MIDDLEFIELD BANC CORP
Form S-4/A
November 18, 2016
Table of Contents

As filed with the Securities and Exchange Commission on November 18, 2016

Registration No. 333-213889

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

Amendment No. 1 of

FORM S-4

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

MIDDLEFIELD BANC CORP.

(Exact name of Registrant as Specified in its Charter)

Ohio	**6712**	**34-1585111**
(State or other Jurisdiction of Incorporation or Organization)	**(Primary Standard Industrial Classification Code Number)**	**(IRS Employer Identification Number)**

15985 East High Street

Middlefield, Ohio 44062-0035

(440) 632-1666

(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant s Principal Executive Offices)

James R. Heslop, II

15985 East High Street

Middlefield, Ohio 44062-0035

(440) 632-1666

(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for service of process)

with copies to:

Francis X. Grady, Esq.

Grady & Associates

20220 Center Ridge Road, Suite 300

Rocky River, Ohio 44116-3501

(440) 356-7255

M. Patricia Oliver, Esq.

Tucker Ellis LLP

950 Main Avenue, Suite 1100

Cleveland, Ohio 44113

(216) 696-4149

Approximate date of commencement of proposed sale of the securities to the public: as soon as practicable after this registration statement becomes effective.

If the securities being registered on this Form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act.

Large accelerated filer		Accelerated filer
Non-accelerated filer	(do not check if a smaller reporting company)	Smaller reporting company

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment that specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act or until this Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

Table of Contents

Information contained herein is subject to completion or amendment. A registration statement relating to these securities has been filed with the Securities and Exchange Commission. These securities may not be sold nor may offers to buy be accepted prior to the time the registration statement becomes effective. This prospectus and proxy statement shall not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of these securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction.

PRELIMINARY SUBJECT TO COMPLETION DATED NOVEMBER 18, 2016

MERGER PROPOSED YOUR VOTE IS VERY IMPORTANT

Proxy Statement and Prospectus of	Proxy Statement of
Middlefield Banc Corp.	**Liberty Bank, N.A.**

MERGER PROPOSAL YOUR VOTE IS VERY IMPORTANT

Middlefield Banc Corp. (Middlefield) and Liberty Bank, N.A. (Liberty) entered into an Agreement and Plan of Reorganization on July 28, 2016. We refer to the agreement as the Reorganization Agreement. A copy is attached to this joint proxy statement/prospectus as Annex A. The Reorganization Agreement provides that Liberty will merge into The Middlefield Banking Company, which is Middlefield s bank subsidiary. The merger is subject to a number of conditions, including but not limited to obtaining approval of Middlefield stockholders and approval of Liberty stockholders.

Approximately 45% of the Liberty shares of common stock exchanged in the merger will be exchanged for Middlefield common stock, and the remaining Liberty shares of common stock exchanged in the merger (approximately 55%) will be exchanged for cash. Each share of Liberty common stock not owned by Middlefield will be converted at the effective time of the merger into the right to receive either: (*x*) $37.96 in cash or (*y*) 1.1934 shares of Middlefield common stock, subject to allocation procedures to ensure that approximately 45% of the outstanding shares of Liberty common stock are converted into Middlefield common stock and the remaining Liberty common stock is converted into cash. Excluding the 23,218 Liberty shares owned by Middlefield, which will be cancelled in the merger without consideration, the aggregate consideration payable to Liberty stockholders is approximately $20.8 million in cash and approximately 557,079 shares of Middlefield common stock. On July 27, 2016, the day before execution of the Reorganization Agreement, the per share closing price of Middlefield common stock on the Nasdaq Capital Market was $33.74. At that price the stock portion of the merger consideration would have a value of approximately $18.8 million, and combined with the approximately $20.8 million cash payable for 55% of Liberty common stock, the total merger consideration would be $39.6 million, before the special dividend discussed below. Because the 1.1934 exchange ratio is fixed, the value of the stock portion of the total merger consideration will fluctuate with changes in the price of Middlefield stock. Holders of Liberty stock options and phantom shares also will receive cash for cancellation of those interests. Finally, in addition to the cash and stock merger consideration, Liberty stockholders will receive a special dividend of approximately $3.0 million in the aggregate, or $3.13 per share, before merger closing. Middlefield will receive no merger consideration for its 23,218 Liberty shares but it will be entitled to a proportionate share of the special dividend payment. See *SUMMARY What Liberty stockholders will receive in the Merger.*

Middlefield will not issue fractional shares. A holder of Liberty common stock who would otherwise be entitled to a fractional share will instead receive cash, without interest, equal to the product of the fractional share to which the holder would otherwise be entitled multiplied by the volume-weighted average closing sale price of Middlefield common stock for the 30 trading days immediately before the effective time.

Middlefield and Liberty will each hold a meeting of stockholders to vote on adoption and approval of the Reorganization Agreement. The meeting of Middlefield s stockholders will be held at: 10:00 a.m. local time on January 10, 2017 at Middlefield, Ohio. The meeting of Liberty s stockholders will be held at: 9:00 a.m. local time on December 22, 2016 at Corporate College East, 4400 Richmond Road, Warrensville Heights, Ohio. At these meetings stockholders will be asked to approve and adopt the Reorganization Agreement and the merger transaction. Stockholders will also be asked to approve adjournment of the meeting, if adjournment is necessary to allow Middlefield or Liberty time to solicit additional proxies in favor of the Reorganization Agreement and the merger transaction. Liberty s stockholder meeting is an annual meeting, so Liberty stockholders will also be asked to act upon routine annual meeting proposals, including election of directors and ratification of the appointment of independent auditors.

This document is a proxy statement of both Middlefield and Liberty. It is also a prospectus for Middlefield s issuance of common stock in the merger. This joint proxy statement/prospectus describes Middlefield s special meeting, Liberty s annual meeting, and the merger proposal.

The board of directors of Middlefield and the board of directors of Liberty approved the Reorganization Agreement and the merger transaction. They recommend that their stockholders vote FOR adoption and approval of the Reorganization Agreement and FOR adjournment of the meeting if adjournment is necessary.

Middlefield s common stock trades on the Nasdaq Capital Market under the symbol MBCN. On July 27, 2016, the day before execution of the Reorganization Agreement, the closing price of Middlefield common stock was $33.74 per share. On , 2016 the closing price of Middlefield common stock was $ per share. Liberty common stock is privately held, not listed on a stock exchange, and not traded in the over-the-counter market.

You are encouraged to read this document carefully, including the materials incorporated by reference into this document. In particular, you should read the Risk Factors section beginning on page 28 for a discussion of the risks related to the merger and the risks of owning Middlefield common stock.

Regardless of whether you plan to attend your company s stockholder meeting, you are urged to vote by completing, signing, and returning the enclosed proxy card in the enclosed postage-paid envelope.

If you are a Liberty stockholder as of the November 25, 2016 record date but your shares are not voted in favor of adoption and approval of the Reorganization Agreement, you have the right to demand the fair cash value for your Liberty common stock but to do so you must adhere to the specific requirements of the National Bank Act, 12 U.S.C. §215, paragraphs (b), (c), and (d). See *DISSENTERS RIGHTS* on page 48 of this joint proxy statement/prospectus and the complete text of the National Bank Act dissenters rights provision attached to this joint proxy statement/prospectus as Annex B. Holders of Middlefield common stock do not have dissenters rights.

Not voting in person or by proxy or at the stockholder meeting will have the same effect as voting against adoption and approval of the Reorganization Agreement. We urge you to read carefully this joint proxy statement/prospectus, which contains a detailed description of your company s stockholder meeting, the merger proposal, and Middlefield common stock to be issued in the merger.

Sincerely,	Sincerely,
Thomas G. Caldwell	William A. Valerian
President and Chief Executive Officer	Chairman, President and Chief Executive Officer
Middlefield Banc Corp.	Liberty Bank, N.A.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of Middlefield common stock to be issued in the merger. Neither the Securities and Exchange Commission nor any state securities commission has determined whether this joint proxy statement/prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The securities to be issued in the merger described in this joint proxy statement/prospectus are not savings accounts, deposit accounts, or other obligations of a bank or savings association and are not insured by the Federal Deposit Insurance Corporation, the Deposit Insurance Fund, or any other federal or state governmental agency.

This joint proxy statement/prospectus is dated , 2016 and it is first being mailed to Middlefield Banc Corp. stockholders and Liberty Bank, N.A. stockholders on or about , 2016.

Table of Contents

NOTICE OF ANNUAL MEETING

To the Stockholders of Liberty Bank, N.A.:

Liberty Bank, N.A. s Annual Meeting will be held on December 22, 2016 at 9:00 a.m. Eastern Time at Corporate College East, 4400 Richmond Road, Warrensville Heights, Ohio 44128. The meeting is for the purpose of considering and acting upon proposals to:

1. adopt and approve the July 28, 2016 Agreement and Plan of Reorganization entered into by Middlefield Banc Corp., The Middlefield Banking Company, and Liberty Bank, N.A. and approve the transactions contemplated thereby,

2. adjourn the annual meeting if adjournment is necessary to allow solicitation of additional proxies because of insufficient votes to adopt and approve the Agreement and Plan of Reorganization and approve the transactions contemplated thereby,

3. elect twelve directors to serve until the earlier of (i) completion of the Merger or (ii) Liberty Bank s 2017 Annual Meeting and until their successors are elected and qualified,

4. ratify the appointment of Maloney + Novotny LLC as independent public accountants for the fiscal year ending December 31, 2016, and

5. transact any other business properly presented at the Meeting or at any adjournment.

Record holders of Liberty s common stock at the close of business on November 25, 2016 are entitled to receive notice of and to vote at the meeting and any adjournment or postponement. The affirmative vote of the holders of at least two-thirds of Liberty s outstanding common stock is required for adoption and approval of the Agreement and Plan of Reorganization and approval of the transactions contemplated thereby.

A joint proxy statement/prospectus and proxy card for the meeting are enclosed. A copy of the Agreement and Plan of Reorganization is attached as Annex A to the joint proxy statement/prospectus.

Your vote is very important regardless of the number of shares you own. Please vote as soon as possible to make sure that your shares are represented at the meeting. If you are a holder of record, you may cast your vote in person at the meeting or, to ensure that your shares are represented at the meeting, you may vote your shares by completing, signing, and returning the enclosed proxy card. If your shares are held in a stock brokerage account or by a bank or other nominee (in street name), please follow the voting instructions of your broker, bank, or nominee.

The Liberty board of directors recommends that you vote (1) FOR adoption and approval of the Agreement and Plan of Reorganization, (2) FOR adjournment of the meeting, (3) FOR election of the identified director nominees, and (4) FOR ratification of the selection of independent auditors.

By order of the Board of Directors,

William A. Valerian

Chairman of the Board, President &

Chief Executive Officer

Beachwood, Ohio
, 2016

Table of Contents

NOTICE OF SPECIAL MEETING

To the Stockholders of Middlefield Banc Corp.:

Middlefield Banc Corp. s Special Meeting will be held on January 10, 2017 at 10:00 a.m. Eastern Time at The Middlefield Banking Company, 15985 East High Street, Middlefield, Ohio 44062. The meeting is for the purpose of considering and acting upon proposals to:

1) approve the transactions under the July 28, 2016 Agreement and Plan of Reorganization entered into by Middlefield Banc Corp., The Middlefield Banking Company, and Liberty Bank, N.A.,

2) approve issuance of up to 563,261 shares of Middlefield common stock in the merger,

3) adjourn the special meeting if adjournment is necessary to allow solicitation of additional proxies if there are insufficient votes to adopt and approve the Agreement and Plan of Reorganization, and

4) transact any other business properly presented at the Meeting or at any adjournment.

Record holders of Middlefield s common stock at the close of business on November 17, 2016 are entitled to vote at the meeting and any adjournment or postponement. The affirmative vote of the holders of at least two-thirds of Middlefield s outstanding common stock is required for adoption and approval of the Agreement and Plan of Reorganization.

A joint proxy statement/prospectus and proxy card for the meeting are enclosed. A copy of the Agreement and Plan of Reorganization is attached as Annex A to the joint proxy statement/prospectus.

Your vote is very important regardless of the number of shares you own. Please vote as soon as possible to make sure that your shares are represented at the meeting. If you are a holder of record, you may cast your vote in person at the meeting or, to ensure that your shares are represented at the meeting, you may vote your shares by completing, signing, and returning the enclosed proxy card. If your shares are held in a stock brokerage account or by a bank or other nominee (in street name), please follow the voting instructions of your broker, bank, or nominee.

The Middlefield board of directors recommends that you vote (1) FOR the Agreement and Plan of Reorganization, (2) FOR issuance of Middlefield common stock in the merger, and (3) FOR adjournment of the meeting.

By order of the Board of Directors,

Kathleen M. Johnson
Secretary

Middlefield, Ohio
, 2016

Table of Contents

WHERE YOU CAN FIND MORE INFORMATION

Middlefield is a publicly traded company filing annual, quarterly, and other reports, proxy statements, and other business and financial information with the Securities and Exchange Commission (SEC). You may read and obtain copies of these documents at the SEC s Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549, at prescribed rates. Please call the SEC at (800) SEC-0330 for additional information about the public reference room. Middlefield files its annual, quarterly, and other reports, proxy statements, and other business and financial information with the SEC electronically. The SEC maintains a web site located at www.sec.gov containing this information. Information filed by Middlefield with the SEC is also available without charge through Middlefield s website at www.middlefieldbank.com under the Investor Relations tab.

Middlefield filed with the SEC a registration statement on Form S-4 to register the issuance of common stock to Liberty stockholders in the merger. This joint proxy statement/prospectus is part of that Form S-4 registration statement. As permitted by SEC rules, this document does not contain all of the information included in the registration statement or in the exhibits or schedules to the registration statement. You may read and request a copy of the registration statement, including any amendments, schedules, and exhibits at the address given below. Statements contained in this document regarding the contents of any contract or other document filed as an exhibit to the registration statement are not necessarily complete. In each case you should refer to the contract or other document filed as an exhibit. These documents are available without charge to you upon written or oral request at the following address and telephone number:

Middlefield Banc Corp.

15985 East High Street

P.O. Box 35

Middlefield, Ohio 44062-0035

Attention: Investor Relations

(440) 632-1666

To obtain timely delivery of these documents, you must request the information no later than January 3, 2017 to receive them before the Middlefield special meeting and no later than December 15, 2016 to receive them before the Liberty annual meeting.

Liberty is privately-held and does not file reports with the SEC.

Neither Middlefield nor Liberty has authorized anyone to provide you with information other than the information included in this document and any documents incorporated by reference. If anyone provides you with different or inconsistent information, you should not rely on it. You should assume that the information in this document and any documents incorporated by reference are accurate only as of their respective dates. Each of Middlefield s and Liberty s business, financial condition, results of operations, and prospects could have changed since those dates.

Table of Contents

TABLE OF CONTENTS

Table of Contents

Table of Contents

QUESTIONS AND ANSWERS ABOUT THE MERGER AND THE STOCKHOLDER MEETINGS

The following questions and answers cover some of the questions most likely to arise about the stockholder meetings. We urge you to read carefully the remainder of this joint proxy statement/prospectus, including the annexes, because this section does not necessarily contain all information that is important to you.

Q: Why am I receiving this joint proxy statement/prospectus?

A: You are receiving this joint proxy statement/prospectus because Liberty Bank, N.A. (Liberty) agreed to merge into The Middlefield Banking Company by the terms of a July 28, 2016 Agreement and Plan of Reorganization (the Reorganization Agreement) entered into by Liberty, Middlefield Banc Corp. (Middlefield), and The Middlefield Banking Company, and to be executed by MBC Interim Bank, an interim state-chartered commercial bank to be incorporated under the laws of the state of Ohio (MBC Interim Bank). The Middlefield Banking Company is and will remain a wholly owned subsidiary of Middlefield. Pursuant to the Reorganization Agreement, Liberty and MBC Interim Bank will merge with and into Liberty with Liberty surviving that merger (the Interim Merger), and immediately thereafter Liberty will merge with and into The Middlefield Banking Company with The Middlefield Banking Company surviving that merger (the Bank Merger, and considered together with the Interim Merger, the Merger). The Reorganization Agreement is attached to this joint proxy statement/prospectus as Annex A and is an integral part of this joint proxy statement/prospectus. The Merger cannot be completed unless Liberty stockholders and Middlefield Banc Corp. stockholders vote to approve and adopt the Reorganization Agreement and the transactions contemplated by the Reorganization Agreement.

This joint proxy statement/prospectus contains important information about the Merger and the stockholder meetings of Middlefield and Liberty. You should read the joint proxy statement/prospectus, including its annexes, carefully. The enclosed proxy voting materials allow you to vote your company s common stock without attending the meeting.

Q: What will Liberty stockholders receive in the Merger?

A: Liberty stockholders will receive a combination of cash and Middlefield common stock, in addition to a special dividend of approximately $3.13 per share in cash immediately prior to the completion of the Merger. Subject to Reorganization Agreement allocation procedures ensuring that approximately 45% of the outstanding Liberty common stock is converted into the right to receive Middlefield common stock and the remaining outstanding Liberty common stock is converted into the right to receive cash, at the effective time of the Merger Liberty common stock not owned by Middlefield will be converted into the right to receive either:

- $37.96 in cash, or

- 1.1934 shares of Middlefield common stock

On July 27, 2016, which was the day before public announcement of the proposed Merger, the closing price of Middlefield common stock on the Nasdaq Capital Market was $33.74. Based on that price for the stock portion of the Merger consideration and $37.96 per share for the cash portion, a Liberty stockholder who receives stock for 45% of his or her common stock at the 1.1934 fixed exchange ratio and cash for 55% would receive total Merger consideration with an implied value of approximately $39.00 per share, in addition to a special dividend of approximately $3.13 per share in cash. As of the more recent , 2016 date, the closing price for Middlefield common stock was $. At that price and giving effect to the 1.1934 fixed exchange ratio, the implied value of a share of Liberty common stock exchanged for Middlefield common stock is $. At this more recent price for Middlefield common stock, a Liberty stockholder who receives stock for 45% of his or her shares and cash for 55% would receive total Merger consideration with an implied value of approximately $ per share.

1

Table of Contents

Middlefield will not issue fractional shares. Instead, a holder of Liberty common stock who would otherwise be entitled to a fractional share (after taking into account all shares of Liberty common stock owned by the holder at the effective time of the Merger) will receive cash, without interest, in an amount equal to the product of the fractional share to which the holder would otherwise be entitled multiplied by the volume-weighted average closing sale price of Middlefield common stock for the 30 trading days immediately before the effective time.

It is not part of the Merger consideration, but the Reorganization Agreement also provides that Liberty will declare a special dividend to stockholders before the Merger closes (or becomes effective). The special dividend is currently estimated to be approximately $3.0 million in the aggregate, or $3.13 per share. Middlefield will receive no Merger consideration for its 23,218 Liberty shares but will be entitled to a proportionate share of the special dividend payment.

Q: Will Liberty stockholders be able to make an election for the form of merger consideration they desire to receive?

A: Yes. If you are a Liberty stockholder you will have the opportunity to elect the form of consideration to be received for your shares, but your election will be subject to adjustment and allocation procedures set forth in the Reorganization Agreement ensuring that approximately 45% of the outstanding Liberty common stock is converted into the right to receive Middlefield common stock and the remaining outstanding Liberty shares are converted into the right to receive cash. Therefore, your ability to receive the cash or stock elections of your choice depends on the elections made by other Liberty stockholders. The allocation of the mix of consideration payable to Liberty stockholders in the Merger will not be known until Middlefield tallies the results of the cash and stock elections made by all Liberty stockholders, which will likely not occur until shortly after Merger closing.

It is unlikely that Liberty stockholders as a group will elect to receive precisely 55% of the Merger consideration in cash and the remainder in Middlefield common stock. For that reason the Reorganization Agreement contains procedures to be followed if Liberty stockholders in the aggregate elect to receive more or less of the Middlefield common stock than Middlefield has agreed to issue

If Stock Is Oversubscribed: If Liberty stockholders elect to receive more shares of Middlefield common stock than Middlefield is issuing, all Liberty stockholders who elect to receive cash or who make no election will receive cash for their Liberty shares; stockholders who elect to receive Middlefield common stock will receive a *pro rata* portion of the available Middlefield shares, receiving cash for shares not converted into Middlefield common stock.

If Stock Is Undersubscribed: If Liberty stockholders elect to receive fewer shares of Middlefield common stock than Middlefield is issuing, all Liberty stockholders who elect to receive Middlefield common stock will receive Middlefield common stock; stockholders who elect to receive cash or who make no election will be treated in the following manner:

if the number of shares held by Liberty stockholders who make no election is sufficient to make up the shortfall in the number of shares of Middlefield common stock that Middlefield is issuing, Liberty stockholders who elect cash will receive cash; stockholders who make no election will receive Middlefield common stock in such proportion as is necessary to make up the shortfall, receiving cash for the remainder, and

if the number of shares held by Liberty stockholders who make no election is not sufficient to make up the shortfall, Liberty stockholders who make no election will receive Middlefield common stock; Liberty stockholders who elect to receive cash will receive Middlefield common stock in such proportion as is necessary to make up the shortfall, receiving cash for the remainder.

You might not receive the amount of cash or stock you elect. As a result of the allocation procedures and other limitations outlined in this document and in the Reorganization Agreement, you may receive Middlefield common stock or cash in amounts that vary from the amounts you elect to receive.

Table of Contents

Q: How do Liberty stockholders make their election to receive cash, Middlefield common stock, or a combination of both?

A: Each Liberty stockholder of record will receive an election form to be completed and returned. The election deadline will be 5:00 p.m., Eastern Time, on , 2016, which we refer to as the election deadline. A copy of the election form is being mailed separately to Liberty stockholders on or about the date of this joint proxy statement/prospectus.

If you own Liberty shares in street name through a bank, broker, or other nominee and you wish to make an election, you should seek instructions from the bank, broker, or other nominee holding your shares concerning how to make an election. If you do not send in the election form with your stock certificate(s) by the election deadline, you will be treated as though you made no election.

If a Liberty stockholder submits a valid election form and subsequently transfers any or all of the shares as to which an election has been made, that election will continue to apply to those shares in the hands of the transferee unless that election is changed or revoked in a timely fashion in the manner described below.

Q: Will I be allowed to change my election?

A: Yes. Until the election deadline you may change your election by submitting to American Stock Transfer & Trust Company, LLC written notice accompanied by a properly completed and signed, revised election form. After the election deadline you will not be allowed to change or revoke your election. If you instructed a bank, broker, or other financial institution to submit an election for your shares, you must follow their directions for changing those instructions.

Q: What happens if I do not make a valid election to receive cash or Middlefield common stock?

A: If you do not return a properly completed election form by the election deadline specified in the election form, your Liberty common stock will be considered non-election shares and will be converted into the right to receive the stock consideration or the cash consideration according to the allocation procedures specified in the Reorganization Agreement. Generally, if one form of consideration (cash or Middlefield common stock) is undersubscribed, Liberty common stock for which no election is validly made will be allocated to the undersubscribed form before shares electing the oversubscribed form are allocated to the undersubscribed form. If proration becomes necessary, shares for which a valid election is made will have priority over non-electing shares, although electing a particular form of consideration does not guarantee that your election will be honored in full.

Q: What are the material U.S. federal income tax consequences of the Merger to Liberty stockholders?

A: Tucker Ellis LLP has delivered its legal opinion, dated September 26, 2016, to the effect that the Merger qualifies as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended (which we refer to as the Internal Revenue Code). In addition, the completion of the Merger is conditioned on receipt of a tax opinion from Tucker Ellis LLP, dated as of the closing date, to the same effect. However, neither Liberty nor Middlefield has requested or received a ruling from the Internal Revenue Service that the Merger will qualify as a reorganization or as to any other aspect of the Reorganization Agreement or the transactions contemplated by it. The U.S. federal income tax consequences of the Merger to a Liberty stockholder will depend on the relative mix of cash and Middlefield common stock received by that Liberty stockholder. Liberty stockholders should not recognize any gain or loss for U.S. federal income tax purposes if they exchange their Liberty shares solely for shares of Middlefield common stock in the Merger, except with respect to cash received in lieu of fractional shares of Middlefield common stock. Liberty stockholders will recognize gain or loss if they exchange their Liberty shares solely for cash in the Merger. Liberty stockholders will recognize gain, but not loss, if they exchange their Liberty shares for a combination of Middlefield common stock and cash, but their taxable gain in that case will not exceed the cash they receive in the Merger. The special dividend is not part of the Merger consideration. It will be taxable to Liberty stockholders as ordinary income, taxable at preferential rates applicable to qualified dividends. Any gain recognized on the Merger consideration and any ordinary income from the special dividend could be subject to an additional tax on net investment income, depending on the individual s adjusted gross income, as described below under *THE MERGER Material U.S. Federal Income Tax Consequences Medicare Tax on Net Investment Income.* You should consult with your tax advisor for the specific tax consequences of the Merger and the special dividend to you. See *THE MERGER Material U.S. Federal Income Tax Consequences* on page 73.

The consequences of the Merger to each Liberty stockholder depend on that stockholder s particular facts and circumstances. Accordingly, you are urged to consult your tax advisor to determine the tax consequences of the Merger to you.

Q: Is Liberty allowed to pay dividends before the effective date of the Merger?

A: Yes. Under the terms of the Reorganization Agreement, Liberty is permitted to pay usual and customary cash dividends. The Reorganization Agreement also requires Liberty to declare a special dividend before closing. The amount of the special dividend may change, but it currently is estimated at approximately $3.0 million in the aggregate, or $3.13 per share.

Q: When and where will the Middlefield and Liberty stockholder meetings be?

A: Middlefield s special meeting of stockholders will be held at 10:00 a.m., local time, on January 10, 2017 at The Middlefield Banking Company, 15985 East High Street, Middlefield, Ohio 44062. The annual meeting of Liberty stockholders will be held at 9:00 a.m., local time, on December 22, 2016 at Corporate College East, 4400 Richmond Road, Warrensville Heights, Ohio 44128.

Q: What proposals will be acted on at the Middlefield and Liberty stockholder meetings?

A: Middlefield stockholders will be asked to (1) approve the transactions under the Reorganization Agreement, (2) approve issuance of up to 563,261 shares of Middlefield common stock in the Merger, (3) approve adjournment of the special meeting to allow additional time for proxy solicitation if there are not sufficient votes to approve the Reorganization Agreement transactions, and (4) vote on any other business properly presented.

Liberty stockholders will be asked to (1) adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement, (2) approve adjournment of the annual meeting to allow additional time for proxy solicitation if there are not sufficient votes to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement, (3) elect twelve directors for the term expiring at the earlier of (i) completion of the Merger or (ii) the 2017 annual meeting and until their successors are elected and qualified, (4) ratify the selection of independent auditors, and (5) vote on any other business properly presented.

Q: What do the Board of Directors of Middlefield and the Board of Directors of Liberty recommend regarding the proposals to be acted on at the stockholder meetings?

Middlefield s board of directors believes that the Merger and other transactions under the Reorganization Agreement are in the best interests of Middlefield and its stockholders and recommends that Middlefield stockholders vote FOR the proposal to approve the transactions under the Reorganization Agreement, FOR the proposal to issue Middlefield common stock in the Merger, and FOR the proposal to adjourn the special meeting to solicit additional proxies if there are insufficient votes to approve the Reorganization Agreement transactions.

Liberty s board of directors also determined that the Reorganization Agreement is in the best interests of Liberty and its stockholders and recommends that Liberty stockholders vote FOR the proposal to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement and FOR the proposal to adjourn the annual meeting to solicit additional proxies if there are insufficient votes to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement. Regarding the other proposals to be presented at the annual meeting, Liberty s board of directors recommends that stockholders vote FOR election of the identified director nominees and FOR ratification of the selection of the independent auditor.

Table of Contents

Q: Is my vote needed to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement and to approve the other proposals?

A: Adoption and approval of the Reorganization Agreement and approval of the transactions contemplated by the Reorganization Agreement requires the affirmative vote of the holders of at least two-thirds of the shares of Liberty common stock outstanding. When Liberty s stockholder meeting is held, if there are insufficient votes to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement the meeting may be adjourned to allow solicitation of additional proxies. The affirmative vote of the holders of a majority of the shares represented at the meeting in person or by proxy and entitled to vote is necessary to approve adjournment. All of Liberty s directors entered into voting agreements with Middlefield as a condition to Middlefield s agreement to the Reorganization Agreement (the Voting Agreements), agreeing to vote their Liberty shares in favor of adoption and approval of the Reorganization Agreement and approval of the transactions contemplated by the Reorganization Agreement and in favor of the adjournment proposal. Excluding Liberty shares held by their immediate family members, Liberty s directors collectively own 354,986 shares of Liberty common stock, or approximately 34.3% of the shares outstanding. The form of Voting Agreement is an exhibit to the Reorganization Agreement included as Annex A to this joint proxy statement/prospectus. As a holder of 23,218 shares of Liberty common stock, or 2.2%, Middlefield intends to vote in favor of adoption and approval of the Reorganization Agreement, in favor of the adjournment proposal, in favor of election of the identified director nominees, and in favor of ratifying the selection of independent accountants.

For the proposal to elect directors at Liberty s annual meeting, directors are elected by plurality vote, which means the directors receiving the greatest number of votes are elected. The affirmative vote of the holders of a majority of the shares represented at the meeting in person or by proxy and entitled to vote is necessary to ratify selection of Liberty s independent auditor.

Similar to the approval standard applicable to the Liberty stockholder meeting, approval of the transactions under the Reorganization Agreement by Middlefield stockholders requires the affirmative vote of the holders of at least two-thirds of the shares of Middlefield common stock outstanding. If there are insufficient votes to approve the Reorganization Agreement transactions when Middlefield s stockholder meeting is held, the meeting may be adjourned to allow solicitation of additional proxies. The affirmative vote of the holders of a majority of the votes cast is necessary to approve adjournment. To approve issuance of Middlefield common stock in the Merger, the affirmative vote of a majority of the votes cast is necessary. Middlefield directors did not enter into agreements regarding voting of their shares of Middlefield common stock. Collectively they own approximately 102,153 shares, or approximately 4.6% of Middlefield s outstanding common stock, with the right to acquire 20,674 additional shares.

Q: How do I vote?

A: If you were the record holder of Middlefield common stock on the November 17, 2016 record date for the Middlefield special meeting or Liberty common stock on the November 25, 2016 record date for the Liberty annual meeting, you may vote in person by attending your company s meeting, and to ensure that your shares are represented at the meeting you may vote by signing and returning your company s enclosed proxy card in the postage-paid envelope provided.

If you hold Middlefield or Liberty common stock beneficially through a broker, bank, or other nominee, please see the discussion below regarding shares held in street name.

Q: What will happen if I fail to vote or if I abstain from voting?

A: If you are a Liberty stockholder and you do not return a proxy card or vote in person at the Liberty annual meeting or if you mark the proxy card or ballot **ABSTAIN** for the proposal to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement, this will have the same effect as a vote **AGAINST** that proposal. Marking your proxy card or ballot **ABSTAIN** will have the same effect as a vote **AGAINST** the adjournment proposal and the auditor

Table of Contents

ratification proposal. Failure to return your proxy card or vote in person will have no effect on the adjournment proposal, the proposal to elect directors, or the proposal to ratify the auditor selection.

If you are a Middlefield stockholder and you do not return a proxy card or vote in person at the Middlefield special meeting or if you mark the proxy card or ballot **ABSTAIN** for the proposal to approve the transactions under the Reorganization Agreement, this will have the same effect as a vote **AGAINST** that proposal, but failing to vote or abstaining will have no effect on the adjournment proposal or the proposal to approve issuance of shares.

Q: How will my shares be voted if I return a signed proxy card without marking voting instructions?

A: If you are a Liberty stockholder and you sign, date, and return a proxy card without stating how you want your shares to be voted, your shares will be voted **FOR** adoption and approval of the Reorganization Agreement and approval of the transactions contemplated by the Reorganization Agreement, and if adjournment of the meeting is necessary to allow time for solicitation of additional proxies your shares will be voted **FOR** adjournment. Similarly, your shares will be voted **FOR** election of the identified director nominees and **FOR** ratification of the auditor selection if you return a valid proxy card without giving voting instructions.

If you are a Middlefield stockholder and you sign, date, and return a proxy card without giving voting instructions, your shares will be voted **FOR** approval of the transactions under the Reorganization Agreement and **FOR** approval of the share issuance, and if adjournment of the meeting is necessary to allow time for solicitation of additional proxies your shares will be voted **FOR** adjournment.

Q: If my shares are held in a stock brokerage account or by a bank or other nominee in street name , will my broker, bank, or other nominee vote shares for me?

A: No. If you do not provide the broker, bank, or nominee (the record holder of your shares) with instructions for voting your shares, the broker, bank, or other nominee will not be able to vote on any proposal other than ratification of independent auditors. Please follow the broker, bank, or other nominee s directions for giving voting instructions to the broker, bank, or nominee.

if you hold Liberty shares in street name through a broker, bank, or other nominee but do not give voting instructions to the broker, bank, or other nominee, the broker, bank, or other nominee may not vote your shares on the proposal to adopt and approve the Reorganization Agreement and the Merger or the proposal to adjourn the meeting, which broker non-votes will have the same effect as votes **AGAINST** those proposals. Failing to give voting instructions also will prevent the broker, bank, or other nominee from voting on the director election proposal, but directors nevertheless will be elected because directors are elected by a plurality; however, your broker, bank, or other nominee will be able to vote on the auditor ratification proposal without voting instructions,

if you are a Middlefield stockholder but do not give voting instructions to your broker, bank, or other nominee, the broker, bank, or other nominee may not vote your shares on the proposal to approve the transactions under the Reorganization Agreement, which broker non-vote will have the same effect as a vote

AGAINST that proposal. Although failing to give voting instructions also will prevent your broker, bank, or other nominee from voting on the proposal to issue common stock or the adjournment proposal, broker non-votes on those proposals have no effect because under Middlefield s regulations the proposals will be decided by a majority of votes actually cast.

Under applicable Financial Industry Regulatory Authority (FINRA) and stock exchange rules, brokers who hold shares in street name for a beneficial owner are allowed to vote in their discretion on routine proposals, even without voting instructions from beneficial owners. For proposals stock exchanges consider non-routine, however, brokers are not allowed to exercise voting discretion and cannot vote on those non-routine proposals unless the beneficial owner gives specific voting instructions. Except for the auditor ratification proposal to be acted on at the Liberty stockholder meeting, Middlefield and Liberty believe the

Table of Contents

proposals to be voted on at the stockholder meetings are non-routine and that brokers therefore will not be able to vote without specific voting instructions. Broker non-votes occur when a broker or nominee is not instructed by the beneficial owner of shares to vote on a particular proposal for which the broker does not have discretionary voting power.

Q: May I change my vote after submitting a proxy?

A: Yes, but only until a vote is taken. Middlefield stockholders who hold directly, not in street name, may revoke a proxy at any time before a vote is taken by (*x*) filing a written notice of revocation with Middlefield s Secretary, at 15985 East High Street, Middlefield, Ohio 44062-0035, (*y*) executing and returning another proxy card with a later date, or (*z*) attending the meeting and giving notice of revocation in person. Liberty stockholders may revoke a proxy at any time before a vote is taken by (*x*) filing a written notice of revocation with Liberty s Secretary, at 25201 Chagrin Boulevard, Suite 120, Beachwood, Ohio 44122, (*y*) executing and returning another proxy card with a later date, or (*z*) attending the meeting and giving notice of revocation in person. A revocation notice or a later dated proxy will not be effective unless actually received by Liberty prior to the vote.

Your attendance at the meeting will not, by itself, revoke your proxy.

If you hold shares in street name and gave voting instructions to the broker, bank, or nominee, you must follow the broker, bank or nominee s directions for changing your vote.

Q: If I do not favor adoption and approval of the Reorganization Agreement and approval of the transactions contemplated by the Reorganization Agreement, what are my dissenters rights?

A: Under federal banking law Liberty stockholders may dissent from the Merger and elect to have the fair market value of their shares appraised, receiving payment for their shares in cash. To assert dissenters right of appraisal, a stockholder must comply with the provisions of federal law, which include voting against the proposal to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement or giving notice to the presiding officer in writing at or before Liberty s meeting that the stockholder dissents. For more information see *DISSENTERS RIGHTS* and the copy of the applicable statutory provision included as Annex B to this joint proxy statement/prospectus.

Q: When will the Merger be completed?

A: Middlefield and Liberty desire to complete the Merger in the first quarter of 2017, but achieving that goal is contingent on obtaining stockholder approvals and applicable governmental approvals and on satisfying all other conditions precedent to the Merger.

Q: Should Liberty stockholders send in their share certificates now?

A: No. Within five business days after the Merger is completed, the Exchange Agent for the Merger will send Liberty stockholders a letter of transmittal with instructions for delivering share certificates to the Exchange Agent. American Stock Transfer & Trust Company, LLC will act as Exchange Agent. Liberty stockholders must use the letter of transmittal to exchange Liberty share certificates for Merger consideration. Do not send in share certificates with your proxy form.

Q: What do I need to do now?

A: After carefully reviewing this joint proxy statement/prospectus, including its Annexes, please complete, sign, and date the enclosed proxy card and return it in the enclosed postage-paid envelope as soon as possible. By submitting your proxy, you authorize the individuals named in your company s proxy to vote your shares at your company s meeting of stockholders in accordance with your instructions. ***Your vote is very important. Regardless of whether you plan to attend the meeting, please submit your proxy with voting instructions to ensure that your shares are voted.***

Table of Contents

Q: Are there risks that I should consider in deciding whether to vote in favor of the Reorganization Agreement and the other proposals?

A: Yes. You should read and carefully consider the section of this joint proxy statement/prospectus captioned *RISK FACTORS*, which begins on page 28.

Q: Who can answer my questions?

A: If you have questions about the Merger or desire additional copies of this joint proxy statement/prospectus or additional proxy cards, please contact your company or its proxy solicitor at the applicable address below:

Middlefield stockholders:

Middlefield Banc Corp.

Attention: Investor Relations

15985 East High Street

P.O. Box 35

Middlefield, Ohio 44062-0035

(440) 632-1666

D.F. King & Co. (Middlefield s Proxy Solicitor)

48 Wall Street

New York, New York 10005

Toll-Free: (800) 967-5084

Liberty stockholders:

Liberty Bank, N.A.

Attention: Stockholder Relations

25201 Chagrin Boulevard, Suite 120

Beachwood, Ohio 44122

(216) 359-5500

Table of Contents

SUMMARY

This summary highlights selected information from this joint proxy statement/prospectus. It does not necessarily contain all of the information that is important to you. You should read carefully this entire document, including its Annexes, and all other documents to which this joint proxy statement/prospectus refers before you decide how to vote. This summary includes page references directing you to more detailed information.

The Companies

Middlefield Banc Corp.

15985 East High Street

P.O. Box 35

Middlefield, Ohio 44062-0035

Phone: (440) 632-1666

Middlefield is a one-bank holding company. Middlefield s principal subsidiary is The Middlefield Banking Company, an Ohio-chartered, nonmember commercial bank. Middlefield s other subsidiary, EMORECO Inc., is an asset resolution corporation dedicated to the resolution and disposition of troubled assets of a central-Ohio bank that Middlefield acquired in 2007, specifically nonperforming loans and other real estate owned (OREO) held by the acquired bank as the result of borrower defaults on real estate-secured loans. That bank, Emerald Bank, operated as a separate subsidiary of Middlefield from 2007 through 2013, merging into The Middlefield Banking Company on January 20, 2014. At the end of September 2016 The Middlefield Banking Company had total assets of $760.6 million and more than 140 employees.

The Middlefield Banking Company offers a broad range of banking services, including online banking and bill payment services for individuals and online cash management services for business customers at www.middlefieldbank.com. The Middlefield Banking Company s customers are small and medium-sized businesses, professionals, small business owners, and retail customers. Loan products include operational and working capital loans, loans to finance capital purchases, term business loans, residential construction loans, selected guaranteed or subsidized loan programs for small businesses, professional loans, residential and mortgage loans, and consumer installment loans to purchase automobiles or boats, make home improvements, and for other personal expenditures. The bank makes available customary deposit-related products and services, such as checking, savings, negotiable order of withdrawal accounts, money market accounts, time certificates of deposit, safe deposit facilities, and travelers checks.

The Middlefield Banking Company operates in two distinct and very competitive markets, one in the northeastern Ohio counties of Geauga, Portage, Trumbull, Ashtabula, and Lake. The other market is central Ohio, specifically the Columbus area and Franklin County, the result of the 2007 acquisition of Emerald Bank. Ohio has a high concentration of financial service firms, many of which are significantly larger institutions with greater financial resources. Savings banks, savings and loan associations, commercial banks, mortgage banking companies, credit unions, insurance companies and other financial service companies compete to make loans. Savings and loan associations, savings banks, commercial banks, and credit unions compete for deposits, but non-depository entities such as mutual funds, securities and brokerage firms, and insurance companies also compete for depositors funds.

The Middlefield Banking Company s operations have historically been concentrated in the area east of Liberty s market, in largely rural areas with a large Amish population. The Middlefield Banking Company s business originated in this market and was not an outgrowth of the nearby Cleveland-area or Akron-area markets. This includes Geauga County, where The Middlefield Banking Company s business began in 1901 and where four of its ten offices are located, and northern Portage County, where two offices are located, with a

9

seventh office in Cortland in Trumbull County, an office in Orwell in southern Ashtabula County, and two offices in central Ohio, in Franklin County. The Middlefield Banking Company s eleventh banking office opened in October 2016 in Sunbury, also in central Ohio, in Delaware County. It also has a loan production office in Mentor, in Lake County. The Middlefield Banking Company s northeast Ohio market adjoins the market of Liberty, which is to the immediate west.

Middlefield common stock trades on the Nasdaq Capital Market under the symbol MBCN . Middlefield is subject to reporting requirements under the Securities Exchange Act of 1934, filing annual, quarterly, and current reports, proxy statements, and other information with the SEC.

Liberty Bank, N.A.

25201 Chagrin Boulevard, Suite 120

Beachwood, Ohio 44122

Phone: (216) 359-5500

Liberty is a national bank established in October 1990. Liberty currently has approximately 40 employees. Liberty s three bank offices are in Twinsburg in northern Summit County and Beachwood and Solon in eastern Cuyahoga County, Ohio. Liberty common stock is not listed on an exchange or traded over the counter. From inception, Liberty has been associated with the Akron and Cleveland business community and has sought to be a community banking resource for individuals and small business customers seeking the personalized service and local decision-making that distinguish community banks from the much larger regional and national banking institutions dominating the banking markets in Akron and Cleveland.

After the Merger, The Middlefield Banking Company will conduct through Liberty s three bank offices the typical community banking business The Middlefield Banking Company has conducted through its offices since 1901. Both banks are community banks, and although Liberty serves the credit and deposit needs not only of local small businesses but also individuals, Liberty s identity, its physical branch presence, and its marketing focus are more characteristic of a small business bank. The Middlefield Banking Company actively seeks to serve the lending and deposits needs not only of business customers but also individuals, for example individuals seeking home mortgage credit who do not have a preexisting commercial borrowing or deposit relationship with The Middlefield Banking Company. Middlefield believes the Merger will have the consequence of Liberty s office locations being occupied by a community bank with a broader customer focus, with more active consumer marketing of The Middlefield Banking Company s products and services in its new market in Cuyahoga County and Summit County.

The Reorganization Agreement (page 78)

If all of the Reorganization Agreement conditions are satisfied or waived, Liberty will merge into The Middlefield Banking Company, with The Middlefield Banking Company surviving. The Reorganization Agreement is Annex A to this joint proxy statement/prospectus and forms part of this joint proxy statement/prospectus. ***We encourage you to read the Reorganization Agreement carefully. It is the principal legal document governing the Merger.*** Immediately before Liberty merges into The Middlefield Banking Company, an interim bank subsidiary organized by Middlefield will merge into Liberty, with Liberty surviving momentarily before Liberty immediately thereafter merges into The Middlefield Banking Company.

Table of Contents

What Liberty stockholders will receive in the Merger (page 79)

Liberty stockholders will be entitled to receive from Middlefield a combination of cash and Middlefield common stock when the Merger is completed, in addition to a special dividend of approximately $3.13 per share in cash immediately prior to the completion of the Merger. Subject to allocation procedures in the Reorganization Agreement ensuring that approximately 45% of the outstanding Liberty common stock is converted into Middlefield common stock and the remaining outstanding Liberty common stock is converted into cash, at the effective time of the Merger Liberty common stock not owned by Middlefield will be converted into the right to receive either:

- $37.96 in cash, or

- 1.1934 shares of Middlefield common stock

Liberty stockholders will own up to approximately 20% of the Middlefield common stock outstanding after the Merger. Middlefield will not issue fractional shares. Instead, a holder of Liberty common stock who would otherwise be entitled to a fractional share (after taking into account all Liberty common stock owned by the holder at the effective time of the Merger) will receive cash, without interest, equal to the product of the fractional share to which the holder would otherwise be entitled multiplied by the volume-weighted average closing sale price of Middlefield common stock for the 30 trading days immediately before the effective time.

It technically is not part of the Merger consideration, but pursuant to the Reorganization Agreement, Liberty must declare a special dividend to stockholders before Merger closing. The special dividend is currently estimated to be approximately $3.0 million in the aggregate, or $3.13 per share. Middlefield will not receive Merger consideration for its 23,218 Liberty shares but will be entitled to a proportionate share of the special dividend payment.

What holders of Liberty stock options and phantom shares will receive (page 79)

Liberty s compensation arrangements for officers and employees include equity-based awards, including stock options and phantom awards. There are option awards outstanding for 13,572 shares, all of which are vested, including options held by Liberty s Chief Credit Officer to acquire a total of 4,000 shares. At the effective time of the Merger each outstanding and unexercised option to purchase Liberty common stock will be cancelled in exchange for a cash payment equal to (*x*) the positive difference between $41.09 and the exercise price of the option, multiplied by (*y*) the number of shares of Liberty common stock acquirable by option exercise. There are also outstanding 2,000 phantom share awards made in 2013. The phantom share awards consist of the right to a cash payment equal to the positive difference between Liberty s stock value on December 31, 2016 and the stock value on the award date, multiplied by the number of phantom shares awarded, with value being determined by Liberty s board of directors. The total cash payment for cancellation of the options and phantom awards is estimated to be $161,931, of which $62,986 is payable to Liberty s Chief Credit Officer. The $41.09 figure is the sum of the $37.96 per share cash Merger consideration and the $3.13 per share special dividend.

Exchange of Liberty common stock certificates (page 79)

When the Merger is complete, acting as exchange agent, American Stock Transfer & Trust Company, LLC will mail to Liberty stockholders transmittal materials and instructions for exchanging Liberty share certificates for Middlefield common stock to be issued by book-entry transfer.

Table of Contents

Liberty annual meeting of stockholders (page 34)

The Liberty annual meeting of stockholders will be held at 9:00 a.m., local time, on December 22, 2016 at Corporate College East, 4400 Richmond Road, Warrensville Heights, Ohio 44128 for the purpose of considering and voting on proposals to

adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement,

adjourn the annual meeting if adjournment is necessary to allow solicitation of additional proxies because of insufficient votes to adopt and approve the Reorganization Agreement,

elect twelve directors to serve until the earlier of (i) completion of the Merger or (ii) the 2017 annual meeting and until their successors are elected and qualified,

ratify the appointment of Maloney + Novotny LLC as independent public accountants for the fiscal year ending December 31, 2016, and

transact any other business properly presented at the meeting or at any adjournment or postponement. The Liberty board of directors currently is not aware of any other business to be presented at the meeting.

You are entitled to vote at the annual meeting if you owned Liberty common stock as of the close of business on the November 25, 2016 record date. As of that date a total of   shares of Liberty common stock were outstanding and eligible to vote at the Liberty annual meeting.

Middlefield special meeting of stockholders (page 44)

A special meeting of stockholders of Middlefield will be held at 10:00 a.m., local time, on January 10, 2017 at The Middlefield Banking Company, 15985 East High Street, Middlefield, Ohio, 44062 for the purpose of considering and voting on proposals to

approve the transactions under the Reorganization Agreement,

issue up to 563,261 shares of Middlefield common stock in the Merger,

adjourn the special meeting if adjournment is necessary to allow solicitation of additional proxies because of insufficient votes to adopt and approve the Reorganization Agreement, and transact any other business properly presented at the special meeting or any adjournment or postponement. The Middlefield board of directors currently is not aware of any other business to be presented at the meeting.

You are entitled to vote at the special meeting if you owned Middlefield common stock as of the close of business on the November 17, 2016 record date. As of that date a total of 2,250,893 shares were outstanding and eligible to vote at the Middlefield special meeting.

Required vote (pages 34, 44)

Liberty. A quorum will exist at Liberty s annual meeting if a majority of the outstanding common stock is represented in person or by proxy. The Reorganization Agreement will be adopted and approved and the transactions contemplated by the Reorganization Agreement will be approved if they receive the affirmative vote of the holders of at least two-thirds of Liberty s outstanding common stock. If there are insufficient votes to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement when the meeting is held, the meeting may be adjourned to allow solicitation of additional proxies. The affirmative vote of the holders of a majority of the shares represented at the meeting in person or by proxy and entitled to vote is necessary to approve adjournment.

Table of Contents

All of Liberty s directors agreed to vote their Liberty shares in favor of adoption and approval of the Reorganization Agreement and approval of the transactions contemplated by the Reorganization Agreement, in favor of the adjournment proposal and in favor of entering into voting agreements with Middlefield as a condition to Middlefield s agreement to enter into the Reorganization Agreement (Voting Agreements). Excluding Liberty shares held by their immediate family members, Liberty s directors collectively own 354,986 shares of Liberty common stock, or approximately 34.3% of the shares outstanding. The form of Voting Agreement is an exhibit to the Reorganization Agreement attached as Annex A to this joint proxy statement/prospectus. As a group, Liberty s directors, executive officers, and affiliates own 357,889 shares of Liberty common stock, or 34.6% of shares outstanding, with the right to acquire an additional 4,000 shares. As a holder of 23,218 shares of Liberty common stock, or 2.2%, Middlefield intends to vote in favor of adoption and approval of the Reorganization Agreement and approval of the transactions contemplated under the Reorganization Agreement and in favor of the adjournment proposal.

For the proposal to elect directors at Liberty s annual meeting, directors are elected by plurality vote, which means the directors receiving the greatest number of votes are elected. The affirmative vote of the holders of a majority of the shares represented at the meeting in person or by proxy and entitled to vote is necessary to ratify selection of Liberty s independent auditor. Middlefield intends to vote in favor of electing the director nominees identified in this joint proxy statement/prospectus and in favor of ratifying the selection of Liberty s independent auditor.

Middlefield. A quorum at Middlefield s special meeting is a majority of the shares outstanding, whether present in person or by proxy. The Reorganization Agreement will be adopted and approved if it receives the affirmative vote of the holders of at least two-thirds of Middlefield s outstanding common stock. If there are insufficient votes to adopt and approve the Reorganization Agreement when the meeting is held, the meeting may be adjourned to allow solicitation of additional proxies. The affirmative vote of the holders of a majority of the votes cast is necessary to approve adjournment. To approve issuance of Middlefield common stock in the Merger, the affirmative vote of a majority of the votes cast is necessary.

As a group, Middlefield s directors, executive officers, and affiliates own 106,138 shares of Middlefield common stock, or 4.72% of shares outstanding, with the right to acquire 28,249 additional shares.

Recommendation to Liberty stockholders (page 55)

Liberty s board of directors unanimously approved the Reorganization Agreement and the transactions contemplated by the Reorganization Agreement. Liberty s board believes the Merger is in the best interests of Liberty and its stockholders. The board unanimously recommends that Liberty stockholders vote **FOR** adoption and approval of the Reorganization Agreement and approval of the transactions contemplated by the Reorganization Agreement and, if the adjournment proposal is presented for a vote, **FOR** adjournment to allow additional proxy solicitation. Liberty s board considered many factors in this decision, which are described in the section captioned *THE MERGER Background of the Merger* beginning on page 49 and *THE MERGER Liberty s Reasons for the Merger* beginning on page 53 of this joint proxy statement/prospectus. Liberty s board also recommends that stockholders vote **FOR** election of the identified director nominees and **FOR** ratification of the selection of independent accountants.

Opinion of Liberty s Financial Advisor (page 55)

On July 27, 2016 Liberty s financial advisor, Boenning & Scattergood, Inc. (Boenning), delivered to Liberty s board of directors a written opinion concerning the fairness, from a financial point of view, of the Merger consideration to be received by the holders of Liberty common stock. The full text of the opinion,

Table of Contents

describing the procedures followed, assumptions made, matters considered, and qualifications and limitations on the review undertaken by Boenning, is attached as Annex C to this joint proxy statement/prospectus.

Boenning s opinion was for the information of and was directed to Liberty s board for the board s consideration of the financial terms of the Merger. The opinion does not pertain to Liberty s underlying business decision to engage in the Merger or enter into the Reorganization Agreement. The opinion does not constitute a recommendation to the Liberty board regarding the Merger and it does not constitute a recommendation to any holder of Liberty common stock or any stockholder of any other entity regarding how to vote on the Merger or on any other proposal.

Recommendation to Middlefield stockholders (page 63)

Middlefield s board of directors also unanimously approved the Reorganization Agreement. Middlefield s board believes the Merger is in the best interests of Middlefield and its stockholders. The board unanimously recommends that Middlefield stockholders vote **FOR** approval of the transactions contemplated by the Reorganization Agreement, **FOR** issuance of up to 563,261 shares of common stock in the Merger, and **FOR** adjournment to allow additional proxy solicitation if the adjournment proposal is presented for a vote. In reaching this decision Middlefield s board of directors considered many factors as described in the section captioned *THE MERGER Background of the Merger* beginning on page 49 and *THE MERGER Middlefield s Reasons for the Merger* beginning on page 62 of this joint proxy statement/prospectus.

Opinion of Middlefield s Financial Advisor (page 63)

Middlefield s financial advisor, Donnelly Penman & Partners Inc., delivered to Middlefield s board of directors a July 27, 2016 opinion concerning the fairness to Middlefield stockholders, from a financial point of view, of the consideration being paid. Describing the procedures followed, assumptions made, matters considered, and qualifications and limitations on the review undertaken by Donnelly Penman & Partners Inc., the full text of the opinion is attached as Annex D to this joint proxy statement/prospectus.

Donnelly Penman & Partners Inc. s opinion was for the information of and was directed to Middlefield s board for its consideration of the financial terms of the Merger. The opinion does not pertain to Middlefield s underlying business decision to engage in the Merger or enter into the Reorganization Agreement. The opinion does not constitute a recommendation to the Middlefield board regarding the Merger and it does not constitute a recommendation to any Middlefield stockholder regarding how to vote on the Merger or on any other proposal.

Material U.S. federal income tax consequences (page 73)

The U.S. federal income tax consequences of the Merger to a Liberty stockholder will depend on the relative mix of cash and Middlefield common stock received by such Liberty stockholder. Liberty stockholders should not recognize any gain or loss for U.S. federal income tax purposes if they exchange their Liberty shares solely for shares of Middlefield common stock in the Merger, except with respect to cash received in lieu of fractional shares of Middlefield common stock. Liberty stockholders will recognize gain or loss if they exchange their Liberty shares solely for cash in the Merger. Liberty stockholders will recognize gain, but not loss, if they exchange their Liberty shares for a combination of Middlefield common stock and cash, but their taxable gain in that case will not exceed the cash they receive in the Merger. **The tax consequences of the Merger to each Liberty stockholder will depend on such Liberty stockholder s own situation. Liberty stockholders should consult with their own tax advisors for a full understanding of the tax consequences of the Merger to them.** Tucker Ellis LLP has delivered a tax opinion, dated September 26, 2016, to the effect that the Merger qualifies as a reorganization under Section 368(a) of the Internal Revenue Code. In addition, the completion of the Merger is conditioned on receipt of a tax opinion from Tucker Ellis LLP, dated the closing date, to the same effect as the opinion described in the preceding sentence. The opinion will not bind the Internal Revenue Service, which could take a different view.

See *THE MERGER Material U.S. Federal Income Tax Consequences* for a more detailed discussion of the tax consequences of the Merger.

Interests of directors and certain executive officers of Liberty (page 72)

Directors and certain executive officers of Liberty have employment and other compensation agreements or economic interests that give them interests in the Merger that are somewhat different from or in addition to their interests as Liberty stockholders. These interests and agreements include:

- two members of the Liberty board of directors will be appointed to Middlefield s board of directors. These directors are Chairman, President, and CEO William A. Valerian and Director Thomas W. Bevan,

- all outstanding stock options issued by Liberty to officers and employees will be cancelled in exchange for cash equal to (*x*) the positive difference between $41.09 and the exercise price of the option, multiplied by (*y*) the number of shares of Liberty common stock acquirable by option exercise; of the $161,931 total payable in cancellation of options and phantom stock, $62,986 will be paid to Senior Vice President and Chief Credit Officer Craig E. Reay. Mr. Valerian s son holds 1,000 phantom shares, which will be cancelled in exchange for $15,200 in cash,

- Liberty s CEO William A. Valerian and CFO Richard C. Ebner have employment agreements with Liberty. The employment agreements provide that they are entitled to a payment equal to 2.5 times salary when a change in control occurs, payable in equal installments over 30 months, plus payments for the cost of life insurance, long-term disability, and medical benefits over those 30 months. The Merger will constitute a change in control under those employment agreements. Mr. Valerian s total payments are estimated to be $929,502 and Mr. Ebner s are estimated to be $716,900,

- certain Liberty officers will receive retention bonuses to remain with Liberty through consummation of the Merger,

- the Reorganization Agreement provides that Middlefield will consult with Liberty about forming a Northeast Ohio Advisory Board, which would include some of Liberty s current directors, and

- the Reorganization Agreement preserves for six years the rights of Liberty s officers and directors to continued indemnification coverage and continued coverage under directors and officers liability insurance policies.

Each of Middlefield s and Liberty s board of directors was aware of these interests and considered them in approving the Reorganization Agreement and the transactions contemplated by the Reorganization Agreement. See *THE MERGER Interests of Liberty Directors and Executive Officers in the Merger* beginning on page 72 of this joint proxy statement/prospectus.

Dissenters rights of Liberty stockholders (page 48)

The National Bank Act gives Liberty stockholders the right to dissent from the Merger and elect to have the fair market value of their shares appraised, receiving payment for their shares in cash. To assert dissenters rights of appraisal, a stockholder must comply with the requirements of the National Bank Act, which include voting against the proposal to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement or giving notice in writing at or before Liberty s meeting that the

15

Table of Contents

stockholder dissents by giving notice to the presiding officer. For more information, see *DISSENTERS RIGHTS* and the copy of the applicable statutory provision attached as Annex B to this joint proxy statement/prospectus.

A Liberty stockholder who has questions regarding dissenters rights should consult his or her legal advisers.

Differences in stockholder rights (page 91)

Liberty stockholders who receive Middlefield common stock will be Middlefield stockholders when the Merger is completed. As such, their rights will be governed by Middlefield s Second Amended and Restated Articles of Incorporation and Regulations, as well as Ohio law. For a summary of significant differences between the rights of Middlefield stockholders and the rights of Liberty stockholders, see *COMPARISON OF RIGHTS OF LIBERTY AND MIDDLEFIELD STOCKHOLDERS* beginning on page 91 of this joint proxy statement/prospectus.

Conditions to the Merger (page 88)

As more fully described in this joint proxy statement/prospectus and in the Reorganization Agreement, completion of the Merger depends on adoption and approval of the Reorganization Agreement by Middlefield stockholders and by Liberty stockholders, and satisfaction or waiver of other customary merger closing conditions. Middlefield and Liberty desire to complete the Merger in the first quarter of 2017. See *THE REORGANIZATION AGREEMENT Conditions to the Merger* beginning on page 88 of this joint proxy statement/prospectus.

Termination; Termination Fee (page 89)

The Reorganization Agreement may be terminated before the effective time of the Merger, whether before or after approval by Liberty stockholders and Middlefield stockholders:

- by mutual written consent of Middlefield and Liberty,

- by either Middlefield or Liberty if the other party breaches its covenants or representations and warranties and the breach is not cured within 30 days after written notice or by its nature cannot be cured (provided the terminating party is not also in breach of its covenants or representations and warranties),

- by either Middlefield or Liberty if the Merger does not occur by May 30, 2017 (or a later date the parties may agree to), unless the failure to close by that date is the result of the terminating party s breach of covenants or representations and warranties in the Reorganization Agreement,

- by either Middlefield or Liberty if the Liberty stockholders or the Middlefield stockholders do not vote to approve the Reorganization Agreement,

- by either party if a required governmental approval is denied by final, non-appealable action, or if a governmental entity issues a final, non-appealable order, injunction, or ruling enjoining or otherwise prohibiting consummation of the Merger, by Middlefield if Liberty becomes subject to a formal bank regulatory enforcement action,

by Middlefield if Liberty s board fails to recommend adoption and approval of the Reorganization Agreement to Liberty stockholders or withdraws or adversely changes the recommendation in favor of the Reorganization Agreement, or if Liberty accepts a competing acquisition proposal, and

Table of Contents

by Liberty if it accepts a superior acquisition proposal, but Liberty s termination right is conditioned on Liberty giving to Middlefield notice of the superior proposal and the opportunity to modify Middlefield s merger proposal.

Liberty may be required to pay a termination fee of $1.65 million to Middlefield if (i) the Reorganization Agreement is terminated as described in the seventh and eighth bullet points above or (ii) if a competing acquisition proposal is made known to Liberty, Middlefield subsequently terminates the Reorganization Agreement, and Liberty enters into a definitive agreement relating to the competing acquisition proposal within one year of the termination of the Reorganization Agreement. See *THE REORGANIZATION AGREEMENT Termination; Termination Fee* beginning on page 89.

Table of Contents

SELECTED UNAUDITED PRO FORMA CONDENSED COMBINED CONSOLIDATED FINANCIAL DATA

The following unaudited pro forma condensed combined consolidated balance sheet as of September 30, 2016 and the unaudited pro forma condensed combined consolidated statements of income for the nine months ended September 30, 2016 and for the year ended December 31, 2015 are based on the historical financial statements of Middlefield and Liberty after giving effect to the Merger. The Merger will be accounted for using the acquisition method of accounting in accordance with Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 805, Business Combinations (ASC 805).

The unaudited pro forma condensed combined consolidated statements of income for the nine months ended September 30, 2016 and for the year end December 31, 2015 give effect to the Merger as of the beginning of all periods presented. The unaudited pro forma condensed combined consolidated balance sheet as of September 30, 2016 assumes that the Merger took place on September 30, 2016.

The unaudited condensed combined consolidated balance sheet and statement of income as of and for the nine months ended September 30, 2016 were derived from Middlefield s unaudited condensed financial statements and Liberty s unaudited condensed financial statements and as of and for the nine months ended September 30, 2016. The unaudited condensed statement of income for the year ended December 31, 2015 was derived from Middlefield s and Liberty s audited statements of income for the year ended December 31, 2015.

The pro forma condensed combined consolidated financial statements reflect management s best estimate of the fair value of the tangible and intangible assets acquired and liabilities assumed. As final valuations are performed, increases or decreases in the fair value of assets acquired and liabilities assumed will result in adjustments, which may be material, to the balance sheet and/or statement of income.

As required, the unaudited pro forma condensed combined consolidated financial data includes adjustments which give effect to the events that are directly attributable to the Merger, expected to have a continuing impact and are factually supportable. We expect that we will incur reorganization and restructuring expenses as a result of combining our companies. We also anticipate that the Merger will provide the combined company with financial benefits that include reduced operating expenses (as compared to the sum of expenses from each company while operating separately) and the opportunity to earn more revenue. The pro forma information does not take into account these expected expenses or anticipated financial benefits, and does not attempt to predict or suggest future results.

The unaudited pro forma condensed combined consolidated financial statements are provided for informational purposes only and are subject to a number of uncertainties and assumptions and do not purport to represent what the companies actual performance or financial position would have been had the Merger occurred on the dates indicated and does not purport to indicate the financial position or results of operations as of any date or for any future period.

Please refer to the following information in conjunction with the accompanying notes to these pro forma financial statements and the historical financial statements and the accompanying notes thereto and the section MANAGEMENT S DISCUSSION AND ANALYSIS OF MIDDLEFIELD S FINANCIAL CONDITION AND RESULTS OF OPERATIONS in this joint proxy statement/prospectus.

The unaudited pro forma stockholders equity and net income are qualified by the statements set forth under this caption and should not be considered indicative of the market value of Middlefield common stock or the actual or future results of operations of Middlefield for any period. Actual results may be materially different from the pro forma information presented.

Table of Contents

UNAUDITED PRO FORMA COMBINED CONSOLIDATED CONDENSED BALANCE SHEET

AS OF SEPTEMBER 30, 2016

(Dollars in Thousands, Except Per Share Amounts)

	HISTORICAL Middlefield Banc Corp.	Liberty Bank, N.A.	Pro Forma Adjustments		Combined Pro Forma
ASSETS					
Cash and due from banks	$ 21,976	$ 22,804	$ (2,933)	**A**	$ 32,578
			(1,536)	**B**	
			(7,166)	**C**	
			(567)	**D**	
Fed funds sold	1,300				1,300
Cash and cash equivalents	23,276	22,804	(12,202)		33,878
Investment securities available for sale, at fair value	123,054		(580)	**E**	122,474
Loans held for sale	880	358			1,238
Loans	586,329	197,400	(3,860)	**F**	779,869
Less allowance for loan and lease losses	6,334	3,276	(3,276)	**G**	6,334
Net loans	579,995	194,124	(584)		773,535
Premises and equipment, net	9,921	358			10,279
Goodwill	4,559		11,651	**H**	16,210
Core deposit intangibles	46		582	**I**	628
Bank owned life insurance	13,438	1,653			15,091
Other real estate owned	1,205				1,205
Accrued interest and other assets	5,884	2,171	79	**J**	8,134
TOTAL ASSETS	$ 762,258	$ 221,468	$ (1,054)		$ 982,672
LIABILITIES					
Noninterest-bearing demand	$ 136,320	$ 29,515	$		$ 165,835
Interest-bearing demand	67,061	30,197			97,258
Money market	77,774	82,886			160,660
Savings	173,272	9,953			183,225
Time	184,915	35,689	224	**K**	220,828
Total deposits	639,342	188,240	224		827,806
Short-term borrowings	32,803				32,803
Other borrowings	9,713		12,000	**L**	21,713
Accrued interest and other liabilities	2,208	1,806			4,014
TOTAL LIABILITIES	$ 684,066	$ 190,046	$ 12,224		$ 886,336

EQUITY					
Common stock	$ 47,812	$ 9,603	$ (9,603)	**M**	$ 66,119
			18,307	**N**	
Surplus / additional paid in capital		16,977	(16,977)	**M**	
Retained earnings	40,282	4,842	(4,842)	**M**	40,119
			(567)	**D**	
			404	**E**	
Accumulated other comprehensive income	3,616				3,616
Treasury stock	(13,518)				(13,518)
TOTAL STOCKHOLDERS EQUITY	$ 78,192	$ 31,422	$ (13,278)		$ 96,336
TOTAL LIABILITIES AND STOCKHOLDERS EQUITY	$ 762,258	$ 221,468	$ (1,054)		$ 982,672

See accompanying notes to the unaudited pro forma condensed combined consolidated financial statements.

19

Table of Contents

UNAUDITED PRO FORMA COMBINED CONSOLIDATED CONDENSED STATEMENT OF INCOME FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2016

(Dollars in Thousands, Except Per Share Amounts)

	HISTORICAL Middlefield Banc Corp.	Liberty Bank, N.A.	Pro Forma Adjustments		Combined Pro Forma
INTEREST INCOME					
Interest and fees on originated loans	$ 18,949	$ 7,202	$ 271	**F**	$ 26,422
Interest-bearing deposits in other institutions	42	119			161
Federal funds sold	16				16
Investment securities:	3,092				3,092
Dividends on stock	74	34			108
Total interest income	22,173	7,355	271		29,799
INTEREST EXPENSE					
Deposits	2,665	621	(146)	**K**	3,140
Short-term borrowings	282				282
Other borrowings	53		348	**L**	401
Trust preferred securities	117				117
Total interest expense	3,117	621	202		3,940
Net interest income	19,056	6,734	69		25,859
Provision for loan losses	315				315
Net interest income after provision for loan and lease losses	18,741	6,734	69		25,544
NONINTEREST INCOME					
Service charges on deposit accounts	1,443	240			1,683
Investment securities gains, net	303				303
Earnings on bank-owned life insurance	298	27			325
Gains on sale of loans	322	530			852
Other income	693	285			978
Total noninterest income	3,059	1,082			4,141
NONINTEREST EXPENSE					
Salaries and employee benefits	7,740	3,258			10,998
Occupancy expense	933	390			1,323
Equipment expense	700	152			852

Data processing costs		928		315					1,243
Core deposit intangible amortization		30				50	I		80
Other expense		5,584		1,185					6,769
Total noninterest expense		15,915		5,300		50			21,265
Income before taxes		5,885		2,516		19			8,420
Income taxes		1,129		856		7	O		1,992
NET INCOME	$	4,756	$	1,660	$	12		$	6,428
Less: Income attributable to common stock subject to possible conversion									
Pro forma net income attributable to common stock not subject to possible conversion	$	4,756	$	1,660	$	12		$	6,428
Pro forma net income per common share basic	$	2.31	$	1.73				$	2.59
Pro forma net income per common share diluted		2.30		1.71					2.58
Weighted average number of shares outstanding basic		2,059,656		959,115		515,695	N		2,480,352
Weighted average number of shares outstanding diluted		2,068,532		969,433		515,695	N		2,488,874

See accompanying notes to the unaudited pro forma condensed combined financial statements.

20

Table of Contents

UNAUDITED PRO FORMA COMBINED CONSOLIDATED CONDENSED STATEMENT OF INCOME FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2015

(Dollars in Thousands, Except Per Share Amounts)

	HISTORICAL Middlefield Banc Corp.	Liberty Bank, N.A.	Pro Forma Adjustments		Combined Pro Forma
INTEREST INCOME					
Interest and fees on originated loans	$ 23,824	$ 8,282	$ 359	**F**	$ 32,465
Interest-bearing deposits in other institutions	33	91			124
Federal funds sold	13				13
Investment securities:	4,627				4,627
Dividends on stock	98	66			164
Total interest income	28,595	8,439	359		37,393
INTEREST EXPENSE					
Deposits	3,426	950	(167)	**K**	4,209
Short-term borrowings	194				194
Other borrowings	83		464	**L**	547
Trust preferred securities	117				117
Total interest expense	3,820	950	297		5,067
Net interest income	24,775	7,489	62		32,326
Provision for loan losses	315				315
Net interest income after provision for loan and lease losses	24,460	7,489	62		32,011
NONINTEREST INCOME					
Service charges on deposit accounts	1,874	282			2,156
Investment securities gains, net	323				323
Earnings on bank-owned life insurance	624	54			678
Gains on sale of loans	329	476			805
Other income	894	330			1,224
Total noninterest income	4,044	1,142			5,186
NONINTEREST EXPENSE					
Salaries and employee benefits	9,751	3,703			13,454
Occupancy expense	1,253	493			1,746
Equipment expense	944	212			1,156

Data processing costs		1,071		418					1,489
Core deposit intangible amortization		40				67	**I**		107
Other expense		7,018		1,070					8,088
Total noninterest expense		20,077		5,896		67			26,040
Income before taxes		8,427		2,735		(5)			11,157
Income taxes		1,562		943		(2)	**O**		2,503
NET INCOME	$	6,865	$	1,792	$	(3)		$	8,654
Less: Income attributable to common stock subject to possible conversion	$		$		$			$	
Pro forma net income attributable to common stock not subject to possible conversion	$	6,865	$	1,792	$	(3)		$	8,654
Pro forma net income per common share basic	$	3.41	$	1.88				$	3.42
Pro forma net income per common share diluted		3.39		1.86					3.41
Weighted average number of shares outstanding basic		2,014,966		954,033		515,695	**N**		2,530,130
Weighted average number of shares outstanding diluted		2,024,120		962,091		515,695	**N**		2,539,284

See accompanying notes to the unaudited pro forma condensed combined financial statements.

Table of Contents

Notes to Unaudited Pro Forma Condensed Combined Consolidated Balance Sheets and Income Statements

(Dollars in thousands)

1) Description of the Merger and Basis of Preparation

The Merger

Upon consummation of the Merger Middlefield Banc Corp. will continue to operate as a bank holding company under that name. Pursuant to the Reorganization Agreement, Liberty will merge with and into The Middlefield Banking Company, a subsidiary of Middlefield, with The Middlefield Banking Company being the surviving entity and remaining Middlefield s wholly owned subsidiary.

Basis of Presentation

The unaudited pro forma condensed combined consolidated financial statements have been prepared based on Middlefield s and Liberty s historical financial information. Certain disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles in the United States have been condensed or omitted as permitted by SEC rules and regulations.

These unaudited pro forma condensed combined consolidated financial statements are not necessarily indicative of the results of operations that would have been achieved had the Merger actually taken place at the dates indicated and do not purport to be indicative of future financial condition or operating results.

2) Acquisition Method

The pro forma condensed combined consolidated financial statements reflect the accounting for the transaction in accordance with ASC 805. Under the acquisition method, the purchase price is allocated to the assets acquired and liabilities assumed based on their estimated fair values, with any excess of the purchase price over the estimated fair value of the identifiable net assets acquired recorded as goodwill.

The purchase price allocation for Liberty is summarized as follows (in thousands):

Cash to holders of Liberty common stock	$ 19,166
Value of Liberty common stock owned by Middlefield	984
Middlefield common stock to holders of Liberty common stock	18,307
Total purchase price	38,457
Allocated to:	
Historical book value of Liberty s assets and liabilities	31,422
Pre-closing special dividend to Liberty s common stockholders	(2,933)
Pre-closing cash out of existing Liberty stock options	(1,536)
Historical book value of Liberty s assets and liabilities to be allocated	26,953

To adjust Liberty s assets and liabilities to fair value:	
Loans	(3,860)
Elimination of allowance for loan and lease losses	3,276
Core deposit intangible	582
Net deferred tax asset	79
Time deposits	(224)
Total allocation of purchase price	(147)
Excess of purchase price over allocation of identifiable assets and liabilities	$ 11,651

22

Table of Contents

3) Pro Forma Adjustments and Assumptions

A. Represents payment of special dividend to Liberty common stockholders prior to execution of the transaction.

Special dividend per share	$ 3.13
Outstanding number of shares	960,273
Total special dividends	$ 3,006
Liberty shares held by Middlefield	23,218
Special dividends paid in cash	$ 2,933

B. Represents cashing out of existing Liberty stock options and phantom stock.

Special dividend per share	$ 3.13
Consideration per share (market value of $35.50, 1.1934 exchange rate)	42.37
Total consideration per share	$ 45.50
Stock options and phantom stock weighted average strike price	28.54
Cash out of options and phantom stock per share	16.96
Stock options and phantom stock outstanding	90,571
Total option and phantom stock consideration	$ 1,536

C. Represents the cash component of the purchase price.

Cash consideration per share	$ 37.96
Outstanding number of shares	960,273
Anticipated cash conversion rate	52.58%
Total cash consideration	$ 19,166
Cash proceeds from new debt	12,000
Net cash outflow	$ 7,166

D. Represents payment of $872 of fees to financial advisors, net of 35% anticipated tax effect, payable upon the closing of the acquisition. The fees are non-recurring items directly attributable to the closing of the transaction and are not expected to have a continuing impact on operations and therefore are not included in the Unaudited Pro Forma Statement of Income.

E. Reflects elimination of Middlefield s minority investment in Liberty, carried at $580, and related gain realized as a result of the transaction.

Carrying value of Liberty stock	$ 580
Closing price of common stock as of November 16, 2016	35.50
Liberty shares held by Middlefield	23,218
Fixed exchange ratio of common stock	1.1934
Middlefield realized gain on Liberty stock	$ 404

Table of Contents

F. Reflects the pro forma purchase accounting adjustment of Liberty s loan portfolio to fair value. The preliminary fair value adjustment will be accreted over the loans remaining life on a level yield basis. The initial pro forma amount recorded to the balance sheet as of the acquisition date and subsequent accretion, including the related impact to the provision for loan losses, are as follows:

Book value:	$ 197,400
Fair value:	193,540
Fair value adjustment:	(3,860)
Accretion:	
For the year ended December 31, 2015	359
For the nine months ended September 30, 2016	271

G. Represents elimination of Liberty s allowance for loan and lease losses of $3,276 as of the acquisition date.

H. Reflects the pro forma adjustment to goodwill of $11,651, representing the excess of the purchase price over the fair value of net assets to be acquired.

I. Reflects the pro forma impact of the core deposit intangible asset of Liberty. The preliminary fair value adjustment will be amortized over ten years on an accelerated basis. The initial pro forma amount recorded to the balance sheet as of the acquisition date and subsequent amortization are as follows:

Fair value:	$ 582
Amortization:	
For the year ended December 31, 2015	67
For the nine months ended September 30, 2016	50

J. Reflects creation of a net deferred tax asset resulting from purchase accounting adjustments, estimating a 35% tax rate.

K. Reflects the pro forma purchase accounting adjustment of Liberty s time deposits to fair value. The preliminary fair value adjustment will be accreted over the life of the time deposits on a level yield basis. The initial pro forma amount recorded to the balance sheet as of the acquisition date and subsequent accretion are as follows:

Book value:	$ 35,689
Fair value:	35,913
Fair value adjustment:	224
Accretion:	

For the year ended December 31, 2015	167
For the nine months ended September 30, 2016	146

L. Reflects new Middlefield debt of $12,000 at a blended interest rate of 3.86% utilized to finance the transaction. Borrowings include an $8,000 facility at 3.78% (1-month LIBOR plus 325 basis points) and a $4,000 facility at 4.03% (1-month LIBOR plus 350 basis points).

M. Reflects the elimination of Liberty s historical net equity of approximately $31,422 as a result of the acquisition.

Table of Contents

N. Represents the common stock component of the purchase price.

Closing price of common stock as of November 16, 2016	$ 35.50
Outstanding number of shares	960,273
Fixed exchange ratio of common stock	1.1934
Anticipated stock conversion rate	45.00%
Total stock consideration	$ 18,307
New shares of common stock issued	515,695

O. Reflects tax impact of accretion and amortization of purchase accounting adjustments, assuming a 35% tax rate.

Table of Contents

UNAUDITED COMPARATIVE PER SHARE DATA

The following table summarizes selected share and per share information about Middlefield and Liberty, giving effect to the Merger (known as pro forma information). The data in the table should be read together with the financial information and the financial statements of Middlefield and Liberty incorporated by reference or included in this joint proxy statement/prospectus. The pro forma information is presented as an illustration only, does not represent actual combined financial position per share or combined results of operations per share, and is not a forecast of the combined financial position or combined results of operations for any future period.

The information about book value per share and shares outstanding assumes that the Merger took place as of the dates presented and is based on the assumptions set forth in the preceding unaudited pro forma condensed combined consolidated balance sheets. The information about dividends and earnings per share assumes that the Merger took place as of the beginning of the periods presented and is based on the assumptions set forth in the preceding unaudited pro forma condensed combined consolidated income statements. No pro forma adjustments have been included to reflect potential effects of the Merger related to integration expenses, cost savings, or operational synergies Middlefield expects by combining the operations of Middlefield and Liberty, or to reflect the costs of combining the companies and their operations other than Merger-related expenses. It is further assumed that Middlefield will pay a cash dividend after completion of the Merger at the annual rate of $1.20 per share. The actual payment of dividends is subject to numerous factors, and no assurance can be given that Middlefield will pay dividends after the Merger or that dividends will not be reduced in the future.

	Middlefield Historical	**Liberty Historical**	**Pro Forma Combined** (1)(2)(3)	**Equivalent Pro Forma Liberty** (4)
Basic Net Income Per Share				
Nine Months Ended September 30, 2016	2.31	1.73	2.59	3.09
Diluted Income Per Share				
Nine Months Ended September 30, 2016	2.30	1.71	2.58	3.08
Dividends Declared Per Share				
Nine Months Ended September 30, 2016	0.81	0.60	0.68	0.81
Book Value Per Share				
September 30, 2016	34.80	32.72	34.87	41.62

	Middlefield Historical	**Liberty Historical**	**Pro Forma Combined** (1)(2)(3)	**Equivalent Pro Forma Liberty** (4)
Basic Net Income Per Share				
Year Ended December 31, 2015	3.41	1.88	3.42	4.08
Diluted Income Per Share				
Year Ended December 31, 2015	3.39	1.86	3.41	4.07
Dividends Declared Per Share				
Year Ended December 31, 2015	1.07	0.60	1.08	1.29
Book Value Per Share				
December 31, 2015	33.19	31.59	33.62	40.12

(1)

The pro forma combined book value per share of Middlefield common stock is based on the pro forma combined common stockholders equity for the merged entities divided by total pro forma shares of the combined entities.

(2) Pro forma dividends per share represent Middlefield historical dividends per share.

(3) The pro forma combined diluted net income per share of Middlefield common stock is based on the pro forma combined diluted net income for the merged entities divided by total pro forma diluted shares of the combined entities.

(4) Represents the Pro Forma Combined information multiplied by the 1.1934 exchange ratio.

Table of Contents

MARKET PRICE AND DIVIDEND INFORMATION

Middlefield s common stock trades on the Nasdaq Capital Market under the symbol MBCN. Liberty s common stock does not trade in an established market. Trades in Liberty common stock that occur are the result of direct, private negotiation between buyers and sellers. Accordingly, the management of Liberty does not have information with respect to the price at which all of its common stock has traded. Liberty has 272 stockholders of record.

Liberty paid total cash dividends on its common stock of $0.60 per share in 2015 and $0.40 per share for the first six months of 2016. Liberty has not declared any stock dividends on its common stock during the two most recently completed fiscal years.

A summary of the high and low bid prices of and cash dividends paid on Middlefield common stock for the first nine months of 2016 and for the 2015 and 2014 fiscal years follows. This information does not reflect retail mark-up, markdown or commissions, and does not necessarily represent actual transactions.

	High Bid	Low Bid	Dividend
2014			
First Quarter	28.00	26.00	0.26
Second Quarter	30.50	27.05	0.26
Third Quarter	35.70	28.55	0.26
Fourth Quarter	34.50	33.00	0.26
2015			
First Quarter	34.82	31.50	0.26
Second Quarter	33.65	31.60	0.27
Third Quarter	34.00	30.20	0.27
Fourth Quarter	34.75	28.90	0.27
2016			
First Quarter	34.00	30.00	0.27
Second Quarter	33.00	30.00	0.27
Third Quarter	33.95	31.35	0.27

On July 27, 2016, the last trading day before the Merger was announced, the closing price of Middlefield common stock was $33.74. The closing price was $ on the more recent date of , 2016. The table to follow presents the implied value of Liberty common stock based on those prices for Middlefield common stock and the 1.1934 fixed exchange ratio. We can give no assurance of what the market price of Middlefield common stock will be if and when the Merger is completed.

	closing price of Middlefield common stock on Nasdaq	implied value per share of Liberty common stock at the 1.1934 fixed exchange

		ratio
July 27, 2016	33.74	40.27
, 2016		

27

Table of Contents

RISK FACTORS

This RISK FACTORS section identifies some of the significant factors that make investment in Middlefield common stock speculative or risky, but it does not purport to present an exhaustive description of all significant risks. You should carefully consider the following risk factors before you decide how to vote concerning the proposals presented in this joint proxy statement/prospectus. You should also consider the other information in this joint proxy statement/prospectus, including but not limited to the section captioned FORWARD-LOOKING STATEMENTS, and information in any documents incorporated by reference in this joint proxy statement/prospectus. See WHERE YOU CAN FIND MORE INFORMATION in the forepart of this document

Because the market value of Middlefield common stock fluctuates, Liberty stockholders cannot be sure of the value of the stock portion of the Merger consideration they may receive.

Approximately 45% of the Liberty shares of common stock exchanged in the Merger will be exchanged for Middlefield common stock, and the remaining Liberty shares of common stock exchanged in the Merger (approximately 55%) will be exchanged for cash. This does not take into account the special dividend of approximately $3.0 million, to be declared before closing of the Merger. The cash portion of the Merger consideration is fixed at $37.96 per share, and the stock portion also is fixed at 1.1934 shares of Middlefield common stock for each share of Liberty common stock exchanged for stock. Changes in the price of Middlefield common stock before the Merger is completed will affect the value of the stock portion of the Merger consideration. Changes may result from many factors, including but not limited to general market and economic conditions and changes in Middlefield s business, operations, and prospects. Therefore, when Liberty stockholders vote on the Merger they will not know the final aggregate value of the Merger consideration to be received. Liberty stockholders should obtain current sale prices for Middlefield common stock before voting at the Liberty annual meeting.

You may receive a form of consideration different from the form of consideration you elect

Under the terms of the Reorganization Agreement, stockholders of Liberty will be entitled to receive, for each share of Liberty common stock: (i) $37.96 in cash, or (ii) 1.1934 Middlefield common shares, or (iii) a combination of both. The form of consideration to be received by each Liberty stockholder is subject to reallocation in order to ensure that approximately 45% of the Liberty shares of common stock exchanged in the merger will be exchanged for Middlefield s common shares and 55% of the Liberty shares of common stock exchanged in the merger will be exchanged for cash. The Reorganization Agreement contains proration and allocation methods to achieve this result. If you elect to receive all cash and the available cash is oversubscribed, then you may receive a portion of the Merger consideration in the form of Middlefield common shares. If you elect to receive all Middlefield common shares and the available common shares are oversubscribed, then you may receive a portion of the Merger consideration in cash. If you elect a combination of cash and Middlefield s common shares, you may not receive the specific combination you request.

Middlefield could experience difficulties managing its growth and effectively integrating the operations of Liberty.

The earnings, financial condition and prospects of Middlefield after the Merger will depend in part on Middlefield s ability to integrate successfully the operations of Liberty and continue to implement Middlefield s business plan. Middlefield may not be able to fully achieve its strategic objectives and projected operating efficiencies. The costs or difficulties of integrating Liberty with the Middlefield organization may be greater than expected or the cost savings from anticipated economies of scale of the combined organization may be lower or take longer to realize than expected. Inherent uncertainties exist in integrating the operations of an acquired entity, and Middlefield may encounter difficulties, including but not limited to loss of key employees and customers, disruption of its ongoing business, or possible inconsistencies in standards, controls, procedures, and policies. These factors could contribute to Middlefield not fully achieving its anticipated benefits of the Merger.

Table of Contents

The Reorganization Agreement limits Liberty s ability to pursue alternatives to the Merger.

With limited exceptions, the Reorganization Agreement prohibits Liberty from soliciting, negotiating, or providing confidential information to any third party relating to competing proposals for acquisition of Liberty. In addition, Liberty must pay $1.65 million to Middlefield for termination of the Reorganization Agreement if (a) Middlefield terminates the Reorganization Agreement because Liberty accepts another acquisition proposal, or withdraws its recommendation or fails to recommend to the stockholders adoption of the Reorganization Agreement, or breaches the prohibition against soliciting other acquisition proposals, or (b) Liberty terminates the Reorganization Agreement with the intention of accepting an alternate, superior proposal. Liberty s obligation to make the payment could discourage another company from making a competing proposal.

The circumstances of Liberty and Middlefield may have changed since the date of the fairness opinions obtained from Liberty s and Middlefield s financial advisors.

Liberty s board of directors received an opinion dated July 27, 2016 from its financial advisor and Middlefield s board received a July 27, 2016 opinion from its financial advisor concerning the fairness of the Merger consideration from a financial point of view. Subsequent changes in the operation and prospects of Liberty or Middlefield, changes in general market and economic conditions, and other factors that may be beyond the control of Liberty or Middlefield could significantly alter the value of Liberty or Middlefield or the price of Middlefield common stock by the time the Merger is completed. The opinions state that the Merger consideration is fair from a financial point of view on the date of the opinion, not as of the date the Merger is finally completed or as of any other date. The opinion of Liberty s financial advisor is attached as Annex C to this joint proxy statement/prospectus. The opinion of Middlefield s financial advisor is attached as Annex D. For a description of the opinions, see *THE MERGER Opinion of Liberty s Financial Advisor* on page 55 and *THE MERGER Opinion of Middlefield s Financial Advisor* on page 63 of this joint proxy statement/prospectus.

Middlefield and Liberty stockholders will have a reduced ownership and voting interest after the Merger and will exercise less influence over management of the combined organization.

The Merger will dilute the ownership position of Middlefield stockholders and result in Liberty s stockholders having an ownership stake in the combined company that is smaller than their current 100% stake in Liberty. Upon completion of the Merger, we estimate that continuing Middlefield stockholders will own approximately 80% of the issued and outstanding common stock of Middlefield, while former Liberty stockholders will own approximately 20%. Middlefield stockholders and Liberty stockholders will therefore have less influence over the management and policies of the post-Merger organization than they currently have.

Failure to complete the Merger could adversely affect the value of Liberty common stock and future businesses and financial results of both Middlefield and Liberty.

If the Merger is not completed, the ongoing businesses of Middlefield and Liberty could be adversely affected. Middlefield and Liberty would be subject to several risks, including:

- Middlefield and Liberty will have to pay costs even if the Merger is not completed, such as legal, accounting, financial advisor, and printing fees, under the Reorganization Agreement, Liberty is subject to restrictions regarding the conduct of its business before completing the Merger, which could adversely affect Liberty s ability to execute business strategies, and

the Merger requires substantial commitments of time and resources by Middlefield and Liberty management, which would instead be devoted to other opportunities that could be beneficial to Middlefield and Liberty as independent companies.

Table of Contents

In addition, if the Merger is not completed, Middlefield and Liberty may experience negative reactions from their respective customers and employees. Employees could resign and obtain other employment as a result of the potential Merger or failure to complete the Merger. Middlefield or Liberty also could be subject to litigation related to failure to complete the Merger.

The Middlefield common stock received by Liberty stockholders upon completion of the Merger will have different rights from Liberty shares.

When the Merger is completed, Liberty stockholders receiving the stock form of Merger consideration will no longer be stockholders of Liberty but will instead be Middlefield stockholders, with rights governed by the Ohio Revised Code and Middlefield s articles of incorporation and regulations, which are in some respects materially different from the terms of Liberty s Bylaws and Amended and Restated Articles of Association. See *COMPARISON OF RIGHTS OF LIBERTY AND MIDDLEFIELD STOCKHOLDERS* on page 91 of this joint proxy statement/prospectus.

Liberty directors and certain of Liberty s officers have interests that are different from, or in addition to, interests of Liberty s stockholders generally.

The directors and certain executive officers of Liberty have interests in the Merger that are different from, or in addition to, the interests of Liberty stockholders generally. These interests include covenants in the Reorganization Agreement providing for the election of two current Liberty directors (Messrs. Valerian and Bevan), to the Middlefield board of directors immediately after the Merger is consummated, indemnification and insurance for directors and officers of Liberty for events occurring before the Merger as well as the possible formation of a Northeast Ohio Advisory Board that would include some current Liberty directors. In addition, the Reorganization Agreement provides for retention payments to be made to certain officers and the payment of amounts due under employment agreements with Liberty s Chairman and President and with its Chief Operating Officer and Chief Financial Officer.

Liberty will be subject to business uncertainties and contractual restrictions while the Merger is pending.

Uncertainty about the effect of the Merger on employees and customers may have an adverse effect on Liberty and consequently on Middlefield. These uncertainties may impair Liberty s ability to attract, retain and motivate key personnel until the Merger is consummated, and could cause customers and others that deal with Liberty to seek to change existing business relationships with Liberty. Retention of certain employees may be challenging during the pendency of the Merger, as certain employees may experience uncertainty about their future roles with Middlefield. If key employees depart because of issues relating to the uncertainty and difficulty of integration or a desire not to remain with Middlefield, Middlefield s business following the Merger could be harmed. In addition, the Reorganization Agreement restricts Liberty from making certain acquisitions and taking other specified actions until the Merger occurs without the consent of Middlefield. These restrictions may prevent Liberty from pursuing attractive business opportunities that may arise prior to the completion of the Merger. Please see the section entitled *THE REORGANIZATION AGREEMENT Covenants and Agreements* beginning on page 79 of this proxy statement/prospectus for a description of the restrictive covenants to which Liberty is subject under the Reorganization Agreement.

Completion of the Merger is subject to many conditions and if these conditions are not satisfied or waived, the Merger will not be completed.

The obligation of Middlefield and Liberty to complete the Merger is subject to the fulfillment or written waiver of many conditions, including approval by the requisite vote of Middlefield and Liberty stockholders, absence of orders prohibiting completion of the Merger, effectiveness of the registration statement of which this document is a part, approval for Nasdaq Stock Market (Nasdaq) listing of the Middlefield shares to be issued, continued accuracy of the representations and warranties of the parties, and performance by the parties of covenants and agreements. See *THE REORGANIZATION AGREEMENT Conditions to the Merger* on page 88 of this joint proxy statement/prospectus. These conditions to the consummation of the Merger might not be fulfilled, and the Merger therefore might not be completed. If the Merger is not completed by May 30, 2017 (or a later date the parties may agree to), either Middlefield or Liberty could choose not to proceed with the Merger. The parties also could mutually decide to terminate the Reorganization Agreement at any time, before or after approval by stockholders. In addition, Middlefield or Liberty could elect to terminate the Reorganization Agreement in other circumstances. See *THE REORGANIZATION AGREEMENT Termination; Termination Fee* on page 89 of this joint proxy statement/prospectus for details or refer to Article 10 of the Reorganization Agreement attached as Annex A.

Table of Contents

FORWARD-LOOKING STATEMENTS

This joint proxy statement/prospectus contains forward-looking statements, including statements about Middlefield s, Liberty s, and the post-Merger organization s financial condition, results of operations, earnings outlook, asset quality trends, and profitability. Forward-looking statements express Middlefield and Liberty management s current expectations or forecasts of future events. By their nature the forward-looking statements are subject to assumptions, risks, and uncertainties. Statements contained in this joint proxy statement/prospectus that are not statements of historical fact constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, or the Reform Act, even if the statements are not specifically identified as forward looking. In addition, statements in future filings of Middlefield with the SEC, in press releases, and in oral and written statements made by or with the approval of Middlefield or Liberty that are not statements of historical fact constitute forward-looking statements within the meaning of the Reform Act. Examples of forward-looking statements include but are not limited to:

- statements about the benefits of the Merger, including future financial and operating results, cost savings, enhanced revenues, and accretion to reported earnings that may be realized from the Merger,
- statements regarding plans, objectives, and expectations of Middlefield or Liberty or their respective management or boards of directors,
- statements regarding future economic performance, and
- statements regarding underlying assumptions.

Words such as believes, anticipates, expects, intends, targeted, continue, remain, will, should, may expressions are intended to identify forward-looking statements but are not the exclusive means of identifying forward-looking statements. Forward-looking statements are not guarantees of future performance. They involve certain risks, uncertainties, and assumptions that are difficult to predict with confidence. Therefore, actual outcomes and results could differ materially from what is expressed or forecasted in the forward-looking statements. Factors that could cause actual results to differ from those discussed in the forward-looking statements include but are not limited to:

- the risk that the businesses of The Middlefield Banking Company and Liberty will not be integrated successfully or that integration is more difficult, time-consuming, or costly than expected,
- the risk that revenue synergies and cost savings from the Merger are not fully realized or are not realized within the expected time frame,
- the risk that post-Merger revenues or earnings are lower than expected,

deposit attrition, operating costs, customer loss, business disruption, or employee loss after the Merger could be greater than anticipated,

failure of Middlefield or Liberty stockholders to approve the Merger,

local, regional, national, and international economic conditions and the impact they may have on The Middlefield Banking Company and Liberty and their customers and Middlefield s and Liberty s assessments of that impact,

changes in the level of non-performing assets, delinquent loans, and charge-offs,

material changes in the value of Middlefield common stock,

changes in estimates of future loan loss reserve requirements based upon periodic review in accordance with regulatory and accounting requirements,

the risk that management s assumptions and estimates used in applying critical accounting policies prove unreliable, inaccurate, or not predictive of actual results,

Table of Contents

- inflation, interest rate, securities market, and monetary fluctuations,
- changes in interest rates, spreads on earning assets and interest-bearing liabilities, and interest rate sensitivity,
- competitive pressures among depository and other financial institutions could increase and adversely affect pricing, spending, third-party relationships, and revenues,
- changes in applicable laws and regulations (including laws and regulations concerning taxes, banking, and securities),
- the effects of and changes in trade, monetary, and fiscal policies and laws, including interest rate policies of the Federal Reserve,
- legislation affecting the financial services industry as a whole, and/or Middlefield and its subsidiaries, individually or collectively,
- governmental and public policy changes, and
- the impact of various domestic or international military or terrorist actions or conflicts.

All subsequent written and oral forward-looking statements concerning the proposed transaction or other matters and attributable to Middlefield or Liberty or any person acting on their behalf are expressly qualified in their entirety by the cautionary statements made or referred to above. Forward-looking statements are made only as of the date on which they are made. Middlefield and Liberty are not undertaking to update forward-looking statements.

Table of Contents

THE ANNUAL MEETING OF LIBERTY STOCKHOLDERS

Time, Date and Place

This joint proxy statement/prospectus is provided to Liberty stockholders by Liberty s board of directors for solicitation of proxies to be used at the annual meeting of stockholders. The annual meeting will be held at 9:00 a.m. local time on December 22, 2016 at Corporate College East, 4400 Richmond Road, Warrensville Heights, Ohio 44128, including any adjournment. This joint proxy statement/prospectus is also being furnished by Middlefield to Liberty stockholders as a prospectus for issuance of Middlefield common stock in the proposed Merger.

Matters to be Considered

Liberty stockholders will be asked at the annual meeting to consider and vote upon proposals to

- adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement,
- adjourn the meeting to allow solicitation of additional proxies if there are insufficient votes at the meeting to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement,
- elect twelve directors to serve until the earlier of (i) completion of the Merger or (ii) Liberty s 2017 annual meeting and until their successors are elected and qualified,
- ratify the appointment of Maloney + Novotny LLC as independent public accountants for the fiscal year ending December 31, 2016, and
- transact any other business properly presented at the annual meeting or at any adjournment. Liberty s board of directors is not aware of any other business to be transacted at the meeting.

Liberty s board of directors believes the Merger with Middlefield is in the best interests of Liberty stockholders. The board recommends that you vote (1) **FOR** adoption and approval of the Reorganization Agreement and approval of the transactions contemplated by the Reorganization Agreement, (2) if the adjournment proposal is presented for a vote, **FOR** adjournment to allow additional proxy solicitation, (3) **FOR** election of the identified director nominees, and (4) **FOR** ratification of the selection of independent accountants.

Record Date; Shares Outstanding and Entitled to Vote

November 25, 2016 is the record date for determining Liberty stockholders entitled to vote at the annual meeting. Only holders of Liberty common stock at the close of business on the record date are entitled to vote at the meeting. As of the close of business on the record date there were shares of Liberty common stock outstanding and entitled to vote. Liberty common stock is held of record by 272 stockholders. Each share of Liberty common stock entitles the holder to one vote on all matters properly presented at the meeting. Stockholders are not entitled to vote cumulatively in the election of directors.

Votes Required; Quorum

Adoption and approval of the Reorganization Agreement and approval of the transactions contemplated by the Reorganization Agreement require the affirmative vote of the holders of at least two-thirds of the shares of Liberty common stock outstanding. When the stockholder meeting is held, if there are insufficient votes to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement the meeting may be adjourned to allow solicitation of additional proxies. The affirmative vote of the holders of a majority of the shares represented at the meeting in person or by proxy and entitled to vote is necessary to approve adjournment. For the proposal to elect directors, directors are elected by plurality vote,

Table of Contents

which means the directors receiving the greatest numbers of votes are elected. The affirmative vote of the holders of a majority of the shares represented at the meeting in person or by proxy and entitled to vote is necessary to ratify selection of Liberty s independent accountants.

If you are a Liberty stockholder and you do not return a proxy card or vote in person at the Liberty annual meeting or if you mark the proxy card or ballot **ABSTAIN** for the proposal to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement, this will have the same effect as a vote **AGAINST** the proposal. Marking your proxy card or ballot **ABSTAIN** will have the same effect as a vote **AGAINST** the adjournment proposal and the auditor ratification proposal. Failure to return your proxy card or vote in person will have no effect on the adjournment proposal, the proposal to elect directors, or the proposal to ratify the auditor selection.

If you hold your Liberty stock in street name through a broker, bank, or other nominee, you must provide your broker, bank, or nominee with voting instructions. Under applicable FINRA and stock exchange rules, brokers who hold shares in street name for a beneficial owner are allowed to vote in their discretion on routine proposals, even without voting instructions from beneficial owners. For proposals stock exchanges consider non-routine, however, brokers are not allowed to exercise voting discretion and cannot vote on those non-routine proposals unless the beneficial owner gives specific voting instructions. Broker non-votes occur when a broker or nominee does not receive voting instructions from the beneficial owner. Except for the auditor ratification proposal, Liberty believes the proposals to be voted on at Liberty s annual meeting are non-routine and that brokers therefore will not be able to vote on those proposals without specific voting instructions. Therefore, if you hold Liberty shares in street name but do not give voting instructions to your broker, bank, or other nominee, the broker, bank, or other nominee may not vote your shares on the proposal to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement, the proposal to adjourn the meeting, or the proposal to elect directors.

Broker non-votes will have the same effect as votes **AGAINST** the proposal to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement and the proposal to adjourn the meeting. Failing to give voting instructions also will prevent the broker, bank, or other nominee from voting on the director election proposal, but directors nevertheless will be elected because directors are elected by a plurality. Your broker, bank, or other nominee will be able to vote on the auditor selection proposal without voting instructions. Your broker, bank, or other nominee will provide you with a proxy card and directions for giving voting instructions. Please follow the broker, bank, or other nominee s directions to give voting instructions.

A quorum will exist at Liberty s annual meeting if a majority of the outstanding common stock is represented in person or by proxy. A quorum must be present in person or by proxy at the meeting before any action other than adjournment can be taken. A properly executed proxy card marked **ABSTAIN** will be counted for purposes of determining whether a quorum is present.

All of Liberty s directors agreed to vote their Liberty shares in favor of adoption and approval of the Reorganization Agreement and approval of the transactions contemplated by the Reorganization Agreement, in favor of the adjournment proposal and in favor of entering into Voting Agreements with Middlefield as a condition to Middlefield s agreement to enter into the Reorganization Agreement. Excluding Liberty shares held by their immediate family members, Liberty s directors collectively own 354,986 shares of Liberty common stock, or approximately 34.3% of the shares outstanding. As a holder of 23,218 shares of Liberty common stock, or 2.2%, Middlefield intends to vote in favor of adoption and approval of the Reorganization Agreement and approval of the transactions contemplated therein, in favor of the adjournment proposal if applicable, in favor of electing the director nominees identified in this joint proxy statement/prospectus, and in favor of ratifying the selection of independent auditors.

Table of Contents

Solicitation and Revocation of Proxies

A proxy card accompanies this joint proxy statement/prospectus. If you are a Liberty stockholder your proxy is being solicited by Liberty s board of directors. Regardless of whether you attend the annual meeting, the Liberty board of directors urges you to return your properly executed proxy card as soon as possible. If you return your properly executed proxy card before the meeting and do not revoke it, the shares of Liberty common stock represented by the proxy card will be voted at the annual meeting or adjournment.

The Liberty common stock will be voted as specified on the proxy card. If you are a Liberty stockholder and you sign, date, and return a proxy card without stating how you want your shares to be voted, your shares will be voted **FOR** adoption and approval of the Reorganization Agreement and approval of the transactions contemplated by the Reorganization Agreement, and if adjournment of the meeting is necessary to allow time for solicitation of additional proxies your shares will be voted **FOR** adjournment. Similarly, your shares will be voted **FOR** election of the identified director nominees and **FOR** ratification of the auditor selection if you return a valid proxy card without giving voting instructions. Although Liberty s board currently does not expect any other proposals to be presented at the meeting, if any other proposals are properly presented the Liberty common stock represented by properly executed proxy cards will, to the extent permitted by applicable law, be voted in the discretion of the persons named in the proxy card in accordance with their best judgment.

If you return a properly executed proxy card, you may revoke it at any time before a vote is taken at the meeting by:

- filing a written notice of revocation with Richard C. Ebner, Secretary of Liberty, at 25201 Chagrin Boulevard, Suite 120, Beachwood, Ohio 44122,
- executing and returning another proxy card with a later date, or
- attending the meeting and giving notice of revocation in person.

Attending Liberty s annual meeting will not, by itself, revoke your proxy. If you instructed your broker, bank, or other nominee to vote your shares but you wish to change or revoke those voting instructions, you must follow your broker, bank, or other nominee s directions for changing or revoking your vote.

Liberty will bear its own cost of solicitation of proxies. Proxies will be solicited by mail and may also be solicited by personal contact, telephone, facsimile, or electronic mail by directors, officers, and employees, none of whom will receive additional compensation for their solicitation activities. Liberty will pay the standard charges and expenses of brokerage houses, voting trustees, banks, associations, and other custodians, nominees, and fiduciaries who are record holders of Liberty common stock not beneficially owned by them for forwarding this joint proxy statement/prospectus and other proxy solicitation materials to and obtaining voting instructions from the beneficial owners of Liberty common stock.

Table of Contents

PROPOSALS SUBMITTED TO LIBERTY STOCKHOLDERS

Director Election Proposal

The board of directors of Liberty, elected by Liberty s stockholders, oversees the business and management of Liberty. Members of the board monitor and evaluate Liberty s business performance through regular communication with the CEO and senior management, and by participating in board and board committee meetings. The Liberty board is committed to sound and effective corporate governance policies and high ethical standards. Under Liberty s Amended and Restated Articles of Association and By-Laws, the board must consist of at least 5 directors, but may not exceed 25 directors. The By-Laws provide that the number of directors constituting the board may be changed from time to time, either pursuant to a resolution adopted by a majority of the board, or pursuant to the affirmative vote of a majority of the stockholders present in person or by proxy at any meeting of stockholders which has as one of its purposes the election of directors, provided that a quorum is present. The board has fixed the number of authorized directors at thirteen (13). There is currently one vacancy on the board. The board will fill that vacancy when a suitable candidate is identified unless the Merger is consummated prior to that time. Twelve seats on the board are currently filled by the individuals identified as directors in the table below, each of whom has been nominated by the board for re-election. Each such nominee has consented to being named in this proxy statement and has agreed to serve if elected.

Term of Office

Each director serves for a term ending at the next Annual Meeting of Stockholders following his appointment or election as a director, and until his or her successor is elected and qualified. The term of each of Liberty s twelve current directors expires at the annual meeting, upon the election of their successors. The board has nominated the twelve current directors for re-election to the board for a term ending upon the earliest of the completion of the Merger, the 2017 annual meeting and until his successor is elected and qualified, or until he resigns or is otherwise removed and his successor is duly elected and qualified.

Nominations of Directors

Upon the recommendation of the Corporate Governance/Nominating Committee, the board has nominated the twelve individuals identified below for election as directors. The board believes that the qualifications and experience of the 2016 director nominees will contribute to an effective and well-functioning board. The board and the Corporate Governance/Nominating Committee believe that, individually and as a whole, the directors possess the necessary qualifications to provide effective oversight of Liberty s business and quality advice and counsel to Liberty s management.

Nominations of candidates for election as directors at the meeting are governed by Liberty s By-Laws. The By-Laws provide that such nominations may be made either by the board or by any stockholders entitled to vote at a meeting of stockholders at which directors are elected. The By-Laws require that such nominations, if not made by or on behalf of the board, be made in writing and delivered in person or mailed to Liberty s Secretary and to the Office of the Comptroller of the Currency (OCC) in Washington, D.C., not less than 14 days nor more than 50 days prior to such meeting. However, if less than 21 days notice of such meeting is given to stockholders, such nominations shall be mailed or delivered to the Secretary and to the OCC not later than the close of business on the seventh day following the day on which the notice of meeting was given to stockholders. Notice of the meeting of Liberty s stockholders is deemed to be given on the date on which such notice is deposited in the United States mail. For the purpose of the herein notice with respect to the meeting, such date is , 2016.

Liberty s By-Laws further require that nominations for election as director, if not made by or on behalf of the board, set forth the name, address, and the number and class of Liberty common stock owned by the nominating stockholder, and must include all information relating to the proposed nominee that is required to be disclosed in solicitations of proxies for election of directors in an election contest, or is otherwise required, in each case pursuant to Regulation 14A under the Securities Exchange Act of 1934, as amended, including the proposed nominee s written consent to serve as a director if elected.

Table of Contents

Liberty s By-Laws provide that if the Chairman of the meeting determines that the nomination of any candidate for election as a director was not made in accordance with the By-Laws, then the Chairman may order that such nomination, and all votes cast for the election of such candidate, be disregarded.

Liberty expects that there will be one vacancy on the board following the meeting. In such event, it is the intention of the Board to consider qualified candidates for appointment to the board. As provided by the By-Laws of Liberty, a majority of the board then in office may fill a vacancy on the board.

Directors of Liberty

The following table identifies each director nominee of Liberty. Ages shown are as of November 25, 2016. The term of each current director expires at the meeting, or until he or she resigns or is otherwise removed and his or her successor is duly elected and qualified. There are no family relationships among any of Liberty s directors.

Director Nominees	Age	Director Since	Position
Thomas W. Bevan (3), (5)	50	2011	Director
Michael A. Carlin (1), (2), (4), (5)	68	2014	Director
Joseph E. Cirigliano (4), (5)	92	2011	Director
Dominic M. D Amore, Jr. (2), (4), (7)	63	2002	Director
Richard C. Ebner (1), (5), (6)	66	2004	Director, Chief Operating Officer, Chief Financial Officer & Secretary
Donald A. Latore (3), (4), (6), (7)	74	1999	Director
Joseph D. Miceli (1), (3)	67	2005	Director
James Mirgliotta (3), (6), (7)	83	1989	Director
Ralph R. Razinger (2), (4), (5), (6), (7)	68	2007	Vice Chairman of the Board
Thomas A. Reitan (2), (4), (5)	55	2011	Director
Daniel D. Smith (1), (2), (3)	61	2002	Director
William A. Valerian (1), (5), (6), (7)	73	2001	Chairman of the Board, Chief Executive Officer & President

(1) Member of the Asset/Liability Committee
(2) Member of the Audit Committee
(3) Member of the Corporate Governance/Nominating Committee
(4) Member of the Compensation Committee
(5) Member of the Risk Committee
(6) Member of the Executive Committee
(7) Member of the Loan Committee

Information Concerning Nominees for Director

Thomas W. Bevan, J.D. is a founding shareholder and CEO of Bevan & Associates, LPA, Inc. in Boston Heights, Ohio. Bevan & Associates is a law firm that concentrates on asbestos litigation and workers compensation. Mr. Bevan has been licensed to practice law in the State of Ohio since 1991 and the United States District Court, Northern District of Ohio since 1992. He has practiced law fulltime in Ohio since 1991 and is a member of the Ohio State Bar Association, the Akron Bar Association, the Ohio Association for Justice, the American Association for Justice, and the Public Justice Foundation.

Michael A. Carlin, CPA (inactive) is a financial management executive with extensive experience in the banking and financial services industries as well as over forty years of advising businesses. Prior to forming Carolan Partners LLC in 2006, Mr. Carlin was a partner with Deloitte & Touche LLP from 1989 to 2006. As an advisor to numerous clients, Mr. Carlin has guided both strategic and financial buyers regarding mergers and acquisitions.

Table of Contents

Mr. Carlin also has extensive experience in bank lending and credit including modeling financial needs, development of deal structure and negotiating terms. He has experience with troubled debt restructurings and resolving liquidity and working capital problems. Mr. Carlin has extensive public markets experience including initial public offerings and SEC and bank regulation compliance. He was also a firm-designated specialist in financial instruments and derivatives.

Joseph E. Cirigliano, J.D. retired after twenty-four years as a Common Pleas and Ninth District Court of Appeals Judge. He is presently a member of the Wickens, Herzer, Panza, Cook & Batista Co. law firm (litigation department). He is a member of the American Bar Association, Ohio State Bar Association, Lorain County Bar Association (Executive Committee, Ethics & Grievance Committee), and American Judicature Society. He is a former member of the Board of Governors of the Ohio State Bar Association. He has served as chairman of Lorain County Community College and is a former Ohio Judicial College trustee.

Dominic M. D Amore, *Jr., CPA* is one of the founding members of The D Amore Tatman Group, LLC, a certified public accounting and business consulting firm, and has been with that firm since 1999. Mr. D Amore is a member of the American Institute of Certified Public Accountants, the Ohio Society of Certified Public Accountants, and the National Association of Business Valuation Analysts.

Richard C. Ebner, CPA, GCMA has served as the Chief Operating Officer and Chief Financial Officer of the Bank since 2004. Mr. Ebner is a member of the American Institute of Certified Public Accountants and the Ohio Society of Certified Public Accountants.

Donald A Latore was the President of Howard Hanna Mortgage Services, formerly Home Mortgage Assured Corporation, a Howard Hanna Smythe, Cramer Co. subsidiary, from 1999 to his retirement in 2012. Prior to this, he was President and CEO of Assured Mortgage Corporation, a company he started in 1982. Mr. Latore is a member of, and has served on committees for the Mortgage Bankers Associations of America and Ohio, the Mortgage Brokers Associations of America and Ohio, the National Advisory Board for Lenders One, and the Cleveland Area Board of Realtors. Mr. Latore also served as a trustee and past vice president for the Alta House.

Joseph D. Miceli has been the Chief Executive Officer of Miceli Dairy Products Company since 1980. Mr. Miceli is a member of the Board of Trustees of the Northern Ohio Italian Americans (NOIA), and a member of the Board of Directors of Urban Community School.

James Mirgliotta has been a principal officer of Forest City Erectors Inc., a Twinsburg-based steel erection firm, since 1961, and is also a director of that company. He has also served as past Chairman of the Board and a director of Pre-Cast Services Company, a construction company that erects pre-cast concrete and granite products, and President of T.W. Easton Corporation, a heavy machinery rigging and cartage company. In addition, Mr. Mirgliotta has been the past President of the Steel and Iron Contractors Association of Cleveland, past President and a member of the executive board of the National Erectors Association, a past President and a current member of the Board of Directors of the Cleveland Construction Employers Association, and a member and past President of the Twinsburg Rotary Club. Mr. Mirgliotta served as Chairman of Liberty from 1989 through June 2003.

Ralph R. Razinger has been CEO of CABMAT, LLC, a processor and distributor of non-ferrous metals, since 2006 when he founded the firm. He has over twenty-five years of experience in the non-ferrous metals industry. Mr. Razinger is also a partner in RDR Development Group, LLC, which develops commercial and residential properties in both Ohio and Florida, and a partner in R&J Development, which builds custom homes in Northeastern Ohio. He is a former director of the American Copper Council. Mr. Razinger is Vice Chairman of the board.

Thomas A. Reitan is Executive Vice President of HUB Financial Services, a specialized business unit of HUB International. HUB International is the tenth largest global insurance brokerage and risk management consulting firm. Prior to HUB, Mr. Reitan was a Principal of The Burnham Insurance group, which was purchased by HUB in 2001. Mr. Reitan has thirty years of experience working exclusively with financial institutions on lending and enterprise risk solutions. His clients and experiences range from super-regional banks to community based lenders throughout the U.S. He has served on a variety of regional and national banking and mortgage banking associations.

Daniel D. Smith is President of Consolidated Investment Corporation, a real estate investment and management company. Since 1993, Mr. Smith has been a member of the Board of Directors of Lake Erie College. He also serves on the Lake-Geauga Committee of the Cleveland Foundation.

William A. Valerian has been Chief Executive Officer of the Bank since 2004. He has served as a director of Liberty since 2001 and the Chairman of the Board since July 2003.

Independent Directors

A majority of the directors and all of the members of the Audit Committee, the Corporate Governance/Nominating Committee, and the Compensation Committee are independent, as such term is defined in Rule 5605(a)(2) of the Nasdaq listing standards. Under Nasdaq Rule 5605(a)(2), independent director means a person other than an executive officer or employee of Liberty or any other individual having a relationship which, in the opinion of Liberty s board of directors, would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. For purposes of this rule, family member means a person s spouse, parents, children and siblings, whether by blood, marriage or adoption, or anyone residing in such person s home. Under the Nasdaq rule, the following persons shall not be considered independent:

(A) a director who is, or at any time during the past three years was, employed by Liberty;

(B) a director who accepted or who has a family member who accepted any compensation from Liberty in excess of $120,000 during any period of twelve consecutive months within the three years preceding the determination of independence, other than the following:

(i) compensation for board or board committee service;

(ii) compensation paid to a family member who is an employee (other than an Executive Officer) of Liberty; or

(iii) benefits under a tax-qualified retirement plan, or non-discretionary compensation.

Provided, however, that in addition to the requirements contained in this paragraph (B), Audit Committee members are also subject to additional, more stringent requirements under Nasdaq Rule 5605(c)(2).

(C) a director who is a family member of an individual who is, or at any time during the past three years was, employed by the company as an executive officer;

(D) a director who is, or has a family member who is, a partner in, or a controlling shareholder or an executive officer of, any organization to which Liberty made, or from which Liberty received, payments for property or services in the current or any of the past three fiscal years that exceed 5% of the recipient s consolidated gross revenues for that year, or $200,000, whichever is more, other than the following:

(i) payments arising solely from investments in Liberty s securities; or

(ii) payments under non-discretionary charitable contribution matching programs.

(E) a director of Liberty who is, or has a family member who is, employed as an executive officer of another entity where at any time during the past three years any of the executive officers of Liberty serve on the compensation committee of such other entity; or

Table of Contents

(F) a director who is, or has a family member who is, a current partner of Liberty s outside auditor, or was a partner or employee of Liberty s outside auditor who worked on Liberty s audit at any time during any of the past three years.

The board has determined that all of the current directors, except for Messrs. Valerian and Ebner, who are executive officers of Liberty, are independent directors within the meaning of the foregoing requirements.

Executive Session

The non-management or independent directors of the board meet periodically in executive session without the directors who are executive officers.

Audit Committee

The Audit Committee of Liberty is required to have at least three members, each of whom must comply with the independence and other standards for audit committee members under Nasdaq Rule 5605(c)(2) and Rule 10A-3(b)(1) under the Securities Exchange Act of 1934, as amended (the Act). The current members of the Audit Committee of the Bank are Michael A. Carlin, Dominic M. D Amore, Jr. (Chair), Ralph R. Razinger, Thomas A. Reitan and Daniel D. Smith.

Each Audit Committee member must: (i) be independent as defined under the Nasdaq director independence rules set forth above; (ii) meet the criteria for independence set forth in Rule 10A-3(b)(1) under the Act (subject to the exemptions provided in Rule 10A-3(c) under the Act); (iii) not have participated in the preparation of the financial statements of Liberty or any current subsidiary of Liberty at any time during the past three years; and (iv) be able to read and understand fundamental financial statements, including Liberty s balance sheet, income statement, and cash flow statement. Furthermore, at least one member of the Audit Committee has, and will continue to have, past employment experience in finance or accounting, requisite professional certification in accounting, or any other comparable experience or background which results in the individual s financial sophistication, including being or having been a chief executive officer, chief financial officer or other senior officer with financial oversight responsibilities. Liberty has determined that Audit Committee members Michael A. Carlin and Dominic M. D Amore, Jr. meet these requirements.

Compensation of Directors; Certain Transactions

Members of the board who are not employees of Liberty were compensated for their attendance at meetings of the board during 2015 at the rate of $800 per meeting attended. They received no other compensation for their service on the board. In addition, members of the board who are not employees of Liberty and who served on committees of the board received $275 per meeting attended. Effective January 1, 2016, the compensation for attendance at meetings of the board for members who are not employees of Liberty was increased from $800 to $900 per meeting while compensation for attendance at meetings of committees of the board was increased from $275 to $300 per meeting.

Mr. Valerian was compensated $12,000 in 2015 for his services on the board and the committees on which he serves. Mr. Valerian will be compensated $12,000 in 2016 for his services on the board and the committees on which he serves.

Table of Contents

The following table sets forth the compensation paid to the directors who are not employees of Liberty during 2015:

Name	Board Fees $	Committee Fees $	Total $
Thomas W. Bevan	8,800		8,800
Michael A. Carlin	9,600	2,750	12,350
Joseph E. Cirigliano	9,600	825	10,425
Dominic M. D Amore, Jr.	9,600	2,200	11,800
Donald A. Latore	9,600	1,100	10,700
Joseph D. Miceli	8,000	1,100	9,100
James Mirgliotta	8,800	550	9,350
Ralph R. Razinger	7,200	2,200	9,400
Thomas A. Reitan	8,800	1,650	10,450
Daniel D. Smith	9,600	2,200	11,800

The board met twelve (12) times during 2015. Each director attended at least 75% of the meetings of the board.

From time to time, Liberty extends credit to its directors and executive officers for business and personal uses. All extensions of credit to directors and executive officers are made in the ordinary course of Liberty s business and on substantially the same terms, including interest rates and collateral, as those prevailing at the time for comparable transactions with other borrowers involving similar credit risk. Such credit extensions are made after a determination by the Bank that they do not involve more than the normal risk of collectability or present other unfavorable features.

Liberty s board of directors recommends voting ***FOR*** *election of the identified director nominees.*

Liberty Merger Proposal

As discussed throughout this joint proxy statement/prospectus, Liberty is asking stockholders to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement. Liberty stockholders should carefully read this document in its entirety for more detailed information regarding the Reorganization Agreement and the Merger. In particular, stockholders are directed to the copy of the Reorganization Agreement attached as Annex A to this joint proxy statement/prospectus.

Liberty s board of directors recommends voting ***FOR*** *approval and adoption of the Reorganization Agreement and approval of the transactions contemplated by the Reorganization Agreement.*

Liberty Adjournment Proposal

If there are insufficient votes at the time of the Liberty annual meeting to approve and adopt the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement, the meeting may be adjourned to another time or place to allow additional time for proxy solicitations. If the number of shares of Liberty common stock voting in favor is insufficient to approve and adopt the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement, Liberty intends to move for adjournment to enable the Liberty board of directors to solicit additional proxies for approval. If that occurs, Liberty will ask the Liberty stockholders to vote upon the adjournment proposal (but not the Merger proposal) and will also ask stockholders to vote on the director election proposal and auditor ratification proposal. Liberty is asking stockholders to authorize the proxy holder to vote in favor of adjournment of the Liberty annual meeting to another time and place for the purpose of soliciting additional proxies. If the adjournment proposal is approved, proxies will remain valid if not revoked and Liberty could use the additional time to solicit additional proxies, including the solicitation of proxies from Liberty stockholders who have previously voted.

Liberty s board of directors recommends voting ***FOR*** *the adjournment proposal.*

Auditor Ratification Proposal

The Audit Committee of Liberty s board appointed Maloney + Novotny LLC, Certified Public Accountants, to serve as the Bank s independent auditors for its fiscal year ending December 31, 2016. The board is seeking stockholder ratification of the Audit Committee s appointment of Maloney + Novotny LLC. Representatives of Maloney + Novotny LLC are expected to attend the annual meeting to respond to appropriate questions, and will have an opportunity to make a statement if they desire. If the appointment of Maloney + Novotny LLC is not ratified by the stockholders, the Audit Committee may appoint another independent accounting firm or may decide to maintain the appointment of Maloney + Novotny LLC. Notwithstanding the selection and ratification, the Audit Committee, in its discretion, may direct the appointment of a new independent public accounting firm at any time during the year if the Audit Committee believes that such a change would be in the best interest of Liberty and its stockholders.

The affirmative vote of a majority of the voting power of the common stock present is necessary for ratification of the selection of independent auditors.

Liberty s board of directors recommends voting ***FOR*** *ratification of the selection of Maloney + Novotny LLC as independent auditors.*

Table of Contents

THE SPECIAL MEETING OF MIDDLEFIELD STOCKHOLDERS

Time, Date and Place

This joint proxy statement/prospectus is provided to Middlefield stockholders by Middlefield s board of directors for solicitation of proxies to be used at the special meeting of stockholders. The special meeting will be held at 10:00 a.m. local time on January 10, 2017 at The Middlefield Banking Company, 15985 East High Street, Middlefield, Ohio 44062, including any adjournment.

Matters to be Considered

Middlefield stockholders will be asked at the special meeting to consider and vote upon proposals to

- adopt and approve the Reorganization Agreement,
- approve the issuance of up to 563,261 shares of Middlefield common stock in the Merger,
- adjourn the meeting to allow solicitation of additional proxies if there are insufficient votes to adopt and approve the Reorganization Agreement,
- transact any other business properly presented at the special meeting or at any adjournment. Middlefield s board of directors is not aware of any other business to be transacted at the meeting.

Middlefield s board of directors believes the Merger is in the best interests of Middlefield stockholders and recommends that you vote (1) **FOR** the Reorganization Agreement, (2) **FOR** issuance of common stock, and (3)) if the adjournment proposal is presented for a vote, **FOR** adjournment.

Record Date; Shares Outstanding and Entitled to Vote

The board of directors fixed the close of business on November 17, 2016 as the record date for determining Middlefield stockholders entitled to vote at the special meeting. As of the close of business on the record date there were 2,250,893 shares of Middlefield common stock outstanding and entitled to vote at the special meeting. Middlefield common stock is held of record by approximately 1,060 stockholders. Each share of Middlefield common stock entitles the holder to one vote on all proposals at the special meeting.

Votes Required; Quorum

Under the Ohio General Corporation Law and Middlefield s Second Amended and Restated Articles of Incorporation, adoption and approval of the Reorganization Agreement requires the affirmative vote of the holders of at least two-thirds of Middlefield s outstanding common stock. Under Nasdaq rules, approval of the issuance of Middlefield common stock requires the affirmative vote of the holders of a majority of votes cast on the proposal. Under Middlefield s regulations, approval of adjournment requires the affirmative vote of the holders of a majority of the votes cast on the proposal. On the record date Middlefield directors owned a total of 102,153 shares of Middlefield common stock, or approximately 4.6%.

If you are a Middlefield stockholder and you do not return a proxy card or vote in person at the Middlefield special meeting or if you mark the proxy card or ballot **ABSTAIN** for the proposal to adopt and approve the Reorganization Agreement, this will have the same effect as a vote **AGAINST** that proposal. Failing to vote or abstaining will have no effect on the adjournment proposal or the proposal to approve issuance of shares.

If you hold your Middlefield stock in street name through a broker, bank, or other nominee, please provide your broker, bank, or nominee (the record holder of your common stock) with voting instructions. Under Nasdaq rules, brokers who hold shares in street name for a beneficial owner are allowed to vote in their

Table of Contents

discretion on routine proposals, even without voting instructions from beneficial owners. For proposals Nasdaq considers non-routine, however, brokers are not allowed to exercise voting discretion and cannot vote on those non-routine proposals unless the beneficial owner gives specific voting instructions. Broker non-votes occur when a broker or nominee does not receive voting instructions from the beneficial owner. Middlefield believes the proposals to be voted on at the special meeting are non-routine and that brokers therefore will not be able to vote on those proposals without specific voting instructions. Therefore, if you hold Middlefield stock in street name but do not give voting instructions to your broker, bank, or other nominee, the broker, bank, or other nominee may not vote your shares on the proposal to adopt and approve the Reorganization Agreement, the proposal to approve share issuance, or the proposal to adjourn the meeting.

Broker non-votes on the proposal to adopt and approve the Reorganization Agreement will have the same effect as votes **AGAINST** that proposal. Failing to give voting instructions also will prevent your broker, bank, or other nominee from voting on the proposal to issue common stock and the adjournment proposal, but under Middlefield s regulations broker non-votes on those proposals have no effect because the proposals are decided by a majority of votes actually cast. Your broker, bank, or other nominee will provide you with a proxy card and directions for giving voting instructions. Please follow the broker, bank, or other nominee s directions to give voting instructions.

A quorum will exist at Middlefield s special meeting if a majority of the outstanding common stock is represented in person or by proxy. A quorum must be present in person or by proxy at the meeting before any action other than adjournment can be taken. A properly executed proxy card marked **ABSTAIN** will be counted for purposes of determining whether a quorum is present.

Solicitation and Revocation of Proxies

A proxy card accompanies this joint proxy statement/prospectus. If you are a Middlefield stockholder your proxy is solicited by Middlefield s board of directors. Regardless of whether you attend the special meeting, the Middlefield board urges you to return your properly executed proxy card as soon as possible. If you return a properly executed proxy card before the special meeting and do not revoke it, the Middlefield common stock represented by the proxy card will be voted at the special meeting or adjournment. The common stock will be voted as specified on the proxy card.

If you are a Middlefield stockholder and you sign, date, and return a proxy card but do not specify how your shares are to be voted, your shares will be voted **FOR** adoption and approval of the Reorganization Agreement and the transactions contemplated thereby, **FOR** issuance of common stock in the Merger, and if adjournment of the meeting is necessary to allow time for solicitation of additional proxies your shares will be voted **FOR** adjournment. Although Middlefield s board currently does not expect any other proposals to be presented at Middlefield s special meeting, if any other proposals are properly presented the common stock represented by properly executed proxy cards will, to the extent permitted by applicable law, be voted in the discretion of the persons named in the proxy card in accordance with their best judgment.

If you return a properly executed proxy card, you may revoke it at any time before a vote is taken at the meeting by:

filing a written notice of revocation with Ms. Kathleen M. Johnson, Secretary, Middlefield Banc Corp., 15985 East High Street, P.O. Box 35, Middlefield, Ohio 44062, executing and returning another proxy card with a later date, or

attending the meeting and giving notice of revocation in person.

Attending Middlefield s special meeting will not, by itself, revoke your proxy. If you instructed your broker, bank, or other nominee to vote your shares but you wish to change or revoke those voting instructions, you must follow your broker, bank, or other nominee s directions for changing or revoking your vote.

Table of Contents

Middlefield will bear its own cost of solicitation of proxies. Proxies will be solicited by mail and may also be solicited by personal contact, telephone, facsimile, or electronic mail by directors, officers, and employees, none of whom will receive additional compensation for their solicitation activities. Middlefield has also engaged D.F. King & Co., a proxy soliciting firm, to assist in the solicitation of proxies for a fee of $15,000 and reimbursement of reasonable out-of-pocket expenses. Middlefield will pay the standard charges and expenses of brokerage houses, voting trustees, banks, associations, and other custodians, nominees, and fiduciaries who are record holders of Middlefield common stock not beneficially owned by them for forwarding this joint proxy statement/prospectus and other proxy solicitation materials to and obtaining proxies from the beneficial owners of Middlefield common stock.

Table of Contents

PROPOSALS SUBMITTED TO MIDDLEFIELD STOCKHOLDERS

Middlefield Merger Proposal

As discussed throughout this joint proxy statement/prospectus, Middlefield is asking its stockholders to adopt and approve the Reorganization Agreement and approve the transactions contemplated thereby. Middlefield stockholders should read this document carefully in its entirety for more detailed information regarding the Reorganization Agreement and the Merger. In particular, stockholders are directed to the copy of the Reorganization Agreement attached as Annex A to this joint proxy statement/prospectus.

Middlefield s board of directors recommends voting ***FOR*** *approval and adoption of the Reorganization Agreement and approval of the transactions contemplated thereby.*

Middlefield Proposal to Approve Issuance of Common Stock

Middlefield is also asking stockholders to consider and vote on the proposal to issue up to 563,261 shares of Middlefield common stock in the Merger. A company with Nasdaq-listed stock is required by Nasdaq rules to obtain stockholder approval if a proposed stock issuance equals or exceeds 20% of the number of shares outstanding before the issuance. The number of shares to be issued by Middlefield in the Merger is approximately 25% of the number of shares outstanding, and for this reason Nasdaq rules require Middlefield to seek stockholder approval. **If Middlefield stockholders do not approve the common stock issuance, Middlefield will not be able to complete the Merger**.

Middlefield s board of directors recommends voting ***FOR*** *approval of the issuance of up to 563,261 shares of Middlefield common stock in the Merger.*

Middlefield Adjournment Proposal

If there are insufficient votes at the time of Middlefield s special meeting to approve and adopt the Reorganization Agreement, the meeting may be adjourned to another time or place to allow additional time for proxy solicitations. If the number of shares of Middlefield common stock voting in favor is insufficient to approve and adopt the Reorganization Agreement, Middlefield intends to move for adjournment to enable Middlefield s board to solicit additional proxies for approval. If that occurs, Middlefield will ask stockholders to vote upon adjournment but not the merger proposal or the proposal to approve share issuance. Middlefield is asking stockholders to authorize the proxy holder to vote in favor of adjournment of the Middlefield special meeting to another time and place for the purpose of allowing additional proxy solicitation. If the adjournment proposal is approved, proxies will remain valid if not revoked and Middlefield could use the additional time to solicit additional proxies, including solicitation of proxies from Middlefield stockholders who have previously voted.

Middlefield s board of directors recommends voting ***FOR*** *the adjournment proposal.*

Table of Contents

DISSENTERS RIGHTS

Liberty stockholders are entitled to exercise dissenters rights of appraisal under the National Bank Act, 12 U.S.C. §215. A copy of the dissenters rights provisions of 12 U.S.C. 215 is attached as Annex B to this joint proxy statement/prospectus. Under these provisions of federal law, Liberty stockholders may dissent from the Merger and elect to have the fair market value of their shares appraised, receiving payment of the appraised value in cash. To assert dissenters right of appraisal, a stockholder must vote against the proposal to adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement or give notice in writing at or before Liberty s meeting that the stockholder dissents, giving such notice to the presiding officer. The dissenting stockholder must make a written request to Middlefield for payment of the appraised value of his or her shares at any time before 30 days after Merger consummation, accompanied by surrender of his or her stock certificates.

The value of a dissenter s Liberty shares will be determined by a committee of three persons, including one selected by a majority vote of the dissenting stockholders, one selected by the directors of The Middlefield Banking Company, and the third by the two so chosen. The valuation agreed upon by any two of these three appraisers governs, but if the value fixed by the appraisers is not satisfactory to a dissenting stockholder, the stockholder may within five days after being notified of the appraised value of his or her shares appeal to the OCC, which will cause a reappraisal to be made. The OCC s reappraisal will be final and binding. If within 90 days after the effective date of the Merger one or more of the appraisers is not selected or the appraisers fail to determine the value of the dissenting shares, upon written request of any interested party the OCC will cause an appraisal to be made, which will be final and binding on all parties. The expenses of the OCC in making the appraisal or reappraisal will be paid by The Middlefield Banking Company.

This summary of dissenters rights is qualified in its entirety by reference to the statutory provisions of 12 U.S.C. 215, paragraphs (b) through (d), reproduced in Annex B. Failure by a Liberty stockholder to follow the required steps for perfecting rights as a dissenting stockholder will result in a loss of those rights. Stockholders notices of intent to demand appraisal of and payment for their shares should be sent to: William A. Valerian, Chairman, President and Chief Executive Officer, Liberty Bank, N.A., 25201 Chagrin Boulevard, Suite 120, Beachwood, Ohio 44122. When the Merger is completed, before the 30th day after completion of the Merger stockholders who have properly asserted dissenters rights should request in writing to Middlefield that it pay the appraised value of their shares, surrendering their stock certificates to Middlefield at that time. The written request after the Merger should be sent to: Thomas G. Caldwell, President and Chief Executive Officer, The Middlefield Banking Company, 15985 East High Street, P.O. Box 35, Middlefield, Ohio 44062.

Table of Contents

THE MERGER

The Proposed Merger

The Reorganization Agreement provides for the merger of Liberty into The Middlefield Banking Company with The Middlefield Banking Company being the surviving entity. As part of the transaction, MBC Interim Bank will first merge into Liberty, followed immediately by Liberty s merger into The Middlefield Banking Company.

The Reorganization Agreement is attached to this joint proxy statement/prospectus as Annex A and is an integral part of this joint proxy statement/prospectus. ***You are encouraged to read the Reorganization Agreement carefully. The Reorganization Agreement is the principal legal document governing the Merger.***

Background of the Merger

Retained by Liberty as financial advisor for a possible strategic transaction, in March 2016 Boenning & Scattergood, Inc. (Boenning) invited financial organizations including Middlefield to review a confidential information memorandum concerning Liberty and to submit an initial acquisition bid, with an April 18, 2016 deadline for non-binding indications of interest. Executing the March 21, 2016 confidentiality agreement, Middlefield received a copy of Boenning s confidential information memorandum. After reviewing the confidential information memorandum, Middlefield management declined to submit a bid. Beginning with the financial crisis of 2007 and 2008 merger and acquisition activity for financial institutions remained for many years at greatly reduced levels by comparison to the ten-year period ended in 2006, with much of the post-crisis activity involving acquisitions of problem institutions or sales of control to private equity firms. But by the end of 2015 the pace of healthy financial institution acquisitions was again accelerating. This was one of the factors that led Middlefield management to initially decline submitting a bid for Liberty, believing a very competitive bidding process would lead to deal terms outside the range sanctioned by Middlefield s internal policies.

In the first half of 2016 Middlefield management s attention was focused on raising additional equity in a private offering. Middlefield engaged Boenning to assist with the private equity offering, entering into a letter agreement with Boenning on February 12, 2016, later superseded by an April 27, 2016 Placement Agency Agreement. Under the letter agreement and Placement Agency Agreement, Boenning acted as Middlefield s exclusive placement agent. A private placement to accredited investors only of no more than 20% of Middlefield s common stock outstanding, the private offering began on or about May 2, 2016 and ended June 30, 2016. Middlefield sold to 29 accredited investors a total of 360,815 shares at $33 per share, or approximately 19% of the shares outstanding before the private placement and 16% of the shares outstanding after. Middlefield s net proceeds of the private offering were $11.3 million, after commissions of approximately $577,000 payable to Boenning and reimbursement of $20,245 of Boenning expenses. With the proceeds of the private placement Middlefield repaid borrowings, including a $3.0 million line of credit from Liberty. If within 24 months after the end of the private offering Middlefield raises additional equity from an investor contacted by Boenning, Boenning will be entitled by the Placement Agency Agreement to a commission at the same rate applicable to the 2016 private sales. Boenning is entitled to indemnification from Middlefield for liabilities arising out of the private offering, as well as contribution by Middlefield to the damages, costs, and expenses that may be incurred by Boenning. Boenning has the right of first refusal to act as Middlefield s placement agent if Middlefield engages in a rights offering to stockholders at any time before July 1, 2017, with a 5.0% commission rate on sales to persons who became Middlefield stockholders through the private offering and a reduced commission rate for sales to directors, executives, and other stockholders.

Middlefield also has an investment banking relationship of long standing with Donnelly Penman & Partners Inc. In early April 2016, after Middlefield management initially declined Boenning s invitation to bid on the Liberty transaction, Donnelly Penman informed Middlefield management that a number of other potential bidders also had declined to submit bids because of other acquisition transactions or for other reasons not having to do with Liberty. With a reduced number of potential bidders, Donnelly Penman suggested that management reconsider the decision not to submit a bid, outlining in very general terms a deal proposal management could consider making. Management discussed this with the Executive Committee of the board of directors of Middlefield at a meeting on Tuesday, April 12, 2016, a meeting at which the principal item of business was the private placement transaction that management desired to complete. The directors on the Executive Committee were Directors Turk, Skidmore, Caldwell, and Heslop. Director Darryl Mast also joined the meeting.

The Executive Committee and Director Mast convened again two days later, on April 14, 2016, to discuss the Liberty proposal, with representatives of Donnelly Penman present as well. At this meeting a deal proposal was outlined by Donnelly Penman and discussed at length, with consideration given to transaction-related costs such as the cost of Liberty s data processing contract and the costs associated with Liberty s executive severance arrangements, the future of Liberty s student loan portfolio, the uncertain status of Liberty s recently added loan production office in Wooster, Wayne County, Ohio, potential loss of Liberty s significant deposit customers, the source of funds for the cash component of the potential transaction and the potential dilution resulting from the equity component, the effect of the acquisition on Middlefield s regulatory capital, and potential cost savings that could result for the combined organization if redundancies are eliminated after acquisition. Aware of the Monday, April 18, 2016, deadline for submitting bid proposals, the committee authorized management to request from Donnelly Penman a post-acquisition financial projection revised to assume loss of Liberty s two deposit customers, who according to the confidential information memorandum together accounted for deposits of more than $50 million, and sale of Liberty s student loan portfolio at a slight loss.

On Friday, April 15, 2016 the Executive Committee Directors Turk, Skidmore, Caldwell, and Heslop reviewed Donnelly Penman s revised projections of financial results. The committee concluded that the overall effect of the revised assumptions was not materially adverse, noting that the period to earn back the dilution of Middlefield s tangible book value and the period in which the transaction becomes accretive to Middlefield s earnings are within Middlefield s internal guidelines, although the tangible book value dilution is slightly outside of the guidelines recommended range. Authorizing management to submit a nonbinding bid at the price of 125% of Liberty s tangible book value, the committee instructed management that the bid must be subject to the condition that Liberty sell its student loan portfolio and declare a special cash dividend before acquisition closing to reduce excess capital.

With a 24-hour extension for submitting the indication of interest, the same Executive Committee members met again on Monday, April 18, 2016, to finalize Middlefield s bid, with Donnelly Penman participating by telephone conference. Subject to obtaining legal review, the Executive Committee authorized management to submit to Boenning a bid in the form of a nonbinding letter of intent, with a total transaction value in the range of approximately 125% to 130% of tangible book value, or 137.5% to 145.0% of tangible book value adjusted for the proposed special cash dividend. Recognizing that Liberty stockholders would possess approximately 17% of Middlefield s outstanding stock after the acquisition, Middlefield agreed to offer two board seats to Liberty, one at the level of the holding company and another at the level of The Middlefield Banking Company. Middlefield submitted its bid by the Tuesday, April 19, 2016 deadline.

On April 19, 2016 Boenning informed Middlefield that it was one of four bidders (three banks and one individual investor) being invited to perform due diligence and thereafter to submit a final bid. Middlefield submitted its due diligence request list to Boenning on April 22, 2016

CEO Thomas G. Caldwell updated the board at its May 9, 2016 regular meeting about the status of Middlefield s indication of interest. CEO Thomas G. Caldwell, COO James R. Heslop, II, and CFO Donald L. Stacy met on Thursday, May 12, 2016, with Liberty s board of directors, the day immediately after Middlefield s 2016 annual meeting, outlining for the benefit of Liberty s board the terms of Middlefield s acquisition proposal. Middlefield representatives performed on-site due diligence of Liberty on May 9, 10, and 11, and during this period and thereafter Middlefield and its advisors made use of Boenning s electronic data room, where books and records of Liberty were available confidentially. On May 20, 2016 CEO Thomas G. Caldwell had a breakfast meeting at which he was introduced by Liberty s CEO William A Valerian to Director Thomas W. Bevan. Mr. Bevan is not only a director of Liberty but also controls an organization that is one of Liberty s two largest depositors.

Middlefield s Executive Committee met again on May 25, 2016, with Directors Turk, Skidmore, Caldwell, and Heslop and with Director Mast added to the Executive Committee s membership. Representatives of Donnelly Penman attended the May 25, 2016 meeting by teleconference. The committee noted with approval that the Liberty acquisition would give Middlefield the opportunity to achieve its goal of entering the Cuyahoga County and Summit County markets, add SBA lending expertise to Middlefield s lending products and services, generate income through sale of the government-guaranteed portion of SBA loans into the secondary market, and with Liberty s student loan product constitute another potential addition to Middlefield s loan products and services. Donnelly Penman discussed its updated merger analysis, slightly decreasing its estimate of the post-acquisition value of Liberty s loan portfolio, reducing the estimated loss of deposits after the acquisition, which is referred to as deposit runoff, and slightly reducing the estimated severance benefits payable to Liberty executives as a result of the acquisition. Donnelly Penman s updated analysis also took into account Middlefield s ongoing private placement, which would strengthen Middlefield s capital position, and presented updated projections of Middlefield s financial condition on a stand-alone basis (stand-alone meaning without taking the Merger into account).

For the final bid Donnelly Penman outlined a proposed price of 145% of Liberty s adjusted tangible book value, for a total transaction value of approximately $39.6 million, including a $12.5 million special dividend payable by Liberty before closing, with 50% of the merger consideration consisting of cash and the other half Middlefield stock. The requirement that Liberty sell the student loan portfolio was no longer part of Middlefield s proposal, because the portion of Liberty s student loan portfolio maintained on Liberty s books performs satisfactorily and the portion originated for sale has significant associated correspondent deposit balances maintained at Liberty by the parties to whom Liberty sells the loans. The May 25 meeting ended with the committee agreeing to recommend that the full board approve the proposed transaction terms at the board s June 6 special meeting, one day before the June 7 final bid deadline. Donnelly Penman met again with the Executive Committee on June 1, 2016, updating the committee about the status of the letter of intent.

CEO Thomas G. Caldwell updated the board at its June 6 special meeting about the bid process. Donnelly Penman and Middlefield s counsel joined the meeting by teleconference. By this time two of the four bidders invited to submit a final bid dropped out, leaving Middlefield and one unknown bidder remaining. Based on conversations with Thomas W. Bevan, a director of Liberty and one of its two largest depositors, the projected deposit runoff calculated by Donnelly Penman was reduced again. Mr. Caldwell noted favorably to the board that Liberty and Middlefield have a community banking focus in common, that Liberty does not have material asset quality concerns, that the due diligence process revealed nothing negative about Liberty, that Liberty s offices are located in Middlefield s targeted area of expansion, and that Liberty s SBA lending would expand Middlefield s products and potentially generate income from sale of the government-guaranteed portion of the SBA loans. For the proposed final bid, the period to earn back the estimated 16.5% dilution of Middlefield s tangible book value and the period in which the transaction becomes accretive to Middlefield s earnings remained within Middlefield s internal guidelines, but the tangible book value dilution remained slightly outside of the guidelines recommended range. The board s special meeting ended with unanimous approval for management to submit a final bid on the terms outlined at the meeting, at 145% of Liberty s adjusted tangible book value, or approximately $40.54 per share (including the amount of the special dividend).

Middlefield submitted its final bid in the form of a nonbinding letter of intent on June 6, 2016. Liberty informed Middlefield that the final bids would be reviewed at Liberty s board meeting on Friday, June 10. After the June 10 board meeting, at Liberty s request Boenning informed Donnelly Penman that Liberty s counterproposal was to obtain two holding company board seats at Middlefield, a $1.00 per share increase in the bid price, and a continued interest in future recoveries on previously charged off student loans.

Table of Contents

At a special meeting of Middlefield s board on Monday, June 13, with Donnelly Penman and Middlefield s counsel joining by teleconference, the board approved a final offer, agreeing to add CEO William A. Valerian and Director Thomas W. Bevan to Middlefield s board and agreeing to a price increase of approximately $0.55 per share, half in additional cash and half in additional Middlefield stock, but declined to offer Liberty a continued interest in future recoveries of previously charged off loans. The letter of intent also provided for continued indemnification and insurance coverage of Liberty s officers and directors for six years after the transaction. Middlefield s board also made clear that the company s willingness to enter into a definitive acquisition agreement was conditioned on Liberty directors executing voting agreements, committing themselves to vote their Liberty shares in favor of the transaction with Middlefield.

Promptly after the June 13 special meeting Donnelly Penman informed Boenning of Middlefield s final offer. Middlefield s letter of intent was signed and returned by Liberty on June 14, 2016, and the parties then proceeded to negotiation of the definitive Reorganization Agreement. The letter of intent provided for the merger of Liberty into The Middlefield Banking Company in a transaction qualifying as a tax-free reorganization, at the price of 147% of Liberty s adjusted tangible May 31, 2016 book value. Excluding approximately $1.147 million payable for cancellation of Liberty s outstanding options and phantom stock, total transaction consideration under the final letter of intent was approximately $39.416 million, consisting of (1) $12.5 million in the form of a special cash dividend before acquisition closing, (2) $13.458 million in cash merger consideration, and (3) $13.458 million in stock merger consideration at a 0.882 fixed exchange ratio of Middlefield stock for 50% of Liberty stock, based on the $31.81 closing price for Middlefield stock on June 13, 2016.

Subsequently, Liberty s outside tax counsel reviewed Middlefield s revised indication of interest and, after consultation with and concurrence from Middlefield s outside tax counsel, determined that the proposed payment by Liberty of a $12.5 million dividend to its stockholders immediately prior to completion of the Merger would adversely affect the tax-free reorganization treatment of the Merger and the ability of Liberty s tax counsel to issue a favorable tax opinion. Following further discussions among the parties and their counsel, it was determined that the transaction should be restructured to reduce the Liberty special dividend from $12.5 million to approximately $3.0 million, increase the cash portion of the Merger consideration from 50% to 55% and decrease the common shares portion of the Merger consideration to 45%, while maintaining the same total transaction value. Over the next several weeks, the parties revised the draft Reorganization Agreement to reflect the latest structure of the transaction and negotiated its terms and conditions.

At a July 11, 2016 special meeting, with counsel present and Donnelly Penman present by teleconference, the board reviewed the status of the proposed transaction and the progress toward execution of the definitive acquisition agreement. Donnelly Penman presented a revised analysis of the transaction consideration, reducing from $12.5 million to $3.0 million the amount of the special cash dividend payable to Liberty stockholders before closing and increasing the portion of the cash merger consideration from 50% to 55%, with the stock portion therefore decreasing to 45%, while maintaining the total transaction value. According to Donnelly Penman s analysis of the revised final terms, Liberty stockholders would have a slightly larger 18.7% stake in the combined Middlefield organization after acquisition, rather than the initial estimate of approximately 17%, Middlefield would earn back the tangible book value dilution within the time range sanctioned by Middlefield s internal policy, and Middlefield s regulatory capital ratios would be within policy limits as well. The slight increase in the number of shares to be issued to Liberty stockholders has the consequence of requiring a vote of Middlefield stockholders as well. The number of shares of Middlefield common stock issuable to Liberty stockholders slightly exceeds 20% of the number outstanding before the acquisition, requiring Middlefield approval under Nasdaq rules, and one-sixth of the number outstanding after the acquisition, requiring stockholder approval under OGCL section 1701.83(A).

On July 25, 2016, Liberty s on-site due diligence investigation of Middlefield occurred, conducted by management of Liberty as well as a representative of Boenning. Liberty had been reviewing Middlefield s SEC filings and additional information provided to Boenning, as well as information provided by Middlefield in connection with the May 12 presentation to the Liberty Board.

Middlefield s board considered the proposed final Reorganization Agreement at a special meeting on July 27, 2016, with Donnelly Penman participating and Middlefield s counsel present by teleconference. The Reorganization Agreement was signed on July 28, 2016. The board considered the slight change in the transaction structure, with the introduction of a first-step merger of MBC Interim Bank into Liberty occurring immediately before the merger of Liberty into The Middlefield Banking Company. The change in transaction structure is for the sole purpose of minimizing adverse potential tax consequences to The Middlefield Banking Company if the transaction does not qualify for tax-free reorganization treatment. Donnelly Penman presented its fairness opinion to the board and outlined the significant terms and financial impact of the transaction, including a special dividend of $3.13 per share for each of Liberty s 959,283 outstanding shares, cash merger consideration of $20.88 per share and stock consideration valued at $17.08, for total consideration of approximately $39.1 million (including the special dividend), or $41.09 per share. Donnelly Penman informed the board that tangible book value dilution would be approximately 16.3%, projected to be earned back in a period of less than 3.5 years, with accretion to earnings exceeding 38% in the first year, an internal rate of return exceeding 20%, and a pro forma Tier 1 leverage ratio at The Middlefield Banking Company of 7.71% and a ratio of tangible common equity to tangible assets of 8.32%. Donnelly Penman informed the board that total consideration is approximately 1.31 times Liberty s tangible book value and 19.12 times last-twelve-months earnings, with a core deposit premium of 5.16%. The July 27, 2016 special meeting concluded with Middlefield s board approving the Reorganization Agreement unanimously.

Liberty s Reasons for the Merger

The Liberty Board of Directors has regularly reviewed and discussed Liberty s business strategy, performance and prospects in the context of developments in the banking industry, the regulatory environment and the competitive landscape. Among other things, the board of directors from time to time has discussed various strategic alternatives, including both acquiring other institutions and being acquired by another institution. Based on Liberty s continued growth, the board of directors believed that it would need to engage in a strategic transaction at some point in time.

For a considerable time, the board of directors of Liberty has been concerned about the increasing expense and complexity of regulatory compliance for financial institutions, as well as the competition among large and small financial institutions for the same loan and deposit products. The directors have discussed in recent years how to best ensure the continued sound operation and profitability of Liberty in the face of these concerns.

Over the years, the board considered from time to time how to best provide for the continued safe and sound operation and strong performance of Liberty in the challenging regulatory and competitive environment. The board also discussed the lack of liquidity of Liberty s stock as well as management succession issues. These discussions included a number of formal and informal meetings at which the directors discussed, among other possibilities, whether to proceed with exploring the possibility of acquiring or merging with another bank. Board members received the unsolicited views of some Liberty stockholders regarding a need for greater liquidity in the Liberty shares. As a result of these stockholder discussions and the board s concerns regarding the increasingly challenging competitive and regulatory environment, the board decided to consider the possibility of exploring a merger and to learn more about the current merger and acquisition market.

From time to time over the years, the board invited Boenning to make a presentation about regional and national merger and acquisition activity. During 2015, Boenning reviewed such trends as well as the procedure and timeline for soliciting nonbinding indications of interest from potential merger partners. Boenning also presented a list of bank and thrift holding companies that, according to Boenning s analysis, might have a logical interest in a possible merger with Liberty. In evaluating whether to proceed with the possibility of soliciting potential merger partners, the board also considered the stated desires of some Liberty stockholders for greater liquidity in Liberty shares and the board s long-held concerns regarding competition and regulation. After careful consideration of all the foregoing, the directors decided to consider Boenning s presentation and reconvene at a later time to determine whether to pursue the process of soliciting interest in a possible merger.

At a meeting of the board held on December 14, 2015, the Liberty directors resumed their discussions regarding whether to enter into the process of soliciting interest in a possible merger. After lengthy consideration of all the foregoing factors, and in light of the board s numerous prior discussions regarding exploring the possibility of a merger, the board unanimously decided to proceed with the process, subject to the agreement and understanding that they could terminate the process at any time before the execution of a definitive agreement in the event that their expectations for stockholder value were not realized.

In January 2016, Boenning was hired by Liberty as its financial advisor to counsel Liberty with respect to a possible strategic transaction. Boenning assisted Liberty in preparing a confidential information memorandum and a limited data room containing certain financial and operational information of Liberty. Liberty and Boenning identified thirty-three (33) potential partners to contact and inquire as to whether such party would be interested in reviewing the memorandum and data room. Of those parties, twenty-two (22) executed confidentiality agreements and accessed the data room and four (4) submitted written indications of interest, three of which were from other banks and one of which was from an individual investor. On April 19, 2016, the board of directors met to consider the four (4) indications of interest. The board of directors reviewed with Boenning the current state of the national and local banking markets, as well as the current environment for bank transactions. The board of directors also reviewed in detail each potential partner s business, operations and financial performance. The board of directors discussed each of the indications of interest in detail and considered the merits of an all cash offer versus a part-stock, part-cash offer. The board of directors also reviewed and considered the financial and operating performance of each party and considered the effect of each offer on the submitting party s financial condition. The board, with the advice of Boenning, determined that providing these four (4) bidders the opportunity to continue the due diligence process would maintain a competitive bidding process, while minimizing the potential disruption to Liberty s operations. Each of the parties subsequently conducted a thorough due diligence process, including on-site meetings with Liberty management and extensive review of materials in the online data room.

At a special meeting of the board of directors on June 10, 2016, Boenning informed the board that two (2) of the potential acquirers had decided not to continue in the process, leaving two finalists. At that same meeting, the board reviewed the remaining two (2) indications of interest in detail and provided Boenning with a list of requested changes to each indication of interest. Boenning contacted each party to review and discuss the board s requested changes and provided each party a last opportunity to increase its bid.

At a telephonic special meeting of the board of directors on June 14, 2016, Liberty s board of directors reviewed the two (2) final bid offers and reviewed the process that had resulted in an attractive price for Liberty. The board considered the value of each offer and the liquidity each one provided to its stockholders, while also evaluating the merits of remaining independent and growing Liberty organically or through acquisitions. The board also considered the quality of Middlefield s operating performance as well as a relative valuation of Middlefield s stock that appeared to be attractive for those Liberty stockholders electing to receive stock. The board determined that the updated oral offer from Middlefield was in the best interest of the stockholders and authorized management to execute the latest indication of interest from Middlefield. Specifically, Middlefield s revised indication of interest provided for a price increase of approximately $0.55 per share of Liberty common stock and inclusion of two (2) current directors of Liberty (Messrs. Bevan and Valerian) on the Middlefield board of directors immediately following the closing of the transaction. Middlefield s revised indication of interest also contemplated that, immediately prior to the consummation of the Merger, Liberty would distribute a $12.5 million special dividend to its stockholders.

The parties executed the revised indication of interest on June 14, 2016 and began preparation of the Reorganization Agreement. Subsequently, Liberty s outside tax counsel reviewed Middlefield s revised indication of interest and, after consultation with and concurrence from Middlefield s outside tax counsel, determined that the proposed payment by Liberty of a $12.5 million dividend to its stockholders immediately prior to completion of the Merger would adversely affect the tax-free reorganization treatment of the Merger and the ability of Liberty s tax counsel to issue a favorable tax opinion. Following further discussions among the parties and their counsel, it was determined that the transaction should be restructured to reduce the Liberty special dividend from $12.5 million to approximately $3.0 million, increase the cash portion of the Merger consideration from 50% to 55% and decrease the common shares portion of the Merger consideration to 45%, while maintaining the same total transaction value. Over the next several weeks, the parties revised the draft Reorganization Agreement to reflect the latest structure of the transaction and negotiated its terms and conditions.

At a meeting of the board of directors on July 27, 2016, the board of directors reviewed in detail the draft Reorganization Agreement and also received the opinion from Boenning that the proposed Merger consideration was fair to Liberty s stockholders from a financial point of view. The board of directors authorized the execution of the Merger Agreement, and each member of the board of directors who owns Liberty common stock entered into a written agreement to vote all of the Liberty shares that he or she beneficially owns in favor of the approval of the transactions contemplated by the Reorganization Agreement.

Management of Liberty signed the Reorganization Agreement on behalf of Liberty as of July 28, 2016 on the terms approved by the board of directors.

Recommendation of Liberty s Board of Directors

The directors of Liberty believe that adoption and approval of the Reorganization Agreement and approval of the transactions contemplated by the Reorganization Agreement are in the best interest of Liberty and its stockholders. Consequently, the directors unanimously recommend that Liberty stockholders adopt and approve the Reorganization Agreement and approve the transactions contemplated by the Reorganization Agreement. The directors of Liberty have agreed to vote their shares of Liberty common stock in favor of the Merger Proposal.

Opinion of Liberty s Financial Advisor

Boenning is acting as financial advisor to Liberty in connection with the proposed Merger. Boenning is a registered broker-dealer providing investment banking services with substantial expertise in transactions similar to the proposed Merger. As part of its investment banking activities, Boenning is regularly engaged in the valuation of businesses and securities in connection with mergers, acquisitions, underwritings, private placements and valuations for estate, corporate and other purposes.

On July 27, 2016, Boenning rendered its oral opinion, which was subsequently confirmed in writing, to the Liberty board of directors that, as of such date and subject to the assumptions made, matters considered and limitations of the review undertaken by Boenning, the Merger consideration to be received by the holders of Liberty s common stock pursuant to the Reorganization Agreement was fair, from a financial point of view, to such holders.

The full text of Boenning s written opinion dated July 27, 2016, which sets forth the assumptions made, matters considered and limitations of the review undertaken, is attached as Annex C to this proxy statement. You are urged to, and should, read this opinion carefully and in its entirety in connection with this joint proxy statement/prospectus. The summary of Boenning s opinion set forth in this joint proxy statement/prospectus is qualified in its entirety by reference to the full text of the opinion. Boenning s opinion speaks only as of the date of the opinion and does not reflect any developments that may occur or may have occurred after the date of its opinion and prior to the completion of the proposed Merger.

No limitations were imposed by Liberty on the scope of Boenning s investigation or the procedures to be followed by Boenning in rendering its opinion. Boenning was not requested to, and did not, make any recommendation to the Liberty board of directors as to the form or amount of the consideration to be paid to the Liberty stockholders, which was determined through arm s length negotiations between the parties. In arriving at its opinion, Boenning did not ascribe a specific range of values to Liberty. Its opinion is based on the financial and comparative analyses described below.

Table of Contents

In connection with its opinion, Boenning, among other things:

(i) reviewed the historical financial performance, current financial position and general prospects of each of Middlefield and Liberty and reviewed certain internal financial analyses and forecasts prepared by the respective management teams of Middlefield and Liberty;

(ii) reviewed the proposed Reorganization Agreement;

(iii) reviewed and analyzed the stock performance and trading history of Middlefield;

(iv) studied and analyzed the consolidated financial and operating data of Middlefield and Liberty;

(v) reviewed the pro forma financial impact of the proposed Merger on Middlefield, based on assumptions relating to transaction expenses, purchase accounting adjustments, cost savings and other synergies determined by the respective management teams of Middlefield and Liberty;

(vi) considered the financial terms of the proposed Merger as compared with the financial terms of comparable bank and bank holding company mergers and acquisitions;

(vii) met and/or communicated with certain members of each of Middlefield s and Liberty s senior management to discuss their respective operations, historical financial statements and future prospects; and

(viii) conducted such other financial analyses, studies and investigations as Boenning deemed appropriate.

Boenning s opinion was given in reliance on information and representations made or given by Middlefield, Liberty, and their respective officers, directors, auditors, counsel and other agents, and on filings, releases and other information issued by each of Middlefield and Liberty including financial statements, financial projections, and stock price data as well as certain information from recognized independent sources. Boenning did not independently verify the information concerning Middlefield or Liberty nor any other data Boenning considered in its review and, for purposes of its opinion, Boenning assumed and relied upon the accuracy and completeness of all such information and data. Boenning assumed that all forecasts and projections provided to it had been reasonably prepared and reflected the best currently available estimates and good faith judgments of the respective management teams of Middlefield and Liberty as to their most likely future financial performance. Boenning expressed no opinion as to any financial projections or the assumptions on which they were based. Boenning did not conduct any valuation or appraisal of any assets or liabilities of Middlefield or Liberty, nor have any such valuations or appraisals been provided to Boenning. Additionally, Boenning assumed that the proposed Merger is, in all respects, lawful under applicable law.

With respect to anticipated transaction costs, purchase accounting adjustments, expected cost savings and other synergies and financial and other information relating to the general prospects of Middlefield and Liberty, Boenning assumed that such information had been reasonably prepared and reflected the best currently available estimates and good faith judgment of the respective management teams of Middlefield and Liberty as to their most likely future performance. Boenning further relied on the assurances of the respective management teams of Middlefield and Liberty that they were not aware of any facts or circumstances that would make any of such information inaccurate or misleading. Boenning was not asked to and did not undertake an independent verification of any of such information and Boenning did not assume any responsibility or liability for the accuracy or completeness thereof. Boenning assumed that the allowance for loan losses indicated on the balance sheet of each of Middlefield and Liberty was adequate to cover such losses; Boenning did not review individual loans or credit files of Middlefield and Liberty. Boenning assumed that all of the representations and warranties contained in the reorganization Agreement and all related agreements were true and correct, that each party under the agreements will perform all of the covenants required to be performed by such party under the agreements, and that the conditions precedent in the agreements were not waived. Also, in rendering its opinion, Boenning assumed that in the course of obtaining the necessary regulatory approvals for the consummation of the proposed Merger no conditions will be imposed that will have a material adverse effect on the combined entity or contemplated benefits of the proposed Merger, including the cost savings and related expenses expected to result from the proposed Merger.

Table of Contents

Boenning s opinion is based upon information provided to it by the respective management teams of Middlefield and Liberty, as well as market, economic, financial and other conditions as they existed and could be evaluated only as of the date of its opinion and accordingly, it speaks to no other period. Boenning did not undertake to reaffirm or revise its opinion or otherwise comment on events occurring after the date of its opinion and did not have an obligation to update, revise or reaffirm its opinion. Boenning s opinion does not address the relative merits of the proposed Merger or the other business strategies that Liberty s board of directors has considered or may be considering, nor does it address the underlying business decision of Liberty s board of directors to proceed with the proposed Merger. Boenning s opinion is for the information of Liberty s board of directors in connection with its evaluation of the proposed Merger and does not constitute a recommendation to the board of directors of Liberty in connection with the proposed Merger or a recommendation to any stockholder of Liberty as to how such stockholder should vote or act with respect to the proposed Merger.

In connection with rendering its opinion, Boenning performed a variety of financial analyses that are summarized below. This summary does not purport to be a complete description of such analyses. Boenning believes that its analyses and the summary set forth herein must be considered as a whole and that selecting portions of such analyses and the factors considered therein, without considering all factors and analyses, could create an incomplete view of the analyses and processes underlying its opinion. The preparation of a fairness opinion is a complex process involving subjective judgments and is not necessarily susceptible to partial analysis or summary description. In arriving at its opinion, Boenning considered the results of all of its analyses as a whole and did not attribute any particular weight to any analyses or factors considered by it. The range of valuations resulting from any particular analysis described below should not be taken to be Boenning s view of the actual value of Liberty.

In its analyses, Boenning made numerous assumptions with respect to industry performance, business and economic conditions, and other matters, many of which are beyond the control of Liberty or Middlefield. Any estimates contained in Boenning s analyses are not necessarily indicative of actual future values or results, which may be significantly more or less favorable than suggested by such estimates. Estimates of values of companies do not purport to be appraisals or necessarily reflect the actual prices at which companies or their securities actually may be sold. No company or transaction utilized in Boenning s analyses was identical to Liberty or Middlefield or the proposed Merger. Accordingly, an analysis of the results described below is not mathematical; rather, it involves complex considerations and judgments concerning differences in financial and operating characteristics of the companies and other facts that could affect the public trading value of the companies to which they are being compared. None of the analyses performed by Boenning was assigned a greater significance by Boenning than any other, nor does the order of analyses described represent relative importance or weight given to those analyses by Boenning. The analyses described below do not purport to be indicative of actual future results, or to reflect the prices at which Liberty s common stock or Middlefield s common stock may trade in the public markets, which may vary depending upon various factors, including changes in interest rates, dividend rates, market conditions, economic conditions and other factors that influence the price of securities.

In accordance with customary investment banking practice, Boenning employed generally accepted valuation methods in reaching its opinion. The following is a summary of the material financial analyses that Boenning used in providing its opinion on July 27, 2016. Some of the summaries of financial analyses are presented in tabular format. In order to understand the financial analyses used by Boenning more fully, you should read the tables together with the text of each summary. The tables alone do not constitute a complete description of Boenning s financial analyses, including the methodologies and assumptions underlying the analyses, and if viewed in isolation could create a misleading or incomplete view of the financial analyses performed by Boenning. The summary data set forth below do not represent and should not be viewed by anyone as constituting conclusions reached by Boenning with respect to any of the analyses performed by it in connection with its opinion. Rather, Boenning made its determination as to the fairness to the holders of Liberty s common stock of the Merger consideration, from a financial point of view, on the basis of its experience and professional judgment after considering the results of all of the analyses performed. Accordingly, the data included in the summary tables and the corresponding imputed ranges of value for Liberty should be considered as a whole and in the context of the full narrative description of all of the financial analyses set forth in the following pages, including the assumptions underlying these analyses. Considering the data included in the summary table without considering the full narrative description of all of the financial analyses, including the assumptions underlying these analyses, could create a misleading or incomplete view of the financial analyses performed by Boenning.

In connection with rendering its opinion and based upon the terms of the draft Agreement and Plan of Reorganization reviewed by it, Boenning assumed the effective aggregate indicated Merger consideration to be $41.57 million and the per share Merger consideration to be $42.14, based on Middlefield s closing stock price on July 26, 2016, of $33.76.

Comparison of Selected Companies. Boenning reviewed and, as reflected in Table 1 below, compared the multiples and ratios of the offer price to Liberty s book value, tangible book value, latest 12 months earnings per share, assets, tangible book premium to core deposits, and deposits, such multiples referred to herein as the pricing multiples, with the median pricing multiples for the current trading prices, after the application of a 29.7% assumed control premium, referred to as the adjusted trading price, of the common stock of a peer group of 22 selected public banks and thrifts with assets between $150 million and $400 million, tangible common equity / tangible assets between 11% and 15% and latest 12 months return on average tangible common equity between 5% and 8.5%, excluding merger targets. The 29.7% equity control premium is the median one day stock price premium for all bank and thrift merger and acquisition deals announced since January 1, 2000, based on data from SNL Financial.

Table 1

		Adjusted Trading Price
Pricing Multiple	**Offer Price**	**Median Statistics for Peer Group (1)**
Price/Book Value	130.3%	129.0%
Price/Tangible Book Value	130.3%	129.0%
Price/Latest Twelve Months Core Earnings Per Share	19.0x	18.3x
Price/Assets	18.7%	15.3%
Premium over Tangible Book Value/Core Deposits	5.6%	4.6%
Price/Deposits	21.9%	18.6%

(1) Peer metrics are based on prices as of market close on July 26, 2016.

Analysis of Bank Merger Transactions. Boenning analyzed certain information relating to recent transactions in the banking industry, consisting of (i) nine Midwest bank and thrift transactions announced since January 1, 2014 with target assets between $100 million and $600 million, tangible equity / tangible assets between 11% and 17%, latest 12 months return on average equity between 5% and 10%, and disclosed pricing, referred to below as Group A; and (ii) 17 nationwide bank and thrift deals announced since January 1, 2014 with target assets between $150 million and $400 million, tangible equity / tangible assets between 12% and 18%, latest 12 months return on average equity between 2% and 12%, and disclosed pricing, referred to below as Group B. As reflected in Table 2 below, Boenning then reviewed and compared the pricing multiples of the offer price and the median pricing multiples of the selected transaction values for Group A and Group B.

Table of Contents

Table 2

Pricing Multiple	The Merger	Median for Selected Transactions Group A	Group B
Price/Book Value	130.3%	119.8%	126.1%
Price/Tangible Book Value	130.3%	124.3%	126.5%
Price/Latest Twelve Months Core Earnings Per Share	19.0x	21.4x	25.2x
Price/Assets	18.7%	17.1%	17.1%
Premium over Tangible Book Value/Core Deposits	5.6%	4.9%	5.9%
Price/Deposits	21.9%	19.9%	19.5%

Discounted Cash Flow Analysis. Discounted cash flow analysis approximates the value of a share of stock to an acquiror by calculating the present value of the target s dividendable cash flow in perpetuity. This analysis assumed a short-term earnings growth rate of 5% and a long-term growth rate of 2%, as well as a short-term balance sheet growth rate of 3.5% and a long-term growth rate of 2%, based on guidance from Liberty s management. The estimated cost savings of 30% in year one, 35% in year two and 40% thereafter, transaction costs of $3.1 million pre-tax and gross credit mark of approximately $5.1 million, or 2.75% of loans (equal to $1.8 million net of Liberty s loan loss reserve) were based on guidance provided by Middlefield. A discount rate of 13% was determined using the Capital Asset Pricing Model and the Build-Up Method, both of which take into account certain factors such as the current risk free rate, the beta of bank stocks compared to the broader market and the Ibbotson risk premiums for small, illiquid stocks and for commercial bank stocks, as well as comparable company returns on tangible common equity. The average of the three methods was approximately 13%. Sensitivity analyses for discount rates and cost savings ranged from 11% to 15% and 33.5% to 46.5%, respectively. The present value of Liberty common stock calculated using discounted cash flow analysis ranged from $34.50 per share to $55.26 per share based on the cost savings estimates and discount rates used, compared to the offer price of $42.14 per share. This analysis does not purport to be indicative of actual future results and does not purport to reflect the prices at which shares of Liberty common stock may trade in the public markets. A discounted cash flow analysis was included because it is a widely used valuation methodology, but the results of such methodology are highly dependent upon the numerous assumptions that must be made, including earnings growth rates, dividend payout rates and discount rates.

Present Value Analysis. Applying present value analysis to Liberty s theoretical future earnings, dividends and tangible book value, Boenning compared the offer price for one share of Liberty s common stock to the present value of one share of Liberty s common stock on a stand-alone basis. The analysis was based upon management s projected earnings growth, a range of assumed price/earnings ratios, a range of assumed price/tangible book value ratios and a 13% discount rate, which was determined using the Capital Asset Pricing Model and the Build-Up Method, both of which take into account certain factors such as the current risk free rate, the beta of bank stocks compared to the broader market and the Ibbotson risk premiums for small, illiquid stocks and for commercial bank stocks, as well as comparable company returns on tangible common equity. The average of the three methods was approximately 13%. The valuation was completed with a sensitivity analysis on the discount rate ranging from 11% to 15%. Boenning derived the terminal price/earnings multiple of 15.8x and terminal price/tangible book value multiple of 123.7% from the three-year median trading multiples of the SNL Bank < $500 Million Index as of July 26, 2016. Sensitivity analyses for terminal price/earnings and price/tangible book ranged from 11.4x to 20.2x and 103.4% to 144.0%, respectively. The present value of Liberty s common stock on a standalone basis is $22.86 to $45.10 per share based on price/earnings multiples, and $22.55 to $40.65 per share based on price/tangible book value multiples, compared to the offer price of $42.14 per share. This analysis does not purport to be indicative of actual future results and does not purport to reflect the prices at which shares of Liberty s common stock may trade in the public markets. A present value analysis was included because it is a widely used valuation methodology, but the results of such methodology are highly dependent upon the numerous assumptions that must be made, including earnings growth rates, dividend payout rates and discount rates.

Pro Forma Merger Analysis. Boenning analyzed certain potential pro forma effects of the Merger, assuming the following: (i) the proposed Merger is completed December 31, 2016; (ii) each share of Liberty s common stock will be eligible to receive consideration of approximately $42.14 consisting of a $3.13 special cash dividend, $20.88 in cash, and $17.09 in Middlefield stock; (iii) estimated pre-tax cost savings of approximately 40% of Liberty s noninterest expense on an annual basis, recognized 75% in 2017 and 87.5% in 2018; (iv) estimated one-time transaction-related costs of approximately $3.5 million pre-tax are expensed prior to closing; (v) Liberty performance was calculated in accordance with Liberty management s earnings forecasts; (vi) Middlefield s performance was calculated in accordance with Middlefield management s earnings forecasts; and (vii) certain other assumptions pertaining to costs and expenses associated with the transaction, intangible amortization, opportunity cost of cash and other items. The analyses indicated that, for the full years 2017 and 2018, the proposed Merger (excluding transaction expenses) would be accretive to the combined company s projected earnings per share and accretive to Liberty s per share equivalent earnings, tangible book value and dividends. Additionally, the combined company s regulatory capital ratios would exceed regulatory guidelines for well capitalized. The actual results achieved by the combined company may vary from projected results and the variations may be material.

As described above, Boenning s opinion was just one of the many factors taken into consideration by the Liberty board of directors in making its determination to approve the proposed Merger.

Boenning, as part of its investment banking business, regularly is engaged in the valuation of assets, securities and companies in connection with various types of asset and security transactions, including mergers, acquisitions, private placements, public offerings and valuations for various other purposes, and in the determination of adequate consideration in such transactions. In the ordinary course of Boenning s business as a broker-dealer, it may, from time to time, purchase securities from, and sell securities to, Middlefield, Liberty, and/or their respective affiliates. In the ordinary course of business, Boenning may also actively trade the securities of Middlefield and Liberty for its own account and/or for the accounts of customers and accordingly may at any time hold a long or short position in such securities.

Boenning is acting as Liberty s financial advisor in connection with the proposed Merger and will receive a customary fee for its services, a significant portion of which is contingent upon consummation of the Proposed Merger. Boenning also received a fee for rendering the fairness opinion. Boenning s fee for rendering the fairness opinion was not contingent upon any conclusion that Boenning reached or upon completion of the proposed Merger. The Company has also agreed to indemnify Boenning against certain liabilities that may arise out of Boenning s engagement.

Prior Engagements by Middlefield and Liberty. Boenning was engaged in February 2016 by Middlefield to serve as placement agent for a private placement of common stock. The offering ultimately closed on June 30, 2016, and Boenning was paid a commission for its role. Boenning advised, and received compensation from, Liberty in 2014 relating to the exploration of strategic alternatives, although no transaction was consummated at that time.

Except for the arrangements between Boenning and Liberty and Middlefield described in the preceding paragraphs, Boenning has not had any material relationship with either Middlefield or Liberty during the past two years in which compensation was received or was intended to be received. Boenning may provide services to Middlefield in the future (and/or to Liberty if the proposed Merger is not consummated), although as of the date of Boenning s opinion, there was no agreement to do so nor any mutual understanding that such services are contemplated.

Boenning s opinion was approved by Boenning s fairness opinion committee. Boenning did not express any opinion as to the fairness of the amount or nature of the compensation to be received in the proposed Merger by any of the officers, directors, or employees of any party to the reorganization Agreement, or any class of such persons, relative to the compensation to be received by the holders of Liberty s common stock in the proposed Merger.

60

Table of Contents

Nonpublic Financial Projections Provided to Financial Advisors

For a number of reasons, including the unpredictability of underlying assumptions and estimates, Liberty does not routinely publicly disclose forecasts or internal projections of future performance, earnings, or other results. However, Boenning considered financial projections provided by or reviewed with senior management of Liberty for the purpose of preparing the financial analyses supporting Boenning s fairness opinion, as described in this joint proxy statement/prospectus under the heading Opinion of Liberty s Financial Advisor. In addition, Donnelly Penman & Partners Inc. considered internal financial projections provided by and/or reviewed with senior management of Liberty for the purpose of preparing the financial analyses supporting Donnelly Penman s fairness opinion, as described in this joint proxy statement/prospectus under the heading Opinion of Middlefield s Financial Advisor. A summary of these projections is therefore included in this joint proxy statement/prospectus because the projections were considered by Boenning and by Donnelly Penman in preparing their analyses.

When the financial projections were prepared, they represented the best estimates and judgments of Liberty management about future financial performance. The financial projections summarized below were prepared in good faith, but financial projections are subjective in many respects and are susceptible to interpretation and periodic revision based on actual experience and recent developments. Accordingly, financial projections do not reliably predict future operating results. The financial projections were not prepared with the expectation of public disclosure or with the goal of complying with American Institute of Certified Public Accountants guidelines for prospective financial information or SEC guidelines regarding forward-looking statements. Although presented with numeric specificity, the financial projections reflect numerous estimates and assumptions that might not be realized and are subject to significant uncertainties and contingencies, many of which are beyond Liberty s control. For these reasons and because of the uncertainties inherent in financial projections, Liberty stockholders and Middlefield stockholders should not unduly rely on these financial projections as predictions of future operating results.

The financial projections of Liberty included in this joint proxy statement/prospectus were prepared by and are the responsibility of Liberty management. Neither Liberty s independent registered public accounting firm nor any other independent accounting firm examined, compiled, or performed any procedures on these financial projections, and therefore express no opinion or any other form of assurance regarding the financial projections. Inclusion of the financial projections in this joint proxy statement/prospectus is not an admission or representation by Liberty or Middlefield that Liberty or Middlefield consider the financial projections to be material information.

All of the financial projections are forward-looking statements. The estimates and assumptions underlying the financial projections summarized below involve judgments regarding future economic, competitive, regulatory, and financial market conditions and future business decisions. The estimates and assumptions may not be realized and are inherently subject to significant business, economic, competitive, and regulatory uncertainties, all of which are difficult to predict and many of which are beyond Liberty s control. In addition, these financial projections represent Liberty s evaluation at the time the projections were prepared of its future financial performance on a stand-alone basis, and without reference to the proposed Merger or transaction-related costs or benefits. Accordingly, Liberty gives no assurance that the projected results will be realized or that actual results will not differ materially from those presented in the financial projections. Inclusion of these financial projections should not be interpreted as a statement that Liberty or Middlefield considers this information a reliable prediction of future results, or that the projections would be the same if prepared by Liberty as of the date of this document, and this information should not be unduly relied on for that purpose.

Table of Contents

Liberty provided to Boenning and Donnelly Penman the following estimate of per share earnings on a stand-alone basis for the period 2017 through 2020, based on its internal strategic plan for 2016-2018 and forward growth expectations for 2019 and beyond:

	Year ended December 31,			
	2017	**2018**	**2019**	**2020**
EPS stand-alone	2.39	2.85	3.14	3.30

Middlefield s Reasons for the Merger

Middlefield s board of directors believes the Merger is in the best interests of Middlefield and its stockholders and therefore unanimously approved the transactions contemplated by the Reorganization Agreement and the Merger. The board reached this decision after consulting with management and with Middlefield s financial and legal advisors. The board s reasoning was based on many factors, including but not limited to the following:

- the Merger will expand Middlefield s northeastern Ohio business into Cuyahoga County and Summit County, two counties to the immediate west and south of Middlefield s market but contiguous to Middlefield s market

- Liberty has a diversified loan portfolio, but its primary focus on commercial lending opportunities targeted to professionals and small business owners is compatible with Middlefield s goals and could allow for significant lending growth in these markets

- the Merger will make Middlefield a leading community banking organization in desirable markets within northeastern Ohio, adding scale, profitability, and growth potential

- Middlefield anticipates that eliminating back office redundancies will lead to savings opportunities

- although there are regional and national financial institutions in northeastern Ohio with significantly greater assets, at approximately $1.0 billion in total assets after the Merger Middlefield will not lose its identity as a community banking organization but it will have improved economies of scale to compete more effectively in an increasingly competitive and increasingly concentrated banking market, along with enhanced growth opportunities through three productive new offices in the Cleveland and Akron markets

- the resulting institution will have a stronger regional presence and greater brand recognition

- Liberty customers will have access to a broader range of banking products and services from a bank with greater lending authority

Liberty s SBA lending will be a positive addition to Middlefield s lending products, potentially also generating income from sale of the government-guaranteed portion of the SBA loan portfolio

The Middlefield Banking Company and Liberty are compatible organizations because of similar strategies and a shared customer focus and community orientation

the pro forma financial aspects of the Merger are favorable, with an estimated earnings per share accretion in 2017 of over 38% and an estimated internal rate of return exceeding 20%, with a manageable three- to four-year period to earn back the approximately 16% anticipated tangible book value dilution

when Liberty board members William A. Valerian and Thomas W. Bevan become Middlefield board members at Merger closing their insights about Middlefield s expanded market in Cuyahoga and Summit Counties will enable Middlefield to take greater advantage of competitive opportunities in that expanded market

The continued employment of many Liberty personnel will help with the transition of customers, employees, and the Liberty community, reducing the Merger s potential execution risk

The Middlefield Banking Company will continue to be well capitalized after the Merger based on improved performance and collections of charged off loans, an opportunity exists to collect on student loans previously charged off by Liberty

Middlefield s board of directors considered many factors in its evaluation. The board did not quantify or assign relative weights to any individual factors in its decision.

Recommendation of Middlefield s Board of Directors

Middlefield s board of directors unanimously approved the transactions contemplated by the Reorganization Agreement and the issuance of common stock in the Merger. The board believes the Merger and the common stock issuance are in the best interests of Middlefield and its stockholders. Accordingly, the directors unanimously recommend that Middlefield stockholders vote **FOR** adoption and approval of the Reorganization Agreement and **FOR** issuance of common stock in the Merger.

Opinion of Middlefield s Financial Advisor

On April 19, 2016 Middlefield s board of directors retained Donnelly Penman to provide merger advisory services. As part of the engagement, Donnelly Penman was asked to assess the fairness to Middlefield stockholders, from a financial point of view, of the approximately $40.0 million consideration being paid.

Donnelly Penman is a regional investment banking firm headquartered in Grosse Point, Michigan. Donnelly Penman is continually engaged in the valuation of businesses and securities in mergers and acquisitions, in secondary distributions of securities, and in private placements, as well as valuations for going-private transactions, corporate, and other purposes.

Donnelly Penman representatives attended the July 27, 2016 meeting at which Middlefield s board of directors evaluated and ultimately approved the Reorganization Agreement and proposed Merger. At this meeting Donnelly Penman reviewed the financial aspects of the proposed transaction and rendered an opinion that as of such date the approximately $40.0 million consideration being paid, including the cash and stock consideration payable to Liberty stockholders in exchange for their Liberty common stock, the approximately $3.0 million special dividend to be declared by Liberty before closing, and the cash payable in cancellation of Liberty s outstanding options and phantom stock, was fair from a financial point of view to Middlefield stockholders.

The full text of Donnelly Penman s written opinion is attached as Annex D to this joint proxy statement/prospectus. The following summary of the opinion is qualified in its entirety by reference to the full text of the opinion in Annex D. You should read the opinion in its entirety for a description of the procedures followed, assumptions made, matters considered, and qualifications and limitations on the review undertaken by Donnelly Penman. Donnelly Penman s opinion is necessarily based upon economic and market conditions and other circumstances as they existed and were evaluated on the date of the opinion.

Donnelly Penman s opinion speaks only as of the date of the opinion. The opinion is directed to Middlefield s Board of Directors and addresses only the fairness to Middlefield stockholders, from a financial point of view, of the consideration being paid. It does not address the underlying business decision to proceed with the Merger and does not constitute a recommendation to any stockholder about how the stockholder should vote regarding the Merger.

Table of Contents

Donnelly Penman discussed current business operations, financial conditions and prospects of Middlefield and Liberty the management teams of Middlefield and Liberty, in addition to discussions with independent directors of Middlefield. The resources Donnelly Penman reviewed in the process of forming its fairness opinion also include but are not limited to the following:

the July 28, 2016 Reorganization Agreement and exhibits

public information of Middlefield, including audited financial statements and Form 10-Ks for the years ended December 31, 2015, 2014 and 2013, interim financial results for the six months ended June 30, 2016 and 2015 as disclosed in Form 10-Q, and the quarterly call reports of The Middlefield Banking Company for the periods March 31, 2016 and December 31, September 30, June 30, and March 31, 2015

the capital ownership structure of Middlefield, including information about Middlefield s private offering of common stock in May and June of 2016

historical market prices and trading volume of Middlefield common stock

historical and forecasted financial information relating to earnings, dividends, assets, liabilities, and prospects of Middlefield furnished and deemed reasonable by Middlefield s senior management

Middlefield senior management s projected earnings estimates for fiscal years 2016 through 2018, which Donnelly Penman extrapolated into fiscal year 2020

nonpublic information about Liberty made available in the due diligence process, including Liberty s audited financial statements for the years ended December 31, 2015, 2014, and 2013, as well as publicly available information, including Liberty s quarterly call reports for quarters ended on June 30 and March 31, 2016 and December 31, September 30, June 30, and March 31, 2015

Liberty s problem loan reports as of March 31 and June 30, 2016

Liberty senior management s projected earnings estimates for fiscal years 2016 through 2018, which Donnelly Penman extrapolated into fiscal year 2020

valuation analyses of Middlefield that Donnelly Penman performed, including analysis of comparable transactions, a dividend discount model analysis on a standalone basis for Middlefield and on a pro forma basis including Liberty, and analysis of comparable public companies to Middlefield on a standalone and pro forma basis a summary merger model of the pro forma impact of the transaction to Middlefield

a contribution analysis of Middlefield and Liberty to the combined entity as of June 30, 2016, and

other information, financial studies, analyses, investigations, and factors that Donnelly Penman deemed relevant

Donnelly Penman also discussed with Middlefield management past and current business operations, regulatory relations, financial condition, future prospects, and other matters. Donnelly Penman also discussed with Liberty management that bank s business operations, regulatory relations, earnings results, and future prospects.

Donnelly Penman relied upon the accuracy and completeness of all financial and other information provided to it or publicly available, and did not assume responsibility for the accuracy, completeness, or reasonableness of or responsibility for verification of the information. Donnelly Penman did not make any independent evaluations, valuations, or appraisals of the assets or liabilities of Middlefield or Liberty, did not review individual credit files, and assumed that the aggregate allowances for credit losses relating to the loans of Middlefield and Liberty are and will continue to be adequate to cover losses. Donnelly Penman relied upon Middlefield management regarding the reasonableness and achievability of the financial and operating forecasts and projections (and the assumptions and bases therefor) prepared by and provided by Middlefield management, and similarly relied on Liberty management regarding the reasonableness and achievability of the financial and operating forecasts and projections (and the assumptions and bases therefor) prepared by and provided by Liberty management. Donnelly Penman assumed that the forecasts and projections of Middlefield management reflect management s best currently available estimates and judgments and that the forecasts and projections will be realized in the amounts and in the time periods estimated and that they provide a reasonable basis for Donnelly Penman s opinion. Likewise, Donnelly Penman assumed that the forecasts and projections of Liberty management reflect Liberty management s best currently available estimates and judgments and that the forecasts and projections will be realized in the amounts and in the time periods estimated and that they provide a reasonable basis for Donnelly Penman s opinion. The Middlefield and Liberty forecasts and projections were not prepared with the expectation of public disclosure. The projected financial information is based on numerous variables and assumptions that are inherently uncertain, including without limitation factors related to general economic and competitive conditions. Accordingly, actual results could vary significantly from projected results. Donnelly Penman relied on the projected information without independent verification or analysis. Donnelly Penman relied upon the assurance of Middlefield management and Liberty management that they were unaware of any facts that would make the information provided or available to Donnelly Penman incomplete or misleading.

The following is a summary of the material analyses presented by Donnelly Penman to the Middlefield s board of directors on July 27, 2016. The Donnelly Penman opinion was not the only factor taken into consideration by Middlefield s board of directors in the board s decision to approve the Reorganization Agreement and the Merger. Consequently, the analyses described below were not determinative in the board s decision. The summary is not a complete description of the analyses underlying the Donnelly Penman opinion or the presentation made by Donnelly Penman to Middlefield s board of directors, but summarizes the material analyses performed and presented. The preparation of a fairness opinion is a complex analytic process. Donnelly Penman did not attribute any particular weight to any analysis or factor it considered, but rather made qualitative judgments about the significance and relevance of each analysis and factor. The financial analyses summarized below include information presented in tabular format. The tables alone do not constitute a complete description of the financial analyses. Accordingly, Donnelly Penman believes that its analyses and the summary of its analyses must be considered as a whole and that selecting portions of its analyses and factors or focusing on the information presented below in tabular format, without considering all analyses and factors or the full narrative description of the financial analyses, including the methodologies and assumptions underlying the analyses, could create a misleading or incomplete view of the process underlying its analyses and opinion.

The summary of Donnelly Penman s analyses to follow includes a summary of its analysis of comparable transactions, analysis of a dividend discount model on a stand-alone basis for Middlefield (stand-alone meaning without taking the Merger into account) and on a pro forma, post-merger basis, analysis of tangible book value dilution and earnings accretion attributable to the Merger, analysis of comparable public companies to Middlefield on a stand-alone basis and pro forma basis, and finally a contribution analysis that considers the anticipated 18.7% pro forma outstanding shares of Middlefield common stock held by Liberty stockholders relative to the percentage contribution of Liberty assets, loans, deposits, and tangible common equity to the pro forma combined entity. Donnelly Penman made numerous assumptions regarding industry performance, business and economic conditions, and other matters, many of which are beyond the control of Middlefield and Liberty. Credit, financial, and stock markets can experience unusual volatility. No company or merger included in Donnelly Penman s analysis is identical to Middlefield or Liberty and the comparable transactions considered by Donnelly Penman are not identical to the proposed Merger. Accordingly, Donnelly Penman s analyses are not based solely on arithmetic calculations but instead involve complex considerations and judgments concerning differences in financial and operating characteristics of the relevant companies, the timing of the relevant mergers and prospective buyer interests, as well as other factors that could affect the public trading markets of companies to which Middlefield is being compared. None of the analyses performed by

Donnelly Penman was assigned a greater significance than any other.

Table of Contents

Comparable Transaction Analysis. Donnelly Penman reviewed publicly available information related to comparable acquisitions of banks and bank holding companies as well as thrifts and thrift holding companies. The selection criteria were (1) transaction announcement after June 30, 2014, (2) total assets of acquired company between $100 and $300 million, (3) last twelve month (LTM) return on average assets (ROAA) of acquired company between 0.75% and 1.00%, and (4) nonperforming assets as a percent of total assets of acquired company less than 3.0%. Based on these criteria, Donnelly Penman identified 22 comparable acquisition transactions on a national level

	Acquiring company	**Acquired company**
1)	Arbor Bancorp, Inc.	Birmingham Bloomfield Bancshares, Inc.
2)	Oakstar Bancshares, Inc.	Bank of Urbana
3)	Pinnacle Financial Corporation	Independent Bank of Georgia
4)	Nacogdoches Commercial Bancshares, Inc.	First National Bank of Emory
5)	Cascade Bancorp	Prime Pacific Financial Services
6)	Boscobel Bancorp, Inc.	Rural Bancshares of Wisconsin, Inc.
7)	Citizens Community Bancorp, Inc.	Community Bank of Northern Wisconsin
8)	Horizon Bancorp	Kosciusko Financial, Inc.
9)	County Bancshares, Inc.	First Live Oak Bancshares, Inc.
10)	Franklin Financial Network, Inc.	Civic Bank & Trust
11)	CVB Financial Corp.	County Commerce Bank
12)	Community Bank Holdings of Texas, Inc.	StarBanc Holding Company
13)	WSB Bancshares, Inc.	XIT Bancshares, Inc.
14)	Town and Country Financial Corporation	West Plains Investors, Inc.
15)	Glacier Bancorp, Inc.	Canon Bank Corporation
16)	Southern States Bancshares, Inc.	Columbus Community Bank
17)	Carolina Alliance Bank	PBSC Financial Corporation
18)	Hambac, Inc.	Kentucky Home Bancshares, Inc.
19)	Pacific Continental Corporation	Capital Pacific Bancorp
20)	Partnership Community Bancshares, Inc.	Partnership Bank
21)	Pilgrim Bancorporation	North Central Texas Bancshares, Inc.
22)	Community Bancshares, Inc.	Citizens Bank of Ashville, Ohio

Donnelly Penman considered the transaction price per share as a percent of the acquired company s June 30, 2016 book value, as a percent of the acquired company s tangible book value as of that date, as a multiple of the acquired company s LTM earnings per share in the twelve-month period ended June 30, 2016, and as a percent of the acquired company s June 30, 2016 core deposits, which generally consist of total deposits other than time deposits exceeding $100,000. For comparison purposes, Donnelly Penman calculated the total transaction price to be $40.6 million, or $42.28 per share, which is derived from an estimated $16,387,359 stock consideration to be issued in the Merger in exchange for 45% of Liberty s 959,283 outstanding shares and an estimated $23,027,910 cash consideration. The cash component includes not only cash Merger consideration payable in exchange for Liberty common stock but also the $3.0 million special dividend and the approximately $1.1 million payable for cancellation of outstanding shares and phantom stock. As a percent of book value, tangible book value, LTM earnings per share, and core deposits, the $42.28 per share price is

		comparable transactions national	
deal value relative to . . .	**minimum**	**median**	**maximum**

	Middlefield/Liberty merger		25th percentile		75th percentile	
book value	1.307x	1.022x	1.245x	1.411x	1.496x	1.839x
tangible book value	1.307x	1.022x	1.245x	1.411x	1.496x	1.839x
LTM EPS	19.12x	12.33x	17.87x	19.58x	22.18x	25.51x
core deposit premium	5.16%	0.36%	4.60%	6.10%	9.05%	17.77%

Table of Contents

Of the 22 comparable acquisition transactions on a national level, nine are transactions of companies in the greater Midwest

	Acquiring company	Acquired company
1)	Arbor Bancorp, Inc.	Birmingham Bloomfield Bancshares, Inc.
2)	Oakstar Bancshares, Inc.	Bank of Urbana
3)	Boscobel Bancorp, Inc.	Rural Bancshares of Wisconsin, Inc.
4)	Citizens Community Bancorp, Inc.	Community Bank of Northern Wisconsin
5)	Horizon Bancorp	Kosciusko Financial, Inc.
6)	Town and Country Financial Corporation	West Plains Investors, Inc.
7)	Hambac, Inc.	Kentucky Home Bancshares, Inc.
8)	Partnership Community Bancshares, Inc.	Partnership Bank
9)	Community Bancshares, Inc.	Citizens Bank of Ashville, Ohio

As a percent of book value, tangible book value, LTM earnings per share, and core deposits for this regional group, the $42.28 per share price is

		comparable transactions	Midwest			
deal value relative to . . .	**Middlefield/Liberty merger**	**minimum**	**25th percentile**	**median**	**75th percentile**	**maximum**
book value	1.307x	1.022x	1.148x	1.409x	1.413x	1.839x
tangible book value	1.307x	1.022x	1.148x	1.409x	1.413x	1.839x
LTM EPS	19.12x	12.33x	18.21x	19.59x	19.95x	20.89x
core deposit premium	5.16%	0.36%	3.42%	4.48%	6.29%	8.27%

None of the companies or 22 transactions used as a comparison in these analyses is identical to Liberty, Middlefield, or the Merger. Analysis of these results is not solely mathematical, but instead involves complex considerations and judgments concerning differences in financial and operating characteristics of the companies.

Dividend Discount Model Analysis. Donnelly Penman performed a discounted cash flow analysis of Middlefield on a stand-alone basis and on a pro forma, post-merger basis, estimating the value of a share of Middlefield common stock to be $34.56 on a stand-alone basis and $45.14 pro forma. These estimated values are the sum of two estimated values discounted back to the hypothetical December 31, 2016 merger date: (*x*) cash dividends for the five year period 2016 through 2020 and (*y*) residual or terminal value at the end of the five-year period. To determine present value, Donnelly Penman used a 13.00% discount rate.

Donnelly Penman s estimate assumes Middlefield s dividend remains constant at $1.08 annually both on a stand-alone basis and pro forma, post-merger. The per share values also assume Middlefield s outstanding shares increase by 20,000 annually through Middlefield s dividend reinvestment plan, with pro forma outstanding shares including the estimated 515,164 shares issuable to Liberty stockholders in the Merger. At a 13.00% discount rate, the present value of the five-year projected cash dividend income is $3.56 on a stand-alone and pro forma basis. For the estimated total $34.56 value of Middlefield on a stand-alone basis and $45.14 estimated pro forma value, the residual or terminal value at the end of the five-year period is derived by taking the average of a multiple of 1.40 times projected book value at the end of 2020 and 15.0 times projected 2020 net income, discounting that average value back to the December 31, 2016 hypothetical merger date at 13.0%. To derive the estimated stand-alone value, Donnelly Penman used Middlefield management s forecasted figures for 2016 through 2018, extrapolating from that at 8.00% annual growth for the years 2019 and 2020. Likewise, to derive the estimated pro forma, post-merger value Donnelly Penman used Middlefield management s and Liberty management s forecasts for 2016 through 2018, extrapolating at 8.00% annual growth for the years 2019 and 2020. Net income assumes Middlefield s effective tax rate is 22%. Because the projected allowance for loan losses at the end of 2018 is projected to exceed 1.25%, the pro forma estimate assumes no additional provision expense attributable to Liberty in the years 2017 and 2018, but earnings are based on a slower growth rate

Table of Contents

thereafter to anticipate provision expense in 2019 and 2020. For purposes of the pro forma estimate, Middlefield management estimates a 30% reduction of Liberty s noninterest expense in 2017 and 35% thereafter.

Discounted cash flow present value analysis is a widely used valuation methodology, but it relies on numerous assumptions and estimates, including but not limited to asset and earnings growth rates, discount rates, and multiples of earnings or book value or both to derive residual or terminal values. The numeric per share result of the analysis is not the stock s actual value or expected value. It is merely an estimate within a broad range of potential value estimates.

Tangible Book Value Dilution and Earnings Accretion. Donnelly Penman estimates that Middlefield s tangible book value per share at December 31, 2016 would be $33.52 without taking the Merger into account, with 16.3% dilution, or $5.46 dilution per share, on a pro forma, post-merger basis at December 31, 2016. The Middlefield Banking Company s pro forma Tier 1 leverage ratio would be 7.71%, with pro forma Total Risk-Based Capital of 10.89% and pro forma Tangible Common Equity as a percent of tangible assets at 8.32%. Donnelly Penman estimates that the dilution of tangible book value could be eliminated, or earned back, in a period ranging from three to four years, which is consistent with the 3.9 year median period to earn back tangible book value dilution in a group of nine recent acquisitions examined by Donnelly Penman. Those nine transactions were announced between July 2, 2013 and June 2, 2016, with the first three transactions not yet completed on the date of Donnelly Penman s analysis in July 2016. The nine transactions involve acquired companies in Ohio, Indiana, Pennsylvania, and Michigan, with total deal values ranging from $30 million to $50 million

	Acquiring company	Acquired company
1)	Prudential Bancorp, Inc.	Polonia Bancorp, Inc.
2)	DNB Financial Corporation	East River Bank
3)	CNB Financial Corporation	Lake National Bank
4)	NexTier Incorporated	Eureka Financial Corporation
5)	First Merchants Corporation	Community Bancshares, Inc.
6)	Peoples Bancorp Inc.	North Akron Savings Bank
7)	MainSource Financial Group, Inc.	MBT Bancorp
8)	Peoples Bancorp Inc.	Ohio Heritage Bancorp, Inc.
9)	Peoples Bancorp Inc.	Ohio Commerce Bank

Comparable Public Company Analysis. Donnelly Penman also analyzed a group of 20 publicly traded companies Donnelly Penman considers comparable to Middlefield on a stand-alone basis because of location, asset size, and return on average assets (ROAA). The companies are all located in the Midwest or the greater Midwest region, have total assets between $500 million and $1.0 billion, and have an ROAA between 0.75% and 1.25%. Taking their stock price as of July 22, 2016 and using publicly available data, Donnelly Penman determined that the companies price to book value, price to tangible book value, and price to LTM EPS (as of June 30, 2016) are

	7/22/2016 price to 6/30/2016 book value	7/22/2016 price to 6/30/2016 tangible book value	7/22/2016 price to LTM EPS as of 6/30/2016
low	78.03%	80.94%	7.16x
median	99.48%	108.23%	10.82x

mean	101.00%	111.31%	11.16x
high	149.01%	166.16%	18.73x
Middlefield	96.90%	103.03%	9.27x

Table of Contents

The 20 companies matching Donnelly Penman s criteria are

Blackhawk Bancorp, Inc.	BNCCORP, Inc.
Cortland Bancorp	Croghan Bancshares, Inc.
CSB Bancorp, Inc.	F.S. Bancorp
First Bankers Trustshares, Inc.	First Capital, Inc.
First Savings Financial Group, Inc.	Guaranty Federal Bancshares, Inc.
Heartland BancCorp	HMN Financial, Inc.
Kentucky Bancshares, Inc.	Landmark Bancorp, Inc.
NorthWest Indiana Bancorp	Ohio Valley BancCorp.
PSB Holdings, Inc.	SB Financial Group, Inc.
Southern Michigan Bancorp, Inc.	United Bancshares, Inc.

Donnelly Penman identified a similar group of 18 publicly traded companies that Donnelly Penman considers comparable to Middlefield on a pro forma, post-merger basis, based on an asset size range of $800 million to $1.5 billion, again limited to companies located in the greater Midwest and with ROAA between 0.75% and 1.25%. Taking their stock price as of July 22, 2016 and using publicly available data, Donnelly Penman determined that the companies price to book value, price to tangible book value, and price to LTM EPS (as of June 30, 2016) are

	7/22/2016 price to 6/30/2016 book value	7/22/2016 price to 6/30/2016 tangible book value	7/22/2016 price to LTM EPS as of 6/30/2016
low	84.17%	85.72%	8.08x
median	112.49%	129.44%	12.78x
mean	119.01%	129.15%	12.58x
high	153.32%	163.77%	17.71x
Middlefield	96.90%	103.03%	9.27x

The 18 companies matching Donnelly Penman s criteria for companies comparable to Middlefield on a pro forma basis are

Ames National Corporation	Bank First National Corporation
Civista Bancshares Inc.	Farmers & Merchants Bancorp, Inc.
First Bankers Trustshares, Inc.	First Community Financial Partners, Inc.
Foresight Financial Group, Inc.	Independent Alliance Banks, Inc.
Kentucky Bancshares, Inc.	Landmark Bancorp, Inc.
LCNB Corp.	MBT Financial Corp.
Mutual First Financial, Inc.	NorthWest Indiana Bancorp
Ohio Valley BancCorp	Security National Corporation
Southern Missouri Bancorp, Inc.	Tri City Bankshares Corporation

Table of Contents

Contribution Analysis. Assuming there are 515,164 shares of Middlefield common stock issued in the Merger to Liberty stockholders, Liberty stockholders will possess 18.7% of total pro forma shares outstanding but will contribute an average of 23.9% to the combined entity in terms of the entity s total assets, total loans, total deposits, and tangible common equity as of June 30, 2016, and 2015 net income and last twelve months (as of June 30, 2016) net income

			percent contribution	
(in $000s)	**Liberty**	**Middlefield**	**Liberty**	**Middlefield**
total assets June 30, 2016	222,570	760,108	22.6%	77.4%
total loans June 30, 2016	181,479	579,716	23.8%	76.2%
total deposits June 30, 2016	189,874	628,040	23.2%	76.8%
tangible common equity June 30, 2016	31,024	72,966	29.8%	70.2%
2015 net income	1,791	6,865	20.7%	79.3%
LTM net income	2,122	7,145	22.9%	77.1%
average			23.9%	76.1%

The contribution analysis assumes there are 2,762,068 shares outstanding after the Merger. Accounting adjustments under ASC 805 (formerly FAS 141R) are not taken into account.

Relationships. Donnelly Penman & Partners acted exclusively for the Middlefield board of directors in rendering the opinion included as Annex D to this joint proxy statement/prospectus. Donnelly Penman will receive a fee from Middlefield for its services. Donnelly Penman has also acted as Middlefield s advisor for the Merger transaction, and a portion of Donnelly Penman s fee is contingent on the Merger s successful completion. Middlefield agreed to pay Donnelly Penman a $40,000 fee for the fairness opinion, agreeing to pay an additional $5,000 for each fairness opinion update. Additionally, Middlefield paid Donnelly Penman an initial advisory fee of $12,500 at execution of the April 19, 2016 engagement letter agreement and an additional advisory fee of $12,500 after Liberty identified Middlefield as one of the bidders invited to submit final bids. The advisory fees will be credited against the success fee payable to Donnelly Penman at Merger closing. The total success fee is $250,000, including a nonrefundable $75,000 portion that Middlefield paid when the Reorganization Agreement was signed. Donnelly Penman will receive the remaining portion of the success fee when the Merger is completed ($150,000, after crediting of the advisory fees). Middlefield agreed to reimburse Donnelly Penman for up to $7,500 of reasonable and customary out-of-pocket expenses and disbursements, also agreeing to indemnify Donnelly Penman against liabilities incurred for its services. The initial term of the engagement agreement ends December 31, 2016.

Donnelly Penman has provided advisory services to Middlefield in the past, including a March 2015 engagement concerning a potential acquisition, which did not lead to an acquisition transaction but for which Middlefield paid Donnelly Penman a retainer fee, and an October 2015 engagement concerning another potential acquisition, which also did not lead to an acquisition transaction but for which Middlefield paid Donnelly Penman a retainer. Donnelly Penman has never been engaged by Liberty for any purpose.

Nonpublic Financial Projections Provided to Middlefield s Financial Advisor

For a number of reasons, including the unpredictability of underlying assumptions and estimates, Middlefield does not routinely publicly disclose forecasts or internal projections of future performance, earnings, or other results. However, Donnelly Penman & Partners Inc. used financial projections provided by or reviewed with senior management of Middlefield for the purpose of preparing the financial analyses supporting Donnelly Penman s fairness opinion, as described in this joint proxy statement/prospectus under the heading Opinion of Middlefield s Financial Advisor. A summary of these projections is included in this joint proxy statement/prospectus because the projections were used by Donnelly Penman.

70

Table of Contents

When the financial projections were prepared, they represented the best estimates and judgments of Middlefield management about future financial performance. The financial projections summarized below were prepared in good faith, but financial projections are subjective in many respects and are susceptible to interpretation and periodic revision based on actual experience and recent developments. Accordingly, financial projections do not reliably predict future operating results. The financial projections were not prepared with the expectation of public disclosure or with the goal of complying with American Institute of Certified Public Accountants guidelines for prospective financial information or SEC guidelines regarding forward-looking statements. Although presented with numeric specificity, the financial projections reflect numerous estimates and assumptions that might not be realized and are subject to significant uncertainties and contingencies, many of which are beyond the control of Middlefield. For these reasons and because of the uncertainties inherent in financial projections, Liberty stockholders and Middlefield stockholders should not unduly rely on these financial projections as predictions of future operating results.

The financial projections of Middlefield included in this joint proxy statement/prospectus were prepared by and are the responsibility of Middlefield management. Neither Middlefield s independent registered public accounting firm nor any other independent accounting firm examined, compiled, or performed any procedures on these financial projections, and therefore express no opinion or any other form of assurance regarding the financial projections. Inclusion of the financial projections in this joint proxy statement/prospectus is not an admission or representation by Liberty or Middlefield that Liberty or Middlefield consider the financial projections to be material information.

All of the financial projections are forward-looking statements. The estimates and assumptions underlying the financial projections summarized below involve judgments regarding future economic, competitive, regulatory, and financial market conditions and future business decisions. The estimates and assumptions might not be realized and are inherently subject to significant business, economic, competitive, and regulatory uncertainties, all of which are difficult to predict and many of which are beyond the control of Middlefield. In addition, these financial projections represent Middlefield s evaluation at the time the projections were prepared of its future financial performance on a stand-alone basis, and without reference to the proposed merger or transaction-related costs or benefits. Accordingly, Middlefield gives no assurance that the projected results will be realized or that actual results will not differ materially from those presented in the financial projections. Inclusion of these financial projections should not be interpreted as a statement that Liberty or Middlefield considers this information a reliable prediction of future results, or that the projections would be the same if prepared by Middlefield as of the date of this document, and this information should not be unduly relied on for that purpose.

Middlefield provided to Donnelly Penman & Partners Inc. the following estimate of per share earnings for the period 2017 through 2020, both for Middlefield on a stand-alone basis and on a pro forma, post-merger basis:

	year ended December 31,			
	2017	**2018**	**2019**	**2020**
EPS stand-alone	3.16	3.57	3.82	4.09
EPS pro forma	4.38	5.08	5.55	6.04

Regulatory Approvals Required

The Merger cannot be completed unless Middlefield and Liberty obtain regulatory approval. The Merger consists of two separate mergers: first a merger of Middlefield s newly formed interim bank subsidiary into Liberty, followed immediately by the merger of Liberty into The Middlefield Banking Company. Accordingly, the Merger must be approved by the Office of the OCC, Liberty s principal federal regulator, and by the FDIC, The Middlefield Banking Company s principal federal regulator. The Ohio Division of Financial Institutions (ODFI) also has jurisdiction over the Merger, which is a third required regulatory approval of the Merger itself. Declaration by Liberty of the special dividend before closing is an integral part of the transactions to be carried out under the Reorganization Agreement, but that special dividend cannot be paid unless Liberty first obtains OCC approval. Similarly, The Middlefield Banking Company and Middlefield must obtain ODFI approval of the approximately $9.0 million dividend to be paid by The Middlefield Banking Company to Middlefield, which is one of Middlefield s sources of funds for the cash portion of the Merger consideration. The other source is borrowing of approximately $12 million. Finally, Middlefield also must obtain approval from the ODFI for formation of the interim bank subsidiary and approval from the FDIC of deposit insurance for the interim bank subsidiary. All of these regulatory approvals are Merger closing conditions. By letter dated November 7, 2016 the OCC approved the merger application, subject to the condition that the merger be completed within six months. In an October 24, 2016 letter the OCC also approved Liberty Bank s $3.0 million special dividend. By letter dated October 31, 2016 the FDIC also approved the merger application, also subject to the merger being completed within six months. In a separate October 31, 2016 letter the FDIC also approved the deposit insurance application of MBC Interim Bank, for the sole purpose of enabling MBC Interim Bank to merge into Liberty Bank. Middlefield anticipates that the ODFI will approve both the merger application and the special dividend payable by The Middlefield Banking Company, as well as formation of MBC Interim Bank.

Approval of a regulatory application merely implies satisfaction of regulatory criteria for approval, which does not include review of the adequacy or fairness of the Merger consideration to Liberty stockholders or Middlefield stockholders. Regulatory approvals do not constitute or imply any endorsement or recommendation of the Merger or the terms of the Reorganization Agreement.

Interests of Liberty s Directors and Certain Executive Officers in the Merger

Officers and directors of Liberty have employment and other compensation agreements or economic interests that give them interests in the Merger that are somewhat different from or in addition to their interests as Liberty stockholders. These interests and agreements include

- two members of the Liberty board of directors will be appointed to Middlefield s board of directors. These directors are President and CEO William A. Valerian and Thomas W. Bevan,

- all outstanding stock options awarded by Liberty will be cancelled in exchange for cash equal to (*x*) the positive difference between $41.09 and the exercise price of the option, multiplied by (*y*) the number of shares of Liberty common stock acquirable by option exercise. There are also outstanding 2,000 phantom share awards made in 2013, including an award of 1,000 shares made on January 29, 2013 to President and CEO William A. Valerian s son, who also is an officer of Liberty. The phantom share awards consist of the right to a cash payment equal to the positive difference between Liberty s stock value on December 31, 2016 and the stock value on the award date, multiplied by the number of phantom shares awarded, with value being determined by Liberty s board of directors. The total cash payment for cancellation of the options and phantom awards is estimated to be $161,931, of which $62,986 is payable to Liberty s Chief Credit Officer, and $15,200 is payable to the CEO s son. If Liberty option holders exercise stock options prior to the Merger closing, the resulting shares of Liberty stock will be converted into Merger consideration on the same terms as other outstanding Liberty stock instead of being cashed out as described in this paragraph.

- Liberty s President and CEO William A. Valerian and Chief Operating Officer and CFO Richard C. Ebner have employment agreements with Liberty. The employment agreements provide that they are entitled to a payment equal to 2.5 times salary when a change in control occurs, payable in equal installments over 30 months, plus a payment for the cost of life insurance, long-term disability, and medical benefits over those 30 months. The Merger will constitute a change in control under those employment agreements. Mr. Valerian s total payments are estimated to be $929,502 and Mr. Ebner s are estimated to be $716,900,

Certain Liberty officers will receive retention bonuses to remain with Liberty through consummation of the Merger, The Reorganization Agreement provides that Middlefield will consult with Liberty about forming a Northeast Ohio Advisory Board, which would include some of Liberty s current directors, and

the Reorganization Agreement preserves for six years the rights of Liberty s officers and directors to continued indemnification coverage and continued coverage under directors and officers liability insurance policies.

At Liberty s request, when Middlefield s board approved the Reorganization Agreement it also approved the potential issuance to Liberty CEO William A. Valerian and Liberty Director Thomas W. Bevan of Middlefield common stock in the Merger. This has the effect of exempting from the application of short-swing trading principles under section 16(b) of the Act their acquisition of Middlefield common stock in the Merger. Directors of an issuer that has equity securities registered under the Securities Exchange Act of 1934 are subject to short-swing trading restrictions. Messrs. Valerian and Bevan will be Middlefield directors after the Merger.

Each of Middlefield s and Liberty s board of directors was aware of these interests and considered them in approving the Reorganization Agreement and the transactions contemplated therein.

Material U.S. Federal Income Tax Consequences

The following summary reflects the opinion of Tucker Ellis LLP, legal counsel to Liberty, with respect to the material U.S. federal income tax consequences of the Merger to U.S. holders (as defined below) of Liberty common stock. The summary is based upon the Internal Revenue Code, applicable Treasury Regulations, judicial decisions and administrative rulings and practice, all as in effect as of the date hereof, and all of which are subject to change, possibly with retroactive effect. This summary does not address any tax consequences of the Merger under state, local or foreign laws, or any federal laws other than those pertaining to income tax.

For purposes of this discussion, the term U.S. holder means a beneficial owner that is: an individual citizen or resident of the United States; a corporation (or other entity taxable as a corporation for U.S. federal income tax purposes) created or organized under the laws of the United States or any of its political subdivisions; a trust that (1) is subject to the supervision of a court within the United States and the control of one or more U.S. persons or (2) has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person; or an estate that is subject to U.S. federal income taxation on its income regardless of its source.

This discussion addresses only those U.S. holders of Liberty common stock that hold their Liberty common stock as a capital asset within the meaning of Section 1221 of the Internal Revenue Code and does not address all the U.S. federal income tax consequences that may be relevant to particular holders of Liberty common stock in light of their individual circumstances or to holders of Liberty common stock that are subject to special rules, such as non-U.S. holders (as defined below) (except to the extent discussed under the subheading Tax Implications to Non-U.S. Stockholders below); financial institutions; investors in pass-through entities; persons who are subject to alternative minimum tax; insurance companies; mutual funds; tax-exempt organizations; dealers in securities or currencies; traders in securities that elect to use a mark-to-market method of accounting; persons that hold Liberty common stock as part of a straddle, hedge, constructive sale or conversion or other integrated transaction; regulated investment companies; real estate investment trusts; persons whose functional currency is not the U.S. dollar; and holders who acquired their shares of Liberty common stock through the exercise of an employee stock option or otherwise as compensation.

If a partnership (or other entity that is taxed as a partnership for federal income tax purposes) holds Liberty common stock, the tax treatment of a partner in that partnership generally will depend upon the status of the partner and the activities of the partnership. Partnerships and partners in partnerships should consult their own tax advisors about the tax consequences of the Merger to them.

Tucker Ellis LLP has delivered a legal opinion, dated September 26, 2016, and filed as an exhibit to the registration statement of which this joint proxy statement/prospectus is a part, to the effect that, subject to the exceptions, qualifications and limitations set forth therein, (i) the Merger will constitute a reorganization within the meaning of Section 368(a) of the Internal Revenue Code, and (ii) Liberty and Middlefield will each be a party to such reorganization within the meaning of Section 368(a) of the Internal Revenue Code. Additionally, it is a condition to Liberty s obligation to complete the Merger that Liberty receive an opinion from Tucker Ellis LLP, dated the closing date of the Merger, to that effect. [This condition is waivable, and Middlefield and Liberty undertake to recirculate and resolicit if this condition is waived and the change in tax consequences is material.] This opinion is and will be based upon representation letters provided by Middlefield and Liberty and upon customary factual assumptions. Neither Middlefield nor Liberty has sought, and neither of them will seek, any ruling from the Internal Revenue Service regarding any matters relating to the Reorganization Agreement, and the opinion described above will not be binding on the Internal Revenue Service or any court. Consequently, there can be no assurance that the Internal Revenue Service will not assert, or that a court would not sustain, a position contrary to any of the conclusions set forth below. In addition, if any of the representations or assumptions upon which the opinion is based are inconsistent with the actual facts, the U.S. federal income tax consequences of the Merger could be adversely affected. The actual tax consequences to you of the Merger may be complex and will depend upon your specific situation and upon factors that are not within the control of Middlefield or Liberty. You should consult with your own tax advisor as to the tax consequences of the Merger in light of your particular circumstances, including the applicability and effect of the alternative minimum tax and any state, local or foreign and other tax laws.

The following discussion summarizes the material U.S. federal income tax consequences of the Merger to U.S. holders.

Tax Consequences of the Merger for U.S. holders of Liberty Common Stock. The U.S. federal income tax consequences of the Merger to a U.S. holder will depend on whether such U.S. holder receives cash, shares of Middlefield common stock or a combination of cash and stock in exchange for such U.S. holder s Liberty common stock. At the time a Liberty stockholder makes a cash or stock election pursuant to the terms of the Reorganization Agreement, such stockholder will not know whether, and to what extent, the proration provisions of the Reorganization Agreement will alter the mix of consideration such stockholder will receive. As a result, the tax consequences to such stockholder will not be ascertainable with certainty until such stockholder knows the precise amount of cash and shares of Middlefield common stock that such stockholder will receive pursuant to the Merger.

Exchange of Liberty common stock solely for Middlefield common stock. Except as discussed below, see *-Cash in Lieu of Fractional Shares of Middlefield Common Stock*, a U.S. holder that exchanges all of its shares of Liberty common stock solely for shares of Middlefield common stock pursuant to the Merger will not recognize gain or loss in connection with such exchange. A U.S. holder s aggregate tax basis in the Middlefield common stock received in the Merger in exchange for its Liberty common stock, including any fractional shares deemed received by the U.S. holder under the treatment discussed below in *-Cash in Lieu of Fractional Shares of Middlefield Common Stock*, generally will equal such U.S. holder s aggregate tax basis in the Liberty common stock surrendered by such U.S. holder in the Merger. The holding period for the shares of Middlefield common stock received by such U.S. holder in the Merger in exchange for its Liberty common stock, including any fractional shares deemed received by the U.S. holder under the treatment discussed below in *-Cash in Lieu of Fractional Shares of Middlefield Common Stock*, generally will include the holding period for the shares of Liberty common stock exchanged therefor.

Exchange of Liberty common stock solely for cash. A U.S. holder who exchanges all of its shares of Liberty common stock solely for cash pursuant to the Merger generally will recognize capital gain or loss equal to the difference between the amount of cash received by such U.S. holder and the U.S. holder s adjusted tax basis in the Liberty common stock exchanged therefor. Any capital gain or loss generally will be long-term capital gain or loss if the U.S. holder held the shares of Liberty common stock for more than one year at the effective time of the Merger.

74

Table of Contents

Exchange of Liberty common stock for a combination of Middlefield common stock and cash. Except as discussed below, a U.S. holder who exchanges its shares of Liberty common stock for a combination of Middlefield common stock and cash pursuant to the Merger will recognize gain (but not loss) equal to the lesser of (i) the excess, if any, of the amount of cash plus the fair market value of any Middlefield common stock received in the merger, over such U.S. holder s adjusted tax basis in the shares of Liberty common stock surrendered by such U.S. holder in the Merger and (ii) the amount of cash received by such U.S. holder in the Merger (other than cash received in lieu of fractional shares of Middlefield common stock).

For purposes of this calculation, the fair market value of Middlefield common stock is based on the trading price of that stock on the date of the Merger, rather than the methodology used in calculating the number of shares of Middlefield common stock to be issued to the stockholder. In the case of any U.S. holder who acquired different blocks of Liberty common stock at different times and at different prices, any realized gain or loss will be determined separately for each identifiable block of shares exchanged in the Merger. A loss realized on the exchange of one block of shares cannot be used to offset a gain realized on the exchange of another block of shares, but a U.S. holder will generally be able to reduce its capital gains by capital losses in determining its income tax liability. Prior to voting on the Merger, any U.S. holder potentially in that circumstance should consult its tax advisor with regard to identifying the basis or holding periods of the particular shares of Middlefield common stock received in the Merger. In addition, Treasury Regulations under Section 358 of the Internal Revenue Code provide that where a stockholder surrenders shares of target stock in an exchange and receives cash and shares of acquirer stock, then, to the extent the terms of the exchange specify that shares of acquirer stock or cash are received in exchange for a particular share of target stock surrendered, the terms of the exchange shall control for the purpose of determining the gain to the extent the terms of the exchange are economically reasonable. Therefore, a U.S. holder might be permitted to calculate the amount of taxable gain separately for each share of Liberty common stock surrendered in the Merger based on the specific consideration received for such share. This result might be permitted if the stockholder designates, on the election form (and as specifically authorized by the Reorganization Agreement), specific shares of Liberty common stock to be exchanged for cash or to be exchanged for Middlefield common stock, as the case may be. Such a designation might result in less taxable gain to a U.S. holder even if the holder holds a single block of Liberty common stock with a uniform tax basis. However, it is unclear whether a designation described in this paragraph will be treated as satisfying the requirements of the Treasury Regulations, and whether the proration provisions of the Merger agreement may affect such designation, and, therefore, there can be no assurance that the IRS would not successfully challenge a U.S. holder that reports taxable gain on the basis of such a designation. U.S. holders therefore should consult with their tax advisors with respect to the advisability, including any benefits or risks, of making an express designation in their election form.

Generally, a U.S. holder s aggregate tax basis in the Middlefield common stock received by that U.S. holder in the Merger in exchange for its Liberty common stock, including any fractional shares deemed received by the U.S. holder under the treatment discussed below in -*Cash in Lieu of Fractional Shares of Middlefield Common Stock*, will equal such U.S. holder s aggregate tax basis in the Liberty common stock surrendered in the Merger, increased by the amount of taxable gain (or dividend income as described in the following paragraph, but not the special dividend addressed below in -*Treatment of the Special Dividend*), if any, recognized by such U.S. holder in the Merger (other than with respect to cash received in lieu of fractional shares of Middlefield common stock), and decreased by the amount of cash, if any, received by such U.S. holder in the Merger (other than cash received in lieu of fractional shares of Middlefield common stock). The holding period for the shares of Middlefield common stock received in the Merger, including any fractional shares deemed received by the U.S. holder under the treatment discussed below in -*Cash in Lieu of Fractional Shares of Middlefield Common Stock*, generally will include the holding period for the shares of Liberty common stock exchanged therefor.

Any capital gain generally will be long-term capital gain if the U.S. holder held the shares of Liberty common stock for more than one year at the effective time of the Merger. The deductibility of capital losses is subject to limitations. All or part of the gain that a particular U.S. holder of Liberty recognizes could be treated as dividend income rather than capital gain if (i) such U.S. holder is a significant stockholder of Middlefield or (ii)

Table of Contents

such U.S. holder s percentage ownership, taking into account constructive ownership rules, in Middlefield after the Merger is not meaningfully reduced from what its percentage ownership would have been if it had received solely shares of Middlefield common stock rather than a combination of cash and shares of Middlefield common stock in the Merger. This could happen, for example, because of ownership of additional shares of Middlefield common stock by such holder, ownership of shares of Middlefield common stock by a person related to such holder or a share repurchase by Middlefield from other holders of Middlefield common stock. These rules are complex and dependent upon the specific factual circumstances particular to each U.S. holder. Consequently, each U.S. holder that may be subject to those rules should consult its tax advisor as to the application of these rules to the particular facts relevant to such U.S. holder.

Cash in Lieu of Fractional Shares of Middlefield Common Stock. A U.S. holder that receives cash instead of a fractional share of Middlefield common stock will be treated as having received the fractional share of Middlefield common stock pursuant to the Merger and then as having exchanged the fractional share of Middlefield common stock for cash in a redemption by Middlefield. In general, this deemed redemption will be treated as a sale or exchange, and a U.S. holder will recognize gain or loss equal to the difference between (i) the amount of cash received by such U.S. holder and (ii) the portion of the basis of the shares of Liberty common stock allocable to such fractional interest. Such gain or loss generally will constitute capital gain or loss and will be long-term capital gain or loss if the U.S. holder s holding period for the Liberty common stock exchanged by such U.S. Holder is greater than one year as of the effective time of the Merger.

Medicare Tax on Net Investment Income. A U.S. holder that is an individual is subject to a 3.8% tax on the lesser of (i) his or her net investment income for the relevant taxable year or (ii) the excess of his or her modified adjusted gross income for the taxable year over a certain threshold (between $125,000 and $250,000 depending on the individual s U.S. federal income tax filing status). A similar regime applies to estates and trusts. Net investment income generally would include any capital gain incurred in connection with the Merger, as well as the special dividend addressed below in -*Treatment of the Special Dividend*.

Backup Withholding and Information Reporting. Payments of cash to a U.S. holder of Liberty common stock pursuant to the Merger may, under certain circumstances, be subject to information reporting and backup withholding (currently at a rate of 28%) unless the holder provides proof of an applicable exemption satisfactory to Middlefield and the exchange agent or, in the case of backup withholding, furnishes its taxpayer identification number and otherwise complies with all applicable requirements of the backup withholding rules. The documents provided to Liberty stockholders to surrender their stock certificates for exchange in the Merger will provide an opportunity for the Liberty stockholder to provide required information. Any amounts withheld from payments to a U.S. holder under the backup withholding rules are not additional tax and generally will be allowed as a refund or credit against the U.S. holder s U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

A U.S. holder of Liberty common stock, as a result of having received Middlefield common stock in the Merger, will be required to retain records pertaining to the Merger. In addition, each U.S. holder of Liberty common stock that is a significant holder will be required to file a statement with that holder s U.S. federal income tax return in accordance with Treasury Regulations Section 1.368-3(b) setting forth that holder s basis in the Liberty common stock surrendered and the fair market value of the Middlefield common stock and cash received in the Merger. A significant holder is a holder of Liberty common stock that, immediately before the Merger, owned at least 5% of the vote or value of the outstanding stock of Liberty or securities of Liberty with a basis for federal income taxes of at least $1 million.

Tax Implications to Non-U.S. Stockholders. For purposes of this discussion, the term non-U.S. holder means a beneficial owner of Liberty common stock (other than an entity treated as a partnership for U.S. federal income tax purposes) that is not a U.S. holder. The rules governing the U.S. federal income taxation of non-U.S. holders are complex, and no attempt will be made herein to provide more than a limited summary of those rules. Any gain a non-U.S. holder recognizes from the exchange of Liberty common stock for Middlefield common

Table of Contents

stock and cash in the Merger generally will not be subject to U.S. federal income taxation unless (a) the gain is effectively connected with a trade or business conducted by the non-U.S. holder in the United States, or (b) in the case of a non- U.S. holder who is an individual, such stockholder is present in the United States for 183 days or more in the taxable year of the sale and other conditions are met. Non-U.S. holders described in (a) above will be subject to tax on gain recognized at applicable U.S. federal income tax rates and, in addition, non-U.S. holders that are corporations (or treated as corporations for U.S. federal income tax purposes) may be subject to a branch profits tax equal to 30% (or a lesser rate under an applicable income tax treaty) on their effectively connected earnings and profits for the taxable year, which would include such gain. Non-U.S. holders described in (b) above will be subject to a flat 30% tax on any gain recognized, which may be offset by U.S. source capital losses.

Treatment of the Special Dividend. The special dividend contemplated by the Reorganization Agreement is not part of the Merger consideration and is not addressed by the discussion of the Merger consideration set out above. The special dividend will be taxable to U.S. holders who are individuals as ordinary income, taxable at preferential rates applicable to qualified dividends; and, as discussed above in Medicare Tax on Net Investment Income, will be treated as net investment income for such purposes. Although the special dividend is not part of the Merger consideration for the purposes of the discussion above of the exchange of Liberty common stock in the Merger, the special dividend must be considered in determining whether the Merger qualifies as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code. The potential amount of the special dividend has been calculated in a manner that enables Middlefield to acquire substantially all of the properties of Liberty within the meaning of Revenue Procedure 86-42, to be consistent with the treatment of the Merger as a reorganization as described in Section 368(a) of the Internal Revenue Code.

This discussion does not address tax consequences that may vary with, or are contingent upon, individual circumstances. Moreover, it does not address any non-income tax or any foreign, state or local tax consequences of the Merger. **Tax matters are very complicated, and the tax consequences of the Merger to you will depend upon the facts of your particular situation. Accordingly, we strongly urge you to consult with a tax advisor to determine the particular federal, state, local or foreign tax consequences of the Merger in light of your particular circumstances, including the applicability and effect of the alternative minimum tax and any state, local or foreign and other tax laws.**

Accounting Treatment

The Merger will be accounted for under the acquisition method of accounting in accordance with generally accepted accounting principles in the United States. Under the acquisition method of accounting, the assets and liabilities of Liberty will be recorded and assumed at estimated fair values when the Merger is consummated. The excess of the estimated fair value of Middlefield common stock issued and the cash proceeds paid over the net fair values of the assets acquired, including identifiable intangible assets, and liabilities assumed will be recorded as goodwill and will not be deductible for income tax purposes. Goodwill is subject to an annual test for impairment and the amount impaired, if any, is charged as an expense at the time of impairment.

Resale of Middlefield Common Stock

Middlefield registered with the SEC under the Securities Act of 1933 the issuance of common stock to Liberty stockholders in the Merger. No restrictions on the sale or other transfer of Middlefield common stock issued in the Merger will be imposed solely as a result of the Merger, except for restrictions on the transfer of Middlefield common stock issued to any Liberty stockholder who becomes an affiliate of Middlefield for purposes of SEC Rule 144. The term affiliate is defined in Rule 144 and generally includes a company s executive officers, directors, and stockholders beneficially owning 10% or more of the company s outstanding shares.

Table of Contents

THE REORGANIZATION AGREEMENT

Annex A is a complete copy of the Reorganization Agreement. ***We encourage you to read the Reorganization Agreement carefully. It is the principal legal document governing the Merger.***

The Reorganization Agreement contains representations and warranties of Liberty and Middlefield. The assertions within those representations and warranties are qualified by information contained in confidential disclosure schedules the parties delivered to each other when they executed the Reorganization Agreement. In addition, some of the representations and warranties were made as of a specific date, may be subject to a contractual standard of materiality different from the standard of materiality generally applicable to statements made by a corporation to stockholders, or may have been used for purposes of allocating risk between the respective parties rather than establishing matters as facts. Accordingly, you should not rely on the representations and warranties as characterizations of the actual state of facts as of any specified date. We urge you to read the full text of the Reorganization Agreement carefully.

Effects of the Merger

When Liberty merges into The Middlefield Banking Company, The Middlefield Banking Company will be the surviving company. The separate corporate existence of Liberty will cease and the articles of incorporation and code of regulations of The Middlefield Banking Company in effect immediately before the Merger will be the articles of incorporation and code of regulations of the surviving company. The directors and officers of The Middlefield Banking Company immediately before the Merger will be the directors and officers of the surviving company. Liberty stockholders receiving cash Merger consideration only will not participate in Middlefield s future earnings and potential growth, but also will not bear the risk of loss for the surviving company s business or the risk of decreases in the value of that business. Liberty stockholders receiving Middlefield common stock as Merger consideration will participate in the surviving company s future earnings and potential growth through their ownership of stock, with all other rights associated with ownership of Middlefield common stock, such as the right to dividends and the right to vote at annual and special meetings.

Effective Time of the Merger

The Merger will occur on a date to be specified by Middlefield and Liberty within five days after all necessary closing conditions are satisfied unless otherwise agreed. The conditions include receipt of all stockholder approvals. The Merger will become effective as of the date specified in the certificate of Merger to be filed with the Ohio Secretary of State. As of the date of this joint proxy statement/prospectus, the parties expect that the Merger will be effective in the first quarter of 2017. However, Liberty and Middlefield cannot assure you that all necessary conditions to the Merger will be satisfied or when they will be satisfied.

If the Merger is not completed by May 30, 2017, the Reorganization Agreement may be terminated by Middlefield or by Liberty, unless the failure of the closing to occur by that date is due to the failure of the party seeking to terminate the Reorganization Agreement to perform or observe its covenants and agreements in the Reorganization Agreement. Either party may also terminate for uncured breaches of representations, warranties or covenants sufficient to cause a failure of a closing condition; for failure of the other party to obtain stockholder approval of the Merger; or in the event the Merger has not been completed by May 30, 2017. The parties may mutually agree to extend the May 30, 2017 deadline.

As part of the Merger transaction, MBC Interim Bank, a wholly owned interim bank subsidiary of Middlefield formed for the sole purpose of facilitating the Merger, will first merge into Liberty, with Liberty as the surviving company, followed immediately by Liberty s merger into The Middlefield Banking Company.

Table of Contents

Merger Consideration

When the Merger is completed, Liberty stockholders will receive from Middlefield a combination of cash and Middlefield common stock. Subject to allocation procedures in the Reorganization Agreement ensuring that approximately 45% of the outstanding Liberty common stock is converted into the right to receive Middlefield common stock and the remaining outstanding Liberty common stock is converted into the right to receive cash, at the effective time of the Merger Liberty common stock not owned by Middlefield will be converted into the right to receive either:

$37.96 in cash, or

1.1934 shares of Middlefield common stock

Liberty common stockholders may elect to receive cash, stock, or a mix of cash and stock, subject to adjustment such that 45% of the Liberty shares exchanged in the Merger are exchanged for Middlefield common stock.

It is not part of the Merger consideration, but the Reorganization Agreement also provides that Liberty will declare a special dividend to its stockholders before the Merger closing. The special dividend is currently estimated to be approximately $3.0 million in the aggregate, or $3.13 per share. Middlefield will not receive Merger consideration for its 23,218 Liberty shares but it will be entitled to the special dividend payment.

Liberty stockholders will own approximately 20% of the outstanding Middlefield common stock after the Merger.

Middlefield will not issue fractional shares. A holder of Liberty common stock who would otherwise be entitled to a fractional share (after taking into account all Liberty common stock owned by the holder at the effective time of the Merger) will instead receive cash, without interest, in an amount equal to the product of the fractional share to which the holder would otherwise be entitled multiplied by the volume-weighted average closing sale price of Middlefield common stock for the 30 trading days immediately before the effective time.

Once the Merger is complete, the Exchange Agent will mail to each holder of Liberty common stock transmittal materials and instructions for delivering share certificates to the Exchange Agent. American Stock Transfer & Trust Company, LLC will act as Exchange Agent. Liberty stockholders must use the letter of transmittal to exchange Liberty share certificates for Merger consideration. Do not send in share certificates with your proxy form.

Treatment of Liberty Stock Options

Liberty s compensation arrangements for officers and employees include equity-based awards, including stock options and phantom awards. There are option awards outstanding for 13,572 shares, all of which are vested. At the effective time of the Merger each outstanding and unexercised option to purchase Liberty common stock will be cancelled in exchange for a cash payment equal to (*x*) the positive difference, if any, between $41.09 and the exercise price of the option, multiplied by (*y*) the number of shares of Liberty common stock acquirable by option exercise. There are also outstanding 2,000 phantom share awards made in 2013. The phantom share awards consist of the right to a cash payment equal to the positive difference between Liberty s stock value on December 31, 2016 and the stock value on the award date, multiplied by the number of phantom shares awarded, with value being determined by Liberty s board of directors. The total cash payment for cancellation of the options and phantom awards is estimated to be $161,931. The $41.09 figure is the sum of the $37.96 per share cash Merger consideration and the $3.13 per share special dividend.

Covenants and Agreements

Covenants Affecting the Conduct of Business Until the Merger Occurs. The Reorganization Agreement requires Liberty to conduct its business in the ordinary course in the period before the Merger occurs and to reasonably preserve intact its assets and business organization. Liberty is required by the Reorganization Agreement to grant Middlefield access to Liberty properties and non-confidential books and records, making internal financial information available to Middlefield as well and keeping Middlefield informed regarding Liberty s operations as Middlefield may request. Liberty must keep Middlefield informed of material developments in its business or of any threatened litigation, meeting monthly with Middlefield personnel concerning Liberty s operations and providing monthly reports about problem assets. Liberty will cooperate with Middlefield regarding integration of data processing and related electronic information systems. Liberty also must maintain commercially reasonable business insurance. Liberty must notify Middlefield of any stockholder litigation arising out of the Reorganization Agreement, giving Middlefield the opportunity to participate at its own expense in the defense or settlement of the litigation.

If all necessary bank regulatory approvals and stockholder approvals of the Reorganization Agreement and Merger are obtained, Liberty will declare, upon receipt of OCC approval, a special dividend payable in cash to Liberty stockholders at or before Merger closing. The amount of the special dividend is estimated to be approximately $3.0 million in the aggregate, or $3.13 per share, but under section 6.1(b) of the Reorganization Agreement, the amount can increase based on Liberty s and Middlefield s tax advisers mutual determination of the potential effect of the special dividend on the ability of Liberty s tax counsel to render an opinion at closing that the Merger qualifies as a tax-free reorganization under Internal Revenue Code section 368(a). The Reorganization Agreement requires in section 6.1(c) that Liberty maintain Tier 1 capital of at least $28.3 million, after taking the special dividend into account but excluding the effect of identified expenses arising out of the Reorganization Agreement and Merger. For this purpose tier 1 capital is defined in OCC rules.

Liberty also agreed to a number of restrictions for the period until the Merger becomes effective, agreeing that without Middlefield s advance consent Liberty will not

(A) take any action that would prevent or impede the Mergers from qualifying as a reorganization under Section 368(a) of the Internal Revenue Code of 1986,

(B) change or waive any provision of Liberty s articles of association or bylaws,

(C) issue any shares of Liberty common stock or right to acquire Liberty common stock, split, combine, or reclassify any shares of capital stock, declare, set aside, or pay a dividend, or redeem or acquire any shares of capital stock, except for shares issued upon exercise of outstanding rights, except for regular cash dividends in amounts and with payment and record dates consistent with past practice (provided that declaration and payment of the final Liberty dividend before the Effective Time is coordinated with Middlefield Banc Corp. so that holders of Liberty common stock do not receive dividends on both Liberty common stock and Middlefield Banc Corp. common stock for the same period), and except for the special dividend payable under the terms of the Reorganization Agreement,

(D) enter into, amend, or terminate a contract or agreement involving payments exceeding $25,000 over the life of the contract or agreement,

(E) apply to open a branch or automated teller facility or give notice of the intent to close a branch or automated teller facility,

(F) increase salary or wages, grant or agree to pay a bonus or severance or termination pay to, or enter into, renew, or amend an employment agreement, severance agreement, or supplemental executive agreement with, or increase the compensation or fringe benefits of, any director, officer, employee, or consultant except for (1) existing commitments, (2) bonuses, incentive payments, and salary adjustments in the ordinary course of business consistent with past practice, or (3) payments otherwise allowed by the Reorganization Agreement. Liberty will not hire or promote an employee to a rank having a title of vice president or other more senior rank or hire a new employee at an annual rate of compensation exceeding $40,000, but Liberty may hire at-will non-officer employees at an annual compensation rate not exceeding $30,000 to fill vacancies arising in the ordinary course of business. Liberty may not hire a new employee without first seeking to fill the position internally,

Table of Contents

(G) enter into or modify a pension, retirement, stock purchase, stock appreciation right, stock grant, savings, profit sharing, deferred compensation, supplemental retirement, consulting, bonus, group insurance, or other employee benefit, incentive, or welfare contract, plan, or arrangement, or any trust agreement for any director, officer, or employee, or make a contribution to a defined contribution or defined benefit plan not in the ordinary course of business or not consistent with past practice,

(H) merge or consolidate, sell or lease all or a substantial portion of Liberty s assets or business, acquire all or a substantial portion of the business or assets of another entity other than in foreclosure, settlement in lieu of foreclosure, troubled loan or debt restructuring, or collection of a loan or credit arrangement, enter into a purchase and assumption transaction for deposits and liabilities, incur deposit liabilities other than liabilities incurred in the ordinary course of business consistent with past practice and consistent with prevailing competitive rates, permit the revocation or surrender by Liberty of its certificate of authority to maintain, or file an application for the relocation of, a branch office,

(I) except for transactions with the FHLB, subject an asset to a lien, pledge, security interest, or other encumbrance (excepting deposits, repurchase agreements, bankers acceptances, pledges in connection with acceptance of governmental deposits, transactions in federal funds, and satisfaction of legal requirements in the exercise of trust powers) other than in the ordinary course of business consistent with past practice, or incur indebtedness for borrowed money or guarantee indebtedness, except in the ordinary course of business consistent with past practice,

(J) change its method, practice, or principle of accounting, except as may be required from time to time by GAAP (without optional early adoption) or regulatory accounting principles,

(K) waive, release, grant, or transfer any rights of value or modify or change existing indebtedness other than in the ordinary course of business consistent with past practice,

(L) increase its investment securities portfolio above the amount in the fiscal year 2016 budget,

(M) purchase any securities except securities rated A or higher by either Standard & Poor s Ratings Services or Moody s Investors Service and having a duration of three years or less,

(N) except for existing unexpired commitments (other than unused portions of lines of credit) and except for the renewal of existing lines of credit, (x) make or acquire a new loan or other credit facility commitment (including loan participation, line of credit, or letter of credit) exceeding $1.5 million or (y) make or acquire a new loan or other credit facility commitment (including loan participation, line of credit, or letter of credit) in an amount that would result in a lending relationship to a borrower or an affiliated group of borrowers exceeding $1.5 million; but the proposed actions specified in (x) and (y) are permissible if Liberty gives written notice to Middlefield 48 hours in advance,

(O) enter into, renew, extend, or modify any other transaction (other than a deposit transaction) with a Liberty affiliate,

(P) enter into a futures contract, option, interest rate cap, interest rate floor, interest rate exchange agreement, or other agreement or take any other action for purposes of hedging the exposure of its interest-earning assets and interest-bearing liabilities to changes in market rates of interest,

(Q) take any action that would create on the part of any individual a right to payment under the terms of an employment agreement, except for rights arising on account of this Reorganization Agreement,

(R) except as may be required by changes in applicable law or regulations, GAAP, regulatory accounting principles, or by a bank regulatory agency, make any change in policies in force regarding extension of credit or establishment of reserves for possible losses or charge-off of losses, investments, asset/liability management, or other banking policies,

(S) take any action that would accelerate the right to payment on the part of any individual under a Liberty benefit plan, except for acceleration occurring on account of this Reorganization Agreement,

(T) make capital expenditures exceeding $50,000 individually or $80,000 in the aggregate, other than for existing binding commitments,

Table of Contents

(U) purchase or otherwise acquire or sell or otherwise dispose of any assets or incur any liabilities other than in the ordinary course of business consistent with past practices and policies,

(V) except for existing commitments to sell a participation interest in a loan, sell a participation interest in a loan, other than sales of loans secured by one-to-four-family real estate consistent with past practice, without giving Middlefield the first opportunity and a reasonable time to purchase the participation being sold, or purchase a participation interest in a loan other than purchases of participation interests from Middlefield,

(W) except in the ordinary course of providing credit to customers as part of its banking business, undertake or enter into a lease, contract, or other commitment involving payment by Liberty of more than $35,000 annually or containing a financial commitment extending beyond 12 months from the date of the Reorganization Agreement,

(X) except in the ordinary course of business consistent with past practice and involving solely money damages of up to $40,000 individually or $100,000 in the aggregate and that does not create adverse precedent for other pending or potential claims, actions, litigation, arbitration or proceedings, pay, discharge, settle, or compromise a claim, action, litigation, arbitration, or proceeding,

(Y) foreclose upon or take a deed or title to any commercial real estate without having a Phase I environmental assessment of the property conducted as of a reasonably current date and, if the Phase I environmental assessment of the property reveals the presence of Materials of Environmental Concern, providing notice to Middlefield before the final sale,

(Z) purchase or sell a mortgage loan servicing right other than in the ordinary course of business consistent with past practice,

(AA) make, renew, or modify any loan, loan commitment, or other extension of credit if the loan, loan commitment, or other extension of credit is (x) contractually past due 90 days or more in the payment of principal or interest, or (y) on nonaccrual status, or (z) as of June 30, 2016 classified as Other Loans Specially Mentioned, Special Mention, Substandard, Doubtful, Loss, Classified, Criticized, or Watch list,

(BB) except as required by law or for communications in the ordinary course of business consistent with past practice and not relating to the Mergers or other transactions under this Agreement, issue a broadly distributed communication of a general nature to employees (including general communications relating to benefits and compensation) without first consulting with Middlefield and, if the communication has to do with post-Merger employment or benefit or compensation information, without first obtaining Middlefield s consent, or issue a broadly distributed communication of a general nature to customers without first obtaining Middlefield s approval,

(CC) make, change, or rescind a material election concerning taxes or tax returns, file an amended tax return, enter into a closing agreement regarding taxes, settle or compromise a material tax claim or assessment, or surrender a right to claim a refund of taxes or obtain a tax ruling, or

(DD) take any action that would (1) materially adversely affect the ability of the parties to obtain regulatory approval of the Merger or materially increase the time necessary to obtain regulatory approval, (2) materially adversely affect Liberty s ability to perform its Reorganization Agreement covenants, or (3) result in a Liberty representation and warranty not being true and correct or result in any of the closing conditions not being satisfied.

Middlefield has also agreed to a limited set of restrictions on its business in the period before the Merger is completed. Specifically, Middlefield has agreed that in the period before the Merger is completed it and The Middlefield Banking

Company will conduct business in the usual and ordinary course, will maintain commercially reasonable business insurance, and will not take any action that

changes or waives a provision of its articles of incorporation or code of regulations in a way that is adverse to Liberty stockholders,

82

materially adversely affects the ability of the parties to obtain regulatory approval of the Merger or increases the time necessary to obtain approvals, or Middlefield s or The Middlefield Banking Company s ability to perform its Reorganization Agreement obligations, or results in a condition to closing not being satisfied, or

prevents the Merger from qualifying as a tax-free reorganization under Internal Revenue Code section 368(a) Middlefield must deposit with the Exchange Agent before Merger closing cash and Middlefield common stock sufficient to pay the Merger consideration to Liberty stockholders. Until the Merger occurs Middlefield may not issue additional shares of common stock or rights to acquire stock except under Middlefield s equity-based benefit plans or under Middlefield s dividend reinvestment plan. Middlefield also is required to grant Liberty access to Middlefield properties and non-confidential books and records, making internal financial information available to Liberty as well. Middlefield is also obligated to maintain insurance, supplement its disclosures to Liberty, and seek consents necessary for closing.

Nasdaq Listing. Middlefield will cause the Middlefield common stock being issued in the Merger to be authorized for listing on Nasdaq, subject to official notice of issuance, before the Merger becomes effective.

Middlefield Board of Directors. Following the Merger, the Board of Directors of Middlefield will cause two current members of the Board of Directors of Liberty, William A. Valerian and Thomas W. Bevan, to be appointed to the Board of Directors of Middlefield.

Employee Matters. Liberty employees who become employees of Middlefield or The Middlefield Banking Company when the Merger is completed will participate in employee benefit plans of general applicability to the same extent as similarly-situated employees of Middlefield and The Middlefield Banking Company, and for vesting and eligibility purposes the former Liberty employees will be credited for their service as Liberty employees. Middlefield and The Middlefield Banking Company are not contractually committed to retaining Liberty employees but have agreed to retain as many Liberty officers and employees as is commercially reasonable and possible, agreeing also to consider Liberty personnel for any positions becoming open at Middlefield or The Middlefield Banking Company after the date of the Reorganization Agreement. Middlefield will honor employment, change-in-control severance, and split dollar insurance agreements of Liberty, but is not required to pay and will not pay any benefits that would constitute parachute payments under Internal Revenue Code sections 280G and 4999. Those provisions of the Internal Revenue Code impose a 20% excise tax on parachute payments in a change in control, denying to the employer a compensation deduction for the benefits constituting parachute payments. For Liberty employees whose service does not continue after the Merger or who are terminated without cause within one year after the Merger, Middlefield has agreed in the Reorganization Agreement to pay them cash severance equal to one week of base pay for each year of service, with a minimum of four weeks of base pay and a maximum of 26, and to make available career counseling and professional counseling. Middlefield also may pay retention or incentive bonuses to selected Liberty personnel whose service is critical to the Merger-related transition, such as data processing personnel.

Indemnification and Directors and Officers Insurance. For a period ending six years after the effective time of the Merger, Middlefield will indemnify and hold harmless, to the fullest extent provided under Liberty s articles of association and bylaws, each present and former director and officer of Liberty and its subsidiaries from liabilities arising out of or pertaining to matters existing or occurring at or before the effective time of the Merger, including the transactions under the Reorganization Agreement. Middlefield has also agreed that for a period of six years after the Merger Middlefield will maintain directors and officers liability insurance coverage for actions, omissions, or events occurring before the effective time of the Merger, including the transactions under the Reorganization Agreement, and covering Liberty directors and officers on the July 28, 2016 date of the Reorganization Agreement. The insurance will be on terms and conditions substantially equivalent to Liberty s directors and officers liability insurance coverage, but

Middlefield is not required to incur annual premium expense greater than 150% of Liberty s annual premium cost as of July 28, 2016. Instead of Middlefield s continued maintenance of directors and officers liability insurance coverage, before the effective time of the Merger, Middlefield may purchase and pay for a tail policy for directors and officers liability insurance on the terms described in this paragraph, or Liberty may do so with Middlefield s consent.

Regulatory Matters. Middlefield agreed to promptly prepare and file with the SEC a registration statement on Form S-4, of which this joint proxy statement/prospectus is a part. Liberty prepared the portion of this joint proxy statement/prospectus constituting the proxy statement of Liberty. Middlefield and Liberty agreed to use commercially reasonable efforts to have the Form S-4 declared effective under the Securities Act of 1933 as promptly as practicable after such filing, and Middlefield and Liberty agreed to mail or deliver the joint proxy statement/prospectus to their respective stockholders. Middlefield also will use commercially reasonable efforts to obtain all necessary state securities law or Blue Sky permits and approvals required to complete the Merger. Middlefield and Liberty will cooperate with each other and use commercially reasonable efforts to promptly prepare and file all necessary documentation and obtain all permits, consents, approvals, and authorizations of all third parties and governmental entities that are necessary to complete the Merger. The Reorganization Agreement requires both Middlefield and Liberty to file for all necessary regulatory approvals. See THE MERGER Regulatory Approvals Required.

Stockholder Approval. Both Middlefield and Liberty are required by the Reorganization Agreement to call and hold a meeting of stockholders to enable stockholders to consider and vote on the Reorganization Agreement and the Merger. Liberty s board of directors also committed in the Reorganization Agreement to recommend that Liberty stockholders vote in favor of adopting and approving the Reorganization Agreement, committing also to ensure that any anti-takeover provisions of Liberty s articles of association, bylaws, or applicable state law are made inapplicable to the Merger or to minimize the impact of any applicable antitakeover provisions. The board is permitted by the Reorganization Agreement to decline to recommend a vote in favor or to withdraw, modify, or change the recommendation to stockholders if, after consultation with financial and legal advisors, the board concludes that recommending a vote in favor of adoption and approval or failing to withdraw, modify, or change the recommendation would breach the directors fiduciary duties to stockholders.

No Solicitation. The Reorganization Agreement prohibits Liberty and its officers, directors, employees, representatives, affiliates, and agents from (*x*) initiating, soliciting, knowingly encouraging, or furnishing assistance or nonpublic information for an inquiry or the making of a proposal that constitutes or that may reasonably be expected to lead to an acquisition proposal, (*y*) discussing, negotiating, or making a proposal that constitutes or that may reasonably be expected to lead to an acquisition proposal, or (z) agreeing to or endorsing an acquisition proposal. For this purpose the term acquisition proposal means a proposal or offer (other than Middlefield s) involving Liberty for (1) merger, consolidation, share exchange, business combination, or other similar transactions, (2) sale, lease, exchange, mortgage, pledge, transfer, or other disposition of 25% or more of the assets of Liberty in a single transaction or series of transactions, or (3) a tender offer or exchange offer for 25% or more of the outstanding shares of Liberty common stock or the filing of a registration statement under the Securities Act of 1933 for the offer of shares in exchange for Liberty stock. Acquisition proposal also includes a publicly announced proposal, plan, or intention to do any of the foregoing or any agreement to engage in any of the foregoing. Liberty would not violate this obligation, however, if it furnishes information to and negotiates with a person making an acquisition proposal if two conditions are satisfied: (1) the acquisition proposal is not solicited by Liberty and (2) Liberty s board concludes in good faith, after consulting with legal and financial advisors, that the unsolicited acquisition proposal is reasonably likely to result in a transaction more favorable to Liberty stockholders from a financial point of view than the Merger transaction under the Reorganization Agreement. A proposal satisfying both of those conditions is referred to as a Superior Proposal. Liberty must notify Middlefield within two business days after receiving inquiries, proposals, offers, or information requests.

84

Table of Contents

Representations and Warranties

Liberty s representations and warranties to Middlefield in the Reorganization Agreement concern the following topics and are qualified by the confidential disclosure schedules delivered to Middlefield:

- corporate organization, good standing, corporate power, qualification to do business, and capitalization
- authority to enter into the Reorganization Agreement and complete the Merger
- absence of conflicts with governing documents, applicable laws, or contractual arrangements as a result of entering into the Reorganization Agreement or completing the Merger
- required regulatory and third party consents necessary for the Merger
- conformity with GAAP of Liberty s financial statements and absence of undisclosed liabilities
- compliance with tax reporting obligations and payment of taxes
- absence of material events or circumstances since December 31, 2015 that have had or reasonably would be expected to have a material adverse effect on Liberty
- absence of material contractual arrangements restricting Liberty s business
- absence of defaults under material contracts
- absence of transactions outside the ordinary course of business since December 31, 2015
- quality of Liberty s ownership interest in properties used in its business
- maintenance by Liberty of adequate insurance for the conduct of its business
- absence of legal proceedings against Liberty or affecting Liberty s assets, or challenging the Reorganization Agreement or the Merger or adversely affecting Liberty s ability to complete the Merger

Liberty s compliance with law generally, including but not limited to laws particularly affecting banking organizations

compliance by Liberty with laws affecting employee benefits

broker s and finder s fees related to the Merger payable by Liberty

compliance with applicable environmental laws

quality of Liberty s loan portfolio and adequacy of the allowance for loan losses

absence of insider or affiliate transactions on preferential terms

absence of deposits treated under FDIC rules as brokered deposits

approval of the Reorganization Agreement by the board of directors

legal status of risk management securities such as swaps, options, forward contracts and similar arrangements

receipt by Liberty of a fairness opinion from Liberty s financial advisor, Boenning

legal right to intellectual property

absence of labor disputes

absence of any material misstatements or omissions

quality of Liberty s internal controls over financial reporting

status of Liberty s insurance on the lives of officers or directors

Table of Contents

Middlefield s representations and warranties to Liberty in the Reorganization Agreement concern the following topics and are qualified by the confidential disclosure schedules delivered to Liberty:

- corporate organization, good standing, corporate power, qualification to do business, and capitalization
- authority to enter into the Reorganization Agreement and complete the Merger
- absence of conflicts with governing documents, applicable laws, or contractual arrangements as a result of entering into the Reorganization Agreement or completing the Merger
- required regulatory and third party consents necessary for the Merger
- conformity with GAAP and SEC requirements of Middlefield s financial statements filed with the SEC and absence of undisclosed liabilities
- compliance with tax reporting obligations and payment of taxes
- absence of material events or circumstances since December 31, 2015 that have had or would be expected to have a material adverse effect on Middlefield
- absence of material contractual arrangements restricting Middlefield s or The Middlefield Banking Company s business
- absence of defaults under material contracts
- absence of material asset acquisitions or dispositions since December 31, 2015
- quality of Middlefield s ownership interest in properties used in its business
- maintenance by Middlefield of adequate insurance for the conduct of its business
- absence of legal proceedings against Middlefield or affecting Middlefield s assets, or challenging the Reorganization Agreement or the Merger or adversely affecting Middlefield s ability to complete the Merger

Middlefield s compliance with law generally, including but not limited to laws particularly affecting banking organizations

compliance by Middlefield with laws affecting employee benefits

broker s and finder s fees related to the Merger payable by Middlefield

compliance with applicable environmental laws

quality of The Middlefield Banking Company s loan portfolio and adequacy of the allowance for loan losses

absence of insider or affiliate transactions on preferential terms

approval of the Reorganization Agreement by the board of directors

legal status of risk management securities such as swaps, options, forward contracts and similar arrangements

legal right to intellectual property

absence of claims against The Middlefield Banking Company based on fiduciary duties

absence of labor disputes

absence of any material misstatements or omissions

quality of Middlefield s internal controls over financial reporting

authorization and validity of the shares of Middlefield common stock to be issued in the Merger to Liberty stockholders compliance by Middlefield with its SEC reporting obligations

receipt by Middlefield of a fairness opinion from Middlefield s financial advisor, Donnelly Penman & Partners, Inc.

Many of the representations and warranties of Liberty and Middlefield are qualified regarding materiality or material adverse effect. For purposes of the Reorganization Agreement, a material adverse effect means an effect that is material and adverse to the financial condition, results of operations, or business of Middlefield and its subsidiaries taken as a whole, or of Liberty and its subsidiaries taken as a whole, or materially impairs the ability of either Liberty, on one hand, or Middlefield and The Middlefield Banking Company, on the other hand, to perform the obligations under the Reorganization Agreement or otherwise materially impedes consummation of the Merger, except that the following circumstances or events are excluded when determining whether a material adverse effect has occurred:

(1) the impact of (*x*) changes in laws, rules, or regulations affecting banks or their holding companies generally, or interpretations thereof by courts or governmental agencies, (*y*) changes in GAAP, or (*z*) changes in regulatory accounting requirements, in any case applicable to financial institutions or their holding companies generally and not specifically relating to Liberty, on one hand, or Middlefield or any Middlefield subsidiary, on the other hand,

(2) announcement of the Reorganization Agreement by press release mutually agreed to by Liberty and Middlefield or by Form 8-K filed by Middlefield,

(3) any act or omission of Liberty required under the Reorganization Agreement or taken or omitted to be taken with the express written permission of Middlefield,

(4) any act or omission of Middlefield or The Middlefield Banking Company required under the Reorganization Agreement or taken or omitted to be taken with the express written permission of Liberty,

(5) the direct effects of compliance with the Reorganization Agreement on the operating performance of the parties, including expenses incurred by the parties investigating, negotiating, documenting, effecting, and consummating the transactions under the Reorganization Agreement,

(6) any changes after the date of the Reorganization Agreement in general economic or capital market conditions affecting banks or their holding companies generally, and

(7) any changes in national or international political or social conditions, including engagement by the United States in hostilities, whether by the declaration of a national emergency or war, or the occurrence of a military attack upon or within the United States.

The representations and warranties in the Reorganization Agreement do not survive the effective time of the Merger and, as described below under Termination , if the Reorganization Agreement is terminated there will be no liability under the representations and warranties of the parties or otherwise under the Reorganization Agreement unless a party knowingly breached the Reorganization Agreement.

The Reorganization Agreement representations and warranties of Middlefield and Liberty were made solely for purposes of that agreement and as of specific dates. The representations, warranties, and covenants in the Reorganization Agreement may be subject to limitations agreed upon by the contracting parties, including being qualified by confidential disclosures made for the purposes of allocating contractual risk between the parties to the Reorganization Agreement instead of establishing matters as facts, and may be subject to standards of materiality applicable to the contracting parties that differ from those generally applicable to investors. When reviewing the representations, warranties, and covenants contained in the Reorganization Agreement or summarized in this joint proxy statement/prospectus, it is important to bear in mind that the representations, warranties, and covenants and the summary are not intended by the parties to the Reorganization Agreement to be characterizations of the actual state of facts or condition of Middlefield, Liberty, or any of their respective subsidiaries or affiliates. Moreover, information concerning the subject matter of the representations, warranties,

Table of Contents

and covenants may have changed after the date of the Reorganization Agreement. For the foregoing reasons, the representations, warranties, and covenants or any summary of those provisions should not be read alone and should instead be read in conjunction with the other information contained in the reports, statements, and filings that Middlefield publicly files with the SEC. For more information regarding these documents, see the section entitled Where You Can Find More Information in the forepart of this document.

Conditions to the Merger

Conditions to Each Party s Obligations. The obligations of Middlefield and Liberty to complete the Merger are subject to satisfaction of the following conditions:

- adoption and approval of the Reorganization Agreement and the Merger by Liberty stockholders and by Middlefield stockholders,
- absence of an order or injunction against consummation of the Merger,
- receipt of all necessary regulatory approvals and expiration of any required waiting period, and absence of regulatory approval conditions that would have a material adverse effect on Middlefield or Liberty,
- effectiveness of the Form S-4 registration statement of which this joint proxy statement/prospectus is a part, and the absence of a stop order or proceeding initiated or threatened by the SEC for that purpose, and
- authorization for Nasdaq listing of the Middlefield common stock to be issued in the Merger.

Conditions to Middlefield s Obligations. Middlefield s obligation to complete the Merger is subject to satisfaction of these additional conditions:

- accuracy of Liberty s representations and warranties in the Reorganization Agreement as of the date of the Reorganization Agreement and as of effective time of the Merger (other than representations and warranties that by their terms are made specifically as of the date of the Reorganization Agreement or another date), subject to applicable materiality qualifiers,
- performance by Liberty in all material respects of its obligations under the Reorganization Agreement,
- absence of an event or circumstance after the date of the Reorganization Agreement having a material adverse effect on Liberty s financial condition, results of operations, or business,
- absence of regulatory approval conditions that would have a material adverse effect on Middlefield, and

the landlord of Liberty s Twinsburg location consents to The Middlefield Banking Company succeeding to Liberty s interest as tenant.

Conditions to Liberty s Obligations. Liberty s obligation to complete the Merger is subject to satisfaction of these additional conditions:

accuracy of Middlefield s and The Middlefield Banking Company s representations and warranties in the Reorganization Agreement as of the date of the Reorganization Agreement and as of effective time of the Merger (other than representations and warranties that by their terms are made specifically as of the date of the Reorganization Agreement or another date), subject to applicable materiality qualifiers,

performance by Middlefield and The Middlefield Banking Company in all material respects of their obligations under the Reorganization Agreement,

absence of an event or circumstance after the date of the Reorganization Agreement having a material adverse effect on Middlefield s or The Middlefield Banking Company s financial condition, results of operations, or business,

- receipt by Liberty of a legal opinion dated the closing date, stating that the Merger will qualify as a reorganization under Internal Revenue Code section 368(a),

- deposit by Middlefield of the Merger consideration with the Exchange Agent, and

- the landlord of Liberty s Twinsburg location consenting to The Middlefield Banking Company succeeding to Liberty s interest as tenant.

Termination; Termination Fee

The Reorganization Agreement may be terminated before the effective time of the Merger, whether before or after approval by Liberty stockholders and Middlefield stockholders:

- by mutual written consent of Middlefield and Liberty,

- by either Middlefield or Liberty if the other party breaches its covenants or representations and warranties and the breach is not cured within 30 days after written notice, or if by its nature the breach cannot be cured, provided the terminating party is not also in breach of its covenants or representations and warranties,

- by either Middlefield or Liberty if the Merger does not occur by May 30, 2017 (or a later date the parties may agree to), unless the failure to close by that date is the result of the terminating party s breach of covenants or representations and warranties in the Reorganization Agreement,

- by Middlefield if the Liberty stockholders do not vote to approve the Reorganization Agreement,

- by Liberty if the Middlefield stockholders do not vote to approve the Reorganization Agreement,

- by either party if a required governmental approval is denied by final, non-appealable action, or if a governmental entity issues a final, non-appealable order, injunction, or ruling enjoining or otherwise prohibiting,

- by Middlefield if Liberty becomes subject to a formal bank regulatory enforcement action,

- by Middlefield if Liberty s board fails to recommend to Liberty stockholders adoption and approval of the Reorganization Agreement or withdraws or adversely changes the recommendation in favor of the Reorganization Agreement, or if Liberty accepts a competing acquisition proposal, by Liberty if its accepts a superior acquisition proposal, but Liberty s termination right is conditioned on Liberty giving to Middlefield notice of the superior proposal and the opportunity to modify Middlefield s merger proposal.

Liberty must pay a termination fee of $1.65 million to Middlefield if Middlefield terminates the Reorganization Agreement because Liberty s board fails to recommend to Liberty stockholders adoption and approval of the Reorganization Agreement, or because Liberty s board withdraws or adversely changes the recommendation in favor of the Reorganization Agreement, or because Liberty accepts a competing acquisition proposal. Liberty would also be required to pay the $1.65 million termination fee to Middlefield if Liberty terminates the Reorganization Agreement because it accepts a superior acquisition proposal. Finally, if a competing acquisition proposal is made to Liberty and thereafter Middlefield terminates the Reorganization Agreement because of a breach by Liberty or Middlefield or Liberty thereafter terminate the agreement because Liberty stockholders do not adopt and approve the Reorganization Agreement and Merger, Liberty will have to pay the $1.65 million termination fee to Middlefield if within one year after termination Liberty enters into a definitive agreement for a competing acquisition proposal.

Effect of Termination

If the Reorganization Agreement terminates, it will be deemed void, without any liability on the part of any of the parties, except in the case of a party s willful breach of the Reorganization Agreement, and except for a

Table of Contents

potential termination fee payment by Liberty. Reorganization Agreement provisions for confidentiality of the parties information, the termination fee, and other technical provisions would remain effective despite termination of the Reorganization Agreement.

Amendments, Extensions and Waivers

Liberty and Middlefield may amend the Reorganization Agreement by action of their boards of directors, whether before or after stockholder approval of the Reorganization Agreement. If the amendment decreases the amount or value of Merger consideration or the form of the Merger consideration additional approval of Liberty stockholders would be necessary. At any time before effective time of the Merger a party may extend the time for performance of the other party s obligations, waive inaccuracies in the other party s representations and warranties, or waive compliance with agreements or conditions in the Reorganization Agreement.

Stock Market Listing

Middlefield common stock is listed on Nasdaq, trading under the symbol MBCN. Middlefield will apply to Nasdaq to list the additional common stock being issued in the Merger. It is a condition to both parties obligation to complete the Merger that Nasdaq approve Middlefield s application, subject to official notice of issuance.

Fees and Expenses

Fees and expenses incurred by a party regarding the Merger, the Reorganization Agreement, and the transactions under the Reorganization Agreement will be paid by the party incurring the fees and expenses, regardless of whether the Merger is completed, but if the Reorganization Agreement is terminated because of a party s willful and material breach, the breaching party is liable for damages and all costs and expenses.

Table of Contents

COMPARISON OF LIBERTY AND MIDDLEFIELD STOCKHOLDER RIGHTS

The rights of Liberty stockholders who receive Middlefield common stock in the Merger will be governed by the Ohio General Corporation Law (OGCL) and by Middlefield s Second Amended and Restated Articles of Incorporation and Code of Regulations. Their stockholder rights currently are determined by Liberty s Amended and Restated Articles of Association and its By-Laws. Federal law authorizing national banking associations permits national banks to select the state law that will control corporate governance questions not specifically treated in the articles of association and bylaws. Liberty s By-Laws state that the OGCL apply.

Although the rights of Middlefield stockholders and the rights of Liberty stockholders are similar, there are some differences between provisions of the Second Amended and Restated Articles of Incorporation of Middlefield and the Amended and Restated Articles of Association of Liberty, and differences between provisions of the Amended Code of Regulations of Middlefield and the By-Laws of Liberty. The following comparison of stockholder rights is not a complete description of all differences individual Liberty stockholders might consider important. The comparison is qualified in its entirety by reference to the OGCL and the governing corporate documents of Liberty and Middlefield.

	Liberty Bank, N.A.	**Middlefield Banc Corp.**
authorized capital	Liberty s authorized capital stock consists of 2,500,000 shares of common stock, par value $10.00 per share; amendment of Liberty s articles of association to increase authorized capital would require advance approval both of stockholders and of the OCC	Middlefield s authorized capital consists of 10,000,000 shares of common stock, without par value; amendment of Middlefield s articles of incorporation to increase authorized capital would require advance approval of stockholders only; bank regulatory approval is not necessary
preemptive rights (the right of stockholders to purchase shares to maintain their percentage ownership interest before a corporation may sell shares to the public)	Liberty stockholders do not have preemptive rights	Middlefield stockholders do not have preemptive rights
issuer stock repurchases	a national banking association generally must obtain advance approval of the OCC to repurchase shares, along with approval of two thirds of the shares outstanding	neither the OGCL nor Middlefield s governing documents require advance regulatory approval and advance stockholder approval generally are not necessary for Middlefield to repurchase shares, but approval of the Federal Reserve potentially can be required in exceptional circumstances
dividends		

	stockholders are entitled to dividends when, as, and if declared by the board of directors, provided that such dividends are made in compliance with national banking law; OCC approval may be required in limited cases	stockholders are entitled to dividends when, as, and if declared by the board of directors, provided that such dividends are made in compliance with the OGCL

Table of Contents

	Liberty Bank, N.A.	Middlefield Banc Corp.
amendment of governing documents (articles of incorporation or association and code of regulations or by-laws)	amendment of the articles of association requires approval of a majority of the outstanding shares	amendment of Middlefield s articles of incorporation requires approval of a majority of the outstanding shares, but a two-thirds supermajority is necessary to amend the business combination provisions of Article Sixth
	Liberty s by-laws may be altered, amended or repealed by a majority of the board of directors of Liberty or by the holders of at least a majority of the voting power of the outstanding voting shares of Liberty	amendment of Middlefield s regulations requires approval of two-thirds of the outstanding shares, but a majority of the outstanding shares may amend the regulations if the amendment is first approved by a disinterested board majority
number of directors	a national banking association s board of directors must consist of at least five but no more than 25 directors; within that range the board, subject to certain limitations, may increase its size without stockholder approval	Middlefield s board size is not limited by law, but Middlefield s regulations state that the authorized number of directors is a minimum of five and a maximum of 25; within that range the board may increase its size without stockholder approval
director terms	each elected director is elected for a term ending on the date of the following annual meeting of stockholders	directors serve staggered three-year terms, with the size of each of the three classes being as nearly equal as possible
director qualification and stock ownership	a majority of directors must be residents of Ohio or residents within a 100-mile radius of Liberty s main office; each director must own Liberty stock with a market value of at least $1,000	Middlefield s governing documents do not impose a residency requirement or a stock ownership requirement, but Middlefield s Corporate Governance Guidelines state that within three years after election a director should own Middlefield common stock with a value of at least two times the director s annual base compensation for service as a director of The Middlefield Banking Company, and three times compensation within six years after election

election of directors	directors are elected by plurality vote	directors are elected by plurality vote; directors can be elected at annual meetings only

Table of Contents

	Liberty Bank, N.A.	Middlefield Banc Corp.
removal of directors	a director may be removed by the vote of a majority of the outstanding shares, subject to certain limitations	a director may be removed solely for cause by the vote of a majority of the outstanding shares
nomination of directors by stockholders	a stockholder seeking to nominate a director for election must submit the nomination to the Secretary of Liberty and the OCC not less than 14 days nor more than 50 days prior to the election meeting; provided, however, that if less than 21 days notice of the election meeting is given to stockholders, the nomination shall be mailed or delivered to the Secretary and the OCC not later than the 7th day following the day on which the notice was given	a stockholder seeking to nominate a director for election must submit detailed information specified in Article III, section 4 of Middlefield s regulations, submitting the information during a 60-day period ending approximately 60 days before the proxy soliciting materials are mailed to stockholders
calling special meetings of stockholders	special meetings of stockholders may be called by the chairman of the board, the president, a vice president, or the board of directors; holders of record of 25% or more of the outstanding shares may call a special meeting if the meeting does not involve amendment of the articles of association or a change in control; holders of record of a majority of the outstanding shares may call a special meeting involving amendment of the articles of association or a change in control	special meetings of stockholders may be called by the board of directors, by the Chairman or President, or by holders of 25% or more of the outstanding shares
quorum for stockholder meetings	a quorum exists at a meeting if holders of a majority of the outstanding shares are represented	a quorum exists at a meeting if holders of a majority of the outstanding shares are represented
action of stockholders	at a meeting at which a quorum exists, on proposals other than election of directors the affirmative vote of a majority of the shares present and entitled to vote is sufficient to constitute action by stockholders, unless the National Bank Act and OCC regulations or Liberty s governing documents	at a meeting at which a quorum exists, on proposals other than election of directors approval of a majority of the votes cast, excluding abstentions, is sufficient to constitute action by stockholders, unless the OGCL or Middlefield s governing documents impose a greater

	impose a greater percentage approval requirement	percentage approval requirement

93

Table of Contents

	Liberty Bank, N.A.	Middlefield Banc Corp.
merger approval	under the National Bank Act, the merger of a national banking association requires approval of at least two thirds of outstanding shares, in addition to federal bank regulatory approval	in addition to bank regulatory approval required under federal law and Ohio law, the OGCL generally requires approval of two thirds of outstanding shares for approval of a merger; the OGCL allows a corporation s articles of incorporation to impose the lower threshold of a mere majority, but Middlefield s articles of incorporation do not allow approval of mergers by majority vote
cumulative voting for directors (multiplying each stockholder s voting power by the number of directors standing for election and allowing stockholders to allocate all of their votes to one or more of the directors)	Liberty s governing documents do not authorize cumulative voting	cumulative voting is not permitted
stockholder proposals for business to be conducted at a meeting	Liberty s governing documents do not state procedures for proposal by stockholders of business to be acted upon at a meeting	a stockholder seeking to propose business for action by stockholders at a meeting must submit detailed information specified in Article I, section 8 of Middlefield s regulations, submitting the information during a 60-day period ending approximately 60 days before the proxy soliciting materials are mailed to stockholders; stockholders also have the right under SEC Rule 14a-8 to submit proposals for inclusion in Middlefield s annual meeting proxy statement
provisions specifically governing changes in control	Liberty s governing documents contain no change-in-control provisions	Article Sixth of Middlefield s Second Amended and Restated Articles of Incorporation requires disinterested majority approval for any business combination transaction involving a holder of 10% or more of Middlefield s stock

Table of Contents

INFORMATION ABOUT MIDDLEFIELD

Directors, Executive Officers, Compensation

Middlefield Directors. According to article III, section 2, of Middlefield s regulations, the board may consist of no fewer than five and no more than 25 directors, the precise number being fixed or changed from time to time within that range by the board or by majority vote of shareholders acting at an annual meeting. Article III, section 2(b) of Middlefield s regulations provides that if the number of directors (including vacancies) of Middlefield is six or more, the directors must be classified into at least two classes, as nearly equal in number as possible and consisting of no fewer than three directors in each class, designated Class I, Class II, and if there are nine or more directors, Class III. Our board currently consists of ten directors.

	Age	Director since	Current term expires	Biography
Thomas G. Caldwell	59	1997	2019	Mr. Caldwell is President and Chief Executive Officer of Middlefield, The Middlefield Banking Company, and EMORECO, Inc. Mr. Caldwell served as Vice President of Middlefield until October 2000, when he became President and CEO. Mr. Caldwell s experience in the banking and financial services industry and significant leadership positions with Middlefield, The Middlefield Banking Company, and EMORECO, Inc. allow him to provide business and leadership expertise to the board.
James R. Heslop, II	62	2001	2018	Executive Vice President and Chief Operating Officer of The Middlefield Banking Company since 1996, Mr. Heslop became Executive Vice President and Chief Operating Officer of Middlefield on October 30, 2000. He became a director of the bank in July 1999 and a director of Middlefield on November 19, 2001. He is also the Vice President and Secretary and a director of EMORECO, Inc. From July 1993 until joining The Middlefield Banking Company in April 1996, Mr. Heslop was a Director, President, and Chief Executive Officer of First County Bank in Chardon, Ohio, an institution with total assets exceeding $40 million. First County Bank was an affiliate of FNB Corporation of Hermitage, Pennsylvania. Mr. Heslop earned a B.S. in Business Administration from Wheeling College, an M.B.A. from Tiffin University, and is a graduate of the Graduate School of Banking at the University of Wisconsin-Madison. Mr. Heslop s education, experience in the banking and financial services industry, and significant leadership positions with Middlefield, The Middlefield Banking Company, and EMORECO, Inc. allow him to provide business and leadership expertise to the board.
Eric W. Hummel	71	2011	2017	

Mr. Hummel is President of Hummel Construction, Ravenna, Ohio, a position he has held since 1971. Mr. Hummel attended the Kent State University School of Architecture and the University of Wisconsin College of Engineering. He has been a member of the Portage Foundation Board of Trustees, Kent State University Architecture School Foundation, and Leadership Portage County Board. Mr. Hummel s extensive business management experience allows him to provide business and leadership expertise to the board.

95

Table of Contents

	Age	Director since	Current term expires	Biography
Kenneth E. Jones	68	2008	2017	A self-employed financial consultant and advisor, Mr. Jones earned a B.S. in Nuclear Engineering from the University of Virginia in 1970 and an M.B.A. from the University of Virginia in 1972. He is also licensed in Ohio as a CPA (inactive). Mr. Jones is a former director of Applied Innovation, Inc. of Dublin, Ohio (NASDAQ), and served as Chairman of its Audit Committee. He has served as the elected fiscal officer of Jefferson Township, Franklin County, Ohio since May 2004. Mr. Jones financial and business experience and his service as a director of Middlefield since 2008 allow him to provide business and leadership expertise to the board.
Darryl E. Mast	66	2013	2019	Darryl Mast is part of the Hattie Larlham organization, a non-profit organization dedicated to improving the lives of children and adults with developmental disabilities. Mr. Mast currently serves as Chief Operations Officer for Hattie Larlham Care Group and Hattie Larlham Foundation, with responsibility for IT and phone systems, facilities, vehicle fleet, housing development, as well as the accounting, finance, and human resource departments. Mr. Mast previously was a Senior Vice President at Second National Bank of Warren and an executive officer of its holding company, Second Bancorp Inc., with responsibility for 33 retail banking centers, private banking, consumer lending, call center, web site, and on-line banking. He also served on the Asset/Liability and other committees. While at Second National Bank Mr. Mast also served as President of the Hattie Larlham Foundation and as Treasurer of the Hattie Larlham Care Group. He has served on various Hattie Larlham boards since 1996. Mr. Mast has served as President of the Rotary Club of Warren and has been involved with numerous community-based organizations, including the Advisory Board of Kent State University s Trumbull Campus, the Warren Area Chamber of Commerce Economic Development Foundation, and the Wooster Area Chamber of Commerce. Mr. Mast has attended Miami University in Oxford, Ohio and the Graduate School of Banking at the University of Wisconsin. Mr. Mast s banking experience, his demonstrated leadership ability, and his community involvement add important business and leadership expertise to the board.
James J. McCaskey	53	2004	2017	Mr. McCaskey is the President of McCaskey Landscape & Design, LLC, a design-build landscape development company. Mr. McCaskey is also a past member of the Board of Directors and past President of the Ohio Landscape Association. Previously, he was Vice President of Sales for the Pattie Group,

also a design-build landscape development company, with which he had been employed for seventeen years.
Mr. McCaskey also serves on the Advisory Board of Kent State University (Geauga), was President of the Chardon Rotary for the term July 2014 through June 2015, and beginning January 2, 2014 serves as Munson Township Trustee. Mr. McCaskey earned a Bachelor s

Table of Contents

	Age	Director since	Current term expires	Biography
				Degree in Agricultural Production and a Bachelor s Degree in Biology from Wilmington College in 1985. Mr. McCaskey s extensive business management experience, community involvement, and service as a director of Middlefield since 2004 allow him to provide business and leadership expertise to the board.
Clayton W. Rose III	64	2016	2018	Mr. Rose is an Executive Principal in the Dublin, Ohio office of Rea & Associates Inc. CPA s. He is a licensed CPA. Rea & Associates is a regional public accounting firm with eleven offices in the state of Ohio. Mr. Rose earned a B.S. from The Ohio State University in 1974. He is active in the Dublin community with involvement in Kiwanis, the Dublin Convention and Visitors Bureau, the Dublin Irish Festival, and the Ohio State University Alumni Society. Mr. Rose was a director of Emerald Bank when it merged into The Middlefield Banking Company on January 20, 2014. He became a director of The Middlefield Banking Company shortly after the January 2014 merger. Mr. Rose s business and accounting experience allow him to provide accounting and financial management expertise to the board.
William J. Skidmore	60	2007	2019	Mr. Skidmore is Northeast Ohio Senior District Manager of Waste Management and has held progressively responsible positions with Waste Management and a predecessor company since 1978. He previously served on the Board of Directors of both First County Bank in Chardon, Ohio, and of Metropolitan National Bank in Youngstown, Ohio. He is a member and was the past President of the Chardon Rotary, a former President of the Chardon Chamber of Commerce, a former member of the business advisory committee of Kent State University (Geauga), and a past representative to the board of the National Solid Waste Management Association in Washington, D. C. Mr. Skidmore earned a Bachelor s Degree in Sales and Marketing from Bowling Green State University in 1978. Mr. Skidmore s business management and banking experience in the northeast Ohio market allow him to provide business and leadership expertise to the board.
Robert W. Toth	71	2009	2018	Mr. Toth retired in 2007 as the President of Gold Key Processing, Ltd., headquartered in Middlefield, Ohio. Mr. Toth is a graduate of Ohio University, with a B.B.A. in accounting. Prior to joining Gold Key, he was Vice President Finance and Administration for Burton Rubber Processing, Inc. Having begun his career with Amsted Industries in Chicago, Illinois, Mr. Toth has held progressively responsible positions with

Warner and Swasey Co. and Missouri Portland Cement Co. He has a long record of community service and currently sits on the Board of the Geauga County Library Foundation. Mr. Toth s extensive business management and community service experience allow him to provide business and leadership expertise to the board.

97

Table of Contents

	Age	Director since	Current term expires	Biography
Carolyn J. Turk	60	2004	2019	Ms. Turk is the Controller of Molded Fiber Glass Companies and is a licensed CPA. Located in Ashtabula, Ohio, Molded Fiber Glass Companies is a manufacturer of reinforced fiber glass products, with 14 entities in the U.S. and Mexico. Ms. Turk earned a B.S. in Accountancy from Youngstown State University in 1984. She has a long record of community service and currently sits on the Board of Country Neighbor Program, Inc. and the Ashtabula Foundation. Ms. Turk s business and accounting experience allow her to provide accounting and financial management expertise to the board.

Director Compensation. The following table shows the compensation paid to nonemployee directors for their service in 2015, including their service on our board, on the board of The Middlefield Banking Company, and on board committees of Middlefield and The Middlefield Banking Company. The compensation of Directors Caldwell and Heslop is included in the Summary Compensation Table. Director Rose was not a director in 2015.

	($) Fees Earned or Paid in Cash	($) Stock Awards *	($) Option Awards	($) Non-Equity Incentive Plan Compensation	($) Nonqualified Deferred Compensation Earnings	($) All Other Compensation	($) Total
Eric W. Hummel	40,200	2,048	0	n/a	n/a	0	42,248
Kenneth E. Jones	45,800	2,048	0	n/a	n/a	0	47,848
Darryl E. Mast	43,750	2,048	0	n/a	n/a	0	45,798
James J. McCaskey	39,350	2,048	0	n/a	n/a	0	41,398
William J. Skidmore	47,850	2,048	0	n/a	n/a	0	49,898
Robert W. Toth	43,750	2,048	0	n/a	n/a	0	45,798
Carolyn J. Turk	54,600	2,048	0	n/a	n/a	0	56,648

* Each nonemployee director was awarded 65 fully vested shares on August 10, 2015. The price of our stock on that date was $31.50.

Middlefield directors receive compensation of $750 for each board and committee meeting attended. Middlefield s Chairman of the Board receives additional annual compensation of $4,000. The Middlefield Banking Company directors receive compensation of $1,800 per month less $100 for each meeting not attended in a particular month. The Middlefield Banking Company directors also receive $500 in committee fees for each meeting attended. The 2015 compensation of Director Jones includes $2,700 for his service on our Central Ohio Regional Advisory Board. Directors of EMORECO, Inc. receive no compensation for board service.

At the 2001 annual meeting shareholders approved the form and use of indemnification agreements for directors. The indemnification agreements allow directors to select the most favorable indemnification rights provided under (1) Middlefield s Second Amended and Restated Articles of Incorporation or Regulations in effect on the date of the indemnification agreement or on the date expenses are incurred, (2) state law in effect on the date of the indemnification agreement or on the date expenses are incurred, (3) any liability insurance policy in effect when a claim is made against the director or on the date expenses are incurred, and (4) any other indemnification arrangement otherwise available. The agreements cover all fees, expenses, judgments, fines, penalties, and settlement amounts paid in any matter relating to the director s role as a Middlefield director, officer, employee, agent, or when serving as Middlefield s representative with respect to another entity. Each indemnification agreement provides for the prompt advancement of all expenses incurred in connection with any proceeding subject to the director s obligation to repay those advances if it is determined later that the director is not entitled to indemnification.

Table of Contents

Executive Officers Who Do Not Also Serve as Directors. There are no family relationships among any of Middlefield s directors or executive officers. Executive officers who do not also serve as directors are

	Age	Principal Occupation in the Last 5 Years
David G. Dalessandro	60	Mr. Dalessandro is Senior Vice President/Chief Credit Officer for The Middlefield Banking Company. Prior to joining the bank in July 2014, he was Senior Vice President and Director of Credit Audit with PNC Financial Services group. Mr. Dalessandro has also served as an Examiner with the Federal Reserve Bank of Cleveland. He is a graduate of Pennsylvania State University with a B.S. degree in Accounting and Youngstown State University with an Executive M.B.A. Mr. Dalessandro is also a Certified Public Accountant (inactive).
Courtney M. Erminio	34	Serving as Vice President Risk Officer, Ms. Erminio joined The Middlefield Banking Company in June 2010. Prior thereto, she was on the internal audit staff of Crowe Horwath LLP. Ms. Erminio is a graduate of the University of Akron, holding a B.S. degree in Business Administration/Finance.
Teresa M. Hetrick	53	Ms. Hetrick is Senior Vice President Operations/Administration. Ms. Hetrick served as Vice President and Secretary of First County Bank in Chardon, Ohio before joining The Middlefield Banking Company in December 1996.
Eric P. Hollinger	55	Mr. Hollinger is the Senior Vice President/Senior Lender for The Middlefield Banking Company. Prior to joining the bank in 2013, he was a Senior Vice President/Commercial Lender for FirstMerit Bank. Mr. Hollinger holds a B.S. degree in Business Administration/Marketing from Bowling Green State University and an M.B.A. from Case Western Reserve University.
Charles O. Moore	54	Mr. Moore joined The Middlefield Banking Company in January 2016 as President Central Ohio Region. With over 25 years of banking experience, most recently Mr. Moore served as Executive Vice President, Chief Risk and Consumer Lending Officer, of Delaware County Bank in Delaware, Ohio. He has also served as President of Regency Finance Company, a subsidiary of F.N.B. Corporation, and as an executive with U.S. Bank and Banc One. He is a veteran of the U.S. Marine Corps and the U.S. Army National Guard. He is a graduate of Ohio Dominican College and the University of the State of New York. Mr. Moore was formerly the Deputy Superintendent of Consumer Finance and Consumer Affairs for the State of Ohio Division of Financial Institutions. He is currently on the boards of the Ohio Mortgage Bankers Association, the Ohio Dominican College Patriots and Finance curriculum, the Central Ohio Symphony Orchestra, and the Delaware County United Way.
Donald L. Stacy	63	Mr. Stacy joined The Middlefield Banking Company in August 1999 and serves as its Senior Vice President and Chief Financial Officer. Mr. Stacy also is a director, Vice President, and Treasurer of EMORECO, Inc. On October 30, 2000, he was appointed as the Treasurer and Chief Financial Officer of Middlefield. He previously served for 20 years with Security Dollar Bank and Security Financial Corp. in Niles, Ohio, where he was Senior Vice President and Treasurer.
Alfred F. Thompson, Jr.	57	

Mr. Thompson is The Middlefield Banking Company s Vice President/Loan Administration and a director and Vice President of EMORECO, Inc.
Mr. Thompson has been with The Middlefield Banking Company since March 1996. He was promoted from loan officer to Assistant Vice President in 1997, and promoted again to his current position in 1998. Before joining The Middlefield Banking Company, Mr. Thompson served as Loan Officer in the Small Business Group of National City Bank, Northeast.

99

Table of Contents

Executive Compensation. The majority of the compensation of executive officers is paid by The Middlefield Banking Company, but compensation shown in the table is aggregate compensation paid by Middlefield, The Middlefield Banking Company, and Emerald Bank. No compensation is paid by EMORECO, Inc. Emerald Bank merged into The Middlefield Banking Company on January 20, 2014.

SUMMARY COMPENSATION TABLE

Name and Principal Position	Year	Salary ($) (1)	Bonus ($) (2)	Stock Awards ($)	Option Awards ($)	Non-Equity Incentive Plan Compensation ($) (3)	Nonqualified Deferred Compensation Earnings ($)	All Other Compensation ($) (4)	Total ($)
Thomas G. Caldwell	2015	303,196	0	0(5)	0	81,837	0	42,810	427,843
President and Chief Executive Officer	2014	292,081	0	0	0	63,120	0	45,465	400,666
James R. Heslop, II	2015	240,161	0	0(5)	0	42,142	0	33,125	315,427
Executive Vice President and Chief Operating Officer	2014	230,977	0	0	0	32,498	0	35,167	298,641
Donald L. Stacy	2015	166,378	0	0(5)	0	33,197	0	25,926	225,501
Chief Financial Officer and Treasurer	2014	159,910	0	0	0	25,600	0	27,548	213,057

(1) Includes salary deferred at the election of the executive under The Middlefield Banking Company s 401(k) retirement plan. Also includes fees for service as a director. Mr. Caldwell s director fees were $29,750 in 2015 and $28,350 in 2014. Mr. Heslop s director fees were $29,000 in 2015 and $28,350 in 2014.

(2) Bonus amounts are attributable to performance in the year shown but are paid in the first quarter of the following year.

(3) The 2015 cash incentive payments under The Middlefield Banking Company s Annual Incentive Plan were made on March 4, 2016, based on financial performance and the executives performance in 2015, and the 2014 cash incentive payments were made in February of 2015, based on financial performance and the executives performance in 2014.

(4) The figures in the All Other Compensation column are the sum of matching contributions under The Middlefield Banking Company s 401(k) plan and contributions and interest earnings credited by The Middlefield Banking Company for each executive under the executive deferred compensation agreements. The bank made contributions of $8,196 to the 401(k) plan account of Mr. Caldwell in 2015, $6,329 to the account of Mr. Heslop, and $4,986 to the account of Mr. Stacy. The 2015 contributions and interest earnings for the executive deferred compensation agreements were contributions of $27,352 and interest earnings of $7,262 for Mr. Caldwell, contributions of $21,124 and interest earnings of $5,672 for Mr. Heslop, and contributions of $16,640 and interest earnings of

$4,300 for Mr. Stacy.

(5) Messrs. Caldwell, Heslop, and Stacy received conditional stock awards on June 22, 2015. The number of shares awarded was 814 shares to Mr. Caldwell, 628 shares to Mr. Heslop, and 495 shares to Mr. Stacy. To become vested in and entitled to that number of shares, two conditions must be satisfied. The first condition is the executive must maintain continuous service with Middlefield for three years, although this condition will be waived in the case of death or disability or a change in control occurring in the three-year period. The second condition is the average annual return of Middlefield stock for the years 2015, 2016, and 2017 must be at least 8.00%. For this purpose annual return is the sum of annual dividends and the excess of the closing stock price on the final trading day of the year over the closing price on the final trading day of the preceding year, divided by the closing stock price on the final trading day of the preceding year. The three-year average of the annual returns for 2015, 2016, and 2017 will determine whether the 8.00% goal is satisfied. If the 8.00% goal is not satisfied but the average annual return is positive, the recipient will become the owner of and entitled to a portion of the conditional stock award, forfeiting the remainder. The portion that will be issued to the recipient is the percentage of the total award equal to the percentage achievement of the 8.00% goal. If the average annual return is negative, the entire award is forfeited, unless the Compensation Committee waives the performance condition. If average annual return exceeds 8.00%, the nominal amount of the conditional stock award will increase, up to a maximum of 125% of the nominal award, increasing based on the percentage excess of actual average return over the 8.00% goal. Accordingly, the maximum potential conditional stock award total for Mr. Caldwell is 1,018 shares, for Mr. Heslop 785 shares, and for Mr. Stacy 619 shares. The terms of the award and a copy of the form of conditional award agreement are included in the Form 8-K Current Report filed by Middlefield with the SEC on June 24, 2015. The closing stock price on December 31, 2014 was $33.61. The closing stock price on December 31, 2015 was $32.40, and dividends per share for 2015 were $1.07. Based on this, the return for 2015 was negative, or (0.42)%, but the award nevertheless be earned in full if the average annual return at the end of 2017 is at least 8.00%. Middlefield determined that the stock awards had no fair value on the award date for accounting purposes, and as a result no compensation expense was recognized for the awards in 2015.

Perquisites and other personal benefits provided to each of the named executive officers in 2015 and 2014 had a value of less than $10,000. The value of insurance on the lives of the named executive officers is not

Table of Contents

included in the Summary Compensation Table because the executives have no interest in the policies. However, the executives are entitled to designate the beneficiary of death benefits payable by The Middlefield Banking Company under executive survivor income agreements. See the *Executive Survivor Income Agreements* discussion below.

Annual Incentive Plan. In 2003 The Middlefield Banking Company established the Annual Incentive Plan, a short-term cash incentive plan that rewards employees with additional cash compensation if specific objectives are achieved. An employee s potential cash incentive payment under the Annual Incentive Plan depends upon two factors: (*x*) the employee s position, which establishes a maximum cash incentive award as a percent of base salary, and (*y*) the degree to which the performance targets, such as targeted net income, and individual performance targets, are achieved. Annual incentive payments under the plan for a particular year generally are based on objective financial performance criteria established by the board, with the Compensation Committee s recommendation. A copy of the plan is included as exhibit 10.22 to the Form 8-K Current Report that we filed with the SEC on June 12, 2012, which is available for viewing or download at www.sec.gov. All employees are eligible for awards under the Annual Incentive Plan. The plan is terminable by the board at any time.

The bank-wide performance objectives that had to be achieved in 2015 in order for Messrs. Caldwell, Heslop, and Stacy to receive a cash incentive payment under the plan included a net income goal, a goal for reduction of adversely classified loans as a percent of the sum of tier 1 capital and the allowance for loan and lease losses, a goal for loan growth, and a goal having to do with the regulatory and supervisory status of Middlefield and The Middlefield Banking Company. Please see the Form 8-K Current Report filed by Middlefield with the SEC on June 18, 2015 for additional information. In future years other financial performance measures could be taken into account, such as return on average equity (ROAE), return on average assets (ROAA), deposit growth, and net interest margin. The Compensation Committee also considers individual performance goals.

2007 Omnibus Equity Plan. The 2007 Omnibus Equity Plan authorizes the issuance of 160,000 shares of Middlefield common stock. Middlefield s Compensation Committee administers the Omnibus Equity Plan. Shares of common stock issued under the Omnibus Equity Plan may be treasury shares, authorized and unissued shares not reserved for any other purpose, or a combination of treasury shares and authorized but unissued shares. Awards to employees may take the form of incentive stock options, or *ISO*s, that qualify for favored tax treatment under Internal Revenue Code section 422, stock options that do not qualify under section 422, referred to as *NQSO*s, stock appreciation rights, or *SAR*s, restricted stock, and performance shares. In contrast to the kinds of awards that may be made to employees, non-employee directors are eligible for awards of NQSOs and restricted stock only. The terms of each award are stated in award agreements. Of the shares authorized for issuance under the Omnibus Equity Plan, up to one half may be reserved for issuance under incentive stock options. The aggregate number of shares underlying awards granted to an individual participant in a single year may not exceed 16,000.

Unless the participant s award agreement provides otherwise, when a participant employee s service terminates or when a non-employee director participant s service terminates the portion of any award held by the participant that is not exercisable is forfeited. All NQSOs, SARs, and ISOs held by the participant that are exercisable are forfeited if not exercised before the earlier of the expiration date specified in the award agreement or 90 days after termination occurs. However, all of a participant s outstanding awards are forfeited if the participant s employment or director service terminates for cause or if in Middlefield s judgment a basis for termination for cause exists, regardless of whether the awards are exercisable and regardless of whether the participant s employment or director service actually terminates. However, shares of restricted stock or performance shares that have been released from escrow and distributed to the participant are not affected by a termination for cause.

101

Table of Contents

If a change in control of Middlefield occurs, the Compensation Committee has broad authority and sole discretion to take actions it deems appropriate to preserve the value of participants awards. In general, a change in control means one or more of the following events occur

- a change in the composition of Middlefield s board of directors, after which the incumbent members of the board on the effective date of the Plan including their successors whose election or nomination was approved by those incumbent directors and their successors no longer represent a majority of the board,
- a person (other than persons such as subsidiaries or benefit plans) becomes a beneficial owner of Middlefield securities representing 25% or more of the combined voting power of all securities eligible to vote for the election of directors, excepting business combinations after which Middlefield s shareholders own more than 50% of the resulting company and except for stock issuances approved by incumbent directors and their successors;
- a merger, consolidation, share exchange, or similar form of business combination transaction requiring approval of Middlefield s shareholders, excepting business combinations after which Middlefield s shareholders own more than 50% of the resulting company; or
- Middlefield s shareholders approve a plan of complete liquidation or dissolution or sale of all or substantially all of Middlefield s assets.

Executive Deferred Compensation Agreements. The Middlefield Banking Company entered into executive deferred compensation agreements with Messrs. Caldwell, Heslop, and Stacy on December 28, 2006. Amended on May 9, 2008 for compliance with Internal Revenue Code section 409A, the executive deferred compensation agreements provide supplemental retirement income benefits. The arrangement is noncontributory, meaning contributions can be made solely by The Middlefield Banking Company. For each year the executive remains employed with The Middlefield Banking Company, until attaining age 65, The Middlefield Banking Company may credit each executive with a contribution equal to 5% of the executive s base annual salary. Contributions exceeding 5% of salary are conditional on achievement of performance goals: (*x*) The Middlefield Banking Company s net income for the plan year and (*y*) The Middlefield Banking Company s peer ranking for the plan year, based on the Uniform Bank Performance Report available on the Federal Financial Institutions Examination Council s website at www.ffiec.gov/UBPR.htm. The UBPR is an analytical tool created for bank supervisory, examination, and management purposes. In a concise format, the UPBR shows the impact of management decisions and economic conditions on a bank s performance and balance-sheet composition.

Each of the two performance goals can account for a contribution of up to 7.5% of the executive s base annual salary. The net income goal for each year is established by the Compensation Committee by March 31 of that year. The Compensation Committee s decisions are not final unless approved by a majority of Middlefield s independent directors.

Executive Survivor Income Agreements. The Middlefield Banking Company entered into executive survivor income agreements with executives in June 2003, including Messrs. Caldwell, Heslop, and Stacy. The agreements promise a specific cash benefit payable by The Middlefield Banking Company to an executive s designated beneficiary at the executive s death, provided the executive dies before attaining age 85. The benefit would be paid to the executive s beneficiary if the executive dies in active service to The Middlefield Banking Company, but it also would be payable for death occurring after the executive s termination of service if the executive terminated (*x*) because of disability, or (*y*) within 12 months after a change in control of Middlefield, or (*z*) after having attained age 55 with at least ten years of service to The Middlefield Banking Company or after having attained age 65.

The total death benefit payable to Mr. Caldwell s beneficiaries if he dies in active service to The Middlefield Banking Company is $471,741, the benefit payable to Mr. Heslop s beneficiaries is $368,970, and the benefit payable to Mr. Stacy s beneficiaries is $222,619. For death after terminating active service with The Middlefield Banking Company, the death benefit for Mr. Caldwell s beneficiaries is $471,741, $368,970 for Mr. Heslop s beneficiaries, and $111,309 for Mr. Stacy s beneficiaries. To assure itself of funds sufficient to pay the promised death benefits, The Middlefield Banking Company purchased insurance on the executives lives with a single premium payment. The Middlefield Banking Company owns the policies and is the sole beneficiary. Of the total premium paid for the insurance on the various executives lives, $495,873 is attributable to insurance purchased on the life of Mr. Caldwell, $447,351 is attributable to insurance on the life of Mr. Heslop, and $333,890 is attributable to insurance purchased on the life of Mr. Stacy. The premium amounts are not included in the Summary Compensation Table. The Middlefield Banking Company expects the policies death benefits to be sufficient to pay all benefits promised under the executive survivor income agreements.

Severance Agreements. Middlefield and its subsidiaries do not have written employment agreements with officers, although Middlefield entered into severance agreements with executives, including Messrs. Caldwell, Heslop, and Stacy. The severance agreements provide that the executive is entitled to severance compensation if a change in control occurs during the term of the agreement. The severance compensation is payable in a single lump sum. For purposes of the severance agreements, the term change in control is defined as it is defined in Internal Revenue Code section 409A and implementing rules. In the case of executives other than Messrs. Caldwell, Heslop, and Stacy, the lump-sum severance benefit is payable immediately after involuntary termination without cause or voluntary termination with good reason occurring within 24 months after a change in control. Rather than being contingent on a separation from service after a change in control, the lump-sum benefit of Messrs. Caldwell, Heslop, and Stacy is payable immediately after a change in control occurs.

The agreements promise to each executive a lump-sum payment calculated as a multiple of the executive s salary and the executive s cash bonus and cash incentive compensation. The multiple of compensation payable under the severance agreements is 2.5 times in the case of Mr. Caldwell and Mr. Heslop and two times compensation for other executives. The agreements also promise continued life, health, and disability insurance coverage for 24 months after employment termination and legal fee reimbursement if the severance agreements are challenged after a change in control.

Retirement Plan. Middlefield does not maintain a defined benefit or actuarial plan providing retirement benefits for officers or employees based on actual or average final compensation. But The Middlefield Banking Company maintains a section 401(k) employee savings and investment plan for substantially all employees and officers who have more than one year of service. The bank s contribution to the plan is based on 50% matching of voluntary contributions, up to 6% of compensation. An eligible employee may contribute up to 15% of his or her salary. Employee contributions are vested at all times. Bank contributions are fully vested after six years, vesting in 20% annual increments beginning with the second year. Employees also have life insurance benefits under a group term life insurance program, paying benefits to an employee s beneficiary if the employee dies while employed by The Middlefield Banking Company, up to the lesser of (*x*) twice the employee s annual salary at the time of death or (*y*) $200,000.

Internal Revenue Code Limits. The qualifying compensation regulations issued by the Internal Revenue Service under Internal Revenue Code section 162(m) state that no deduction is allowed for applicable employee remuneration paid by a publicly held corporation to a covered employee to the extent that the remuneration exceeds $1 million for the applicable taxable year, unless specified conditions are satisfied. Salary and bonus amounts deferred by executives are not subject to section 162(m). Currently, Middlefield s remuneration is not expected to exceed $1 million for any employee. Therefore, Middlefield does not expect that compensation will be affected by the qualifying compensation regulations. The Compensation Committee and Middlefield s board intend to maintain executive compensation within the section 162(m) deductibility limits, but could permit compensation exceeding the section 162(m) limits in the future.

Transactions with Related Parties. Middlefield directors and executive officers and their associates are customers of and enter into banking transactions with The Middlefield Banking Company in the ordinary course

Table of Contents

of business. Middlefield expects that these relationships and transactions will continue. The transactions with directors, executive officers, and their associates have not involved more than the normal risk of collectability and have not presented other unfavorable features. Loans and commitments to lend included in these transactions were made and will be made on substantially the same terms including interest rates and collateral as those prevailing at the time for comparable transactions with persons not affiliated with Middlefield.

The following table shows as of December 31, 2015 unvested and unearned stock awards and the number of shares acquirable, exercise prices, and expiration dates of all unexercised stock options held by the executives identified in the Summary Compensation Table.

OUTSTANDING EQUITY AWARDS

	Option Awards (1)					Stock Awards (1)			
	Number of Securities Underlying Unexercised Options (#)								
Name	**Exercisable**	**Unexercisable**	**Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)**	**Option Exercise Price ($)**	**Option Expiration Date**	**Number of Shares or Units of Stock That Have Not Vested (#)**	**Market Value of Shares or Units of Stock That Have Not Vested ($)**	**Equity Incentive Plan Awards: Number of Unearned Shares, Units, or Other Rights That Have Not Vested (#) (2)**	**Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units, or Other Rights That Have Not Vested ($) (2)**
Thomas G. Caldwell	525			40.24	12/11/2016			814	26,374
	1,000			23.00	11/10/2018				
	1,500			23.00	11/10/2018				
	2,500			17.55	05/09/2021				
James R. Heslop, II	525			40.24	12/11/2016			628	20,347
	1,000			23.00	11/10/2018				
	1,950			17.55	05/09/2021				
Donald L. Stacy	525			40.24	12/11/2016			495	16,038

750	37.00	12/10/2017
2,500	17.55	05/09/2021

(1) adjusted for stock dividends

(2) Messrs. Caldwell, Heslop, and Stacy received conditional stock awards on June 22, 2015. To become vested in and entitled to the shares, two conditions must be satisfied. The first condition is the executive must maintain continuous service with Middlefield for three years, although this condition will be waived in the case of death or disability or a change in control occurring in the three-year period. The second condition is the average annual return of Middlefield stock for the years 2015, 2016, and 2017 must be at least 8.00%. For this purpose annual return is the sum of annual dividends and the excess of the closing stock price on the final trading day of the year over the closing price on the final trading day of the preceding year, divided by the closing stock price on the final trading day of the preceding year. If the 8.00% goal is not satisfied but the average annual return is positive, the recipient will become the owner of and entitled to a portion of the conditional stock award, forfeiting the remainder. The portion that will be issued to the recipient is the percentage of the total award equal to the percentage achievement of the 8.00% goal. If the average annual return is negative, the entire award is forfeited, unless the Compensation Committee waives the performance condition. If average annual return exceeds 8.00%, the nominal amount of the conditional stock award will increase, up to a maximum of 125% of the nominal award, increasing based on the percentage excess of actual average return over the 8.00% goal. Accordingly, the maximum potential conditional stock award total for Mr. Caldwell is 1,018 shares, for Mr. Heslop 785 shares, and for Mr. Stacy 619 shares. The terms of the award and a copy of the form of conditional award agreement are included in the Form 8-K Current Report filed by Middlefield with the SEC on June 24, 2015. The market value in the table is the number of shares multiplied by the $32.40 closing stock price on December 31, 2015. The conditional stock awards do not confer any shareholder rights until the conditions are satisfied (or waived), such as voting rights, the right to dividends, or the right to transfer shares. Award recipients are not credited for dividends paid by Middlefield on common stock. The conditional stock award agreements include a prohibition against competing with Middlefield for one year after employment termination.

Table of Contents

Business of Middlefield

Middlefield is a one-bank holding company. Middlefield s principal subsidiary is The Middlefield Banking Company, an Ohio-chartered, nonmember commercial bank. Middlefield s other subsidiary, EMORECO Inc., is an asset resolution corporation dedicated to the resolution and disposition of troubled assets of a central-Ohio bank that Middlefield acquired in 2007, specifically nonperforming loans and other real estate owned (OREO) held by the acquired bank as the result of borrower defaults on real estate-secured loans. That bank, Emerald Bank, operated as a separate subsidiary of Middlefield from 2007 through 2013, merging into The Middlefield Banking Company on January 20, 2014. At the end of September 2016 The Middlefield Banking Company had total assets of $760.6 million and more than 140 employees.

The Middlefield Banking Company offers a broad range of banking services, including online banking and bill payment services for individuals and online cash management services for business customers at www.middlefieldbank.com. The Middlefield Banking Company s customers are small and medium-sized businesses, professionals, small business owners, and retail customers. Loan products include operational and working capital loans, loans to finance capital purchases, term business loans, residential construction loans, selected guaranteed or subsidized loan programs for small businesses, professional loans, residential and mortgage loans, and consumer installment loans to purchase automobiles, boats, make home improvements, and for other personal expenditures. The Middlefield Banking Company makes available customary deposit-related products and services, such as checking, savings, negotiable order of withdrawal accounts, money market accounts, time certificates of deposit, safe deposit facilities, and travelers checks.

The Middlefield Banking Company operates in two distinct and very competitive markets, one in the northeastern Ohio counties of Geauga, Portage, Trumbull, Ashtabula, and Lake. The other market is central Ohio, specifically the Columbus area and Franklin County, the result of the 2007 acquisition of Emerald Bank. Ohio has a high concentration of financial service firms, many of which are significantly larger institutions with greater financial resources. Savings banks, savings and loan associations, commercial banks, mortgage banking companies, credit unions, insurance companies and other financial service companies compete to make loans. Savings and loan associations, savings banks, commercial banks, and credit unions compete for deposits, but non-depository entities such as mutual funds, securities and brokerage firms, and insurance companies also compete for depositors funds.

The Middlefield Banking Company s operations have historically been concentrated in the area east of Liberty s market, in largely rural areas with a large Amish population. The Middlefield Banking Company s business originated in this market and was not an outgrowth of the nearby Cleveland-area or Akron-area markets. This includes Geauga County, where The Middlefield Banking Company s business began in 1901 and where four of its ten offices are located, and northern Portage County, where two offices are located, with a seventh office in Cortland in Trumbull County, an office in Orwell in southern Ashtabula County, and two offices in central Ohio, in Franklin County. The Middlefield Banking Company s eleventh banking office opened in October 2016 in Sunbury, also in central Ohio, in Delaware County. It also has a loan production office in Mentor, in Lake County. The Middlefield Banking Company s northeast Ohio market adjoins the market of Liberty, which is to the immediate west.

Lending *Loan Portfolio Composition and Activity*. The Middlefield Banking Company makes residential and commercial mortgage, home equity, secured and unsecured consumer installment, commercial and industrial, and real estate construction loans for owner-occupied and rental properties. The Credit Policy aspires to a loan composition mix consisting of approximately 40% to 50% consumer purpose transactions including residential real estate loans, home equity loans and other consumer loans. The Policy is also designed to provide for 35% to 40% of total loans as business purpose commercial loans and business and consumer credit card accounts of up to 5% of total loans.

Although Ohio law imposes no material restrictions on the types of loans The Middlefield Banking Company may make, real estate-based lending has historically been the primary focus. For prudential reasons,

Table of Contents

we avoid lending on the security of real estate located outside our market area. Ohio law does restrict the amount of loans an Ohio-chartered bank may make, generally limiting credit to any single borrower to less than 15% of capital. An additional margin of 10% of capital is allowed for loans fully secured by readily marketable collateral. This 15% legal lending limit has not been a material restriction on lending. We can accommodate loan volumes exceeding the legal lending limit by selling loan participations to other banks. As of September 30, 2016, The Middlefield Banking Company s 15%-of-capital limit on loans to a single borrower was approximately $11.2 million.

The Middlefield Banking Company offers specialized loans for business and commercial customers, including equipment and inventory financing, real estate construction loans and Small Business Administration loans for qualified businesses. A substantial portion of The Middlefield Banking Company s commercial loans are designated as real estate loans for regulatory reporting purposes because they are secured by mortgages on real property. Loans of that type may be made for purposes of financing commercial activities, such as accounts receivable, equipment purchases and leasing, but they are secured by real estate to provide The Middlefield Banking Company with an extra measure of security. Although these loans might be secured in whole or in part by real estate, they are treated in the discussions to follow as commercial and industrial loans. The Middlefield Banking Company s consumer installment loans include secured and unsecured loans to individual borrowers for a variety of purposes, including personal, home improvements, revolving credit lines, autos, boats, and recreational vehicles.

The following table shows on a consolidated basis the composition of the loan portfolio in dollar amounts and in percentages along with a reconciliation to loans receivable, net.

	At September 30		**Loan Portfolio Composition At December 31,**							
	2016		**2015**		**2014**		**2013**		**2012**	
(Dollars in thousands)	**Amount**	**Percent**	**Amount**	**Percent**	**Amount**	**Percent**	**Amount**	**Percent**	**Amount**	**Percent**
Type of loan:										
Commercial and industrial	$ 59,376	10.13%	$ 42,536	7.97%	$ 34,928	7.42%	$ 54,498	12.51%	$ 62,188	15.23
Real estate construction	17,633	3.01	22,137	4.15	30,296	6.44	25,601	5.88	22,522	5.51
Mortgage:			0	0.00						
Residential	258,952	44.16	232,478	43.56	210,096	44.65	210,310	48.27	203,872	49.92
Commercial	245,636	41.89	231,701	43.41	190,685	40.52	141,171	32.40	115,734	28.34
Consumer installment	4,732	0.81	4,858	0.91	4,579	0.97	4,145	0.94	4,117	1.00
Total loans	586,329	100.00%	533,710	100.00%	470,584	100.00%	435,725	100.00%	408,433	100.00
Less:										
Allowance for loan and lease losses	6,334		6,385		6,846		7,046		7,779	
Net loans	$ 579,995		$ 527,325		$ 463,738		$ 428,679		$ 400,654	

The following table presents consolidated maturity information for the loan portfolio. The table does not include prepayments or scheduled principal repayments. All loans are shown as maturing based on contractual maturities.

	Loan Portfolio Maturity at September 30, 2016					
	Commercial and	Real Estate	Mortgage		Consumer	
(Dollars in thousands)	**Industrial**	**Construction**	**Residential**	**Commercial**	**Installment**	**Total**
Amount due:						
In one year or less	$ 15,190	$ 2,295	$ 3,058	$ 5,172	$ 360	$ 26,075
After one year through five years	23,936	1,690	13,477	23,950	4,057	67,110
After five years	20,250	13,648	242,417	216,514	315	493,144
Total amount due	$ 59,376	$ 17,633	$ 258,952	$ 245,636	$ 4,732	$ 586,329

Table of Contents

Loans due on demand and overdrafts are included in the amount due in one year or less. The Middlefield Banking Company has no loans without a stated schedule of repayment or a stated maturity.

The following table shows on a consolidated basis the dollar amount of all loans due after September 30, 2016 that have pre-determined interest rates and the dollar amount of all loans due after September 30, 2016 that have floating or adjustable rates.

(Dollars in thousands)	Fixed Rate	Adjustable Rate	Total
Commercial and industrial	$ 38,169	$ 21,207	$ 59,376
Real estate construction	1,481	16,152	17,633
Mortgage:			
Residential	14,253	244,699	258,952
Commercial	52,151	193,485	245,636
Consumer installment	3,752	980	4,732
	$ 109,806	$ 476,523	$ 586,329

Residential Mortgage Loans A significant portion of The Middlefield Banking Company s lending consists of origination of conventional loans secured by 1-4 family real estate. Residential mortgage loans approximated $232.5 million or 43.6% of The Middlefield Banking Company s total loan portfolio at December 31, 2015, and $259.0 million or 44.2% at September 30, 2016.

The Middlefield Banking Company makes loans of up to 80% of the value of the real estate and improvements securing a loan (LTV ratio) on 1-4 family real estate. The Middlefield Banking Company generally does not lend in excess of the lower of 80% of the appraised value or sales price of the property. The Middlefield Banking Company offers residential real estate loans with terms of up to 30 years.

Approximately 94.9% of the portfolio of conventional mortgage loans secured by 1-4 family real estate at December 31, 2015 is adjustable rate, and 94.5% at September 30, 2016. Generally, The Middlefield Banking Company originates fixed-rate, single-family mortgage loans in conformity with Freddie Mac guidelines, so as to permit their being sold to Freddie Mac. These loans are sold with servicing rights retained, and are sold in furtherance of The Middlefield Banking Company s goal of better matching the maturities and interest rate sensitivity of its assets and liabilities. The Middlefield Banking Company generally retains responsibility for collecting and remitting loan payments, inspecting the properties, making certain insurance and tax payments on behalf of borrowers and otherwise servicing the loans it sells and receives a fee for performing these services. Sales of loans also provide funds for additional lending and other purposes.

The Middlefield Banking Company s home equity Credit Policy generally allows for a loan of up to 85% of a property s appraised value, less the principal balance of the outstanding first mortgage loan. The Middlefield Banking Company s home equity loans generally have terms of 20 years.

At December 31, 2015, residential mortgage loans of approximately $4.1 million were over 90 days delinquent or nonaccruing on that date, representing 1.8% of the residential mortgage loan portfolio. At December 31, 2014, residential mortgage loans of approximately $5.3 million were over 90 days delinquent or nonaccruing on that date, representing 2.3% of the residential mortgage loan portfolio. At September 30, 2016, residential mortgage loans of approximately $3.8 million were over 90 days delinquent or nonaccruing on that date, representing 1.5% of the residential mortgage loan portfolio.

Table of Contents

Commercial and Industrial Loans and Commercial Real Estate Loans. The Middlefield Banking Company s commercial loan services include:

- accounts receivable, inventory and working capital loans
- short-term notes
- renewable operating lines of credit
- selected guaranteed or subsidized loan programs for small businesses
- loans to finance capital equipment
- loans to professionals
- term business loans
- commercial real estate loans

Commercial real estate loans include commercial properties occupied by the proprietor of the business conducted on the premises, and income-producing or farm properties. Although The Middlefield Banking Company makes agricultural loans, it currently does not have a significant amount of agricultural loans. The primary risks of commercial real estate loans are loss of income of the owner or occupier of the property and the inability of the market to sustain rent levels. Although commercial and commercial real estate loans generally bear more risk than single-family residential mortgage loans, they tend to be higher yielding, have shorter terms and provide for interest-rate adjustments. Accordingly, commercial and commercial real estate loans enhance a lender s interest rate risk management and, in management s opinion, promote more rapid asset and income growth than a loan portfolio composed strictly of residential real estate mortgage loans.

Although a risk of nonpayment exists for all loans, certain specific risks are associated with various kinds of loans. One of the primary risks associated with commercial loans is the possibility that the commercial borrower will not generate income sufficient to repay the loan. The Middlefield Banking Company s Credit Policy provides that commercial loan applications must be supported by documentation indicating cash flow sufficient for the borrower to service the proposed loan. Financial statements or tax returns for at least three years must be submitted, and annual reviews are required for business purpose relationships of $1,000,000 or more. Ongoing financial information is generally required for any commercial credit where the exposure is $250,000 or more.

The fair value of collateral for collateralized commercial loans must exceed The Middlefield Banking Company s exposure. For this purpose fair value is determined by independent appraisal or by the loan officer s estimate employing guidelines established by the Credit Policy. Loans not secured by real estate generally have terms of five years or fewer, unless guaranteed by the U.S. Small Business Administration or other governmental agency, and term loans secured by collateral having a useful life exceeding five years may have longer terms. The Middlefield Banking Company s Credit Policy allows for terms of up to 15 years for loans secured by commercial real estate, and one year for business lines of credit. The maximum LTV ratio for commercial real estate loans is 80% of the appraised value or cost, whichever is less.

Real estate is commonly a material component of collateral for The Middlefield Banking Company s loans, including commercial loans. Although the expected source of repayment is generally the operations of the borrower s business or personal income, real estate collateral provides an additional measure of security. Risks associated with loans secured by real estate include fluctuating land values, changing local economic conditions, changes in tax policies, and a concentration of loans within a limited geographic area.

At December 31, 2015 commercial and commercial real estate loans totaled $274.2 million, or 51.4% of The Middlefield Banking Company s total loan portfolio. At December 31, 2015, commercial and commercial real estate loans of approximately $3.3 million were over 90 days delinquent or nonaccruing on that date, and represented 1.2% of the commercial and commercial real estate loan portfolios. At December 31, 2014, commercial and commercial real estate loans totaled $225.6 million, or 47.9% of The Middlefield Banking Company s total loan portfolio. At December 31, 2014, commercial and commercial real estate loans of approximately $1.4 million were over 90 days delinquent or nonaccruing on that date, and represented 0.6% of the commercial and commercial real estate loan portfolios. At September 30, 2016, commercial and commercial real estate loans totaled $305.0 million, or 52.0% of The Middlefield Banking Company s total loan portfolio. At September 30, 2016, commercial and commercial real estate loans of approximately $2.7 million were over 90 days delinquent or nonaccruing on that date, and represented 0.9% of the commercial and commercial real estate loan portfolios.

Table of Contents

Real Estate Construction. The Middlefield Banking Company originates several different types of loans that it categorizes as construction loans, including:

- residential construction loans to borrowers who will occupy the premises upon completion of construction,
- residential construction loans to builders,
- commercial construction loans, and
- real estate acquisition and development loans.

Because of the complex nature of construction lending, these loans are generally recognized as having a higher degree of risk than other forms of real estate lending. The Middlefield Banking Company s fixed-rate and adjustable-rate construction loans do not provide for the same interest rate terms on the construction loan and on the permanent mortgage loan that follows completion of the construction phase of the loan. It is the norm for The Middlefield Banking Company to make residential construction loans without an existing written commitment for permanent financing. The Middlefield Banking Company s Credit Policy provides that The Middlefield Banking Company may make construction loans with terms of up to one year, with a maximum LTV ratio for residential construction of 80%. The Middlefield Banking Company also offers residential construction-to-permanent loans that have a twelve-month construction period followed by 30 years of permanent financing.

At December 31, 2015, real estate construction loans totaled $22.1 million, or 4.1% of The Middlefield Banking Company s total loan portfolio. Real estate construction loans of approximately $0.1 million were over 90 days delinquent or nonaccruing on that date, representing 0.6% of the real estate construction loan portfolio. At December 31, 2014, real estate construction loans totaled $30.3 million, or 6.4% of The Middlefield Banking Company s total loan portfolio. Real estate construction loans of approximately $0.6 million were over 90 days delinquent or nonaccruing on that date, representing 1.9% of the real estate construction loan portfolio. At September 30, 2016, real estate construction loans totaled $17.6 million, or 3.0% of The Middlefield Banking Company s total loan portfolio. Real estate construction loans of approximately $17,000 were over 90 days delinquent or nonaccruing on that date, representing .01% of the real estate construction loan portfolio.

Consumer Installment Loans The Middlefield Banking Company s consumer installment loans include secured and unsecured loans to individual borrowers for a variety of purposes, including personal, home improvement, revolving credit lines, autos, boats, and recreational vehicles. The Middlefield Banking Company does not currently do any indirect lending. Unsecured consumer loans carry significantly higher interest rates than secured loans. The Middlefield Banking Company maintains a higher loan loss allowance for consumer loans, while maintaining strict credit guidelines when considering consumer loan applications.

According to the Credit Policy, consumer loans secured by collateral other than real estate generally may have terms of up to five years, and unsecured consumer loans may have terms up to three years. Real estate security generally is required for consumer loans having terms exceeding five years.

At December 31, 2015, The Middlefield Banking Company had approximately $4.9 million in its consumer installment loan portfolio, representing 0.9% of total loans. At December 31, 2015, 6.2% of consumer installment loans were over 90 days delinquent or nonaccruing. At December 31, 2014, The Middlefield Banking Company had approximately $4.6 million in its consumer installment loan portfolio, representing 1.0% of total loans. At December 31, 2014, 0.1% of consumer installment loans were over 90 days delinquent or nonaccruing. At September 30, 2016, The Middlefield Banking Company had approximately $4.7 million in its consumer installment loan portfolio, representing .80% of total loans. At September 30, 2016, 0.0% of consumer installment loans were over 90 days delinquent or nonaccruing.

Loan Solicitation and Processing Loan originations are developed from a number of sources, including continuing business with depositors, other borrowers and real estate builders, solicitations by Bank personnel and walk-in customers.

Table of Contents

When a loan request is made, The Middlefield Banking Company reviews the application, credit bureau reports, property appraisals or evaluations, financial information, verifications of income, and other documentation concerning the creditworthiness of the borrower, as applicable to each loan type. The Middlefield Banking Company s underwriting guidelines are set by senior management and approved by the Board of Directors. The Credit Policy specifies each individual officer s loan approval authority. Loans exceeding an individual officer s approval authority are submitted to an Officer s Loan Committee, which has authority to approve loans up to $2,000,000. The Board of Directors Loan Committee acts as an approval authority for exposures over $2,000,000 and up to $5,000,000. Loans exceeding $5,000,000 require approval from the full Board of Directors.

Income from Lending Activities The Middlefield Banking Company earns interest and fee income from its lending activities. Net of origination costs, loan origination fees are amortized over the life of a loan. The Middlefield Banking Company also receives loan fees related to existing loans, including late charges. Income from loan origination and commitment fees and discounts varies with the volume and type of loans and commitments made and with competitive and economic conditions. Note 1 to the Consolidated Financial Statements included herein contains a discussion of the manner in which loan fees and income are recognized for financial reporting purposes.

Mortgage Banking Activity The Middlefield Banking Company originates conventional loans secured by first lien mortgages on one-to-four family residential properties located within its market area for either portfolio or sale into the secondary market. During the year ended December 31, 2015, The Middlefield Banking Company recorded gains of $0.3 million on the sale of $17.6 million in loans receivable originated for sale. During the year ended December 31, 2014, The Middlefield Banking Company recorded gains of $0.2 million on the sale of $6.0 million in loans receivable originated for sale. For the nine months ended September 30, 2016, The Middlefield Banking Company recorded gains of $0.3 on the sale of $16.0 million in loans receivable originated for sale. The sold loans were sold on a servicing retained basis to Freddie Mac.

In addition to interest earned on loans and income recognized on the sale of loans, The Middlefield Banking Company receives fees for servicing loans that it has sold. Because The Middlefield Banking Company has data processing capacity that will allow it to expand its portfolio of serviced loans without incurring significant incremental expenses, The Middlefield Banking Company intends in the future to augment its portfolio of loans serviced by continuing to originate and sell such fixed-rate single-family residential mortgage loans with Freddie Mac while retaining servicing.

Income from these activities will vary from period to period with the volume and type of loans originated and sold, which in turn is dependent on prevailing mortgage interest rates and their effect on the demand for loans in The Middlefield Banking Company s market area.

Nonperforming Loans Late charges on residential mortgages and consumer loans are assessed if a payment is not received by the due date plus a grace period. When an advanced stage of delinquency appears on a single-family loan and if repayment cannot be expected within a reasonable time or a repayment agreement is not entered into, a required notice of foreclosure or repossession proceedings may be prepared by The Middlefield Banking Company s attorney and delivered to the borrower so that foreclosure proceedings may be initiated promptly, if necessary. The Middlefield Banking Company also collects late charges on commercial loans.

When The Middlefield Banking Company acquires real estate through foreclosure, voluntary deed, or similar means, it is classified as OREO until it is sold. When property is acquired in this manner, it is recorded at the lower of cost (the unpaid principal balance at the date of acquisition) or fair value, less anticipated cost to sell. Any subsequent write-down is charged to expense. All costs incurred from the date of acquisition to maintain the property are expensed. OREO is appraised during the foreclosure process, before acquisition when possible. Losses are recognized for the amount by which the book value of the related mortgage loan exceeds the estimated net realizable value of the property.

Table of Contents

The Middlefield Banking Company undertakes regular review of the loan portfolio to assess its risks, particularly the risks associated with the commercial loan portfolio.

Classified Assets FDIC regulations governing classification of assets require nonmember commercial banks including The Middlefield Banking Company to classify their own assets and to establish appropriate general and specific allowances for losses, subject to FDIC review. The regulations are designed to encourage management to evaluate assets on a case-by-case basis, discouraging automatic classifications. Under this classification system, problem assets of insured institutions are classified as substandard, doubtful, or loss. An asset is considered substandard if it is inadequately protected by the current net worth and paying capacity of the obligor or of the collateral pledged, if any. Substandard assets include those characterized by the distinct possibility that the insured institution will sustain some loss if the deficiencies are not corrected. Assets classified as doubtful have all the weaknesses inherent in those classified substandard, with the added characteristic that the weaknesses make collection of principal in full on the basis of currently existing facts, conditions, and values highly questionable and improbable. Assets classified as loss are those considered uncollectible and of such little value that their continuance as assets without the establishment of a specific loss reserve is not warranted. Assets that do not expose The Middlefield Banking Company to risk sufficient to warrant classification in one of the above categories, but that possess some weakness, are required to be designated special mention by management.

When an insured institution classifies assets as either substandard or doubtful, it may establish allowances for loan losses in an amount deemed prudent by management. When an insured institution classifies assets as loss, it is required either to establish an allowance for losses equal to 100% of that portion of the assets so classified or to charge off that amount. An Ohio nonmember bank s determination about classification of its assets and the amount of its allowances is subject to review by the FDIC, which may order the establishment of additional loss allowances. Management also employs an independent third party to semi-annually review and validate the internal loan review process and loan classifications.

The Middlefield Banking Company experienced a decrease in substandard loans as of December 31, 2015. Loans secured by residential real estate and commercial real estate account for $5.8 million and $8.0 million of the substandard loans, respectively. These amounts represent 88.8% of The Middlefield Banking Company s substandard loans. As of September 30, 2016 and December 31, 2015, 2014, 2013, 2012, and 2011, consolidated classified loans were as follows:

	September 30,		Classified Loans at December 31,									
	2016		2015		2014		2013		2012		2011	
(Dollars in thousands)	**Amount**	**Percent of total loans**	**Amount**	**Percent of total loans**	**Amount**	**Percent of total loans**	**Amount**	**Percent of total loans**	**Amount**	**Percent of total loans**	**Amount**	**Percent of total loans**
Classified loans:												
Special mention	$ 4,163	0.71%	$ 5,297	0.99%	$ 4,987	1.06%	$ 4,685	1.08%	$ 3,364	0.82%	$ 2,653	0.66%
Substandard	11,325	1.93%	15,586	2.92%	16,211	3.44%	19,328	4.44%	26,459	6.48%	27,061	6.73%
Doubtful	17	0.00%	130	0.02%	627	0.13%	43	0.01%	59	0.01%	73	0.02%

Total amount	$ 15,505	2.64%	$ 21,013	3.93%	$ 21,825	4.63%	$ 24,056	5.53%	$ 29,882	7.31%	$ 29,787	7.41%

Other than those disclosed above, The Middlefield Banking Company does not believe there are any loans classified for regulatory purposes as loss, doubtful, substandard, special mention or otherwise, which will result in losses or have a material impact on future operations, liquidity or capital reserves. We are not aware of any other information that causes us to have serious doubts as to the ability of borrowers in general to comply with repayment terms.

Investments Investment securities provide a return on residual funds after lending activities. Investments may be in federal funds sold, corporate securities, U.S. Government and agency obligations, state and local government obligations and government-guaranteed mortgage-backed securities. The Middlefield Banking

Table of Contents

Company generally does not invest in securities that are rated less than investment grade by a nationally recognized statistical rating organization. Ohio law prescribes the kinds of investments an Ohio-chartered bank may make. Permitted investments include local, state, and federal government securities, mortgage-backed securities, and securities of federal government agencies. An Ohio-chartered bank also may invest up to 10% of its assets in corporate debt and equity securities, or a higher percentage in certain circumstances. Ohio law also limits to 15% of capital the amount an Ohio-chartered bank may invest in the securities of any one issuer, other than local, state, and federal government and federal government agency issuers and mortgage-backed securities issuers. These provisions have not been a material constraint upon The Middlefield Banking Company s investment activities.

All securities-related activity is reported to The Middlefield Banking Company s board of directors. General changes in investment strategy are required to be reviewed and approved by the board. Senior management can purchase and sell securities in accordance with The Middlefield Banking Company s stated investment policy.

Management determines the appropriate classification of securities at the time of purchase. At this time The Middlefield Banking Company has no securities that are classified as held to maturity. Securities to be held for indefinite periods and not intended to be held to maturity or on a long-term basis are classified as available for sale. Available-for-sale securities are reflected on the balance sheet at their fair value.

The following table exhibits the consolidated amortized cost and fair value of The Middlefield Banking Company s investment portfolio at September 30, 2016 and at December 31, 2013, 2014, and 2015:

	Investment Portfolio Amortized Cost and Fair Value					
	At September 30, 2016		**At December 31, 2015**		**2014**	
(Dollars in thousands)	**Amortized cost**	**Fair value**	**Amortized cost**	**Fair value**	**Amortized cost**	**Fair value**
Available for Sale:						
U.S. Government agency securities	$ 10,516	$ 10,863	$ 21,655	$ 21,629	$ 23,035	$ 22,896
Obligations of states and political subdivisions:						
Taxable	1,616	1,802	1,989	2,123	2,953	3,179
Tax-exempt	81,829	85,723	91,940	95,167	91,916	95,166
Mortgage-backed securities in government-sponsored entities	20,939	21,380	24,480	24,524	29,150	29,391
Private-label mortgage-backed securities	1,927	2,068	2,079	2,263	2,672	2,919
Equity securities in financial institutions	750	1,218	750	814	750	783
Total Investment Securities	$ 117,577	$ 123,054	$ 142,893	$ 146,520	$ 150,476	$ 154,334

The contractual maturity of investment debt securities as of September 30, 2016 is as follows:

September 30, 2016

	One year or less		More than one to five years		More than five to ten years		More than ten years		Total investment securities		
	Amortized cost	Average yield	Amortized cost	Average yield	Amortized cost	Average yield	Amortized cost	Average yield	Amortized cost	Average yield	Fair value
(Dollars in thousands)											
U.S. Government agency securities			$ 2,000	1.38%			$ 8,516	3.13%	$ 10,516	2.80%	$ 10,863
Obligations of states and political subdivisions:											
Taxable					1,616	5.24%			1,616	5.24%	1,802
Tax-exempt **	2,842	4.10%	7,057	3.67%	11,055	3.74%	60,875	3.22%	81,829	3.36%	85,723
Mortgage-backed securities in government-sponsored entities					244	3.11%	20,695	2.28%	20,939	2.29%	21,380
Private-label mortgage-backed securities			76	5.53%			1,851	4.41%	1,927	4.46%	2,068
Total	$ 2,842	4.10%	$ 9,133	3.19%	$ 12,915	3.92%	$ 91,937	3.02%	$ 116,827	3.16%	$ 121,836

** Tax-equivalent yield
Expected maturities of investment securities could differ from contractual maturities because the borrower, or issuer, could have the right to call or prepay obligations with or without call or prepayment penalties. The average yields in the above table are not calculated on a tax-equivalent basis.

As of September 30, 2016, The Middlefield Banking Company also held 18,872 shares of $100 par value Federal Home Loan Bank of Cincinnati stock, which is a restricted security. FHLB stock represents an equity interest in the FHLB, but it does not have a readily determinable market value. The stock can be sold at its par value only, and only to the FHLB or to another member institution. Member institutions are required to maintain a minimum stock investment in the FHLB, based on total assets, total mortgages, and total mortgage-backed securities. The Middlefield Banking Company s minimum investment in FHLB stock at September 30, 2016 was $1.9 million.

Sources of Funds *Deposit Accounts* Deposit accounts are a major source of funds for The Middlefield Banking Company. The Middlefield Banking Company offers a number of deposit products to attract both commercial and regular consumer checking and savings customers, including regular and money market savings accounts, NOW accounts, and a variety of fixed-maturity, fixed-rate certificates with maturities ranging from 3 to 60 months. These accounts earn interest at rates established by management based on competitive market factors and management s desire to increase certain types or maturities of deposit liabilities. The Middlefield Banking Company also provides travelers checks, official checks, money orders, ATM services, and IRA accounts.

The following table shows on a consolidated basis the amount of time deposits of $100,000 or more as of September 30, 2016, including certificates of deposit, by time remaining until maturity.

(Dollar amounts in thousands)	Amount	Percent of Total
Within three months	11,902	12.28%
Beyond three but within six months	13,061	13.48%
Beyond six but within twelve months	16,950	17.49%
Beyond one year	55,011	56.76%
Total	96,924	100.01%

Borrowings Deposits and repayment of loan principal are The Middlefield Banking Company s primary sources of funds for lending activities and other general business purposes. However, when the supply of funds cannot satisfy the demand for loans or general business purposes, The Middlefield Banking Company s subsidiary bank can obtain funds from the FHLB of Cincinnati. Interest and principal are payable monthly, and the line of credit is secured by a pledge collateral agreement. At September 30, 2016, The Middlefield Banking Company had $31.5 million of FHLB borrowings outstanding. The Middlefield Banking Company also has access to credit through the Federal Reserve Bank of Cleveland and other funding sources.

The outstanding balances and related information about short-term borrowings as of September 30, 2016 and December 31, 2015, which includes securities sold under agreements to repurchase, lines of credit with other banks and Federal Funds purchased are summarized on a consolidated basis as follows:

(Dollar amounts in thousands)	9/30/2016	12/31/2015
Balance at period-end	$ 32,803	$ 35,825
Average balance outstanding	30,155	11,768
Maximum month-end balance	42,024	35,825
Weighted-average rate at period-end	0.46%	1.65%
Weighted-average rate during the year	1.48%	1.37%

113

Table of Contents

Personnel. As of September 30, 2016 The Middlefield Banking Company had 140 full-time equivalent employees. No employees are represented by a collective bargaining group. Management considers relations with employees to be excellent.

Supervision and Regulation. The following discussion of bank supervision and regulation is qualified in its entirety by reference to the statutory and regulatory provisions discussed. Changes in applicable law or in the policies of various regulatory authorities could materially affect the business and prospects of Middlefield. Middlefield is a bank holding company within the meaning of the Bank Holding Company Act of 1956. As such, Middlefield is subject to regulation, supervision, and examination by the Board of Governors of the Federal Reserve System, acting primarily through the Federal Reserve Bank of Cleveland. Middlefield is required to file annual reports and other information with the Federal Reserve. The Middlefield Banking Company subsidiary is an Ohio-chartered commercial bank. As a state-chartered, nonmember bank, The Middlefield Banking Company is primarily regulated by the FDIC and by the Ohio Division of Financial Institutions.

Middlefield and The Middlefield Banking Company are subject to federal banking laws, and Middlefield is also subject to Ohio bank law. These federal and state laws are intended to protect depositors, not stockholders. Federal and state laws applicable to holding companies and their financial institution subsidiaries regulate the range of permissible business activities, investments, reserves against deposits, capital levels, lending activities and practices, the nature and amount of collateral for loans, establishment of branches, mergers, dividends, and a variety of other important matters. The Middlefield Banking Company is subject to detailed, complex, and sometimes overlapping federal and state statutes and regulations affecting routine banking operations. These statutes and regulations include but are not limited to state usury and consumer credit laws, the Truth-in-Lending Act and Regulation Z, the Equal Credit Opportunity Act and Regulation B, the Fair Credit Reporting Act, the Truth in Savings Act, and the Community Reinvestment Act. The Middlefield Banking Company must comply with Federal Reserve Board regulations requiring depository institutions to maintain reserves against their transaction accounts (principally NOW and regular checking accounts). Because required reserves are commonly maintained in the form of vault cash or in a noninterest-bearing account (or pass-through account) at a Federal Reserve Bank, the effect of the reserve requirement is to reduce an institution s earning assets.

The Federal Reserve Board and the FDIC have extensive authority to prevent and to remedy unsafe and unsound practices and violations of applicable laws and regulations by institutions and holding companies. The agencies may assess civil money penalties, issue cease-and-desist or removal orders, seek injunctions, and publicly disclose those actions. In addition, the Ohio Division of Financial Institutions possesses enforcement powers to address violations of Ohio banking law by Ohio-chartered banks.

Regulation of Bank Holding Companies *Bank and Bank Holding Company Acquisitions* The Bank Holding Company Act requires every bank holding company to obtain approval of the Federal Reserve before

directly or indirectly acquiring ownership or control of any voting shares of another bank or bank holding company, if after the acquisition the acquiring company would own or control more than 5% of the shares of the other bank or bank holding company (unless the acquiring company already owns or controls a majority of the shares),

acquiring all or substantially all of the assets of another bank, or merging or consolidating with another bank holding company.

The Federal Reserve will not approve an acquisition, merger, or consolidation that would have a substantially anticompetitive result, unless the anticompetitive effects of the proposed transaction are clearly outweighed by a greater public interest in satisfying the convenience and needs of the community to be served. The Federal Reserve also considers capital adequacy and other financial and managerial factors and the record of performance under the Community Reinvestment Act in its review of acquisitions and mergers.

Additionally, the Bank Holding Company Act, the Change in Bank Control Act and the Federal Reserve Board s Regulation Y require advance approval of the Federal Reserve to acquire control of a bank holding

Table of Contents

company. Control is conclusively presumed to exist if an individual or company acquires 25% or more of a class of voting securities. If the holding company has securities registered under Section 12 of the Securities Exchange Act of 1934, as Middlefield does, or if no other person owns a greater percentage of the class of voting securities, control is presumed to exist if a person acquires 10% or more, but less than 25%, of any class of voting securities. Approval of the Ohio Division of Financial Institutions is also necessary to acquire control of an Ohio-chartered bank.

Nonbanking Activities With some exceptions, the Bank Holding Company Act generally prohibits a bank holding company from acquiring or retaining direct or indirect ownership or control of more than 5% of the voting shares of any company that is not a bank or bank holding company, or from engaging directly or indirectly in activities other than those of banking, managing or controlling banks, or providing services for its subsidiaries. The principal exceptions to these prohibitions involve nonbank activities that, by statute or by Federal Reserve Board regulation or order, are held to be closely related to the business of banking or of managing or controlling banks. In making its determination that a particular activity is closely related to the business of banking, the Federal Reserve considers whether the performance of the activities by a bank holding company can be expected to produce benefits to the public such as greater convenience, increased competition, or gains in efficiency in resources that will outweigh the risks of possible adverse effects such as decreased or unfair competition, conflicts of interest, or unsound banking practices. Some of the activities determined by Federal Reserve Board regulation to be closely related to the business of banking are: making or servicing loans or leases; engaging in insurance and discount brokerage activities; owning thrift institutions; performing data processing services; acting as a fiduciary or investment or financial advisor; and making investments in corporations or projects designed primarily to promote community welfare.

Financial Holding Companies On November 12, 1999 the Gramm-Leach-Bliley Act became law, repealing much of the 1933 Glass-Steagall Act s separation of the commercial and investment banking industries. The Gramm-Leach-Bliley Act expands the range of nonbanking activities a bank holding company may engage in, while preserving existing authority for bank holding companies to engage in activities that are closely related to banking. The new legislation creates a new category of holding company called a financial holding company. Financial holding companies may engage in any activity that is

- financial in nature or incidental to that financial activity, or
- complementary to a financial activity and that does not pose a substantial risk to the safety and soundness of depository institutions or the financial system generally.

Activities that are financial in nature include

- acting as principal, agent, or broker for insurance,
- underwriting, dealing in, or making a market in securities, and
- providing financial and investment advice.

The Federal Reserve Board and the Secretary of the Treasury have authority to decide that other activities are also financial in nature or incidental to financial activity, taking into account changes in technology, changes in the banking marketplace, competition for banking services, and so on. Middlefield is engaged solely in activities that were permissible for a bank holding company before enactment of the Gramm-Leach-Bliley Act. Federal Reserve Board rules require that all of the depository institution subsidiaries of a financial holding company be and remain well capitalized and well managed. If all depository institution subsidiaries of a financial holding company do not remain well capitalized and well managed, the financial holding company must enter into an agreement acceptable to the Federal Reserve Board, undertaking to comply with all capital and management requirements within 180 days. In the meantime the financial holding company may not use its expanded authority to engage in nonbanking activities without Federal Reserve Board approval and the Federal Reserve may impose other limitations on the holding company s or affiliates activities. If a financial holding company fails to restore the well-capitalized and well-managed status of a depository institution subsidiary, the Federal Reserve may order divestiture of the subsidiary.

Table of Contents

Holding Company Capital and Source of Strength The Federal Reserve considers the adequacy of a bank holding company s capital on essentially the same risk-adjusted basis as capital adequacy is determined by the FDIC at the bank subsidiary level. The Federal Deposit Insurance Act requires that bank holding companies serve as a source of strength for their subsidiary banking institutions.

Under Bank Holding Company Act section 5(e), the Federal Reserve Board may require a bank holding company to terminate any activity or relinquish control of a nonbank subsidiary if the Federal Reserve Board determines that the activity or control constitutes a serious risk to the financial safety, soundness or stability of a subsidiary bank. And with the Federal Deposit Insurance Corporation Improvement Act of 1991 s addition of the prompt corrective action provisions to the Federal Deposit Insurance Act, section 38(f)(2)(I) of the Federal Deposit Insurance Act now provides that a federal bank regulatory authority may require a bank holding company to divest itself of an undercapitalized bank subsidiary if the agency determines that divestiture will improve the subsidiary bank s financial condition and prospects.

Capital *Risk-Based Capital Requirements* The Federal Reserve Board and the FDIC employ similar risk-based capital guidelines in their examination and regulation of bank holding companies and financial institutions. If capital falls below the minimum levels established by the guidelines, the holding company or bank may be denied approval to acquire or establish additional banks or nonbank businesses or to open new facilities. Failure to satisfy capital guidelines could subject a banking institution to a variety of restrictions or enforcement actions by federal bank regulatory authorities, including the termination of deposit insurance by the FDIC and a prohibition on the acceptance of brokered deposits.

A bank s capital hedges its risk exposure, absorbing losses that can be predicted as well as losses that cannot be predicted. According to the Federal Financial Institutions Examination Council s explanation of the capital component of the Uniform Financial Institutions Rating System, commonly known as the CAMELS rating system, a rating system employed by the Federal bank regulatory agencies, a financial institution must maintain capital commensurate with the nature and extent of risks to the institution and the ability of management to identify, measure, monitor, and control these risks. The effect of credit, market, and other risks on the institution s financial condition should be considered when evaluating the adequacy of capital. Under Basel III, a community bank such as The Middlefield Banking Company is required to maintain a minimum common equity Tier 1 capital ratio of 4.5%, a Tier 1 capital ratio of 6%, a total capital ratio of 8%, and a Tier 1 leverage ratio of 4%. Basel III also established a capital conservation buffer of 2.5% above the new regulatory minimum capital requirements, which must consist entirely of common equity Tier 1 capital and will be phased in beginning in January 2016 at 0.625% of risk-weighted assets and increase by that amount each year until fully implemented in January 2019. The capital conservation buffer is designed to absorb losses during periods of economic stress. Banking institutions that fail to maintain the capital conservation buffer will face constraints on dividends, equity repurchases and compensation based on the amount of the shortfall. These ratios are absolute minimums. In practice, banks are expected to operate with more than the absolute minimum capital. The FDIC may establish greater minimum capital requirements for specific institutions.

The FDIC also employs a market risk component in its calculation of capital requirements for nonmember banks. The market risk component could require additional capital for general or specific market risk of trading portfolios of debt and equity securities and other investments or assets. The FDIC s evaluation of an institution s capital adequacy takes account of a variety of other factors as well, including interest rate risks to which the institution is subject, the level and quality of an institution s earnings, loan and investment portfolio characteristics and risks, risks arising from the conduct of nontraditional activities, and a variety of other factors.

Accordingly, the FDIC s final supervisory judgment concerning an institution s capital adequacy could differ significantly from the conclusions that might be derived from the absolute level of an institution s risk-based capital ratios. Therefore, institutions generally are expected to maintain risk-based capital ratios that exceed the minimum ratios discussed above. This is particularly true for institutions contemplating significant expansion plans and institutions that are subject to high or inordinate levels of risk. Moreover, although the FDIC does not impose explicit capital requirements on holding companies of institutions regulated by the FDIC, the FDIC can take account of the degree of leverage and risks at the holding company level. If the FDIC determines that the holding company (or another affiliate of the institution regulated by the FDIC) has an excessive degree of leverage or is subject to inordinate risks, the FDIC may require the subsidiary institution(s) to maintain additional capital or the FDIC may impose limitations on the subsidiary institution s ability to support its weaker affiliates or holding company.

At December 31, 2015 and September 30, 2016, Middlefield and The Middlefield Banking Company were in compliance with all regulatory capital requirements.

Prompt Corrective Action. To resolve the problems of undercapitalized institutions and to prevent a recurrence of savings and loan crisis of the 1980s and early 1990s, the Federal Deposit Insurance Corporation Improvement Act of 1991 established a system known as prompt corrective action. Under the prompt corrective action provisions and implementing regulations, every institution is classified into one of five categories, depending on its total risk-based capital ratio, its common equity Tier 1 ratio, its Tier 1 risk-based capital ratio, its leverage ratio, and subjective factors. The categories are well capitalized, adequately capitalized, undercapitalized, significantly undercapitalized and critically undercapitalized. To be considered well capitalized for purposes of the prompt corrective action rules, a bank must maintain total risk-based capital of 10.0% or greater, Tier 1 risk-based capital of 8.0% or greater, common equity Tier 1 capital of 6.5%, and a leverage ratio of 5.0% or greater. An institution with a capital level that might qualify for well capitalized or adequately capitalized status may nevertheless be treated as though it were in the next lower capital category if its primary federal banking supervisory authority determines that an unsafe or unsound condition or practice warrants that treatment.

A financial institution s operations can be significantly affected by its capital classification under the prompt corrective action rules. For example, an institution that is not well capitalized generally is prohibited from accepting brokered deposits and offering interest rates on deposits higher than the prevailing rate in its market without advance regulatory approval, which can have an adverse effect on the bank s liquidity. At each successively lower capital category, an insured depository institution is subject to additional restrictions. Undercapitalized institutions are required to take specified actions to increase their capital or otherwise decrease the risks to the federal deposit insurance funds. A bank holding company must guarantee that a subsidiary bank that adopts a capital restoration plan will satisfy its plan obligations. Any capital loans made by a bank holding company to a subsidiary bank are subordinated to the claims of depositors in the subsidiary bank and to certain other indebtedness of the subsidiary bank. If bankruptcy of a bank holding company occurs, any commitment by the holding company to a Federal banking regulatory agency to maintain the capital of a subsidiary bank would be assumed by bankruptcy trustee and would be entitled to priority of payment. Bank regulatory agencies generally are required to appoint a receiver or conservator shortly after an institution becomes critically undercapitalized.

Table of Contents

The Middlefield Banking Company met each of the well-capitalized ratio guidelines at September 30, 2016. The following table indicates the capital ratios for The Middlefield Banking Company and Middlefield at September 30, 2016 and December 31, 2015. The capital conservation buffer is being phased in from 0.625% for 2016 to 2.50% by 2019. The amounts shown below as the adequately capitalized ratio plus capital conservation buffer includes the fully phased-in 2.50% buffer.

	As of September 30, 2016			
	Leverage	**Tier 1 Risk Based**	**Common Equity Tier 1**	**Total Risk Based**
The Middlefield Banking Company	9.02%	11.92%	11.92%	13.03%
Middlefield Banc Corp.	10.10%	13.58%	13.58%	14.69%
Adequately capitalized ratio	4.00%	6.00%	4.50%	8.00%
Adequately capitalized ratio plus capital conservation buffer	4.00%	8.50%	7.00%	10.50%
Well-capitalized ratio (Bank only)	5.00%	8.00%	6.50%	10.00%

	As of December 31, 2015			
	Leverage	**Tier 1 Risk Based**	**Common Equity Tier 1**	**Total Risk Based**
The Middlefield Banking Company	9.23%	12.52%	12.52%	13.73%
Middlefield Banc Corp.	8.69%	12.00%	12.00%	13.20%
Adequately capitalized ratio	4.00%	6.00%	4.50%	8.00%
Adequately capitalized ratio plus capital conservation buffer	4.00%	8.50%	7.00%	10.50%
Well-capitalized ratio (Bank only)	5.00%	8.00%	6.50%	10.00%

New Capital Rules On July 9, 2013, the federal bank regulatory agencies issued a final rule that will revise their risk-based capital requirements and the method for calculating risk-weighted assets to make them consistent with agreements that were reached by the Basel Committee on Banking Supervision and certain provisions of the Dodd-Frank Act. The final rule applies to all depository institutions, top-tier bank holding companies with total consolidated assets of $1.0 billion or more and top-tier savings and loan holding companies. The rule establishes a new common equity Tier 1 minimum capital requirement (4.5% of risk-weighted assets), increases the minimum Tier 1 capital to risk-based assets requirement (from 4.0% to 6.0% of risk-weighted assets) and assigns a higher risk weight (150%) to exposures that are more than 90 days past due or are on nonaccrual status and to certain commercial real estate facilities that finance the acquisition, development or construction of real property.

The rule also includes changes in what constitutes regulatory capital, some of which are subject to a two-year transition period. These changes include the phasing-out of certain instruments as qualifying capital. In addition, Tier 2 capital is no longer limited to the amount of Tier 1 capital included in total capital. Mortgage servicing rights, certain deferred tax assets and investments in unconsolidated subsidiaries over designated percentages of common stock will be required to be deducted from capital, subject to a two-year transition period. Finally, Tier 1 capital will include accumulated other comprehensive income (which includes all unrealized gains and losses on available-for-sale debt and equity securities), subject to a two-year transition period. In the first quarter of 2015 Middlefield permanently opted out of the inclusion of accumulated other comprehensive income in its capital calculation in an effort to reduce the impact of market volatility on its regulatory capital levels.

The new capital requirements also include changes in the risk-weights of assets to better reflect credit risk and other risk exposures. These include a 150% risk weight (up from 100%) for certain high volatility commercial real estate acquisition, development and construction loans and nonresidential mortgage loans that are 90 day past due or otherwise on nonaccrual status; a 20% (up from 0%) credit conversion factor for the unused portion of a commitment with an original maturity of one year or less that is not unconditionally cancellable; a 250% risk weight (up from 100%) for mortgage servicing and deferred tax assets that are not deducted from capital; and increased risk-weights (from 0% to up to 600%) for equity exposures.

Table of Contents

Finally, the rule limits capital distributions and certain discretionary bonus payments if the bank does not hold a capital conservation buffer consisting of 2.5% of common equity Tier 1 capital to risk-weighted assets in addition to the amount necessary to meet its minimum risk-based capital requirements.

The final rule became effective for The Middlefield Banking Company on January 1, 2015. The capital conservation buffer requirement will be phased in beginning January 1, 2016 at 0.625% of risk-weighted assets increasing each year until fully implemented at 2.5% on January 1, 2019.

Limits on Dividends and Other Payments Middlefield s ability to obtain funds for the payment of dividends and for other cash requirements depends on the amount of dividends that may be paid to it by The Middlefield Banking Company. Ohio bank law and FDIC policy are consistent, providing that banks generally may rely solely on current earnings for the payment of dividends. Under Ohio Revised Code section 1107.15(B) a dividend may be declared from surplus, meaning additional paid-in capital, with the approval of (*x*) the Ohio Superintendent of Financial Institutions and (*y*) the holders of two thirds of the bank s outstanding shares. Superintendent approval is also necessary for payment of a dividend if the total of all cash dividends in a year exceeds the sum of (*x*) net income for the year and (*y*) retained net income for the two preceding years. Relying on 12 U.S.C. 1818(b), the FDIC may restrict a bank s ability to pay a dividend if the FDIC has reasonable cause to believe that the dividend would constitute an unsafe and unsound practice. A bank s ability to pay dividends may be affected also by the FDIC s capital maintenance requirements and prompt corrective action rules. A bank may not pay a dividend if the bank is undercapitalized or if payment would cause the bank to become undercapitalized.

A 1985 policy statement of the Federal Reserve Board declares that a bank holding company should not pay cash dividends on common stock unless the organization s net income for the past year is sufficient to fully fund the dividends and the prospective rate of earnings retention appears consistent with the organization s capital needs, asset quality, and overall financial condition. Until the third anniversary of the January 20, 2014 merger of Emerald Bank into The Middlefield Banking Company, The Middlefield Banking Company cannot pay a dividend to Middlefield Banc Corp. without advance approval of the Ohio Division of Financial Institutions.

The Dodd-Frank Act The Dodd-Frank Wall Street Reform and Consumer Protection Act (DFA) became law on July 21, 2010. The DFA includes corporate governance and executive compensation reforms, new registration requirements for hedge fund and private equity fund advisers, increased regulation of over-the-counter derivatives and asset-backed securities, and new rules for credit rating agencies. The DFA includes these provisions

Title X establishes an independent Federal regulatory body within the Federal Reserve System. Dedicated exclusively to consumer protection and known as the Consumer Financial Protection Bureau, this regulatory body has responsibility for most consumer protection laws, with rulemaking, supervisory, examination, and enforcement authority.

section 171 restricts the amount of trust preferred securities that may be considered Tier 1 capital. For depository institution holding companies with total assets of less than $15 billion, trust preferred securities issued before May 19, 2010 may continue to be included in Tier 1 capital, but future issuances of trust preferred securities will no longer be eligible for treatment as Tier 1 capital.

under section 334 the FDIC s minimum reserve ratio is to be increased from 1.15% to 1.35%, with the goal of attaining that 1.35% level by September 30, 2020; however, financial institutions with assets of less than $10 billion are exempt from the cost of the increase. The DFA also removes the upper limit on the designated reserve ratio, which was formerly capped at 1.5%, removing the upper limit on the size of the insurance fund as a consequence. The DFA gives the FDIC much greater discretion to manage its insurance fund reserves, including where to set the insurance fund s designated reserve ratio.

the deposit insurance cover limit is increased to $250,000 by section 335.

119

Table of Contents

section 627 repeals the longstanding prohibition against financial institutions paying interest on checking accounts.

section 331 changes the way deposit insurance premiums are calculated by the FDIC as well. That is, deposit insurance premiums are calculated based upon an institution s so-called assessment base. Until the DFA became law, the assessment base consisted of an institution s deposit liabilities. Section 331, however, makes clear that the assessment base shall now be the difference between total assets and tangible equity. In other words, the assessment base will take account of all liabilities, not merely deposit liabilities. This change is likely to have a greater impact on large banks, which tend to rely on a variety of funding sources, than on community banks, which tend to rely primarily on deposit funding.

the Office of the Comptroller of the Currency s ability to preempt state consumer protection laws is constrained by section 1044, and because of section 1042 state attorneys general have greater authority to enforce state consumer protection laws against national banks and their operating subsidiaries.

section 604 requires the Federal bank regulatory agencies to take into account the risks to the stability of the U.S. banking or financial system associated with approval of an application for acquisition of a bank, for acquisition of a nonbank company, or for a bank merger transaction.

section 619 implements the so-called Volcker rule, prohibiting a banking entity from engaging in proprietary trading or from sponsoring or investing in a hedge fund or private equity fund.

imposing a 5% risk retention requirement on securitizers of asset-backed securities, section 941 could have an impact on financial institutions that originate mortgages for sale into the secondary market.

The DFA creates a new, independent federal agency called the Consumer Financial Protection Bureau (CFPB), which has rulemaking, supervisory, and enforcement powers under specific federal consumer financial protection laws, including the Equal Credit Opportunity Act, Truth in Lending Act, Real Estate Settlement Procedures Act, Fair Credit Reporting Act, Fair Debt Collection Act, and Consumer Financial Privacy provisions of the Gramm-Leach-Bliley Act. In addition to giving the CFPB responsibility for these specific statutes, the DFA grants to the CFPB broad authority to prohibit the offering by banks of consumer financial products or engaging in acts or practices that the CFPB considers to be unfair, deceptive, or abusive. The CFPB has examination and primary enforcement authority over depository institutions with $10 billion or more in assets, not smaller institutions. However, smaller institutions are subject to CFPB rules. In addition, the standards established by the CFPB for large institutions are likely to be applied in practice to smaller institutions as well. The DFA does not prevent states from adopting consumer protection laws and standards that are more stringent than those adopted at the federal level and, in certain circumstances, permits state attorneys general to enforce compliance with both the state and federal laws and regulations.

Implementing section 1411 of the DFA, in 2013 the CFPB amended Regulation Z under the Truth in Lending Act, adding a rule that mortgage lenders must make a reasonable and good faith determination that a consumer being granted mortgage credit has the ability to repay the loan according to its terms. Under this new rule, referred to as the ability-to-repay rule, mortgage lenders may determine the consumer s ability to repay in one of two ways. The first alternative involves assessment of eight underwriting factors, including the loan applicant s current or reasonably expected income or assets, current employment status, monthly payment for the credit applied for, monthly payment on any simultaneous loan being made to the applicant, monthly payment for mortgage-related obligations, current debt obligations, alimony, and child support, monthly debt-to-income ratio or residual income, and credit history. The second alternative involves origination of a so-called qualified mortgage, meaning a mortgage with terms that are consistent with minimum standards established by the CFPB, which currently include a maximum 43% debt-to-income ratio for the borrower (although the 43% minimum debt-to-income ratio does not apply if the loan is eligible to be purchased, insured, or guaranteed by FNMA, FHLMC, HUD, or the VA). In general terms, a qualified mortgage is one with a term of 30 years or less, with substantially equal regular periodic payments (although adjustable-rate mortgages can be qualified mortgages), with total points and fees of 3% of the loan amount or less, and without negative amortization or interest-only payments or balloon payments.

Table of Contents

A lender originating a qualified mortgage is protected against a legal claim that the lender failed to comply with the ability-to-repay rule. A mortgage with an interest rate exceeding the prime rate by 1.5 percentage points or more (3.5 percentage points for subordinate-lien loans such as home equity loans) is referred to in the CFPB rule as a higher-priced mortgage loan, but is more commonly known as a subprime loan. A subprime loan can be a qualified mortgage, but the lender making a subprime qualified mortgage has less protection under the ability-to-repay rule than a lender making a prime qualified mortgage. A lender originating a mortgage that is not a qualified mortgage is exposed to a potential claim that the lender did not comply with the ability-to-repay rules, which could require the lender to pay damages to the borrower, including but not necessarily limited to the sum of all finance charges and fees paid by the borrower (a lender originating a subprime qualified mortgage bears this risk to a degree as well). The borrower s claim also could impair the lender s ability to enforce the loan terms or foreclose on the real estate collateral. Because of these potential risks, a qualified mortgage might have more value in the secondary mortgage market and might be easier for a lender to sell into the secondary mortgage market than a mortgage that is not a qualified mortgage.

Although we believe the majority of our mortgage originations will be qualified mortgages, the ability-to-repay rule creates a new basis for challenge by regulators and by consumers. In addition, the CFPB s mission is consumer protection, not lender safety and soundness, and for that reason the CFPB wrote the ability-to-repay rule with the goal of preventing consumers from being steered by lenders into expensive and unsustainable borrowing, rather than with the goal of assuring actual loan repayment. Accordingly, typical credit-quality features such as LTV standards are not part of the ability-to-repay rule, and it will not necessarily be the case that qualified mortgages have a higher probability or history of repayment than other mortgages. Compliance with the ability-to-repay rules has increased community banks compliance costs, including our own, and will potentially adversely affect the profitability of routine residential mortgage lending. In addition, for the mortgage lending industry the ability-to-repay rule creates a bias in favor of qualified mortgages, which because of factors such as a minimum 43% debt-to-income ratio could have unintended adverse effects, such as reducing community bank lending to low- and moderate-income borrowers and communities.

In addition to ability to repay, the DFA imposes a risk-retention requirement on mortgage lenders selling loans into the secondary mortgage market. With some exceptions, a mortgage lender selling a loan into the secondary mortgage market must retain not less than 5% of the credit risk associated with the loan, the assumption being that if mortgage lenders remain exposed to credit risk they will not knowingly make loans that fail to satisfy ordinary and reasonable standards of creditworthiness. A qualified mortgage for purposes of the ability-to-repay rule is also exempt from the risk-retention requirement, allowing a mortgage lender to sell 100% of a qualified mortgage rather than only 95%. The exemption of qualified mortgages from the risk-retention requirement is likely to contribute to the regulatory bias in favor of qualified mortgages and against other forms of mortgage lending.

Sarbanes-Oxley Act of 2002 The goals of the Sarbanes-Oxley Act enacted in 2002 are to increase corporate responsibility, to provide for enhanced penalties for accounting and auditing improprieties at publicly traded companies, and to protect investors by improving the accuracy and reliability of corporate disclosures made under the securities laws. The changes are intended to allow shareholders to monitor the performance of companies and directors more easily and efficiently.

The Sarbanes-Oxley Act generally applies to all companies that file periodic reports with the SEC under the Securities Exchange Act of 1934. The Act has an impact on a wide variety of corporate governance and disclosure issues, including the composition of audit committees, certification of financial statements by the chief executive officer and the chief financial officer, forfeiture of bonuses and profits made by directors and senior officers in the 12-month period covered by restated financial statements, a prohibition on insider trading during pension plan black-out periods, disclosure of off-balance sheet transactions, a prohibition on personal loans to directors and officers (excluding

Federally insured financial institutions), expedited filing requirements for stock transaction reports by officers and directors, the formation of a public accounting oversight board, auditor independence, and various increased criminal penalties for violations of securities laws.

Table of Contents

Deposit Insurance The premium that banks pay for deposit insurance is based upon a risk classification system established by the FDIC. Banks with higher levels of capital and a low degree of supervisory concern are assessed lower premiums than banks with lower levels of capital or a higher degree of supervisory concern.

Interstate Banking and Branching Section 613 of the DFA amends the interstate branching provisions of the Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994. The expanded *de novo* branching authority of the DFA authorizes a state or national bank to open a *de novo* branch in another state if the law of the state where the branch is to be located would permit a state bank chartered by that state to open the branch. Section 607 of the DFA also increases the approval threshold for interstate bank acquisitions, providing that a bank holding company must be well capitalized and well managed as a condition to approval of an interstate bank acquisition, rather than being merely adequately capitalized and adequately managed, and that an acquiring bank must be and remain well capitalized and well managed as a condition to approval of an interstate bank merger.

Transactions with Affiliates Although The Middlefield Banking Company is not a member bank of the Federal Reserve System, it is required by the Federal Deposit Insurance Act to comply with section 23A and section 23B of the Federal Reserve Act pertaining to transactions with affiliates as if it were a member bank. These statutes are intended to protect banks from abuse in financial transactions with affiliates, preventing federally insured deposits from being diverted to support the activities of unregulated entities engaged in nonbanking businesses. An affiliate of a bank includes any company or entity that controls or is under common control with the bank. Generally, section 23A and section 23B of the Federal Reserve Act

- limit the extent to which a bank or its subsidiaries may lend to or engage in various other kinds of transactions with any one affiliate to an amount equal to 10% of the institution s capital and surplus, limiting the aggregate of covered transactions with all affiliates to 20% of capital and surplus,

- impose restrictions on investments by a subsidiary bank in the stock or securities of its holding company,

- require that affiliate transactions be on terms substantially the same, or at least as favorable to the institution or subsidiary, as those provided to a non-affiliate, and

- impose strict collateral requirements on loans or extensions of credit by a bank to an affiliate

The Middlefield Banking Company s authority to extend credit to insiders meaning executive officers, directors and greater than 10% stockholders or to entities those persons control, is subject to section 22(g) and section 22(h) of the Federal Reserve Act and Regulation O of the Federal Reserve Board. Among other things, these laws require insider loans to be made on terms substantially similar to those offered to unaffiliated individuals, place limits on the amount of loans a bank may make to insiders based in part on the bank s capital position, and require that specified approval procedures be followed. Loans to an individual insider may not exceed the legal limit on loans to any one borrower, which in general terms is 15% of capital but can be higher in some circumstances. And the aggregate of all loans to all insiders may not exceed the bank s unimpaired capital and surplus. Insider loans exceeding the greater of 5% of capital or $25,000 must be approved in advance by a majority of the board, with any interested director not participating in the voting. Lastly, loans to executive officers are subject to special limitations. Executive officers may borrow in unlimited amounts to finance their children s education or to finance the purchase or improvement of their residence, and they may borrow no more than $100,000 for most other purposes. Loans to executive officers exceeding $100,000 may be allowed if the loan is fully secured by government securities or a segregated deposit account. A violation of these restrictions could result in the assessment of substantial civil monetary penalties, the imposition of a cease-and-desist order or other regulatory sanctions.

Banking agency guidance for commercial real estate lending In December 2006 the FDIC and other Federal banking agencies issued final guidance on sound risk management practices for concentrations in commercial real estate lending, including acquisition and development lending, construction lending, and other land loans, which recent experience has shown can be particularly high-risk lending.

Table of Contents

The commercial real estate risk management guidance does not impose rigid limits on commercial real estate lending but does create a much sharper supervisory focus on the risk management practices of banks with concentrations in commercial real estate lending. According to the guidance, an institution that has experienced rapid growth in commercial real estate lending, has notable exposure to a specific type of commercial real estate, or is approaching or exceeds the following supervisory criteria may be identified for further supervisory analysis of the level and nature of its commercial real estate concentration risk

- total reported loans for construction, land development, and other land represent 100% or more of the institution s total capital, or

- total commercial real estate loans represent 300% or more of the institution s total capital and the outstanding balance of the institution s commercial real estate loan portfolio has increased by 50% or more during the prior 36 months.

These measures are intended merely to enable the bank regulatory agencies to quickly identify institutions that could have an excessive commercial real estate lending concentration, potentially requiring close supervision to ensure that the institutions have sound risk management practices in place. Conversely, these measures do not imply that banks are authorized by the December 2006 guidance to accumulate a commercial real estate lending concentration up to the 100% and 300% thresholds.

Corporate Governance and Compensation The Federal banking agencies jointly published their final Guidance on Sound Incentive Compensation Policies in June of 2010. The goal of the guidance is to enable financial organizations to manage the safety and soundness risks of incentive compensation arrangements and to assist banks and bank holding companies with identification of improperly-structured compensation arrangements. To ensure that incentive compensation arrangements do not encourage employees to take excessive risks that undermine safety and soundness, the incentive compensation guidance sets forth these key principles

- incentive compensation arrangements should provide employees incentives that appropriately balance risk and financial results in a manner that does not encourage employees to expose the organization to imprudent risk,

- these arrangements should be compatible with effective controls and risk management, and

- these arrangements should be supported by strong corporate governance, including active and effective oversight by the board of directors.

To implement the interagency guidance, a financial organization must regularly review incentive compensation arrangements for all executive and non-executive employees who, either individually or as part of a group, have the ability to expose the organization to material amounts of risk, also reviewing the risk-management, control, and corporate governance processes related to these arrangements. The organization must immediately correct any identified deficiencies in compensation arrangements or processes that are inconsistent with safety and soundness.

In addition to numerous provisions that affect the business of banks and bank holding companies, the DFA includes in Title IX a number of provisions affecting corporate governance and executive compensation, for example the requirements that stockholders be given the opportunity to consider and vote upon executive compensation disclosed in a company s annual meeting proxy statement, that a company s compensation committee be comprised entirely of independent directors and that the committee have stated minimum authorities, that company policy provide for recovery of excess incentive compensation after an accounting restatement, and that stockholders have the ability to designate director nominees for inclusion in a company s annual meeting proxy statement. Section 956 also provides for adoption of incentive compensation guidelines jointly by the Federal banking agencies and the SEC, the National Credit Union Administration, and the Federal Housing Finance Agency.

Table of Contents

Community Reinvestment Act Under the Community Reinvestment Act of 1977 and implementing regulations of the banking agencies, a financial institution has a continuing and affirmative obligation consistent with safe and sound operation to address the credit needs of its entire community, including low- and moderate-income neighborhoods. The CRA does not establish specific lending requirements or programs for financial institutions, nor does it limit an institution s discretion to develop the types of products and services it believes are best suited to its particular community. The CRA requires that bank regulatory agencies conduct regular CRA examinations and provide written evaluations of institutions CRA performance. The CRA also requires that an institution s CRA performance rating be made public. CRA performance evaluations are based on a four-tiered rating system: Outstanding, Satisfactory, Needs to Improve and Substantial Noncompliance.

Although CRA examinations occur on a regular basis, CRA performance evaluations have been used principally in the evaluation of regulatory applications submitted by an institution. CRA performance evaluations are considered in evaluating applications for such things as mergers, acquisitions, and applications to open branches.

The Middlefield Banking Company s CRA performance evaluation dated December 2, 2013 assigns a CRA rating of Satisfactory.

Federal Home Loan Bank The Federal Home Loan Bank serves as a credit source for their members. As a member of the FHLB of Cincinnati, The Middlefield Banking Company must maintain an investment in the capital stock of the FHLB of Cincinnati in an amount calculated by reference to the amount of loans, and or advances, from the FHLB. Each FHLB is required to establish standards of community investment or service that its members must maintain for continued access to long-term advances from the FHLB. The standards take into account a member s performance under the Community Reinvestment Act and its record of lending to first-time home buyers.

Anti-money laundering and anti-terrorism legislation The Bank Secrecy Act of 1970 requires financial institutions to maintain records and report transactions to prevent the financial institutions from being used to hide money derived from criminal activity and tax evasion. The Bank Secrecy Act establishes (a) record keeping requirements to assist government enforcement agencies with tracing financial transactions and flow of funds, (b) reporting requirements for Suspicious Activity Reports and Currency Transaction Reports to assist government enforcement agencies with detecting patterns of criminal activity, (c) enforcement provisions authorizing criminal and civil penalties for illegal activities and violations of the Bank Secrecy Act and its implementing regulations, and (d) safe harbor provisions that protect financial institutions from civil liability for their cooperative efforts.

The Treasury s Office of Foreign Asset Control administers and enforces economic and trade sanctions against targeted foreign countries, entities, and individuals based on U.S. foreign policy and national security goals. As a result, financial institutions must scrutinize transactions to ensure that they do not represent obligations of or ownership interests in entities owned or controlled by sanctioned targets.

Signed into law on October 26, 2001, the USA PATRIOT Act of 2001 is omnibus legislation enhancing the powers of domestic law enforcement organizations to resist the international terrorist threat to United States security. Title III of the legislation, the International Money Laundering Abatement and Financial Anti-Terrorism Act of 2001, most directly affects the financial services industry, enhancing the Federal government s ability to fight money laundering through monitoring of currency transactions and suspicious financial activities. The Act has significant implications for depository institutions and other businesses involved in the transfer of money a financial institution must establish due diligence policies, procedures, and controls reasonably designed to detect and report money laundering through correspondent accounts and private banking accounts,

Table of Contents

- no bank may establish, maintain, administer, or manage a correspondent account in the United States for a foreign shell bank,

- financial institutions must abide by Treasury Department regulations encouraging financial institutions, their regulatory authorities, and law enforcement authorities to share information about individuals, entities, and organizations engaged in or suspected of engaging in terrorist acts or money laundering activities,

- financial institutions must follow Treasury Department regulations setting forth minimum standards regarding customer identification. These regulations require financial institutions to implement reasonable procedures for verifying the identity of any person seeking to open an account, maintain records of the information used to verify the person s identity, and consult lists of known or suspected terrorists and terrorist organizations provided to the financial institution by government agencies,

- every financial institution must establish anti-money laundering programs, including the development of internal policies and procedures, designation of a compliance officer, employee training, and an independent audit function.

Consumer protection laws and regulations. The Middlefield Banking Company is subject to regular examination by the FDIC to ensure compliance with statutes and regulations applicable to The Middlefield Banking Company s business, including consumer protection statutes and implementing regulations, some of which are discussed below. Violations of any of these laws may result in fines, reimbursements, and other related penalties.

Equal Credit Opportunity Act. The Equal Credit Opportunity Act generally prohibits discrimination in any credit transaction, whether for consumer or business purposes, on the basis of race, color, religion, national origin, sex, marital status, age (except in limited circumstances), receipt of income from public assistance programs, or good faith exercise of any rights under the Consumer Credit Protection Act.

Truth in Lending Act. The Truth in Lending Act is designed to ensure that credit terms are disclosed in a meaningful way so that consumers may compare credit terms more readily and knowledgeably. As a result of the Truth in Lending Act, all creditors must use the same credit terminology to express rates and payments, including the annual percentage rate, the finance charge, the amount financed, the total of payments and the payment schedule, among other things.

Fair Housing Act. The Fair Housing Act makes it unlawful for a lender to discriminate against any person because of race, color, religion, national origin, sex, handicap, or familial status. A number of lending practices have been held by the courts to be illegal under the Fair Housing Act, including some practices that are not specifically mentioned in the Fair Housing Act.

Home Mortgage Disclosure Act. The Home Mortgage Disclosure Act arose out of public concern over credit shortages in certain urban neighborhoods. The Home Mortgage Disclosure Act requires financial institutions to collect data that enable regulatory agencies to determine whether the financial institutions are serving the housing credit needs of the neighborhoods and communities in which they are located. The Home Mortgage Disclosure Act also requires the collection and disclosure of data about applicant and borrower characteristics as a way to identify possible discriminatory lending patterns. The vast amount of information that financial institutions collect and disclose concerning applicants and borrowers receives attention not only from state and Federal banking supervisory authorities but also from community-oriented organizations and the general public.

Real Estate Settlement Procedures Act. The Real Estate Settlement Procedures Act requires that lenders provide borrowers with disclosures regarding the nature and cost of real estate settlements. The Real Estate Settlement Procedures Act also prohibits abusive practices that increase borrowers costs, such as kickbacks and fee-splitting without providing settlement services.

Table of Contents

Privacy. Under the Gramm-Leach-Bliley Act, all financial institutions are required to establish policies and procedures to restrict the sharing of non-public customer data with non-affiliated parties and to protect customer data from unauthorized access. In addition, the Fair Credit Reporting Act of 1971 includes many provisions concerning national credit reporting standards and permits consumers to opt out of information-sharing for marketing purposes among affiliated companies.

State Banking Regulation As an Ohio-chartered bank, The Middlefield Banking Company is subject to regular examination by the Ohio Division of Financial Institutions. State banking regulation affects the internal organization of The Middlefield Banking Company as well as its savings, lending, investment, and other activities. State banking regulation may contain limitations on an institution s activities that are in addition to limitations imposed under federal banking law. The Ohio Division of Financial Institutions may initiate supervisory measures or formal enforcement actions, and if the grounds provided by law exist it may take possession and control of an Ohio-chartered bank.

Monetary Policy The earnings of financial institutions are affected by the policies of regulatory authorities, including monetary policy of the Federal Reserve Board. An important function of the Federal Reserve System is regulation of aggregate national credit and money supply. The Federal Reserve Board accomplishes these goals with measures such as open market transactions in securities, establishment of the discount rate on bank borrowings, and changes in reserve requirements against bank deposits. These methods are used in varying combinations to influence overall growth and distribution of financial institutions loans, investments and deposits, and they also affect interest rates charged on loans or paid on deposits. Monetary policy is influenced by many factors, including inflation, unemployment, short-term and long-term changes in the international trade balance, and fiscal policies of the United States government. Federal Reserve Board monetary policy has had a significant effect on the operating results of financial institutions in the past, and it can be expected to influence operating results in the future.

Properties. The Middlefield Banking Company s offices are:

Location	County	Owned / Leased	Other information
Main Office: 15985 East High Street Middlefield, Ohio	Geauga	Owned	
Branches:			
West Branch 15545 West High Street Middlefield, Ohio	Geauga	Owned	
Garrettsville Branch 8058 State Street Garrettsville, Ohio	Portage	Owned	

Mantua Branch 10519 South Main Street Mantua, Ohio	Portage	Leased	three-year lease renewed in November 2013, with option to renew for five additional consecutive three-year terms
Chardon Branch 348 Center Street Chardon, Ohio	Geauga	Owned	
Orwell Branch 30 South Maple Avenue Orwell, Ohio	Ashtabula	Owned	

126

Table of Contents

Location	County	Owned / Leased	Other information
Newbury Branch 11110 Kinsman Road Newbury, Ohio	Geauga	Leased	ten-year lease dated December 2006, with option to renew for four additional consecutive five-year terms
Cortland Branch 3450 Niles Cortland Road Cortland, Ohio	Trumbull	Owned	
Dublin Branch 6215 Perimeter Drive Dublin, Ohio	Franklin	Leased	twenty-year lease dated February 2004, with the option to purchase after the tenth year
Sunbury Branch 492 West Cherry Street Sunbury, Ohio	Delaware	Leased	five-year lease dated July 1, 2016, with two five-year renewal options
Westerville Branch 17 North State Street Westerville, Ohio	Franklin	Owned	
Administrative Offices 15200 Madison Road, Suite 108 Middlefield, Ohio 44062	Geauga	Owned	
Mentor Loan Production Office 8353 Mentor Avenue Mentor, Ohio 44060	Lake	Leased	one-year lease dated September 2015, with the option to renew for two additional one-year terms

At September 30, 2016 the net book value of The Middlefield Banking Company s investment in premises and equipment totaled $9.9 million.

Legal Proceedings. From time to time Middlefield and The Middlefield Banking Company are involved in various legal proceedings that are incidental to its business. In the opinion of management, no current legal proceedings are material to the financial condition of Middlefield or the subsidiary bank, either individually or in the aggregate.

Table of Contents

Voting Securities and Principal Holders. The following table shows the beneficial ownership of Middlefield common stock on November 17, 2016 on the part of each director, each executive officer identified in the Summary Compensation Table, and all directors and executive officers as a group. For purposes of the table, a person is considered to own beneficially any shares over which he or she exercises sole or shared voting or investment power or of which he or she has the right to acquire beneficial ownership within 60 days. Unless noted otherwise, voting power and investment power are exercised solely by the person named or they are shared with members of his or her household. The percentage figures are based on 2,250,893 shares outstanding, plus the number of shares each individual has the right to acquire within 60 days. The percentage ownership of each person identified in the table would be less than 1.0% if 45% of the 960,273 shares of Liberty Bank common stock outstanding are converted into Middlefield common stock at the exchange rate of 1.1934 shares of Middlefield common stock for each share of Liberty Bank common stock, resulting in issuance of 515,695 shares of Middlefield common stock. Middlefield is not aware of any person being owner of more than five percent of Middlefield common stock. To the best of Middlefield s knowledge no Liberty stockholder to whom Middlefield common stock will be issued in the merger will own more than five percent of Middlefield common stock as a result of issuance of shares in the merger.

Directors, Director Nominees, and Named Executive Officers	**Shares Beneficially Owned**	**Shares Acquirable Within 60 Days By Option Exercise(1)**	**Percent of Stock**
Thomas G. Caldwell, director, President & CEO	14,574(2)	5,525	(6)
James R. Heslop, II, director, EVP and COO	8,092	3,475	(6)
Eric W. Hummel, director	16,502	0	(6)
Kenneth E. Jones, director	7,764(3)	2,837	(6)
Darryl E. Mast, director	6,828	0	(6)
James J. McCaskey, director	3,461(4)	1,500	(6)
Clayton W. Rose III, director	2,870	1,500	(6)
William J. Skidmore, director	5,505	2,837	(6)
Donald L. Stacy, CFO and Treasurer	2,060	3,775	(6)
Robert W. Toth, director	25,371(5)	1,500	1.19%
Carolyn J. Turk, director	12,322	1,500	(6)
other executive officers (6 people)	1,949	3,800	(6)
all directors, nominees, and executive officers as a group (17 people)	107,297	28,249	5.95%

(1) Options granted under Middlefield s 1999 Stock Option Plan or the 2007 Omnibus Equity Plan. Options granted under the plans vest and become exercisable one year after the grant date and have ten-year terms.
(2) Includes shares held by Mr. Caldwell as custodian for his minor children.
(3) Includes 1,132 shares held by spouse. Mr. Jones disclaims beneficial ownership of those shares.
(4) Includes 686 shares held by spouse.
(5) Includes 4,394 shares held by spouse.
(6) Does not exceed 1%.

Director Stock Ownership Guidelines. Middlefield s Corporate Governance Guidelines include stock ownership guidelines for directors. The guidelines state that within three years after election a director should own Middlefield common stock equal in value to at least two times the director s yearly base compensation for service as a director of The Middlefield Banking Company, and three times base compensation within six years. As of December 31, 2015, the projected annual yearly compensation of a director other than the Chairman of the Board is $21,600.

Table of Contents

MANAGEMENT S DISCUSSION AND ANALYSIS OF MIDDLEFIELD S FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This information should be read in conjunction with the consolidated financial statements and accompanying notes to the financial statements. This Management s Discussion and Analysis contains forward-looking statements. Forward-looking statements are based upon a variety of estimates and assumptions. The estimates and assumptions involve judgments about a number of things, including future economic, competitive, and financial market conditions and future business decisions. These matters are inherently subject to significant business, economic, and competitive uncertainties, all of which are difficult to predict and many of which are beyond Middlefield s control. Although Middlefield believes its estimates and assumptions are reasonable, actual results could vary materially from those shown. Inclusion of forward-looking information does not constitute a representation by Middlefield or any other person that the indicated results will be achieved. Investors are cautioned not to place undue reliance on forward-looking information. These forward-looking statements may involve significant risks and uncertainties. Although Middlefield believes that the expectations reflected in such forward-looking statements are reasonable, actual results may differ materially from the results in these forward-looking statements.

Capital maintenance is a priority. Middlefield s Tier 1 leverage capital was 8.69% as of December 31, 2015, with total risk-based capital of 13.20%. The Middlefield Banking Company s Tier 1 leverage capital was 9.23% as of December 31, 2015, with total risk-based capital of 13.73%. In 2015 The Middlefield Banking Company grew the balance sheet as a result of increasing loan volume. We also benefitted from strong income and stockholders equity experienced growth. The goal of the elevated capital levels is to account for potential economic stress in the markets in which Middlefield operates and to account for the levels of substandard and other nonperforming assets. At September 30, 2016, Middlefield s Tier 1 leverage capital was 10.10%, with total risk-based capital of 14.69%, while The Middlefield Banking Company s Tier 1 leverage capital was 9.02%, with total risk-based capital of 13.0%.

Longer-term prospects for growth. Continued reduction of nonperforming assets continues to be a higher priority than growth. Middlefield does not anticipate significant deposit growth. An increase in loan demand and the availability of high-quality lending opportunities continues to be the driver of growth potential and depends on a broad range of economic factors in the markets in which Middlefield operates, including the condition of real estate markets in northeastern Ohio and in central Ohio.

Nonperforming and classified assets held by the banking industry have decreased from previous elevated levels. Because of uncertainty about economic sustainability and the potential for other factors to have an adverse impact on the prospects for the banking industry, such as national and global economic and political factors, the bank regulatory agencies have insisted that banks increase the size of the buffer that protects a bank from unknown potential adverse events and circumstances: regulatory capital. The total number of banks and savings associations as of the end of 2015 is less than half the number at the end of 1990. Nevertheless, a large percentage of the institutions that remain are small, community-oriented institutions, although the share of total banking assets that they control continues to decline. As an increasing share of the banking universe is occupied by the largest institutions, and taking into account economic, demographic, and technological changes and a greatly expanding regulatory burden, the future of banking favors larger institutions. We believe these factors create a strong incentive for growth through industry consolidation, meaning acquisition of smaller institutions by larger institutions and mergers of smaller institutions as a defense to competitive pressure from larger institutions. We therefore believe that industry consolidation is likely to continue and that the pace of consolidation could actually accelerate.

The trend toward consolidation would be most advantageous for financial institution organizations that have a surplus of capital, a strategy for growth, a strong financial profile, and few if any regulatory supervisory concerns, the ingredients of prompt regulatory approval that could be a significant competitive advantage in the

Table of Contents

market for financial institution mergers and acquisitions. Our goal is to acquire that advantage, although we give no assurance that our efforts to do so will succeed. We continue to commit significant resources to increase operational effectiveness in The Middlefield Banking Company. We continue to invest resources both to resolve existing nonperforming and substandard assets and to prevent growth in those asset classes.

Critical Accounting Policies. ***Allowance for loan and lease losses***. Arriving at an appropriate level of allowance for loan and lease losses involves a high degree of judgment. Middlefield s allowance for loan and lease losses provides for probable losses based upon evaluations of known and inherent risks in the loan portfolio. Management uses historical information to assess the adequacy of the allowance for loan and lease losses as well as the prevailing business environment, which is affected by changing economic conditions and various external factors and which may impact the portfolio in ways currently unforeseen. The allowance is increased by provisions for loan losses and by recoveries of loans previously charged-off and reduced by loans charged-off. For a full discussion of Middlefield s methodology of assessing the adequacy of the reserve for loan losses, refer to Note 1 of Notes to Consolidated Financial Statements of this joint proxy statement/prospectus.

Valuation of Securities. Securities are classified as held to maturity or available for sale on the date of purchase. Only those securities classified as held to maturity are reported at amortized cost. Available-for-sale and trading securities are reported at fair value with unrealized gains and losses included in accumulated other comprehensive income, net of related deferred income taxes, on the Consolidated Balance Sheet. The majority Middlefield s securities are valued based on prices compiled by third party vendors using observable market data. However, certain securities are less actively traded and do not always have quoted market prices. The determination of their fair value, therefore, requires judgment, as this determination may require benchmarking to similar instruments or analyzing default and recovery rates. Examples include certain collateralized mortgage and debt obligations and high-yield debt securities. Realized securities gains or losses are reported within noninterest income in the Consolidated Statement of Income. The cost of securities sold is based on the specific identification method.

Management evaluates securities for other-than-temporary impairment (OTTI) at least on a quarterly basis, and more frequently when economic or market conditions warrant such an evaluation. Investment securities are generally evaluated for OTTI under Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 320, Investments Debt and Equity Securities. Consideration is given to the length of time and the extent to which the fair value has been less than cost, the financial condition and near-term prospects of the issuer, whether the market decline was affected by macroeconomic conditions and whether Middlefield has the intent to sell the debt security or more likely than not will be required to sell the debt security before its anticipated recovery. In analyzing an issuer s financial condition, Middlefield may consider whether the securities are issued by the federal government or its agencies, or U.S. government-sponsored enterprises, whether downgrades by bond rating agencies have occurred, and the results of reviews of the issuer s financial condition. The assessment of whether an other-than-temporary decline exists involves a high degree of subjectivity and judgment and is based on the information available to management at a point in time.

When OTTI occurs, the amount of the OTTI recognized in earnings depends on whether an entity intends to sell the security or it is more likely than not it will be required to sell the security before recovery of its amortized cost basis. If an entity intends to sell or it is more likely than not it will be required to sell the security before recovery of its amortized cost basis, the OTTI shall be recognized in earnings equal to the entire difference between the investment s amortized cost basis and its fair value at the balance sheet date. The previous amortized cost basis less the OTTI recognized in earnings becomes the new amortized cost basis of the investment. For debt securities that do not meet the aforementioned criteria, the amount of impairment is split into two components as follows: 1) OTTI related to credit loss, which must be recognized in the income statement and 2) OTTI related to other factors, which is recognized in other comprehensive income or loss. The credit loss is defined as the difference between the present value of the cash flows expected to be collected and the amortized cost basis. For equity securities, the entire amount of impairment is recognized through earnings.

Table of Contents

Debt securities issued by U.S. government agencies, U.S. government-sponsored enterprises, and state and political subdivisions accounted for more than 97.9% of the total available-for-sale portfolio as of December 31, 2015, and more than 98.4% at September 30, 2016, and no credit losses are expected, given the explicit and implicit guarantees provided by the U.S. federal government and the lack of significant unrealized loss positions within the obligations of state and political subdivisions security portfolio. Middlefield considered the following factors in determining whether a credit loss exists and the period over which the debt security is expected to recover:

- The length of time and the extent to which the fair value has been less than the amortized cost basis.

- Changes in the near term prospects of the underlying collateral of a security such as changes in default rates, loss severity given default and significant changes in prepayment assumptions.

- The level of cash flows generated from the underlying collateral supporting the principal and interest payments of the debt securities.

- Any adverse change to the credit conditions and liquidity of the issuer, taking into consideration the latest information available about the overall financial condition of the issuer, credit ratings, recent legislation and government actions affecting the issuer s industry and actions taken by the issuer to deal with the present economic climate.

Refer to Note 3 in the consolidated financial statements.

Income Taxes. Middlefield estimates income tax expense based on amounts expected to be owed to the various tax jurisdictions in which Middlefield conducts business. On a quarterly basis, management assesses the reasonableness of Middlefield s effective tax rate based upon management s current estimate of the amount and components of net income, tax credits and the applicable statutory tax rates expected for the full year. The estimated income tax expense is recorded in the Consolidated Statement of Income.

Deferred income tax assets and liabilities are determined using the balance sheet method and are reported in accrued taxes, interest and expenses in the Consolidated Balance Sheet. Under this method, the net deferred tax asset or liability is based on the tax effects of the differences between the book and tax basis of assets and liabilities and recognizes enacted changes in tax rates and laws. Deferred tax assets are recognized to the extent they exist and are subject to a valuation allowance based on management s judgment that realization is more likely than not.

Accrued taxes represent the net estimated amount due to taxing jurisdictions and are reported in accrued taxes, interest and expenses in the Consolidated Balance Sheet. Middlefield evaluates and assesses the relative risks and appropriate tax treatment of transactions and filing positions after considering statutes, regulations, judicial precedent and other information and maintains tax accruals consistent with management s evaluation of these relative risks and merits. Changes to the estimate of accrued taxes occur periodically due to changes in tax rates, interpretations of tax laws, the status of examinations being conducted by taxing authorities and changes to statutory, judicial and regulatory guidance that impact the relative risks of tax positions. These changes, when they occur, can affect deferred taxes and accrued taxes as well as the current period s income tax expense and can be significant to the operating results of Middlefield.

Goodwill and Other Intangible Assets. Goodwill is the excess of the purchase price over the fair value of the assets acquired in connection with business acquisitions accounted for as purchases. Other intangible assets consist of branch acquisition core deposit premiums. Initially, an assessment of qualitative factors (Step 0) is performed to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If, after assessing the totality of events or circumstances, we determine it is not more likely than not that the fair value of a reporting unit is less than its carrying value, then performing the two-step impairment test is unnecessary. However, if we conclude otherwise, then we are required to perform the first step (Step 1) of the two-step impairment test by calculating the fair value of the reporting unit and comparing the fair value with the carrying amount of the reporting unit. If the fair value is less than the carrying value, an expense may be required on our books to write down the goodwill to the proper carrying value. Step 2 of impairment testing, which is necessary only if Step 1 fails, compares the implied fair value of the goodwill with the carrying amount of the goodwill.

Middlefield must assess goodwill and other intangible assets each year for impairment. The gross carrying amount of goodwill and intangible assets is tested for impairment in the fourth quarter, after the annual forecasting process.

Fair Value of Financial Instruments. The disclosure of the fair value of financial instruments is based on available market prices or management s estimates of the fair value of such instruments. Management consults with a third party for available market prices as well as performs calculations of the present value of contractual cash flows discounted at current comparative market inputs. Prepayment estimates are utilized when appropriate.

Changes in Financial Condition

General. Middlefield s total assets increased $57.6 million or 8.5% to $735.1 million at December 31, 2015 from $677.5 million at December 31, 2014. This was due to an increase in net loans of $63.6 million, which was partially offset by a decrease in investments of $7.8 million.

The increase in Middlefield s total assets reflects a related increase in total liabilities of $59.2 million or 9.6% to a total balance of $672.8 million at December 31, 2015 from $613.7 million at December 31, 2014. Middlefield experienced a decrease in total stockholders equity of $1.6 million.

The increase in total liabilities was due to growth in deposits and short-term borrowings for the year. Total deposits increased $38.3 million or 6.5% to $624.4 million at December 31, 2015 from $586.1 million as of December 31, 2014. Short-term borrowings increased $21.0 million or 141.9% to $35.8 million at December 31, 2015 from $14.8 million as of December 31, 2014. The net decrease in total stockholders equity can be attributed to a $6.8 million increase in treasury stock, partially offset by an increase in retained earnings and common stock of $4.7 million and of $0.7 million, respectively.

Cash on hand and Federal funds sold. Cash and due from banks and federal funds sold represent cash and cash equivalents which decreased $1.9 million or 7.4% to $23.7 million at December 31, 2015 from $25.6 million at December 31, 2014. Deposits from customers into savings and checking accounts, loan and security repayments and proceeds from borrowed funds typically increase these accounts. Decreases result from customer withdrawals, new loan originations, security purchases and repayments of borrowed funds.

Securities. Management s objective in structuring the portfolio is to maintain a prudent level of liquidity while providing an acceptable rate of return without sacrificing asset quality. Maturing securities have historically provided sufficient liquidity. The balance of total securities decreased $7.8 million, or 5.1%, as compared to 2014, with the ratio of securities to total assets decreasing to 19.9% at December 31, 2015, compared to 22.8% at December 31, 2014.

Middlefield benefits from owning mortgage-backed securities, which totaled $26.6 million or 18.6% of Middlefield s total investment portfolio at December 31, 2015. The primary difference of mortgage-backed securities is the amortization of principal as compared to other types of investment securities, which deliver proceeds upon maturity or call date. The weighted-average federal tax-equivalent (FTE) yield on all debt securities at year-end 2015 was 4.11%, as compared to 4.18% at year-end 2014. While Middlefield s focus is to generate interest revenue primarily through loan growth, management will continue to invest excess funds in securities when opportunities arise.

Loans receivable. The loans receivable category consists primarily of single-family mortgage loans used to purchase or refinance personal residences located within Middlefield s market area and commercial real estate loans used to finance properties that are used in the borrowers businesses or to finance investor-owned rental properties and commercial loans to finance the business operations and to a lesser extent construction and consumer loans. Net loans receivable increased $63.6 million or 13.7% to $527.3 million at December 31, 2015 from $463.7 million at December 31, 2014. Included in this growth were increases in real estate mortgages and C&I loans of $63.4 million and $7.6 million, respectively, but partially offset by an $8.2 million decrease in real estate construction loans.

The product mix in the loan portfolio is commercial and industrial loans equaling 8.0%, construction loans 4.1%, residential real estate loans 43.6%, commercial real estate loans 43.4% and consumer loans 0.9% at December 31, 2015 compared with 7.4%, 6.4%, 44.6%, 40.5% and 1.0%, respectively, at December 31, 2014.

Loans contributed 83.3% of total interest income in 2015 and 81.5% in 2014. The loan portfolio yield of 4.81% in 2015 was 30 basis points higher than the average yield for total interest-earning assets. Management recognizes that while the loan portfolio holds some of Middlefield s highest yielding assets, it is inherently the most risky portfolio. Accordingly, management attempts to balance credit risk versus return with conservative credit standards. Management has developed and maintains comprehensive underwriting guidelines and a loan review function that monitors credits during and after the approval process. Management follows additional procedures to obtain current borrower financial information annually throughout the life of the loan obligation.

To minimize risks associated with changes in the borrower s future repayment capacity, Middlefield generally requires scheduled periodic principal and interest payments on all types of loans and normally requires collateral.

Middlefield will continue to monitor the size of its loan portfolio growth. Middlefield s lending markets have rebounded from the suppressed levels of loan originations in previous years. Middlefield anticipates total loan growth to be steady, with volume to continue at a moderate pace. Middlefield remains committed to sound underwriting practices without sacrificing asset quality and avoiding exposure to unnecessary risk that could weaken the credit quality of the portfolio.

FHLB stock. FHLB stock remained unchanged at $1.9 million at December 31, 2015 when compared to the prior year.

Goodwill. Goodwill results from prior business acquisitions and represents the excess of the purchase price over the fair value of acquired tangible assets and liabilities and identifiable intangible assets. Goodwill is assessed annually for impairment and any such impairment is recognized in the period identified by a charge to earnings.

Middlefield values core deposits and monitors the ongoing value of core deposit intangibles and goodwill on an annual basis. Goodwill balances were unchanged in 2015.

Bank owned life insurance. Bank owned life insurance (BOLI) is universal life insurance, purchased by Middlefield, on the lives of Middlefield s officers. The beneficial aspects of these universal life insurance policies are tax-free earnings and a tax-free death benefit, which are realized by Middlefield as the owner of the policies. BOLI increased by $4.0 million to $13.1 million as of December 31, 2015 from $9.1 million at the end of 2014 as a result of the additional insurance purchases and increases in cash surrender value.

Deposits. Interest-earning assets are funded generally by both interest-bearing and noninterest-bearing core deposits. Deposits are influenced by changes in interest rates, economic conditions and competition from other banks. Middlefield considers various sources when evaluating funding needs, including but not limited to deposits, which represented 93.2% of Middlefield s total funding sources at December 31, 2015. The deposit base consists of demand deposits, savings, money market accounts and time deposits. Total deposits increased $38.3 million or 6.5% to $624.4

million at December 31, 2015 from $586.1 million at December 31, 2014.

Table of Contents

Savings and time deposits are the largest sources of funding for Middlefield s earning assets, making up a combined 59.6% of total deposits. During 2015, time deposits increased $21.4 million, or 12.6% while savings increased $2.2 million, or 1.2%, from year-end 2014. The time deposit increase is primarily due to growth in out-of-market time deposits.

Demand deposit balances increased in 2015 by $11.8 million, or 7.3%, to finish at $173.7 million at year-end 2015 as compared to $161.9 million at year-end 2014. Middlefield will continue to experience increased competition for deposits in its market areas, which could challenge net growth in its deposit balances. Middlefield will continue to evaluate its deposit portfolio mix to properly employ both retail and wholesale funds to support earning assets and minimize interest costs.

Borrowed funds. Middlefield uses short and long-term borrowings as another source of funding to benefit asset growth and liquidity needs. These borrowings primarily include FHLB advances, junior subordinated debt, lines of credit from other banks and repurchase agreement borrowings. Borrowed funds increased $20.4 million or 79.9% to $45.8 million at December 31, 2015 from $25.4 million at December 31, 2014. Short-term borrowings increased $21.0 million in order to fund loan growth and purchase treasury shares.

Stockholders equity. Middlefield maintains a capital level that exceeds regulatory requirements as a margin of safety for its depositors and shareholders. All of the capital ratios exceeded the regulatory well-capitalized guidelines.

Stockholders equity totaled $62.3 million at December 31, 2015, compared to $63.9 million at December 31, 2014, which represents a decrease of 2.4%. Treasury stock increased $6.8 million, or 100.7%, from $6.7 million at December 31, 2014. Retained earnings increased $4.7 million resulting from net income, less cash dividends paid of $2.2 million, or $1.07 per share, year-to-date. Common stock increased $0.7 million or 1.9% to $36.2 million at December 31, 2015 from $35.5 million at December 31, 2014. Middlefield maintains a dividend reinvestment and stock purchase plan. The plan allows shareholders to purchase additional shares of Company stock. A benefit of the plan is to permit the shareholders to reinvest cash dividends as well as make supplemental purchases without the usual payment of brokerage commissions. During 2015, shareholders invested $0.7 million through the dividend reinvestment and stock purchase plan. These proceeds resulted in the issuance of 20,393 new shares at an average price of $32.17.

Table of Contents

Average Balance Sheet and Yield/Rate Analysis. The following tables set forth, for the periods indicated, information concerning the total dollar amounts of interest income from interest-earning assets and the resultant average yields, the total dollar amounts of interest expense on interest-bearing liabilities and the resultant average costs, net interest income, interest rate spread and the net interest margin earned on average interest-earning assets. For purposes of these tables, average balances are calculated using monthly averages and the average loan balances include nonaccrual loans and exclude the allowance for loan and lease losses, and interest income includes accretion of net deferred loan fees. Yields on tax-exempt securities (tax-exempt for federal income tax purposes) are shown on a fully tax-equivalent basis utilizing a federal tax rate of 34%.

	For the Twelve Months Ended December 31,								
	2015			2014			2013		
(Dollars in thousands)	**Average Balance**	**Interest**	**Average Yield/Cost**	**Average Balance**	**Interest**	**Average Yield/Cost**	**Average Balance**	**Interest**	**Average Yield/Cost**
Interest-earning assets:									
Loans receivable	$ 494,931	$ 23,824	4.81%	$ 455,035	$ 22,726	4.99%	$ 415,610	$ 22,496	5.41%
Investment securities (3)	152,015	4,627	4.11%	158,585	5,023	4.18%	182,942	5,558	3.90%
Interest-bearing deposits with other banks	23,855	144	0.60%	33,119	125	0.38%	38,117	124	0.33%
Total interest-earning assets	670,801	28,595	4.51%	646,739	27,874	4.56%	636,669	28,178	4.67%
Noninterest-earning assets	39,470			24,845			24,278		
Total assets	$ 710,271			$ 671,584			$ 660,947		
Interest-bearing liabilities:									
Interest-bearing demand deposits	$ 62,064	191	0.31%	$ 59,484	193	0.32%	$ 81,941	215	0.26%
Money market deposits	76,034	312	0.41%	75,443	300	0.40%	77,991	303	0.39%
Savings deposits	179,095	542	0.30%	177,958	560	0.31%	178,678	608	0.34%
Certificates of deposit	190,097	2,381	1.25%	180,634	2,580	1.43%	184,539	3,583	1.94%
Borrowings	22,108	394	1.78%	19,567	437	2.23%	20,451	541	2.65%
Total interest-bearing liabilities	529,398	3,820	0.72%	513,086	4,070	0.79%	543,600	5,250	0.97%

Noninterest-bearing liabilities:						
Other liabilities	116,218		99,511		63,971	
Stockholders equity	64,655		58,987		53,376	
Total liabilities and stockholders equity	$ 710,271		$ 671,584		$ 660,947	
Net interest income		$ 24,775		$ 23,804		$ 22,928
Interest rate spread (1)		3.78%		3.77%		3.71%
Net interest margin (2)		3.94%		3.93%		3.85%
Ratio of average interest-earning assets to average interest-bearing liabilities		126.71%		126.05%		117.12%

(1) Interest rate spread represents the difference between the average yield on interest-earning assets and the average cost of interest-bearing liabilities

(2) Net interest margin represents net interest income as a percentage of average interest-earning assets.

(3) Tax-equivalent adjustments to interest income for tax-exempt securities were $1,628, $ 1,611, and $ 1,568 for 2015, 2014, and 2013, respectively.

135

Table of Contents

	For the Three Months Ended September 30,					
	2016			2015		
(Dollar amounts in thousands)	Average Balance	Interest	Average Yield/Cost	Average Balance	Interest	Average Yield/Cost
Interest-earning assets:						
Loans receivable	$ 580,798	$ 6,459	4.42%	$ 503,790	$ 5,971	4.70%
Investment securities (3)	124,998	922	4.06%	153,316	1,150	4.05%
Interest-bearing deposits with other banks	23,824	39	0.65%	32,782	30	0.36%
Total interest-earning assets	729,620	7,420	4.24%	689,888	7,151	4.35%
Noninterest-earning assets	39,683			26,302		
Total assets	$ 769,303			$ 716,190		
Interest-bearing liabilities:						
Interest-bearing demand deposits	$ 69,666	$ 54	0.31%	$ 66,041	$ 53	0.32%
Money market deposits	82,718	84	0.40%	75,137	78	0.41%
Savings deposits	173,311	106	0.24%	179,416	134	0.30%
Certificates of deposit	183,340	677	1.47%	196,026	611	1.24%
Borrowings	45,281	105	0.92%	16,272	83	2.02%
Total interest-bearing liabilities	554,316	1,026	0.74%	532,892	959	0.71%
Noninterest-bearing liabilities						
Other liabilities	136,913			121,227		
Stockholders equity	78,074			62,071		
Total liabilities and stockholders equity	$ 769,303			$ 716,190		
Net interest income		$ 6,394			$ 6,192	
Interest rate spread (1)				3.50%		3.64%
Net interest margin (2)				3.68%		3.80%
Ratio of average interest-earning assets to average interest-bearing liabilities				131.63%		129.46%

(1) Interest rate spread represents the difference between the average yield on interest-earning assets and the average cost of interest-bearing
(2) Net interest margin represents net interest income as a percentage of average interest-earning assets.
(3) Tax-equivalent adjustments to interest income for tax-exempt securities were $ 354 and $417 for the three months ended September 30 2016 and 2015, respectively .

Table of Contents

	For the Nine Months Ended September 30,					
	2016			2015		
(Dollars in thousands)	Average Balance	Interest	Average Yield/Cost	Average Balance	Interest	Average Yield/Cost
Interest-earning assets:						
Loans receivable	$ 556,764	$ 18,949	4.55%	$ 486,438	$ 17,656	4.85%
Investment securities (3)	135,836	3,092	4.17%	153,531	3,488	4.10%
Interest-bearing deposits with other banks	22,254	132	0.79%	36,942	108	0.39%
Total interest-earning assets	714,854	22,173	4.36%	676,911	21,252	4.44%
Noninterest-earning assets	36,850			24,768		
Total assets	$ 751,704			$ 701,679		
Interest-bearing liabilities:						
Interest-bearing demand deposits	$ 66,045	$ 147	0.30%	$ 62,260	$ 145	0.31%
Money market deposits	81,091	250	0.41%	75,393	231	0.41%
Savings deposits	175,725	323	0.25%	179,119	409	0.00%
Certificates of deposit	186,268	1,945	1.39%	190,883	1,796	1.26%
Borrowings	44,940	452	1.34%	18,093	251	1.85%
Total interest-bearing liabilities	554,069	3,117	0.75%	525,748	2,832	0.72%
Noninterest-bearing liabilities						
Other liabilities	127,554			112,787		
Stockholders equity	70,081			63,144		
Total liabilities and stockholders equity	$ 751,704			$ 701,679		
Net interest income		$ 19,056			$ 18,420	
Interest rate spread (1)			3.61%			3.72%
Net interest margin (2)			3.78%			3.88%
Ratio of average interest-earning assets to average interest-bearing liabilities			129.02%			128.75%

(1) Interest rate spread represents the difference between the average yield on interest-earning assets and the average cost of interest-bearing
(2) Net interest margin represents net interest income as a percentage of average interest-earning assets.
(3) Tax-equivalent adjustments to interest income for tax-exempt securities were $ 1,147 and $ 1,222 for the nine months ended September 30, 2016 and 2015, respectively.

Table of Contents

Analysis of Changes in Net Interest Income. The following tables analyze the changes in interest income and interest expense in terms of: (1) changes in volume of interest-earning assets and interest-bearing liabilities and (2) changes in yields and rates. The table reflects the extent to which changes in interest income and interest expense are attributable to changes in rate (change in rate multiplied by prior period volume), changes in volume (changes in volume multiplied by prior period rate) and changes attributable to the combined impact of volume/rate (change in rate multiplied by change in volume). The changes attributable to the combined impact of volume/rate are allocated on a consistent basis between the volume and rate variances. Changes in interest income on securities reflects the changes in interest income on a fully tax-equivalent basis.

	three months ended September 30 2016 versus 2015 Increase (decrease) due to		
(Dollar amounts in thousands)	**Volume**	**Rate**	**Total**
Interest-earning assets:			
Loans receivable	$ 910	$ (422)	$ 488
Investment securities	(288)	60	(228)
Interest-bearing deposits with other banks	(8)	17	9
Total interest-earning assets	614	(345)	269
Interest-bearing liabilities:			
Interest-bearing demand deposits	3	(2)	1
Money market deposits	8	(2)	6
Savings deposits	(5)	(23)	(28)
Certificates of deposit	(40)	106	66
Borrowings	147	(125)	22
Total interest-bearing liabilities	113	(46)	67
Net interest income	$ 501	$ (299)	$ 202

	nine months ended September 30, 2016 versus 2015 Increase (decrease) due to		
(Dollars in thousands)	**Volume**	**Rate**	**Total**
Interest-earning assets:			
Loans receivable	$ 2,553	$ (1,260)	$ 1,293
Investment securities	(543)	147	(396)
Interest-bearing deposits with other banks	(43)	67	24
Total interest-earning assets	1,967	(1,046)	921
Interest-bearing liabilities:			

Interest-bearing demand deposits	9	(7)	2
Money market deposits	17	2	19
Savings deposits		(86)	(86)
Certificates of deposit	(44)	193	149
Borrowings	372	(171)	201
Total interest-bearing liabilities	354	(69)	285
Net interest income	$ 1,613	$ (977)	$ 636

Table of Contents

	-54%	-52%	(3,189)		(4,836)	
Operating earnings before other expenses, net			+12%	Ps 10,736	Ps 12,064	

N/A = Not Applicable

(1) Represents the average change in domestic cement and ready-mix concrete prices in local currency terms. For purposes of a geographic segment consisting of a region, the average prices in local currency terms for each individual country within the region are first translated into U.S. Dollar terms (except for the Rest of Northern Europe and the Rest of the Mediterranean regions, which is translated first into Euros) at the exchange rates in effect as of the end of the reporting period. Variations for a region represent the weighted average change of prices in U.S. Dollar terms (except for the Rest of Northern Europe and the Rest of the Mediterranean regions, which represent the weighted average change of prices in Euros) based on total sales volumes in the region.

(2) On August 27, 2010, we sold seven aggregates quarries, three resale aggregate distribution centers and one concrete block manufacturing facility all located in Kentucky.

(3) Refers primarily to operations in Ireland, the Czech Republic, Austria, Poland, Hungary and Latvia, as well as trading activities in Scandinavia and Finland.

(4) Includes mainly the operations in Croatia, the UAE and Israel.

(5) Includes the operations in Costa Rica, Panama, Puerto Rico, the Dominican Republic, Nicaragua, Jamaica and other countries in the Caribbean, Guatemala, and small ready-mix concrete operations Argentina.

(6) Includes primarily our operations in Thailand, Bangladesh, China and Malaysia.

(7) Our Others segment refers to: (i) cement trade maritime operations, (ii) our information technology solutions business (Neoris), (iii) CEMEX, S.A.B. de C.V. and other corporate entities and (iv) other minor subsidiaries with different lines of business.

Net sales. Our consolidated net sales increased approximately 7%, from approximately Ps178 billion in 2010 to Ps190 billion in 2011. The increase in net sales was primarily attributable to higher volumes and prices in our main markets. The infrastructure and residential sectors continue to be the main drivers of demand in most of our markets. Set forth below is a quantitative and qualitative analysis of the effects of the various factors affecting our net sales on a geographic segment basis. The discussion of volume data below is presented before eliminations resulting from consolidation. The discussion of net sales information below is presented before the eliminations resulting from consolidation shown on note 4 of our 2012 audited consolidated financial statements included elsewhere in this annual report.

Table of Contents

Mexico

Our domestic cement sales volumes from our operations in Mexico increased approximately 1% in 2011 compared to 2010, and ready-mix concrete sales volumes increased approximately 6% during the same period. Our net sales from our operations in Mexico represented approximately 21% of our total net sales for the year ended December 31, 2011, in Peso terms, before eliminations resulting from consolidation. The increases in domestic cement and ready-mix concrete sales volumes were primarily attributable to a modest growth in the self-construction sector. Our cement export volumes of our operations in Mexico, which represented approximately 3% of our Mexican cement sales volumes in 2011, increased approximately 19% in 2011 compared to 2010, primarily as a result of higher export volumes to the South America region. Of our total cement export volumes during 2011 from operations in Mexico, 22% was shipped to the United States, 36% to Central America and the Caribbean and 42% to South America. Our average domestic sales price of cement for our operations in Mexico increased approximately 3%, in Peso terms, in 2011 compared to 2010, and the average sales price of ready-mix concrete increased approximately 6%, in Peso terms, over the same period. For the year ended December 31, 2011, cement represented approximately 53%, ready-mix concrete approximately 23% and our aggregates and other businesses approximately 24% of our net sales for our operations in Mexico before intra-sector eliminations within the segment and before eliminations from consolidation, as applicable.

As a result of the increases in domestic cement and ready-mix concrete sales volumes and average sales prices, our net sales in Mexico, in Peso terms, increased approximately 1% in 2011 compared to 2010.

United States

Our domestic cement sales volumes from our operations in the United States, which include cement purchased from our other operations, decreased approximately 2% in 2011 compared to 2010, and ready-mix concrete sales volumes increased approximately 7% during the same period. The increases in our ready-mix concrete sales volumes of our operations in the United States resulted primarily from the consolidation of the Ready Mix USA joint venture in August 2011. During the year, construction activity in the residential sector remained relatively stagnant due to excess inventory, tight credit conditions, weak job market and lack of confidence in the economy. In addition, continued weakness in state fiscal conditions and uncertainty over federal funding negatively affected the infrastructure sector. The industrial and commercial sector continued to show improvement. Our net sales from our operations in the United States represented approximately 16% of our total net sales for the year ended December 31, 2011, in Peso terms, before eliminations resulting from consolidation. Our average sales price of domestic cement of our operations in the United States remained flat, in U.S. Dollar terms, in 2011 compared to 2010, and the average sales price of ready-mix concrete increased approximately 3%, in U.S. Dollar terms, over the same period. For the year ended December 31, 2011, cement represented approximately 29%, ready-mix concrete approximately 29% and our aggregates and other businesses approximately 42% of our net sales for our operations in the United States before intra-sector eliminations within the segment and before eliminations from consolidation, as applicable.

As a result of the increases in ready-mix concrete sales volumes and average sales prices, partially offset by the decrease in domestic cement sales volumes, our net sales in the United States, in U.S. Dollar terms, increased approximately 1% in 2011 compared to 2010.

Northern Europe

In 2011, our operations in the Northern Europe region consisted of our operations in the United Kingdom, Germany and France, which represent the most significant operations in this region, in addition to our Rest of Northern Europe segment, which refers primarily to our operations in Ireland, the Czech Republic, Austria, Poland, Hungary and Latvia, as well as trading activities in Scandinavia and Finland. Our net sales from our operations in the Northern Europe region represented approximately 30% of our total net sales for the year ended December 31, 2011, in Peso terms, before eliminations resulting from consolidation. As of December 31, 2011, our operations in the Northern Europe region represented approximately 15% of our total assets. Set forth below is a quantitative and qualitative analysis of the effects of the various factors affecting our net sales for our main operations in the Northern Europe region.

Table of Contents

United Kingdom

Our domestic cement sales volumes from our operations in the United Kingdom increased approximately 6% in 2011 compared to 2010, and ready-mix concrete sales volumes increased approximately 11% during the same period. The main driver of construction activity during the year was the infrastructure sector, although a slowdown was apparent during the second half of the year. Similarly, after a positive first half of the year, the residential sector was constrained by weak market fundamentals during the second half of the year, which made it difficult for buyers to obtain mortgages. The industrial and commercial sector was negatively affected by economic instability that accelerated during the second half of 2011. Our net sales from our operations in the United Kingdom represented approximately 8% of our total net sales for the year ended December 31, 2011, in Peso terms, before eliminations resulting from consolidation. Our average domestic sales price of cement from our operations in the United Kingdom increased approximately 2%, in Pound terms, in 2011 compared to 2010, and the average price of ready-mix concrete increased approximately 2%, in Pound terms, over the same period. For the year ended December 31, 2011, cement represented approximately 15%, ready-mix concrete approximately 25% and our aggregates and other businesses approximately 60% of net sales of our operations in the United Kingdom before intra-sector eliminations within the segment and before eliminations from consolidation, as applicable.

As a result of the increases in domestic cement and ready-mix concrete sales volumes and average sales prices, net sales from our operations in the United Kingdom, in Pound terms, increased approximately 7% in 2011 compared to 2010.

Germany

Our domestic cement sales volumes from our operations in Germany increased approximately 14% in 2011 compared to 2010, and ready-mix concrete sales volumes increased approximately 13% during the same period. The increases in domestic cement and ready-mix concrete sales volumes resulted primarily from the positive momentum of the residential sector, resulting from historically low mortgage rates, stable construction prices, shrinking unemployment and higher wages. Performance from the industrial and commercial sector benefited from the strength in the manufacturing sector, as well as high capacity utilization. Construction activity from the infrastructure sector decreased slightly due to cuts in the national budget. Our net sales from our operations in Germany represented approximately 8% of our total net sales for the year ended December 31, 2011, in Peso terms, before eliminations resulting from consolidation. Our average domestic sales price of cement from our operations in Germany decreased approximately 1%, in Euro terms, in 2011 compared to 2010, and the average price of ready-mix concrete remained flat, in Euro terms, over the same period. For the year ended December 31, 2011, cement represented approximately 26%, ready-mix concrete approximately 35% and our aggregates and other businesses represented approximately 39% of net sales of our operations in Germany before intra-sector eliminations within the segment and before eliminations from consolidation, as applicable.

As a result of the increases in domestic cement and ready-mix concrete sales volumes, partially offset by the decrease in domestic cement average sales prices, net sales in Germany, in Euro terms, increased approximately 12% in 2011 compared to 2010.

France

Our ready-mix concrete sales volumes from our operations in France increased approximately 12% in 2011 compared to 2010. The increase in ready-mix concrete volumes resulted primarily from the residential sector, which benefited from economic stimulus plan measures, such as social housing, tax incentives and zero rate loans, as well as favorable credit conditions. The increase in the number of new project starts and permits, especially from offices and warehouses, positively affected the performance of the industrial and commercial sector. Construction activity from the infrastructure sector remained stable, driven mainly by private investments, which offset the drop in public investments. Our net sales from our operations in France represented approximately 7% of our total net sales for the year ended December 31, 2011, in Peso terms, before eliminations resulting from consolidation. Our average sales price of ready-mix concrete from our operations in France increased approximately 1%, in Euro terms, in 2011 compared to 2010. For the year ended December 31, 2011, ready-mix concrete represented approximately 73% and our aggregates and other businesses represented approximately 27% of our net sales for our operations in France before intra-sector eliminations within the segment and before eliminations from consolidation, as applicable.

As a result of the increases in ready-mix concrete sales volumes and average sales prices, net sales in France, in Euro terms, increased approximately 12% in 2011 compared to 2010.

Rest of Northern Europe

In 2011, our operations in our Rest of Northern Europe segment consisted primarily of our operations in Ireland, the Czech Republic, Austria, Poland, Hungary and Latvia, as well as trading activities in Scandinavia and Finland. Our domestic cement sales volumes of our operations in our Rest of Northern Europe segment increased approximately 16% in 2011 compared to 2010, and ready-mix concrete sales volumes increased approximately 15% during the same period. The increases in domestic cement and ready-mix concrete sales volumes resulted primarily from better weather conditions compared to last year and increased demand from infrastructure projects. Our net sales from our operations in our Rest of Northern Europe segment represented approximately 7% of our total net sales for the year ended December 31, 2011, in Peso terms, before eliminations resulting from consolidation. Our average domestic sales price of cement from our operations in our Rest of Northern Europe segment increased approximately 2%, in Euro, terms in 2011 compared to 2010, and the average price of ready-mix concrete increased approximately 4%, in Euro terms, over the same period. For the year ended December 31, 2011, cement represented approximately 37%, ready-mix concrete approximately 42% and our aggregates and other businesses approximately 21% of net sales from our operations in our Rest of Northern Europe segment before intra-sector eliminations within the segment and before eliminations resulting from consolidation, as applicable.

As a result of the increases in domestic cement and ready-mix concrete sales volumes and average sales prices, net sales in our Rest of Northern Europe segment, in Euro terms, increased approximately 7% in 2011 compared to 2010.

The Mediterranean

In 2011, our operations in the Mediterranean region consisted of our operations in Spain and Egypt, which represent the most significant operations in this region, in addition to our Rest of the Mediterranean segment, which includes mainly our operations in Croatia, the UAE and Israel. Our net sales from our operations in the Mediterranean region represented approximately 11% of our total net sales for the year ended December 31, 2011, in Peso terms, before eliminations resulting from consolidation. As of December 31, 2011, our operations in the Mediterranean region represented approximately 12% of our total assets. Set forth below is a quantitative and qualitative analysis of the effects of the various factors affecting our net sales for our main operations in the Mediterranean region.

Spain

Our domestic cement sales volumes from our operations in Spain decreased approximately 19% in 2011 compared to 2010, while ready-mix concrete sales volumes decreased approximately 21% during the same period. The decreases in domestic cement and ready-mix concrete sales volumes were the result of lower construction activity across all regions and demand sectors. The residential sector was negatively affected by high inventory levels and lack of financing, with housing permits at all-time lows. Large budget cuts and lack of economic resources negatively affected the infrastructure sector activity. Furthermore, activity from the industrial and commercial sector declined, given the lack of visibility, high risk premium, unfavorable macroeconomic conditions and tighter credit. Our net sales from our operations in Spain represented

Table of Contents

approximately 4% of our total net sales for the year ended December 31, 2011, in Peso terms, before eliminations resulting from consolidation. Our cement export volumes of our operations in Spain, which represented approximately 29% of our cement sales volumes in Spain for the year ended December 31, 2011, increased by approximately 6% in 2011 compared to 2010, primarily as a result of higher export volumes to Europe, partially offset by lower export volumes to Africa. Of such total cement export volumes, 31% was shipped to Europe and the Middle East, and 69% to Africa. Our average domestic sales price of cement of our operations in Spain remained flat, in Euro terms, in 2011 compared to 2010, and the average price of ready-mix concrete decreased approximately 1%, in Euro terms, over the same period. For the year ended December 31, 2011, cement represented approximately 67%, ready-mix concrete approximately 20% and our aggregates and other businesses approximately 13% of net sales for our operations in Spain before intra-sector eliminations within the segment and before eliminations from consolidation, as applicable.

As a result of the decreases in domestic cement and ready-mix concrete sales volumes, partially offset by the increase in the cement export volumes, our net sales in Spain, in Euro terms, decreased approximately 14% in 2011 compared to 2010.

Egypt

Our domestic cement sales volumes from our operations in Egypt decreased approximately 3% in 2011 compared to 2010, while ready-mix concrete sales volumes decreased approximately 17% during the same period. The domestic cement and ready-mix concrete sales volumes were negatively affected by the country s political and social unrest, which slowed Egypt s economy and affected the overall business environment. In the infrastructure sector, most projects were on hold due to a reduction in government expenditures. In addition, spending on other demand segments was stagnant, as a result of heightened uncertainty given the difficult political situation. Our net sales from our operations in Egypt represented approximately 3% of our total net sales for the year ended December 31, 2011, in Peso terms, before eliminations resulting from consolidation. Our average domestic sales price of cement of our operations in Egypt decreased by approximately 7%, in Egyptian pound terms, in 2011 compared to 2010, and the average price of ready-mix concrete decreased approximately 9%, in Egyptian pound terms, over the same period. For the year ended December 31, 2011, cement represented approximately 89%, ready-mix concrete approximately 7% and our aggregates and other businesses approximately 4% of net sales for our operations in Egypt before intra-sector eliminations within the segment and before eliminations from consolidation, as applicable.

As a result of the decreases in domestic cement and ready-mix concrete sales volumes and average domestic sales prices, our net sales in Egypt, in Egyptian pound terms, decreased approximately 11% in 2011 compared to 2010.

Rest of the Mediterranean

In 2011, our operations in our Rest of the Mediterranean segment consisted mainly of our operations in Croatia, the UAE and Israel. Our domestic cement sales volumes of our operations in our Rest of the Mediterranean segment decreased approximately 6% in 2011 compared to 2010, and ready-mix concrete sales volumes increased approximately 13% during the same period. The decrease in domestic cement sales volumes resulted primarily from a slowdown in construction activity in our operations in Croatia and the UAE, and the increase in ready-mix concrete sales volumes resulted primarily from an upturn in the housing sector and more infrastructure projects in our operations in Israel. Our net sales from our operations in our Rest of the Mediterranean segment represented approximately 4% of our total net sales for the year ended December 31, 2011, in Peso terms, before eliminations resulting from consolidation. Our average domestic sales price of cement from our operations in our Rest of the Mediterranean increased approximately 2%, in U.S. Dollar terms, in 2011 compared to 2010, and the average price of ready-mix concrete increased approximately 5%, in U.S. Dollar terms, over the same period. For the year ended December 31, 2011, cement represented approximately 25%, ready-mix concrete approximately 58% and our aggregates and other businesses approximately 17% of our net sales from our operations in our Rest of the Mediterranean segment before intra-sector eliminations within the segment and before eliminations resulting from consolidation, as applicable.

As a result of the increases in ready-mix concrete sales volumes and domestic cement and ready-mix concrete average sales prices, partially offset by the decrease in domestic cement sales volumes, net sales in our Rest of the Mediterranean segment, in U.S. Dollar terms, increased approximately 8% in 2011 compared to 2010.

South America and the Caribbean

In 2011, our operations in the South America and the Caribbean region consisted of our operations in Colombia, which represents the most significant operation in this region, in addition to our Rest of South America and the Caribbean segment, which includes our operations in Costa Rica, Guatemala, Panama, Nicaragua, Puerto Rico, the Dominican Republic, Jamaica and other countries in the Caribbean, and small ready-mix concrete operations in Argentina. Most of these trading operations consist of the resale in the Caribbean region of cement produced by our operations in Mexico. Our net sales from our operations in the South America and the Caribbean region represented approximately 12% of our total net sales for the year ended December 31, 2011, in Peso terms, before eliminations resulting from consolidation. As of December 31, 2011, our operations in the South America and the Caribbean region represented approximately 7% of our total assets. Set forth below is a quantitative and qualitative analysis of the effects of the various factors affecting our net sales for our main operations in the South America and the Caribbean region.

Colombia

Our domestic cement volumes from our operations in Colombia increased approximately 5% in 2011 compared to 2010, and ready-mix concrete sales volumes increased approximately 29% during the same period. Construction activity for the year was driven by the residential sector, particularly middle and high income housing development, which benefited from stable interest rates, controlled inflation, low unemployment and favorable macroeconomic conditions. Construction spending in the industrial and commercial sector, primarily on warehouses and commercial buildings, had a positive effect on volumes for the year. In addition, construction spending on infrastructure projects, primarily on road construction and maintenance, contributed to the performance of the sector. Our net sales from our operations in Colombia represented approximately 4% of our total net sales for the year ended December 31, 2011, in Peso terms, before eliminations resulting from consolidation. Our average domestic sales price of cement from our operations in Colombia increased approximately 10%, in Colombian Peso terms, in 2011 compared to 2010, while the average price of ready-mix concrete increased approximately 6%, in Colombian Peso terms, over the same period. For the year ended December 31, 2011, cement represented approximately 62%, ready-mix concrete approximately 26% and our aggregates and other businesses approximately 12% of our net sales for our operations in Colombia before intra-sector eliminations within the segment and before eliminations from consolidation, as applicable.

As a result of the increases in domestic cement and ready-mix concrete sales volumes and average sales prices, net sales of our operations in Colombia, in Colombian Peso terms, increased approximately 21% in 2011 compared to 2010.

Rest of South America and the Caribbean

In 2011, our operations in our Rest of South America and the Caribbean segment included our operations in Costa Rica, Guatemala, Panama, Nicaragua, Puerto Rico, the Dominican Republic, Jamaica and other countries in the Caribbean, and small ready-mix concrete operations in Argentina. Our domestic cement volumes from our operations in our Rest of South America and the Caribbean segment increased approximately 4% in 2011 compared to 2010, and ready-mix concrete sales volumes increased approximately 5% during the same period. Our net sales from our operations in our Rest of South America and the Caribbean segment represented approximately 8% of our total net sales for the year ended December 31, 2011, in Peso terms, before eliminations resulting from consolidation. Our average domestic sales price of cement for our operations in our Rest of South America and the Caribbean segment increased approximately 5%, in U.S. Dollar terms, in 2011 compared to 2010, and the average sales price of ready-mix concrete increased approximately 7%, in U.S. Dollar terms, over the same period. For the year ended December 31, 2011, cement represented approximately 72%, ready-mix concrete approximately 20% and our other businesses approximately 8% of net for our operations in our Rest of South America and the Caribbean segment before intra-sector eliminations within the segment and before eliminations from consolidation, as applicable.

As a result of the increases in domestic cement and ready-mix concrete sales volumes and average sales prices, net sales of our operations in our Rest of South America and the Caribbean segment, in U.S. Dollar terms, increased approximately 21% in 2011 compared to 2010.

Asia

In 2011, our operations in the Asia region consisted of our operations in the Philippines, which represents the most significant operation in this region, in addition to our Rest of Asia segment, which includes our operations in Thailand, Bangladesh, China and Malaysia. Our net sales from our operations in the Asia region represented approximately 3% of our total net sales for the year ended December 31, 2011, in Peso terms, before eliminations resulting from consolidation. As of December 31, 2011, our operations in the Asia region represented approximately 2% of our total assets. Set forth below is a quantitative and qualitative analysis of the effects of the various factors affecting our net sales for our main operations in the Asia region.

The Philippines

Our domestic cement volumes from our operations in the Philippines decreased approximately 5% in 2011 compared to 2010 primarily as a result of the lower demand for building materials due to the government s suspension of key infrastructure projects in its effort to implement a more rigorous process relating to the bidding and disbursement of funds, as well as by the delay in the implementation of public-private partnership projects. In addition, unfavorable weather conditions in many regions of the country hampered construction activity during the year. Our net sales from our operations in the Philippines represented approximately 2% of our total net sales for the year ended December 31, 2011, in Peso terms, before eliminations resulting from consolidation. Our average domestic sales price of cement from our operations in the Philippines decreased approximately 8%, in Philippine Peso terms, in 2011 compared to 2010. For the year ended December 31, 2011, cement represented approximately 100% of our net sales for our operations in the Philippines before intra-sector eliminations within the segment and before eliminations from consolidation, as applicable.

As a result of the decreases in domestic cement sales volumes and average sales prices, net sales of our operations in the Philippines, in Philippine Peso terms, decreased approximately 10% in 2011 compared to 2010.

Rest of Asia

In 2011, our operations in our Rest of Asia segment included our operations in Thailand, Bangladesh, China and Malaysia. Our domestic cement volumes from our operations in our Rest of Asia segment increased approximately 8% in 2011 compared to 2010, and ready-mix concrete sales volumes decreased approximately 8% during the same period. Our net sales from our operations in our Rest of Asia segment represented approximately 1% of our total net sales for the year ended December 31, 2011, in Peso terms, before eliminations resulting from consolidation. Our average domestic sales price of cement for our operations in our Rest of Asia segment increased approximately 2%, in U.S. Dollar terms, in 2011 compared to 2010, and the average sales price of ready-mix concrete increased approximately 12%, in U.S. Dollar terms, over the same period. For the year ended December 31, 2011, cement represented approximately 31%, ready-mix concrete approximately 57% and our other businesses approximately 12% of net sales for our operations in our Rest of Asia segment before intra-sector eliminations within the segment and before eliminations from consolidation, as applicable.

Table of Contents

As a result of the increases in domestic cement sales volumes and domestic cement and ready-mix concrete average sales prices, partially offset by the decrease in ready-mix concrete sales volumes, net sales of our operations in our Rest of Asia segment, in U.S. Dollar terms, decreased approximately 2% in 2011 compared to 2010.

Others

Our Others segment includes our cement, trade maritime operations, our information technology solutions business and other minor subsidiaries with different lines of business. Net sales of our Others segment increased approximately 26% before eliminations resulting from consolidation in 2011 compared to 2010, in U.S. Dollar terms, primarily as a result of an increase of approximately 48% in our worldwide cement, clinker and slag trading operations. For the year ended December 31, 2011, our trading operations net sales represented approximately 62%, and our information technology solutions company 21%, of our Others segment s net sales.

Cost of Sales. Our cost of sales, including depreciation, amortization and depletion of assets involved in production, increased approximately 7%, from Ps128 billion in 2010 to Ps136 billion in 2011, primarily due to higher sales volumes. As a percentage of net sales, cost of sales decreased from 72% in 2010 to 71.7% in 2011, mainly as a result of higher prices in our most important markets, as well as the results of our cost reduction initiatives, which more than offset the increase in fuel and raw materials costs. Our cost of sales includes freight expenses of raw materials used in our producing plants, storage costs in producing plants as well as delivery expenses of our ready-mix concrete business. However, our costs of sales excludes (i) expenses related to personnel and equipment comprising our selling network and those expenses related to warehousing at the points of sale, which were included as part of our administrative and selling expenses line item in the amount of approximately Ps7.9 billion in 2010 and Ps8.1 billion in 2011; and (ii) freight expenses of finished products from our producing plants to our points of sale and from our points of sale to our customers locations, which were included as part of our distribution expenses line item, and which, for the years ended December 31, 2010 and 2011, represented Ps13.2 billion and Ps16.2 billion, respectively.

Gross Profit. For the reasons explained above, our gross profit increased approximately 8%, from approximately Ps49.7 billion in 2010 to approximately Ps53.7 billion in 2011. As a percentage of net sales, gross profit increased from approximately 28% in 2010 to 28.3% in 2011. In addition, our gross profit may not be directly comparable to those of other entities that include all their freight expenses in cost of sales. As described above, we include freight expenses of finished products from our producing plants to our points of sale and from our points of sale to our customers locations within distribution expenses, which in aggregate represented costs of approximately Ps13.2 billion in 2010 and approximately Ps16.2 billion in 2011.

Administrative, selling and distribution expenses. Our administrative, selling and distribution expenses increased approximately 6%, from approximately Ps39.1 billion in 2010 to approximately Ps41.7 billion in 2011, primarily as a result of higher distribution expenses, which were partially offset by savings from our cost-reduction initiatives. As a percentage of net sales, our administrative, selling and distribution expenses represented approximately 22% in 2010 and 2011. See note 2R to our 2012 audited consolidated financial statements included elsewhere in this annual report.

Operating Earnings Before Other Expenses, Net. For the reasons mentioned above, our operating earnings before other expenses, net increased approximately 11%, from approximately Ps10.7 billion in 2010 to approximately Ps12.0 billion in 2011. As a percentage of net sales, operating earnings before other expenses, net represented approximately 6% in each of 2010 and 2011. Additionally, set forth below is a quantitative and qualitative analysis of the effects of the various factors affecting our operating earnings before other expenses, net on a geographic segment basis.

Table of Contents

Mexico

Our operating earnings before other expenses, net from our operations in Mexico increased approximately 10%, from approximately Ps11.9 billion in 2010 to approximately Ps13.1 billion in 2011, in Peso terms. The increase in operating earnings before other expenses, net was primarily attributable to the increases in domestic cement and ready-mix concrete sales volumes and average sales prices.

United States

Our operating loss before other expenses, net from our operations in the U.S. improved approximately 6%, from an operating loss before other expenses, net of approximately Ps8.4 billion in 2010 to an operating loss before other expenses, net of approximately Ps7.9 billion in 2011, in Peso terms. As mentioned above, the improvement in operating loss before other expenses, net resulted primarily from the consolidation of the Ready Mix USA joint venture and increases in ready-mix concrete sales volumes and average sales prices.

Northern Europe

United Kingdom

Our operating loss before other expenses, net from our operations in the United Kingdom improved approximately 80%, from an operating loss before other expenses, net of approximately Ps723 million in 2010 to an operating loss before other expenses, net of approximately Ps147 million in 2011, in Peso terms. The increase in the operating earnings before other expenses, net of our operations in the United Kingdom during 2011 compared to 2010 resulted primarily from higher domestic cement and ready-mix concrete sales volumes and average sales prices.

Germany

Our operating earnings before other expenses, net from our operations in Germany increased significantly, from an operating loss before other expenses, net of Ps270 million in 2010 to an operating earnings before other expenses, net of Ps174 million in 2011, in Peso terms. The increase resulted primarily from higher domestic cement and ready-mix concrete sales volumes as a result of the positive momentum of the residential sector.

France

Our operating earnings before other expenses, net from our operations in France improved significantly, from approximately Ps516 million in 2010 to approximately Ps1.1 billion in 2011, in Peso terms. The increase resulted primarily from higher ready-mix concrete and aggregates sales volumes and average sales prices driven by the residential sector.

Rest of Northern Europe

Our operating earnings before other expenses, net from our operations in our Rest of Northern Europe segment increased significantly, from an operating loss before other expenses, net of approximately Ps112 million in 2010 to an operating earnings before other expenses, net of approximately Ps648 million in 2011, in Peso terms. The increase in our operating earnings before other expenses, net from our operations in our Rest of Northern Europe segment resulted from higher domestic cement and ready-mix concrete sales volumes and average sales prices.

The Mediterranean

Spain

Our operating earnings before other expenses, net from our operations in Spain decreased approximately 15%, from approximately Ps1 billion in 2010 to Ps894 million in 2011, in Peso terms. The decrease in operating earnings before other expenses, net resulted primarily from decreases in domestic cement and ready-mix concrete sales volumes and ready-mix concrete average sales prices as the result of lower construction activity across all regions and demand sectors.

Table of Contents

Egypt

Our operating earnings before other expenses, net from our operations in Egypt decreased approximately 35%, from approximately Ps3.7 billion in 2010 to Ps2.4 billion in 2011, in Peso terms. The decrease in operating earnings before other expenses, net resulted primarily from decreases in domestic cement and ready-mix concrete sales volumes and average sales prices given the country s political and social unrest, which slowed Egypt s economy and affected the overall business environment.

Rest of the Mediterranean

Our operating earnings before other expenses, net from our operations in our Rest of the Mediterranean segment increased approximately 45%, from approximately Ps471 million in 2010 to Ps682 million in 2011, in Peso terms. The increase in operating earnings before other expenses, net resulted primarily from increases in ready-mix concrete sales volumes and average sales prices.

South America and the Caribbean

Colombia

Our operating earnings before other expenses, net from our operations in Colombia increased approximately 18%, from approximately Ps2.2 billion in 2010 to approximately Ps2.6 billion in 2011, in Peso terms. The increase resulted primarily from higher domestic cement and ready-mix concrete sales volumes, which benefited from higher construction spending in the industrial and commercial sector, primarily on warehouses and commercial buildings.

Rest of South America and the Caribbean

Our operating earnings before other expenses, net from our operations in our Rest of South America and the Caribbean segment increased approximately 20%, from approximately Ps2.5 billion in 2010 to Ps2.9 billion in 2011, in Peso terms. The increase in operating earnings before other expenses, net resulted primarily from increases in domestic cement and ready-mix concrete sales volumes and average sales prices in our markets.

Asia

The Philippines

Our operating earnings before other expenses, net from our operations in the Philippines decreased approximately 64%, from approximately Ps996 million in 2010 to approximately Ps358 million in 2011, in Peso terms. The decrease in operating earnings before other expenses, net resulted primarily from a decrease in domestic cement sales volumes and average sales prices.

Rest of Asia

Our operating earnings before other expenses, net from our operations in our Rest of Asia segment decreased approximately 47%, from approximately Ps96 million in 2010 to approximately Ps51 million in 2011, in Peso terms.

Others

Our operating loss before other expenses, net from our Others segment increased approximately 52%, from an operating loss before other expenses, net of approximately Ps3.2 billion in 2010 to an operating loss before other expenses, net of approximately Ps4.8 billion, in 2011 in Peso terms. The increase in operating loss before other expenses, net resulted primarily from a substantial increase in our worldwide cement, clinker and slag trading operations.

Table of Contents

Other Expenses, Net. Our other expenses, net, decreased approximately 14%, from approximately Ps6.3 billion in 2010 to approximately Ps5.4 billion in 2011, primarily due to results from sales of assets and the net effect of the compensation for the nationalization of our operations in Venezuela, partially offset by the increase in our restructuring cost due to our transformation process.

The most significant items included under this caption in 2010 and 2011 are as follows:

	2010	2011
	(in millions of Mexican Pesos)	
Restructuring costs	Ps (897)	Ps (1,959)
Impairment losses	(1,904)	(1,751)
Charitable contributions	(385)	(140)
Results from sales of assets and others, net	(3,149)	(1,599)
	Ps (6,335)	Ps (5,449)

Financial Items

Pursuant to IFRS, financial items include:

- financial or interest expense on borrowed funds;
- financial income on cash and temporary investments;
- changes in the fair value resulting from the valuation of financial instruments, including derivative instruments and marketable securities;
- foreign exchange gains or losses associated with monetary assets and liabilities denominated in foreign currencies; and
- accretion result from assets and liabilities and others.

	Year Ended December 31, 2010	2011
	(in millions of Mexican Pesos)	
Financial items:		
Financial expense	Ps (14,753)	Ps (16,627)
Other financial (expense) income, net:		
Financial income	483	489
Results from financial instruments	(1,103)	(76)
Foreign exchange result	895	(1,919)
Effects of net present value on assets and liabilities and others, net	(798)	(708)
	Ps (15,276)	Ps (18,841)

Our aggregate financial items in 2011, which comprises interest expense and other financial income (expense), net, as reported in our statements of operations, was a loss of approximately Ps18.8 billion, an increase from the loss of approximately Ps15.3 billion in 2010. The components of the change are shown above.

Our financial expense increased approximately 13%, from approximately Ps14.7 billion in 2010 to approximately Ps16.6 billion in 2011. The increase was primarily attributable to the issuance of fixed rate instruments to prepay debt under the 2009 Financing Agreement, improve our liquidity and for general corporate purposes.

Other financial (expense) income, net comprises our financial income which increased 1%, from Ps483 million in 2010 to Ps489 million in 2011. Our loss from our financial instruments decreased substantially, from a loss of approximately Ps1.0 billion in 2010 to a loss of approximately Ps76 million in 2011. This loss resulted

Table of Contents

primarily from negative valuations of equity derivatives related to shares of CEMEX, S.A.B. de C.V. and Axtel, S.A.B. de C.V., or Axtel. Our foreign exchange result decreased, from a gain of approximately Ps895 million in 2010 to a loss of approximately Ps1.9 billion in 2011, mainly due to the depreciation of the Mexican Peso against the U.S. Dollar during 2011. The accretion expense or income, which represents the effects on our net assets and liabilities recognized at amortized cost due to the passage of time, decreased from an expense of approximately Ps798 million in 2010 to an expense of Ps708 million in 2011.

Derivative Financial Instruments. For the years ended December 31, 2010 and 2011, our derivative financial instruments that had a potential impact on our other financial income (expense) consisted of equity forward contracts, a forward instrument over the Total Return Index of the Mexican Stock Exchange, interest rate derivatives related to energy projects and conversion options embedded in our convertible notes, as discussed in note 16D to our 2012 audited consolidated financial statements included elsewhere in this annual report.

For the year ended December 31, 2011, our Results from financial instruments improved to a net loss of approximately Ps76 million under the item compared to a net loss of approximately Ps1,103 million in 2010. This improvement in 2011 was mainly attributable to positive changes in the fair value of the conversion options embedded in our convertible notes, which partially offset losses generated from the changes in fair value of our other derivative instruments related to shares of CEMEX, S.A.B. de C.V. and Axtel. See Liquidity and Capital Resources Our Equity Forward Arrangements.

Income Taxes. Our income tax effect in the statement of operations, which is primarily comprised of current income taxes plus deferred income taxes, increased from an expense of approximately Ps2 billion in 2010 to an expense of Ps12.2 billion in 2011. This increase is mainly attributable to our current income tax expense, which increased from an expense of approximately Ps4.7 billion in 2010 to an expense of approximately Ps14.3 billion in 2011. This increase of approximately Ps9.6 billion in the current income tax expense was mainly a result of: a) an income tax benefit related to the expiration of the statute of limitations of uncertain tax positions for approximately Ps4.2 billion in 2010 as compared to approximately Ps120 million in 2011; b) the income tax expense recognized during the period associated to changes in the expected outcome in several of our uncertain tax positions, primarily in connection with uncertain tax positions in Mexico, which led to a net increase in our unrecognized tax benefits provision and consequently a net expense for approximately Ps3.5 billion in 2011 as compared to a net expense of approximately Ps2.2 billion in 2010, including in both periods interest and penalties; c) the reclassification to equity of current income tax benefit in both periods associated with foreign exchange losses that were recorded directly in equity for approximately Ps4.8 billion in 2010 as compared to approximately Ps6.0 billion in 2011; and d) an income tax benefit of approximately Ps2.9 billion in 2010 related to the changes in the tax consolidation regime in Mexico.

Our deferred tax benefit decreased from a benefit of approximately Ps2.6 billion in 2010 to a benefit of approximately Ps2.1 billion in 2011. The decrease in our deferred tax benefit was primarily attributable to the increase in valuation allowances relating to tax loss carryforwards in certain countries. See notes 19 and 19D to our 2012 consolidated financial statements included elsewhere in this annual report. For each of the years ended December 31, 2010 and 2011, our approximate statutory income tax rate was 30%.

Our effective tax rate in 2010 resulted in a negative tax rate of 18.2%, considering a loss before income tax of approximately Ps11.4 billion, while our effective tax rate in 2011 resulted in a negative tax rate of 97.2%, considering a loss before income tax of approximately Ps12.6 billion. See Item 3 Key Information Risk Factors The Mexican tax consolidation regime may have an adverse effect on cash flow, financial condition and net income.

Consolidated Net Loss. For the reasons described above, our consolidated net loss (before deducting the portion allocable to non-controlling interest) for 2011 increased 84%, from a consolidated net loss of approximately Ps13.4 billion in 2010 to a consolidated net loss of approximately Ps24.8 billion in 2011.

Non-controlling Interest Net Loss. Changes in non-controlling interest net income (loss) in any period reflect changes in the percentage of the stock of our subsidiaries held by non-associated third parties as of the end of each month during the relevant period and the consolidated net income (loss) attributable to those subsidiaries. Non-controlling interest net income increased approximately 54%, from a gain of Ps21 million in 2010 to a gain of Ps46 million in 2011, mainly as a result of an increase in the net income of the consolidated entities in which others have a non-controlling interest.

Controlling Interest Net Loss. Controlling interest net loss represents the difference between our consolidated net loss and non-controlling interest net income (loss), which is the portion of our consolidated net income (loss) attributable to those of our subsidiaries in which non-associated third parties hold interests. Controlling interest net loss increased 84%, from a net loss of approximately Ps13.5 billion in 2010 to a controlling interest net loss of approximately Ps24.8 billion in 2011.

Liquidity and Capital Resources

Operating Activities

We have satisfied our operating liquidity needs primarily through operations of our subsidiaries and expect to continue to do so for both the short and long-term. Although cash flow from our operations has historically met our overall liquidity needs for operations, servicing debt and funding capital expenditures and acquisitions, our subsidiaries are exposed to risks from changes in foreign currency exchange rates, price and currency controls, interest rates, inflation, governmental spending, social instability and other political, economic and/or social developments in the countries in which they operate, any one of which may materially reduce our net income and cash from operations. Consequently, in order to meet our liquidity needs, we also rely on cost-cutting and operating improvements to optimize capacity utilization and maximize profitability, as well as borrowing under credit facilities, proceeds of debt and equity offerings, and proceeds from asset sales. Our consolidated net cash flows provided by operating activities before financial expenses, Perpetual Debenture coupons and income taxes paid in cash were approximately Ps26.0 billion in 2010, Ps23.6 billion in 2011 and Ps29.9 billion in 2012. See our statement of cash flows included elsewhere in this annual report. Our management is of the opinion that working capital is sufficient for our present requirements.

Sources and Uses of Cash

Our review of sources and uses of resources below refers to nominal amounts included in our statement of cash flows for 2010, 2011 and 2012.

Table of Contents

Our primary sources and uses of cash during the years ended December 31, 2010, 2011 and 2012 were as follows:

	For the Year Ended December 31,		
	2010	2011	2012
	(in millions of Mexican Pesos)		
Operating activities			
Consolidated net loss	(13,436)	(24,767)	(11,219)
Non-cash items	40,011	49,110	43,164
Changes in working capital, excluding income taxes	(623)	(727)	(2,048)
Net cash flows provided by operations before interest and income taxes	25,952	23,616	29,897
Financial expense, Perpetual Debenture coupons and income taxes paid in cash	(19,278)	(17,130)	(24,273)
Net cash flows provided by operating activities	6,674	6,486	5,624
Investing activities			
Property, machinery and equipment, net	(4,726)	(3,198)	(5,597)
Disposal (acquisition) of subsidiaries and associates, net	1,172	1,232	(895)
Other long term assets and others, net	1,682	474	4,258
Net cash flows used in investing activities	(1,872)	(1,492)	(2,234)
Financing activities			
Issuance of common stock	5	11	
Issuance of common stock by subsidiaries			12,442
Derivative financial instruments	69	(5,464)	1,633
Issuance (repayment) of debt, net	(9,615)	5,702	(17,239)
Securitization of trade receivables	121	2,890	(193)
Non-current liabilities and others, net	140	1,430	(1,679)
Net cash flows (used in) provided by financing activities	(9,280)	4,569	(5,036)
Increase (decrease) in cash and cash equivalents	(4,478)	9,563	(1,646)
Conversion effects	(1,272)	(1,789)	(2,004)
Cash and cash equivalents at beginning of period	14,104	8,354	16,128
Cash and cash equivalents at end of period	Ps 8,354	Ps 16,128	Ps 12,478

2012. During 2012, including the negative foreign currency effect of our initial balances of cash and cash equivalents generated during the period of approximately Ps2.0 billion, there was a decrease in cash and cash equivalents of approximately Ps3.7 billion. This decrease was generated by our net cash flows used in financing activities of approximately Ps5.0 billion and our net cash flows used in investing activities of approximately Ps2.2 billion, partially offset by our net cash flows generated by operating activities, which, after financial expense, Perpetual Debenture coupons and income taxes paid in cash of approximately Ps24.3 billion, amounted to approximately Ps5.6 billion.

For the year ended December 31, 2012, our net cash flows provided by operating activities included cash flows applied in working capital of approximately Ps2.0 billion, which was primarily comprised of cash flows applied to other accounts payable and accrued expenses, other accounts receivable and other assets and trade accounts payable, for an aggregate amount of approximately Ps6.4 billion, partially offset by cash flows originated by trade accounts receivable and inventories for an aggregate amount of approximately Ps4.4 billion.

During 2012, our net cash flows provided by operating activities after financial expense, Perpetual Debenture coupons and income taxes paid in cash of approximately Ps5.6 billion, our net resources applied in financing activities of approximately Ps5.0 billion, which include payments to our debt, net for an aggregate

Table of Contents

amount of approximately Ps17.2 billion, partially offset by our cash flows provided by the issuance of common stock by subsidiaries for an aggregate amount of approximately Ps12.4 billion, related mainly in connection with Cemex Latam outstanding common shares.

2011. During 2011, including the negative foreign currency effect of our initial balances of cash and cash equivalents generated during the period of approximately Ps1.8 billion, there was an increase in cash and cash equivalents of approximately Ps7.8 billion. This increase was generated by our net cash flows provided by operating activities, which after financial expense, Perpetual Debenture coupons and income taxes paid in cash of approximately Ps17.1 billion amounted to approximately Ps6.5 billion, and net cash flows provided by financing activities of approximately Ps4.6 billion, partially offset by net cash flows used in investing activities of approximately Ps1.5 billion.

For the year ended December 31, 2011, our net cash flows provided by operating activities included cash flows applied in working capital of approximately Ps727 million, which was primarily composed by cash flows applied to trade accounts receivable, inventories and trade accounts payable for an aggregate amount of approximately Ps3.2 billion, partially offset by cash flows originated by other accounts receivable and other assets and other accounts payable and accrued expenses for an aggregate amount of approximately Ps2.5 billion.

During 2011, our net cash flows provided by operating activities after financial expense, Perpetual Debentures coupons and income taxes paid in cash of approximately Ps6.5 billion, our net resources provided by financing activities of approximately Ps4.6 billion, which include payments to our financial derivative instruments for an aggregate amount of approximately Ps5.5 billion related primarily to the purchase of a capped call and the settlement of options based on the price of our ADSs, and cash flows provided by the disposal of subsidiaries and associates and other long-term assets for an aggregate amount of approximately Ps1.7 billion, were disbursed mainly in connection with capital expenditures of approximately Ps3.2 billion.

2010. During 2010, including the negative foreign currency effect of our initial balances of cash and investments generated during the period of approximately Ps1.3 billion, there was a decrease in cash and investments of approximately Ps5.8 billion. This decrease was generated by net cash flows used in financing activities of approximately Ps9.3 billion and by net cash flows used in investing activities of approximately Ps1.9 billion, partially offset by our net cash flows provided by operating activities, which after financial expenses, Perpetual Debenture coupons and income taxes paid in cash of approximately Ps19.3 billion, amounted to approximately Ps6.7 billion.

For the year ended December 31, 2010, our net cash flows provided by operating activities included cash flows applied in working capital of approximately Ps623 million, which was primarily composed by cash flows applied in other accounts receivable and inventories for an aggregate amount of approximately Ps2.6 billion, partially offset by cash flows originated by trade accounts receivable, trade accounts payable and other accounts payable and accrued expenses for an aggregate amount of approximately Ps1.9 billion.

During 2010, our cash flows were disbursed mainly in connection with our net cash flows used in financing activities of approximately Ps9.3 billion, which include net payments of debt of approximately Ps9.6 billion, and with capital expenditures of approximately Ps4.7 billion.

As of December 31, 2012, we had the following uncommitted lines of credit, at annual interest rates ranging between approximately 2.14% and 10.0%, depending on the negotiated currency:

	Lines of Credit	**Available**
	(in millions of Mexican Pesos)	
Other lines of credit in foreign subsidiaries	6,491	4,243
Other lines of credit from banks	456	

Table of Contents

Capital Expenditures

Our capital expenditures incurred for the years ended December 31, 2011 and 2012, and our expected capital expenditures during 2013, which include an allocation to 2013 of a portion of our total future committed amount, are as follows:

	Actual For the Year Ended December 31, 2011	2012	Estimated in 2013
	(in millions of U.S. Dollars)		
Mexico	87	98	90
United States	66	149	131
Northern Europe			
United Kingdom	47	43	32
Germany	26	35	31
France	22	21	19
Rest of Northern Europe(1)	39	48	45
The Mediterranean			
Egypt	13	21	21
Spain	39	26	12
Rest of Mediterranean(2)	22	24	23
South America and the Caribbean			
Colombia	20	81	75
Rest of South America and the Caribbean(3)	43	38	40
Asia			
Philippines	36	19	15
Rest of Asia(4)	5	5	7
Others	3	1	159
Total consolidated	468	609	700
Of which			
Expansion capital expenditures	136	178	200
Base capital expenditures	332	431	500

(1) Refers mainly to our operations in Ireland, the Czech Republic, Austria, Poland, Hungary and Latvia as well as trading activities in Scandinavia and Finland.
(2) Includes our operations in Croatia, the UAE and Israel.
(3) Includes our operations in Costa Rica, Panama, Puerto Rico, the Dominican Republic, Nicaragua, Peru, Jamaica and other countries in the Caribbean, Guatemala and small ready-mix concrete operations in Argentina.
(4) Includes our operations in Thailand, Bangladesh, China and Malaysia.

For the years ended December 31, 2011 and 2012, we recognized U.S.$468 million and U.S.$609 million in capital expenditures, respectively. As of December 31, 2012, in connection with our significant projects, we had contractually committed capital expenditures of approximately U.S.$700 million, including our capital expenditures estimated to be incurred during 2013. This amount is expected to be incurred during 2013, based on the evolution of the related projects. Pursuant to the Facilities Agreement, we are prohibited from making aggregate annual capital expenditures in excess of U.S.$800 million (excluding certain capital expenditures, joint venture investments and acquisitions by CEMEX Latam and its subsidiaries, which capital expenditures, joint venture investments and acquisitions at any time then incurred are in the aggregate not to exceed U.S.$350.0 million (or its equivalent)).

Table of Contents

Our Indebtedness

As of December 31, 2012, we had approximately Ps218,026 million (U.S.$16,967 million) (principal amount Ps226,957 million (U.S.$17,662 million)) of total debt plus other financial obligations, which does not include approximately Ps6,078 million (U.S.$473 million) of Perpetual Debentures. See notes 16A, 16B and 20D to our 2012 audited consolidated financial statements included elsewhere in this annual report. Of our total debt plus other financial obligations, approximately 3.5% were short-term (including current maturities of long-term debt) and 96.5% were long-term. As of December 31, 2012, approximately 81% of our total debt plus other financial obligations was Dollar-denominated, approximately 14% was Euro-denominated, approximately 5% was Peso-denominated and immaterial amounts were denominated in other currencies.

On August 14, 2009, we entered into the 2009 Financing Agreement, which extended the final maturities of approximately U.S.$15 billion in syndicated and bilateral bank facilities and private placement notes to February 14, 2014. On July 5, 2012, we launched an exchange offer and consent request (the Exchange Offer and Consent Request), to eligible creditors under the 2009 Financing Agreement, pursuant to which eligible creditors were requested to consent to certain amendments to the 2009 Financing Agreement, including the deletion of all mandatory prepayment provisions, the release of the collateral securing the 2009 Financing Agreement and other obligations secured by such collateral, and the deletion of certain representations, information undertakings, financial covenants, general undertakings and events of default thereunder (together, the Amendment Consents). In addition, we offered to exchange the indebtedness owed to such creditors under the 2009 Financing Agreement that were eligible to participate in the Exchange Offer and Consent Request (the Participating Creditors) for (i) new loans (or, in the case of the private placement notes, new private placement notes) or (ii) up to U.S.$500 million of our September 2012 Notes, in each case, in transactions exempt from registration under the Securities Act.

On September 17, 2012, we successfully completed the refinancing transactions contemplated by the Exchange Offer and Consent Request (collectively, the Refinancing Transaction), and we and certain of our subsidiaries entered into (a) an amendment and restatement agreement, dated September 17, 2012 (the Amendment and Restatement Agreement), pursuant to which the Amendment Consents with respect to the 2009 Financing Agreement were given effect, and (b) a facilities agreement, dated September 17, 2012 (the Facilities Agreement), pursuant to which we were deemed to borrow loans from those Participating Creditors participating in the Exchange Offer and Consent Request in principal amounts equal to the principal amounts of indebtedness subject to the 2009 Financing Agreement that was extinguished by such Participating Creditors. As a result of the Refinancing Transaction, participating creditors received (i) approximately U.S.$6.155 billion in aggregate principal amount of new loans and new private placement notes and (ii) U.S.$500 million aggregate principal amount of the September 2012 Notes. In addition, approximately U.S.$525 million aggregate principal amount of loans and private placement notes remained outstanding under the 2009 Financing Agreement as of September 17, 2012. The aggregate principal amount of loans and private placement notes outstanding under the 2009 Financing Agreement was subsequently repaid in full, as a result of prepayments made in accordance with the Facilities Agreement.

As part of the Facilities Agreement, we pledged under pledge agreements or transferred to a trustee under a security trust, as collateral, the Collateral, and all proceeds of the Collateral, to secure our payment obligations under the Facilities Agreement and under several other financing arrangements. These subsidiaries whose shares were pledged or transferred as part of the Collateral collectively own, directly or indirectly, substantially all our operations worldwide. See Item 3 Key Information Risk Factors We pledged the capital stock of subsidiaries that represent substantially all of our business as collateral to secure our payment obligations under the Facilities Agreement, the Senior Secured Notes and other financing arrangements. Upon completion of the Refinancing Transaction, the collateral securing the 2009 Financing Agreement and other obligations secured by such collateral was released.

As of December 31, 2012, we had an aggregate principal amount of outstanding debt under the 2009 Financing Agreement of approximately Ps605 million (U.S.$47 million) (principal amount Ps703 million (U.S.$55 million)) maturing on February 14, 2014. In connection with the issuance of the March 2013 Notes, we used a portion of the proceeds from the offering for the repayment in full of the remaining indebtedness under the 2009 Financing Agreement. See Item 5 Operating and Financial Review and Prospects Recent Developments.

As of December 31, 2012, we had an aggregate principal amount of outstanding debt under the Facilities Agreement of approximately Ps52,406 million (U.S.$4,078 million) (principal amount Ps53,798 million (U.S.$4,187 million)), all of which matures in 2017. However, if we are unable to comply with the milestones for addressing the maturities of certain indebtedness pursuant to the Facilities Agreement, the maturity date of our indebtedness under the Facilities Agreement will spring-back to earlier dates. See Item 3 Key Information Risk Factors If we are unable to comply with the milestones for addressing the maturities of certain indebtedness pursuant to the Facilities Agreement, the maturity date of our indebtedness under the Facilities Agreement will automatically reset, or spring-back, to earlier dates.

For a discussion of restrictions and covenants under the Facilities Agreement, see Item 3 Key Information Risk Factors The Facilities Agreement contains several restrictions and covenants. Our failure to comply with such restrictions and covenants could have a material adverse effect on us.

For a description of the Senior Secured Notes, see Summary of Material Contractual Obligations and Commercial Commitments Senior Secured Notes.

Some of our subsidiaries and special purpose vehicles have issued or provided guarantees of certain of our indebtedness, as indicated in the table below.

	Senior Secured Notes(3)	**Facilities Agreement**	**Perpetual Debentures**	**Eurobonds**	**CBs(4)**
Amount outstanding as of December 31, 2012(1)(2)	U.S.$9,481 million (Ps121,831 million) (principal amount U.S.$9,548 million (Ps122,694 million))	U.S.$4,078 million (Ps52,406 million) (principal amount U.S.$4,187 million (Ps53,798 million))	U.S.$706 million (Ps9,078 million)	U.S.$325 million (Ps4,178 million) (principal amount U.S.$327 million (Ps4,197 million))	U.S.$44 million (Ps568 million)
CEMEX, S.A.B. de C.V.	ü	ü	ü		ü
CEMEX España	ü	ü		ü	
CEMEX México	ü	ü	ü		ü
New Sunward	ü	ü	ü		
CEMEX Corp.	ü	ü			
CEMEX Finance LLC	ü	ü			
CEMEX Research Group	ü	ü			
CEMEX Shipping	ü	ü			
CEMEX Asia	ü	ü			
CEMEX France	ü	ü			
CEMEX UK	ü	ü			
CEMEX Egyptian Investments	ü	ü			
CEMEX Concretos	ü	ü			
Empresas Tolteca	ü	ü			ü
C5 Capital (SPV) Ltd.			ü		
C8 Capital (SPV) Ltd.			ü		
C10 Capital (SPV) Ltd.			ü		
C10-EURCapital (SPV) Ltd.			ü		
CEMEX Finance Europe B.V				ü	

(1) Includes Senior Secured Notes, Perpetual Debentures and Eurobonds held by CEMEX.
(2) As adjusted to give effect to the issuance of the March 2013 Notes, the Eurobond Tender Offer and the prepayment of the 2009 Financing Agreement.

Table of Contents

(3) CEMEX Finance LLC is neither the issuer of, nor does it provide a guarantee for, the May 2010 Notes, Additional May 2010 Notes, January 2011 Notes, Additional January 2011 Notes, April 2011 Notes, March 2012 Notes, September 2012 Notes and March 2013 Notes. On March 25, 2013, CEMEX Corp., CEMEX Concretos and Empresas Tolteca became guarantors of the May 2010 Notes, Additional May 2010 Notes, January 2011 Notes, Additional January 2011 Notes, April 2011 Notes, March 2012 Notes and March 2013 Notes.

(4) Includes long-term secured CBs.

Most of our outstanding indebtedness has been incurred to finance our acquisitions and to finance our capital expenditure programs. Historically, we have addressed our liquidity needs (including funds required to make scheduled principal and interest payments, refinance debt, and fund working capital and planned capital expenditures) with operating cash flow, securitizations, borrowings under credit facilities, proceeds of debt and equity offerings and proceeds from asset sales.

The continued weakness of the global economic environment and its adverse effects on our operating results may negatively affect our credit rating and the market value of our common stock, our CPOs and our ADSs. If current economic pressures continue or worsen, we may be dependent on the issuance of equity as a source to repay our existing indebtedness, including indebtedness under the Facilities Agreement. Although we have been able to raise debt, equity and equity-linked capital in the recent past, previous conditions in the capital markets in 2008 and 2009 were such that traditional sources of capital were not available to us on reasonable terms or at all. As a result, we cannot assure you that we will be able to successfully raise additional debt or equity capital on terms that are favorable to us or at all.

If the global economic environment deteriorates and our operating results worsen significantly, if we were unable to complete debt or equity offerings or if the proceeds of any divestitures and/or our cash flow or capital resources prove inadequate, we could face liquidity problems and may not be able to comply with our upcoming principal payments under our indebtedness or refinance our indebtedness. If we are unable to comply with our upcoming principal maturities under our indebtedness, or refinance or extend maturities of our indebtedness, our debt could be accelerated. Acceleration of our debt would have a material adverse effect on our business and financial condition.

We and our subsidiaries have sought and obtained waivers and amendments to several of our debt instruments relating to a number of financial ratios in the past. Our ability to comply with these ratios may be affected by current global economic conditions and volatility in foreign exchange rates and the financial and capital markets. We may need to seek waivers or amendments in the future. However, we cannot assure you that any future waivers or amendments, if requested, will be obtained. If we or our subsidiaries are unable to comply with the provisions of our debt instruments, and are unable to obtain a waiver or amendment, the indebtedness outstanding under such debt instruments could be accelerated. Acceleration of these debt instruments would have a material adverse effect on our financial condition.

Relevant Transactions Related to Our Indebtedness During 2012

As of December 31, 2012, as adjusted to give effect to the issuance of the March 2013 Notes, the Eurobond Tender Offer and the prepayment of the 2009 Financing Agreement, we had approximately Ps221,971 million (U.S.$17,274 million) (principal amount Ps230,863 million (U.S.$17,966 million)) of total debt plus other financial obligations, which does not include approximately Ps6,078 million (U.S.$473 million) of Perpetual Debentures. Our financing activities through December 31, 2011 are described in the 2011 20-F. The following is a description of our most relevant transactions related to our indebtedness in 2012:

On March 28, 2012, CEMEX España, acting through its Luxembourg branch, issued U.S.$704 million aggregate principal amount and 179 million aggregate principal amount of the March 2012 Notes in exchange for Perpetual Debentures and the Eurobonds, pursuant to separate private placement exchange offers directed to the holders of Perpetual Debentures and Eurobonds, in transactions exempt from registration pursuant to Section 4(2) of the Securities Act.

148

On September 17, 2012, we successfully completed the Refinancing Transaction, and we and certain of our subsidiaries entered into (a) the Amendment and Restatement Agreement pursuant to which the Amendment Consents were given effect, and (b) the Facilities Agreement, pursuant to which we were deemed to borrow loans from those Participating Creditors participating in the Exchange Offer and Consent Request in principal amounts equal to the principal amounts of indebtedness subject to the 2009 Financing Agreement that was extinguished by such Participating Creditors. In addition, on September 17, 2012, CEMEX, S.A.B. de C.V. issued U.S.$500 million aggregate principal amount of the September 2012 Notes to such participating creditors that elected to receive the September 2012 Notes in place of all or a portion of their indebtedness subject to the 2009 Financing Agreement. See Liquidity and Capital Resources Our Indebtedness.

On October 12, 2012, CEMEX Finance LLC issued U.S.$1.5 billion aggregate principal amount of the October 2012 Notes in transactions exempt from registration pursuant to Rule 144A and Regulation S under the Securities Act.

We used a substantial portion of the proceeds from these transactions to repay and refinance indebtedness, to improve our liquidity position and for general corporate purposes. Through these and prior repayments, including from the proceeds of the CEMEX Latam Offering, taken together with the repayment in full of the remaining indebtedness under the 2009 Financing Agreement in connection with the issuance of the March 2013 Notes (see Recent Developments), we have addressed all maturities under the 2009 Financing Agreement and have addressed all maturities under the Facilities Agreement until February 14, 2017.

Our Other Financial Obligations

Other financial obligations in the consolidated balance sheet as of December 31, 2011 and 2012 are detailed as follows:

	December 31, 2011			December 31, 2012		
	Short-term	Long-term	Total	Short-term	Long-term	Total
I. Convertible subordinated notes due 2018	Ps	7,451	7,451	Ps	7,100	7,100
I. Convertible subordinated notes due 2016		11,236	11,236		10,786	10,768
II. Convertible subordinated notes due 2015		8,829	8,829		8,397	8,397
III. Convertible securities due 2019	131	1,703	1,834	152	1,561	1,713
IV. Liabilities secured with accounts receivable	7,052	2,500	9,552	6,013	2,500	8,513
V. Capital leases	528	1,471	1,999	813	2,587	3,400
	Ps 7,711	33,190	40,901	Ps 6,978	32,913	39,891

As mentioned in note 2L to our 2012 audited consolidated financial statements included elsewhere in this annual report, financial instruments convertible into our CPOs and/or ADSs contain components of both liability and equity, which are recognized differently depending if the instrument is mandatorily convertible, or is optionally convertible by election of the note holders.

2011 Optional Convertible Subordinated Notes

On March 15, 2011, CEMEX, S.A.B. de C.V. closed the offering of U.S.$978 million (Ps11,632 million) aggregate principal amount of 3.25% Convertible Subordinated Notes due 2016 and U.S.$690 million (Ps8,211 million) aggregate principal amount of 3.75% Convertible Subordinated Notes due 2018. The aggregate principal amounts reflect the full exercise of the U.S.$177.5 million and U.S.$90 million over-allotment option granted to the relevant initial purchasers of the 3.25% Convertible Subordinated Notes due 2016 and the 3.75% Convertible Subordinated Notes due 2018, respectively. The 2011 Optional Convertible Subordinated Notes are subordinated to all of CEMEX s liabilities and commitments. The initial conversion price was equivalent to an approximate 30% premium to the closing price of our ADSs on March 9, 2011, and the notes are convertible into our ADSs, at any time after June 30, 2011. A portion of the net proceeds from this transaction were used to fund the purchase

Table of Contents

of capped call transactions. During 2012 and 2011, changes in the fair value of these capped call transactions generated a gain of approximately U.S.$155 million (Ps1,973 million) and a loss of approximately U.S.$153 million (Ps1,906 million), respectively, which were recognized within Other financial income (expense), net in the statements of operations (see note 16D to our 2012 audited consolidated financial statements included elsewhere in this annual report), which are generally expected to reduce the potential dilution cost to CEMEX, S.A.B. de C.V. upon future conversion of the 2011 Optional Convertible Subordinated Notes. As a result of the issuance, substantially all the new shares approved at CEMEX, S.A.B. de C.V. s extraordinary shareholders meeting on February 24, 2011 (see note 20 to our 2012 audited consolidated financial statements included elsewhere in this annual report) were reserved by CEMEX, S.A.B. de C.V. to satisfy conversion of these notes. After antidilution adjustments, the conversion rate as of December 31, 2012 was 95.8525 ADSs per U.S.$1,000 principal amount of such notes and as of March 21, 2013, has been further adjusted to 99.6866 ADS per U.S.$1,000 principal amount of such notes, reflecting the issuance of CPOs in connection with the recapitalization of earnings approved by shareholders at the 2012 annual general ordinary shareholders meeting held on March 21, 2013. In addition, considering that the currency in which the notes are denominated and the functional currency of the issuer differ, under IFRS, we separated the conversion options embedded in these notes and recognized them as a freestanding derivative at fair value through the statements of operations. Changes in fair value of such conversion options generated a loss in 2012 for approximately U.S.$243 million (Ps3,078 million) and a gain in 2011 for approximately U.S.$279 million (Ps3,482 million) (see note 16D to our 2012 audited consolidated financial statements included elsewhere in this annual report).

2010 Optional Convertible Subordinated Notes

On March 30, 2010, CEMEX, S.A.B. de C.V. issued U.S.$715 million (Ps8,837 million) aggregate principal amount of 4.875% Optional Convertible Subordinated Notes due 2015, including the full exercise of the U.S.$65 million over-allotment option granted to the initial purchasers of the notes. The 2010 Optional Convertible Subordinated Notes are subordinated to all of CEMEX s liabilities and commitments. The holders of the 2010 Optional Convertible Subordinated Notes have the option to convert their notes for our ADSs at a conversion price per ADS 30% higher than the ADS price at the pricing of the transaction. In connection with the offering, CEMEX, S.A.B. de C.V. entered into a capped call transaction expected to generally reduce the potential dilution cost to CEMEX, S.A.B. de C.V. upon future conversion of the 2015 Notes. During 2012 and 2011, changes in the fair value of this capped call transaction generated a gain of approximately U.S.$47 million (Ps594 million) and a loss of approximately U.S.$79 million (Ps984 million), respectively, which were recognized within Other financial income (expense), net in the statements of operations (see note 16D to our 2012 audited consolidated financial statements included elsewhere in this annual report). After antidilution adjustments, the conversion rate as of December 31, 2012 was 82.7227 ADSs per U.S.$1,000 principal amount of such notes and as of March 21, 2013, has been further adjusted to 86.0316 ADS per U.S.$1,000 principal amount of such notes, reflecting the issuance of CPOs in connection with the recapitalization of earnings approved by shareholders at the 2012 annual general ordinary shareholders meeting held on March 21, 2013. In addition, considering that the currency in which the notes are denominated and the functional currency of the issuer differ, under IFRS, we separated the conversion option embedded in these notes and recognized it as a freestanding derivative at fair value through the statements of operations. Changes in fair value of the conversion option generated a loss in 2012 for approximately U.S.$56 million (Ps708 million) and a gain in 2011 for approximately U.S.$97 million (Ps1,211 million) (see note 16D to our 2012 audited consolidated financial statements included elsewhere in this annual report).

Mandatory Convertible Notes

In December 2009, CEMEX, S.A.B. de C.V. completed its offer to exchange CBs issued in Mexico with maturities between 2010 and 2012, into Mandatorily Convertible Notes for approximately Ps4,126 million (U.S.$315 million). Reflecting antidilution adjustments, at their scheduled conversion in ten years or earlier if the price of the CPO reaches approximately $30.68, the securities will be mandatorily convertible into approximately 202 million CPOs at a conversion price of approximately $20.4510 per CPO. During their tenure, the securities yield a 10% interest payable quarterly. Holders have an option to voluntarily convert their securities, after the first anniversary of their issuance, on any interest payment date into CPOs. The equity component for Ps1,971 million was recognized within Other equity reserves. See note 16B to our 2012 audited consolidated financial statements included elsewhere in this annual report.

Our Receivables Financing Arrangements

Our subsidiaries in the United States, Mexico and France (which incorporated the sale of trade receivables in the United Kingdom) are parties to sales of trade accounts receivable programs with financial institutions, referred to as securitization programs. As of December 31, 2011 and 2012, trade accounts receivable include receivables of Ps12,733 million (U.S.$912 million) and Ps10,792 million (U.S.$840 million), respectively. In October 2012, CEMEX terminated its program in Spain. Under these programs, our subsidiaries effectively surrender control associated with the trade accounts receivable sold and there is no guarantee or obligation to reacquire the assets. However, we retain certain residual interest in the programs and/or maintain continuing involvement with the accounts receivable; therefore, the amounts received are recognized within Other financial obligations. Trade accounts receivable qualifying for sale exclude amounts over certain days past due or concentrations over certain limits to any one customer, according to the terms of the programs. The portion of the accounts receivable sold maintained as reserves amounted to Ps3,181 million and Ps2,280 million as of December 31, 2011 and 2012, respectively. Therefore, the funded amount to CEMEX was Ps$8,512 million (U.S.$662 million) in 2012 and Ps$9,552 million (U.S.$684 million) in 2011. The discount granted to the acquirers of the trade accounts receivable is recorded as financial expense and amounted to approximately Ps390 million (U.S.$31 million) and Ps368 million (U.S.$29 million) in 2011 and 2012, respectively. Our securitization programs are negotiated for specific periods and should be renewed at their maturity. The securitization programs outstanding as of December 31, 2012 in Mexico and the United States were initiated or renewed during 2012 and mature in October 2015 and May 2013, respectively. The securitization programs in France and the United Kingdom were renewed in 2013 and currently mature in March 2014.

Capital leases

As of December 31, 2011 and 2012, we held several operating assets, mainly mobile equipment, under capital lease contracts for a total of approximately U.S.$143 million (Ps1,999 million) and U.S.$265 million (Ps3,400 million), respectively. Future payments associated with these contracts are presented in note 23E to our 2012 audited consolidated financial statements included elsewhere in this annual report.

Our Equity Forward Arrangements

In connection with the sale of CPOs of Axtel (note 16D to our 2012 audited consolidated financial statements included elsewhere in this annual report) and in order to maintain exposure to changes in the price of such entity, in March 2008, we entered into a forward contract to be settled in cash over the price of 119 million CPOs of Axtel (59.5 million CPOs with each counterparty), which was originally set to mature in April 2011. During 2009, in order to reset the exercise price included in the contract, we instructed the counterparties to definitively dispose of the deposits in margin accounts for approximately Ps207 million, and each of the counterparties exercised an option to maintain the contract over their respective 59.5 million CPOs of Axtel until October 2011. During 2010, one of the counterparties further extended the maturity of 50% of the notional amount of this forward contract to April 2012. In addition, during 2011, the other counterparty further extended the maturity of its contract also until April 2012. During 2012, one of the contracts was further extended until October 2013, while other contracts reached its scheduled maturity in April 2012. In March 2012, CEMEX renewed the forward contract to be settled in cash over the price of 59.5 CPOs of Axtel, which is extended until October 2013. Changes in the fair value of this instrument generated losses of approximately U.S.$35 million (Ps437 million) in 2011, and approximately U.S.$7 million (Ps100 million) in 2012.

Perpetual Debentures

As of December 31, 2011 and 2012, non-controlling interest stockholders equity included approximately U.S.$938 million (Ps13,089 million) and U.S.$473 million (Ps6,078 million), respectively, representing the

Table of Contents

principal amount of the Perpetual Debentures. The Perpetual Debentures have no fixed maturity date and do not represent a contractual payment obligation for us. Based on their characteristics, the Perpetual Debentures, issued through special purpose vehicles, or SPVs, qualify as equity instruments under IFRS and are classified within non-controlling interest as they were issued by consolidated entities, considering that there is no contractual obligation to deliver cash or any other financial asset, the Perpetual Debentures do not have any maturity date, meaning that they were issued to perpetuity, and, if the conditions to interest deferred are satisfied, we have the unilateral right to defer indefinitely the payment of interest due on the Perpetual Debentures. Issuance costs, as well as the interest expense, which is accrued based on the principal amount of the Perpetual Debentures, are included within Other equity reserves and represented expenses of approximately Ps1,010 million and Ps453 million in 2011 and 2012, respectively. The different SPVs were established solely for purposes of issuing the Perpetual Debentures and are included in our 2012 audited consolidated financial statements included elsewhere in this annual report. As of December 31, 2012, the Perpetual Debentures were as follows:

Issuer	Issuance Date	Nominal Amount at Issuance Date (in millions)	Nominal Amount Outstanding as of December 31, 2012 (in millions)(2)	Repurchase Option	Interest Rate
C5 Capital (SPV) Ltd(1).	December 2006	U.S.$ 350	U.S.$ 69	Fifth anniversary and at every coupon payment date thereafter	LIBOR + 4.277%
C8 Capital (SPV) Ltd.	February 2007	U.S.$ 750	U.S.$ 137	Eighth anniversary	6.640%
C10 Capital (SPV) Ltd.	December 2006	U.S.$ 900	U.S.$ 183	Tenth anniversary	6.722%
C10-EUR Capital (SPV) Ltd.	May 2007	730	64	Tenth anniversary	6.277%

(1) Because we did not exercise our repurchase option by December 31, 2011, the annual interest rate of this series changed to 3-month LIBOR plus 4.277%, which will be reset quarterly. Interest payments on this series will be made quarterly instead of semi-annually. We are not permitted to call these Perpetual Debentures under the Facilities Agreement. As of December 31, 2012, 3-month LIBOR was approximately 0.306%.

(2) Excludes the notional amount of Perpetual Debentures held by subsidiaries, acquired in December 2011 through a series of asset swaps. See notes 16A and 20D to our 2012 audited consolidated financial statements included elsewhere in this annual report.

Stock Repurchase Program

Under Mexican law, our shareholders may authorize a stock repurchase program at our annual general ordinary shareholders meeting. Unless otherwise instructed by our shareholders, we are not required to purchase any minimum number of shares pursuant to such program.

In connection with CEMEX, S.A.B. de C.V. s 2010, 2011 and 2012 annual general ordinary shareholders meetings held on February 24, 2011, February 23, 2012 and March 21, 2013, respectively, no stock repurchase program has been proposed between February 2011 and the date of this annual report. Subject to certain exceptions, we are not permitted to repurchase shares of our capital stock under the Facilities Agreement and the indentures governing the Senior Secured Notes.

Research and Development, Patents and Licenses, etc.

Our research and development, or R&D, efforts help us in achieving our goal of increasing market share in the markets in which we operate. The department of the Vice President of Technology and Safety is responsible for developing new products for our cement, ready-mix concrete, aggregate and admixture businesses that respond to our clients needs, as well as introduce new or improved processing and equipment technology for all our core businesses. The department of the Vice President of Energy and Sustainability has the responsibility to optimize operational efficiencies and reduce our costs and environmental impact through the usage of alternative or biomass fuels, and energy management systems. For example, we have developed processes and products that allow us to reduce heat consumption in our kilns, which in turn reduces energy costs. Products have also been developed that provide our customers with solutions with better performance and overall lower environment footprint in the whole value chain. We believe this has helped us to keep or increase our market share in many of the markets in which we operate.

We have nine laboratories dedicated to our R&D efforts. Eight of these laboratories are strategically located in close proximity to our plants to assist our operating subsidiaries with troubleshooting, optimization techniques and quality assurance methods. One of our laboratories is located in Switzerland, where we are continually improving and consolidating our research and development efforts in the areas of cement, concrete, aggregates, admixtures, mortar and asphalt technology, as well as in business processes, information technology and energy management. We have actively registering patents and pending applications in many of the countries in which we operate. These patent registrations and applications relate primarily to different solutions, materials, additives used in the construction industry and the production processes related to them, as well as processes to decrease the use of scarce resources and improve our use of alternative fuels and raw materials.

Our Information Technology divisions have developed information management systems and software relating to cement and ready-mix concrete operational practices, automation and maintenance. These systems have helped us to better serve our clients with respect to purchasing, delivery and payment.

R&D activities comprise part of the daily routine of the departments and divisions mentioned above; therefore, the costs associated with such activities are expensed as incurred. However, the costs incurred in the development of software for internal use are capitalized and amortized in operating results over the estimated useful life of the software, which is approximately five years.

In 2010, 2011 and 2012, the combined total expense of the departments of the Vice President of Energy, Vice President of Technology, which includes R&D activities, amounted to approximately Ps519 million (U.S.$41 million), Ps487 million (U.S.$39 million) and Ps514 million (U.S.$40 million), respectively.

Trend Information

Other than as disclosed elsewhere in this annual report, we are not aware of any trends, uncertainties, demands, commitments or events for the year ended December 31, 2012 that are reasonably likely to have a material and adverse effect on our net sales, income, profitability, liquidity or capital resources, or that would cause the disclosed financial information to be not necessarily indicative of future results of operations or financial conditions.

Summary of Material Contractual Obligations and Commercial Commitments

The 2009 Financing Agreement

On August 14, 2009, we entered into the 2009 Financing Agreement. The 2009 Financing Agreement extended the final maturities of approximately U.S.$15 billion in syndicated and bilateral bank facilities and private placement notes to February 14, 2014, providing for a semi-annual amortization schedule, and, prior to giving effect to the Refinancing Transaction, we had reduced indebtedness under the 2009 Financing Agreement by approximately U.S.$7.7 billion. Upon completion of the Refinancing Transaction, the collateral securing the 2009 Financing Agreement and other obligations secured by such collateral was released. As of December 31, 2012, we had an aggregate principal amount of outstanding debt under the 2009 Financing Agreement of approximately Ps605 million (U.S.$47 million) (principal amount Ps703 million (U.S.$55 million)) maturing on February 14, 2014. In connection with the issuance of the March 2013 Notes, we used a portion of the proceeds from the offering for the repayment in full of the remaining indebtedness under the 2009 Financing Agreement. See Recent Developments.

Table of Contents

The Facilities Agreement

As a result of the Refinancing Transaction, on September 17, 2012, we entered into the Facilities Agreement. See Liquidity and Capital Resources Our Indebtedness. As of December 31, 2012, we had an aggregate principal amount of outstanding debt under the Facilities Agreement of approximately Ps52,406 million (U.S.$4,078 million) (principal amount Ps53,798 million (U.S.$4,187 million)), all of which matures in 2017. Additionally, if we are unable to comply with the milestones for addressing the maturities of certain indebtedness pursuant to the Facilities Agreement, the maturity date of our indebtedness under the Facilities Agreement will spring-back to earlier dates. See Item 3 Key Information Risk Factors If we are unable to comply with the milestones for addressing the maturities of certain indebtedness pursuant to the Facilities Agreement, the maturity date of our indebtedness under the Facilities Agreement will automatically reset, or spring-back, to earlier dates.

The Facilities Agreement is secured by a first-priority security interest over the Collateral and all proceeds of such Collateral.

For a discussion of restrictions and covenants under the Facilities Agreement, see Item 3 Key Information Risk Factors The Facilities Agreement contains several restrictions and covenants. Our failure to comply with such restrictions and covenants could have a material adverse effect on us.

Senior Secured Notes

The indentures governing the Senior Secured Notes impose significant operating and financial restrictions on us. These restrictions will limit our ability, among other things, to: (i) incur debt; (ii) pay dividends on stock; (iii) redeem stock or redeem subordinated debt; (iv) make investments; (v) sell assets, including capital stock of subsidiaries; (vi) guarantee indebtedness; (vii) enter into agreements that restrict dividends or other distributions from restricted subsidiaries; (viii) enter into transactions with affiliates; (ix) create or assume liens; (x) engage in mergers or consolidations; and (xi) enter into a sale of all or substantially all of our assets.

December 2009 Notes. On December 14, 2009, our subsidiary, CEMEX Finance LLC, issued U.S.$1,250 million aggregate principal amount of its 9.50% Dollar-Denominated Notes and 350,000,000 aggregate principal amount of its 9.625% Euro-Denominated Notes, or together, the December 2009 Notes, in transactions exempt from registration pursuant to Rule 144A and Regulation S under the Securities Act. On January 19, 2010, CEMEX Finance LLC issued an additional U.S.$500,000,000 aggregate principal amount of its 9.50% Dollar-Denominated Notes. CEMEX, S.A.B. de C.V., CEMEX México, CEMEX España, New Sunward, Cemex Asia B.V. (CEMEX Asia), CEMEX Concretos, S.A. de C.V. (CEMEX Concretos), CEMEX Corp., Cemex Egyptian Investments B.V. (CEMEX Egyptian Investments), CEMEX France Gestion (S.A.S.) (CEMEX France), Cemex Research Group AG (CEMEX Research Group), Cemex Shipping B.V. (CEMEX Shipping), CEMEX UK and Empresas Tolteca de México, S.A. de C.V. (Empresas Tolteca) have fully and unconditionally guaranteed the performance of all obligations of CEMEX Finance LLC under the December 2009 Notes on a senior basis. The payment of principal, interest and premium, if any, on such notes is secured by a first-priority security interest over the Collateral and all proceeds of such Collateral.

May 2010 Notes. On May 12, 2010, CEMEX España, acting through its Luxembourg branch, issued U.S.$1,067,665,000 aggregate principal amount of its 9.25% Dollar-Denominated Notes and 115,346,000 aggregate principal amount of its 8.875% Euro-Denominated Notes, or together, the May 2010 Notes, in exchange for a majority in principal amount of the then outstanding Perpetual Debentures pursuant to exchange offers, in private transactions exempt from registration pursuant to Section 4(2) of the Securities Act and Regulation S under the Securities Act. In addition, on March 4, 2011, CEMEX España, acting through its Luxembourg branch, issued an additional U.S.$125,331,000 aggregate principal amount of the Additional May 2010 Notes, in exchange for 119,350,000 aggregate principal amount of the 6.277% Debentures, pursuant to an exchange offer, in a private transaction exempt from registration pursuant to Regulation S under the Securities Act. CEMEX, S.A.B. de C.V., CEMEX México, New Sunward, CEMEX Asia, CEMEX Concretos, CEMEX Corp., CEMEX Egyptian Investments, CEMEX France, CEMEX Research Group, CEMEX Shipping, CEMEX

Table of Contents

UK and Empresas Tolteca have fully and unconditionally guaranteed the performance of all obligations of CEMEX España under the May 2010 Notes, including the Additional May 2010 Notes, on a senior basis. The payment of principal, interest and premium, if any, on such notes is secured by a first-priority security interest over the Collateral and all proceeds of such Collateral.

January 2011 Notes. On January 11, 2011, CEMEX, S.A.B. de C.V. issued U.S.$1,000,000,000 aggregate principal amount of its 9.000% Senior Secured Notes due 2018, or the January 2011 Notes, in transactions exempt from registration pursuant to Rule 144A and Regulation S under the Securities Act. On July 11, 2011, CEMEX, S.A.B. de C.V. issued an additional U.S.$650,000,000 aggregate principal amount of the Additional January 2011 Notes. CEMEX México, CEMEX España, New Sunward, CEMEX Asia, CEMEX Concretos, CEMEX Corp., CEMEX Egyptian Investments, CEMEX France, CEMEX Research Group, CEMEX Shipping, CEMEX UK and Empresas Tolteca have fully and unconditionally guaranteed the performance of all obligations of CEMEX, S.A.B. de C.V. under the January 2011 Notes and the Additional January 2011 Notes on a senior basis. The payment of principal, interest and premium, if any, on such notes is secured by a first-priority security interest over the Collateral and all proceeds of such Collateral.

April 2011 Notes. On April 5, 2011, CEMEX, S.A.B. de C.V. issued U.S.$800,000,000 aggregate principal amount of its Floating Rate Senior Secured Notes due 2015, or the April 2011 Notes, in transactions exempt from registration pursuant to Rule 144A and Regulation S under the Securities Act. CEMEX México, CEMEX España, New Sunward, CEMEX Asia, CEMEX Concretos, CEMEX Corp., CEMEX Egyptian Investments, CEMEX France, CEMEX Research Group, CEMEX Shipping, CEMEX UK and Empresas Tolteca have fully and unconditionally guaranteed the performance of all obligations of CEMEX, S.A.B. de C.V. under the April 2011 Notes on a senior basis. The payment of principal, interest and premium, if any, on such notes is secured by a first-priority security interest over the Collateral and all proceeds of such Collateral.

March 2012 Notes. On March 28, 2012, CEMEX España, acting through its Luxembourg branch, issued U.S.$703,861,000 aggregate principal amount of its 9.875% U.S. Dollar-Denominated Senior Secured Notes Due 2019 and 179,219,000 aggregate principal amount of its 9.875% U.S. Dollar-Denominated Senior Secured Notes Due 2019, or together, the March 2012 Notes, in exchange for Perpetual Debentures and Eurobonds pursuant to separate private placement exchange offers directed to the holders of Perpetual Debentures and Eurobonds, in transactions exempt from registration pursuant to Section 4(2) of the Securities Act. Such exchange offers were made within the United States only to qualified institutional buyers (as defined in Rule 144A under the Securities Act), and outside the United States to persons that are not U.S. persons, as such term is defined in Rule 902(k) of Regulation S under the Securities Act and who participated in the transactions in accordance with Regulation S. CEMEX, S.A.B. de C.V., CEMEX México, New Sunward, CEMEX Asia, CEMEX Concretos, CEMEX Corp., CEMEX Egyptian Investments, CEMEX France, CEMEX Research Group, CEMEX Shipping, CEMEX UK and Empresas Tolteca have fully and unconditionally guaranteed the performance of all obligations of CEMEX España under the March 2012 Notes on a senior basis. The payment of principal, interest and premium, if any, on such notes is secured by a first-priority security interest over the Collateral and all proceeds of such Collateral.

September 2012 Notes. In connection with the Refinancing Transaction, on September 17, 2012, CEMEX, S.A.B. de C.V. issued U.S.$500,000,000 aggregate principal amount of its 9.50% Senior Secured Notes due 2018, or the September 2012 Notes, to participating creditors that elected to receive the September 2012 Notes in place of all or a portion of their indebtedness subject to the 2009 Financing Agreement. CEMEX México, CEMEX España, New Sunward, CEMEX Asia, CEMEX Concretos, CEMEX Corp., CEMEX Egyptian Investments, CEMEX France, CEMEX Research Group, CEMEX Shipping, CEMEX UK and Empresas Tolteca have fully and unconditionally guaranteed the performance of all obligations of CEMEX, S.A.B. de C.V. under the September 2012 Notes on a senior basis. The payment of principal, interest and premium, if any, on such notes is secured by a first-priority security interest over the Collateral and all proceeds of such Collateral.

October 2012 Notes. On October 12, 2012, our subsidiary, CEMEX Finance LLC, issued U.S.$1.5 billion aggregate principal amount of its 9.375% Senior Secured Notes due 2022, or the October 2012 Notes, in transactions exempt from registration pursuant to Rule 144A and Regulation S under the Securities Act.

CEMEX, S.A.B. de C.V., CEMEX México, CEMEX España, New Sunward, CEMEX Asia, CEMEX Concretos, CEMEX Corp., CEMEX Egyptian Investments, CEMEX France, CEMEX Research Group, CEMEX Shipping, CEMEX UK and Empresas Tolteca have fully and unconditionally guaranteed the performance of all obligations of CEMEX Finance LLC under the October 2012 Notes on a senior basis. The payment of principal, interest and premium, if any, on such notes is secured by a first-priority security interest over the Collateral and all proceeds of such Collateral.

March 2013 Notes. On March 25, 2013, CEMEX, S.A.B. de C.V. issued U.S.$600,000,000 aggregate principal amount of its 5.875% Senior Secured Notes due 2019, or the March 2013 Notes, in transactions exempt from registration pursuant to Rule 144A and Regulation S under the Securities Act. CEMEX México, CEMEX España, New Sunward, CEMEX Asia, CEMEX Concretos, CEMEX Corp., CEMEX Egyptian Investments, CEMEX France, CEMEX Research Group, CEMEX Shipping, CEMEX UK and Empresas Tolteca have fully and unconditionally guaranteed the performance of all obligations of CEMEX, S.A.B. de C.V. under the March 2013 Notes. The payment of principal, interest and premium, if any, on such notes is secured by a first-priority security interest over the Collateral and all proceeds of such Collateral.

Mandatory Convertible Notes

On December 10, 2009, CEMEX, S.A.B. de C.V. issued approximately Ps4.1 billion (approximately U.S.$315 million) in Mandatory Convertible Notes, in exchange for CBs maturing on or before December 31, 2012, pursuant to an exchange offer conducted in Mexico, in transactions exempt from registration pursuant to Regulation S under the Securities Act. The Mandatory Convertible Notes are mandatorily convertible into newly issued CPOs at a conversion price per CPO (calculated as the volume-weighted average price of the CPO for the ten trading days prior to the closing of the exchange offer multiplied by a conversion premium of approximately 1.65), accrue interest, payable in cash, at 10% per annum, provide for the payment of a cash penalty fee, equal to approximately one year of interest, upon the occurrence of certain anticipated conversion events, and mature on November 28, 2019. After antidilution adjustments, the conversion rate as of December 31, 2012 was 418.4494 CPOs per each obligation, equivalent to a conversion price of approximately Ps21.27 per CPO and as of March 21, 2013, has been further adjusted to 435.1874 CPOs per each obligation, equivalent to a conversion price of approximately Ps20.4510 per CPO, reflecting the issuance of CPOs in connection with the recapitalization of earnings approved by shareholders at the 2012 annual general ordinary shareholders meeting held on March 21, 2013.

Convertible Subordinated Notes

2010 Optional Convertible Subordinated Notes. On March 30, 2010, CEMEX, S.A.B. de C.V. issued U.S.$715,000,000 aggregate principal amount of its 4.875% Convertible Subordinated Notes due 2015, or the 2010 Optional Convertible Subordinated Notes, including the initial purchasers exercise in full of their over-allotment option, in transactions exempt from registration pursuant to Rule 144A under the Securities Act. The conversion rate at issuance was 73.5402 ADSs per U.S.$1,000 principal amount of 2010 Optional Convertible Subordinated Notes. After antidilution adjustments, the conversion rate as of December 31, 2012 was 82.7227 ADSs per U.S.$1,000 principal amount of such notes and as of March 21, 2013, has been further adjusted to 86.0316 ADS per U.S.$1,000 principal amount of such notes, reflecting the issuance of CPOs in connection with the recapitalization of earnings approved by shareholders at the 2012 annual general ordinary shareholders meeting held on March 21, 2013. We used a portion of the net proceeds from the offering of the 2010 Optional Convertible Subordinated Notes to fund the purchase of a capped call transaction, which are expected generally to reduce the potential cost to CEMEX upon future conversion of the 2010 Optional Convertible Subordinated Notes.

2011 Optional Convertible Subordinated Notes. On March 15, 2011, CEMEX, S.A.B. de C.V. issued U.S.$977.5 million aggregate principal amount of its 3.25% Convertible Subordinated Notes due 2016 and U.S.$690 million aggregate principal amount of its 3.75% Convertible Subordinated Notes due 2018, or together, the 2011 Optional Convertible Subordinated Notes, including the initial purchasers exercise in full of their over-allotment options, in transactions exempt from registration pursuant to Rule 144A and Regulation S under the Securities Act. The 2011 Optional Convertible Subordinated Notes are convertible into ADSs, at any time after June 30, 2011. The initial conversion price for the 2011 Optional Convertible Subordinated Notes was equivalent to approximately U.S.$11.28 per ADS, a 30% premium to the closing price of ADSs on March 9, 2011. After antidilution adjustments, the conversion rate as of December 31, 2012 was 95.8525 ADSs per U.S.$1,000 principal amount of such notes and as of March 21, 2013, has been further adjusted to 99.6866 ADS per U.S.$1,000 principal amount of such notes, reflecting the issuance of CPOs in connection with the recapitalization of earnings approved by shareholders at the 2012 annual general ordinary shareholders meeting held on March 21, 2013. We used a portion of the net proceeds from the offering of the 2011 Optional Convertible Subordinated Notes to fund the purchase of capped call transactions, which are expected generally to reduce the potential cost to CEMEX upon future conversion of the 2011 Optional Convertible Subordinated Notes.

Commercial Commitments

As of December 31, 2011 and 2012, we had commitments for the purchase of raw materials for an approximate amount of U.S.$184 million and U.S.$127 million, respectively.

On July 27, 2012, we entered into a Master Professional Services Agreement with IBM. This agreement provides the framework for our contracting for IBM to provide us with the following services: information technology, application development and maintenance, finance and accounting outsourcing, human resources administration and contact center services. The agreement provides for these services to be provided to us from July 27, 2012 until August 31, 2022, unless earlier terminated. Our minimum required payments to IBM under the agreement are approximately U.S.$50 million per year. We will have the right to adjust the cost and quality of the services every two years if it is determined that they do not meet certain benchmarks. We may terminate the agreement (or a portion of it) at our discretion and without cause at any time by providing at least six-months notice to IBM and paying termination charges consisting of IBM s unrecovered investment and breakage and wind-down costs. In addition, we may terminate the agreement (or a portion of it) for cause without paying termination charges. Other termination rights may be available to us for a termination charge that will vary with the reason for termination. IBM may terminate the agreement if we (i) fail to make payments when due or (ii) become bankrupt and do not pay in advance for the services.

In 2006, in order to take advantage of the high wind potential in the Tehuantepec Isthmus, CEMEX and ACCIONA formed an alliance to develop a wind farm project for the generation of 250 megawatts in the Mexican state of Oaxaca. We acted as promoter of the project, which was named EURUS. ACCIONA provided the required financing, constructed the facility and currently owns and operates the wind farm. The operation of the 167 wind turbines on the farm commenced on November 15, 2009. The agreements between CEMEX and ACCIONA established that CEMEX s plants in Mexico will acquire a portion of the energy generated by the wind farm for a period of at least 20 years, which began in February 2010, when EURUS reached the committed limit capacity. For the years ended December 31, 2011 and 2012, EURUS supplied approximately 23.7% and 29.1%, respectively, of CEMEX s overall electricity needs in Mexico during such years.

In 1999, CEMEX entered into an agreement with an international partnership, which built and operated an electrical energy generating plant in Mexico called Termoeléctrica del Golfo, or TEG. In 2007, another international company replaced the original operator. The agreement established that CEMEX would purchase the energy generated for a term of not less than 20 years, which started in April 2004. In addition, CEMEX committed to supply TEG all fuel necessary for its operations, a commitment that has been hedged through a 20-year agreement entered with PEMEX, which terminates in 2024. With the change of the operator in 2007, CEMEX extended the term of its agreement with TEG until 2027. Consequently, for the last 3 years of the agreement, CEMEX intends to purchase the required fuel in the market. For the years ended December 31, 2011 and 2012, the power plant has supplied approximately 69% and 68%, respectively, of CEMEX s overall electricity needs during such years for its cement plants in Mexico.

Table of Contents

In March 1998, we entered into a 20-year contract with PEMEX providing that PEMEX s refinery in Cadereyta would supply us with 0.9 million tons of petcoke per year, commencing in 2003. In July 1999, we entered into a second 20-year contract with PEMEX providing that PEMEX s refinery in Madero would supply us with 0.85 million tons of petcoke per year, commencing in 2002. We expect the PEMEX petcoke contracts to reduce the volatility of our fuel costs and provide us with a consistent source of petcoke throughout their 20-year terms (which expire in July 2023 for the Cadereyta refinery contract and October 2022 for the Madero refinery contract).

Contractual Obligations

As of December 31, 2011 and 2012, we had material contractual obligations as set forth in the table below. For purposes of this table, we have presented the U.S.$1 billion prepayment required to satisfy the March 31, 2013 milestone under the Facilities Agreement as a required payment.

	As of December 31, 2011	As of December 31, 2012				
Obligations	**Total**	**Less than 1 year**	**1-3 Years**	**3-5 Years**	**More than 5 Years**	**Total**
			(in millions of U.S. Dollars)			
Long-term debt	U.S.$ 14,924	42	1,333	6,600	5,882	13,857
Capital lease obligation(1)	182	83	112	51	115	361
Convertible notes(2)	2,102	12	683	878	604	2,177
Total debt and other financial obligations(3)	17,208	137	2,128	7,529	6,601	16,395
Operating leases(4)	565	129	155	76	53	413
Interest payments on debt(5)	4,111	747	1,437	1,066	463	3,713
Pension plans and other benefits(6)	1,845	154	301	314	884	1,653
Purchases of raw materials(7)	184	102	25			127
Purchases of fuel and energy(8)	3,794	201	413	430	2,495	3,539
Total contractual obligations	U.S.$ 27,707	1,470	4,459	9,415	10,496	25,840
Total contractual obligations (Mexican Pesos)	Ps 386,791	18,889	57,298	120,983	134,874	332,044

(1) The amounts of payments under capital leases have been determined on the basis of nominal cash flows. As of December 31, 2012, the net present value of future payments under such leases is approximately U.S.$265 million (Ps3,400 million), of which, approximately U.S.$90 million (Ps1,163 million) refers to cash flows from 1 to 3 years, approximately U.S.$32 million (Ps413 million) refers to cash flows from 3 to 5 years and approximately U.S.$79 million (Ps1,011 million) refers to cash flows of more than 5 years.

(2) Refers to the Mandatory Convertible Notes described herein and assumes repayment at maturity and no conversion of the notes.

(3) The schedule of debt payments, which includes current maturities, does not consider the effect of any refinancing of debt that may occur during the following years. In the past, CEMEX has replaced its long-term obligations for others of a similar nature. For purposes of this table, other financial obligations do not include liabilities secured with accounts receivable, as these receivables are sold on a non-recourse basis.

(4) The amounts for operating leases have been determined on the basis of nominal cash flows. CEMEX has operating leases, primarily for operating facilities, cement storage and distribution facilities and certain transportation and other equipment, under which annual rental payments are required plus the payment of certain administrative, selling and distribution expenses. Rental expense was U.S.$256 million (Ps3,195 million) in 2011 and U.S.$156 million (Ps2,003 million) in 2012.

(5) For the determination of the future estimated interest payments on floating rate denominated debt, CEMEX used the floating interest rates in effect as of December 31, 2011 and 2012.

Table of Contents

(6) Represents estimated annual payments under these benefits for the next 10 years (see note 18 to our 2012 audited consolidated financial statements included elsewhere in this annual report). Future payments include the estimate of new retirees during such future years.
(7) Future payments for the purchase of raw materials are presented on the basis of contractual nominal cash flows.
(8) Future nominal payments of energy have been estimated for all contractual commitments on the basis of aggregate average expected consumption of approximately 3,171.4 GWh per year using the future prices of energy established in the contracts for each period. Future payments also include our commitments for the purchase of fuel.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements that are reasonably likely to have a material effect on our financial condition, operating results, liquidity or capital resources.

CEMEX Venezuela

On August 18, 2008, the Government of Venezuela expropriated all business, assets and shares of CEMEX in Venezuela and took control of its facilities. CEMEX controlled and operated CEMEX Venezuela until August 17, 2008. In October 2008, CEMEX submitted a request to ICSID, seeking international arbitration claiming that the nationalization and seizure of the facilities located in Venezuela and owned by CEMEX Venezuela did not comply with the terms of the treaty for the protection of investments signed by the Government of Venezuela and the Netherlands and with international law because CEMEX had not received any compensation and no public purpose was proven. On November 30, 2011, following negotiations with the Government of Venezuela and its public entity Corporación Socialista de Cemento, S.A., a settlement agreement was reached between CEMEX and the Government of Venezuela that closed on December 13, 2011. Under this settlement agreement, CEMEX received compensation for the expropriation of CEMEX Venezuela and administrative services provided after the expropriation in the form of: (i) a cash payment of U.S.$240 million; and (ii) notes issued by PDVSA, with nominal value and interest income to maturity totaling approximately U.S.$360 million. Additionally, as part of the settlement, claims among all parties and their affiliates were released and all intercompany payments due from or to CEMEX Venezuela to and from CEMEX were cancelled, resulting in the cancellation for CEMEX of accounts payable, net of approximately U.S.$154 million. Pursuant to this settlement agreement, CEMEX and the government of Venezuela agreed to withdraw the ICSID arbitration. As a result of this settlement, CEMEX cancelled the book value of its net assets in Venezuela of approximately U.S.$503 million and recognized a settlement gain in the statement of operations of approximately U.S.$25 million, which includes the write-off of the currency translation effects accrued in equity. In 2012, upon disposal of the PDVSA notes, CEMEX recognized a net gain of approximately Ps169 million as part of other financial (expense) income, net, including the effects recognized within other comprehensive income in prior years. See note 13B to our 2012 audited consolidated financial statements included elsewhere in this annual report.

See Item 4 Information on the Company Regulatory Matters and Legal Proceedings Expropriation of CEMEX Venezuela and ICSID Arbitration.

Qualitative and Quantitative Market Disclosure

Our Derivative Financial Instruments

For the year ended December 31, 2011, we had a net gain related to the recognition of changes in fair values of derivative financial instruments of approximately Ps329 million (U.S.$26 million). For the year ended December 31, 2012, we had a net loss related to the recognition of changes in fair values of derivative financial instruments of approximately Ps98 million (U.S.$8 million).

Since the beginning of 2009, with the exception of our capped call transaction entered into in March 2010 and March 2011, we have been reducing the aggregate notional amount of our derivatives, thereby reducing the risk of cash margin calls. This initiative has included closing substantially all notional amounts of derivative instruments related to our debt (currency and interest rate derivatives) and the settlement of our inactive

Table of Contents

derivative financial instruments (see note 16D to our 2012 audited consolidated financial statements included elsewhere in this annual report), which we finalized during April 2009. The Facilities Agreement significantly restricts our ability to enter into derivative transactions.

We use derivative financial instruments in order to change the risk profile associated with changes in interest rates and foreign exchange rates of debt agreements, as a vehicle to reduce financing costs, as an alternative source of financing, and as hedges of: (i) highly probable forecasted transactions, (ii) our net assets in foreign subsidiaries and (iii) future exercises of options under our executive stock option programs. Before entering into any transaction, we evaluate, by reviewing credit ratings and our business relationship according to our policies, the creditworthiness of the financial institutions and corporations that are prospective counterparties to our derivative financial instruments. We select our counterparties to the extent we believe that they have the financial capacity to meet their obligations in relation to these instruments. Under current financial conditions and volatility, we cannot assure that risk of non-compliance with the obligations agreed to with such counterparties is minimal.

The fair value of derivative financial instruments is based on estimated settlement costs or quoted market prices and supported by confirmations of these values received from the counterparties to these financial instruments. The notional amounts of derivative financial instrument agreements are used to measure interest to be paid or received and do not represent the amount of exposure to credit loss.

	At December 31, 2011		At December 31, 2012		
	Notional amount	Estimated fair value	Notional amount	Estimated fair value	Maturity Date
	(in millions of U.S. Dollars)				
Interest Rate Swaps	189	46	181	49	September 2022
Equity forwards on third-party shares	46	1	27		October 2013
Forward instruments over indexes	5		5		July 2013
Options on our own shares					March 2015
	2,743	11	2,743	(138)	March 2018

Our Interest Rate Swaps. As of December 31, 2011 and 2012, we had an interest rate swap maturing in September 2022 with notional amounts of U.S.$189 million and U.S.$181 million, respectively, negotiated to exchange floating for fixed rates in connection with agreements we entered into for the acquisition of electric energy in Mexico. For more information, see note 23C to our 2012 audited consolidated financial statements included elsewhere in this annual report. As of December 31, 2011 and 2012, the fair value of the swap represented assets of approximately U.S.$46 million and U.S.$49 million, respectively. Pursuant to this instrument, during the tenure of the swap and based on its notional amount, we will receive a fixed rate of 5.4% and will pay a LIBOR, which is the international reference for debt denominated in U.S. Dollars. As of December 31, 2011 and 2012, LIBOR was 0.7705% and 0.513%, respectively. Changes in the fair value of interest rate swaps, including those settled in April 2009, generated gains of approximately U.S.$12 million (Ps150 million) in 2011 and U.S.$2 million (Ps35 million) in 2012, which were recognized in the statement of operations for each year.

Our Equity Forwards on Third-Party Shares. As of December 31, 2011 and 2012, we had forward contracts to be settled in cash over the price of 119 million CPOs and 59.5 million CPOs, respectively, of Axtel with an aggregate notional amount of U.S.$46 million and U.S.$27 million, respectively. One of the contracts matured in April 2012 and the remaining contract matures in October 2013. Changes in the fair value of this instrument generated a loss of approximately U.S.$35 million (Ps437 million) in 2011 and U.S.$7 million (Ps100 million) in 2012, which were recognized in the statement of operations for each year. See Liquidity and Capital Resources Our Equity Forward Arrangements.

Our Forward Instruments Over Indexes. As of December 31, 2011 and 2012, we held forward derivative instruments over the TRI (Total Return Index) of the Mexican Stock Exchange, which were set to mature in October 2012 and were extended until April 2013 and July 2013. Through these instruments, we maintained

160

exposure to increases or decreases of such index. TRI expresses the market return on stocks based on market capitalization of the issuers comprising the index. Changes in the fair value of these instruments generated a loss of approximately U.S.$1 million (Ps13 million) in 2011 and a gain of approximately U.S.$1 million (Ps13 million) in 2012, which were recognized in the statement of operations for each year.

Our Options on Our Own Shares. On March 15, 2011, in connection with the offering of the 2011 Optional Convertible Subordinated Notes and to effectively increase the conversion price for our CPOs under such notes, CEMEX, S.A.B. de C.V. entered into capped call transactions over approximately 160 million ADSs (94 million ADSs maturing in March 2016 and 66 million ADSs maturing in March 2018), by means of which, for the 3.25% Convertible Subordinated Notes due 2016, at maturity of the notes in March 2016, if the price per ADS is above U.S.$10.4327, we will receive in cash the difference between the market price of the ADS and U.S.$10.4327, with a maximum appreciation per ADS of U.S.$4.8151. Likewise, for the 3.75% Convertible Subordinated Notes due 2018, at maturity of the notes in March 2018, if the price per ADS is above U.S.$10.4327, we will receive in cash the difference between the market price of the ADS and U.S.$10.4327, with a maximum appreciation per ADS of U.S.$6.4201. We paid a total premium of approximately U.S.$222 million. As of December 31, 2011 and 2012, the fair value of such options represented an asset of approximately U.S.$71 million (Ps984 million) and U.S.$226 million (Ps2,899 million), respectively. During 2011 and 2012, changes in the fair value of this contract generated a loss of approximately U.S.$153 million (Ps1,906 million) and a gain U.S.$155 million (Ps1,973 million), respectively, which were recognized in the statements of operations for each year. As previously mentioned, for accounting purposes under IFRS, we separated the conversion options embedded in these notes and recognized them at fair value, which as of December 31, 2011 and 2012, resulted in liabilities of approximately U.S.$58 million (Ps806 million) and U.S.$301 million (Ps3,862 million), respectively. Changes in fair value of the conversion options generated a gain in 2011 for approximately U.S.$279 million (Ps3,842 million) and a loss in 2012 for approximately U.S.$243 million (Ps3,078 million), which were recognized in the statement of operations for each year. In addition, even though the changes in fair value of CEMEX s embedded conversion options in these notes affect the statements of operations, they do not imply any risk or variability in cash flows, considering that through the exercise of such embedded conversion options, we may settle a fixed amount of debt with a fixed amount of shares.

On March 30, 2010, in connection with the offering of the 2010 Optional Convertible Subordinated Notes and to effectively increase the conversion price for our CPOs under such notes, CEMEX, S.A.B. de C.V. entered into a capped call transaction over approximately 59.1 million ADSs maturing in March 2015, by means of which, at maturity of the notes, if the price per ADS is above U.S.$12.0886, we will receive in cash the difference between the market price of the ADS and U.S.$12.0886, with a maximum appreciation per ADS of U.S.$4.6494. We paid a premium of approximately U.S.$105 million. As of December 31, 2011 and 2012, the fair value of such options represented an asset of approximately U.S.$11 million (Ps157 million) and U.S.$58 million (Ps751 million), respectively. During 2011 and 2012, changes in the fair value of this contract generated a loss of approximately U.S.$79 million (Ps984 million) and gains of U.S.$47 million (Ps594 million), respectively, which were recognized in the statements of operations for each year. As previously mentioned, for accounting purposes under IFRS, we separated the conversion option embedded in these notes and recognized it at fair value, which as of December 31, 2011 and 2012, resulted in liabilities of approximately U.S.$8 million (Ps120 million) and U.S.$64 million (Ps828 million), respectively. Changes in fair value of the conversion options generated a gain in 2011 for approximately U.S.$97 million (Ps1,211 million) and a loss in 2012 for approximately U.S.$56 million (Ps708 million), which were recognized in the statement of operations for each year. In addition, even though the changes in fair value of CEMEX s embedded conversion option in these notes affect the statements of operations, they do not imply any risk or variability in cash flows, considering that through the exercise of such embedded conversion option, we may settle a fixed amount of debt with a fixed amount of shares.

As of December 31, 2012, we had granted a guarantee for a notional amount of approximately U.S.$360 million in connection with put option transactions on our CPOs entered into by Citibank with a Mexican trust that we established on behalf of our Mexican pension fund and certain of our directors and current and former

Table of Contents

employees in April 2008, as described in notes 16D and 23C to our 2012 audited consolidated financial statements included elsewhere in this annual report. The fair value of such guarantee, net of deposits in margin accounts, represented liabilities of approximately U.S.$4 million (Ps58 million) in 2011 and U.S.$58 million (Ps740 million) in 2012. As of December 31, 2011 and 2012, cash deposits in margin accounts were approximately U.S.$225 million (Ps3,141 million) and U.S.$76 million (Ps975 million), respectively. As of April 17, 2013, the notional amount of the guarantee was completely closed as a result of the unwinding of 100% of the original underlying amount of put options over CPOs of CEMEX, S.A.B. de C.V. Cash and cash deposits in margin accounts, after deducting the proceeds from the sale of securities that track the performance of the Mexican Stock Exchange and CEMEX s CPOs held by the Mexican trust in an aggregate amount of approximately U.S.$112 million, were used to settle the unwinding of these put options.

Interest Rate Risk, Foreign Currency Risk and Equity Risk

Interest Rate Risk. The table below presents tabular information of our fixed and floating rate long-term foreign currency-denominated debt as of December 31, 2012. Average floating interest rates are calculated based on forward rates in the yield curve as of December 31, 2012. Future cash flows represent contractual principal payments. The fair value of our floating rate long-term debt is determined by discounting future cash flows using borrowing rates available to us as of December 31, 2012 and is summarized as follows:

	Expected maturity dates as of December 31, 2012						
Long-Term Debt(1)	**2013**	**2014**	**2015**	**2016**	**After 2017**	**Total**	**Fair Value**
	(in millions of U.S. Dollars, except percentages)						
Variable rate	U.S.$ 6	18	756	4	4,097	U.S.$ 4,882	U.S.$ 4,804
Average interest rate	4.89%	5.02%	5.27%	5.66%	6.28%		
Fixed rate	U.S.$ 36	552	6	1,739	6,643	U.S.$ 8,975	U.S.$ 9,877
Average interest rate	9.01%	9.03%	9.31%	9.31%	9.37%		

(1) The information above includes the current maturities of the long-term debt. Total long-term debt as of December 31, 2012 does not include our other financial obligations and the Perpetual Debentures for an aggregate amount of U.S.3,578 million (Ps45,969 million) issued by consolidated entities. See notes 16B and 20D to our 2012 audited consolidated financial statements included elsewhere in this annual report.

As of December 31, 2012, we were subject to the volatility of floating interest rates, which, if such rates were to increase, may adversely affect our financing cost and our net income. As of December 31, 2012, 35% of our foreign currency-denominated long-term debt bears floating rates at a weighted average interest rate of LIBOR plus 456 basis points. See note 16 to our 2012 audited consolidated financial statements included elsewhere in this annual report.

Foreign Currency Risk. Due to our geographic diversification, our revenues are generated in various countries and settled in different currencies. However, some of our production costs, including fuel and energy, and some of our cement prices, are periodically adjusted to take into account fluctuations in the U.S. Dollar/Peso exchange rate. For the year ended December 31, 2012, approximately 21% of our net sales, before eliminations resulting from consolidation, were generated in Mexico, 19% in the United States, 7% in the United Kingdom, 7% in Germany, 6% in France, 6% in our Rest of Northern Europe geographic segment, 2% in Spain, 3% in Egypt, 4% in our Rest of the Mediterranean segment, 6% in Colombia, 8% in our Rest of South America and the Caribbean segment, 3% in Asia and 8% from our Other operations.

As of December 31, 2012, approximately 81% of our total debt plus other financial obligations was U.S. Dollar-denominated, approximately 14% was Euro-denominated, approximately 5% was Peso-denominated and immaterial amounts were denominated in other currencies, which does not include approximately Ps6,078 million (U.S.$473 million) of Perpetual Debentures; therefore, we had a foreign currency exposure arising from

Table of Contents

the debt plus other financial obligations denominated in U.S. Dollars, and the debt and other financial obligations denominated in Euros, versus the currencies in which our revenues are settled in most countries in which we operate. We cannot guarantee that we will generate sufficient revenues in Euros from our operations in Spain, Germany, France and the Rest of Northern Europe to service these obligations. As of December 31, 2011 and 2012, all cross-currency swaps had been settled.

Equity Risk. As described above, we have entered into equity forward contracts on Axtel CPOs. Upon liquidation, the equity forward contracts provide for cash settlement and the effects are recognized in the statement of operations. At maturity, if these forward contracts are not settled or replaced, or if we default on these agreements, our counterparties may sell the shares of the underlying contracts. Under these equity forward contracts, there is a direct relationship in the change in the fair value of the derivative with the change in value of the underlying asset.

As of December 31, 2012, the potential change in the fair value of these contracts that would result from a hypothetical, instantaneous decrease of 10% in the market price of Axtel CPOs would be a loss of approximately U.S.$1 million (Ps17 million).

In addition, we have entered into forward contracts on the TRI of the Mexican Stock Exchange through which we maintained exposure to changes of such index, until maturity in April 2013 and July 2013. Upon liquidation, these forward contracts provide for cash settlement of the estimated fair value and the effects are recognized in the statement of operations. Under these equity forward contracts, there is a direct relationship in the change in the fair value of the derivative with the change in value of the TRI of the Mexican Stock Exchange. See Qualitative and Quantitative Market Disclosure Our Derivative Financial Instruments Our Forward Instruments Over Indexes.

As of December 31, 2012, the potential change in the fair value of these contracts that would result from a hypothetical, instantaneous decrease of 10% in the aforementioned index would be a loss of approximately U.S.$1 million (Ps17 million).

In connection with the offering of the 2010 Optional Convertible Subordinated Notes and the 2011 Optional Convertible Subordinated Notes issued in March 2010 and March 2011, respectively, we entered into capped call transactions with the financial institutions involved on those transactions or their affiliates. See Qualitative and Quantitative Market Disclosure Our Derivative Financial Instruments Our Options on Our Own Shares.

Investments, Acquisitions and Divestitures

The transactions described below represent our principal investments, acquisitions and divestitures completed during 2010, 2011 and 2012.

Investments and Acquisitions

In October 2012, Corporación Cementera Latinoamericana, S.L., an indirect subsidiary of CEMEX España, completed the acquisition of the 49% non-controlling interest in Global Cement, S.A., a CEMEX subsidiary in Guatemala, in a private transaction for approximately U.S.$54 million (approximately Ps694 million), recognizing within Other equity reserves a loss of approximately U.S.$32 million (approximately Ps411 million).

On May 17, 2012, through a public tender offer commenced on March 12, 2012, and after compliance with applicable regulations in Ireland, Readymix Investments, an indirect subsidiary of CEMEX España, acquired the 38.8% interest in Readymix plc, our main subsidiary in Ireland, that had not been owned by us for approximately 11 million (U.S.$15 million or Ps187 million), for 0.25 per share in cash. The listing and trading of Readymix plc s shares on the Irish Stock Exchange was cancelled beginning on May 18, 2012.

Table of Contents

On July 1, 2005, we and Ready Mix USA, a privately owned ready-mix concrete producer with operations in the southeastern United States, established two jointly-owned limited liability companies, CEMEX Southeast, LLC, a cement company, and Ready Mix USA LLC, a ready-mix concrete company, to serve the construction materials market in the southeast region of the United States.

Pursuant to the terms of the limited liability company agreements, Ready Mix USA had a put option right, which, upon exercise, required us to acquire Ready Mix USA s interest in CEMEX Southeast, LLC and Ready Mix USA LLC. As a result of Ready Mix USA s exercise of its put option (see note 15B to our 2012 audited consolidated financial statements included elsewhere in this annual report), and after performance of the obligations by both parties under the put option agreement, effective as of August 1, 2011, through the payment of approximately U.S.$352 million (approximately Ps4,914 million), we acquired our former joint venture partner s interests in CEMEX Southeast, LLC and Ready Mix USA, LLC, including a non-compete and a transition services agreement. In accordance with the joint venture agreements, from the date on which Ready Mix USA exercised its put option until the date we acquired Ready Mix USA s interest, Ready Mix USA continued to control and manage Ready Mix USA, LLC. Nonetheless, based on IAS 27, considering the existence of a settlement price that could have been paid any time until September 30, 2011 at our election, Ready Mix USA LLC s balance sheet was consolidated as of March 31, 2011 and its operating results beginning April 1, 2011. Upon consolidation, the purchase price was assigned to each joint venture in proportion to our relative contribution interest in CEMEX Southeast, LLC and Ready Mix USA, LLC considering the original fair values as of the dates of the agreements in 2005. We fully consolidated the acquisition of the minority interest in CEMEX Southeast, LLC, as of the acquisition date, and Ready Mix USA, LLC generated an aggregate gain of approximately U.S.$24 million (approximately Ps316 million), which was recognized within Other expenses, net. During 2012, after the completion of the purchase price allocation, there were changes in the values of certain assets and liabilities, none of which were individually significant, which decreased the aggregate gain on purchase by approximately U.S.$1 million (approximately Ps13 million). Our 2011 audited consolidated financial statements included in the 2011 20-F include the balance sheet of Ready Mix USA, LLC as of December 31, 2011, based on the best estimate of its net asset s fair value as of the acquisition date of approximately Ps4,487 million, including cash and cash equivalents for approximately Ps912 million and debt for approximately Ps1,352 million, and its results of operations for the nine-month period ended December 31, 2011.

Ready Mix USA, LLC s net assets as of December 31, 2012, CEMEX consolidated net assets of approximately Ps3,792 million, including cash and cash equivalents for approximately Ps3 million and debt for approximately Ps1,977 million.

Our total additions in property, machinery and equipment, as reflected in our 2012 audited consolidated financial statements (see note 14 to our 2012 audited consolidated financial statements included elsewhere in this annual report), excluding acquisitions of equity interests in subsidiaries and associates and including capital leases, was approximately U.S.$555 million in 2010, U.S.$468 million in 2011 and U.S.$609 million in 2012. This capital expenditure in property, machinery and equipment has been applied to the construction and upgrade of plants and equipment and the maintenance of plants and equipment, including environmental controls and technology updates. As of the date of this annual report, we have allocated approximately U.S.$500 million of our $750 million 2013 budget to continue with this effort.

Divestitures

During 2012 we sold assets for approximately U.S.$227 million comprised in part by real estate, non-core businesses and equipment.

In November 2012, CEMEX Latam, a then wholly-owned subsidiary of CEMEX España, completed the sale of newly issued common shares in the CEMEX Latam Offering, representing approximately 26.65% of CEMEX Latam s outstanding common shares. CEMEX Latam s common shares are listed on the Colombian

164

Stock Exchange (*Bolsa de Valores de Colombia S.A.*). The net proceeds to CEMEX Latam from the offering were approximately U.S.$960 million, after deducting underwriting discounts, commissions and offering expenses. CEMEX Latam used the net proceeds to repay a portion of the indebtedness owed to us, which we used for general corporate purposes, including the repayment of indebtedness. CEMEX Latam is the holding company for CEMEX s operations in Brazil, Colombia, Costa Rica, Guatemala, Nicaragua, Panama and El Salvador. As of December 31, 2012, CEMEX España owned approximately 73.35% of CEMEX Latam s outstanding common shares, excluding shares held in treasury.

During 2011 we sold assets for approximately U.S.$225 million comprised in part by real estate, non-core businesses and equipment.

On August 27, 2010, we completed the sale of seven aggregates quarries, three resale aggregate distribution centers and one concrete block manufacturing facility in Kentucky to Bluegrass Materials Company, LLC for U.S.$88 million in proceeds.

Recent Developments

Offering of 5.875% Senior Secured Notes due 2019

On March 25, 2013, CEMEX, S.A.B. de C.V. issued U.S.$600,000,000 aggregate principal amount of its 5.875% Senior Secured Notes due 2019, or the March 2013 Notes, in transactions exempt from registration pursuant to Rule 144A and Regulation S under the Securities Act. The payment of principal, interest and premium, if any, on the March 2013 Notes is fully and unconditionally guaranteed by CEMEX México, CEMEX España, New Sunward, CEMEX Asia, CEMEX Concretos, CEMEX Corp., CEMEX Egyptian Investments, CEMEX France, CEMEX Research Group, CEMEX Shipping, CEMEX UK and Empresas Tolteca. The March 2013 Notes are secured by a first-priority security interest over the Collateral and all proceeds of such Collateral. The March 2013 Notes were issued at par. The net proceeds from the offering of approximately U.S.$595 million were used for the repayment in full of the remaining indebtedness under the 2009 Financing Agreement of approximately U.S.$55 million and the remainder for general corporate purposes, including the purchase of Eurobonds in the Eurobond Tender Offer.

Eurobond Tender Offer

On March 28, 2013, we completed our purchase of 182,939,000 aggregate principal amount of Eurobonds through a cash tender offer using a portion of the proceeds from the issuance of the March 2013 Notes.

Change in the Parent Company s functional currency

Considering the guidance under IFRS set forth by International Accounting Standard 21, *The Effects of Changes in Foreign Exchange Rates* (IAS 21), and based on changing circumstances on the net monetary position in foreign currencies of CEMEX, S.A.B. de C.V. (on a parent company only basis) resulting mainly from: a) a significant decrease in tax liabilities denominated in Mexican Pesos; b) a significant increase in its U.S. Dollar-denominated debt and other financial obligations; and c) the expected increase in U.S. Dollar-denominated intra-group administrative expenses associated with the externalization of major back office activities with IBM; effective as of January 1, 2013, CEMEX, S.A.B. de C.V., for purposes of its parent company only financial statements, was required to prospectively change its functional currency from the Mexican Peso to the U.S. Dollar, as the U.S. Dollar was determined to be the currency of CEMEX, S.A.B. de C.V. s primary economic environment. The aforementioned change has no effect on the functional currencies of CEMEX, S.A.B. de C.V. s subsidiaries, which continue to be the currency in the primary economic environment in which each subsidiary operates. Moreover, the reporting currency for the consolidated financial statements of CEMEX, S.A.B. de C.V. and its subsidiaries and the parent company only financial statements of CEMEX, S.A.B. de C.V. continues to be the Mexican Peso.

Table of Contents

The main effects in CEMEX, S.A.B. de C.V. s parent company only financial statements beginning on January 1, 2013, associated with the change in functional currency, as compared to prior years are: a) all transactions, revenues and expenses in any currency are recognized in U.S. Dollars at the exchange rates prevailing at their execution dates; b) monetary balances of CEMEX, S.A.B. de C.V. denominated in U.S. Dollars will not generate foreign currency fluctuations, while monetary balances in Mexican Pesos and other non-U.S. Dollar-denominated balances will now generate foreign currency fluctuations through CEMEX, S.A.B. de C.V. s statement of operations; and c) the conversion option embedded in CEMEX, S.A.B. de C.V. s Mandatory Convertible Notes denominated in Mexican Pesos will now be treated as a stand-alone derivative instrument through CEMEX, S.A.B. de C.V. s statement of operations, while the options embedded in CEMEX, S.A.B. de C.V. s U.S. Dollar-Denominated 2010 Optional Convertible Subordinated Notes and 2011 Optional Convertible Subordinated Notes will cease to be treated as stand-alone derivatives through CEMEX, S.A.B. de C.V. s statement of operations. Prior period financial statements are not required to be restated.

Item 6 Directors, Senior Management and Employees
Senior Management and Directors

Senior Management

Set forth below is the name and position of each member of our senior management team as of the date of this annual report. The terms of office of the senior managers are indefinite.

Name, Position (Age)	Experience
Lorenzo H. Zambrano Treviño, Chief Executive Officer (69)	Joined CEMEX in 1968. During his career with CEMEX, Mr. Zambrano has been involved in all operational aspects of our business. He held several positions in CEMEX prior to his appointment as Director of Operations in 1981. In 1985, Mr. Zambrano was appointed chief executive officer, and in 1995 he was elected chairman of the board of directors. Mr. Zambrano is a graduate of Instituto Tecnológico y de Estudios Superiores de Monterrey, A.C., or ITESM, with a degree in mechanical engineering and administration and has an M.B.A. from Stanford University. Mr. Zambrano has been a member of our board of directors since 1979 and chairman of our board of directors since 1995. He is a member of the board of directors of Cementos Chihuahua, IBM, Enseñanza e Investigación Superior, A.C. and Museo de Arte Contemporáneo de Monterrey A.C. (MARCO). Mr. Zambrano participated in the chairman s Council of Daimler Chrysler AG until July 2005, was a member of the Stanford University s Graduate School of Business Advisory Council until 2006, of the board of directors of Vitro, S.A.B. de C.V. until 2007, of the board of directors of Alfa, S.A.B. de C.V. until 2008, of the board of directors of Grupo Televisa, S.A.B. and Banamex until April 2009 and of the board of directors of Fomento Económico Mexicano S.A.B. de C.V., or FEMSA and the international advisory board of Citigroup until 2011 and served as chairman of the board of directors of Enseñanza e Investigación Superior, A.C., which manages ITESM, until February 2012. In recognition of his business and philanthropic record, Mr. Zambrano has received several awards and recognitions, including the Woodrow Wilson Center s Woodrow Wilson Award for Corporate Citizenship,

Table of Contents

Name, Position (Age)	Experience
	the America s Society Gold Medal Distinguished Service Award, and Stanford University s Graduate School of Business Alumni Association s Ernest C. Arbuckle Award. Mr. Zambrano is a first cousin of Rogelio Zambrano Lozano, a member of our board of directors, he is also a second cousin of Roberto Luis Zambrano Villarreal and second uncle of Tomás Milmo Santos, both members of our board of directors.
Juan Romero Torres, President CEMEX Mexico (56)	Joined CEMEX in 1989 and has occupied several senior management positions, including president of CEMEX Colombia, president of our operations in Mexico, president of the South America and the Caribbean region and president of our former Europe, Middle East, Africa and Asia region. He is currently president of our operations in Mexico and is also in charge of our global technology area. Mr. Romero graduated from Universidad de Comillas in Spain, where he studied law and economic and enterprise sciences. Mr. Romero was appointed vice-president and representative of the board of directors of Cement National Chamber (*Cámara Nacional del Cemento*) in June 2011 and member of the board of directors of Cementos Chihuahua in April 2011.
Jaime Gerardo Elizondo Chapa, President CEMEX South America and the Caribbean (49)	Joined CEMEX in 1985 and since then he has headed several operations, including Panama, Colombia, Venezuela, and, more recently, Mexico. He is the current president of CEMEX South America (including Central America) and the Caribbean, and is also in charge of the company s global procurement area. Mr. Elizondo has served as a member of the board of directors of Cementos Chihuahua, president and vice-president of the Cement National Chamber (*Cámara Nacional del Cemento*) and president of the Transformation Industry of Nuevo León Chamber (*Cámara de la Industria de la Transformación de Nuevo León*). He graduated with a BS and an M.B.A. from ITESM.
Ignacio Madridejos Fernández President CEMEX Northern Europe (47)	Joined CEMEX in 1996 and, after holding management positions in the strategic planning area, he headed CEMEX s operations in Egypt, Spain, and Western Europe. He is currently president of CEMEX Northern Europe, and is also responsible for our global energy and sustainability area. He has served as a member of the board of directors of COMAC (*Comercial de Mateiales de Construcción S.L.*), member of the board and president of OFICEMEN (Agrupación de Fabricantes de Cemento de España), chairman and member of the board of IECA (*Instituto Español del Cemento y sus Aplicaciones*), president of CEMA, and patron of the Junior Achievement Foundation. In June 2010, he was appointed vice-president and, in June 2011, chairman of CEMBUREAU (European Cement Association). He graduated with a degree in civil engineering from the Polytechnic University of Madrid and holds an M.B.A. from Stanford University.
Jaime Muguiro Domínguez, President CEMEX Mediterranean (44)	Joined CEMEX in 1996, and held several executive positions in the areas of strategic planning, business development, ready-mix concrete, aggregates, and human resources. More recently, he headed CEMEX s operations in Egypt. He is currently president of

Name, Position (Age)	Experience
	CEMEX Mediterranean, which includes operations in Spain, Egypt, Croatia and the Middle East. He graduated with a management degree from San Pablo CEU University, and holds a law degree from the Complutense University of Madrid and an M.B.A. from the Massachusetts Institute of Technology.
Karl H. Watson Jr., President CEMEX USA (48)	Joined CEMEX in 2007, after a successful career of more than 19 years in the building materials industry. Since then, he has held several senior positions in our operations in Florida and the Eastern region of the United States. Before joining CEMEX, he headed the ready-mix concrete and concrete products divisions of Rinker in the United States and Australia. He is currently president of CEMEX USA. Mr. Watson served as chairman of the Florida Concrete and Products Association from 2008 to 2009 and was appointed chairman of the NRMCA from 2010 to 2011 and member of the executive committee of the Portland Cement Association from 2011 to 2013. He holds a B.S. from the Palm Beach Atlantic University and an M.B.A. from the University of Nova Southeastern, both in Florida.
Joaquín Miguel Estrada Suarez, President CEMEX Asia (49)	Joined CEMEX in 1992 and has held several executive positions, including head of operations in Egypt and Spain, as well as head of trading for Europe, the Middle East and Asia. He is currently president of CEMEX Asia and is also responsible for our global trading activities. From 2008 to 2011, he served as a member of the board of directors of COMAC (Comercial de Materiales de la Construcción S.L.), president and member of the board of OFICEMEN *(Agrupación de Fabricantes de Cemento de España)*, and member of the board of IECA (Instituto Español del Cemento y sus Aplicaciones), he was also the president of CEMA *(Fundación Laboral del Cemento y el Medioambiente)* from 2010 to 2011. He graduated with a degree in economics from the University of Zaragoza and holds an M.B.A. from the Instituto de Empresa.
Fernando A. González Olivieri, Executive Vice President of Finance and Administration and Chief Financial Officer (58)	Joined CEMEX in 1989, and has served as corporate vice-president of strategic planning from 1994 to 1998, president of CEMEX Venezuela from 1998 to 2000, president of CEMEX Asia from 2000 to May 2003, and president of the South American and the Caribbean region from May 2003 to February 2005. In March 2005, he was appointed president of the expanded European Region, in February 2007, president of our former Europe, Middle East, Africa, Asia and Australia Region, and, in May 2009, executive vice president of planning and development. In February 2010, Mr. Gonzalez was appointed executive vice president of planning and finance and in 2011 he was appointed chief financial officer. He is a member of the board of directors of Cementos Chihuahua. Mr. González earned his B.A. and M.B.A. degrees from ITESM.
Juan Pablo San Agustín Rubio, Executive Vice President of Strategic Planning and New Business Development (44)	Joined CEMEX in 1994 and has held executive positions in the strategic planning, continuous improvement, e-business, and marketing areas. He is currently executive vice president of strategic planning and new business development. He graduated with a B.S. from the Universidad Metropolitana and holds an International M.B.A. from the Instituto de Empresa.

Name, Position (Age)	Experience
Luis Hernández Echávez, Executive Vice President of Organization and Human Resources (49)	Joined CEMEX in 1996, and has held senior management positions in the strategic planning and human resources areas. He is currently executive vice president of organization and human resources. He graduated with a degree in civil engineering from ITESM, and holds a master s degree in civil engineering and an M.B.A. from the University of Texas at Austin. Mr. Hernández is also an alternate director of Cementos Chihuahua.
Francisco Garza, Vice Chairman of the Board of CEMEX Mexico, Chairman of CEMEX Latin America Advisory Board and Advisor to the CEO on Institutional Relations (57)	Joined CEMEX in 1988 and has served as director of trading from 1988 to 1992, president of CEMEX USA from 1992 to 1994, president of CEMEX Venezuela from 1994 to 1996 and Cemento Bayano from 1995 to 1996, president of CEMEX Mexico and CEMEX USA from 1996 to 1998, president of the our former North American region and trading from 1998 to 2009 and, in 2009, he was appointed president of our former Americas region. In 2011, he was appointed vice chairman of the board of CEMEX Mexico, chairman of CEMEX Latin America Advisory Board and advisor to the CEO on Institutional Relations. He is a member of the board of directors of Universidad Regiomontana, A.C. and Cementos Chihuahua. He is a graduate in business administration from ITESM and has an M.B.A. from the Johnson School of Management at Cornell University in 1982.
Víctor M. Romo, Executive Advisor to the Chairman and CEO (55)	Joined CEMEX in 1985 and has served as director of administration of CEMEX España from 1992 to 1994, general director of administration and finance of CEMEX España from 1994 to 1996, president of CEMEX Venezuela from 1996 to 1998, president of our former South American and the Caribbean region from 1998 to May 2003, and executive vice president of administration from May 2003 to April 2011. In April 2011, he was appointed executive advisor to the chairman and chief executive officer. He is a member of the board of directors of Cementos Chihuahua. Mr. Romo is a certified public accountant and received a master s degree in administration and finance from ITESM. Previously, he worked for Grupo Industrial Alfa, S.A. de C.V. from 1979 to 1985.
Rafael Garza Lozano, Chief Accounting Officer (49)	Joined CEMEX in 1985 and has served as chief accounting officer since 1999. Mr. Garza is a certified public accountant and received a master s degree in administration and finance from ITESM. He also attended executive programs at ITAM, IPADE and Harvard University. He is currently a member of the board of directors of Consejo Mexicano para la Investigación y Desarrollo de Normas de Información Financiera, or CINIF, and an alternate director of Cementos Chihuahua.
Ramiro G. Villarreal Morales, General Counsel and Secretary (65)	Joined CEMEX in 1987 and has served as general counsel since then, and also has served as secretary of our board of directors since 1995. He is a graduate of the Universidad Autónoma de Nuevo León with a degree in law. He also received a master of science degree in finance from the University of Wisconsin. Prior to joining CEMEX, he served as assistant general director of Grupo Financiero Banpais from 1985 to 1987.

Table of Contents

Name, Position (Age)	Experience
	Mr. Villarreal is a member of the board of directors of VINTE Viviendas Integrales, S.A., both real estate development companies, and an alternate member of the boards of directors of Cementos Chihuahua and Axtel. Until February 2012, Mr. Villarreal was the secretary of the board of directors of Ensenanza e Investigación Superior, A.C., that administered ITESM.

Board of Directors

As of December 31, 2012, Bernardo Quintana Isaac was a member of CEMEX, S.A.B. de C.V. s board of drectors. Mr. Quintana Isaac was not elected as a director at CEMEX, S.A.B. de C.V. s 2012 annual general ordinary shareholders meeting held on March 21, 2013 and no longer serves on the board of directors. Set forth below are the names of the current members of CEMEX, S.A.B. de C.V. s board of directors, elected at CEMEX, S.A.B. de C.V. s 2012 annual general ordinary shareholders meeting held on March 21, 2013. At this shareholders meeting, no alternate directors were elected. Members of CEMEX, S.A.B. de C.V. s board of directors serve for one-year terms.

Name (Age)	Experience
Lorenzo H. Zambrano Treviño, Chairman (69)	See Senior Management.
Armando J. García Segovia (61)	Mr. García has been a member of CEMEX, S.A.B. de C.V. s board of directors since 1983. He initially joined CEMEX in 1975 and rejoined CEMEX in 1985. He served as director of operational and strategic planning from 1985 to 1988, director of operations from 1988 to 1991, director of corporate services and affiliate companies from 1991 to 1994, director of development from 1994 to 1996, general director of development from 1996 to 2000, executive vice president of development from 2000 to May 2009, and executive vice president for technology, energy and sustainability from May 2009 to March 2010, the year in which he retired from CEMEX. He is a graduate of ITESM with a degree in mechanical engineering and administration and received an M.B.A. from the University of Texas. He was employed at Cydsa, S.A. from 1979 to 1981 and at Conek, S.A. de C.V. from 1981 to 1985. He also serves as a member of the board of directors of Cementos Chihuahua and GCC Cemento, S.A. de C.V. He was also vice president of COPARMEX, member of the board and former chairman of the Private Sector Center for Sustainable Development Studies (*Centro de Estudios del Sector Privado para el Desarrollo Sustentable*), former chairman of Centro Patronal de Nuevo León (now COPARMEX NL), he was chairman and member of the board of Gas Industrial de Monterrey, S.A. de C.V. and member of the board of the World Environmental Center. Presently, he is a member of the board of directors of Hoteles City Express, S.A.P.I. de C.V. and Grupo Chapa, S.A. de C.V., and the chairman of the board of the Engineering School of the Instituto Tecnológico de Estudios Superiores de Monterrey. He is also a member of the board of Universidad Regiomontana, A.C., Universidad de Monterrey, A.C., Unidos para la Conservación, Pronatura Noreste, A.C., Consejo Consultivo de Flora y Fauna del Estado de N.L., and Parques y Vida

Name (Age)	Experience
	Silvestre de N.L. He is also founder and chairman of the board of Comenzar de Nuevo, A.C. He is a first cousin of Rodolfo García Muriel, a member of our board of directors.
Rodolfo García Muriel (67)	Has been a member of CEMEX, S.A.B. de C.V. s board of directors since 1985 and member of CEMEX, S.A.B. de C.V. s finance committee since 2009. He is the chief executive officer of Compañía Industrial de Parras, S.A. de C.V. He is a member of the board of directors of Inmobiliaria Romacarel, S.A.P.I. de C.V., Comfort Jet, S.A. de C.V., and member of the regional board of Banamex. Mr. García Muriel is also vice president of the Textile Industry National Chamber (*Cámara Nacional de la Industria Textil*). Mr. García Muriel holds a degree in electric mechanical engineering from the Universidad Iberoamericana. He is a first cousin of Armando J. García Segovia, a member of CEMEX, S.A.B. de C.V. s board of directors.
Rogelio Zambrano Lozano (56)	Has been a member of CEMEX, S.A.B. de C.V. s board of directors since 1987 and president of CEMEX, S.A.B. de C.V. s finance committee since 2009. He is also a member of the advisory board of Banamex, Zona Norte, and member of the boards of directors of Carza, S.A. de C.V., Plaza Sesamo, S.A. de C.V., Hospital San José, and ITESM. He is a graduate in industrial engineering from ITESM and holds an M.B.A. from the Wharton Business School of Pennsylvania University. He is a first cousin of Lorenzo H. Zambrano, chairman of CEMEX, S.A.B. de C.V. s board of directors and our chief executive officer and uncle of Tomás Milmo Santos, a member of CEMEX, S.A.B. de C.V. s board of directors.
Roberto Luis Zambrano Villarreal (67)	Has been a member of CEMEX, S.A.B. de C.V. s board of directors since 1987. He was president of CEMEX, S.A.B. de C.V. s audit committee from 2002 to 2006, president of CEMEX, S.A.B. de C.V. s corporate practices and audit committee from 2006 to 2009, and president of CEMEX, S.A.B. de C.V. s new audit committee since 2009. He is also a member of the board of directors of CEMEX Mexico. He is chairman of the board of directors of Desarrollo Integrado, S.A. de C.V., Administración Ficap, S.A. de C.V., Aero Zano, S.A. de C.V., Ciudad Villamonte, S.A. de C.V., Focos, S.A. de C.V., C & I Capital, S.A. de C.V., Industrias Diza, S.A. de C.V., Inmobiliaria Sanni, S.A. de C.V., Inmuebles Trevisa, S.A. de C.V., Servicios Técnicos Hidráulicos, S.A. de C.V., Mantenimiento Integrado, S.A. de C.V., Pilatus PC-12 Center de México, S.A. de C.V., and Pronatura, A.C. He is a member of the board of directors of S.L.I. de México, S.A. de C.V., and Compañía de Vidrio Industrial, S.A. de C.V. Mr. Zambrano Villarreal is a graduate in mechanical engineering and administration from the ITESM. He is the second cousin of Lorenzo H. Zambrano, chief executive officer and chairman of CEMEX, S.A.B. de C.V. s board of directors.
Dionisio Garza Medina (59)	Has been a member of CEMEX, S.A.B. de C.V. s board of directors since 1995 and president of CEMEX, S.A.B. de C.V. s corporate practices committee since 2009. He is honorary chairman and

Table of Contents

Name (Age)	Experience
	member of the board of Alfa, S.A.B. de C.V. where he was chairman and chief executive officer until March 2010. Mr. Garza Medina is a member of the advisory board of the Mexican Ministry of Economy, the advisory committee of the David Rockefeller Center for Latin American Studies at Harvard. He is chairman of the Harvard Business School Latin American advisory board, the Advisory Council of Stanford s Engineering School and the Trilateral Commission. Additionally, Mr. Garza Medina was the chairman of the board of the Universidad de Monterrey, A.C. until April 2012. Mr. Garza Medina holds an industrial engineering degree and a master degree in industrial engineering from Stanford University and an M.B.A. from Harvard University.
Tomás Milmo Santos (48)	Has been a member of CEMEX, S.A.B. de C.V. s board of directors since 2006 and member of CEMEX, S.A.B. de C.V. s finance committee since 2009. Mr. Milmo Santos served as an alternate member of CEMEX, S.A.B. de C.V. s board of directors from 2001 to 2006. He is chief executive officer and chairman of the board of directors of Axtel, a telecommunications company that operates in the local, long distance and data transfer market. He is also a member of the board of directors of CEMEX Mexico, Promotora Ambiental, S.A., ITESM and chairman of the board of directors of Tec Salud and Alianza Educativa por Nuevo León. He graduated with a degree in economics from Stanford University. Mr. Milmo Santos is the second nephew of Lorenzo H. Zambrano, chief executive officer and chairman of CEMEX, S.A.B. de C.V. s board of directors.
José Manuel Rincón Gallardo Purón (70)	Has been a member of CEMEX, S.A.B. de C.V. s board of directors since 2003. He is also a member of CEMEX, S.A.B. de C.V. s audit committee, where he qualifies as a financial expert for purposes of the Sarbanes-Oxley Act of 2002. He is president of the board of directors of Sonoco de México S.A. de C.V., member of the board of directors and audit committees of Banamex, Grupo Herdez, S.A. de C.V., General de Seguros, S.A.B., Kansas City Southern and Grupo Aeroportuario del Pacífico, S.A. de C.V., and member of the board of directors of Laboratorios Sanfer-Hormona. Mr. Rincón Gallardo is a member of the Instituto Mexicano de Contadores Públicos, A.C., he was managing partner of KPMG Mexico, and was member of the board of directors of KPMG United States and KPMG International. He is also a member of the corporate practices committee of Consejo Coordinador Empresarial and is a member of the audit committee of Banco Nacional de México, S.A.B., Sonoco de México, S.A.B., Grupo Herdez, S.A.B., among other companies. He is a certified public accountant from the Universidad Nacional Autonoma de México.
Francisco Javier Fernández Carbajal (58)	Has been a member of CEMEX, S.A.B. de C.V. s board of directors, a member of CEMEX, S.A.B. de C.V. s finance committee since February 2012 and a member of CEMEX, S.A.B. de C.V. s corporate practices committee since March 2013. Mr. Fernández is currently the chairman of the board of directors of

Name (Age)	Experience
	Primero Finanzas, S.A. de C.V. and of Primero Seguros, S.A. de C.V., He is also chief executive officer of Servicios Administrativos Contry, S.A. de C.V. and a proprietary investing advisor and consultant in investment banking operations since January 2002. He has served as chief executive officer of Corporate Development at Grupo Financiero BBVA Bancomer, S.A. de C.V., after holding several positions in BBVA Bancomer since 1991. Furthermore, Mr. Fernández is a member of the board of directors of Femsa, S.A.B. de C.V., Visa, Inc., Fresnillo PLC and Alfa, S.A.B. de C.V. He graduated with a degree in electric mechanical engineering from ITESM and also holds an M.B.A. from Harvard Business School.
Rafael Rangel Sostmann (71)	Has been a member of CEMEX, S.A.B. de C.V. s board of directors and member of CEMEX, S.A.B. de C.V. s corporate practices committee since 2009 and member of CEMEX, S.A.B. de C.V. s audit committee since 2010. Mr. Rangel Sostmann was president of ITESM from 1985 to 2011. He is also a member of the board of directors of Fundación Santos y de la Garza Evia, I.B.P., which owns Hospital San José de Monterrey. Mr. Sostmann is also a member of the following boards: UNIVERSIA (Consorcio de Universidades Iberoamericanas) SACS (Southern Association of Colleges and Schools) and Thunderbird Board of Fellows. He also served as president and chief executive officer of the Monterrey Tech Foundation from October 2011 to March 2012. He graduated with a degree in electric mechanical engineering from ITESM and also holds a master s degree in mechanical engineering from University of Wisconsin.

Board Practices

In compliance with the Mexican securities market law, which was enacted on December 28, 2005 and became effective on June 28, 2006, CEMEX, S.A.B. de C.V. s shareholders approved, at a general extraordinary meeting of shareholders held on April 27, 2006, a proposal to amend various articles of CEMEX, S.A.B. de C.V. s by-laws, or *estatutos sociales*, in order to improve our standards of corporate governance and transparency, among other matters. The amendments include outlining the fiduciary duties of the members of CEMEX, S.A.B. de C.V. s board of directors, who are now required:

- to perform their duties in a value-creating manner for the benefit of CEMEX without favoring a specific shareholder or group of shareholders;
- to act diligently and in good faith by adopting informed decisions; and
- to comply with their duty of care and loyalty, abstaining from engaging in illicit acts or activities.

The Mexican securities market law also eliminated the position of statutory examiner, whose duties of surveillance are now the responsibility of the board of directors, fulfilled through the corporate practices and the audit committees, as well as through the external auditor who audits the entity s financial statements, each within its professional role. With its surveillance duties, CEMEX, S.A.B. de C.V. s board of directors is no longer in charge of managing CEMEX; instead, this is the responsibility of CEMEX, S.A.B. de C.V. s chief executive officer.

Pursuant to the Mexican securities market law and CEMEX, S.A.B. de C.V. s by-laws, at least 25% of its directors must qualify as independent directors.

CEMEX, S.A.B. de C.V. has not entered into any service contracts with its directors that provide for benefits upon termination of employment.

The Audit Committee, the Corporate Practices Committee and the Finance Committee

The Mexican securities market law required CEMEX, S.A.B. de C.V. to create a corporate practices committee comprised entirely of independent directors, in addition to its then existing audit committee. In compliance with such requirement, in 2006 CEMEX, S.A.B. de C.V. increased the responsibilities of its audit committee and changed its name to corporate practices and audit committee. To further enhance the effectiveness of its corporate governance, at CEMEX, S.A.B. de C.V. s annual shareholders meeting of April 23, 2009, CEMEX, S.A.B. de C.V. s shareholders approved the division of this committee into two committees with different members and responsibilities, the audit committee and the corporate practices committee. In addition, at an annual general ordinary shareholders meeting held on April 29, 2010, CEMEX, S.A.B. de C.V. s shareholders approved the creation of the finance committee.

CEMEX, S.A.B. de C.V. s audit committee is responsible for:

- evaluating our internal controls and procedures, and identifying deficiencies;
- following up with corrective and preventive measures in response to any non-compliance with our operation and accounting guidelines and policies;
- evaluating the performance of our external auditors;
- describing and valuing non-audit services performed by our external auditor;
- reviewing CEMEX, S.A.B. de C.V. s financial statements;
- assessing the effects of any modifications to the accounting policies approved during any fiscal year;
- overseeing measures adopted as a result of any observations made by CEMEX, S.A.B. de C.V. s shareholders, directors, executive officers, employees or any third parties with respect to accounting, internal controls and internal and external audit, as well as any complaints regarding management irregularities, including anonymous and confidential methods for addressing concerns raised by employees; and
- analyzing the risks identified by CEMEX, S.A.B. de C.V. s independent auditors, accounting, internal control and process assessment areas.

CEMEX, S.A.B. de C.V. s corporate practices committee is responsible for:

- evaluating the hiring, firing and compensation of CEMEX, S.A.B. de C.V. s chief executive officer;
- reviewing the hiring and compensation policies for CEMEX, S.A.B. de C.V. s executive officers;

- reviewing related party transactions;
- reviewing policies regarding use of corporate assets;
- reviewing unusual or material transactions;
- evaluating waivers granted to our directors or executive officers regarding seizure of corporate opportunities; and
- identifying, evaluating and following up on the operating risks affecting the company and its subsidiaries.

CEMEX, S.A.B. de C.V. s finance committee is responsible for:

- evaluating the company s financial plans; and
- reviewing the company s financial strategy and its implementation.

Table of Contents

Under CEMEX, S.A.B. de C.V. s bylaws and the Mexican securities market law, all members of the corporate practices committee and the audit committee, including their presidents, are required to be independent directors. The president of the audit committee, the corporate practices committee and the finance committee shall be appointed and removed from his or her position only by the general shareholders meeting, and the rest of the members may only be removed by a resolution of the general shareholders meeting or of the board of directors.

Set forth below are the names of the members of CEMEX, S.A.B. de C.V. s current audit committee, corporate practices committee and finance committee. The terms of the members of the committees are indefinite. José Manuel Rincón Gallardo qualifies as an audit committee financial expert for purposes of the Sarbanes Oxley Act of 2002. See Item 16A Audit Committee Financial Expert.

Audit Committee:

Roberto Zambrano Villarreal, President	See Board of Directors.
José Manuel Rincón Gallardo	See Board of Directors.
Rafael Rangel Sostmann	See Board of Directors.

Corporate Practices Committee:

Dionisio Garza Medina, President	See Board of Directors.
Francisco Javier Fernández Carbajal	See Board of Directors.
Rafael Rangel Sostmann	See Board of Directors.

Finance Committee:

Rogelio Zambrano Lozano, President	See Board of Directors.
Rodolfo García Muriel	See Board of Directors.
Francisco Javier Fernández Carbajal	See Board of Directors.
Tomás Milmo Santos	See Board of Directors.

Compensation of CEMEX, S.A.B. de C.V. s Directors and Members of Our Senior Management

For the year ended December 31, 2012, the aggregate amount of compensation we paid, or our subsidiaries paid, to all members of our board of directors, alternate members of our board of directors and senior managers, as a group, was approximately U.S.$37.2 million. Approximately U.S.$26.1 million of this amount was paid as base compensation, including approximately U.S.$9.5 million of a bonus pool to key executives base on our operating performance and U.S.$3.1 million to provide pension, retirement or similar benefits. In addition, approximately U.S.$11.1 million of the aggregate amount corresponds to stock-based compensation, including approximately U.S.$2.4 million related to the bonus pool to key executives based on our operating performance and approximately U.S.$3 million of compensation earned under the program that is linked to the fulfillment of certain performance conditions and that is payable through March 2015 to then still active members of CEMEX, S.A.B. de C.V.´s board of directors and top management executives. During 2012, we issued 9.8 million of CPOs to this group pursuant to the Restricted Stock Incentive Plan, or RSIP, described below under Restricted Stock Incentive Plan (RSIP).

CEMEX, Inc. ESOP

As a result of the acquisition of CEMEX, Inc. (formerly Southdown, Inc.) in November 2000, we established a stock option program for CEMEX, Inc. s executives to purchase our ADSs. The options granted under the program have a fixed exercise price in U.S. Dollars equivalent to the average market price of one ADS during a six-month period before the grant date and have a 10-year term. Twenty-five percent of the options vested annually during the first four years after their grant date. The options are covered using shares currently

Table of Contents

owned by our subsidiaries, thus potentially increasing stockholders equity and the number of shares outstanding. As of December 31, 2012, options to acquire 1,014,894 ADSs remained outstanding under this program. These options have a weighted average exercise price of approximately U.S.$1.40 per CPO, or U.S.$13.98 per ADS. As of December 31, 2012, the outstanding options under this program had a remaining tenure of approximately 1.4 years.

The November 2001 Voluntary Exchange Program

In November 2001, we implemented a voluntary exchange program to offer participants in our then existing stock option program new options in exchange for their existing options. The new options have an escalating strike price in U.S. Dollars increasing at a 7% annual rate. As of December 31, 2012, options to acquire 1,451,249 CPOs remained outstanding under this program, with a weighted average exercise price of approximately U.S.$1.42 per CPO. As of December 31, 2012, the outstanding options under this program had a remaining tenure of approximately 0.6 years. Exercise prices and the number of underlying CPOs are technically adjusted for the dilutive effect of stock dividends and recapitalization of retained earnings.

The 2004 Voluntary Early Exercise Program

In December 2004, we offered participants in our then existing stock options programs new options, conditioned on the participants exercising and receiving the intrinsic value of their existing options. As a result of this program, we granted a total of 139,151,236 new options. The new options had an initial strike price of U.S.$7.4661 per CPO, which was U.S.$0.50 above the closing CPO market price on the date on which the old options were exercised, and which increased at a rate of 5.5% per annum. All gains from the exercise of these new options would be paid in restricted CPOs. The restrictions would be removed gradually within a period of between two and four years, depending on the exercise date.

Of the 139,151,236 new options, 120,827,370 would be automatically exercised if the closing CPO market price reached U.S.$8.50, while the remaining 18,323,866 options did not have an automatic exercise threshold. Holders of these options were entitled to receive an annual payment of U.S.$0.10 net of taxes per option outstanding as of the payment date until exercise or maturity of the options or until the closing CPO market price reached U.S.$8.50, which payment was scheduled to grow annually at a 10% rate.

On June 17, 2005, the closing CPO market price reached U.S.$8.50, and, as a result, all outstanding options subject to automatic exercise were automatically exercised and the annual payment to which holders of the remaining options were entitled was terminated. As of December 31, 2012, options to acquire 15,022,272 CPOs under this program were non-vested.

For accounting purposes under IFRS, as of December 31, 2012, we accounted for the options granted under the February 2004 voluntary exchange program by means of the fair value method through earnings. See notes 2S and 21 to our 2012 audited consolidated financial statements included elsewhere in this annual report.

Consolidated Employee Stock Option Information

Stock options activity during 2011 and 2012, the balance of options outstanding as of December 31, 2011 and 2012 and other general information regarding our stock option programs, is presented in note 21 to our 2012 audited consolidated financial statements included elsewhere in this annual report.

As of December 31, 2012, the following employee stock options to purchase our securities were outstanding:

Title of security underlying options	**Number of CPOs or CPO equivalents underlying options**	**Expiration Date**	**Range of exercise prices per CPO or CPO equivalent**	
CPOs (U.S. Dollars) (may be instantly cash-settled)	1,451,249	2013	U.S.$	1.4-1.6
CEMEX, Inc. ESOP	10,148,940	2013-2015	U.S.$	1.0-1.9

Table of Contents

Restricted Stock Incentive Plan (RSIP)

Since January 2005, we have been changing our long-term variable compensation programs from stock option grants to restricted stock awards under a RSIP. Under the terms of the RSIP, eligible employees are allocated a specific number of restricted CPOs as variable compensation to be vested over a four-year period. Before 2006, we distributed annually to a trust an amount in cash sufficient to purchase in the market, on behalf of each eligible employee, 25% of such employee s allocated number of CPOs. During 2006, in order to reduce the volatility of our RSIP, we began to distribute annually an amount in cash sufficient to purchase 100% of the allocated CPOs for each eligible employee. Although the vesting period of the restricted CPOs and other features of the RSIP did not change as a result of this new policy, the nominal amount of annual compensation received by eligible employees increased in proportion to the additional number of CPOs received as a result of the new policy. The CPOs purchased by the trust was held in a restricted account by the trust on behalf of each employee for four years. At the end of each year during such four-year period, the restrictions lapsed with respect to 25% of the allocated CPOs and such CPOs became freely transferable and subject to withdrawal from the trust.

Starting in 2009, we made additional changes to the mechanism for granting the RSIP, but the benefits remained the same as in previous years. First, CPOs are no longer purchased in the open market, but instead CEMEX issues new CPOs to cover the RSIP. Second, CEMEX now issues the RSIP in four blocks of 25% per year. The total number of CEMEX CPOs granted during 2012 was approximately 72.5 million, of which approximately 37.9 million were related to senior management and the board of directors. In 2012, approximately 46.4 million CPOs were issued, representing the first 25% of the 2012 program, representing the second 25% of the 2011 program, the third 25% of the 2010 program and the final 25% of the 2009 program. Of these 46.4 million CPOs, approximately 17.7 million corresponded to senior management and the board of directors. See note 25 to our consolidated financial statements included elsewhere in this annual report.

Employees

As of December 31, 2012, we had approximately 43,905 employees worldwide, which represented a decrease of approximately 0.45% from December 31, 2011. We reduced our headcount by approximately 28% as a result of the implementation of our global cost-reduction program since 2007, as part of our ongoing efforts to align our company with new market conditions, lower costs and increase our efficiency.

The following table sets forth the number of our full-time employees and a breakdown of their geographic location as of December 31, 2010, December 31, 2011 and December 31, 2012:

Location	2010	2011	2012
Mexico	13,082	12,036	11,108
United States	8,910	8,391	9,846
Northern Europe			
United Kingdom	3,580	3,259	3,072
Germany	3,149	3,010	2,907
France	1,963	1,933	1,915
Rest of Northern Europe	3,605	3,510	3,299
The Mediterranean			
Spain	2,595	2,228	1,798
Egypt	658	644	637
Rest of the Mediterranean	2,223	2,093	2,056
South America and the Caribbean			
Colombia	1,544	1,875	2,157
Rest of South America and the Caribbean	3,774	3,806	3,911
Asia			
Philippines	575	549	555
Rest of Asia	875	770	644

Table of Contents

Employees in Mexico have collective bargaining agreements on a plant-by-plant basis, which are renewable on an annual basis with respect to salaries and on a biannual basis with respect to benefits. During 2012, more than 100 contracts with different labor unions were renewed.

Approximately 27% of our employees in the United States are represented by unions, with the largest number being members of the International Brotherhood of Teamsters, the Laborers Union of North America, the International Brotherhood of Boilermakers and the International Union of Operating Engineers. Collective bargaining agreements are in effect or are being negotiated at many of our U.S. plants and have various expiration dates through December 31, 2017.

Our Spanish union employees have company collective bargaining agreements that are renewable every two to three years on a legal entity and business basis. Some employees in the ready-mix concrete, mortar, aggregates and transport sectors have industry collective bargaining agreements. Executive compensation in Spain is subject to our institutional policies and influenced by the local labor market.

In the United Kingdom, our cement manufacturing and cement logistics operations have collective bargaining agreements with the Unite union. The rest of our operations in the United Kingdom are not part of collective bargaining agreements; however, there are local agreements for consultation and employee representation with Unite union, and the GMB union.

In Germany, most of our employees work under collective bargaining agreements with the Industriegewerkschaft Bauen Agrar Umwelt IG B.A.U. union. In addition to the collective bargaining agreements, there are internal company agreements, negotiated between the workers council and the company itself.

In France, less than 5% of our employees are members of one of the five main unions. At least one representative from one of five main unions is represented in our French subsidiaries, mainly in the following legal entities: Cemex Granulats, Cemex Bétons Ile de France, Cemex Bétons Rhône Alpes Auvergne, Cemex Bétons Sud Est and Cemex Granulats Rhône Méditrreanéee. All agreements are negotiated with unions and non-union representatives elected in the local workers council (*Comité d Entreprise*) for periods of four years. The last elections took place in April 2010.

In Colombia, a single union represents our employees at the Bucaramanga and Cúcuta cement plants. There are also collective agreements with non-union workers at the Caracolito/Ibagué and Santa Rosa cement plants, all ready-mix concrete and aggregates plants and all logistics operations in Colombia. Overall, we consider our relationships with labor unions representing our employees to be satisfactory.

Share Ownership

As of March 31, 2013, our senior management and directors and their immediate families owned, collectively, approximately 2.25% of CEMEX, S.A.B. de C.V. s outstanding shares, including shares underlying stock options and restricted CPOs under our ESOPs. This percentage does not include shares held by the extended families of members of our senior management and directors, since, to the best of our knowledge, no voting arrangements or other agreements exist with respect to those shares. As of March 31, 2013, no individual director or member of our senior management beneficially owned one percent or more of any class of CEMEX, S.A.B. de C.V. s outstanding capital stock and each such individual s share ownership has not been previously disclosed to shareholders or otherwise made public.

Table of Contents

Item 7 Major Shareholders and Related Party Transactions

Major Shareholders

Based upon information contained in a statement on Schedule 13G filed with the SEC on January 30, 2013, as of December 31, 2012, BlackRock Inc. beneficially owned 821,682,526 CPOs, which represent approximately 7.2% of CEMEX, S.A.B. de C.V. s outstanding capital stock as of March 31, 2013. BlackRock Inc. does not have voting rights different from our other non-Mexican holders of CPOs. As required by CEMEX, S.A.B. de C.V. s by-laws, CEMEX, S.A.B. de C.V. s board of directors is required to approve Blackrock Inc. s beneficial ownership of CEMEX, S.A.B. de C.V. s outstanding capital stock. We expect the corresponding request for approval will be submitted to the board of directors during the second quarter of 2013.

Based upon information contained in a statement on Schedule 13G filed with the SEC on April 10, 2013, as of March 31, 2013, Southeastern Asset Management, Inc., an investment adviser registered under the U.S. Investment Advisers Act of 1940, as amended, beneficially owned 51,732,448 ADSs and 40,571,360 CPOs, which represent a total of 557,895,840 CPOs or approximately 4.9% of CEMEX, S.A.B. de C.V. s outstanding capital stock as of March 31, 2013. According to SEC filings, Southeastern Asset Management, Inc. increased its shareholding from 13.7% of CEMEX, S.A.B. de C.V. s then outstanding capital stock as of December 31, 2010 to 18.4% of CEMEX, S.A.B. de C.V. s then outstanding capital stock as of December 31, 2011. Southeastern Asset Management, Inc. subsequently decreased its shareholding to 4.9% of CEMEX, S.A.B. de C.V. s then outstanding capital stock as of March 31, 2013. Southeastern Asset Management, Inc. does not have voting rights different from our other non-Mexican holders of CPOs.

As of March 31, 2013, CEMEX, S.A.B. de C.V. s outstanding capital stock consisted of 22,747,925,696 Series A shares and 11,373,962,848 Series B shares, in each case including shares held by our subsidiaries.

As of March 31, 2013, a total of 21,705,670,506 Series A shares and 10,852,835,253 Series B shares outstanding were held by the CPO trust. Each CPO represents two Series A shares and one Series B share. A portion of the CPOs is represented by ADSs. Under the terms of the CPO trust agreement, non-Mexican holders of CPOs and ADSs have no voting rights with respect to the A shares underlying those CPOs and ADSs. All ADSs are deemed to be held by non-Mexican nationals. At every shareholders meeting, the A shares held in the CPO trust are voted as expressed by the shareholders representing the majority of the capital stock entitled to vote.

Other than BlackRock Inc., Southeastern Asset Management, Inc. and the CPO trust, we are not aware of any person that is the beneficial owner of five percent or more of any class of CEMEX, S.A.B. de C.V. s voting securities.

As of March 31, 2013, through CEMEX, S.A.B. de C.V. s subsidiaries, we owned approximately 18.2 million CPOs, representing approximately 0.2% of CEMEX, S.A.B. de C.V. s outstanding CPOs and approximately 0.2% of CEMEX, S.A.B. de C.V. s outstanding voting stock. These CPOs are voted at the direction of our management. CEMEX, S.A.B. de C.V. s voting rights over those CPOs are the same as those of any other CPO holder. As of the same date, we did not hold any CPOs in derivative instruments hedging expected cash flows of stock options exercises.

CEMEX, S.A.B. de C.V. s provide that its board of directors must authorize in advance any transfer of voting shares of its capital stock that would result in any person s, or group s acting in concert, becoming a holder of 2% or more of CEMEX, S.A.B. de C.V. s voting shares.

Mexican securities regulations provide that our majority-owned subsidiaries may neither directly or indirectly invest in CEMEX, S.A.B. de C.V. s CPOs nor other securities representing CEMEX, S.A.B. de C.V. s capital stock. The Mexican securities authority could require any disposition of the CPOs or of other securities representing our capital stock so owned and/or impose fines on us if it were to determine that the ownership of our CPOs or of other

Table of Contents

securities representing CEMEX, S.A.B. de C.V. s capital stock by CEMEX, S.A.B. de C.V. s subsidiaries, in most cases, negatively affects the interests of CEMEX, S.A.B. de C.V. s shareholders. Notwithstanding the foregoing, the exercise of all rights pertaining to our CPOs or to other securities representing our capital stock in accordance with the instructions of CEMEX, S.A.B. de C.V. s subsidiaries does not violate any provisions of CEMEX, S.A.B. de C.V. s bylaws or the bylaws of its subsidiaries. The holders of these CPOs or of other securities representing CEMEX, S.A.B. de C.V. s capital stock are entitled to exercise the same rights relating to their CPOs or their other securities representing CEMEX, S.A.B. de C.V. s capital stock, including all voting rights, as any other holder of the same series.

As of March 31, 2013, we had 738 ADS holders of record, representing 5,295,010,310 CPOs, or approximately 46.6% of CEMEX, S.A.B. de C.V. s outstanding capital stock as of such date.

On April 27, 2006, CEMEX, S.A.B. de C.V. s shareholders approved a stock split, which occurred on July 17, 2006. In connection with the stock split, each of CEMEX, S.A.B. de C.V. existing series A shares was surrendered in exchange for two new series A shares, and each of CEMEX, S.A.B. de C.V. s existing series B shares was surrendered in exchange for two new series B shares. Concurrent with this stock split, we authorized the amendment of the CPO trust agreement pursuant to which our CPOs are issued to provide for the substitution of two new CPOs for each of CEMEX, S.A.B. de C.V. s existing CPOs, with each new CPO representing two new series A shares and one new series B share. In connection with the stock split and at our request, Citibank, N.A., as depositary for the ADSs, distributed one additional ADS for each ADS outstanding as of the record date for the stock split. The ratio of CPOs to ADSs did not change as a result of the stock split; each ADS represents ten new CPOs following the stock split and the CPO trust amendment. The proportional equity interest participation of existing shareholders did not change as a result of the stock split. The financial data set forth in this annual report have been adjusted to give effect to the stock split.

Related Party Transactions

Francisco Javier Fernández Carbajal, a member of CEMEX, S.A.B. de C.V. s board of directors, is also a member of the board of directors of FEMSA, a large multinational beverage company. In addition, José Antonio Fernández Carbajal, the brother of Francisco Javier Fernández Carbajal, is the president and chief executive officer of FEMSA. In the ordinary course of business, we pay and receive various amounts to and from FEMSA for products and services for varying amounts on market terms.

On April 12, 2011, Juan Pablo San Agustín Rubio was appointed to the role of executive vice president for strategic planning and business development, which is part of our senior management. In 2007, in compliance with our then applicable policies, we extended a loan to Mr. San Agustín Rubio for the construction of a house. As of the date of this annual report the loan has been repaid in full. The loan bore interest at an annual rate of 1.2% and the largest amount outstanding from January 1, 2011 until it was repaid was approximately 275,000.

Except as disclosed in the preceding paragraph, from January 1, 2010 through the date of this annual report, we did not have any other outstanding loans to any of our directors or members of senior management.

Item 8 Financial Information

Consolidated Financial Statements and Other Financial Information

See Item 18 Financial Statements and Index to Consolidated Financial Statements.

Legal Proceedings

See Item 4 Information on the Company Regulatory Matters and Legal Proceedings.

180

Table of Contents

Dividends

A declaration of any dividend is made by CEMEX, S.A.B. de C.V. s shareholders at a general ordinary meeting. Any dividend declaration is usually based upon the recommendation of CEMEX, S.A.B. de C.V. s board of directors. However, CEMEX, S.A.B. de C.V. s shareholders are not obligated to approve the board s recommendation. CEMEX, S.A.B. de C.V. may only pay dividends from retained earnings included in financial statements that have been approved by CEMEX, S.A.B. de C.V. s shareholders and after all losses have been paid for, a legal reserve equal to 5% of its paid-in capital has been created and CEMEX, S.A.B. de C.V. s shareholders have approved the relevant dividend payment. According to Mexican tax laws, all shareholders, excluding Mexican corporations, that receive a dividend in cash or in any other form are subject to a withholding tax. See Item 10 Additional Information Taxation Mexican Tax Considerations. Since CEMEX, S.A.B. de C.V. conducts its operations through its subsidiaries, it has no significant assets of its own except for its investments in those subsidiaries. Consequently, CEMEX, S.A.B. de C.V. s ability to pay dividends to its shareholders is dependent upon its ability to receive funds from its subsidiaries in the form of dividends, management fees, or otherwise. The Facilities Agreement and the indentures governing the Senior Secured Notes effectively prohibit CEMEX, S.A.B. de C.V. from declaring and paying cash dividends or making other cash distributions to its shareholders. See Item 3 Key Information Risk Factors CEMEX, S.A.B. de C.V. s ability to repay debt and pay dividends depends on our subsidiaries ability to transfer income and dividends to us.

The recommendation of CEMEX, S.A.B. de C.V. s board of directors as to whether to pay and the amount of any annual dividends has been and will continue to be, in absence of contractual restrictions to pay or declare dividends, based upon, among other things, earnings, cash flow, capital requirements, contractual restrictions, and our financial condition and other relevant factors.

Owners of ADSs on the applicable record date will be entitled to receive any dividends payable in respect of the A shares and the B shares underlying the CPOs represented by those ADSs; however, as permitted by the deposit agreement pursuant to which CEMEX, S.A.B. de C.V. s ADSs are issued, CEMEX, S.A.B. de C.V. may instruct the ADS depositary not to extend the option to elect to receive cash in lieu of the stock dividend to the holders of ADSs. The ADS depositary will fix a record date for the holders of ADSs in respect of each dividend distribution. Unless otherwise stated, the ADS depositary has agreed to convert cash dividends received by it in respect of the A shares and the B shares underlying the CPOs represented by ADSs from Mexican Pesos into U.S. Dollars and, after deduction or after payment of expenses of the ADS depositary, to pay those dividends to holders of ADSs in U.S. Dollars. CEMEX, S.A.B. de C.V. cannot assure holders of its ADSs that the ADS depositary will be able to convert dividends received in Mexican Pesos into U.S. Dollars.

CEMEX, S.A.B. de C.V. did not declare a dividend for fiscal years 2010, 2011 and 2012.

Significant Changes

Except as described herein, no significant change has occurred since the date of our consolidated financial statements included elsewhere in this annual report.

Table of Contents

Item 9 Offer and Listing

Market Price Information

CEMEX, S.A.B. de C.V. s CPOs are listed on the Mexican Stock Exchange and trade under the symbol CEMEX.CPO. CEMEX, S.A.B. de C.V. s ADSs, each of which currently represents ten CPOs, are listed on the New York Stock Exchange (NYSE) and trade under the symbol CX. The following table sets forth, for the periods indicated, the reported highest and lowest market quotations in nominal Mexican Pesos for CPOs on the Mexican Stock Exchange and the high and low sales prices in U.S. Dollars for ADSs on the NYSE.

	CPOs(1)		**ADSs**	
Calendar Period	**High**	**Low**	**High**	**Low**
Yearly				
2008	33.80	5.55	32.61	4.01
2009	19.19	6.16	14.58	3.94
2010	16.16	9.59	12.60	7.46
2011	13.60	3.25	11.15	2.27
2012	12.93	7.00	10.14	4.94
Quarterly				
2011				
First quarter	13.60	10.13	11.15	8.35
Second quarter	10.96	8.99	9.28	7.55
Third quarter	10.14	4.36	8.70	3.33
Fourth quarter	7.70	3.25	5.61	2.27
2012				
First quarter	11.05	7.25	8.67	5.30
Second quarter	9.99	7.00	7.88	4.94
Third quarter	11.18	8.45	8.74	6.28
Fourth quarter	12.93	10.71	10.14	8.07
2013				
First quarter	15.55	12.59	12.47	9.83
Monthly				
2012-2013				
October	12.14	10.71	9.48	8.07
November	12.30	11.02	9.48	8.27
December	12.93	11.52	10.14	8.85
January	14.31	12.93	11.20	10.17
February	14.05	12.59	11.07	9.83
March	15.55	13.58	12.47	10.57
April(2)	15.41	13.61	12.71	11.03

Source: Based on data of the Mexican Stock Exchange and the NYSE.

(1) As of December 31, 2012, approximately 99.2% of CEMEX, S.A.B. de C.V. s outstanding share capital was represented by CPOs.
(2) CPO and ADS prices are through April 19, 2013.

On April 19, 2013, the last reported closing price for CPOs on the Mexican Stock Exchange was Ps13.96 per CPO, and the last reported closing price for ADSs on the NYSE was U.S.$11.34 per ADS.

Table of Contents

Item 10 Additional Information

Articles of Association and By-laws

General

Pursuant to the requirements of Mexican corporations law, CEMEX, S.A.B. de C.V. s articles of association and by-laws (*estatutos sociales)*, have been registered with the Mercantile Section of the Public Registry of Property and Commerce in Monterrey, N.L., Mexico, under entry number 21, since June 11, 1920.

CEMEX, S.A.B. de C.V. is a holding company engaged, through its operating subsidiaries, primarily in the production, distribution, marketing and sale of cement, ready-mix concrete and clinker. CEMEX, S.A.B. de C.V. s objectives and purposes can be found in article 2 of CEMEX, S.A.B. de C.V. s by-laws.

CEMEX, S.A.B. de C.V. has two series of common stock, the Series A common stock, with no par value, or A shares, which can only be owned by Mexican nationals, and the Series B common stock, with no par value, or B shares, which can be owned by both Mexican and non-Mexican nationals. CEMEX, S.A.B. de C.V. s by-laws state that the A shares may not be held by non-Mexican individuals, corporations, groups, units, trusts, associations or governments that are foreign or have participation by foreign governments or their agencies. CEMEX, S.A.B. de C.V. s by-laws also state that the A shares shall at all times account for a minimum of 64% of CEMEX, S.A.B. de C.V. s total outstanding voting stock and that the B shares shall at all times account for a minimum of 36% of CEMEX, S.A.B. de C.V. s total outstanding voting stock. Other than as described herein, holders of the A shares and the B shares have the same rights and obligations.

In 1994, CEMEX, S.A.B. de C.V. changed from a fixed capital corporation to a variable capital corporation in accordance with Mexican corporation law. As a result, CEMEX, S.A.B. de C.V. established a fixed capital account and a variable capital account and issued one share of variable capital stock of the same series for each eight shares of fixed capital stock held by any shareholder. Each of our fixed and variable capital accounts is comprised of A shares and B shares. Under the Mexican securities market law and CEMEX, S.A.B. de C.V. s by-laws, holders of shares representing variable capital are not entitled to withdraw those shares.

Shareholder authorization is required to increase or decrease either the fixed capital account or the variable capital account. Shareholder authorization to increase or decrease the fixed capital account must be obtained at an extraordinary meeting of shareholders. Shareholder authorization to increase or decrease the variable capital account must be obtained at an ordinary general meeting of shareholders.

On September 15, 1999, CEMEX, S.A.B. de C.V. s shareholders approved a stock split, and for every one of CEMEX, S.A.B. de C.V. s shares of any series CEMEX, S.A.B. de C.V. issued two Series A shares and one Series B share. Concurrently with this stock split, CEMEX, S.A.B. de C.V. also consummated an exchange offer to exchange new CPOs and new ADSs representing the new CPOs for CEMEX, S.A.B. de C.V. s then existing A shares, B shares and ADSs, and converted CEMEX, S.A.B. de C.V. s then existing CPOs into the new CPOs.

On June 1, 2001, the Mexican securities market law was amended, among other, to increase the protection granted to minority shareholders of Mexican listed companies and to commence bringing corporate governance procedures of Mexican listed companies in line with international standards.

On February 6, 2002, the Mexican securities authority (*Comisión Nacional Bancaria y de Valores*) issued an official communication authorizing the amendment of CEMEX, S.A.B. de C.V. s by-laws to incorporate additional provisions to comply with the then new provisions of the Mexican securities market law. Following approval from CEMEX, S.A.B. de C.V. s shareholders at the 2002 annual general ordinary shareholders meeting, CEMEX, S.A.B. de C.V. amended and restated its by-laws to incorporate these additional provisions, which consist of, among other things, protective measures to prevent share acquisitions, hostile takeovers, and direct or indirect changes of control. As a result of the amendment and restatement of CEMEX, S.A.B. de C.V. s by-laws, the expiration of CEMEX, S.A.B. de C.V. s corporate term of existence was extended from 2019 to 2100.

Table of Contents

On March 19, 2003, the Mexican securities authority issued new regulations designed to (i) further implement minority rights granted to shareholders by the Mexican securities market law and (ii) simplify and consolidate in a single document provisions relating to securities offerings and periodic reports by Mexican-listed companies.

On April 24, 2003, CEMEX, S.A.B. de C.V. s shareholders approved changes to its by-laws, incorporating additional provisions and removing some restrictions. The changes that are still in force are as follows:

The limitation on CEMEX, S.A.B. de C.V. s variable capital was removed. Formerly, CEMEX, S.A.B. de C.V. s variable capital was limited to ten times CEMEX, S.A.B. de C.V. s minimum fixed capital.

Increases and decreases in CEMEX, S.A.B. de C.V. s variable capital now require the notarization of the minutes of the annual general ordinary shareholders meeting that authorize such increase or decrease, as well as the filing of these minutes with the Mexican National Securities Registry (*Registro Nacional de Valores*), except when such increase or decrease results from (i) shareholders exercising their redemption rights or (ii) stock repurchases.

The cancellation of registration of our shares in the Securities Section of the Mexican National Securities Registry now involves an amended procedure, which is described below under Repurchase Obligation. In addition, any amendments to the article containing these provisions no longer require the consent of the Mexican securities authority and 95% approval by shareholders entitled to vote.

On December 30, 2005, a Mexican securities market law was published to continue bringing corporate governance requirements of Mexican listed companies in line with international standards. This new law includes provisions increasing disclosure information requirements, improving minority shareholder rights, and strengthening corporate governance standards including the introduction of new requirements and fiduciary duties (duties of care and loyalty), applicable to each director, officer, external auditor and major shareholder of publicly traded companies. The law also provides that each member of the audit committee must be an independent director, and requires the creation of corporate governance committees integrated by independent directors as well. In addition, the law clarifies directors duties, specifies safe harbors for directors actions, clarifies what is deemed as a conflict of interest and clarifies what are the confidentiality obligations for directors.

Under the new Mexican securities market law, CEMEX, S.A.B. de C.V. was required to adopt specific amendments to its by-laws within 180 days of the effective date of the new law. Following approval from CEMEX, S.A.B. de C.V. s shareholders at its 2005 annual general ordinary shareholders meeting held on April 27, 2006, CEMEX, S.A.B. de C.V. amended and restated its by-laws to incorporate these amendments. The amendments to CEMEX, S.A.B. de C.V. s by-laws became effective on July 3, 2006. The most significant of these amendments were as follows:

The change of its corporate name from CEMEX, S.A. de C.V. to CEMEX, S.A.B. de C.V., which means that it is now called a publicly traded company (*Sociedad Anónima Bursátil* or S.A.B.).

The creation of a corporate practices committee, which is a new committee of CEMEX, S.A.B. de C.V. s board of directors and which is comprised exclusively of independent directors.

The elimination of the position of statutory examiner (comisario) and the assumption of its responsibilities by the board of directors through the audit committee and the new corporate practices committee, as well as through the external auditor who audits CEMEX, S.A.B. de C.V. s financial statements, each within its professional role.

The express attribution of certain duties (such as the duty of loyalty and the duty of care) and liabilities on members of the board of directors as well as on certain senior executive officers.

The implementation of a mechanism for claims of a breach of a director s or officer s duties, to be brought by us or by holders of 5% or more of CEMEX, S.A.B. de C.V. s shares.

Table of Contents

The chief executive officer is now the person in charge of managing the company; previously, this was the duty of the board of directors. The board of directors now supervises the chief executive officer.

Shareholders are given the right to enter into certain agreements with other shareholders.

At a general extraordinary meeting of shareholders held on April 28, 2005, CEMEX, S.A.B. de C.V. s shareholders approved a two-for-one stock split, which became effective on July 1, 2005. In connection with this stock split, each of CEMEX, S.A.B. de C.V. s existing Series A shares was surrendered in exchange for two new Series A shares, and each of CEMEX, S.A.B. de C.V. s existing Series B shares was surrendered in exchange for two new Series B shares. Concurrent with this stock split, we authorized the amendment of the CPO trust agreement pursuant to which CEMEX, S.A.B. de C.V. s CPOs are issued to provide for the substitution of two new CPOs for each of CEMEX, S.A.B. de C.V. s existing CPOs, with each new CPO representing two new Series A shares and one new Series B share. The number of CEMEX, S.A.B. de C.V. s existing ADSs did not change as a result of the stock split. Instead, the ratio of CPOs to ADSs was modified so that each existing ADS represented ten new CPOs following the stock split and the CPO trust amendment.

At the 2005 annual general ordinary shareholders meeting held on April 27, 2006, CEMEX, S.A.B. de C.V. s shareholders approved a new stock split, which became effective on July 17, 2006. In connection with this new two-for-one stock split, each of its existing Series A shares was surrendered in exchange for two new Series A shares, and each of its existing Series B shares was surrendered in exchange for two new Series B shares. Concurrent with this stock split, we authorized the amendment of the CPO trust agreement pursuant to which CEMEX, S.A.B. de C.V. s CPOs are issued to provide for the substitution of two new CPOs for each of its existing CPOs, with each new CPO representing two new Series A shares and one new Series B share. In connection with the stock split and at our request, Citibank, N.A., as depositary for the ADSs, distributed one additional ADS for each ADS outstanding as of the record date for the stock split. The ratio of CPOs to ADSs did not change as a result of the stock split; each ADS continued to represent ten CPOs following the stock split and the CPO trust amendment. The proportional equity interest participation of existing shareholders did not change as a result of this stock split.

On September 4, 2009, CEMEX, S.A.B. de C.V. held an extraordinary shareholders meeting in which its shareholders approved an increase in the variable portion of its capital stock of up to 4.8 billion shares (equivalent to 1.6 billion CPOs or 160 million ADSs). Pursuant to the resolution approved by CEMEX, S.A.B. de C.V. s shareholders, the subscription and payment of the new shares represented by CPOs may occur through a public offer of CPOs and/or issuance of convertible bonds within a period of 24 months. On September 28, 2009, CEMEX, S.A.B. de C.V. sold a total of 1,495,000,000 CPOs, directly or in the form of ADSs, in a global offering for approximately U.S.$1,782 billion in net proceeds. On November 11, 2009, CEMEX, S.A.B. de C.V. launched an exchange offer in México, in transactions exempt from registration pursuant to Regulation S under the Securities Act, directed to holders of CBs, in order to exchange such CBs for the Mandatory Convertible Notes. Pursuant to the exchange offer, on December 10, 2009, CEMEX, S.A.B. de C.V. issued approximately Ps4.1 billion (approximately U.S.$334 million at the Peso/U.S. Dollar CEMEX accounting rate on December 31, 2010) in Mandatory Convertible Notes in exchange for CBs. On March 30, 2010, CEMEX, S.A.B. de C.V. s closed the offering of U.S.$715 million aggregate principal amount of its 2010 Optional Convertible Subordinated Notes.

On February 24, 2011, CEMEX, S.A.B. de C.V. held an extraordinary shareholders meeting in which its shareholders approved an increase in the variable portion of its capital stock of up to 6 billion shares (equivalent to 2 billion CPOs or 200 million ADSs). Pursuant to the resolution approved by CEMEX, S.A.B. de C.V. s shareholders, the subscription and payment of the new shares represented by CPOs may occur through a public offer of CPOs and/or issuance of convertible bonds and, until then, these shares will be kept in our treasury. In addition, on February 24, 2011, CEMEX, S.A.B. de C.V. held its annual general ordinary shareholders meeting in which its shareholders approved an increase in the variable portion of its capital stock of up to 60 million shares (equivalent to 20 million CPOs or 2 million ADSs). These shares will be kept in CEMEX, S.A.B. de

Table of Contents

C.V. s treasury and will be used to preserve the rights of note holders pursuant to the issuance of convertible notes. On March 15, 2011, CEMEX, S.A.B. de C.V. s closed the offering of U.S.$1,667,500,000 aggregate principal amount of its 2011 Optional Convertible Subordinated Notes.

As of December 31, 2012, CEMEX, S.A.B. de C.V. s common stock was represented as follows:

	2012	
Shares(1)	Series A(2)	Series B(3)
Subscribed and paid shares	21,872,295,096	10,936,147,548
Unissued shares authorized for stock compensation programs	1,155,804,458	577,902,229
Shares that guarantee the issuance of convertible securities(4)	6,162,438,520	3,081,219,260
Shares authorized for the issuance of stock or convertible securities(5)	4,146,404	2,073,202
	29,194,684,478	14,597,342,239

(1) As of December 31, 2012, 13,068,000,000 shares correspond to the fixed portion, and 30,724,026,717 shares correspond to the variable portion.
(2) Series A or Mexican shares must represent at least 64% of CEMEX s capital stock.
(3) Series B or free subscription shares must represent at most 36% of CEMEX s capital stock.
(4) Shares that guarantee the conversion of the Mandatory Convertible Notes and the 2010 Optional Convertible Subordinated Notes and 2011 Optional Convertible Subordinated Notes.
(5) Shares authorized for the issuance of stock through a public offer or through the issuance of convertible securities.

On March 21, 2013, CEMEX, S.A.B. de C.V. held its 2012 annual general ordinary shareholders meeting in which its shareholders approved, among other items, (i) an increase in the variable portion of CEMEX, S.A.B. de C.V. s capital stock of up to 1,312,380,330 shares (equivalent to approximately 437.5 million CPOs or 43,746,011 ADSs) paid with a charge to retained earnings and (ii) an increase in the variable portion of CEMEX, S.A.B. de C.V. s capital stock through the issuance of up to 369,000,000 shares (equivalent to 123 million CPOs or 12,300,000 ADSs), such shares to be kept in CEMEX, S.A.B. de C.V. s treasury and to be used to preserve the rights of note holders pursuant to the outstanding Mandatory Convertible Notes and the 2010 and 2011 Optional Convertible Subordinated Notes.

In addition, on March 21, 2013, CEMEX, S.A.B. de C.V. held an extraordinary shareholder s meeting at which its shareholders approved, among other items, the proposal by the board of directors to (i) issue new notes convertible into shares and to place them (A) among public investors and use the proceeds to pay and cancel a corresponding amount of 2010 Optional Convertible Subordinated Notes and 2011 Optional Convertible Subordinated Notes and/or (B) through an exchange offer for the 2010 Optional Convertible Subordinated Notes and 2011 Optional Convertible Subordinated Notes, and (ii) apply the shares held in treasury to satisfy the conversion rights of any such cancelled or exchanged 2010 Optional Convertible Subordinated Notes or 2011 Optional Convertible Subordinated Notes to satisfy the conversion rights of any such new notes convertible into shares.

CEMEX, S.A.B. de C.V. did not declare a dividend for fiscal years 2010, 2011 and 2012. See Item 8 Financial Information Dividends for a description of CEMEX, S.A.B. de C.V. s policy on dividend distributions and dividend restrictions.

At each of CEMEX, S.A.B. de C.V. s 2010, 2011 and 2012 annual general ordinary shareholders meetings, held on February 24, 2011, February 23, 2012 and March 21, 2013, respectively, CEMEX, S.A.B. de C.V. s shareholders approved a recapitalization of retained earnings. New CPOs issued pursuant to each such recapitalization were allocated to shareholders on a pro-rata basis. As a result, shares equivalent to approximately 401 million CPOs, approximately 418.7 million CPOs and approximately 437.5 million CPOs were allocated to shareholders on a pro-rata basis in connection with the 2010, 2011 and 2012 recapitalizations, respectively. In each case, CPO holders received one new CPO for each 25 CPOs held and ADS holders received one new ADS for each 25 ADSs held. There was no cash distribution and no entitlement to fractional shares.

Table of Contents

Changes in Capital Stock and Preemptive Rights

Subject to certain exceptions referred below, CEMEX, S.A.B. de C.V. s by-laws allow for a decrease or increase in its capital stock if it is approved by its shareholders at a shareholders meeting. Additional shares of CEMEX, S.A.B. de C.V. s capital stock, having no voting rights or limited voting rights, are authorized by its by-laws and may be issued upon the approval of its shareholders at a shareholders meeting, with the prior approval of the Mexican securities authority.

CEMEX, S.A.B. de C.V. s by-laws provide that, subject to certain exceptions, shareholders have preemptive rights with respect to the class and in proportion to the number of shares of our capital stock they hold, in connection with any capital increase in the number of outstanding A shares, B shares, or any other existing series of shares, as the case may be. Subject to certain requirements: (i) under article 53 of the Mexican securities market law, this preemptive right to subscribe is not applicable to increases of CEMEX, S.A.B. de C.V. s capital through public offers; and (ii) under article 210 bis of the General Law of Negotiable Instruments and Credit Operations (*Ley General de Titulos y Operaciones de Credito*), this preemptive right to subscribe is not applicable when issuing shares under convertible notes. Preemptive rights give shareholders the right, upon any issuance of shares by us, to purchase a sufficient number of shares to maintain their existing ownership percentages. Preemptive rights must be exercised within the period and under the conditions established for that purpose by the shareholders, and CEMEX, S.A.B. de C.V. s by-laws and applicable law provide that this period must be 15 days following the publication of the notice of the capital increase in the Official Gazette of the State of Nuevo León (*Periódico Oficial del Estado de Nuevo León*) or any major newspaper published and distributed in the City of Monterrey, Nuevo León, México.

Holders of ADSs that are U.S. persons or are located in the United States may be restricted in their ability to participate in the exercise of such pre-emptive rights. See Item 3 Key Information Risk Factors Preemptive rights may be unavailable to ADS holders.

Pursuant to the CEMEX, S.A.B. de C.V. by-laws, significant acquisitions of shares of CEMEX, S.A.B. de C.V. s capital stock and changes of control of CEMEX, S.A.B. de C.V. require prior approval from CEMEX, S.A.B. de C.V. s board of directors. CEMEX, S.A.B. de C.V. s board of directors must authorize in advance any transfer of, or creation of any encumbrance or lien on, voting shares of CEMEX, S.A.B. de C.V. s capital stock that would result in any person or group becoming a holder of 2% of more of CEMEX, S.A.B. de C.V. s shares. The CEMEX, S.A.B. de C.V. board of directors shall consider the following when determining whether to authorize such transfer of voting shares: a) the type of investors involved; b) whether the acquisition would result in the potential acquirer exercising a significant influence or being able to obtain control; c) whether all applicable rules and CEMEX, S.A.B. de C.V. s by-laws have been observed by the potential acquirer; d) whether the potential acquirers are our competitors and whether there is a risk of affecting market competition, or the potential acquirers could have access to confidential and privileged information; e) the morality and economic solvency of the potential acquirers; f) the protection of minority rights and the rights of our employees; and g) whether an adequate base of investors would be maintained. If the CEMEX, S.A.B. de C.V. board of directors denies the authorization, or the requirements established in CEMEX, S.A.B. de C.V. s by-laws are not complied with, the persons involved in the transfer shall not be entitled to exercise the voting rights corresponding to the transferred shares, and such shares shall not be taken into account for the determination of the quorums of attendance and voting at shareholders meetings, nor shall the transfers be recorded in our share registry and the registry undertaken by S.D. Indeval, Institucion para el Deposito de Valores, S.A. de C.V., or Indeval, the Mexican securities depositary, shall not have any effect.

Any acquisition of shares of CEMEX, S.A.B. de C.V. s capital stock representing 30% or more of its capital stock by a person or group of persons requires prior approval from CEMEX, S.A.B. de C.V. s board of directors and, in the event approval is granted, the acquirer has an obligation to make a public offer to purchase all of the outstanding shares of CEMEX, S.A.B. de C.V. s capital stock. In the event the requirements for significant acquisitions of shares of CEMEX, S.A.B. de C.V. s capital stock are not met, the persons acquiring such shares

Table of Contents

will not be entitled to any corporate rights with respect to such shares, such shares will not be taken into account for purposes of determining a quorum for shareholders meetings, CEMEX, S.A.B. de C.V. will not record such persons as holders of such shares in its share registry, and the registry undertaken by the Indeval shall not have any effect.

CEMEX, S.A.B. de C.V. s by-laws require the stock certificates representing shares of its capital stock to make reference to the provisions in its by-laws relating to the prior approval of the CEMEX, S.A.B. de C.V. board of directors for significant share transfers and the requirements for recording share transfers in its share registry. In addition, shareholders are responsible for informing CEMEX, S.A.B. de C.V. within five business days whenever their shareholdings exceed 5%, 10%, 15%, 20%, 25% and 30% of CEMEX, S.A.B. de C.V. s capital stock. If a person acquires beneficial ownership (within the meaning of Rule 13d-3 promulgated by the SEC under the Securities Exchange Act of 1934) of 20% or more in voting power of the outstanding voting stock of CEMEX, S.A.B. de C.V., a change of control will be deemed to have occurred under the Facilities Agreement and other debt agreements of CEMEX; provided that the acquisition of beneficial ownership of capital stock of CEMEX, S.A.B. de C.V. by Lorenzo H. Zambrano or any member of his immediate family shall not constitute a change of control as described herein.

CEMEX, S.A.B. de C.V. is required to maintain a share registry that records the names, nationalities and domiciles of all significant shareholders, and any shareholder that meets or exceeds these thresholds must be recorded in this registry if such shareholder is to be recognized or represented at any shareholders meeting. If a shareholder fails to inform CEMEX, S.A.B. de C.V. of its shareholdings reaching a threshold as described above, we will not record the transactions that cause such threshold to be met or exceeded in CEMEX, S.A.B. de C.V. s share registry, and such transaction will have no legal effect and will not be binding on us.

CEMEX, S.A.B. de C.V. s by-laws also require that its shareholders comply with legal provisions regarding acquisitions of securities and certain shareholders agreements that require disclosure to the public.

Repurchase Obligation

In accordance with Mexican securities regulations, CEMEX, S.A.B. de C.V. is obligated to make a public offer for the purchase of stock to its shareholders if CEMEX, S.A.B. de C.V. s registration with the Mexican securities registry is canceled, either by resolution of its shareholders or by an order of the Mexican securities authority. The minimum price at which we must purchase the stock is the higher of:

- the weighted average price per share based on the weighted average trading price of CEMEX, S.A.B. de C.V. s CPOs on the Mexican Stock Exchange during the latest period of 30 trading days preceding the date of the offer, for a period not to exceed six months; or

- the book value per share, as reflected in the last quarterly report filed with the Mexican securities authority and the Mexican Stock Exchange before the date of the offer.

CEMEX, S.A.B. de C.V. s board of directors shall prepare and disclose to the public through the Mexican Stock Exchange, within ten business days after the day the public offer begins, and after consulting the corporate practices committee, its opinion regarding the price of the offer and any conflicts of interests that each of its members may have regarding such offer. This opinion may be accompanied by an additional opinion issued by an independent expert that we may hire.

Following the cancellation of CEMEX, S.A.B. de C.V. s registration with the Mexican securities registry, it must place in a trust set up for that purpose for a six-month period an amount equal to that required to purchase the remaining shares held by investors who did not participate in the offer.

Table of Contents

Shareholders Meetings and Voting Rights

Shareholders meetings may be called by:

- CEMEX, S.A.B. de C.V. s board of directors or the corporate practices committee or the audit committee;

- shareholders representing at least 10% of outstanding and fully paid shares, by requesting that it to the chairman of CEMEX, S.A.B. de C.V. s board of directors or CEMEX, S.A.B. de C.V. s corporate practices committee and audit committee;

- any shareholder (i) if no meeting has been held for two consecutive years or when the matters referred to in Article 181 of the Mexican corporations law have not been dealt with, or (ii) when, for any reason, the required quorum for valid sessions of the corporate practices committee and audit committee was not reached and the board of directors failed to make the appropriate provisional appointments; or

- a Mexican court of competent jurisdiction, in the event CEMEX, S.A.B. de C.V. s board of directors or the corporate practices committee and audit committee do not comply with the valid shareholders request described above.

Notice of shareholders meetings must be published in the Official Gazette of the State of Nuevo León (*Periódico Oficial del Estado de Nuevo León*), Mexico or any major newspaper published and distributed in the City of Monterrey, Nuevo León, Mexico. The notice must be published at least 15 days prior to the date of any shareholders meeting. Consistent with Mexican law, CEMEX, S.A.B. de C.V. s by-laws further require that all information and documents relating to the shareholders meeting be available to shareholders from the date the notice of the meeting is published.

General shareholders meetings can be ordinary or extraordinary. At every general shareholders meeting, each qualified holder of A shares and B shares is entitled to one vote per share. Shareholders may vote by proxy duly appointed in writing. Under the CPO trust agreement, holders of CPOs who are not Mexican nationals cannot exercise voting rights corresponding to the A shares represented by their CPOs, in which case, the CPO trustee will vote the underlying A shares in the same manner as the holders of the majority of the voting shares.

An annual general ordinary shareholders meeting must be held during the first four months after the end of each of CEMEX, S.A.B. de C.V. s fiscal year to consider the approval of a report of its board of directors regarding CEMEX, S.A.B. de C.V. s performance and its financial statements for the preceding fiscal year and to determine the allocation of profits from the preceding year. In addition, CEMEX, S.A.B. de C.V. s annual general ordinary shareholders meeting must:

- review the annual reports of CEMEX, S.A.B. de C.V. corporate practices committee and audit committee, its chief executive officer, and its board of directors;

- elect, remove, or substitute the members of CEMEX, S.A.B. de C.V. s board of directors;

- determine the level of independence of the members of CEMEX, S.A.B. de C.V. s board of directors;

- elect or remove the chairman of CEMEX, S.A.B. de C.V. s audit and corporate practices committees;

- approve any transaction that represents 20% or more of CEMEX, S.A.B. de C.V. consolidated assets; and resolve any issues not reserved for extraordinary shareholders meetings.

A general extraordinary shareholders meeting may be called at any time to deal with any of the matters specified by Article 182 of the Mexican corporations law, which include, among other things:

extending CEMEX, S.A.B. de C.V. s corporate existence;

- CEMEX, S.A.B. de C.V. s voluntary dissolution;
- increasing or reducing CEMEX, S.A.B. de C.V. s fixed capital stock;
- changing CEMEX, S.A.B. de C.V. s corporate purpose;
- changing CEMEX, S.A.B. de C.V. s country of incorporation;
- changing CEMEX, S.A.B. de C.V. s form of organization;
- a proposed merger;
- issuing preferred shares;
- redeeming CEMEX, S.A.B. de C.V. s own shares;
- any amendment to CEMEX, S.A.B. de C.V. s by-laws; and
- any other matter for which a special quorum is required by law or by CEMEX, S.A.B. de C.V. s by-laws.

In order to vote at a meeting of shareholders, shareholders must (i) appear on the list that Indeval and the Indeval participants holding shares on behalf of the shareholders prepare prior to the meeting or must deposit prior to that meeting, or (ii) prior to the meeting, deposit the certificates representing their shares at CEMEX, S.A.B. de C.V. s offices or in a Mexican credit institution or brokerage house that operates in accordance with applicable laws in Mexico. The certificate of deposit with respect to the share certificates must be presented to CEMEX, S.A.B. de C.V. s company secretary at least 48 hours before a meeting of shareholders. CEMEX, S.A.B. de C.V. s company secretary verifies that the person in whose favor any certificate of deposit was issued is named in CEMEX, S.A.B. de C.V. s share registry and issues an admission pass authorizing that person s attendance at the meeting of shareholders.

CEMEX, S.A.B. de C.V. s by-laws provide that a shareholder may only be represented by proxy in a shareholders meeting with a duly completed form provided by CEMEX, S.A.B. de C.V. authorizing the proxy s presence. In addition, CEMEX, S.A.B. de C.V. s by-laws require that the secretary acting at the shareholders meeting publicly affirm the compliance by all proxies with this requirement. A shareholders resolution is required to take action on any matter presented at a shareholders meeting.

At an ordinary meeting of shareholders, the affirmative vote of the holders of a majority of the shares present at the meeting is required to adopt a shareholders resolution. At an extraordinary meeting of shareholders, the affirmative vote of at least 50% of the capital stock is required to adopt a shareholders resolution, except that when amending Article 7 (with respect to measures limiting shareholding ownership), Article 10 (relating to the register of shares and significant participations) or Article 22 (specifying the impediments to being appointed a member of CEMEX, S.A.B. de C.V. s board of directors) of CEMEX, S.A.B. de C.V. s by-laws, the affirmative vote of at least 75% of the voting stock is needed.

The attendance quorum for a general ordinary meeting of shareholders upon the first call, is 50% of CEMEX, S.A.B. de C.V. s outstanding and fully paid shares, and for the second call is any number of CEMEX, S.A.B. de C.V. s outstanding and fully paid shares. If the quorum is not met upon the first call, a subsequent meeting may be called and the quorum for the second ordinary meeting is any number of CEMEX, S.A.B. de C.V. s outstanding and fully paid shares represented at the meeting. The attendance quorum for the extraordinary shareholders meeting upon the first call, is 75% of CEMEX, S.A.B. de C.V. s outstanding and fully paid shares, upon the second and subsequent calls is 50% of CEMEX, S.A.B. de C.V. s outstanding and fully paid shares.

Rights of Minority Shareholders

At CEMEX, S.A.B. de C.V. s annual general ordinary shareholders meeting, any shareholder or group of shareholders representing 10% or more of its voting stock has the right to appoint or remove one member of

Table of Contents

CEMEX, S.A.B. de C.V. s board of directors, in addition to the directors appointed by the majority. Such appointment may only be revoked by other shareholders when the appointment of all other directors is also revoked.

CEMEX, S.A.B. de C.V. s by-laws provide that holders of at least 10% of its capital stock are entitled to demand the postponement of the voting on any resolution of which they deem they have not been sufficiently informed.

Under Mexican law, holders of at least 20% of CEMEX, S.A.B. de C.V. s outstanding capital stock entitled to vote on a particular matter may oppose any resolution at a shareholders meeting, by filing a petition for a court order to suspend the resolution temporarily with a court of law within 15 days after the adjournment of the meeting at which that action was taken and showing that the challenged action violates Mexican law or CEMEX, S.A.B. de C.V. s by-laws and provided the opposing shareholders deliver a bond to the court to secure payment of any damages that we suffer as a result of suspending the resolution in the event that the court ultimately rules against the opposing shareholders. Relief under these provisions is only available to holders who were entitled to vote on, or whose rights as shareholders were adversely affected by, the challenged shareholder action and whose shares were not represented when the action was taken or, if represented, voted against it.

Under Mexican law, an action for civil liabilities against directors may be initiated by a shareholders resolution for violation of their duty of loyalty to shareholders. In the event shareholders decide to bring an action of this type, the persons against whom that action is brought will immediately cease to be directors. Additionally, shareholders representing not less than 33% of the outstanding shares may directly exercise that action against the directors; provided that:

- those shareholders shall not have voted against exercising such action at the relevant shareholders meeting; and

- the claim covers all of the damage alleged to have been caused to us and not merely the damage suffered by the plaintiffs.

Under CEMEX, S.A.B. de C.V. s by-laws, shareholders representing 5% or more of its outstanding capital stock may initiate actions exclusively on behalf of CEMEX, S.A.B. de C.V. against members of its board of directors, its corporate practices committee and audit committee, its chief executive officer, or any relevant executives, for breach of their duty of care or duty of loyalty to shareholders or for committing illicit acts or activities. The only requirement is that the claim covers all of the damage alleged to have been caused to us or any entities on which we have a significant influence and not merely the damage suffered by the plaintiffs. Actions initiated on these grounds have a five-year statute of limitations from the day of the act or action that caused the damage.

Any recovery of damages with respect to these actions will be for CEMEX, S.A.B. de C.V. s benefit and not that of the shareholders bringing the action.

Registration and Transfer

CEMEX, S.A.B. de C.V. s common stock is evidenced by share certificates in registered form with registered dividend coupons attached. Shareholders who have not deposited their shares into the CPO trust may hold their shares in the form of physical certificates or through institutions that have accounts with Indeval. Accounts may be maintained at Indeval by brokers, banks and other entities approved by the Mexican securities authority. CEMEX, S.A.B. de C.V. maintains a stock registry, and, in accordance with Mexican law, only those holders listed in CEMEX, S.A.B. de C.V. s stock registry and those holding certificates issued by Indeval and by Indeval participants indicating ownership are recognized as CEMEX, S.A.B. de C.V. shareholders.

Pursuant to Mexican law, any transfer of shares must be registered in CEMEX, S.A.B. de C.V. s stock registry, if effected physically, or through book entries that may be tracked back from CEMEX, S.A.B. de C.V. s stock registry to the records of Indeval.

Table of Contents

Redemption

CEMEX, S.A.B. de C.V. s capital stock is subject to redemption upon approval of our shareholders at an extraordinary shareholders meeting.

Share Repurchases

If approved by CEMEX, S.A.B. de C.V. s shareholders at a general shareholders meeting, we may purchase CEMEX, S.A.B. de C.V. s outstanding shares. The economic and voting rights corresponding to repurchased shares cannot be exercised during the period the shares are owned by us and the shares will be deemed outstanding for purposes of calculating any quorum or vote at any shareholders meeting. We may also repurchase our equity securities on the Mexican Stock Exchange at the then prevailing market prices in accordance with Mexican securities law. If we intend to repurchase shares representing more than 1% of CEMEX, S.A.B. de C.V. s outstanding shares at a single trading session, we must inform the public of such intention at least ten minutes before submitting our bid. If we intend to repurchase shares representing 3% or more of CEMEX, S.A.B. de C.V. s outstanding shares during a period of 20 trading days, we are required to conduct a public tender offer for such shares. We must conduct share repurchases through the person or persons approved by CEMEX, S.A.B. de C.V. s board of directors, through a single broker dealer during the relevant trading session, and without submitting bids during the first and the last 30 minutes of each trading session. We must inform the Mexican Stock Exchange of the results of any share repurchase no later than the business day following any such share repurchase.

Directors and Shareholders Conflict of Interest

Under Mexican law, any shareholder who has a conflict of interest with CEMEX, S.A.B. de C.V. with respect to any transaction is obligated to disclose such conflict and is prohibited from voting on that transaction. A shareholder who violates this prohibition may be liable for damages if the relevant transaction would not have been approved without that shareholder s vote.

Under Mexican law, any director who has a conflict of interest with CEMEX, S.A.B. de C.V. in any transaction must disclose that fact to the other directors and is prohibited from participating and being present during the deliberations and voting on that transaction. A director who violates this prohibition will be liable for damages and lost profits. Additionally, CEMEX, S.A.B. de C.V. s directors may not represent shareholders in our shareholders meetings.

Withdrawal Rights

Whenever CEMEX, S.A.B. de C.V. s shareholders approve a change of corporate purpose, change of nationality or transformation from one form of corporate organization to another, Mexican law provides that any shareholder entitled to vote on that change who has voted against it may withdraw from CEMEX, S.A.B. de C.V. and receive an amount equal to the book value (in accordance with the latest balance sheet approved by the annual general ordinary shareholders meeting) attributable to such shareholder s shares, provided that such shareholder exercises that right within 15 days following the meeting at which the change was approved.

Dividends

At the annual general ordinary shareholders meeting, CEMEX, S.A.B. de C.V. s board of directors submits, for approval by its shareholders, its financial statements together with a report on them prepared by its board of directors and the statutory auditors. CEMEX, S.A.B. de C.V. s shareholders, once they have approved the financial statements, determine the allocation of our net income, after provision for income taxes, legal reserve and statutory employee profit sharing payments, for the preceding year. All shares of CEMEX, S.A.B. de C.V. s capital stock outstanding at the time a dividend or other distribution is declared are entitled to share equally in that dividend or other distribution.

Table of Contents

Liquidation Rights

In the event CEMEX, S.A.B. de C.V. is liquidated, the surplus assets remaining after payment of all its creditors will be divided among CEMEX, S.A.B. de C.V. s shareholders in proportion to the respective shares held by them. The liquidator may, with the approval of CEMEX, S.A.B. de C.V. s shareholders, distribute the surplus assets in kind among CEMEX, S.A.B. de C.V. s shareholders, sell the surplus assets and divide the proceeds among CEMEX, S.A.B. de C.V. s shareholders or put the surplus assets to any other uses agreed to by a majority of CEMEX, S.A.B. de C.V. s shareholders voting at an extraordinary shareholders meeting.

Differences Between Our Corporate Governance Practices and NYSE Standards for Domestic Companies

For a description of significant ways in which CEMEX, S.A.B. de C.V. s corporate governance practices differ from those required of domestic companies under NYSE standards, see Item 16G Corporate Governance.

Material Contracts

On March 14, 2006, CEMEX, S.A.B. de C.V. registered a Ps5 billion revolving promissory note program (*programa dual revolvente de certificados bursátiles*) with the Mexican securities authority. CEMEX, S.A.B. de C.V. has subsequently increased the authorized amount under this program. On March 31, 2010, we received authorization from the Mexican securities authority for a Ps10 billion revolving promissory note program, which authorization is valid until March 31, 2015.

On December 18, 2006, CEMEX, through two special purpose vehicles, issued two tranches of fixed-to-floating rate callable Perpetual Debentures. C5 Capital (SPV) Limited issued U.S.$350 million original principal amount of Perpetual Debentures under the first tranche, with the issuer having the option to redeem such Perpetual Debentures on December 31, 2011 and on each interest payment date thereafter, of which U.S.$69 million principal amount were outstanding as of December 31, 2012 (excluding Perpetual Debentures held by us). C10 Capital (SPV) Limited issued U.S.$900 million original principal amount of Perpetual Debentures under the second tranche, with the issuer having the option to redeem such Perpetual Debentures on December 31, 2016 and on each interest payment date thereafter, of which U.S.$183 million principal amount were outstanding as of December 31, 2012 (excluding Perpetual Debentures held by us). Both tranches pay coupons denominated in U.S. Dollars at a fixed rate until the call date and at a floating rate thereafter. On February 12, 2007, CEMEX, through a special purpose vehicle, issued a third tranche of fixed-to-floating rate callable Debentures. C8 Capital (SPV) Limited issued U.S.$750 million original principal amount of Perpetual Debentures under this third tranche, with the issuer having the option to redeem such Perpetual Debentures on December 31, 2014 and on each interest payment date thereafter, of which U.S.$137 million principal amount were outstanding as of December 31, 2012 (excluding Perpetual Debentures held by us). This third tranche also pays coupons denominated in U.S. Dollars at a fixed rate until the call date and at a floating rate thereafter. On May 9, 2007, CEMEX, through a special purpose vehicle, issued a fourth tranche of fixed-to-floating rate callable Perpetual Debentures. C10-EUR Capital (SPV) Limited issued 730 million original principal amount of Perpetual Debentures under this fourth tranche, with the issuer having the option to redeem such Perpetual Debentures on June 30, 2017 and on each interest payment date thereafter, of which 64 million principal amount were outstanding as of December 31, 2012 (excluding Perpetual Debentures held by us). This fourth tranche pays coupons denominated in Euros at a fixed rate until the call date and at a floating rate thereafter. Due to their perpetual nature and optional deferral of coupons, these transactions, in accordance with IFRS, qualify as equity.

On March 5, 2007, CEMEX Finance Europe B.V., issued 900 million in Eurobonds paying a fixed coupon of 4.75% and maturing in 2014. The Eurobonds have been listed for trading on the London Stock Exchange s Professional Securities Market. The notes are guaranteed by CEMEX España. As of December 31, 2012, as adjusted to give effect to the Eurobond Tender Offer, we had approximately Ps4,178 million (U.S.$325 million) (principal amount Ps4,197 million (U.S.$327 million)) of Eurobonds outstanding.

Table of Contents

For a description of the material terms relating to the Mandatory Convertible Notes, see Item 5 Operating and Financial Review and Prospects Summary of Material Contractual Obligations and Commercial Commitments Mandatory Convertible Notes.

For a description of the material terms relating to the 2010 Optional Convertible Subordinated Notes and 2011 Optional Convertible Subordinated Notes, see Item 5 Operating and Financial Review and Prospects Summary of Material Contractual Obligations and Commercial Commitments Convertible Subordinated Notes.

For a description of the material terms relating to the Facilities Agreement, see Item 5 Operating and Financial Review and Prospects Liquidity and Capital Resources Our Indebtedness. In connection with our entry into the Facilities Agreement, we also entered into the related Ancillary Agreement, dated as of September 17, 2012, Irrevocable Administration Trust Agreement, dated as of September 17, 2012, USPP Note Purchase Agreement, dated as of September 17, 2012 and USPP Note Guarantee, dated as of September 17, 2012, as well as the Intercreditor Agreement, dated as of September 17, 2012, Dutch law Share Pledge, dated as of September 17, 2012, Swiss law Share Pledge, dated as of September 17, 2012, Spanish law Share Pledge, dated as of November 8, 2012, and Mexican law Security Trust Agreement, dated as of September 17, 2012, relating to the Collateral.

For a description of the material terms relating to the Senior Secured Notes, see Item 5 Operating and Financial Review and Prospects Summary of Material Contractual Obligations and Commercial Commitments Senior Secured Notes.

Exchange Controls

See Item 3 Key Information Mexican Peso Exchange Rates.

Taxation

Mexican Tax Considerations

General

The following is a summary of certain Mexican federal income tax considerations relating to the ownership and disposition of our CPOs or ADSs.

This summary is based on Mexican income tax law that is in effect on the date of this annual report, which is subject to change. This summary is limited to non-residents of Mexico, as defined below, who own our CPOs or ADSs. This summary does not address all aspects of Mexican income tax law. Holders are urged to consult their tax counsel as to the tax consequences that the purchase, ownership and disposition of our CPOs or ADSs, may have.

Table of Contents

For purposes of Mexican taxation, an individual is a resident of Mexico if he or she has established his or her home in Mexico. If the individual also has a home in another country, he or she will be considered a resident of Mexico if his or her center of vital interests is in Mexico. Under Mexican law, an individual s center of vital interests is in Mexico if, among other things:

- more than 50% of the individual s total income in the relevant year comes from Mexican sources; or
- the individual s main center of professional activities is in Mexico.

Mexican nationals that are employed by the Mexican government are deemed residents of Mexico, even if his or her center of vital interests is located outside of Mexico. Unless otherwise proven, Mexican nationals are deemed residents of Mexico for tax purposes.

A legal entity is a resident of Mexico if it is organized under the laws of Mexico or if it maintains the principal administration of its business or the effective location of its management in Mexico.

A Mexican citizen is presumed to be a resident of Mexico for tax purposes unless such person or entity can demonstrate otherwise. If a legal entity or an individual is deemed to have a permanent establishment in Mexico for tax purposes, all income attributable to such permanent establishment will be subject to Mexican taxes, in accordance with relevant tax provisions.

Individuals or legal entities that cease to be residents of Mexico must notify the tax authorities within 15 business days before their change of residency.

A non-resident of Mexico is a legal entity or individual that does not satisfy the requirements to be considered a resident of Mexico for Mexican federal income tax purposes.

Taxation of Dividends

Dividends, either in cash or in any other form, paid to non-residents of Mexico with respect to A shares or B shares represented by the CPOs (or in the case of holders who hold CPOs represented by ADSs), will not be subject to withholding tax in Mexico.

Disposition of CPOs or ADSs

Gains on the sale or disposition of ADSs by a holder who is a non-resident of Mexico will not be subject to Mexican tax.

Gains on the sale or disposition of CPOs by a holder who is a non-resident of Mexico will not be subject to any Mexican tax if the sale is carried out through the Mexican Stock Exchange or other recognized securities market, as determined by Mexican tax authorities. Gains realized on sales or other dispositions of CPOs by non-residents of Mexico made in other circumstances would be subject to Mexican income tax.

Under the terms of the Convention Between the United States and Mexico for Avoidance of Double Taxation and Prevention of Fiscal Evasion with Respect to Income Taxes, and a Protocol thereto, the Tax Treaty, gains obtained by a U.S. Shareholder eligible for benefits under the Tax Treaty on the disposition of CPOs will not generally be subject to Mexican tax, provided that such gains are not attributable to a permanent establishment of such U.S. Shareholder in Mexico and that the eligible U.S. Shareholder did not own, directly or indirectly, 25% or more of our outstanding stock during the 12-month period preceding the disposition. In the case of non-residents of Mexico eligible for the benefits of a tax treaty, gains derived from the disposition of ADSs or CPOs may also be exempt, in whole or in part, from Mexican taxation under a treaty to which Mexico is a party.

Deposits and withdrawals of ADSs will not give rise to any Mexican tax or transfer duties.

Table of Contents

The term U.S. Shareholder shall have the same meaning ascribed below under the section U.S. Federal Income Tax Considerations.

Estate and Gift Taxes

There are no Mexican inheritance or succession taxes applicable to the ownership, transfer or disposition of ADSs or CPOs by holders that are non-residents of Mexico, although gratuitous transfers of CPOs may, in some circumstances, cause a Mexican federal tax to be imposed upon a recipient. There are no Mexican stamp, issue, registration or similar taxes or duties payable by holders of ADSs or CPOs.

U.S. Federal Income Tax Considerations

General

The following is a summary of the material U.S. federal income tax consequences relating to the ownership and disposition of our CPOs and ADSs.

This summary is based on provisions of the U.S. Internal Revenue Code, or the Code, of 1986, as amended, U.S. Treasury regulations promulgated under the Code, and administrative rulings, and judicial interpretations of the Code, all as in effect on the date of this annual report and all of which are subject to change, possibly retroactively. This summary is limited to U.S. Shareholders (as defined below) who hold our ADSs or CPOs, as the case may be, as capital assets. This summary does not discuss all aspects of U.S. federal income taxation which may be important to an investor in light of its individual circumstances, for example, an investor subject to special tax rules (e.g., banks, thrifts, real estate investment trusts, regulated investment companies, insurance companies, dealers in securities or currencies, expatriates, tax-exempt investors, persons who own 10% or more of our voting stock, or holders whose functional currency is not the U.S. Dollar or U.S. Shareholders who hold a CPO or an ADS as a position in a straddle, as part of a synthetic security or hedge, as part of a conversion transaction or other integrated investment, or as other than a capital asset). In addition, this summary does not address any aspect of state, local or foreign taxation.

For purposes of this summary, a U.S. Shareholder means a beneficial owner of CPOs or ADSs, who is for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation or other entity taxable as a corporation that is created or organized in the United States or under the laws of the United States or any political subdivision thereof;
- an estate the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust that (i) is subject to the primary supervision of a court within the United States and with respect to which one or more U.S. persons are authorized to control all substantial decisions or (ii) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a United States person.

If a partnership (including any entity treated as a partnership for U.S. federal income tax purposes) is the beneficial owner of CPOs or ADSs, the U.S. federal income tax treatment of a partner in such partnership will generally depend upon the status of the partner and the activities of the partnership. A partner in a partnership that is the beneficial owner of CPOs or ADSs is urged to consult its own tax advisor regarding the associated tax consequences.

U.S. Shareholders should consult their own tax advisors as to the particular tax consequences to them under United States federal, state and local, and foreign laws relating to the ownership and disposition of our CPOs and ADSs.

Table of Contents

Ownership of CPOs or ADSs in general

In general, for U.S. federal income tax purposes, U.S. Shareholders who own ADSs will be treated as the beneficial owners of the CPOs represented by those ADSs, and each CPO will represent a beneficial interest in two A shares and one B share.

Taxation of distributions with respect to CPOs and ADSs

A distribution of cash or property with respect to the A shares or B shares represented by CPOs, including CPOs represented by ADSs, generally will be treated as a dividend to the extent paid out of our current or accumulated earnings and profits, as determined under U.S. federal income tax principles, and will be includible in the gross income of a U.S. Shareholder as foreign source passive income on the date the distribution is received by the CPO trustee or successor thereof. Any such dividend will not be eligible for the dividends-received deduction allowed to corporate U.S. Shareholders. To the extent, if any, that the amount of any distribution by us exceeds our current and accumulated earnings and profits as determined under U.S. federal income tax principles, it will be treated first as a tax-free return of the U.S. Shareholder s adjusted tax basis in the CPOs or ADSs, as applicable, and thereafter as capital gain.

The gross amount of any dividends paid in Mexican Pesos will be includible in the income of a U.S. Shareholder in a U.S. Dollar amount calculated by reference to the exchange rate in effect the day the Mexican Pesos are received by the CPO trustee or successor thereof whether or not the Mexican Pesos are converted into U.S. Dollars on that day. Generally, any gain or loss resulting from currency exchange fluctuations during the period from the date the dividend payment is includible in income to the date such payment is converted into U.S. Dollars will be treated as ordinary income or loss. Such gain or loss will generally be income from sources within the United States for foreign tax credit limitation purposes.

Dividend income is generally taxed as ordinary income. However, a maximum United States federal income tax rate of 20 percent (15 percent if taxable income is below certain thresholds) will apply to qualified dividend income received by U.S. Shareholders that are individuals (as well as certain trusts and estates) in taxable years beginning after December 31, 2012, provided that certain holding period requirements are met. Qualified dividend income includes dividends paid on shares of qualified foreign corporations if, among other things: (i) the shares of the foreign corporation are readily tradable on an established securities market in the United States, or (ii) the foreign corporation is eligible with respect to substantially all of its income for the benefits of a comprehensive income tax treaty with the United States which contains an exchange of information program.

We believe that we are a qualified foreign corporation because (i) the ADSs trade on the New York Stock Exchange and (ii) we are eligible for the benefits of the comprehensive income tax treaty between Mexico and the United States which includes an exchange of information program. Accordingly, we believe that any dividends we pay should constitute qualified dividend income for United States federal income tax purposes. We cannot assure you, however, that we will continue to be considered a qualified foreign corporation and that our dividends will continue to be qualified dividend income.

Taxation of capital gains on disposition of CPOs or ADSs

The sale, exchange, redemption, or other disposition of CPOs or ADSs will result in the recognition of gain or loss by a U.S. Shareholder for U.S. federal income tax purposes in an amount equal to the difference between the amount realized on the disposition and the U.S. Shareholder s tax basis in the CPOs or ADSs, as applicable. Such gain or loss will be long-term capital gain or loss if the U.S. Shareholder s holding period for the CPOs or ADSs exceeds one year at the time of disposition. Long-term capital gain recognized by a U.S. Shareholder that is an individual (as well as certain trusts and estates) upon the sale or exchange of CPOs or ADSs in a taxable year which begins after December 31, 2012 generally will be subject to a maximum United States federal income tax rate of 20 percent (15 percent if taxable income is below certain thresholds). The deduction of capital losses

Table of Contents

is subject to limitations. Gain from the disposition of CPOs or ADSs generally will be treated as a U.S. source for foreign tax credit purposes; losses generally will be allocated against U.S. source income. Deposits and withdrawals of CPOs by U.S. Shareholders in exchange for ADSs will not result in the realization of gain or loss for U.S. federal income tax purposes.

United States backup withholding and information reporting

A U.S. Shareholder may, under certain circumstances, be subject to information reporting with respect to some payments to that U.S. Shareholder such as dividends or the proceeds of a sale or other disposition of the CPOs or ADSs. Backup withholding at a rate of 28 percent also may apply to amounts paid to such holder unless such holder (i) is a corporation or comes within certain exempt categories and demonstrates this fact when so required, or (ii) provides a correct taxpayer identification number and otherwise complies with applicable requirements of the backup withholding rules. Backup withholding is not an additional tax. Amounts withheld as backup withholding may be creditable against the U.S. Shareholder s federal income tax liability, and the U.S. Shareholder may obtain a refund of any excess amounts withheld under the backup withholding rules by filing the appropriate claim for refund with the Internal Revenue Service (IRS) and timely furnishing any required information. Pursuant to the Hiring Incentives to Restore Employment Act enacted on March 18, 2010, an individual U.S. Shareholder may be required to submit to the IRS certain information with respect to his or her beneficial ownership of CPOs or ADSs, unless such CPOs or ADSs are held on his or her behalf by a U.S. financial institution. The new law also imposes penalties if an individual U.S. Shareholder is required to submit such information to the IRS and fails to do so. U.S. Shareholders should consult their tax advisors regarding the application of the new law in their particular circumstances.

Documents on Display

We are subject to the informational requirements of the Securities Exchange Act of 1934 and, in accordance with these requirements, file reports and information statements and other information with the SEC. These reports and information statements and other information filed by us with the SEC can be inspected and copied at the public reference room of the SEC at 100 F Street, N.E., Washington, D.C. 20549.

In reviewing the agreements included as exhibits to this annual report, please remember they are included to provide you with information regarding their terms and are not intended to provide any other factual or disclosure information about us or the other parties to the agreements.

The agreements may contain representations and warranties by each of the parties to the applicable agreement. These representations and warranties have been made solely for the benefit of the other parties to the applicable agreement and:

- should not in all instances be treated as categorical statements of fact, but rather as a way of allocating the risk to one of the parties if those statements prove to be inaccurate;
- have been qualified by disclosures that were made to the other party in connection with the negotiation of the applicable agreement, which disclosures are not necessarily reflected in the agreement;
- may apply standards of materiality in a way that is different from what may be viewed as material to you or other investors; and
- were made only as of the date of the applicable agreement or such other date or dates as may be specified in the agreement and are subject to more recent developments.

Accordingly, these representations and warranties may not describe the actual state of affairs as of the date they were made or at any other time.

Table of Contents

Item 11 Qualitative and Quantitative Disclosures About Market Risk

See Item 5 Operating and Financial Review and Prospects Qualitative and Quantitative Market Disclosure Our Derivative Financial Instruments.

Item 12 Description of Securities Other than Equity Securities

Item 12A Debt Securities

Not applicable.

Item 12B Warrants and Rights

Not applicable.

Item 12C Other Securities

Not applicable.

Item 12D American Depositary Shares

Depositary Fees and Charges

Under the terms of the Deposit Agreement for CEMEX, S.A.B. de C.V. s ADSs, an ADS holder may have to pay the following service fees to the depositary:

Services	Fees
Issuance of ADSs upon deposit of eligible securities	Up to 5¢ per ADS issued.
Surrender of ADSs for cancellation and withdrawal of deposited securities	Up to 5¢ per ADS surrendered.
Exercise of rights to purchase additional ADSs	Up to 5¢ per ADS issued.
Distribution of cash (i.e., upon sale of rights and other entitlements)	Up to 2¢ per ADS held.

An ADS holder also is responsible to pay fees and expenses incurred by the ADS depositary and taxes and governmental charges including, but not limited to:

transfer and registration fees charged by the registrar and transfer agent for eligible and deposited securities, such as upon deposit of eligible securities and withdrawal of deposited securities;

expenses incurred for converting foreign currency into U.S. Dollars;

expenses for cable, telex and fax transmissions and for delivery of securities;

expenses incurred in connection with compliance with exchange control regulations and other applicable regulatory requirements;

fees and expenses incurred in connection with the delivery of deposited securities; and taxes and duties upon the transfer of securities, such as when eligible securities are deposited or withdrawn from deposit.

We have agreed to pay some of the other charges and expenses of the ADS depositary. Note that the fees and charges that a holder of ADSs is required to pay may vary over time and may be changed by us and by the ADS depositary. ADS holders will receive notice of the changes. The fees described above may be amended from time to time.

Depositary Payments for the Year Ended December 31, 2012

In 2012, we received approximately U.S.$2,110,779.08 (after applicable U.S. taxes) from our Depositary Bank, Citibank, N.A., to reimburse us for contributions towards our investor relations activities (including but not limited to investor meetings, conferences, and fees to investor relations service vendors), and other miscellaneous expenses related to the listing of our ADSs on the NYSE.

Table of Contents

PART II

Item 13 Defaults, Dividend Arrearages and Delinquencies

None.

Item 14 Material Modifications to the Rights of Security Holders and Use of Proceeds

None.

Item 15 Controls and Procedures

Disclosure Controls and Procedures

Our management has evaluated, with the participation of our Chief Executive Officer and Executive Vice President of Finance and Administration, the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934) as of the end of the period covered by this report, and has concluded that our disclosure controls and procedures were effective as of December 31, 2012.

Management s Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, (as defined in Rule 13a-15(f) under the Securities Exchange Act of 1934). Under the supervision and with the participation of our management, including our Chief Executive Officer and principal financial and accounting officers, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, our management has concluded that internal control over financial reporting was effective as of December 31, 2012.

KPMG Cárdenas Dosal, S.C., the registered public accounting firm that audited our financial statements included elsewhere in this annual report, has issued an attestation report on our internal control over financial reporting, which is included in page F-3 of this report.

Attestation Report of the Registered Public Accounting Firm

KPMG Cárdenas Dosal, S.C. s report on our internal control over financial reporting appears on page F-3 of this report, and is incorporated herein by reference.

Changes in Internal Control Over Financial Reporting

During 2012, we continued with the implementation of our Enterprise Resource Planning (ERP) system in our operations, in order to support our business model. We plan to continue with the implementation of this platform over the course of 2013 for a small number of our operations for which the ERP was not implemented during 2012. Our management believes this business model improves the efficiency of our operations and financial information process.

On July 27, 2012, we reached a strategic agreement with IBM, expected to improve some of our business processes. This agreement implies the transfer of internal controls for some of our transactional processes. During 2012, we started evaluating these transfers of certain internal controls, and we observed no material change. Accordingly, during 2013, we will continue monitoring the effects that this change may have in all our internal controls related to the processes included in the agreement.

We have not identified other changes in our internal control over financial reporting during 2012 that could have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 16 [RESERVED]

Item 16A Audit Committee Financial Expert

Our board of directors has determined that it has at least one audit committee financial expert (as defined in Item 16A of Form 20-F) serving on its audit committee. Mr. José Manuel Rincón Gallardo meets the requisite qualifications and is independent for purposes of the rules of the NYSE.

Item 16B Code of Ethics

We have adopted a written code of ethics that applies to all our senior executives, including our principal executive officer, principal financial officer and principal accounting officer.

You may view our code of ethics in the corporate governance section of our website (www.cemex.com), or you may request a copy of our code of ethics, at no cost, by writing to or telephoning us as follows:

CEMEX, S.A.B. de C.V.

Avenida Ricardo Margáin Zozaya #325

Colonia Valle del Campestre

Garza García, Nuevo León, México 66265.

Attn: Luis Hernández

Telephone: (+ 5281) 8888-8888

Item 16C Principal Accountant Fees and Services

Audit Fees: KPMG Cárdenas Dosal, S.C. in Mexico and KPMG firms worldwide charged us approximately Ps185 million in fiscal year 2012 in connection with the professional services rendered for the audit of our annual financial statements and services normally provided by them relating to statutory and regulatory filings or engagements. In fiscal year 2011, KPMG Cárdenas Dosal, S.C. in Mexico and KPMG firms worldwide billed us approximately Ps177 million for these services.

Audit-Related Fees: KPMG Cárdenas Dosal, S.C. in Mexico and KPMG firms worldwide billed us approximately Ps14 million in fiscal year 2012 for assurance and related services reasonably related to the performance of our audit. In fiscal year 2011, KPMG Cárdenas Dosal, S.C. in Mexico and KPMG firms worldwide charged us approximately Ps15 million for audit-related services.

Tax Fees: KPMG Cárdenas Dosal, S.C. in Mexico and KPMG firms worldwide charged us approximately Ps12 million in fiscal year 2012 for tax compliance, tax advice and tax planning. In fiscal year 2011, KPMG Cárdenas Dosal, S.C. in Mexico and KPMG firms worldwide billed us approximately Ps13 million for tax-related services.

All Other Fees: KPMG Cárdenas Dosal, S.C. in Mexico and KPMG firms worldwide billed us Ps20 million in fiscal year 2012 for products and services other than those comprising audit fees, audit-related fees and tax fees. In fiscal year 2011, KPMG Cárdenas Dosal, S.C. in Mexico and KPMG firms worldwide charged us approximately Ps15 million for products and services in this category. These fees relate mainly to services provided by KPMG to us with respect to our due diligence activities around the world.

Audit Committee Pre-Approval Policies and Procedures

Our audit committee is responsible, among other things, for the appointment, compensation and oversight of our external auditors. To assure the independence of our independent auditors, our audit committee pre-approves annually a catalog of specific audit and non-audit services in the categories Audit Services, Audit-Related Services, Tax-Related Services, and Other Services that may be performed by our auditors, as well as the budgeted fee levels for each of these categories. All other permitted services must receive a specific approval from our audit committee. Our external auditor periodically provides a report to our audit committee in order for our audit committee to review the services that our external auditor is providing, as well as the status and cost of those services.

During 2012, there were no services provided to us by our external auditors that were performed pursuant to the *de minimis* exception.

Table of Contents

Item 16D Exemptions from the Listing Standards for Audit Committees

Not applicable.

Item 16E Purchases of Equity Securities by the Issuer and Affiliated Purchasers

Not applicable.

Item 16F Change in Registrant s Certifying Accountant

Not applicable.

Item 16G Corporate Governance

Section 303A.11 of the NYSE Listed Company Manual (LCM), requires that listed foreign private issuers, such as CEMEX, disclose any significant ways in which their corporate governance practices differ from those followed by U.S. companies under NYSE listing standards.

CEMEX s corporate governance practices are governed by its bylaws, by the corporate governance provisions set forth in the *Ley del Mercado de Valores* (the Mexican Securities Market Law), the *Circular de Emisoras* (the Mexican Regulation for Issuers) issued by the *Comisión Nacional Bancaria y de Valores* (the Mexican Banking and Securities Commission) and the *Reglamento Interior de la Bolsa Mexicana de Valores* (the Mexican Stock Exchange Rules) (the Mexican Securities Market Law, the Mexican Regulation for Issuers and the Mexican Stock Exchange Rules, collectively the Mexican Laws and Regulations), and by applicable U.S. securities laws. CEMEX is also subject to the rules of the NYSE to the extent they apply to foreign private issuers. Except for those specific rules, foreign private issuers are permitted to follow home country practice in lieu of the provisions of Section 303A of the LCM.

CEMEX, on a voluntary basis, also complies with the *Código de Mejores Prácticas Corporativas* (the Mexican Code of Best Corporate Practices) as indicated below, which was promulgated by a committee established by the *Consejo Coordinador Empresarial* (Mexican Corporate Coordination Board). The Mexican Corporate Coordination Board provides recommendations for better corporate governance practices for listed companies in Mexico, and the Mexican Code of Best Corporate Practices has been endorsed by the Mexican Banking and Securities Commission.

The following is a summary of significant ways in which our corporate governance practices differ from those required to be followed by U.S. domestic companies under the NYSE s listing standards.

NYSE LISTING STANDARDS	CEMEX CORPORATE GOVERNANCE PRACTICE
303A.01	
Listed companies must have a majority of independent directors.	Pursuant to the Mexican securities market law, CEMEX, S.A.B. de C.V. is required to have a board of directors with a maximum of 21 members, 25% of whom must be independent. Determination as to the independence of CEMEX, S.A.B. de C.V. s directors is made upon their election by CEMEX, S.A.B. de C.V. s shareholders at the corresponding meeting. Currently, CEMEX, S.A.B. de C.V. s Board of Directors has 10 members, of which more than 25% are independent under the Mexican Securities Market Law.

Table of Contents

NYSE LISTING STANDARDS	CEMEX CORPORATE GOVERNANCE PRACTICE
	The Mexican Securities Market Law sets forth, in article 26, the definition of independence, which differs from the one set forth in Section 303A.02 of the LCM. Generally, under the Mexican Securities Market Law, a director is not independent if such director is an employee or officer of the company or its subsidiaries; an individual that has significant influence over the company or its subsidiaries; a shareholder that is part of a group that controls the company; or, if there exist certain relationships between a company and a director, entities with which the director is associated or family members of the director.
303A.03	
Non-management directors must meet at regularly executive sessions without management.	Under CEMEX, S.A.B. de C.V. s bylaws and the Mexican Laws and Regulations, our non-management and independent directors are not required to meet in executive sessions. Our Board of Directors must meet at least once every three months.
303A.04	
Listed companies must have a nominating/corporate governance committee composed of independent directors.	Under CEMEX, S.A.B. de C.V. s bylaws and the Mexican Laws and Regulations, we are not required to have a nominating committee. We do not have such a committee.
	Our Corporate Practices Committee operates pursuant to the provisions of the Mexican securities market law and CEMEX, S.A.B. de C.V. s bylaws. Our Corporate Practices Committee is composed of 3 independent directors.
	Our Corporate Practices Committee is responsible for evaluating the performance of our executive officers; reviewing related party transactions; reviewing the compensation paid to executive officers; evaluating any waivers granted to directors or executive officers for their taking of corporate opportunities; and carrying out the activities described under Mexican law.
	Our Corporate Practices Committee meets as required by CEMEX, S.A.B. de C.V. s bylaws and by the Mexican Laws and Regulations.
303A.05	
Listed companies must have a compensation committee composed of independent directors. Compensation committee members must satisfy additional independence requirements specific to compensation committee membership.	Under CEMEX, S.A.B. de C.V. s bylaws and the Mexican Laws and Regulations, we are not required to have a compensation committee. We do not have such committee.

Table of Contents

NYSE LISTING STANDARDS	CEMEX CORPORATE GOVERNANCE PRACTICE
303A.06	
Listed companies must have an audit committee that satisfies the requirements of Rule 10A-3 under the Exchange Act.	CEMEX, S.A.B. de C.V. s Audit Committee operates pursuant to the provisions of the Mexican Securities Market Law and CEMEX, S.A.B. de C.V. s bylaws.
	CEMEX, S.A.B. de C.V. s Audit Committee is composed of 3 members. According to CEMEX, S.A.B. de C.V. s by-laws, all of the members must be independent.
	CEMEX, S.A.B. de C.V. s Audit Committee is responsible for evaluating the company s internal controls and procedures, identifying any material deficiencies it finds; following up with any corrective or preventive measures adopted with respect to the non-compliance with the operation and accounting guidelines and policies; evaluating the performance of the external auditors; describing and valuating those non-audit services rendered by the external auditor; reviewing the company s financial statements; assessing the effects of any modifications to the accounting policies approved during a fiscal year; overseeing measures adopted as result of any observations made by shareholders, directors, executive officers, employees or any third parties with respect to accounting, internal controls and internal and external audit, as well as any complaints regarding irregularities on management, including anonymous and confidential methods for addressing concerns raised by employees; assuring the execution of resolutions adopted at shareholders or board of directors meetings.
	CEMEX, S.A.B. de C.V. s Board of Directors has determined that it has an audit committee financial expert, for purposes of the Sarbanes-Oxley Act of 2002, serving on its Audit Committee.
	CEMEX, S.A.B. de C.V. s Audit Committee meets as required by CEMEX, S.A.B. de C.V. s bylaws and by the Mexican Laws and Regulations.
303A.09	
Listed companies must adopt and disclose corporate governance guidelines.	Under CEMEX, S.A.B. de C.V. s bylaws and the Mexican Laws and Regulations, we are not required to adopt corporate governance guidelines, but, on an annual basis, we file a report with the Mexican Stock Exchange regarding our compliance with the Mexican Code of Best Corporate Practices.

Table of Contents

NYSE LISTING STANDARDS	CEMEX CORPORATE GOVERNANCE PRACTICE
303A.10	
Listed companies must adopt and disclose a code of business conduct and ethics for directors, officers and employees, and promptly disclose any waivers of the code for directors or executive officers.	CEMEX, S.A.B. de C.V. has adopted a written code of ethics that applies to all of our employees, including our principal executive officer, principal financial officer and principal accounting officer.
Equity compensation plans	
Equity compensation plans require shareholder approval, subject to limited exemptions.	Shareholder approval is not expressly required under CEMEX, S.A.B. de C.V. s bylaws for the adoption and amendment of an equity compensation plan. No equity compensation plans have been submitted for approval by our shareholders.

Item 16H Mine Safety Disclosure

The information concerning mine safety violations and other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act is included in Exhibit 15.1 to this annual report on Form 20-F.

205

Table of Contents

PART III

Item 17 Financial Statements

Not applicable.

Item 18 Financial Statements

See pages F-1 through F-108, incorporated herein by reference.

Item 19 Exhibits

1.1	Amended and Restated By-laws of CEMEX, S.A.B. de C.V.(a)
2.1	Form of Trust Agreement between CEMEX, S.A.B. de C.V., as founder of the trust, and Banco Nacional de México, S.A. regarding the CPOs.(b)
2.2	Amendment Agreement to the Trust Agreement dated November 21, 2002, between CEMEX, S.A.B. de C.V., as founder of the trust, and Banco Nacional de México, S.A. regarding the CPOs.(c)
2.3	Form of CPO Certificate.(b)
2.4	Form of Second Amended and Restated Deposit Agreement (A and B share CPOs), dated August 10, 1999, among CEMEX, S.A.B. de C.V., Citibank, N.A. and holders and beneficial owners of American Depositary Shares.(b)
2.4.1	Amendment No. 1 to the Second Amended and Restated Deposit Agreement, dated as of July 1, 2005, by and among CEMEX, S.A.B. de C.V., Citibank, N.A., as Depositary, and all holders and beneficial owners from time to time of American Depositary Shares evidenced by American Depositary Receipts issued thereunder, including the form of ADR attached thereto.(e)
2.4.2	Letter Agreement, dated October 12, 2007, by and between CEMEX, S.A.B. de C.V. and Citibank, N.A., as Depositary, supplementing the Second Amended and Restated Deposit Agreement, as amended, to enable the Depositary to establish a direct registration system for the ADSs.(e)
2.4.3	Letter Agreement, dated March 30, 2010 by and between CEMEX, S.A.B. de C.V. and Citibank, N.A., as Depositary, supplementing the Second Amended and Restated Deposit Agreement, as amended, to set forth the terms upon which CEMEX, S.A.B. de C.V. is to deposit CPOs upon conversion of the 4.875% Subordinated Convertible Notes due 2015, and the Depositary is to issue ADSs upon deposit of such CPOs.(h)
2.4.4	Letter Agreement, dated March 30, 2010 by and between CEMEX, S.A.B. de C.V. and Citibank, N.A., as Depositary, supplementing the Second Amended and Restated Deposit Agreement, as amended, to set forth the terms upon which CEMEX, S.A.B. de C.V. is to establish a restricted ADS series.(h)
2.4.5	Letter Agreement, dated March 15, 2011 by and between CEMEX, S.A.B. de C.V. and Citibank, N.A., as Depositary, supplementing the Second Amended and Restated Deposit Agreement, as amended, to set forth the terms upon which CEMEX, S.A.B. de C.V. is to deposit CPOs upon conversion of the 3.25% Subordinated Convertible Notes due 2016 and 3.75% Subordinated Convertible Notes due 2018, and the Depositary is to issue ADSs upon deposit of such CPOs.(h)
2.4.6	Letter Agreement, dated March 15, 2011 by and between CEMEX, S.A.B. de C.V. and Citibank, N.A., as Depositary, supplementing the Second Amended and Restated Deposit Agreement, as amended, to set forth the terms upon which CEMEX, S.A.B. de C.V. is to establish a restricted ADS series.(h)
2.5	Form of American Depositary Receipt (included in Exhibit 2.3) evidencing American Depositary Shares.(b)
2.6	Form of Certificate for shares of Series A Common Stock of CEMEX, S.A.B. de C.V.(b)
2.7	Form of Certificate for shares of Series B Common Stock of CEMEX, S.A.B. de C.V.(b)

Table of Contents

4.1	Note Indenture, Dated as of December 18, 2006, by and among New Sunward Holding Financial Ventures B.V., as issuer, and CEMEX, S.A.B. de C.V., CEMEX Mexico, S.A. de C.V., and New Sunward Holding B.V., as guarantors and the Bank of New York, as trustee, relating to New Sunward Holding Financial Ventures B.V. s U.S. $350,000,000 Callable Perpetual Dual-Currency Notes.(e)
4.1.1	First Supplemental Note Indenture, dated as of August 10, 2009, by and among New Sunward Holding Financial Ventures B.V., as issuer, and CEMEX, S.A.B. de C.V., CEMEX Mexico, S.A. de C.V., and New Sunward Holding B.V., as guarantors and the Bank of New York, as trustee, supplementing the Note Indenture, dated as of December 18, 2006, among New Sunward Holding Financial Ventures B.V., as issuer, CEMEX, S.A.B. de C.V., CEMEX Mexico, S.A. de C.V. and New Sunward Holding B.V., as guarantors, and The Bank of New York Mellon, as trustee, relating to New Sunward Holding Financial Ventures B.V. s U.S.$350,000,000 Callable Perpetual Dual-Currency Notes.(e)
4.1.2	Second Supplemental Note Indenture, dated as of May 12, 2010, by and among New Sunward Holding Financial Ventures B.V., as issuer, CEMEX, S.A.B. de C.V., CEMEX Mexico, S.A. de C.V. and New Sunward Holding B.V., as guarantors, The Bank of New York Mellon, as trustee, Swap 5 Capital (SPV) Limited and C5 Capital (SPV) Limited., supplementing the Note Indenture, dated as of December 18, 2006, among New Sunward Holding Financial Ventures B.V., as issuer, CEMEX, S.A.B. de C.V., CEMEX Mexico, S.A. de C.V. and New Sunward Holding B.V., as guarantors, and The Bank of New York Mellon, as trustee, relating to New Sunward Holding Financial Ventures B.V. s U.S. $350,000,000 Callable Perpetual Dual-Currency Notes.(e)
4.2	Note Indenture, dated as of December 18, 2006, by and among New Sunward Holding Financial Ventures B.V., as issuer, and CEMEX, S.A.B. de C.V., CEMEX Mexico, S.A. de C.V., and New Sunward Holding B.V., as guarantors and the Bank of New York, as trustee, relating to New Sunward Holding Financial Ventures B.V. s U.S.$900,000,000 Callable Perpetual Dual-Currency Notes.(e)
4.2.1	First Supplemental Note Indenture, dated as of August 10, 2009, by and among New Sunward Holding Financial Ventures B.V., as issuer, and CEMEX, S.A.B. de C.V., CEMEX Mexico, S.A. de C.V., and New Sunward Holding B.V., as guarantors and the Bank of New York, as trustee, supplementing the Note Indenture, dated as of December 18, 2006, among New Sunward Holding Financial Ventures B.V., as issuer, CEMEX, S.A.B. de C.V., CEMEX Mexico, S.A. de C.V. and New Sunward Holding B.V., as guarantors, and The Bank of New York Mellon, as trustee, relating to New Sunward Holding Financial Ventures B.V. s U.S. $900,000,000 Callable Perpetual Dual-Currency Notes.(e)
4.2.2	Second Supplemental Note Indenture, dated as of May 12, 2010, by and among New Sunward Holding Financial Ventures B.V., as issuer, CEMEX, S.A.B. de C.V., CEMEX Mexico, S.A. de C.V. and New Sunward Holding B.V., as guarantors, The Bank of New York Mellon, as trustee, Swap 10 Capital (SPV) Limited and C10 Capital (SPV) Limited., supplementing the Note Indenture, dated as of December 18, 2006, among New Sunward Holding Financial Ventures B.V., as issuer, CEMEX, S.A.B. de C.V., CEMEX Mexico, S.A. de C.V. and New Sunward Holding B.V., as guarantors, and The Bank of New York Mellon, as trustee, relating to New Sunward Holding Financial Ventures B.V. s U.S.$900,000,000 Callable Perpetual Dual-Currency Notes.(e)
4.3	Note Indenture, dated as of February 12, 2007, by and among New Sunward Holding Financial Ventures B.V., as issuer, and CEMEX, S.A.B. de C.V., CEMEX Mexico, S.A. de C.V., and New Sunward Holding B.V., as guarantors and the Bank of New York, as trustee, relating to New Sunward Holding Financial Ventures B.V. s U.S.$750,000,000 Callable Perpetual Dual-Currency Notes.(e)
4.3.1	First Supplemental Note Indenture, dated as of August 10, 2009, by and among New Sunward Holding Financial Ventures B.V., as issuer, and CEMEX, S.A.B. de C.V., CEMEX Mexico, S.A. de C.V., and New Sunward Holding B.V., as guarantors and the Bank of New York, as trustee, supplementing the Note Indenture, dated as of February 12, 2007, among New Sunward Holding Financial Ventures B.V., as issuer, CEMEX, S.A.B. de C.V., CEMEX Mexico, S.A. de C.V. and New Sunward Holding B.V., as guarantors, and The Bank of New York Mellon, as trustee, relating to New Sunward Holding Financial Ventures B.V. s U.S. $750,000,000 Callable Perpetual Dual-Currency Notes.(e)

4.3.2	Second Supplemental Note Indenture, dated as of May 12, 2010, by and among New Sunward Holding Financial Ventures B.V., as issuer, CEMEX, S.A.B. de C.V., CEMEX Mexico, S.A. de C.V. and New Sunward Holding B.V., as guarantors, The Bank of New York Mellon, as trustee, Swap 8 Capital (SPV) Limited and 8 Capital (SPV) Limited., supplementing the Note Indenture, dated as of February 12, 2007, among New Sunward Holding Financial Ventures B.V., as issuer, CEMEX, S.A.B. de C.V., CEMEX Mexico, S.A. de C.V. and New Sunward Holding B.V., as guarantors, and The Bank of New York Mellon, as trustee, relating to New Sunward Holding Financial Ventures B.V. s U.S.$750,000,000 Callable Perpetual Dual-Currency Notes.(e)
4.4	Trust Deed, dated February 28, 2007, among CEMEX Finance Europe B.V., as issuer, and several initial purchasers, relating to the issuance by CEMEX Finance Europe B.V. of 900,000,000 aggregate principal amount of 4.75% Notes due 2014.(d)
4.5	Note Indenture, dated as of May 9, 2007, by and among New Sunward Holding Financial Ventures B.V., as issuer, and CEMEX, S.A.B. de C.V., CEMEX Mexico, S.A. de C.V., and New Sunward Holding B.V., as guarantors and the Bank of New York, as trustee, relating to New Sunward Holding Financial Ventures B.V. s U.S. 730,000,000 Callable Perpetual Dual-Currency Notes.(e)
4.5.1	First Supplemental Note Indenture, dated as of August 10, 2009, by and among New Sunward Holding Financial Ventures B.V., as issuer, and CEMEX, S.A.B. de C.V., CEMEX Mexico, S.A. de C.V., and New Sunward Holding B.V., as guarantors and the Bank of New York, as trustee, supplementing the Note Indenture, dated as of May 9, 2007, among New Sunward Holding Financial Ventures B.V., as issuer, CEMEX, S.A.B. de C.V., CEMEX Mexico, S.A. de C.V. and New Sunward Holding B.V., as guarantors, and The Bank of New York Mellon, as trustee, relating to New Sunward Holding Financial Ventures B.V. s U.S. 730,000,000 Callable Perpetual Dual-Currency Notes.(e)
4.5.2	Second Supplemental Note Indenture, dated as of May 12, 2010, by and among New Sunward Holding Financial Ventures B.V., as issuer, CEMEX, S.A.B. de C.V., CEMEX Mexico, S.A. de C.V. and New Sunward Holding B.V., as guarantors, The Bank of New York Mellon, as trustee, Swap C10-EUR Capital (SPV) Limited and C10-EUR Capital (SPV) Limited., supplementing the Note Indenture, dated as of February 12, 2007, among New Sunward Holding Financial Ventures B.V., as issuer, CEMEX, S.A.B. de C.V., CEMEX Mexico, S.A. de C.V. and New Sunward Holding B.V., as guarantors, and The Bank of New York Mellon, as trustee, relating to New Sunward Holding Financial Ventures B.V. s U.S. 730,000,000 Callable Perpetual Dual-Currency Notes.(e)
4.6	Indenture, dated December 10, 2009, by and among CEMEX, S.A.B. de C.V., as issuer, Banco Mercantil de Norte Sociedad Anonima, Institución de Banca Múltiple, Grupo Financiero Banorte, as common representative and calculation agent, in connection with the issuance of Mandatory Convertible Bonds.(e)
4.7	Indenture, dated December 14, 2009, among CEMEX Finance LLC, as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, in connection with the issuance of 350,000,000 9.625% Senior Secured Notes Due 2017.(e)
4.7.1	Supplemental Indenture No. 1, dated September 17, 2012, among CEMEX Finance LLC, as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, relating to its 9.625% Senior Secured Notes Due 2017.(i)
4.8	Indenture, dated December 14, 2009, among CEMEX Finance LLC, as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, in connection with the issuance of U.S.$1,250,000,000 9.50% Senior Secured Notes due 2016.(e)
4.8.1	Supplemental Indenture No. 1, dated January 19, 2010, among CEMEX Finance LLC, as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, in connection with the issuance of U.S.$500,000,000 9.50% Senior Secured Notes due 2016.(e)

Table of Contents

4.8.2	Supplemental Indenture No. 2, dated September 17, 2012, among CEMEX Finance LLC, as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, relating to its 9.50% Senior Secured Notes due 2016.(i)
4.9	Master Terms and Conditions Agreement, dated March 24, 2010, by and between Citibank, N.A. and CEMEX, S.A.B. de C.V., relating to the capped call transaction entered into in connection with issuance by CEMEX, S.A.B. de C.V. of U.S.$715,000,000 aggregate principal amount of 4.875% Convertible Subordinated Notes due 2015.(e)
4.10	Security Agreement, dated March 30, 2010, by and between Citibank, N.A. and CEMEX, S.A.B. de C.V. relating to the capped call transaction entered into in connection with issuance by CEMEX, S.A.B. de C.V. of U.S.$715,000,000 aggregate principal amount of 4.875% Convertible Subordinated Notes due 2015.(e)
4.11	Collateral Agreement, dated March 30, 2010, among Citibank, N.A., CEMEX, S.A.B. de C.V. and Banco Nacional de México, S.A., Integrante del Grupo Financiero Banamex, División Fiduciaria relating to the capped call transaction entered into in connection with issuance by CEMEX, S.A.B. de C.V. of U.S.$715,000,000 aggregate principal amount of 4.875% Convertible Subordinated Notes due 2015.(e)
4.12	Amended and Restated Dealer Manager Agreement, dated May 6, 2010, among CEMEX, S.A.B. de C.V., CEMEX Mexico, New Sunward, New Sunward Holding Financial Ventures, B.V., CEMEX España, acting through its Luxembourg branch, J.P. Morgan Securities Inc., J.P. Morgan Securities Ltd., Citigroup Global Markets Inc, Citigroup Global Markets Ltd., C5 Capital (SPV) Limited, C8 Capital (SPV) Limited, C10 Capital (SPV) Limited, and C-10 Capital (SPV) Limited, in connection with the offers to exchange Debentures for 9.25% U.S. Dollar-Denominated Senior Secured Notes due 2020 and 8.875% Euro-Denominated Senior Secured Notes due 2017, as applicable.(e)
4.13	Indenture, dated May 12, 2010, among CEMEX España, acting through its Luxembourg branch, as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, in connection with the issuance of U.S.$1,067,665,000 aggregate principal amount of 9.25% U.S. Dollar-Denominated Senior Secured Notes Due 2020 and 115,346,000 aggregate principal amount of the 8.875% Euro-Denominated Senior Secured Notes Due 2017.(e)
4.13.1	Supplemental Indenture No. 1, dated September 17, 2012, among CEMEX España, acting through its Luxembourg branch, as issuer, as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, relating to its 9.25% U.S. Dollar-Denominated Senior Secured Notes Due 2020 and 8.875% Euro-Denominated Senior Secured Notes Due 2017.(i)
4.13.2	Supplemental Indenture No. 2, dated March 25, 2013, among CEMEX España, acting through its Luxembourg branch, as issuer, as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, relating to its 9.25% U.S. Dollar-Denominated Senior Secured Notes Due 2020 and 8.875% Euro-Denominated Senior Secured Notes Due 2017.(i)
4.14	Purchase Agreement, dated January 4, 2011, among CEMEX, S.A.B de C.V., as issuer, the Note Guarantors party thereto and several initial purchasers named therein, in connection with the issuance of U.S.$1,000,000,000 9.000% Senior Secured Notes due 2018.(f)
4.15	Indenture, dated January 11, 2011, among CEMEX, S.A.B. de C.V., as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, in connection with the issuance of U.S.$1,000,000,000 9.000% Senior Secured Notes due 2018.(f)
4.15.1	Supplemental Indenture No. 1, dated July 11, 2011, among CEMEX, S.A.B de C.V., as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, in connection with the issuance of U.S.$650,000,000 9.000% Senior Secured Notes due 2018.(g)
4.15.2	Supplemental Indenture No. 2, dated September 17, 2012, among CEMEX, S.A.B de C.V., as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, relating to its 9.000% Senior Secured Notes due 2018.(i)

4.15.3	Supplemental Indenture No. 3, dated March 25, 2013, among CEMEX, S.A.B de C.V., as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, relating to its 9.000% Senior Secured Notes due 2018.(i)
4.16	Purchase Agreement, dated March 9, 2011, among CEMEX, S.A.B. de C.V. as issuer, and several initial purchasers named therein, in connection with the issuance of U.S.$800,000,000 3.25% Convertible Subordinated Notes due 2016.(f)
4.17	Purchase Agreement, dated March 9, 2011, among CEMEX, S.A.B. de C.V. as issuer, and several initial purchasers named therein, in connection with the issuance of U.S.$600,000,000 3.75% Convertible Subordinated Notes due 2018.(f)
4.18	Master Terms and Conditions Agreement, dated March 9, 2011, by and between Citibank, N.A. and CEMEX, S.A.B. de C.V., relating to the capped call transaction entered into in connection with issuance by CEMEX, S.A.B. de C.V. of U.S.$800,000,000 3.25% Convertible Subordinated Notes due 2016.(f)
4.19	Master Terms and Conditions Agreement, dated March 9, 2011, by and between JPMorgan Chase Bank, National Association, London Branch and CEMEX, S.A.B. de C.V., relating to the capped call transaction entered into in connection with issuance by CEMEX, S.A.B. de C.V. of U.S.$800,000,000 3.25% Convertible Subordinated Notes due 2016.(f)
4.20	Master Terms and Conditions Agreement, dated March 9, 2011, by and between BNP Paribas and CEMEX, S.A.B. de C.V., relating to the capped call transaction entered into in connection with issuance by CEMEX, S.A.B. de C.V. of U.S.$600,000,000 3.75% Convertible Subordinated Notes due 2018.(f)
4.21	Master Terms and Conditions Agreement, dated March 9, 2011, by and between Bank of America, N.A. and CEMEX, S.A.B. de C.V., relating to the capped call transaction entered into in connection with issuance by CEMEX, S.A.B. de C.V. of U.S.$800,000,000 3.25% Convertible Subordinated Notes due 2016 and U.S.$600,000,000 3.75% Convertible Subordinated Notes due 2018.(f)
4.22	Master Terms and Conditions Agreement, dated March 9, 2011, by and between The Royal Bank of Scotland plc and CEMEX, S.A.B. de C.V., relating to the capped call transaction entered into in connection with issuance by CEMEX, S.A.B. de C.V. of U.S.$800,000,000 3.25% Convertible Subordinated Notes due 2016.(f)
4.23	Master Terms and Conditions Agreement, dated March 9, 2011, by and between HSBC Bank USA, National Association and CEMEX, S.A.B. de C.V., relating to the capped call transaction entered into in connection with issuance by CEMEX, S.A.B. de C.V. of U.S.$800,000,000 3.25% Convertible Subordinated Notes due 2016.(f)
4.24	Master Terms and Conditions Agreement, dated March 9, 2011, by and between Banco Santander, S.A. and CEMEX, S.A.B. de C.V., relating to the capped call transaction entered into in connection with issuance by CEMEX, S.A.B. de C.V. of U.S.$800,000,000 3.25% Convertible Subordinated Notes due 2016 and U.S.$600,000,000 3.75% Convertible Subordinated Notes due 2018.(f)
4.25	Purchase Agreement, dated March 29, 2011, among CEMEX, S.A.B de C.V., as issuer, the Note Guarantors party thereto and several initial purchasers named therein, in connection with the issuance of U.S.$800,000,000 Floating Rate Senior Secured Notes due 2015.(f)
4.26	Indenture, dated April 5, 2011, among CEMEX, S.A.B. de C.V., as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, in connection with the issuance of U.S.$800,000,000 Floating Rate Senior Secured Notes due 2015.(f)
4.26.1	Supplemental Indenture No. 1, dated September 17, 2012, among CEMEX, S.A.B de C.V., as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, relating to its Floating Rate Senior Secured Notes due 2015.(i)

4.26.2	Supplemental Indenture No. 2, dated March 25, 2013, among CEMEX, S.A.B de C.V., as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, relating to its Floating Rate Senior Secured Notes due 2015.(i)
4.27	Purchase Agreement, dated July 6, 2011, among CEMEX, S.A.B de C.V., as issuer, the Note Guarantors party thereto and several initial purchasers named therein, in connection with the issuance of U.S.$650,000,000 9.000% Senior Secured Notes due 2018.(g)
4.28	Dealer Manager Agreement, dated February 27, 2012, among CEMEX, S.A.B. de C.V., CEMEX Mexico, New Sunward, New Sunward Holding Financial Ventures, B.V., CEMEX España, acting through its Luxembourg branch, J.P. Morgan Securities LLC, J.P. Morgan Securities Ltd., Merrill Lynch, Pierce, Fenner & Smith Incorporated, Merrill Lynch International, C5 Capital (SPV) Limited, C8 Capital (SPV) Limited, C10 Capital (SPV) Limited, and C-10 Capital (SPV) Limited, in connection with the offers to exchange Debentures and Eurobonds for 9.875% U.S. Dollar-Denominated Senior Secured Notes due 2019 and 9.875% Euro-Denominated Senior Secured Notes due 2019, as applicable.(g)
4.29	Amendment to the Dealer Manager Agreement, dated March 12, 2012, among CEMEX, S.A.B. de C.V., CEMEX Mexico, New Sunward, New Sunward Holding Financial Ventures, B.V., CEMEX España, acting through its Luxembourg branch, J.P. Morgan Securities LLC, J.P. Morgan Securities Ltd., Merrill Lynch, Pierce, Fenner & Smith Incorporated, Merrill Lynch International, C5 Capital (SPV) Limited, C8 Capital (SPV) Limited, C10 Capital (SPV) Limited, and C-10 Capital (SPV) Limited.(g)
4.30	Indenture, dated March 28, 2012, among CEMEX España, acting through its Luxembourg branch, as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, in connection with the issuance of U.S.$703,861,000 aggregate principal amount of 9.875% U.S. Dollar-Denominated Senior Secured Notes due 2019 and 179,219,000 aggregate principal amount of 9.875% Euro-Denominated Senior Secured Notes due 2019.(g)
4.30.1	Supplemental Indenture No. 1, dated September 17, 2012, among CEMEX España, acting through its Luxembourg branch, as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, relating to its 9.875% U.S. Dollar-Denominated Senior Secured Notes due 2019 and 9.875% Euro-Denominated Senior Secured Notes due 2019.(i)
4.30.2	Supplemental Indenture No. 2, dated March 25, 2013, among CEMEX España, acting through its Luxembourg branch, as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, relating to its 9.875% U.S. Dollar-Denominated Senior Secured Notes due 2019 and 9.875% Euro-Denominated Senior Secured Notes due 2019.(i)
4.31	Facilities Agreement for CEMEX, S.A.B. de C.V. and certain of its subsidiaries, dated September 17, 2012, with the financial institutions, noteholders and other entities named therein as Original Creditors and Citibank International plc acting as Agent and Wilmington Trust (London) Limited acting as Security Agent.(i)
4.32	Intercreditor Agreement, dated September 17, 2012, by and among Citibank International plc, as Facilities Agent, The Facilities Agreement Creditors (as named therein), CEMEX, S.A.B. de C.V. and certain of its subsidiaries, as Original Borrowers, Original Guarantors and Original Security Providers and Intra-Group Lenders, Wilmington Trust (London) Limited, acting as Security Agent, and others.(i)
4.33	Dutch law Share Pledge over the registered shares in New Sunward Holding B.V., dated September 17, 2012, between Corporación Gouda S.A. de C.V., Mexcement Holdings, S.A. de C.V., CEMEX International Finance Company and CEMEX TRADEMARKS HOLDING Ltd. (as Pledgors) and Wilmington Trust (London) Limited (as Pledgee).(i)

4.34	Swiss law Share Pledge over 1,938,958,014 shares in CEMEX TRADEMARKS HOLDING Ltd., dated September 17, 2012, between CEMEX, S.A.B de C.V., CEMEX México, S.A. de C.V., Interamerican Investments Inc. and Empresas Tolteca de México, S.A. de C.V. (as Pledgors) and Wilmington Trust (London) Limited (as Pledgee).(i)
4.35	Spanish law Share Pledge over the shares in CEMEX España, dated November 8, 2012, between New Sunward Holding B.V., CEMEX, S.A.B de C.V., CEMEX España, S.A. and Wilmington Trust (London) Limited (as Security Agent).(i)
4.36	English translation of Mexican law Security Trust Agreement, dated September 17, 2012, entered into by CEMEX, S.A.B de C.V., Empresas Tolteca de Mexico, S.A. de C.V., Impra Café S.A. de C.V., Interamerican Investments Inc., Centro Distribuidor de Cemento, S.A. de C.V. and CEMEX México, regarding the shares of each of them owns in: CEMEX México; Centro Distribuidor de Cemento S.A. de C.V.; Corporación Gouda S.A. de C.V.; and Mexcement Holdings, S.A. de C.V.(i)
4.37	Ancillary Agreement, dated as of September 17, 2012, among CEMEX, S.A.B. de C.V., certain subsidiaries of CEMEX, S.A.B. de C.V., certain creditors party to the Financing Agreement, dated August 14, 2009 (as amended), Citibank International PLC, as administrative agent, and Citibank International PLC, as exchange agent.(i)
4.38	English translation of Irrevocable Administration Trust Agreement with Reversion Rights No. 111523-3, dated as of September 17, 2012, among CEMEX, S.AB. de C.V. and certain of its subsidiaries, as the settlors and second beneficiaries, Banco Nacional de México, S.A., as trustee, and Wilmington Trust Company (London) Limited, as first beneficiary, and CEMEX, S.A.B. de C.V. and certain other of its subsidiaries, as counterparties.(i)
4.39	USPP Note Purchase Agreement, dated as of September 17, 2012, among CEMEX Finance LLC and each of the purchasers thereunder, for $106,586,333.79 9.66% senior notes due 2017.(i)
4.40	USPP Note Guarantee, dated as of September 17, 2012, by CEMEX España, S.A. in favor of the holders of notes under the Note Purchase Agreement, dated as of September 17, 2012.(i)
4.41	Indenture, dated September 17, 2012, among CEMEX, S.A.B. de C.V., as issuer, the Note Guarantors party thereto and Computershare Trust Company, N.A., as trustee, in connection with the issuance of U.S.$500,000,000 9.50 Senior Secured Notes due 2018.(i)
4.42	Purchase Agreement, dated October 4, 2012, among CEMEX Finance LLC, as issuer, the Note Guarantors party thereto and several initial purchasers named therein, in connection with the issuance of U.S.$1,500,000,000 9.375% Senior Secured Notes due 2022.(i)
4.43	Indenture, dated October 12, 2012, among CEMEX Finance LLC, as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, N.A., as trustee, in connection with the issuance of U.S.$1,500,000,000 9.375% Senior Secured Notes due 2022.(i)
4.44	Purchase Agreement, dated November 6, 2012, among CEMEX Latam Holdings, S.A., as issuer, CEMEX, S.A.B. de C.V. and several initial purchasers named therein, in connection with the issuance of 147,634,465 shares of common stock.(i)
4.45	Dealer Manager Purchase Agreement, dated March 14, 2013, among CEMEX, S.A.B. de C.V., and Merrill Lynch International, Citigroup Global Markets Limited, HSBC Bank plc and Banco Santander Central Hispano, S.A., in connection with a Eurobond Tender Offer for certain of the outstanding 4.75% Notes due 2014 issued by CEMEX Finance Europe B.V., a subsidiary of the CEMEX, S.A.B. de C.V.(i)
4.46	Purchase Agreement, dated March 14, 2013, among CEMEX, S.A.B. de C.V., as issuer, the Note Guarantors party thereto and several initial purchasers named therein, in connection with the issuance of U.S.$600,000,000 5.875% Senior Secured Notes due 2019.(i)
4.47	Indenture, dated March 25, 2013, among CEMEX, S.A.B. de C.V., as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, N.A., as trustee, in connection with the issuance of U.S.$600,000,000 5.875% Senior Secured Notes due 2019.(i)

Table of Contents

4.48	English translation of Accession Deed, dated March 25, 2013, issued by The Bank of New York Mellon, as Trustee, and CEMEX España, S.A., concerning the shares of CEMEX España, S.A. relating to the issuance by CEMEX, S.A.B. de C.V. of U.S.$600,000,000 5.875% Senior Secured Notes due 2019.(i)
8.1	List of subsidiaries of CEMEX, S.A.B. de C.V.(i)
12.1	Certification of the Principal Executive Officer of CEMEX, S.A.B. de C.V. pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.(i)
12.2	Certification of the Principal Financial Officer of CEMEX, S.A.B. de C.V. pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.(i)
13.1	Certification of the Principal Executive and Financial Officers of CEMEX, S.A.B. de C.V. pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.(i)
14.1	Consent of KPMG Cárdenas Dosal, S.C. to the incorporation by reference into the effective registration statements of CEMEX, S.A.B. de C.V. under the Securities Act of their report with respect to the consolidated financial statements of CEMEX, S.A.B. de C.V., which appears in this Annual Report on Form 20-F.(i)
15.1	Mine safety and health administration safety data.(i)

(a) Incorporated by reference to Form 6-K of CEMEX, S.A.B. de C.V., filed with the SEC on March 8, 2011.
(b) Incorporated by reference to the Registration Statement on Form F-4 of CEMEX, S.A.B. de C.V. (Registration No. 333-10682), filed with the SEC on August 10, 1999.
(c) Incorporated by reference to the 2002 annual report on Form 20-F of CEMEX, S.A.B. de C.V. filed with the SEC on April 8, 2003.
(d) Incorporated by reference to the 2006 annual report on Form 20-F of CEMEX, S.A.B. de C.V. filed with the SEC on June 27, 2007.
(e) Incorporated by reference to the 2009 annual report on Form 20-F of CEMEX, S.A.B. de C.V. filed with the SEC on June 30, 2010.
(f) Incorporated by reference to the 2010 annual report on Form 20-F of CEMEX, S.A.B. de C.V. filed with the SEC on June 16, 2011.
(g) Incorporated by reference to the 2011 annual report on Form 20-F of CEMEX, S.A.B. de C.V. filed with the SEC on April 30, 2012.
(h) Incorporated by reference to the Registration Statement on Form F-6 of CEMEX, S.A.B. de C.V. (Registration No. 333-174743), filed with the SEC on June 6, 2011.
(i) Filed herewith.

In reviewing the agreements included as exhibits to this annual report, please remember they are included to provide you with information regarding their terms and are not intended to provide any other factual or disclosure information about us or the other parties to the agreements.

The agreements may contain representations and warranties by each of the parties to the applicable agreement. These representations and warranties have been made solely for the benefit of the other parties to the applicable agreement and:

- should not in all instances be treated as categorical statements of fact, but rather as a way of allocating the risk to one of the parties if those statements prove to be inaccurate;

- have been qualified by disclosures that were made to the other party in connection with the negotiation of the applicable agreement, which disclosures are not necessarily reflected in the agreement;

Table of Contents

- may apply standards of materiality in a way that is different from what may be viewed as material to you or other investors; and

- were made only as of the date of the applicable agreement or such other date or dates as may be specified in the agreement and are subject to more recent developments.

Accordingly, these representations and warranties may not describe the actual state of affairs as of the date they were made or at any other time.

Table of Contents

SIGNATURES

CEMEX, S.A.B. de C.V. hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

CEMEX, S.A.B. de C.V.

By:	/s/ Lorenzo H. Zambrano
Name:	Lorenzo H. Zambrano
Title:	Chief Executive Officer

Date: April 23, 2013

Table of Contents

INDEX TO AUDITED CONSOLIDATED FINANCIAL STATEMENTS

CEMEX, S.A.B. de C.V. and subsidiaries:

Table of Contents

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders

CEMEX, S.A.B. de C.V.:

We have audited the accompanying consolidated balance sheets of CEMEX, S.A.B. de C.V. and subsidiaries (the Company) as of December 31, 2012 and 2011, and the related consolidated statements of operations, comprehensive loss, changes in stockholders equity , and cash flows for each of the years in the three-year period ended December 31, 2012. These consolidated financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of CEMEX, S.A.B. de C.V. and subsidiaries as of December 31, 2012 and 2011, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2012, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), CEMEX, S.A.B. de C.V. and subsidiaries internal control over financial reporting as of December 31, 2012, based on criteria established in Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated April 23, 2013 expressed an unqualified opinion on the effectiveness of the Company s internal control over financial reporting.

KPMG Cárdenas Dosal, S.C.

/s/ Celin Zorrilla Rizo

Monterrey, N.L., Mexico

April 23, 2013

F-2

Table of Contents

INTERNAL CONTROL REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders

CEMEX, S.A.B. de C.V.:

We have audited CEMEX, S.A.B. de C.V. and subsidiaries (the Company) internal control over financial reporting as of December 31, 2012, based on criteria established in Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). CEMEX, S.A.B. de C.V. and subsidiaries management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management s Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company s internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, CEMEX, S.A.B. de C.V. and subsidiaries maintained, in all material respects, effective internal control over financial reporting as of December 31, 2012, based on criteria established in Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of CEMEX, S.A.B. de C.V. and subsidiaries as of December 31, 2012 and 2011, and the related consolidated statements of operations, comprehensive loss, changes in stockholders equity, and cash flows for each of the years in the three-year period ended December 31, 2012, and our report dated April 23, 2013 expressed an unqualified opinion on those consolidated financial statements.

KPMG Cárdenas Dosal, S.C.

/s/ Celin Zorrilla Rizo

Monterrey, N.L. Mexico

April 23, 2013

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Consolidated Statements of Operations

(Millions of Mexican pesos, except for loss per share)

			Years ended December 31,		
	Note		**2012**	**2011**	**2010**
Net sales	**3**	Ps	197,036	189,887	177,641
Cost of sales	**2R**		(138,711)	(136,167)	(127,845)
Gross profit			**58,325**	**53,720**	**49,796**
Administrative and selling expenses			(23,545)	(25,486)	(25,818)
Distribution expenses			(17,580)	(16,170)	(13,242)
	2R		(41,125)	(41,656)	(39,060)
Operating earnings before other expenses, net 1			**17,200**	**12,064**	**10,736**
Other expenses, net	**6**		(5,692)	(5,449)	(6,335)
Operating earnings 2			**11,508**	**6,615**	**4,401**
Financial expense	**16**		(18,335)	(16,627)	(14,753)
Other financial (expense) income, net	**7**		977	(2,214)	(523)
Equity in gain (loss) of associates	**13A**		728	(334)	(487)
Loss before income tax			**(5,122)**	**(12,560)**	**(11,362)**
Income tax	**19**		(6,097)	(12,207)	(2,074)
CONSOLIDATED NET LOSS			**(11,219)**	**(24,767)**	**(13,436)**
Non-controlling interest net income			662	21	46
CONTROLLING INTEREST NET LOSS		Ps	**(11,881)**	**(24,788)**	**(13,482)**
BASIC LOSS PER SHARE	**22**	Ps	**(0.34)**	**(0.71)**	**(0.39)**
DILUTED LOSS PER SHARE	**22**	Ps	**(0.34)**	**(0.71)**	**(0.39)**

1 The line item Operating earnings before other expenses, net was titled by CEMEX in prior years as Operating income (note 2A).
2 The line item Operating earnings was titled by CEMEX in prior years as Operating income after other expenses, net (note 2A).
The accompanying notes are part of these consolidated financial statements.

Table of Contents

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Consolidated Statements of Comprehensive Loss

(Millions of Mexican pesos)

			Years ended December 31,		
	Notes		2012	2011	2010
CONSOLIDATED NET LOSS		Ps	**(11,219)**	**(24,767)**	**(13,436)**
Items that will not be reclassified subsequently to profit or loss					
Actuarial losses	**18**		(940)	(1,042)	(1,192)
Income tax recognized directly in other comprehensive income	**19**		318	343	392
			(622)	(699)	(800)
Items that will be reclassified subsequently to profit or loss when specific conditions are met					
Effects from available-for-sale investments	**13B**		(44)	(93)	
Currency translation of foreign subsidiaries	**20B**		(7,336)	11,360	(7,029)
Income tax recognized directly in other comprehensive income	**19**		(3,639)	4,631	5,958
			(11,019)	15,898	(1,071)
Other comprehensive income (loss) for the period			(11,641)	15,199	(1,871)
TOTAL COMPREHENSIVE LOSS FOR THE PERIOD			**(22,860)**	**(9,568)**	**(15,307)**
Non-controlling interest comprehensive income for the period			662	21	46
CONTROLLING INTEREST COMPREHENSIVE LOSS FOR THE PERIOD		Ps	**(23,522)**	**(9,589)**	**(15,353)**

The accompanying notes are part of these consolidated financial statements.

Table of Contents

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Consolidated Balance Sheets

(Millions of Mexican pesos)

	Notes		December 31, 2012	2011
ASSETS				
CURRENT ASSETS				
Cash and cash equivalents	**8**	Ps	12,478	16,128
Trade receivables less allowance for doubtful accounts	**9**		23,698	26,205
Other accounts receivable	**10**		6,239	5,258
Inventories, net	**11**		16,485	17,654
Other current assets	**12**		4,421	3,953
Total current assets			63,321	69,198
NON-CURRENT ASSETS				
Investments in associates	**13A**		7,979	8,533
Other investments and non-current accounts receivable	**13B**		8,600	10,595
Property, machinery and equipment, net	**14**		212,301	233,709
Goodwill and intangible assets, net	**15**		173,522	189,062
Deferred income taxes	**19B**		13,047	30,555
Total non-current assets			415,449	472,454
TOTAL ASSETS		Ps	**478,770**	**541,652**
LIABILITIES AND STOCKHOLDERS EQUITY				
CURRENT LIABILITIES				
Short-term debt including current maturities of long-term debt	**16A**	Ps	596	4,673
Other financial obligations	**16B**		6,978	7,711
Trade payables			20,516	20,169
Income tax payable			6,736	11,301
Other accounts payable and accrued expenses	**17**		18,967	20,680
Total current liabilities			53,793	64,534
NON-CURRENT LIABILITIES				
Long-term debt	**16A**		177,539	203,798
Other financial obligations	**16B**		32,913	33,190
Employee benefits	**18**		13,460	15,325
Deferred income taxes	**19B**		12,861	17,560
Other non-current liabilities	**17**		32,604	35,542
Total non-current liabilities			269,377	305,415
TOTAL LIABILITIES			**323,170**	**369,949**

STOCKHOLDERS EQUITY				
Controlling interest:				
Common stock and additional paid-in capital	**20A**		118,068	113,444
Other equity reserves	**20B**		12,203	14,797
Retained earnings	**20C**		22,722	51,648
Net loss			(11,881)	(24,788)
Total controlling interest			141,112	155,101
Non-controlling interest and perpetual debentures	**20D**		14,488	16,602
TOTAL STOCKHOLDERS EQUITY			**155,600**	**171,703**
TOTAL LIABILITIES AND STOCKHOLDERS EQUITY		Ps	**478,770**	**541,652**

The accompanying notes are part of these consolidated financial statements.

F-6

Table of Contents

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Consolidated Statements of Cash Flows

(Millions of Mexican pesos)

	Notes		2012	2011	2010
OPERATING ACTIVITIES					
Consolidated net loss		Ps	**(11,219)**	**(24,767)**	**(13,436)**
Non-cash items:					
Depreciation and amortization of assets	**5**		17,184	17,536	19,108
Impairment losses	**6**		1,661	1,751	1,904
Equity in loss of associates	**13A**		(728)	334	487
Other expenses (income), net			1,592	(1,559)	1,162
Comprehensive financing result			17,358	18,841	15,276
Income taxes	**19**		6,097	12,207	2,074
Changes in working capital, excluding income taxes			(2,048)	(727)	(623)
Net cash flow provided by operating activities before interest and income taxes			**29,897**	**23,616**	**25,952**
Financial expense paid in cash including coupons on perpetual debentures	**20D**		(19,564)	(13,352)	(14,968)
Income taxes paid in cash			(4,709)	(3,778)	(4,310)
Net cash flows provided by operating activities			**5,624**	**6,486**	**6,674**
INVESTING ACTIVITIES					
Property, machinery and equipment, net	**14**		(5,597)	(3,198)	(4,726)
Disposal (acquisition) of subsidiaries and associates, net	**13, 15**		(895)	1,232	1,172
Intangible assets and other deferred charges	**15**		(438)	(932)	117
Long term assets and others, net			4,696	1,406	1,565
Net cash flows used in investing activities			**(2,234)**	**(1,492)**	**(1,872)**
FINANCING ACTIVITIES					
Issuance of common stock	**20A**			11	5
Issuance of common stock by subsidiaries	**20D**		12,442		
Derivative instruments			1,633	(5,464)	69
Issuance (repayment) of debt, net	**16A**		(17,239)	5,702	(9,615)
Securitization of trade receivables			(193)	2,890	121
Non-current liabilities, net			(1,679)	1,430	140
Net cash flows (used in) provided by financing activities			**(5,036)**	**4,569**	**(9,280)**
Increase (decrease) in cash and cash equivalents			(1,646)	9,563	(4,478)
Cash conversion effect, net			(2,004)	(1,789)	(1,272)
Cash and cash equivalents at beginning of year			16,128	8,354	14,104
CASH AND CASH EQUIVALENTS AT END OF YEAR	**8**	Ps	**12,478**	**16,128**	**8,354**
Changes in working capital, excluding income taxes:					
Trade receivables, net		Ps	2,956	(2,211)	133
Other accounts receivable and other assets			(2,010)	1,306	(2,484)

Inventories		1,412	(575)	(146)
Trade payables		(424)	(454)	1,599
Other accounts payable and accrued expenses		(3,982)	1,207	275
Changes in working capital, excluding income taxes	Ps	**(2,048)**	**(727)**	**(623)**

The accompanying notes are part of these consolidated financial statements.

Table of Contents

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Statements of Changes in Stockholders Equity

(Millions of Mexican pesos)

	Note		Common stock	Additional paid-in capital	Other equity reserves	Retained earnings	Total controlling interest	Non-controlling interest	Total stockholders equity
Balance at January 1, 2010		Ps	**4,127**	**98,797**	**(2,748)**	**74,827**	**175,003**	**43,601**	**218,604**
Net loss for the period						(13,482)	(13,482)	46	(13,436)
Total other items of comprehensive loss for the period					(1,871)		(1,871)		(1,871)
Capitalization of retained earnings	**20A**		5	5,476		(5,481)			
Stock-based compensation	**20A, 21**			317			317		317
Effects of perpetual debentures	**20D**				3,777		3,777	(23,549)	(19,772)
Changes in non-controlling interest	**20D**							(655)	(655)
Balance at December 31, 2010			**4,132**	**104,590**	**(842)**	**55,864**	**163,744**	**19,443**	**183,187**
Net loss for the period						(24,788)	(24,788)	21	(24,767)
Total other items of comprehensive income for the period					15,199		15,199		15,199
Capitalization of retained earnings	**20A**		3	4,213		(4,216)			
Stock-based compensation	**20A, 21**			506			506		506
Effects of perpetual debentures	**20D**				827		827	(3,221)	(2,394)
Changes in non-controlling interest	**20D**				(387)		(387)	359	(28)
Balance at December 31, 2011			**4,135**	**109,309**	**14,797**	**26,860**	**155,101**	**16,602**	**171,703**
Net loss for the period						(11,881)	(11,881)	662	(11,219)
Total other items of comprehensive loss for the period					(11,641)		(11,641)		(11,641)
Capitalization of retained earnings	**20A**		4	4,134		(4,138)			
Stock-based compensation	**20A, 21**			486	136		622		622
Effects of perpetual debentures	**20D**				1,227		1,227	(7,004)	(5,777)
Changes in non-controlling interest	**20D**				7,684		7,684	4,228	11,912
Balance at December 31, 2012		Ps	**4,139**	**113,929**	**12,203**	**10,841**	**141,112**	**14,488**	**155,600**

The accompanying notes are part of these consolidated financial statements.

Table of Contents

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

1) DESCRIPTION OF BUSINESS

CEMEX, S.A.B. de C.V., a public stock corporation with variable capital (S.A.B. de C.V.) organized under the laws of the United Mexican States, or Mexico, is a holding company (parent) of entities whose main activities are oriented to the construction industry, through the production, marketing, distribution and sale of cement, ready-mix concrete, aggregates and other construction materials.

CEMEX, S.A.B. de C.V. was founded in 1906 and was registered with the Mercantile Section of the Public Register of Property and Commerce in Monterrey, N.L., Mexico in 1920 for a period of 99 years. In 2002, this period was extended to the year 2100. The shares of CEMEX, S.A.B. de C.V. are listed on the Mexican Stock Exchange (MSE) as Ordinary Participation Certificates (CPOs). Each CPO represents two series A shares and one series B share of common stock of CEMEX, S.A.B. de C.V. In addition, CEMEX, S.A.B. de C.V. s shares are listed on the New York Stock Exchange (NYSE) as American Depositary Shares (ADSs) under the symbol CX. Each ADS represents ten CPOs.

The terms CEMEX, S.A.B. de C.V. and/or the Parent Company used in these accompanying notes to the financial statements refer to CEMEX, S.A.B. de C.V. without its consolidated subsidiaries. The terms the Company or CEMEX refer to CEMEX, S.A.B. de C.V. together with its consolidated subsidiaries. The issuance of these consolidated financial statements was authorized by the management of CEMEX, S.A.B. de C.V. on January 31, 2013. These consolidated financial statements were authorized by the Stockholders Meeting of CEMEX, S.A.B. de C.V. on March 21, 2013.

2) SIGNIFICANT ACCOUNTING POLICIES

2A) BASIS OF PRESENTATION AND DISCLOSURE

In November 2008, the CNBV issued regulations requiring registrants whose shares are listed on the MSE, to begin preparing their consolidated financial statements using International Financial Reporting Standards (IFRS), as issued by the International Accounting Standards Board (IASB), no later than January 1, 2012 and to stop using Mexican Financial Reporting Standards (MFRS). In connection with this requirement, CEMEX s consolidated financial statements as of December 31, 2012 and 2011 and for the years ended December 31, 2012, 2011 and 2010, were prepared in accordance with IFRS as issued by the IASB.

On January 26, 2012, CEMEX issued its last consolidated financial statements under MFRS, which were as of December 31, 2011 and 2010 and for the years ended December 31, 2011, 2010 and 2009. These financial statements were used to comply with CEMEX s financial information requirements before April 2012 issuance of its 2011 annual report with the Mexican National Banking and Exchange Commission (*Comisión Nacional Bancaria y de Valores* or CNBV) and its 2011 annual report on Form 20-F with the U.S. Securities and Exchange Commission (SEC). In addition, for purposes of preparing its 2011 annual reports with the CNBV and the SEC, on April 27, 2012, CEMEX issued its first financial statements under IFRS, which were as of December 31, 2011 and 2010 and as of January 1, 2010 and for the years ended December 31, 2011 and 2010 (not included in this report), in which CEMEX described the options it made in the migration to IFRS and the effects that such migration had on (i) CEMEX s opening balance sheet as of January 1, 2010, according to IFRS 1, *First time adoption* (IFRS 1), (ii) CEMEX s balance sheets as of December 31, 2011 and 2010, and (iii) CEMEX s statements of operations, statements of comprehensive loss and statements of cash flows for the years ended December 31, 2011 and 2010, in each case, as compared to CEMEX s previously reported amounts under MFRS.

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

Definition of terms

When reference is made to pesos or Ps, it means Mexican pesos. The amounts in the financial statements and the accompanying notes are stated in millions, except when references are made to loss per share and/or prices per share. When reference is made to US$ or dollars, it means millions of dollars of the United States of America (United States). When reference is made to £ or pounds, it means millions of British pounds sterling. When reference is made to or Euros, it means millions of the currency in circulation in a significant number of European Union (EU) countries. When it is deemed relevant, certain amounts presented in the notes to the financial statements include between parentheses a convenience translation into dollars, into pesos, or both, as applicable. These translations should not be construed as representations that the amounts in pesos or dollars, as applicable, actually represent those peso or dollar amounts or could be converted into pesos or dollars at the rate indicated. As of December 31, 2012 and 2011, translations of pesos into dollars and dollars into pesos, were determined for balance sheet amounts using the closing exchange rates of Ps12.85 and Ps13.96 pesos per dollar, respectively, and for statements of operations amounts, using the average exchange rates of Ps13.15, Ps12.48 and Ps12.67 pesos per dollar for 2012, 2011 and 2010, respectively. When the amounts between parentheses are the peso and the dollar, the amounts were determined by translating the foreign currency amount into dollars using the closing exchange rates at year-end, and then translating the dollars into pesos as previously described.

Statements of operations

In CEMEX s statements of operations for the years ended December 31, 2012, 2011 and 2010, the line item currently titled Operating earnings before other expenses, net was previously titled Operating income, and the line item currently titled Operating earnings was previously titled Operating income after other expenses, net. CEMEX made these changes to comply with industry practice when filing financial statements under IFRS with the SEC based on the guidance set forth in paragraph 56 of the Basis for Conclusions of IAS 1, *Presentation of Financial Statements* (IAS 1). However, such changes in line-item titles do not represent any change in CEMEX s accounting practices, policies or methodologies under IFRS as compared to prior years. Consequently, the line item Operating earnings before other expenses, net is directly comparable with the line item Operating income presented in prior years and the line item Operating earnings is directly comparable with the line item Operating income after other expenses, net presented in prior years.

The line item Other expenses, net in the statements of operations consists primarily of revenues and expenses not directly related to CEMEX s main activities, or which are of an unusual and/or non-recurring nature, including impairment losses of long-lived assets, results on disposal of assets and restructuring costs, among others (note 6).

Statements of other comprehensive income (loss)

For the years ended December 31, 2012, 2011 and 2010, CEMEX adopted amendments to IAS 1, which, among other things, require entities to present line items for amounts of other comprehensive income (loss) in the period grouped into those that, in accordance with other IFRSs: a) will not be reclassified subsequently to profit or loss; and b) will be reclassified subsequently to profit or loss when specific conditions are met.

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

Statements of cash flows

The statements of cash flows present cash inflows and outflows, excluding unrealized foreign exchange effects, as well as the following transactions that did not represent sources or uses of cash:

In 2012, the exchange of approximately US$452 (48%) of CEMEX s then outstanding perpetual debentures and of approximately 470 (53%) of CEMEX s then outstanding Euro-denominated 4.75% notes due 2014, for new Euro-denominated notes for 179 and new Dollar-denominated notes for US$704. In 2011, the exchange of a portion of CEMEX s perpetual debentures for new notes for US$125, and in 2010, the exchange of a portion of CEMEX s perpetual debentures for new notes for US$1,067 and new notes for 115 (note 16A). These exchanges represented net increases in debt of Ps4,111 in 2012, Ps1,486 in 2011 and Ps15,361 in 2010, reductions in equity s non controlling interest of Ps5,808 in 2012, Ps1,937 in 2011 and Ps20,838 in 2010 and increases in equity s controlling interest of Ps1,680 in 2012, Ps446 in 2011 and Ps5,401 in 2010;

In 2012 and 2011, the increases in property, plant and equipment for approximately Ps2,025 and Ps1,519, respectively, and in debt for approximately Ps1,401 and Ps1,558, respectively, associated with the negotiation of capital leases during the year (note 16B);

In 2011, the increase in debt for Ps1,352 related mainly to the acquisition of Ready Mix USA LLC (note 15B);

In 2011, the decrease in debt and in perpetual debentures within non-controlling interest for approximately Ps239 and Ps1,391, respectively, in connection with the gains resulting from the difference between the notional amount and the fair value of CEMEX s debt and perpetual instruments held by subsidiaries (note 16A); and

In 2012, 2011 and 2010, the increases in common stock and additional paid-in capital associated with: (i) the capitalization of retained earnings for Ps4,138, Ps4,216 and Ps5,481, respectively (note 20A); and (ii) CPOs issued as part of the executive stock-based compensation for Ps486, Ps495 and Ps312, respectively (note 20A).

2B) PRINCIPLES OF CONSOLIDATION

According to IAS 27, *Consolidated and separate financial statements* (IAS 27), the consolidated financial statements include those of CEMEX, S.A.B. de C.V. and the entities in which the Parent Company holds, directly or through subsidiaries, more than 50% of their common stock and/or has control. Control exists when CEMEX, S.A.B. de C.V. has the power, directly or indirectly, to govern the administrative, financial and operating policies of an entity in order to obtain benefits from its activities. The financial statements of Special Purpose Entities (SPEs) are consolidated if, based on an evaluation of the substance of the agreements and the SPE s risks and rewards, CEMEX concludes that it controls the SPE. Balances and operations between related parties are eliminated in consolidation.

Pursuant to IAS 28, *Investments in associates and joint ventures* (IAS 28), investments in associates are accounted for by the equity method when CEMEX has significant influence, which is generally presumed with a minimum equity interest of 20%, unless it is proven in unusual cases that CEMEX has significant influence with a lower percentage. The equity method reflects in the financial statements the investment s original cost and the proportional interest of the holding company in the associate s equity and earnings after acquisition, considering, if applicable, the effects of inflation. The financial statements of joint ventures, which are those entities in which CEMEX and other third-party investors have agreed to exercise joint control, are also recognized under the

Principles of consolidation - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

equity method. The equity method is discontinued when the carrying amount of the investment, including any long-term interest in the associate or joint venture, reaches zero, unless CEMEX has incurred or guaranteed additional obligations of the associate or joint venture.

Other investments of a permanent nature where CEMEX holds equity interests of less than 20% and/or there is no significant influence are carried at their historical cost.

2C) USE OF ESTIMATES AND CRITICAL ASSUMPTIONS

The preparation of financial statements in accordance with IFRS principles requires management to make estimates and assumptions that affect reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported amounts of revenues and expenses during the period. These assumptions are reviewed on an ongoing basis using available information. Actual results could differ from these estimates.

The main items subject to estimates and assumptions by management include, among others, impairment tests of long-lived assets, allowances for doubtful accounts and inventories, recognition of deferred income tax assets, as well as the measurement of financial instruments at fair value, and the assets and liabilities related to employee benefits. Significant judgment by management is required to appropriately assess the amounts of these assets and liabilities.

2D) FOREIGN CURRENCY TRANSACTIONS AND TRANSLATION OF FOREIGN CURRENCY FINANCIAL STATEMENTS

According to IAS 21, *The effects of changes in foreign exchange rates* (IAS 21), transactions denominated in foreign currencies are recorded in the functional currency at the exchange rates prevailing on the dates of their execution. Monetary assets and liabilities denominated in foreign currencies are translated into the functional currency at the exchange rates prevailing at the balance sheet date, and the resulting foreign exchange fluctuations are recognized in earnings, except for exchange fluctuations arising from: 1) foreign currency indebtedness directly related to the acquisition of foreign entities; and 2) fluctuations associated with related parties balances denominated in foreign currency, which settlement is neither planned nor likely to occur in the foreseeable future and as a result, such balances are of a permanent investment nature. These fluctuations are recorded against Other equity reserves , as part of the foreign currency translation adjustment (note 20B) until the disposal of the foreign net investment, at which time, the accumulated amount is recycled through the statement of operations as part of the gain or loss on disposal.

The financial statements of foreign subsidiaries, as determined using their respective functional currency, are translated to pesos at the closing exchange rate for balance sheet accounts and at the closing exchange rates of each month within the period for income statements accounts. The corresponding translation adjustment is included within Other equity reserves as part of the foreign currency translation adjustment (note 20B) until the disposal of the net investment in the foreign subsidiary. As permitted by IFRS 1, in its opening balance sheet under IFRS as of January 1, 2010, CEMEX elected to reset to zero all cumulative foreign currency translation adjustments determined under MFRS. Consequently, upon disposal of the foreign operations, those effects determined before the migration to IFRS will not be considered in the determination of disposal gains or losses.

Table of Contents

Foreign currency transactions and translation of foreign currency financial statements - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

During the reported periods, there were no subsidiaries whose functional currency was the currency of a hyperinflationary economy, which is generally considered to exist when the cumulative inflation rate over the last three years is approaching, or exceeds, 100%. In a hyperinflationary economy, the accounts of the subsidiary s statements of operations should be restated to constant amounts as of the reporting date, in which case, both the balance sheet accounts and the statements of operations accounts would be translated to pesos at the closing exchange rates of the year.

The most significant closing exchange rates and the approximate average exchange rates for balance sheet accounts and income statement accounts, respectively, as of December 31 2012, 2011 and 2010, were as follows:

	2012		2011		2010	
Currency	**Closing**	**Average**	**Closing**	**Average**	**Closing**	**Average**
Dollar	12.8500	13.1500	13.9600	12.4800	12.3600	12.6700
Euro	16.9615	16.9688	18.1017	17.4204	16.4822	16.7106
British Pound Sterling	20.8841	20.9373	21.6939	20.0321	19.2854	19.5404
Colombian Peso	0.0073	0.0073	0.0072	0.0067	0.0065	0.0067
Egyptian Pound	2.0233	2.1590	2.3151	2.0952	2.1285	2.2410
Philippine Peso	0.3130	0.3125	0.3184	0.2886	0.2819	0.2813

The financial statements of foreign subsidiaries are translated from their functional currencies into dollars and subsequently into pesos. The foreign exchange rates presented in the table above represent the exchange rates inferred from this methodology. The peso to U.S. dollar exchange rate used by CEMEX is an average of free market rates available to settle its foreign currency transactions. No significant differences exist, in any case, between the foreign exchange rates used by CEMEX and those published by the Mexican Central Bank.

2E) CASH AND CASH EQUIVALENTS (note 8)

The balance in this caption is comprised of available amounts of cash and cash equivalents, mainly represented by highly-liquid short-term investments, which are easily convertible into cash, and which are not subject to significant risks of changes in their values, including overnight investments which yield fixed returns and have maturities of less than three months from the investment date. These fixed-income investments are recorded at cost plus accrued interest. Other investments which are easily convertible into cash are recorded at their market value. Gains or losses resulting from changes in market values and accrued interest are included in the statements of operations as part of other financial income (expense), net.

The amount of cash and cash equivalents in the balance sheet includes restricted cash and cash equivalents, comprised of deposits in margin accounts that guarantee several of CEMEX s obligations, to the extent that the restriction will be lifted in less than three months from the balance sheet date. When the restriction period is greater than three months, such restricted cash and cash equivalents are not considered cash equivalents and are included within short-term or long-term Other accounts receivable, as appropriate. When contracts contain provisions for net settlement, these restricted amounts of cash and cash equivalents are offset against the liabilities that CEMEX has with its counterparties.

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

2F) TRADE ACCOUNTS RECEIVABLE AND OTHER CURRENT ACCOUNTS RECEIVABLE (notes 9, 10)

According to IAS 39, *Financial instruments: recognition and measurement* (IAS 39), items under this caption are classified as loans and receivables , which are recorded at their amortized cost, which is represented by the net present value of the consideration receivable or payable as of the transaction date. Due to their short-term nature, CEMEX initially recognizes these receivables at the original invoiced amount less an estimate of doubtful accounts. Allowances for doubtful accounts as well as impairment of other current accounts receivable are recognized against administrative and selling expenses.

Trade receivables sold under securitization programs, in which CEMEX maintains a residual interest in the trade accounts receivable sold in case of recovery failure, as well as continued involvement in such assets, do not qualify for derecognition and are maintained on the balance sheet.

2G) INVENTORIES (note 11)

Inventories are valued using the lower of cost and net realizable value. The cost of inventories includes expenditures incurred in acquiring the inventories, production or conversion costs and other costs incurred in bringing them to their existing location and condition. CEMEX analyzes its inventory balances to determine if, as a result of internal events, such as physical damage, or external events, such as technological changes or market conditions, certain portions of such balances have become obsolete or impaired. When an impairment situation arises, the inventory balance is adjusted to its net realizable value, whereas, if an obsolescence situation occurs, the inventory obsolescence reserve is increased. In both cases, these adjustments are recognized against the results for the period. Advances to suppliers of inventory are presented as part of other short-term accounts receivable.

2H) OTHER INVESTMENTS AND NON-CURRENT RECEIVABLES (note 13B)

As part of the category of loans and receivables under IAS 39, non-current accounts receivable, as well as investments classified as held to maturity are initially recognized at their amortized cost. Subsequent changes in net present value are recognized in the statements of operations as part of other financial income (expenses), net.

Investments in financial instruments held for trading, as well as those investments available for sale, classified under IAS 39, are recognized at their estimated fair value, in the first case through the statements of operations as part of other financial income (expenses), net, and in the second case, changes in valuation are recognized as part of other comprehensive income (loss) of the period within other equity reserves until their time of disposition, when all valuation effects accrued in equity are reclassified to other financial income (expenses), net, in the statements of operations. These investments are tested for impairment upon the occurrence of a significant adverse change or at least once a year during the last quarter.

2I) PROPERTY, MACHINERY AND EQUIPMENT (note 14)

Property, machinery and equipment are recognized at their acquisition or construction cost, as applicable, less accumulated depreciation and accumulated impairment losses. In its opening balance sheet under IFRS as of January 1, 2010, CEMEX elected to determine the deemed cost of several items of its property, machinery and equipment at their estimated fair value at the date of transition, including land, mineral reserves and major equipment. In general, CEMEX maintained the same carrying amount that vehicles, office equipment and other minor assets had under MFRS at the date of transition to IFRS.

F-14

Table of Contents

Property, machinery and equipment - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

Depreciation of fixed assets is recognized as part of cost and operating expenses (note 5), and is calculated using the straight-line method over the estimated useful lives of the assets, except for mineral reserves, which are depleted using the units-of-production method. As of December 31, 2012, the maximum average useful lives by category of fixed assets were as follows:

	Years
Administrative buildings	36
Industrial buildings	34
Machinery and equipment in plant	19
Ready-mix trucks and motor vehicles	8
Office equipment and other assets	6

CEMEX capitalizes, as part of the historical cost of fixed assets, interest expense arising from existing debt during the construction or installation period of significant fixed assets, considering CEMEX s corporate average interest rate and the average balance of investments in process for the period. Initial stripping costs incurred to gain access to the mineral reserves of a determined quarry are capitalized and amortized during the useful life of the quarry based on the estimated tons of material to be extracted. Ongoing stripping costs in the same quarry are expensed as incurred.

Costs incurred in respect of operating fixed assets that result in future economic benefits, such as an extension in their useful lives, an increase in their production capacity or in safety, as well as those costs incurred to mitigate or prevent environmental damage, are capitalized as part of the carrying amount of the related assets. The capitalized costs are depreciated over the remaining useful lives of such fixed assets. Other costs, including periodic maintenance on fixed assets, are expensed as incurred. Advances to suppliers of fixed assets are presented as part of other long-term accounts receivable.

2J) BUSINESS COMBINATIONS, GOODWILL, OTHER INTANGIBLE ASSETS AND DEFERRED CHARGES (note 15)

Business combinations are recognized using the purchase method, by allocating the consideration transferred to assume control of the entity to all assets acquired and liabilities assumed, based on their estimated fair values as of the acquisition date. Intangible assets acquired are identified and recognized at fair value. Any unallocated portion of the purchase price represents goodwill, which is not amortized and is subject to periodic impairment tests (note 2K). Goodwill can be adjusted for any correction to the preliminary assessment given to the assets acquired and/or liabilities assumed within the twelve-month period after purchase. Costs associated with the acquisition are expensed in the statements of operations as incurred. As permitted by IFRS 1, CEMEX elected not to revisit business combinations incurred before the date of transition to IFRS as of January 1, 2010.

CEMEX capitalizes intangible assets acquired, as well as costs incurred in the development of intangible assets, when future economic benefits associated with the assets are identified and there is evidence of control over such benefits. Intangible assets are presented at their acquisition or development cost. Such assets are classified as having a definite or indefinite life; the latter are not amortized since the period cannot be accurately established in which the benefits associated with such intangibles will terminate. Amortization of intangible assets of definite life is calculated under the straight-line method and recognized as part of costs and operating expenses (note 5). Based on IFRS 13, CEMEX modified the value of certain extraction permits considering that as of the date of transition to IFRS, there were better indicators of fair value as compared to the carrying amount related to such permits under MFRS.

Business combinations, goodwill, other intangible assets and deferred charges - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

Startup costs are recognized in the statements of operations as they are incurred. Costs associated with research and development activities (R&D), performed by CEMEX to create products and services, as well as to develop processes, equipment and methods to optimize operational efficiency and reduce costs, are recognized in the operating results as incurred. The technology and energy departments in CEMEX undertake all significant R&D activities as part of their daily activities. In 2012, 2011 and 2010, total combined expenses of these departments were approximately Ps514 (US$40), Ps487 (US$39) and Ps519 (US$41), respectively. Development costs are capitalized only if they meet the definition of intangible asset mentioned above.

Direct costs incurred in the development stage of computer software for internal use are capitalized and amortized through the operating results over the useful life of the software, which on average is approximately 5 years.

Costs incurred in exploration activities such as payments for rights to explore, topographical and geological studies, as well as trenching, among other items incurred to assess the technical and commercial feasibility of extracting a mineral resource, which are not significant to CEMEX, are capitalized when future economic benefits associated with such activities are identified. When extraction begins, these costs are amortized during the useful life of the quarry based on the estimated tons of material to be extracted. When future economic benefits are not achieved, any capitalized costs are subject to impairment.

CEMEX s extraction rights have maximum useful lives that range from 30 to 100 years, depending on the sector, and the expected life of the related reserves. As of December 31, 2012, except for extraction rights and/or as otherwise indicated, CEMEX s intangible assets are amortized on a straight line basis over their useful lives that range on average from 3 to 20 years.

2K) IMPAIRMENT OF LONG LIVED ASSETS (notes 14, 15)

Property, machinery and equipment, intangible assets of definite life and other investments

Property, machinery and equipment, intangible assets of definite life and other investments are tested for impairment upon the occurrence of factors such as the occurrence of a significant adverse event, changes in CEMEX s operating environment, changes in projected use or in technology, as well as expectations of lower operating results for each cash generating unit, in order to determine whether their carrying amounts may not be recovered. In such cases, an impairment loss is recorded in the income statements for the period when such determination is made within Other expenses, net. The impairment loss of an asset results from the excess of the asset s carrying amount over its recoverable amount, corresponding to the higher of the fair value of the asset, less costs to sell such asset, and the asset s value in use, the latter represented by the net present value of estimated cash flows related to the use and eventual disposal of the asset.

Significant judgment by management is required to appropriately assess the fair values and values in use of these assets. The main assumptions utilized to develop these estimates are a discount rate that reflects the risk of the cash flows associated with the assets evaluated and the estimations of generation of future income. Those assumptions are evaluated for reasonableness by comparing such discount rates to available market information and by comparing to third-party expectations of industry growth, such as governmental agencies or industry chambers of commerce.

Table of Contents

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

Goodwill and intangible assets of indefinite life

Goodwill and other intangible assets of indefinite life are tested for impairment when required due to significant adverse changes or at least once a year, during the last quarter of such year, by determining the recoverable amount of the group of cash-generating units (CGUs)to which goodwill balances have been allocated, which consists of the higher of such group of CGUs fair value, less cost to sell and its value in use, represented by the discounted amount of estimated future cash flows to be generated by such CGUs to which goodwill has been allocated. Other intangible assets of indefinite life may be tested at the CGU or group of CGUs level, depending on their allocation. CEMEX determines discounted cash flows generally over periods of 5 years. In specific circumstances, when, according to CEMEX s experience, actual results for a given cash-generating unit do not fairly reflect historical performance and most external economic variables provide the Company with confidence that a reasonably determinable improvement in the mid-term is expected in their operating results, management uses cash flow projections over a period of up to 10 years, to the extent CEMEX has detailed, explicit and reliable financial forecasts and is confident and can demonstrate its ability, based on past experience, to forecast cash flows accurately over that longer period. The number of additional periods above the standard period of 5 years of cash flow projections up to 10 years is determined by the extent to which future expected average performance resembles the historical average performance. If the value in use of a group of CGUs to which goodwill has been allocated is lower than its corresponding carrying amount, CEMEX determines the fair value of such group of CGUs using methodologies generally accepted in the market to determine the value of entities, such as multiples of Operating EBITDA and by reference to other market transactions, among others. An impairment loss is recognized within other expenses, net, if the recoverable amount is lower than the net book value of the group of CGUs to which goodwill has been allocated. Impairment charges recognized on goodwill are not reversed in subsequent periods.

The geographic operating segments reported by CEMEX (note 4), represent CEMEX s groups of CGUs to which goodwill has been allocated for purposes of testing goodwill for impairment. In arriving at this conclusion, CEMEX considered: a) that after the acquisition, goodwill was allocated at the level of the geographic operating segment; b) that the operating components that comprise the reported segment have similar economic characteristics; c) that the reported segments are used by CEMEX to organize and evaluate its activities in its internal information system; d) the homogeneous nature of the items produced and traded in each operative component, which are all used by the construction industry; e) the vertical integration in the value chain of the products comprising each component; f) the type of clients, which are substantially similar in all components; g) the operative integration among components; and h) that the compensation system of a specific country is based on the consolidated results of the geographic segment and not on the particular results of the components. In addition, the country level represents the lowest level within CEMEX at which goodwill is monitored for internal management purposes.

Impairment tests are significantly sensitive to, among other factors, the estimation of future prices of CEMEX s products, the development of operating expenses, local and international economic trends in the construction industry, the long-term growth expectations in the different markets, as well as the discount rates and the growth rates in perpetuity applied. For purposes of estimating future prices, CEMEX uses, to the extent available, historical data plus the expected increase or decrease according to information issued by trusted external sources, such as national construction or cement producer chambers and/or in governmental economic expectations. Operating expenses are normally measured as a constant proportion of revenues, following past experience. However, such operating expenses are also reviewed considering external information sources in respect to inputs that behave according to international prices, such as gas and oil. CEMEX uses specific pre-tax discount rates for each group of CGUs to which goodwill is allocated, which are applied to discount pre-tax cash flows.

Table of Contents

Goodwill and intangible assets of indefinite life - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

The amounts of estimated undiscounted cash flows are significantly sensitive to the growth rate in perpetuity applied. Likewise, the amounts of discounted estimated future cash flows are significantly sensitive to the weighted average cost of capital (discount rate) applied. The higher the growth rate in perpetuity applied, the higher the amount of undiscounted future cash flows by group of CGUs obtained. Conversely, the higher the discount rate applied, the lower the amount of discounted estimated future cash flows by group of CGUs obtained.

2L) FINANCIAL LIABILITIES, DERIVATIVE FINANCIAL INSTRUMENTS AND FAIR VALUE MEASUREMENTS (note 16)

Debt

Bank loans and notes payable are recognized at their amortized cost. Interest accrued on financial instruments is recognized in the balance sheet within Other accounts payable and accrued expenses against financial expense. During 2012 and 2011, CEMEX did not have financial liabilities voluntarily recognized at fair value or associated to fair value hedge strategies with derivative financial instruments. Direct costs incurred in debt issuances or borrowings are capitalized and amortized as interest expense as part of the effective interest rate of each transaction over its maturity. These costs include commissions and professional fees.

Capital leases

Capital leases, in which CEMEX has substantially all risks and rewards associated with the ownership of an asset, are recognized as financing liabilities against a corresponding fixed asset for the lesser of the market value of the leased asset and the net present value of future minimum payments, using the contract s implicit interest rate to the extent available, or the incremental borrowing cost. Among other elements, the main factors that determine a capital lease are: a) if ownership title of the asset is transferred to CEMEX at the expiration of the contract; b) if CEMEX has a bargain purchase option to acquire the asset at the end of the lease term; c) if the lease term covers the majority of the useful life of the asset; and/or d) if the net present value of minimum payments represents substantially all the fair value of the related asset at the beginning of the lease.

Financial instruments with components of both liability and equity

Based on IAS 32, *Financial instruments: presentation* (IAS 32) and IAS 39, when a financial instrument contains components of both liability and equity, such as a note that at maturity is convertible into a fixed number of CEMEX s shares and the currency in which the instrument is denominated is the same as the functional currency of the issuer, each component is recognized separately in the balance sheet according to the specific characteristics of each transaction. In the case of instruments mandatorily convertible into shares of the issuer, the liability component represents the net present value of interest payments on the principal amount using a market interest rate, without assuming any early conversion, and is recognized within Other financial obligations, whereas the equity component represents the difference between the principal amount and the liability component, and is recognized within Other equity reserves net of commissions. In the case of instruments that are optionally convertible into a fixed number of shares, the liability component represents the difference between the principal amount and the fair value of the conversion option premium, which reflects the equity component (note 2P). When the transaction is denominated in a currency different than the functional currency of the issuer, the conversion option is accounted for as a derivative financial instrument at fair value in the statements of operations.

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

Derivative financial instruments

In compliance with the guidelines established by its Risk Management Committee and the restrictions set forth by its debt agreements, CEMEX uses derivative financial instruments (derivative instruments) mainly in order to change the risk profile associated with changes in interest rates, the exchange rates of debt, or both; as an alternative source of financing, and as hedges of: (i) highly probable forecasted transactions; (ii) purchases of certain commodities; and (iii) CEMEX s net investments in foreign subsidiaries.

CEMEX recognizes all derivative instruments as assets or liabilities in the balance sheet at their estimated fair values, and the changes in such fair values are recognized in the statements of operations within Other financial expense, net for the period in which they occur, except for changes in fair value of derivative instruments associated with cash flow hedges, in which case, such changes in fair value are recognized in stockholders equity, and are reclassified to earnings as the interest expense of the related debt is accrued, in the case of interest rate swaps, or when the underlying products are consumed in the case of contracts on the price of raw materials and commodities. Likewise, in hedges of the net investment in foreign subsidiaries, changes in fair value are recognized in stockholders equity as part of the foreign currency translation result (note 2D), which reversal to earnings would take place upon disposal of the foreign investment. For the years ended December 31, 2012 and 2011, CEMEX has not designated any fair value hedges.

Accrued interest generated by interest rate derivative instruments, when applicable, is recognized as financial expense in the relevant period, adjusting the effective interest rate of the related debt.

CEMEX reviews its different contracts to identify the existence of embedded derivatives. Identified embedded derivatives are analyzed to determine if they need to be separated from the host contract and recognized in the balance sheet as assets or liabilities, applying the same valuation rules used for other derivative instruments.

Derivative instruments are negotiated with institutions with significant financial capacity; therefore, CEMEX believes the risk of non-performance of the obligations agreed to by such counterparties to be minimal. According to IFRS 13, the estimated fair value represents the price that would be received for the sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, considering the counterparties risk, that is, an exit price. Occasionally, there is a reference market that provides the estimated fair value; in the absence of such market, such value is determined by the net present value of projected cash flows or through mathematical valuation models.

Put options granted for the purchase of non controlling interests and associates

Represent agreements by means of which CEMEX commits to acquire, in case the counterparty exercises its right to sell at a future date at a predefined price formula, the shares of a non-controlling interest in a subsidiary of CEMEX or an associate. In respect of a put option granted for the purchase of a non-controlling interest in a CEMEX subsidiary, to the extent the put option is exercisable at the measurement date, CEMEX recognizes a liability for the net present value of the obligation as of the financial statements date against the controlling interest within stockholders equity. In respect of a put option granted for the purchase of an associate, CEMEX would recognize a liability against a loss in the statements of operations, to the extent the put option is exercisable at the measurement date, whenever the estimated purchase price exceeds the fair value of the net assets to be acquired by CEMEX, had the counterparty exercised its right to sell.

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

Fair value measurements

CEMEX applies the guidance of IFRS 13, *Fair value measurements* (IFRS 13) for its fair value measurements of financial assets and financial liabilities recognized or disclosed at fair value. IFRS 13 does not require fair value measurements in addition to those already required or permitted by other IFRSs and is not intended to establish valuation standards or affect valuation practices outside financial reporting. Under IFRS 13, fair value represents an Exit Value, which is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, considering the counterparty s credit risk in the valuation.

The concept of exit value is premised on the existence of a market and market participants for the specific asset or liability. When there is no market and/or market participants willing to make a market, IFRS 13 establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to measurements involving significant unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are as follows:

Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that CEMEX has the ability to access at the measurement date.

Level 2 inputs are inputs other than quoted prices that are observable for the asset or liability, either directly or indirectly.

Level 3 inputs are unobservable inputs for the asset or liability.

2M) PROVISIONS

CEMEX recognizes provisions when it has a legal or constructive obligation resulting from past events, whose resolution would imply cash outflows or the delivery of other resources owned by the Company.

Restructuring (note 17)

CEMEX recognizes provisions for restructuring costs only when the restructuring plans have been properly finalized and authorized by management, and have been communicated to the third parties involved and/or affected by the restructuring prior to the balance sheet date. These provisions may include costs not associated with CEMEX s ongoing activities.

Asset retirement obligations (note 17)

Unavoidable obligations, legal or constructive, to restore operating sites upon retirement of long-lived assets at the end of their useful lives are measured at the net present value of estimated future cash flows to be incurred in the restoration process, and are initially recognized against the related assets book value. The increase to the assets book value is depreciated during its remaining useful life. The increase in the liability related to the passage of time is charged to the line item of Other financial expenses, net. Adjustments to the liability for changes in estimations are recognized against fixed assets, and depreciation is modified prospectively. These obligations are related mainly to future costs of demolition, cleaning and reforestation, so that quarries, maritime terminals and other production sites are left in acceptable condition at the end of their operation.

Table of Contents

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

Costs related to remediation of the environment (notes 17 and 24)

Provisions associated with environmental damage represent the estimated future cost of remediation, which are recognized at their nominal value when the time schedule for the disbursement is not clear, or when the economic effect for the passage of time is not significant; otherwise, such provisions are recognized at their discounted values. Reimbursements from insurance companies are recognized as assets only when their recovery is practically certain. In that case, such reimbursement assets are not offset against the provision for remediation costs.

Contingencies and commitments (notes 23 and 24)

Obligations or losses related to contingencies are recognized as liabilities in the balance sheet when present obligations exist resulting from past events that are expected to result in an outflow of resources and the amount can be measured reliably. Otherwise, a qualitative disclosure is included in the notes to the financial statements. The effects of long-term commitments established with third parties, such as supply contracts with suppliers or customers, are recognized in the financial statements on an incurred or accrued basis, after taking into consideration the substance of the agreements. Relevant commitments are disclosed in the notes to the financial statements. The Company does not recognize contingent revenues, income or assets.

2N) PENSIONS AND POSTRETIREMENT EMPLOYEE BENEFITS (note 18)

Defined contribution pension plans

The costs of defined contribution pension plans are recognized in the operating results as they are incurred. Liabilities arising from such plans are settled through cash transfers to the employees retirement accounts, without generating future obligations.

Defined benefit pension plans, other postretirement benefits and termination benefits

Based on IAS 19, *Employee benefits* (IAS19), CEMEX recognizes the costs associated with employees benefits for: a) defined benefit pension plans; and b) other postretirement benefits, basically comprised of health care benefits, life insurance and seniority premiums, granted by CEMEX and/or pursuant to applicable law. These costs are recognized as services are rendered, based on actuarial estimations of the benefits present value with the advice of external actuaries. The actuarial assumptions consider the use of nominal rates. For certain pension plans, irrevocable trust funds have been created to cover future benefit payments. These assets are valued at their estimated fair value at the balance sheet date. The expected rates of return on plan assets are determined based on the market prices prevailing on that date, applicable to the period over which the obligation is to be settled. Termination benefits, not associated with a restructuring event, which mainly represent severance payments by law, are recognized in the operating results for the period in which they are incurred.

The service cost, corresponding to the increase in the obligation for additional benefits earned by employees during the period, is recognized within operating costs and expenses. The interest cost related to the increase in the liability by the passage of time, as well as the expected return on plan assets for the period, are recognized within Other financial expenses, net.

The effects from modifications to the pension plans that affect the cost of past services are recognized within operating costs and expenses during the periods in which such modifications become effective with respect to the employees, or without delay if changes are effective immediately. Likewise, the effects from curtailments and/or

Table of Contents

Defined benefit pension plans, other postretirement benefits and termination benefits - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

settlements of obligations occurring during the period, associated with events that significantly reduce the cost of future services and/or reduce significantly the population subject to pension benefits, respectively, are recognized within operating costs and expenses.

The actuarial gains and losses, related to differences between the projected and real actuarial assumptions at the end of the period, as well as the difference between the expected and real return on plan assets, are recognized in the period in which they are incurred as part of other comprehensive income or loss for the period within stockholders equity.

2O) INCOME TAXES (note 19)

Based on IAS 12, *Income taxes* (IAS 12), the effects reflected in the statements of operations for income taxes include the amounts incurred during the period and the amounts of deferred income taxes, determined according to the income tax law applicable to each subsidiary. Consolidated deferred income taxes represent the addition of the amounts determined in each subsidiary by applying the enacted statutory income tax rate to the total temporary differences resulting from comparing the book and taxable values of assets and liabilities, considering tax loss carryforwards as well as other recoverable taxes and tax credits, to the extent that it is probable that future taxable profits will be available against which they can be utilized. The measurement of deferred income taxes reflects the tax consequences that follow the manner in which CEMEX expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities. Deferred income taxes for the period represent the difference between balances of deferred income at the beginning and the end of the period. Deferred income tax assets and liabilities relating to different tax jurisdictions are not offset. According to IFRS, all items charged or credited directly in stockholders equity or as part of other comprehensive income or loss for the period are recognized net of their current and deferred income tax effects. The effect of a change in enacted statutory tax rates is recognized in the period in which the change is officially enacted.

Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is not considered probable that the related tax benefit will be realized. In conducting such assessment, CEMEX analyzes the aggregate amount of self-determined tax loss carryforwards included in its income tax returns in each country where CEMEX believes, based on available evidence, that the tax authorities would not reject such tax loss carryforwards; and the likelihood of the recoverability of such tax loss carryforwards prior to their expiration through an analysis of estimated future taxable income. If CEMEX believes that it is probable that the tax authorities would reject a self-determined deferred tax asset, it would decrease such asset. Likewise, if CEMEX believes that it would not be able to use a tax loss carryforward before its expiration or any other deferred tax asset, CEMEX would not recognize such deferred tax asset. Both situations would result in additional income tax expense for the period in which such determination is made. In order to determine whether it is probable that deferred tax assets will ultimately be realized, CEMEX takes into consideration all available positive and negative evidence, including factors such as market conditions, industry analysis, expansion plans, projected taxable income, carryforward periods, current tax structure, potential changes or adjustments in tax structure, tax planning strategies, future reversals of existing temporary differences, etc. Likewise, every reporting period, CEMEX analyzes its actual results versus the Company s estimates, and adjusts, as necessary, its tax asset valuations. If actual results vary from CEMEX s estimates, the deferred tax asset and/or valuations may be affected and necessary adjustments will be made based on relevant information. Any adjustments recorded will affect CEMEX s statements of operations in such period.

Income taxes - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

The income tax effects from an uncertain tax position are recognized when it is more-likely-than-not that the position will be sustained based on its technical merits and assuming that the tax authorities will examine each position and have full knowledge of all relevant information, and they are measured using a cumulative probability model. Each position has been considered on its own, regardless of its relation to any other broader tax settlement. The more-likely-than-not threshold represents a positive assertion by management that CEMEX is entitled to the economic benefits of a tax position. If a tax position is not considered more-likely-than-not to be sustained, no benefits of the position are recognized. CEMEX s policy is to recognize interest and penalties related to unrecognized tax benefits as part of the income tax in the consolidated statements of operations.

2P) STOCKHOLDERS EQUITY

Common stock and additional paid-in capital (note 20A)

These items represent the value of stockholders contributions, and include increases related to the recapitalization of retained earnings and the recognition of executive compensation programs in CEMEX s CPOs.

Other equity reserves (note 20B)

This caption groups the cumulative effects of items and transactions that are, temporarily or permanently, recognized directly to stockholders equity, and includes the elements presented in the statements of comprehensive income (loss). Comprehensive income (loss) for the period includes, in addition to net income (loss), certain changes in stockholders equity during a period that do not result from investments by owners and distributions to owners. The most significant items within Other equity reserves during the reported periods are as follows:

Items of Other equity reserves included within other comprehensive income (loss) for the period:

Currency translation effects from the translation of foreign subsidiaries financial statements, net of: a) exchange results from foreign currency debt directly related to the acquisition of foreign subsidiaries; and b) exchange results from foreign currency related parties balances that are of a long-term investment nature (note 2D);

The effective portion of the valuation and liquidation effects from derivative instruments under cash flow hedging relationships, which are recorded temporarily in stockholders equity (note 2L);

Changes in fair value during the tenure of available-for-sale investments until their disposal (note 2H); and

Current and deferred income taxes during the period arising from items whose effects are directly recognized in stockholders equity.

Items of Other equity reserves not included in comprehensive loss for the period:

Effects related to controlling stockholders equity for changes or transactions affecting non-controlling interest stockholders in CEMEX s consolidated subsidiaries;

Table of Contents

Other equity reserves - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

Effects attributable to controlling stockholders equity for financial instruments issued by consolidated subsidiaries that qualify for accounting purposes as equity instruments, such as the interest expense paid on perpetual debentures;

The equity component of outstanding mandatorily convertible securities, which are convertible into shares of the Parent Company (note 16B). Upon conversion, this amount will be reclassified to common stock and additional paid-in capital; and

The cancellation of the Parent Company s shares held by consolidated subsidiaries.

Retained earnings (note 20C)

Retained earnings represent the cumulative net results of prior accounting periods, net of dividends declared to stockholders, and net of any recapitalizations of retained earnings. In addition, retained earnings also include the effects generated from initial adoption of IFRS as of January 1, 2010 according to IFRS 1.

Non-controlling interest and perpetual debentures (note 20D)

This caption includes the share of non-controlling stockholders in the results and equity of consolidated subsidiaries. This caption also includes the amount as of the balance sheet date of financial instruments (perpetual notes) issued by consolidated entities that qualify as equity instruments considering that there is: a) no contractual obligation to deliver cash or another financial asset; b) no predefined maturity date; and c) a unilateral option to defer interest payments or preferred dividends for indeterminate periods.

2Q) REVENUE RECOGNITION (note 3)

CEMEX s consolidated net sales represent the value, before tax on sales, of revenues originated by products and services sold by consolidated subsidiaries as a result of their ordinary activities, after the elimination of transactions between related parties, and are quantified at the fair value of the consideration received or receivable, decreased by any trade discounts or volume rebates granted to customers.

Revenue from the sale of goods and services is recognized when goods are delivered or services are rendered to customers, there is no condition or uncertainty implying a reversal thereof, and they have assumed the risk of loss. Revenue from trading activities, in which CEMEX acquires finished goods from a third party and subsequently sells the goods to another third-party, are recognized on a gross basis, considering that CEMEX assumes the total risk on the goods purchased, not acting as agent or broker.

Revenue and costs associated with construction contracts are recognized in the period in which the work is performed by reference to the percentage or stage of completion of the contract at the end of the period, considering that the following have been defined: a) each party s enforceable rights regarding the asset to be constructed; b) the consideration to be exchanged; c) the manner and terms of settlement; d) actual costs incurred and contract costs required to complete the asset are effectively controlled; and e) it is probable that the economic benefits associated with the contract will flow to the entity.

The percentage of completion of construction contracts represents the proportion that contract costs incurred for work performed to date bear to the estimated total contract costs or the surveys of work performed or the

Table of Contents

Revenue recognition - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

physical proportion of the contract work completed, whichever better reflects the percentage of completion under the specific circumstances. Progress payments and advances received from customers do not reflect the work performed and are recognized as a short or long term advanced payments, as appropriate.

2R) COST OF SALES, ADMINISTRATIVE AND SELLING EXPENSES AND DISTRIBUTION EXPENSES

Cost of sales represents the production cost of inventories at the moment of sale. Such cost of sales includes depreciation, amortization and depletion of assets involved in production and expenses related to storage in production plants. Cost of sales excludes expenses related to personnel, equipment and services involved in sale activities and storage of product at points of sales, which are included as part of the administrative and selling expenses. Cost of sales includes freight expenses of raw material in plants and delivery expenses of CEMEX s ready-mix concrete business, but excludes freight expenses of finished products between plants and points of sale and freight expenses between points of sales and the customers facilities, which are included as part of the distribution expenses line item. For the years ended December 31, 2012, 2011 and 2010, selling expenses included as part of the selling and administrative expenses line item amounted to Ps7,946, Ps8,079 and Ps7,858, respectively.

2S) EXECUTIVE STOCK-BASED COMPENSATION (note 21)

Based on IFRS 2, *Share-based payments* (IFRS 2), stock awards based on shares of CEMEX granted to executives are defined as equity instruments when services received from employees are settled by delivering CEMEX s shares; or as liability instruments when CEMEX commits to make cash payments to the executives on the exercise date of the awards based on changes in CEMEX s own stock (intrinsic value). The cost of equity instruments represents their estimated fair value at the date of grant and is recognized in the statements of operations during the period in which the exercise rights of the employees become vested. In respect of liability instruments, these instruments are valued at their estimated fair value at each reporting date, recognizing the changes in fair value through the operating results. CEMEX determines the estimated fair value of options using the binomial financial option-pricing model.

2T) EMISSION RIGHTS

In some of the countries where CEMEX operates, such as in countries of the EU, governments have established mechanisms aimed at reducing carbon-dioxide emissions (CO2) by means of which industries releasing CO2 must submit to the environmental authorities at the end of a compliance period emission rights for a volume equivalent to the tons of CO2 released. Since the mechanism for emissions reduction in the EU has been in operation, a certain number of emission rights based on historical levels have been granted by the relevant environmental authorities to the different industries free of cost. Therefore, companies have to buy additional emission rights to meet deficits between actual CO2 emissions during the compliance period and emission rights actually held, or they can dispose of any surplus of emission rights in the market. In addition, the United Nations Framework Convention on Climate Change (UNFCCC) grants Certified Emission Reductions (CERs) to qualified CO2 emission reduction projects. CERs may be used in specified proportions to settle emission rights obligations in the EU. CEMEX actively participates in the development of projects aimed to reduce CO2 emissions. Some of these projects have been awarded with CERs.

Table of Contents

Emission rights - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

In the absence of an IFRS that defines an accounting treatment for these schemes, CEMEX accounts for the effects associated with CO2 emission reduction mechanisms as follows:

Emission rights granted by governments are not recognized in the balance sheet considering that their cost is zero.

Revenues from the sale of any surplus of emission rights are recognized by decreasing cost of sales; in the case of forward sale transactions, revenues are recognized upon physical delivery of the emission certificates.

Emission rights and/or CERs acquired to hedge current CO2 emissions are recognized as intangible assets at cost, and are further amortized to cost of sales during the compliance period. In the case of forward purchases, assets are recognized upon physical reception of the emission certificates.

CEMEX accrues a provision against cost of sales when the estimated annual emissions of CO2 are expected to exceed the number of emission rights, net of any benefit obtained through swap transactions of emission rights for CERs.

CERs received from the UNFCCC are recognized as intangible assets at their development cost, which are attributable mainly to legal expenses incurred in the process of obtaining such CERs.

CEMEX does not maintain emission rights, CERs and/or forward transactions with trading purposes.

The combined effect of the use of alternate fuels that help reduce the emission of CO2, and the downturn in produced cement volumes in the EU, generated a surplus of emission rights held over the estimated CO2 emissions. From the consolidated surplus of emission rights, during 2011 and 2010, CEMEX sold an aggregate amount of approximately 13.4 million certificates, receiving revenues of approximately Ps1,518 and Ps1,417, respectively. During 2012, there were no sales of emission rights.

2U) CONCENTRATION OF CREDIT

CEMEX sells its products primarily to distributors in the construction industry, with no specific geographic concentration within the countries in which CEMEX operates. As of and for the years ended December 31, 2012, 2011 and 2010, no single customer individually accounted for a significant amount of the reported amounts of sales or in the balances of trade receivables. In addition, there is no significant concentration of a specific supplier relating to the purchase of raw materials.

2V) NEWLY ISSUED IFRS NOT YET ADOPTED

There are a number of IFRS issued as of the date of issuance of these financial statements but which have not yet been adopted, which are listed below. Except as otherwise indicated, CEMEX expects to adopt these IFRS when they become effective.

During 2011 and 2012, the IASB issued IFRS 9, *Financial instruments: classification and measurement* (IFRS 9), which as issued, reflects the first part of Phase 1 of the IASB s project to replace IAS 39. In subsequent phases, the IASB will address impairment methodology, derecognition and hedge accounting. IFRS 9 requires an entity to recognize a financial asset or a financial liability in its statement of financial position when, and only when, the entity becomes party to the contractual provisions of the instrument. At

Newly issued IFRS not yet adopted - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

initial recognition, an entity shall measure a financial asset or financial liability at its fair value plus or minus, in the case of a financial asset or financial liability not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition or issue of the financial asset or financial liability. IFRS 9 is effective for annual periods beginning on or after January 1, 2015, with early adoption permitted. CEMEX does not consider that current IFRS 9 will have a significant effect on the classification and measurement of CEMEX s financial assets and financial liabilities. Nonetheless, CEMEX will evaluate the impact and will quantify the effect together with the other phases, when issued, to make a comprehensive analysis.

In May 2011, the IASB issued IFRS 10, *Consolidated financial statements* (IFRS 10), effective beginning January 1, 2013. IFRS 10 establishes principles for the presentation and preparation of consolidated financial statements when an entity controls one or more other entities and replaces the consolidation requirements in SIC 12, *Consolidation Special Purpose Entities* and IAS 27. IFRS 10 builds on existing principles by identifying the concept of control as the determining factor in whether an entity should be included within the consolidated financial statements of the parent company. An investor controls an investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. This standard also provides additional guidance to assist in the determination of control where this is difficult to assess. CEMEX does not expect the application of IFRS 10 to have a significant impact on its consolidated financial statements.

In May 2011, the IASB issued IFRS 11, *Joint arrangements* (IFRS 11), effective beginning January 1, 2013. IFRS 11 addresses inconsistencies in the reporting of joint arrangements by requiring an entity to classify the type of joint arrangement in which it is involved by assessing its rights and obligations arising from the arrangement, as: a) joint operations, in which the parties that have joint control of the arrangement have rights to the assets and obligations for the liabilities relating to the arrangement; or b) joint ventures, in which the parties that have joint control of the arrangement have rights to the net assets of the arrangement. The equity method should be applied as the single method to account for interests in joint ventures. Meanwhile, joint operators should account for their interests in joint operations line-by-line considering their share in the assets, liabilities, revenues and expenses of the arrangement. In conjunction with the issuance of IFRS 11, IAS 28 was amended. CEMEX does not expect the application of IFRS 11 to have a significant impact on its consolidated financial statements.

In May 2011, the IASB issued IFRS 12, *Disclosure of interests in other entities* (IFRS 12), effective beginning January 1, 2013, which is a new and comprehensive standard on disclosure requirements for all forms of interests in other entities, including subsidiaries, joint arrangements, associates and unconsolidated structured entities. IFRS 12 will require an entity to disclose information that enables users of financial statements to evaluate: a) the nature of, and risks associated with, its interests in other entities; and b) the effects of those interests on its financial position, financial performance and cash flows. CEMEX would modify its current disclosures regarding interest in other entities as required by IFRS 12, if applicable. Nonetheless, CEMEX does not expect the application of IFRS 12 to have a significant impact on its consolidated financial statements.

In June 2011, the IASB amended IAS 19, which provides the accounting and disclosure requirements by employers for employee benefits. The amendments to IAS 19 intend to provide investors and other users of financial statements with a better understanding of an entity s obligations resulting from the provision of defined benefit plans and how those obligations will affect its financial position, financial performance and cash flows. Among other things, the amendments require: a) the use of a single rate for the determination of

Table of Contents

Newly issued IFRS not yet adopted - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

the expected return on plan assets and the discount of the benefits obligation to present value (together the net interest expense); b) the recognition of the net interest on the net defined benefit liability (liability minus plan assets), instead of an interest cost on the liability and a separate return on plan assets; and c) the recognition of all actuarial gains and losses for the period as part of other comprehensive income or loss, thereby, eliminating the option to defer the recognition of gains and losses, known as the corridor method . The amendments to IAS 19 are effective for CEMEX beginning January 1, 2013, with earlier application permitted. The use of the single rate will generally increase the net interest expense for future periods. For the years ended December 31, 2012 and 2011, had CEMEX used a single rate to determine the net interest expense on its net defined pension liability, the effect would have increased the net interest expense on net defined pension liability of approximately Ps173 and Ps246, respectively (note 18).

In October 2011, the IASB issued International Financial Reporting Interpretations Committee 20, *Stripping costs in the production phase of a surface mine* (IFRIC 20), which is effective beginning January 1, 2013, with early adoption permitted. IFRIC 20 addresses inconsistencies in the reporting of waste removal costs that are incurred in surface mining activity during the production phase of the mine (production stripping costs). To the extent that the benefit from the stripping activity is realized in the form of inventory produced, the entity shall account for the costs of that stripping activity in accordance with the principles of IAS 2, *Inventories*. To the extent the benefit is improved access to ore, the entity shall recognize these costs as an addition to, or as an enhancement of, the existing non-current asset. The capitalized amounts should be further amortized over the expected useful life of exposed ore body based on the units of production method. As mentioned in CEMEX s accounting policy in note 2I, as of December 31, 2012, ongoing stripping costs in the same quarry are expensed as incurred. Therefore, pursuant to IFRIC 20, beginning January 1, 2013, all stripping costs that result in improved access to quarry reserves will be recognized as capital expenditures, as part of the carrying amount of the related quarries, reducing cash production costs and increasing depletion expense. CEMEX estimates that the adoption of IFRIC 20 beginning in January 1, 2013 would increase its annual capital expenditures and quarry depletion expense by approximately US$25 (Ps321).

In December 2011, the IASB amended IAS 32 for disclosure requirements for the offsetting of assets and liabilities on the statement of financial position. The amended standard requires entities to disclose both gross information and net information about both instruments and transactions eligible for offset in the statement of financial position and instruments and transactions subject to an agreement similar to a master netting arrangement. The scope includes derivatives, sale and repurchase agreements and reverse sale and repurchase agreements and securities borrowing and securities lending agreements. The amendments to IAS 32 are effective beginning January 1, 2014 and require retrospective application. CEMEX is currently evaluating the impact of adopting this amended standard; nonetheless, CEMEX does not expect that the adoption of this amended standard will have a significant impact on its consolidated financial statements.

Table of Contents

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

3) REVENUES AND CONSTRUCTION CONTRACTS

For the years ended December 31, 2012, 2011 and 2010, net sales, after sales and eliminations between related parties resulting from consolidation, were as follows:

(Millions of Mexican pesos)		2012	2011	2010
From the sale of goods associated to CEMEX s main activities **1**	Ps	189,219	182,835	171,116
From the sale of services **2**		2,574	2,531	2,182
From the sale of other goods and services **3**		5,243	4,521	4,343
	Ps	197,036	189,887	177,641

1 Includes revenues generated under construction contracts as presented in the table below.
2 Refers mainly to revenues generated by Neoris N.V., a subsidiary involved in the sale of information technology solutions.
3 Refers mainly to revenues generated by minor subsidiaries operating in different lines of business.

For the years ended December 31, 2012, 2011 and 2010, revenues and costs related to construction contracts in progress were as follows:

(Millions of Mexican pesos)		Recognized to date 1	2012	2011	2010
Revenue from construction contracts included in consolidated net sales **2**	Ps	7,270	180	1,027	2,548
Costs incurred in construction contracts included in consolidated cost of sales **3**		(5,727)	(80)	(895)	(1,976)
Construction contracts operating profit	Ps	1,543	100	132	572

1 Revenues and costs recognized from inception of the contracts until December 31, 2012 in connection with those projects still in progress.
2 Revenues from construction contracts during 2012, 2011 and 2010, determined under the percentage of completion method, were mainly obtained in Mexico.
3 Refers to actual costs incurred during the periods. The oldest contract in progress as of December 31, 2012 started in 2008.

As of December 31, 2012 and 2011, amounts receivable for progress billings to customers of construction contracts and/or advances received by CEMEX from these customers were not significant.

4) SELECTED FINANCIAL INFORMATION BY GEOGRAPHIC OPERATING SEGMENT

CEMEX applies IFRS 8, *Operating Segments* (IFRS 8), for the disclosure of its operating segments, which are defined as the components of an entity that engage in business activities from which they may earn revenues and incur expenses, whose operating results are regularly reviewed by the entity s top management to make decisions about resources to be allocated to the segments and assess their performance, and for which discrete financial information is available.

Selected Financial Information by Geographic Operating Segment - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

CEMEX s main activities are oriented to the construction industry segment through the production, distribution, marketing and sale of cement, ready-mix concrete, aggregates and other construction materials. CEMEX operates geographically on a regional basis. Beginning in April 2011, CEMEX s operations were reorganized into six geographical regions, each under the supervision of a regional president: 1) Mexico, 2) United States, 3) Northern Europe, 4) Mediterranean (MED), 5) South America and the Caribbean (SAC), and 6) Asia. Each regional president supervises and is responsible for all the business activities in the countries comprising the region. These activities refer to the production, distribution, marketing and sale of cement, ready-mix concrete, aggregates and other construction materials, the allocation of resources and the review of their performance and operating results. All regional presidents report directly to CEMEX s Chief Executive Officer. The country manager, who is one level below the regional president in the organizational structure, reports the performance and operating results of its country to the regional president, including all the operating sectors. CEMEX s top management internally evaluates the results and performance of each country and region for decision-making purposes and allocation of resources, following a vertical integration approach considering: a) that the operating components that comprise the reported segment have similar economic characteristics; b) that the reported segments are used by CEMEX to organize and evaluate its activities in its internal information system; c) the homogeneous nature of the items produced and traded in each operative component, which are all used by the construction industry; d) the vertical integration in the value chain of the products comprising each component; e) the type of clients, which are substantially similar in all components; f) the operative integration among components; and g) that the compensation system of a specific country is based on the consolidated results of the geographic segment and not on the particular results of the components. In accordance with this approach, in CEMEX s daily operations, management allocates economic resources and evaluates operating results on a country basis rather than on an operating component basis.

Based on IFRS 8 and considering the financial information that is regularly reviewed by CEMEX s top management, each of the six geographic regions in which CEMEX operates and the countries that comprise such regions represent reportable operating segments. However, for disclosure purposes in the notes to the financial statements, considering similar regional and economic characteristics and/or the fact that certain countries do not exceed the materiality thresholds included in IFRS 8 to be reported separately, such countries have been aggregated and presented as single line items as follows: a) Rest of Northern Europe is mainly comprised of CEMEX s operations in Ireland, the Czech Republic, Austria, Poland, Hungary and Latvia, as well as trading activities in Scandinavia and Finland; b) Rest of Mediterranean is mainly comprised of CEMEX s operations in Croatia, the United Arab Emirates and Israel; c) Rest of South America and the Caribbean is mainly comprised of CEMEX s operations in Costa Rica, Panama, Puerto Rico, the Dominican Republic, Nicaragua, Jamaica and other countries in the Caribbean, Guatemala, and small ready-mix concrete operations in Argentina; and d) Rest of Asia is mainly comprised of CEMEX s operations in Thailand, Bangladesh, China and Malaysia. The segment Others refers to: 1) cement trade maritime operations, 2) Neoris, N.V., CEMEX s subsidiary involved in the development of information technology solutions, 3) the Parent Company and other corporate entities, and 4) other minor subsidiaries with different lines of business.

Selected financial information by geographic operating segment for 2010 has been reclassified as applicable in order to be comparable to the new geographic organization implemented beginning in 2011. The major changes as compared to the previous geographic organization are the creation of the Mediterranean region with Spain and Croatia, formerly part of the previously titled Europe region, and Egypt and Israel, formerly part of the previously titled Africa and Middle East region, among others.

Table of Contents

Selected Financial Information by Geographic Operating Segment - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

The main indicator used by CEMEX s management to evaluate the performance of each country is Operating EBITDA , representing operating earnings before other expenses, net, plus depreciation and amortization, considering that such amount represents a relevant measure for CEMEX s management as an indicator of the ability to internally fund capital expenditures, as well as a widely accepted financial indicator to measure CEMEX s ability to service or incur debt (note 16). Operating EBITDA should not be considered as an indicator of CEMEX s financial performance, as an alternative to cash flow, as a measure of liquidity, or as being comparable to other similarly titled measures of other companies. This indicator, which is presented in the selected financial information by geographic operating segment, is consistent with the information used by CEMEX s management for decision-making purposes. The accounting policies applied to determine the financial information by geographic operating segment are consistent with those described in note 2. CEMEX recognizes sales and other transactions between related parties based on market values.

Selected consolidated statements of operations information by geographic operating segment for the years ended December 31, 2012, 2011 and 2010 was as follows:

2012		Net sales (including related parties)	Less: Related parties	**Net sales**	**Operating EBITDA**	Less: depreciation and amortization	**Operating earnings before other expenses, net**	Other expenses, net	Financial expense	Other financing items, net
Mexico	Ps	44,412	(1,425)	42,987	16,238	2,640	13,598	(291)	(432)	(84)
United States		40,319	(122)	40,197	323	6,379	(6,056)	(967)	(546)	(159)
Northern Europe										
United Kingdom		14,620		14,620	1,870	956	914	(297)	(151)	(701)
Germany		14,406	(953)	13,453	680	1,004	(324)	(258)	(19)	(170)
France		13,324		13,324	1,251	493	758	(156)	(69)	13
Rest of Northern Europe		12,778	(806)	11,972	1,739	858	881	440	(118)	56
Mediterranean										
Spain		4,841	(155)	4,686	1,355	684	671	(1,443)	(111)	944
Egypt		6,382	(190)	6,192	2,470	553	1,917	(203)	(9)	82
Rest of Mediterranean		8,160	(37)	8,123	1,063	302	761	(112)	(47)	(91)
South America and the Caribbean										
Colombia		11,932		11,932	4,905	396	4,509	31	(139)	348
Rest of South America and the Caribbean		16,450	(1,851)	14,599	4,402	746	3,656	(70)	(53)	5
Asia										
Philippines		4,704		4,704	900	305	595	27	(3)	(11)
Rest of Asia		2,430		2,430	110	75	35	13	(13)	
Others		15,153	(7,336)	7,817	(2,922)	1,793	(4,715)	(2,406)	(16,625)	745
Total	Ps	209,911	(12,875)	197,036	34,384	17,184	17,200	(5,692)	(18,335)	977

Table of Contents

Selected consolidated statements of operations information by geographic operating segment - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

2011		Net sales (including related parties)	Less: Related parties	**Net sales**	**Operating EBITDA**	Less: depreciation and amortization	**Operating earnings before other expenses, net**	Other expenses, net	Financial expense	Other financing items, net
Mexico	Ps	43,361	(924)	42,437	15,536	2,391	13,145	(963)	(528)	590
United States		32,759	(86)	32,673	(1,106)	6,801	(7,907)	(322)	(373)	(132)
Northern Europe										
United Kingdom		15,757		15,757	1,034	1,181	(147)	(257)	(160)	(99)
Germany		15,975	(1,015)	14,960	1,215	1,041	174	(236)	(55)	(130)
France		14,170		14,170	1,580	524	1,056	(171)	(79)	7
Rest of Northern Europe		14,278	(650)	13,628	1,658	1,010	648	(1,127)	(66)	(227)
Mediterranean										
Spain		7,142	(108)	7,034	1,575	681	894	(498)	(679)	301
Egypt		6,516	(13)	6,503	2,891	469	2,422	(71)	(5)	
Rest of Mediterranean		7,762	(39)	7,723	962	280	682	(121)	(32)	(35)
South America and the Caribbean										
Colombia		8,533		8,533	3,020	452	2,568	(302)	(135)	(168)
Rest of South America and the Caribbean		14,852	(1,689)	13,163	3,868	912	2,956	(240)	(35)	9
Asia										
Philippines		3,701	(44)	3,657	617	259	358	(53)	(5)	7
Rest of Asia		2,597		2,597	155	104	51	(34)	(2)	(11)
Others		14,857	(7,805)	7,052	(3,405)	1,431	(4,836)	(1,054)	(14,473)	(2,326)
Total	Ps	202,260	(12,373)	189,887	29,600	17,536	12,064	(5,449)	(16,627)	(2,214)

Table of Contents

Selected consolidated statements of operations information by geographic operating segment - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

2010		Net sales (including related parties)	Less: Related parties	**Net sales**	**Operating EBITDA**	Less: depreciation and amortization	**Operating earnings before other expenses, net**	Other expenses, net	Financial expense	Other financing items, net
Mexico	Ps	42,907	(744)	42,163	14,495	2,561	11,934	(854)	(447)	(219)
United States		31,575	(70)	31,505	(903)	7,467	(8,370)	(2,413)	(460)	(137)
Northern Europe										
United Kingdom		14,320		14,320	508	1,231	(723)	164	(139)	(256)
Germany		13,524	(864)	12,660	753	1,023	(270)	(112)	(50)	(128)
France		12,179		12,179	1,172	656	516	(98)	(72)	(10)
Rest of Northern Europe		11,677	(454)	11,223	903	1,015	(112)	(50)	(66)	201
Mediterranean										
Spain		8,013	(110)	7,903	1,768	721	1,047	(693)	(732)	(24)
Egypt		8,053	(174)	7,879	4,175	476	3,699	(141)	(8)	15
Rest of Mediterranean		7,253	(178)	7,075	770	299	471	(30)	(28)	(87)
South America and the Caribbean										
Colombia		6,964	(8)	6,956	2,556	377	2,179	(161)	(57)	(264)
Rest of South America and the Caribbean		12,315	(1,588)	10,727	3,299	837	2,462	(279)	(68)	63
Asia										
Philippines		4,014		4,014	1,242	246	996	(7)	(4)	(88)
Rest of Asia		2,512		2,512	197	101	96	(69)	(2)	16
Others		8,216	(1,691)	6,525	(1,091)	2,098	(3,189)	(1,592)	(12,620)	395
Total	Ps	183,522	(5,881)	177,641	29,844	19,108	10,736	(6,335)	(14,753)	(523)

The information of equity in income of associates by geographic operating segment for the years ended December 31, 2012, 2011 and 2010 is included in note 13A.

Table of Contents

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

As of December 31, 2012 and 2011, selected balance sheet information by geographic segment was as follows:

2012		Investments in associates	Other segment assets	Total assets	Total liabilities	Net assets by segment	Additions to fixed assets 1
Mexico	Ps	834	78,232	79,066	18,483	60,583	2,154
United States		187	207,559	207,746	10,105	197,641	2,609
Northern Europe							
United Kingdom		496	28,408	28,904	11,594	17,310	558
Germany		86	12,534	12,620	6,727	5,893	459
France		526	13,427	13,953	4,986	8,967	268
Rest of Northern Europe		78	17,546	17,624	4,107	13,517	657
Mediterranean							
Spain		56	22,366	22,422	2,856	19,566	347
Egypt			7,208	7,208	3,548	3,660	277
Rest of Mediterranean		7	10,074	10,081	3,275	6,806	315
South America and the Caribbean							
Colombia			16,160	16,160	9,252	6,908	1,456
Rest of South America and the Caribbean		23	16,764	16,787	3,856	12,931	500
Asia							
Philippines		3	7,758	7,761	1,382	6,379	246
Rest of Asia			2,801	2,801	865	1,936	77
Others		5,683	29,954	35,637	242,134	(206,497)	103
Total	Ps	7,979	470,791	478,770	323,170	155,600	10,026

2011		Investments in associates	Other segment assets	Total assets	Total liabilities	Net assets by segment	Additions to fixed assets 1
Mexico	Ps	841	77,031	77,872	21,858	56,014	2,612
United States		44	235,976	236,020	10,487	225,533	875
Northern Europe							
United Kingdom		201	31,765	31,966	18,797	13,169	607
Germany		96	13,877	13,973	7,576	6,397	340
France		622	15,311	15,933	5,861	10,072	289
Rest of Northern Europe		108	18,317	18,425	6,030	12,395	501
Mediterranean							
Spain		161	47,160	47,321	14,989	32,332	501
Egypt			7,819	7,819	4,052	3,767	175
Rest of Mediterranean		7	9,916	9,923	3,438	6,485	273
South America and the Caribbean							
Colombia			15,318	15,318	5,161	10,157	179
Rest of South America and the Caribbean		25	19,980	20,005	4,656	15,349	484
Asia							

Philippines			8,786	8,786	2,716	6,070	494
Rest of Asia			2,432	2,432	853	1,579	69
Others		6,428	29,431	35,859	263,475	(227,616)	178
Total	Ps	8,533	533,119	541,652	369,949	171,703	7,577

1 In 2012 and 2011, the total Additions to fixed assets includes capital expenditures of approximately Ps7,899 and Ps5,943, respectively (note 14).

Total consolidated liabilities as of December 31, 2012 and 2011, included debt of Ps178,135 and Ps208,471, respectively. Of such balances, as of December 31, 2012 and 2011, 29% and 31% was in the Parent Company, 18% and 28% was in Spain, 51% and 39% was in finance subsidiaries in Holland, Luxembourg and the United States, and 2% and 2% was in other countries, respectively. As mentioned above, the Parent Company and the finance subsidiaries mentioned above are included within the segment Others.

Table of Contents

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

Net sales by product and geographic segment for the years ended December 31, 2012, 2011 and 2010 were as follows:

2012		Cement	Concrete	Aggregates	Others	Eliminations	Net sales
Mexico	Ps	29,229	12,927	2,478	10,090	(11,737)	42,987
United States		14,372	16,653	8,215	11,204	(10,247)	40,197
Northern Europe							
United Kingdom		3,404	5,628	5,064	7,345	(6,821)	14,620
Germany		4,546	6,264	3,882	3,283	(4,522)	13,453
France			11,181	4,112	312	(2,281)	13,324
Rest of Northern Europe		5,103	6,066	2,155	892	(2,244)	11,972
Mediterranean							
Spain		3,829	965	316	397	(821)	4,686
Egypt		5,461	463	24	525	(281)	6,192
Rest of Mediterranean		1,910	5,130	1,187	1,018	(1,122)	8,123
South America and the Caribbean							
Colombia		8,911	4,102	1,351	897	(3,329)	11,932
Rest of South America and the Caribbean		12,832	3,337	619	703	(2,892)	14,599
Asia							
Philippines		4,702		1	2	(1)	4,704
Rest of Asia		954	1,320	102	92	(38)	2,430
Others					15,153	(7,336)	7,817
Total	Ps	95,253	74,036	29,506	51,913	(53,672)	197,036

2011		Cement	Concrete	Aggregates	Others	Eliminations	Net sales
Mexico	Ps	28,215	12,618	2,387	10,477	(11,260)	42,437
United States		11,772	11,811	6,868	10,213	(7,991)	32,673
Northern Europe							
United Kingdom		3,377	5,942	5,315	8,714	(7,591)	15,757
Germany		5,156	6,797	4,143	3,609	(4,745)	14,960
France			11,853	4,092	362	(2,137)	14,170
Rest of Northern Europe		6,155	6,917	2,184	1,207	(2,835)	13,628
Mediterranean							
Spain		5,567	1,676	647	441	(1,297)	7,034
Egypt		5,917	490	26	197	(127)	6,503
Rest of Mediterranean		2,015	4,801	1,092	304	(489)	7,723
South America and the Caribbean							
Colombia		6,600	2,779	486	774	(2,106)	8,533
Rest of South America and the Caribbean		11,164	3,037	449	813	(2,300)	13,163
Asia							
Philippines		3,699			3	(45)	3,657
Rest of Asia		843	1,524	200	122	(92)	2,597

Others					14,689	(7,637)	7,052
Total	Ps	90,480	70,245	27,889	51,925	(50,652)	189,887

F-35

Table of Contents

Net sales by product and geographic segment - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

2010		Cement	Concrete	Aggregates	Others	Eliminations	Net sales
Mexico	Ps	27,911	11,233	1,622	10,723	(9,326)	42,163
United States		12,232	10,708	7,091	9,274	(7,800)	31,505
Northern Europe							
United Kingdom		3,055	5,107	4,870	6,092	(4,804)	14,320
Germany		4,313	5,770	3,494	3,126	(4,043)	12,660
France			10,051	3,371	368	(1,611)	12,179
Rest of Northern Europe		4,874	5,459	1,924	1,088	(2,122)	11,223
Mediterranean							
Spain		6,107	2,057	757	1,089	(2,107)	7,903
Egypt		7,050	702	41	413	(327)	7,879
Rest of Mediterranean		2,312	4,125	1,020	687	(1,069)	7,075
South America and the Caribbean							
Colombia		5,612	2,021	283	626	(1,586)	6,956
Rest of South America and the Caribbean		10,139	2,732	337	404	(2,885)	10,727
Asia							
Philippines		3,976			38		4,014
Rest of Asia		779	1,497	190	146	(100)	2,512
Others					7,661	(1,136)	6,525
Total	Ps	88,360	61,462	25,000	41,735	(38,916)	177,641

5) DEPRECIATION AND AMORTIZATION

Depreciation and amortization recognized during 2012, 2011 and 2010 is detailed as follows:

		2012	2011	2010
Depreciation and amortization expense related to assets used in the production process	Ps	13,852	13,918	14,574
Depreciation and amortization expense related to assets used in administrative and selling activities		3,332	3,618	4,534
	Ps	17,184	17,536	19,108

6) OTHER EXPENSES, NET

Other expenses, net in 2012, 2011 and 2010, consisted of the following:

		2012	2011	2010
Restructuring costs	Ps	(3,079)	(1,959)	(897)
Impairment losses (notes 12, 13B, 14 and 15)		(1,661)	(1,751)	(1,904)
Charitable contributions		(100)	(140)	(385)
Results from the sale of assets and others, net		(852)	(1,599)	(3,149)
	Ps	(5,692)	(5,449)	(6,335)

During 2012, in connection with the 10-year services agreement with IBM (note 23C), CEMEX recognized one-time restructuring costs of approximately US$138 (Ps1,818), of which, approximately US$54 (Ps710) are related to severance payments for termination of employees employment. In 2011 and 2010, restructuring costs mainly refer to severance payments.

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

7) OTHER FINANCIAL (EXPENSES) INCOME, NET

Other financial (expenses) income, net in 2012, 2011 and 2010, is detailed as follows:

		2012	2011	2010
Financial income	Ps	620	489	483
Results from financial instruments, net (notes 13B and 16D)		178	(76)	(1,103)
Foreign exchange results		1,142	(1,919)	895
Effects of net present value on assets and liabilities and others, net		(963)	(708)	(798)
	Ps	977	(2,214)	(523)

8) CASH AND CASH EQUIVALENTS

As of December 31, 2012 and 2011, consolidated cash and cash equivalents consisted of:

		2012	2011
Cash and bank accounts	Ps	7,581	6,123
Fixed-income securities and other cash equivalents **1**		4,897	10,005
	Ps	12,478	16,128

1 As of December 31, 2011, this caption included approximately Ps4,103 relating to the reserve for the Mexican promissory notes (*Certificados Bursátiles* or CBs) (note 16A). As of December 31, 2012 and 2011, this caption included restricted deposits related to insurance contracts of approximately Ps239 and Ps425, respectively.

Based on net settlement agreements, the balance of cash and cash equivalents excludes deposits in margin accounts that guarantee several obligations of CEMEX of approximately Ps1,782 in 2012 and Ps4,010 in 2011, which were offset against the corresponding obligations of CEMEX with the counterparties, considering CEMEX s right, ability and intention to settle the amounts on a net basis.

9) TRADE ACCOUNTS RECEIVABLE

As of December 31, 2012 and 2011, consolidated trade accounts receivable consisted of:

		2012	2011
Trade accounts receivable	Ps	25,464	28,376

Allowances for doubtful accounts		(1,766)	(2,171)
	Ps	23,698	26,205

As of December 31, 2012 and 2011, trade accounts receivable include receivables of Ps10,792 (US$840) and Ps12,733 (US$912), respectively, that were sold under outstanding securitization programs for the sale of trade accounts receivable and/or factoring programs with recourse in Mexico, the United States, France and the United Kingdom. In October 2012, CEMEX terminated its program in Spain. Under the securitization programs, CEMEX

Table of Contents

Trade accounts receivable - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

effectively surrenders control associated with the trade accounts receivable sold and there is no guarantee or obligation to reacquire the assets. However, CEMEX retains certain residual interest in the programs and/or maintains continuing involvement with the accounts receivable; therefore, the amounts received are recognized within Other financial obligations. Trade accounts receivable qualifying for sale exclude amounts over certain days past due or concentrations over certain limits to any one customer, according to the terms of the programs. The portion of the accounts receivable sold maintained as reserves amounted to Ps2,280 in 2012 and Ps3,181 in 2011. Therefore, the funded amount to CEMEX was Ps8,512 (US$662) in 2012 and Ps9,552 (US$684) in 2011. The discount granted to the acquirers of the trade accounts receivable is recorded as financial expense and amounted to approximately Ps368 (US$28) in 2012, Ps390 (US$31) in 2011 and Ps368 (US$29) in 2010. CEMEX s securitization programs are negotiated for specific periods and may be renewed at their maturity. The securitization programs outstanding as of December 31, 2012 in Mexico, the United States, France and the United Kingdom, were initiated or renewed during 2011 and mature in October 2015, May 2013, March 2013 and March 2013, respectively.

Allowances for doubtful accounts are established according to the credit history and risk profile of each customer. Changes in the valuation of allowance for doubtful accounts in 2012, 2011 and 2010, were as follows:

		2012	2011	2010
Allowances for doubtful accounts at beginning of period	Ps	2,171	2,246	2,571
Charged to selling expenses		372	338	353
Deductions		(595)	(695)	(609)
Business combinations			82	2
Foreign currency translation effects		(182)	200	(71)
Allowances for doubtful accounts at end of period	Ps	1,766	2,171	2,246

10) OTHER ACCOUNTS RECEIVABLE

As of December 31, 2012 and 2011, consolidated other accounts receivable consisted of:

		2012	2011
Non-trade accounts receivable **1**	Ps	2,321	1,964
Interest and notes receivable **2**		2,721	2,284
Loans to employees and others		171	191
Refundable taxes		1,026	819
	Ps	6,239	5,258

1 Non-trade accounts receivable are mainly attributable to the sale of assets.

2 Includes Ps171 in 2012 and Ps185 in 2011, representing the short-term portion of the investment arising from the settlement of derivative instruments related to perpetual debentures issued by CEMEX (notes 16C and 20D)

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

11) INVENTORIES

As of December 31, 2012 and 2011, consolidated balances of inventories are summarized as follows:

		2012	2011
Finished goods	Ps	5,934	6,437
Work-in-process		2,819	2,597
Raw materials		2,980	3,219
Materials and spare parts		4,523	5,328
Inventory in transit		820	517
Allowance for obsolescence		(591)	(444)
	Ps	16,485	17,654

For the years ended December 31, 2012, 2011 and 2010, CEMEX recognized in the statements of operations, inventory impairment losses of approximately Ps44, Ps19 and Ps17, respectively.

12) OTHER CURRENT ASSETS

As of December 31, 2012 and 2011, consolidated other current assets consisted of:

		2012	2011
Advance payments	Ps	2,228	1,946
Assets held for sale		2,193	2,007
	Ps	4,421	3,953

As of December 31, 2012 and 2011, advance payments include Ps18 and Ps549, respectively, associated with advances to suppliers of inventory (note 2G). Assets held for sale are stated at their estimated realizable value and include real estate properties received in payment of trade receivables as well as other assets held for sale.

During 2012, 2011 and 2010, CEMEX recognized within Other expenses, net impairment losses in connection with assets held for sale of approximately Ps595, Ps190 and Ps420, respectively. Of such 2012 impairment losses, approximately Ps123 (US$9) related to the amount of goodwill that was written-off due to the decision to classify these assets as held for sale (note 15A).

Table of Contents

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

13) INVESTMENTS IN ASSOCIATES, OTHER INVESTMENTS AND NON-CURRENT ACCOUNTS RECEIVABLE

13A) INVESTMENTS IN ASSOCIATES

As of December 31, 2012 and 2011, the main investments in shares of associates were as follows:

	Activity	Country	%		2012	2011
Control Administrativo Mexicano, S.A. de C.V.	Cement	Mexico	49.0	Ps	4,471	4,566
Camcem, S.A. de C.V.	Cement	Mexico	10.3		476	486
AB Akmenés cementas	Cement	Lithuania	33.9		399	391
ABC Capital, S.A. Institución de Banca Múltiple **1**	Financing	Mexico	49.0		369	371
Trinidad Cement Ltd	Cement	Trinidad	20.0		252	548
Société Méridionale de Carrières	Aggregates	France	33.3		213	253
Société d Exploitation de Carrières	Aggregates	France	50.0		172	202
Lehigh White Cement Company	Cement	United States	24.5		162	160
Industrias Básicas, S.A	Cement	Panama	25.0		121	129
Société des Ciments Antillais	Cement	French Antilles	26.0		70	136
Other companies					1,274	1,291
				Ps	7,979	8,533
Out of which:						
Book value at acquisition date				Ps	2,420	2,627
Changes in stockholders equity				Ps	5,559	5,906

1 Formerly ABC Capital, S.A. de C.V.S.O.F.O.M. until October 2, 2011.

As of December 31, 2012 and 2011, there were no put options outstanding for the purchase of non-controlling interests and/or investments in associates.

In April 2010, CEMEX announced its plans to contribute up to US$100 million for a non-controlling interest in a vehicle originally named Blue Rock Cement Holdings S.A. which is now named TRG Blue Rock HBM Holdings S.à.r.l. (Blue Rock -TRG) that would invest in the cement and related industries. Blue Rock-TRG is managed by The Rohatyn Group and BK Cement Ltd. Depending on funds raised from third-party investors and the availability of financing, Blue Rock - TRG may decide to invest in different assets in the cement industry and/or related industries and/or enter into operating contracts providing for CEMEX s assistance in the development, building and operation of the invested assets, if any. As of December 31, 2012, different projects were being considered but CEMEX did not have any investment in Blue Rock - TRG.

Equity in net income (loss) of associates by geographic operating segment in 2012, 2011 and 2010 is detailed as follows:

		2012	2011	2010
Mexico	Ps	92	(53)	32
United States		343	(204)	(648)
Northern Europe		157	146	78
Mediterranean		(90)	(8)	(3)
Corporate and Others		226	(215)	54
	Ps	728	(334)	(487)

Table of Contents

Investments in associates - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

Combined condensed balance sheet information of CEMEX s associates as of December 31, 2012 and 2011 is set forth below:

		2012	2011
Current assets	Ps	14,302	15,728
Non-current assets		38,533	42,196
Total assets		52,835	57,924
Current liabilities		7,546	7,912
Non-current liabilities		17,420	21,190
Total liabilities		24,966	29,102
Total net assets	Ps	27,869	28,822

Combined selected information of the statements of operations of CEMEX s associates in 2012, 2011 and 2010 is set forth below:

		2012	2011	2010
Sales	Ps	11,693	15,736	18,798
Operating earnings		1,160	1,118	1,233
Income (loss) before income tax		531	(846)	608
Net income (loss)		517	(402)	444

13B) OTHER INVESTMENTS AND NON-CURRENT ACCOUNTS RECEIVABLE

As of December 31, 2012 and 2011, consolidated other investments and non-current accounts receivable were summarized as follows:

		2012	2011
Non-current portion of valuation of derivative financial instruments	Ps	4,279	1,787
Non-current accounts receivable and other investments **1**		3,744	5,926
Investments available-for-sale **2**		211	2,572
Investments held for trading **3**		366	310
	Ps	8,600	10,595

1 Includes, among other items: a) advances to suppliers of fixed assets of approximately Ps86 in 2012 and Ps216 in 2011; and b) a restricted investment used to pay coupons under the perpetual debentures (note 20D), of approximately Ps490 in 2012 and Ps632 in 2011. CEMEX recognized impairment losses of non-current accounts receivable in the United States of approximately Ps90 in 2012, in the Caribbean and in the United States of approximately Ps167 in 2011 and in the United States of approximately Ps129 in 2010 (note 6).

2 This line item includes: a) an investment in CPOs of Axtel, S.A.B. de C.V. (Axtel) of approximately Ps211 in 2012 and Ps59 in 2011; and b) notes issued by Petróleos de Venezuela, S.A. (PDVSA) with a notional amount of approximately US$203 (Ps2,834) in 2011 and a fair value of approximately US$180 (Ps2,513). During 2012 and 2011, changes in valuation of these investments generated losses of approximately Ps102 and Ps93, respectively, recognized as part of other comprehensive loss within other equity reserves. In 2012, upon disposal of the PDVSA notes, CEMEX recognized a net gain of approximately Ps169 as part of other financial (expense) income, net, including the effects recognized within other comprehensive income in prior years

3 This line item refers to investments in private funds. In 2012 and 2011, no contributions were made to such private funds.

Table of Contents

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

Nationalization of CEMEX Venezuela

In connection with the expropriation in 2008 of all businesses, assets and shares of CEMEX in Venezuela by the Government of Venezuela, and after an international arbitration process with the International Centre for Settlement of Investment Disputes (ICSID), on December 13, 2011, CEMEX and the Government of Venezuela concluded a settlement agreement pursuant to which CEMEX received compensation for the expropriation of CEMEX Venezuela and administrative services provided after the expropriation in the form of: (i) a cash payment of US$240; and (ii) notes issued by PDVSA, with nominal value and interest income to maturity totaling approximately US$360. Additionally, as part of the settlement, all intercompany payments due from or to CEMEX Venezuela to and from CEMEX were cancelled, resulting in the cancellation for CEMEX of accounts payable, net of approximately US$154. Pursuant to this settlement agreement, CEMEX and the Government of Venezuela agreed to withdraw the ICSID arbitration as well as other then outstanding legal proceedings. As a result of this settlement, CEMEX cancelled the book value of its net assets in Venezuela of approximately US$503 and recognized a settlement gain in the statement of operations for 2011 of approximately US$25, recognized within other expenses, net, which includes the write-off of the currency translation effects accrued in equity.

14) PROPERTY, MACHINERY AND EQUIPMENT

As of December 31, 2012 and 2011, consolidated property, machinery and equipment and the changes in such line item during 2012, 2011 and 2010, were as follows:

		2012				
		Land and mineral reserves 1	**Buildings 1**	**Machinery and equipment 2**	**Construction in progress**	**Total**
Cost at beginning of period	Ps	81,135	43,824	183,682	14,976	323,617
Accumulated depreciation and depletion		(5,817)	(11,911)	(72,180)		(89,908)
Net book value at beginning of period		75,318	31,913	111,502	14,976	233,709
Capital expenditures		1,339	1,579	4,981		7,899
Additions through capital leases			813	1,212		2,025
Capitalization of financial expense					102	102
Total additions		1,339	2,392	6,193	102	10,026
Disposals **3**		(1,548)	(397)	(1,451)	15	(3,381)
Reclassifications **4**		(742)	(97)	(261)	(2)	(1,102)
Depreciation and depletion for the period		(1,116)	(1,691)	(11,264)		(14,071)
Impairment losses		(131)	(31)	(380)		(542)
Foreign currency translation effects		(4,955)	(4,476)	(2,092)	(815)	(12,338)
Cost at end of period		75,198	40,316	176,720	14,276	306,510
Accumulated depreciation and depletion		(7,033)	(12,703)	(74,473)		(94,209)
Net book value at end of period	Ps	68,165	27,613	102,247	14,276	212,301

Table of Contents

Properties, machinery and equipment - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

		2011					
		Land and mineral reserves 1	Buildings 1	Machinery and equipment 2	Construction in progress	Total	2010
Cost at beginning of period	Ps	75,149	39,008	165,170	13,016	292,343	310,496
Accumulated depreciation and depletion		(4,446)	(8,990)	(57,636)		(71,072)	(64,373)
Net book value at beginning of period		70,703	30,018	107,534	13,016	221,271	246,123
Capital expenditures		74	397	5,472		5,943	6,875
Additions through capital leases		4		1,515		1,519	
Capitalization of financial expense					115	115	88
Total additions		78	397	6,987	115	7,577	6,963
Disposals **3**		(1,251)	(654)	(1,185)	261	(2,829)	(2,797)
Reclassifications **4**							1,169
Business combinations (note 15A)		1,157	615	2,388	1,006	5,166	38
Depreciation and depletion for the period		(1,461)	(1,630)	(11,366)		(14,457)	(15,337)
Impairment losses		(667)	(85)	(497)		(1,249)	(1,161)
Foreign currency translation effects		6,759	3,252	7,641	578	18,230	(13,727)
Cost at end of period		81,135	43,824	183,682	14,976	323,617	292,343
Accumulated depreciation and depletion		(5,817)	(11,911)	(72,180)		(89,908)	(71,072)
Net book value at end of period	Ps	75,318	31,913	111,502	14,976	233,709	221,271

1 Includes corporate buildings and related land sold to financial institutions during 2012 and 2011, which were leased back, without incurring any change in the carrying amount of such assets or gain or loss on the transactions. The aggregate carrying amount of these assets as of December 31, 2012 and 2011 was approximately Ps1,657 and Ps554, respectively.

2 Includes assets, mainly mobile equipment, acquired in 2012 and 2011 through capital leases, which carrying amount as of December 31, 2012 and 2011 was approximately Ps2,025 and Ps1,519, respectively.

3 In 2012, includes sales of non-strategic fixed assets in Mexico, the United Kingdom and the United States for Ps1,160, Ps1,129 and Ps384, respectively. In 2011, includes sales of non-strategic fixed assets in the United Kingdom, Mexico and the United States for Ps424, Ps567 and Ps968, respectively. In 2010, includes sales of non-strategic fixed assets in the United States and Mexico for Ps1,140 and Ps749, respectively.

4 In 2012, due to decision to dispose of certain components of CGUs in the United States, CEMEX reclassified approximately Ps1,102 of fixed assets associated with such CGUs to assets held for sale (note 12). The reclassified assets were recognized at fair value less cost to sale. In 2010, refers to the capitalization of advances to suppliers of fixed assets during the period.

CEMEX has significant balances of property, machinery and equipment. As of December 31, 2012 and 2011, the consolidated balances of property, machinery and equipment, net, represented approximately 44.3% and 43.1%, respectively, of CEMEX s total consolidated assets. As a result of impairment tests conducted on several CGUs considering certain triggering events, mainly: a) the closing and/or reduction of operations of cement and ready-mix concrete plants resulting from adjusting the supply to current demand conditions; and b) the transferring of installed capacity to more efficient plants, for the years ended December 31, 2012, 2011 and 2010, CEMEX

Table of Contents

Properties, machinery and equipment - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

adjusted the related fixed assets to their estimated value in use in those circumstances in which the assets would continue in operation based on estimated cash flows during the remaining useful life, or to their realizable value, in case of permanent shut down, and recognized impairment losses (note 2K) during 2012, 2011 and 2010 in the following countries and for the following amounts:

		2012	2011	2010
Ireland	Ps	64	790	91
Mexico		203	101	138
United Kingdom			84	
Latvia		38	68	
Colombia			46	
Poland		3	29	76
Germany		128	21	103
Thailand			15	136
United States		71	11	500
Other countries		35	84	117
	Ps	542	1,249	1,161

As of December 31, 2012, there were no items of property, machinery and equipment related to CGUs that due to impairment indicators, such as the reduction of operations and/or the extended economic slowdown in the respective country, were subject to impairment tests and presented relative impairment risk in that their value in use exceeded by only 10% or less their respective carrying amounts. As of December 31, 2011, the CGU that presented relative impairment risk was as follows:

			2011		
Country	Related assets		Excess of value in use over carrying amount	Discount rate	Average remaining useful life
United States	Machinery and equipment	Ps	105	10.7%	21 years

As of December 31, 2011, in connection with the items of property, machinery and equipment mentioned in the table above that presented relative impairment risk, the impairment charges resulting from the sensitivity analysis that would have resulted from a reasonable independent change in each of the relevant variables used to determine the related assets value in use would have been as follows:

	2011
	Sensitivity analysis impact of described change in assumptions
Country	Discount rate + 1pt

		Excess of value in use over carrying amount	Recognized impairment losses	Remaining useful live 10%
United States	Ps	105		(105)

As of December 31, 2011, CEMEX believed that the estimated useful lives of the assets subject to the impairment test above were reasonable. With respect to the discount rate, such rate is linked to the global cost of capital, which may increase in the future, subject to economic conditions in the respective country.

Table of Contents

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

15) GOODWILL AND INTANGIBLE ASSETS

15A) BALANCES AND CHANGES DURING THE PERIOD

As of December 31, 2012 and 2011, consolidated goodwill, intangible assets and deferred charges were summarized as follows:

		2012				2011		
		Cost	Accumulated amortization	Carrying amount		Cost	Accumulated amortization	Carrying amount
Intangible assets of indefinite useful life:								
Goodwill	Ps	142,444		142,444	Ps	152,674		152,674
Intangible assets of definite useful life:								
Extraction rights		27,685	(2,242)	25,443		29,839	(2,307)	27,532
Industrial property and trademarks		429	(76)	353		4,012	(3,000)	1,012
Customer relations		4,862	(2,606)	2,256		5,172	(2,324)	2,848
Mining projects		1,642	(300)	1,342		2,083	(402)	1,681
Others intangible assets		14,068	(12,384)	1,684		16,872	(13,557)	3,315
	Ps	191,130	(17,608)	173,522	Ps	210,652	(21,590)	189,062

The amortization of intangible assets of definite useful life was approximately Ps3,113 in 2012, Ps3,079 in 2011 and Ps3,771 in 2010, and was recognized within operating costs and expenses.

Goodwill

Changes in consolidated goodwill in 2012, 2011 and 2010 were as follows:

		2012	2011	2010
Balance at beginning of period	Ps	152,674	135,822	144,190
Business combinations			14	81
Disposals and cancellations **1**		(323)		(83)
Reclassification to assets held for sale **2**		(212)		
Impairment losses (note 15C) **3**			(145)	(189)
Foreign currency translation effects		(9,695)	16,983	(8,177)
Balance at end of period	Ps	142,444	152,674	135,822

1

In 2012, due to the decision to transfer certain milling assets from Spain to Colombia, CEMEX cancelled approximately Ps323 of goodwill in Spain associated with the original acquisition of the entity that held the assets against other expenses, net.

2 In 2012, due to the classification of certain CGUs in the United States to assets held for sale, considering the historical average Operating EBITDA generation of such CGUs, CEMEX allocated approximately Ps212 of goodwill related to the groups of CGUs to which goodwill had been allocated in such country to the fair value less cost to sale associated with such assets recognized in assets held for sale (note 12).

Table of Contents

Goodwill - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

3 In 2011 and 2010, based on impairment tests made during the last quarter of such years, CEMEX recognized within Other expenses, net goodwill impairment losses in connection with the CGUs to which goodwill had been allocated in Latvia for approximately Ps145 (US$12) in 2011, and in Puerto Rico for approximately Ps189 (US$15) in 2010. The impairment losses in such countries represented 100% of the amount of goodwill allocated to such CGUs. In 2012, there were no impairment losses of goodwill (note 15C).

Intangible assets of definite life

Changes in intangible assets of definite life in 2012, 2011 and 2010 were as follows:

		2012					
		Extraction rights	Industrial property and trademarks	Customer relations	Mining projects	Others 1	Total
Balance at beginning of period	Ps	27,532	1,012	2,848	1,681	3,315	36,388
Additions (disposals), net **1**		(4)	(513)	134	263	(265)	(385)
Amortization		(446)	(373)	(512)	(69)	(1,713)	(3,113)
Impairment losses		(42)				(69)	(111)
Foreign currency translation effects		(1,597)	227	(214)	(533)	416	(1,701)
Balance at end of period	Ps	25,443	353	2,256	1,342	1,684	31,078

		2011						
		Extraction rights	Industrial property and trademarks	Customer relations	Mining projects	Others 1	Total	2010
Balance at beginning of period	Ps	25,225	1,267	2,991	1,342	3,881	34,706	41,338
Business combinations						6	6	48
Additions (disposals), net **1**		61	92	11	117	340	621	(287)
Amortization		(386)	(506)	(463)	(86)	(1,638)	(3,079)	(3,771)
Impairment losses								(5)
Foreign currency translation effects		2,632	159	309	308	726	4,134	(2,617)
Balance at end of period	Ps	27,532	1,012	2,848	1,681	3,315	36,388	34,706

1 As of December 31, 2012 and 2011, Others includes the carrying amount of internal-use software of approximately Ps204 and Ps711, respectively. Capitalized direct costs incurred in the development stage of internal-use software, such as professional fees, direct labor and related travel expenses, amounted to approximately Ps352 in 2012, Ps501 in 2011 and Ps30 in 2010.

When impairment indicators exist, for each intangible asset, CEMEX determines its projected revenue streams over the estimated useful life of the asset. In order to obtain discounted cash flows attributable to each intangible asset, such revenues are adjusted for operating expenses, changes in working capital and other expenditures, as applicable, and discounted to net present value using the risk adjusted discount rate of return. Significant management judgment is necessary to determine the appropriate valuation method and estimates under the key assumptions, among which are: a) the useful life of the asset; b) the risk adjusted discount rate of return; c) royalty rates; and d) growth rates. Assumptions used for these cash flows are consistent with internal forecasts and industry practices.

Table of Contents

Intangible assets of definite life - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

The fair values of intangible assets are very sensitive to changes in the significant assumptions used in their calculation. Certain key assumptions are more subjective than others. In respect of trademarks, CEMEX considers the royalty rate, which is key in the determination of revenue streams, as the most subjective assumption. In respect of extraction rights and customer relationships, the most subjective assumptions are revenue growth rates and estimated useful lives. CEMEX validates its assumptions through benchmarking with industry practices and the corroboration of third party valuation advisors.

15B) MAIN ACQUISITIONS AND DIVESTITURES DURING THE REPORTED PERIODS

In 2005, CEMEX and Ready Mix USA formed two joint ventures: a) CEMEX Southeast, LLC, a joint venture that was 50.01% owned and consolidated by CEMEX, and was comprised of the Demopolis cement plant in Alabama and the Clinchfield cement plant in Georgia, with a combined annual installed capacity of 1.7 million tons, and 12 cement terminals; and b) Ready Mix USA LLC, a joint venture that was 50.01% owned and consolidated by Ready Mix USA, and was comprised of 10 sand and gravel pits, 149 concrete plants and 20 block plants located in the states of Arkansas, Mississippi, Tennessee, Alabama, Georgia, and Florida.

Starting on June 30, 2008, Ready Mix USA had the right, but not the obligation, to sell (or put) its interests in both joint ventures to CEMEX. On September 30, 2010, Ready Mix USA exercised this put option. As a result of Ready Mix USA s exercise of its put option and after performance of the obligations by both parties under the put option agreement, on August 12, 2011, through the payment of approximately US$352 (Ps4,914), CEMEX acquired its former joint venture partner s interests in CEMEX Southeast, LLC and Ready Mix USA, LLC, including a non-compete and a transition services agreement. In accordance with the joint venture agreements, from the date in which Ready Mix USA exercised its put option until CEMEX s acquisition date, Ready Mix USA continued to control and manage Ready Mix USA, LLC. Nonetheless, based on IAS 27, and considering the existence of a settlement price that could have been paid any time until September 30, 2011 at CEMEX election and potential voting rights, Ready Mix USA LLC was consolidated beginning March 31, 2011. Upon consolidation, the purchase price was assigned to each joint venture proportionately to CEMEX s relative contribution interest in CEMEX Southeast, LLC and Ready Mix USA, LLC, considering the original fair values as of the dates of the 2005 agreements. During 2011, the acquisition of the non-controlling interest in CEMEX Southeast, LLC, fully consolidated by CEMEX as of the acquisition date, and the non-controlling interest in Ready Mix USA, LLC, generated a gain of approximately US$24 (Ps316) resulting mainly to the measurement at fair value of CEMEX s previously held equity interest in Ready Mix USA, LLC, and was recognized within Other expenses, net. The consolidated financial statements of CEMEX as of December 31, 2011 included the balance sheet of Ready Mix USA, LLC as of December 31, 2011, based on the best estimate of the fair value of its net assets as of the acquisition date of approximately Ps4,487, including cash and cash equivalents of approximately Ps912 and debt of approximately Ps1,352, and its results of operations for the nine-month period ended December 31, 2011. During 2012, after conclusion of the purchase price allocation, there were changes in the value of certain assets and liabilities, none of which were individually significant, which decreased the aggregate gain on purchase by approximately US$1 (Ps13).

On November 15, 2012, as described in note 20D, CEMEX sold a non-controlling interest of 26.65% in CEMEX Latam Holdings, S.A., a direct subsidiary of CEMEX España, for a net amount of approximately US$960 (Ps12,336).

Main acquisitions and divestitures during the reported periods - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

On October 12, 2012, in a private transaction, CEMEX made the final payment in connection with the acquisition, initiated in April 2012 from third parties, of the 49% non-controlling interest in an indirect holding company of Global Cement, S.A., CEMEX s main operating subsidiary in Guatemala, for a total amount including the final payment of approximately US$54 (Ps694), recognizing within Other equity reserves a loss of approximately US$32 (Ps411).

On May 17, 2012, through a public tender offer commenced on March 12, 2012, and after compliance with applicable regulations in the Republic of Ireland, Readymix Investments, an indirect subsidiary of CEMEX España, acquired all the shares of Readymix plc (Readymix), CEMEX s main operating subsidiary in the Republic of Ireland, for 0.25 per share in cash. The acquisition price for the 38.8% non-controlling interest in Readymix was approximately 11 (US$15 or Ps187). The listing and trading of Readymix s shares on the Irish Stock Exchange was cancelled beginning on May 18, 2012.

15C) ANALYSIS OF GOODWILL IMPAIRMENT

As of December 31, 2012 and 2011, goodwill balances allocated by operating segment were as follows:

		2012	2011
United States	Ps	109,326	117,867
Mexico		6,369	6,369
Northern Europe			
United Kingdom		4,552	4,647
France		3,451	3,690
Rest of Northern Europe **1**		297	420
Mediterranean			
Spain		8,660	9,549
United Arab Emirates		1,371	1,383
Egypt		231	231
South America and the Caribbean			
Colombia		5,510	5,628
Dominican Republic		201	214
Rest of South America and the Caribbean **2**		733	775
Asia			
Philippines		1,389	1,513
Others			
Other operating segments **3**		354	388
	Ps	142,444	152,674

1 This caption refers to the operating segments in the Czech Republic and Latvia.

2 This caption refers to the operating segments in the Caribbean, Argentina, Costa Rica and Panama.

3 This caption is primarily associated with Neoris N.V., CEMEX s subsidiary in the information technology and software development business.

Table of Contents

Analysis of goodwill impairment - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

CEMEX is engaged in the production, marketing, distribution and sale of cement, ready-mix concrete, aggregates and other construction materials. The geographic operating segments reported by CEMEX (note 4) represent CEMEX s groups of CGUs to which goodwill has been allocated for purposes of testing goodwill for impairment. Correspondingly, each of CEMEX s geographic operating segments is comprised of CEMEX s operations in a country. Each country or operating segment is, in turn, comprised of a lower level of cash-generating units, which are not larger than an operating segment, identified by CEMEX as geographical zones within the country in which all main business activities are conducted. For purposes of goodwill impairment tests, all cash-generating units within a country are aggregated, as goodwill is allocated at that level. In order to arrive at these conclusions, CEMEX evaluated: a) that after the acquisition, goodwill is allocated at the level of the reportable operating segment and represents the lowest level within CEMEX at which goodwill is monitored for internal management purposes and reflects the way CEMEX manages its operations and allocates resources; b) that the cash-generating units that comprise the reported segment have similar economic characteristics; c) that the reported segments are used by CEMEX to organize and evaluate its activities in its internal information systems; d) the homogeneous nature of the items produced and traded in each cash-generating unit, which are all used by the construction industry; e) the vertical integration in the value chain of the products comprising each component; f) the type of clients, which are substantially similar in all components; g) the operative integration among components; and h) that the compensation system of a specific country is based on the consolidated results of the geographic operating segment and not on the particular results of the components. Considering materiality for disclosure purposes, in note 15C, certain balances of goodwill were presented for Rest of Northern Europe or Rest of South America and the Caribbean, but this does not represent that goodwill was tested at a level higher than for operations in an individual country.

Impairment tests are significantly sensitive to, among other factors, the estimation of future prices of CEMEX s products, the development of operating expenses, local and international economic trends in the construction industry, the long-term growth expectations in the different markets, as well as the discount rates and the long-term growth rates applied. CEMEX s cash flow projections to determine the value in use of its CGUs to which goodwill has been allocated consider the use of long-term economic assumptions. CEMEX believes that its discounted cash flow projections and the discount rates used reasonably reflect current economic conditions at the time of the calculations, considering, among other factors that: a) the cost of capital reflects current risks and volatility in the markets; and b) the cost of debt represents the average of industry specific interest rates observed in recent transactions. Other key assumptions used to determine CEMEX s discounted cash flows are volume and price increases or decreases by main product during the projected periods. Volume increases or decreases generally reflect forecasts issued by trustworthy external sources, occasionally adjusted based on CEMEX s actual backlog, experience and judgment considering its concentration in certain sectors, while price changes normally reflect the expected inflation in the respective country. Operating costs and expenses during all periods are maintained as a fixed percent of revenues considering historic performance.

During the last quarter of 2012, 2011 and 2010, CEMEX performed its annual goodwill impairment test. Based on these analyses, in 2012 CEMEX did not determine impairment losses of goodwill, whereas, in 2011 and 2010, CEMEX determined impairment losses of goodwill for approximately Ps145 (US$12) and Ps189 (US$15), respectively, associated with CEMEX s groups of CGUs to which goodwill has been allocated in Latvia in 2011 and Puerto Rico in 2010, in both cases representing 100% of the goodwill balance associated with such countries. The estimated impairment losses are mainly attributable to market dynamics in these countries and their position in their business economic cycles. In both countries, their net book value exceeded their respective recoverable amount.

Table of Contents

Analysis of goodwill impairment - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

As of December 31, 2012, 2011 and 2010, CEMEX s pre-tax discount rates and long-term growth rates used to determine the discounted cash flows in the group of CGUs with the main goodwill balances, were as follows:

	Discount rates			Growth rates		
Groups of CGUs	**2012**	**2011**	**2010**	**2012**	**2011**	**2010**
United States	9.9%	10.7%	10.0%	2.5%	2.5%	2.5%
Spain	11.5%	12.0%	11.2%	2.5%	2.5%	2.5%
Mexico	10.7%	11.4%	11.0%	3.0%	2.5%	2.5%
Colombia	10.7%	11.6%	11.1%	3.5%	2.5%	2.5%
France	10.3%	11.5%	10.7%	1.9%	2.5%	2.5%
United Arab Emirates	13.3%	13.9%	11.7%	3.6%	2.5%	2.5%
United Kingdom	10.3%	11.0%	10.7%	2.7%	2.5%	2.5%
Egypt	13.5%	13.0%	11.9%	4.0%	2.5%	2.5%
Range of rates in other countries	11.1% 13.3%	11.8% 14.0%	10.5% 14.9%	3.4% 4.0%	2.5%	2.5%

As of December 31, 2012, the discount rates used by CEMEX in its cash flows projections decreased by an average 5% from the values determined in 2011, mainly as a result of a reduction in the industry specific average cost of debt observed in 2012, as compared to the prior year. In respect to long-term growth rates, following general practice under IFRS, in 2012, CEMEX started the use of country specific rates.

In connection with CEMEX s assumptions included in the table above, as of December 31, 2012 and 2011, CEMEX made sensitivity analyses to changes in assumptions, affecting the value in use of all groups of CGUs with an independent reasonable possible increase of 1% in the pre-tax discount rate, and an independent possible decrease of 1% in the long-term growth rate. In addition, CEMEX performed cross-check analyses for reasonableness of its results using multiples of Operating EBITDA. In order to arrive at these multiples, which represent a reasonableness check of CEMEX s discounted cash flow model, CEMEX determined a weighted average of multiples of Operating EBITDA to enterprise value observed in the industry. The average multiple was then applied to a stabilized amount of Operating EBITDA and the result was compared to the corresponding carrying amount for each group of CGUs to which goodwill has been allocated. As of December 31, 2012 and 2011, CEMEX considered an industry weighted average Operating EBITDA multiple of 10.3 times and 9.6 times, respectively. CEMEX s own Operating EBITDA multiples to enterprise value as of the same dates were 10.6 times in 2012 and 10 times in 2011. The lowest multiple observed in CEMEX s benchmark as of December 31, 2012 and 2011 was 7.2 times and 6.2 times, respectively, and the highest being 21.3 times and 22.1 times, respectively.

As of December 31, 2012, the impairment charges resulting from the sensitivity analyses that would have resulted from an independent change of each one of the variables and/or by the use of multiples of Operating EBITDA, regarding the operating segment that presented a relative impairment risk, would have been as follows:

As of December 31, 2012		**Sensitivity analysis of described change in assumptions**		
(Amounts in millions)	**Recognized impairment charges**	**Discount rate + 1pt**	**Long-term growth rate - 1pt**	**Multiples of Operating EBITDA**

Spain	US$	99	39
United Arab Emirates		8	

Table of Contents

Analysis of goodwill impairment - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

CEMEX will continue to monitor the evolution of the specific CGUs to which goodwill has been allocated that present relative goodwill impairment risk and, in the event that the relevant economic variables and the related cash flows projections would be negatively affected, it may result in a goodwill impairment loss in the future. As of December 31, 2011 and 2010, CEMEX made the sensitivity analyses to changes in assumptions mentioned above.

CEMEX has experienced a significant decline in its market capitalization with respect to levels prior to the 2008 global crisis, which CEMEX believes is due to factors such as: a) the contraction of the construction industry in the United States, which has experienced a continued slow recovery after the crisis of 2008, that has significantly affected CEMEX s operations in such country and consequently its overall generation of cash flows; b) CEMEX s significant amount of consolidated debt and its operation over the last few years under the Financing Agreement (note 16A), has also significantly affected CEMEX s valuation, considering the high uncertainty perceived by stakeholders regarding CEMEX s odds of successfully achieving the different milestones established with its main creditors; and c) the transfer of capital during the last few years, mainly due to high volatility generated by liquidity problems in certain European countries, from variable income securities in developing countries such as Mexico to fixed income securities in developed countries such as the United States. The market price of CEMEX s CPO has recovered significantly after CEMEX entering into the Facilities Agreement (note 16A). In dollar terms, CEMEX s market capitalization increased by approximately 93% in 2012 compared to 2011, to approximately US$10.8 billion (Ps138.7 billion).

Goodwill allocated to the United States accounted for approximately 77% of CEMEX s total amount of consolidated goodwill as of December 31, 2012 and 2011. In connection with CEMEX s determination of value in use relative to its groups of CGUs in the United States as of December 31, 2011 and 2012, CEMEX has considered several factors, such as the historical performance of such operating segment, including operating losses in recent years, the long-term nature of CEMEX s investment, the recent signs of recovery in the construction industry, the significant economic barriers for new potential competitors considering the high investment required, and the lack of susceptibility of the industry to technology improvements or alternate construction products, among other factors. CEMEX has also considered recent developments in its operations in the United States, such as the 20% and 7% increase in ready-mix concrete volumes in 2012 and 2011, respectively, and the 4% and 3% increase in 2012 and 2011, respectively, of ready-mix concrete prices, respectively, which are key drivers for cement consumption and CEMEX s profitability, and which trends are expected to continue over the next few years, as anticipated in CEMEX s cash flow projections.

In addition, as mentioned above, CEMEX performed a reasonableness test of the estimated value in use by performing a sensitivity analysis on key cash flow assumptions, and estimated the recoverable amount by using the method of multiples of Operating EBITDA.

Based on the above, considering economic assumptions that were verified for reasonableness with information generated by external sources, to the extent available, the value in use of the CEMEX s operating segment in the United States exceeded the respective carrying amount for goodwill impairment test purposes as of December 31, 2012 and 2011. The additional sensitivity analyses were as follows:

Excess of value in use over carrying amount	2012	2011
Basic test	US$ 3,933	4,114
Sensitivity to plus 1 percent point in discount rate	1,390	1,335
Sensitivity to minus 1 percent point in long-term growth	2,574	2,493
Excess of multiples of Operating EBITDA over carrying amount	1,106	781

Analysis of goodwill impairment - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

As of December 31, 2012 and 2011, CEMEX considers that its combination of discount rate and long-term growth rate applied in the base model for its group of CGUs in the United States to which goodwill has been allocated reflect the particular risk factors existing as of the date of analysis.

16) FINANCIAL INSTRUMENTS

16A) SHORT-TERM AND LONG-TERM DEBT

As of December 31, 2012 and 2011, CEMEX s consolidated debt summarized by interest rates, currencies and type of instrument, was as follows:

		2012				2011		
		Short-term	Long-term	Total		Short-term	Long-term	Total
Floating rate debt	Ps	81	62,664	62,745	Ps	2,997	106,943	109,940
Fixed rate debt		515	114,875	115,390		1,676	96,855	98,531
	Ps	596	177,539	178,135	Ps	4,673	203,798	208,471
Effective rate 1								
Floating rate		5.5%	5.2%			5.0%	5.3%	
Fixed rate		4.7%	9.0%			10.5%	8.4%	

		2012					2011			
Currency		Short-term	Long-term	Total	Effective rate 1		Short-term	Long-term	Total	Effective rate 1
Dollars	Ps	486	144,582	145,068	7.8%	Ps	310	156,055	156,365	6.9%
Euros		46	30,461	30,507	5.9%		93	44,357	44,450	5.9%
Pesos		15	2,392	2,407	8.8%		4,268	3,268	7,536	9.5%
Other currencies		49	104	153	4.6%		2	118	120	5.8%
	Ps	596	177,539	178,135		Ps	4,673	203,798	208,471	

1 Represents the weighted average effective interest rate.

Table of Contents

Short-term and long-term debt - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

2012		Short-term	Long-term
Bank loans			
Loans in Mexico, 2013 to 2014	Ps		1,088
Loans in foreign countries, 2013 to 2018		2	3,770
Syndicated loans, 2013 to 2017			49,972
		2	54,830
Notes payable			
Notes payable in Mexico, 2013 to 2017			568
Medium-term notes, 2013 to 2022			120,535
Other notes payable, 2013 to 2025		80	2,120
		80	123,223
Total bank loans and notes payable		82	178,053
Current maturities		514	(514)
	Ps	596	177,539

2011		Short-term	Long-term
Bank loans			
Loans in Mexico, 2012 to 2014	Ps		1,820
Loans in foreign countries, 2012 to 2018		16	23,797
Syndicated loans, 2012 to 2014			71,195
		16	96,812
Notes payable			
Notes payable in Mexico, 2012 to 2017			4,647
Medium-term notes, 2012 to 2020			104,440
Other notes payable, 2012 to 2025		124	2,432
		124	111,519
Total bank loans and notes payable		140	208,331
Current maturities		4,533	(4,533)
	Ps	4,673	203,798

Changes in consolidated debt for the years ended December 31, 2012, 2011 and 2010 were as follows:

		2012	2011	2010
Debt at beginning of year	Ps	208,471	194,394	210,446
Proceeds from new debt instruments		33,468	33,591	12,212
Debt repayments		(52,699)	(44,368)	(29,641)
Issuance of debt in exchange for perpetual notes		4,123	1,491	15,437
Increase (decrease) from business combinations			1,352	
Foreign currency translation and inflation effects		(15,228)	22,011	(14,060)
Debt at end of year	Ps	178,135	208,471	194,394

The most representative exchange rates for the financial debt are as follows:

	April 23, 2013	2012	2011	2010
Mexican pesos per dollar	12.26	12.85	13.96	12.36
Euros per dollar	0.7689	0.7576	0.7712	0.7499

F-53

Table of Contents

Short-term and long-term debt - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

The maturities of CEMEX s consolidated long-term debt as of December 31, 2012, were as follows:

		2012
2014	Ps	7,346
2015		9,797
2016		22,391
2017		62,417
2018 and thereafter		75,588
	Ps	177,539

As of December 31, 2012, CEMEX had the following lines of credit, the majority of which are subject to the banks availability, at annual interest rates ranging between 2.14% and 10.0%, depending on the negotiated currency:

		Lines of credit	Available
Other lines of credit in foreign subsidiaries	Ps	6,491	4,243
Other lines of credit from banks		456	
	Ps	6,947	4,243

Relevant debt transactions during 2012, 2011 and 2010

On September 17, 2012, CEMEX concluded the refinancing process of a substantial portion of its then outstanding debt under the Financing Agreement, as amended on several dates during 2009, 2010, 2011 and finally on September 17, 2012 (the Financing Agreement), with the completion of the Exchange Offer on September 17, 2012, as further described in this note 16.

On September 17, 2012, in connection with the Facilities Agreement described elsewhere in this note 16A, CEMEX issued US$500 aggregate principal amount of 9.5% senior secured notes due in 2018 (the September 2012 Notes). The September 2012 Notes were issued in exchange for loans and private placements outstanding under the Financing Agreement.

On October 12, 2012, through its subsidiary CEMEX Finance LLC, CEMEX closed the offering of US$1,500 aggregate principal amount of 9.375% senior secured notes due in 2022 (the October 2012 Notes). The October 2012 Notes, which were issued at par and will be callable commencing on their 5th anniversary, are unconditionally guaranteed by CEMEX, S.A.B. de C.V., CEMEX México, S.A. de C.V., CEMEX España, S.A., New Sunward Holding B.V., CEMEX Concretos, S.A. de C.V., CEMEX Corp. and Empresas Tolteca de México, S.A. de C.V., as well as by CEMEX Research Group AG, CEMEX Shipping B.V., CEMEX Asia B.V., CEMEX France Gestion (S.A.S.), CEMEX UK, and CEMEX Egyptian Investments B.V. (jointly the New Guarantors), which also guarantee debt under the Facilities Agreement. The net proceeds from the offering, approximately US$1,489, were used to repay indebtedness under the Facilities Agreement, which allowed CEMEX to achieve the first debt repayment milestone thereunder of March 2013 and the reduction in the interest rate under such agreement by 25 basis points, as detailed in other section of this note 16A.

Relevant debt transactions during 2012, 2011 and 2010 - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

On March 23, 2012, through several exchange offers made on a private placement basis by CEMEX España s Luxembourg branch, CEMEX finalized the issuance of: a) approximately 179 aggregate principal amount of 9.875% Euro-denominated senior secured notes due 2019; and b) approximately US$704 aggregate principal amount of 9.875% Dollar-denominated senior secured notes due 2019 (collectively, the March 2012 Notes), in exchange for approximately 470, or 53%, of its then outstanding Euro-denominated 4.75% notes due 2014, and approximately US$452, or 48%, in several series of its then aggregate outstanding perpetual debentures (note 20D). The March 2012 Notes are unconditionally guaranteed by CEMEX, S.A.B. de C.V., CEMEX México, S.A. de C.V., New Sunward Holding B.V. and the New Guarantors and share the same collateral that secures the Facilities Agreement and other senior secured debt having the benefit of such collateral. As a result of the private exchanges, CEMEX generated in 2012 a gain of approximately US$131 (Ps1,680), representing the difference between the notional amount of the March 2012 Notes, and the several series of the reacquired and cancelled perpetual debentures, which was recognized within Other equity reserves.

During December 2011, CEMEX exchanged through market transactions a portion of the PDVSA notes received in payment from the Government of Venezuela (note 13B), for perpetual debentures and debt instruments issued by CEMEX subsidiaries. In addition, during the same month, CEMEX received from a third party, as a settlement of an account receivable, the equity interest of an entity whose assets where mainly comprised by perpetual debentures and debt instruments issued by CEMEX subsidiaries. As a result, as of December 31, 2011, CEMEX cancelled in its balance sheet a portion of several series of its subsidiaries debt instruments, held by the newly acquired entity and its other subsidiaries, for an aggregate notional amount of approximately Ps977, including portions of the 9.25% Dollar-denominated senior secured notes due 2020 and portions of the April 2011 Notes, described below, as well as portions of several series of perpetual debentures (note 20D) for an aggregate notional amount of approximately Ps3,029, among others. Considering the difference between the fair value of the instruments and their notional amount, as part of this cancellation, CEMEX recognized gains, net of certain commissions, of approximately Ps1,630, of which, approximately Ps239 associated with CEMEX s debt instruments, were recognized within other expenses, net, and approximately Ps1,391 associated with the perpetual debentures, were recognized in stockholders equity as part of other equity reserves.

As of December 31, 2010 and 2011, in connection with its obligations under the Financing Agreement, which is described within this note 16A, CEMEX had already paid 35.4% of the original principal amount, or approximately US$5,263, of debt under the Financing Agreement and 51.0% of the original principal amount, or approximately US$7,571, of debt under the Financing Agreement, respectively. These repayments exceeded the scheduled amortizations of 19.1%, or approximately US$2,837 by December 15, 2010, and 33.1%, or approximately US$4,918 by December 15, 2011. Through these repayments, CEMEX avoided a 0.5% increase in the interest rate of debt under the Financing Agreement beginning in January 2012 and addressed all maturities under the Financing Agreement until December 2013.

On July 11, 2011, CEMEX, S.A.B. de C.V. closed the reopening of the January 2011 Notes, described below, and issued US$650 aggregate principal amount of additional notes at 97.616% of face value plus any accrued interest. CEMEX used the net proceeds from the reopening for general corporate purposes and the repayment of debt, including debt under the Financing Agreement.

On April 5, 2011, CEMEX, S.A.B. de C.V. closed the offering of US$800 aggregate principal amount of Floating Rate Senior Secured Notes due in 2015 (the April 2011 Notes), which were issued at 99.001% of face value. The April 2011 Notes are unconditionally guaranteed by CEMEX México, S.A. de C.V., New Sunward

Relevant debt transactions during 2012, 2011 and 2010 - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

Holding B.V., CEMEX España, S.A. and the New Guarantors. The net proceeds from the offering, approximately US$788, were used to repay indebtedness under the Financing Agreement.

On March 4, 2011, a CEMEX subsidiary closed a private exchange transaction whereby it exchanged approximately 119 aggregate principal amount of 6.277% perpetual debentures for approximately US$125 (Ps1,491) aggregate principal amount of new 9.25% Dollar-denominated senior secured notes due 2020, described below. As a result of the private exchange, approximately 119 in aggregate principal amount of the 6.277% Perpetual Debentures were cancelled, generating in 2011 a gain of approximately Ps446, representing the difference between the notional amount of the reacquired perpetual debentures and the new senior secured notes, which was recognized within Other equity reserves.

On January 11, 2011, CEMEX, S.A.B. de C.V. closed the offering of US$1,000 aggregate principal amount of its 9.0% senior secured notes due in 2018 (the January 2011 Notes), which were issued at 99.364% of face value, and are callable beginning on their fourth anniversary. The January 2011 Notes share the collateral pledged to the lenders under the Facilities Agreement and other senior secured indebtedness having the benefit of such collateral, and are guaranteed by CEMEX México, S.A. de C.V., New Sunward Holding B.V., CEMEX España, S.A. and the New Guarantors.

In May 2010, CEMEX exchanged at a discount, part of each series of its perpetual debentures (note 20D) into new senior secured notes as follows: (1) US$1,067 senior secured notes denominated in Dollars maturing in May 2020, with an annual coupon of 9.25% and callable commencing on the fifth anniversary of their issuance; and (2) 115 (US$153) senior secured notes denominated in Euros maturing in May 2017, with an annual coupon of 8.875% and callable commencing on the fourth anniversary of their issuance. The senior secured notes, issued by the Luxembourg branch of CEMEX España, S.A., are fully guaranteed by CEMEX, S.A.B. de C.V., CEMEX México S.A. de C.V., New Sunward Holding B.V. and the New Guarantors. As a result of the exchange, CEMEX generated a gain of approximately Ps5,401 (US$437), representing the difference between the amount of perpetual debentures reacquired and the amount of new secured notes issued, which was recorded in other equity reserves in 2010.

On January 13, 2010, through a reopening of the offering of its 9.5% notes due in 2016 issued on December 14, 2009, a CEMEX financial subsidiary issued notes for an additional amount of US$500. The additional notes were issued at a price of US$105.25 per US$100 principal amount plus accrued interest from December 14, 2009 with a yield to maturity of 8.477%. CEMEX used approximately US$411 of the net proceeds to prepay principal due in 2011 under the Financing Agreement and the difference was used for general corporate purposes. The original and additional notes are guaranteed by CEMEX, S.A.B. de C.V., CEMEX México S.A. de C.V., New Sunward Holding B.V. and the New Guarantors.

Facilities Agreement and Financing Agreement

On August 14, 2009, CEMEX, S.A.B. de C.V. and certain subsidiaries entered into the original Financing Agreement with its major creditors, by means of which the maturities of approximately US$14,961 (Ps195,839) (amount determined in accordance with the contracts) of syndicated and bilateral loans, private placement notes and other obligations were extended, providing for a semi-annual amortization schedule. The Financing Agreement is guaranteed by CEMEX, S.A.B. de C.V., CEMEX México, S.A. de C.V., New Sunward Holding B.V., CEMEX España, S.A., CEMEX Concretos, S.A. de C.V., CEMEX Corp., CEMEX Finance LLC and Empresas Tolteca de México, S.A. de C.V. As of December 31, 2011 and 2010, after the application of the

Facilities Agreement and Financing Agreement - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

proceeds from the refinancing transactions disclosed above and in note 16B and others, the application of the net proceeds obtained from the sale of assets, and the equity offering in 2009, the remaining debt balance under the Financing Agreement was approximately US$7,195 (Ps100,442) and US$9,566 (Ps118,235), respectively, with payments due as of August 31, 2012 of approximately US$488 in December 2013 and US$6,707 at final maturity in February 2014, each calculated as of August 30, 2012. Considering that CEMEX was able to prepay by December 31, 2011 approximately US$2,301 of debt under the Financing Agreement, CEMEX avoided an increase in the interest rate of debt under such agreement of 0.5%. Until its maturity, the Financing Agreement does not provide for any further increases in the interest rate associated with a certain amount of prepayments.

On September 17, 2012, CEMEX completed a refinancing process of a substantial portion of its then outstanding debt under the Financing Agreement, as amended on several dates. Pursuant to CEMEX s exchange proposal (the Exchange Offer), creditors were invited to exchange their existing exposures under the existing Financing Agreement into one or a combination of the following instruments: a) new loans (New Loans) or private placement notes (New USPP Notes), as applicable, or b) up to US$500 in new 9.5% notes (the September 2012 Notes) to be issued by CEMEX maturing in June 2018, having terms substantially similar to those of senior secured notes previously issued by CEMEX, S.A.B. de C.V. and/or its subsidiaries. The September 2012 Notes were allocated pro rata to the participating creditors of the Financing Agreement in the Exchange Offer that elected to receive the September 2012 Notes in the Exchange Offer. Financing Agreement creditors accepting certain amendments, including the elimination of the benefit of the security package among others, received an amendment fee of 20 basis points (bps) calculated on the amount of their existing exposures under such agreement.

Pursuant to the Exchange Offer, participating creditors representing approximately 92.7% of the aggregate principal amount of debt outstanding under the existing Financing Agreement agreed to extinguish their existing loans and private placement notes and to receive in place thereof: a) approximately US$6,155 in aggregate principal amount of New Loans with an initial interest rate of LIBOR plus 525 bps (subject to decrease depending on certain prepayments), and new USPP Notes with an initial interest rate of 9.66% (subject to decrease depending on certain prepayments), issued pursuant to a new agreement (the Facilities Agreement) dated as of September 17, 2012, and with a final maturity on February 14, 2017, and an exchange fee of 80 bps calculated on the amount of their existing exposures under the Financing Agreement that were extinguished and for which New Loans or New USPP Notes were issued in place thereof; and b) US$500 of the September 2012 Notes, issued pursuant to an indenture dated as of September 17, 2012. Approximately US$525 aggregate principal amount of loans and U.S. Dollar private placement notes remained outstanding after the Exchange Offer under the existing Financing Agreement, as amended, after the Exchange Offer. As of December 31, 2012, after the application of proceeds resulting from the CEMEX Latam Holdings, S.A. initial offering (note 20D), the aggregate principal amount of loans and U.S. dollar private placement notes under the amended Financing Agreement was US$55 (Ps707), with a final maturity on February 14, 2014.

The Facilities Agreement required CEMEX to make the following amortization payments: (i) US$500 on February 14, 2014, (ii) US$250 on June 30, 2016, and (iii) US$250 on December 31, 2016. The Facilities Agreement also provides that CEMEX must: (a) repay at least US$1,000 of the indebtedness under the Facilities Agreement on or prior to March 31, 2013 (or a date falling no more than 90 days thereafter, if agreed to by two thirds of the participating creditors under the Facilities Agreement), or the maturity date of the indebtedness under the Facilities Agreement will become due on February 14, 2014; (b) on or before March 5, 2014, in case CEMEX does not redeem, purchase, repurchase, refinance or extend the maturity date of 100% of the notes issued by CEMEX Finance Europe B.V. and guaranteed by CEMEX España to a maturity date falling after December 31, 2017, or the maturity date of the indebtedness under the Facilities Agreement will become

Table of Contents

Facilities Agreement and Financing Agreement - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

March 5, 2014; (c) on or before March 15, 2015, in case CEMEX does not redeem, convert into equity, purchase, repurchase, refinance or extend the maturity date of 100% of the 2015 Convertible Subordinated Notes to a maturity date falling after December 31, 2017, or the maturity date of the indebtedness under the Facilities Agreement will become March 15, 2015; (d) on or before September 30, 2015, in case CEMEX does not redeem or extend the maturity date of 100% of the April 2011 Notes to a maturity date falling after December 31, 2017, or the maturity date of the indebtedness under the Facilities Agreement will become September 30, 2015; (e) on or before March 15, 2016, in case CEMEX does not redeem, convert into equity, purchase, repurchase, refinance or extend the maturity date of 100% of the 2016 Convertible Subordinated Notes to a maturity date falling after December 31, 2017, or the maturity date of the indebtedness under the Facilities Agreement will become March 15, 2016; and (f) on or before December 14, 2016, in case CEMEX does not redeem or extend the maturity date of 100% of the December 2009 Notes to a maturity date falling after December 31, 2017, or the maturity date of the indebtedness under the Facilities Agreement will become December 14, 2016.

For the initial US$1,000 repayment, at its sole discretion, CEMEX may elect to: a) sell minority stakes in CEMEX s operations; b) sell selected assets in the United States; c) sell selected assets in Europe; and/or d) sale of other non-core assets. If during the Facilities Agreement term CEMEX pays down US$1,500 and US$2,000 of aggregate principal amount under the Facilities Agreement, the interest rate under the outstanding amount of the New Notes would be reduced to LIBOR plus 500 bps and LIBOR plus 450 bps, respectively, and in the New USPP Notes would be reduced to 9.41% and 8.91%, respectively.

As of December 31, 2012, CEMEX achieved the US$1,000 repayment milestone of March 2013, and the debt amortization requirements under the Facilities Agreement through and including the amortization on December 15, 2016; with US$4,187 remaining outstanding with a final maturity in February 2017. As a result of the prepayments, the interest rate on the New Loans under the Facilities Agreement was reduced to LIBOR plus 450 bps and on the New USPP Notes was reduced to 8.91%.

As mentioned above, the debt under the Facilities Agreement is guaranteed by the same entities that guarantee the debt under the Financing Agreement, and additionally by the New Guarantors. The amended Financing Agreement and certain other precedent facilities did not receive guarantees from the New Guarantors. The debt under the Facilities Agreement (together with other senior capital markets debt issued or guaranteed by CEMEX, and certain other precedent facilities) is also secured by a first-priority security interest in: (a) substantially all the shares of CEMEX México, S.A. de C.V.; Centro Distribuidor de Cemento, S.A. de C.V.; Corporación Gouda, S.A. de C.V.; Mexcement Holdings, S.A. de C.V.; New Sunward Holding B.V.; CEMEX Trademarks Holding Ltd. and CEMEX España, S.A. (the Collateral), and (b) all proceeds of such Collateral.

Pursuant to the Facilities Agreement, CEMEX is prohibited from making aggregate annual capital expenditures in excess of US$800 (excluding certain capital expenditures, and, joint venture investments and acquisitions by CEMEX Latam and its subsidiaries, which capital expenditures, joint venture investments and acquisitions at any time then incurred are subject to a separate aggregate limit of US$350 (or its equivalent)). In the Facilities Agreement, and subject in each case to the permitted negotiated amounts and other exceptions, CEMEX is also subject to a number of negative covenants that, among other things, restrict or limit its ability to: (i) create liens; (ii) incur additional debt; (iii) change CEMEX s business or the business of any obligor or material subsidiary (in each case, as defined in the Facilities Agreement); (iv) enter into mergers; (v) enter into agreements that restrict its subsidiaries ability to pay dividends or repay intercompany debt; (vi) acquire assets; (vii) enter into or invest in joint venture agreements; (viii) dispose of certain assets; (ix) grant additional guarantees or indemnities; (x) declare or pay cash dividends or make share redemptions; (xi) issue shares; (xii) enter into certain derivatives

Facilities Agreement and Financing Agreement - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

transactions; (xiii) exercise any call option in relation to any perpetual bonds CEMEX issues unless the exercise of the call options does not have a materially negative impact on its cash flow; and (xiv) transfer assets from subsidiaries or more than 10% of shares in subsidiaries into or out of CEMEX España or its subsidiaries if those assets or subsidiaries are not controlled by CEMEX España or any of its subsidiaries.

The Facilities Agreement also contains a number of affirmative covenants that, among other things, require CEMEX to provide periodic financial information to its lenders. However, a number of those covenants and restrictions will automatically cease to apply or become less restrictive if (i) CEMEX s consolidated leverage ratio for the two most recently completed semi-annual testing periods is less than or equal to 3.5 times; and (ii) no default under the Facilities Agreement is continuing. Restrictions that will cease to apply when CEMEX satisfies such conditions include the capital expenditure limitations mentioned above and several negative covenants, including limitations on CEMEX s ability to declare or pay cash dividends and distributions to shareholders, limitations on CEMEX s ability to repay existing financial indebtedness, certain asset sale restrictions, the quarterly cash balance sweep, certain mandatory prepayment provisions, and restrictions on exercising call options in relation to any perpetual bonds CEMEX issues (provided that creditors will continue to receive the benefit of any restrictive covenants that other creditors receive relating to other financial indebtedness of CEMEX in excess of US$75). At such time, several baskets and caps relating to negative covenants will also increase, including permitted financial indebtedness, permitted guarantees and limitations on liens. However, CEMEX cannot assure that it will be able to meet the conditions for these restrictions to cease to apply prior to the final maturity date under the Facilities Agreement.

In addition, the Facilities Agreement contains events of default, some of which may be outside of CEMEX s control. CEMEX cannot assure that it will be able to meet any or all of the above milestones for repaying indebtedness pursuant the Facilities Agreement or redeeming, converting into equity, purchasing, repurchasing or extending the maturities of CEMEX s other indebtedness. Failure to meet any of these milestones will result in a spring back of the maturity date of CEMEX s indebtedness under the Facilities Agreement, and CEMEX cannot assure that at such time it will be able to repay such indebtedness. Moreover, CEMEX cannot assure that it will be able to comply with the restrictive covenants and limitations contained in the Facilities Agreement. CEMEX s failure to comply with such covenants and limitations could result in an event of default, which could materially and adversely affect CEMEX s business and financial condition.

Financial Covenants

The Facilities Agreement requires the compliance with financial ratios calculated on a consolidated basis, which mainly include: a) the ratio of net debt to operating EBITDA (leverage ratio); and b) the ratio of operating EBITDA to interest expense (coverage ratio). Pursuant to the Facilities Agreement, beginning on September 17, 2012, at each compliance date, financial ratios should be calculated according to the formulas established in the debt contracts using the consolidated amounts under IFRS. During 2011 and 2010, financial ratios were calculated according to the formulas established in the Financing Agreement using the consolidated amounts under MFRS. The determinations of financial ratios require in most cases *pro forma* adjustments, according to the definitions of the contracts that differed from terms defined under IFRS and MFRS.

Based on the Facilities Agreement, CEMEX must comply with consolidated financial ratios and tests under IFRS, including a coverage ratio for each period of four consecutive fiscal quarters (measured semi-annually) of not less than (i) 1.50 times for the period ending on December 31, 2012 up to and including the period ending on June 30, 2014, (ii) 1.75 times from the period ending on December 31, 2014 up to and including the period

Table of Contents

Financial Covenants - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

ending on June 30, 2015, (iii) 1.85 times for the period ending on December 31, 2015, (iv) 2.0 times for the period ending on June 30, 2016, and (v) 2.25 times for the period ending on December 31, 2016. In addition, the Facilities Agreement allows CEMEX a maximum consolidated leverage ratio for each period of four consecutive fiscal quarters (measured semi-annually) not to exceed: (i) 7.0 times for each period from the period ending on December 31, 2012 up to and including the period ending on December 31, 2013, (ii) 6.75 times for the period ending on June 30, 2014, (iii) 6.5 times for the period ending on December 31, 2014, (iv) 6.0 times for the period ending on June 30, 2015, (v) 5.5 times for the period ending on December 31, 2015, (vi) 5.0 times for the period ending on June 30, 2016, and (vii) 4.25 times for the period ending on December 31, 2016. Applicable during 2011 and 2010, and resulting from the amendments made to the original Financing Agreement on October 25, 2010, CEMEX had to comply with consolidated financial ratios and tests under MFRS, including a coverage ratio of not less than 1.75 times for the periods ended on December 31, 2011 and 2010. In addition, the maximum leverage ratio must not have exceeded 7.75 times for the period ending December 31, 2010 and 7.0 times for the period ending December 31, 2011.

CEMEX s ability to comply with these ratios may be affected by economic conditions and volatility in foreign exchange rates, as well as by overall conditions in the financial and capital markets. For the compliance periods ended as of December 31, 2012, 2011 and 2010, taking into account the Facilities Agreement and the amended Financing Agreement, as applicable, and based on its IFRS and MFRS amounts, as applicable, CEMEX, S.A.B. de C.V. and its subsidiaries were in compliance with the financial covenants imposed by its debt contracts.

The main consolidated financial ratios as of December 31, 2012, 2011 and 2010 were as follows:

		IFRS Consolidated financial ratios	MFRS Consolidated financial ratios	
		2012	**2011**	**2010**
Leverage ratio **1, 2**	**Limit**	=< 7.00	=< 7.00	=< 7.75
	Calculation	5.44	6.64	7.43
Coverage ratio **3**	**Limit**	> 1.50	> 1.75	> 1.75
	Calculation	2.10	1.88	1.95

1 The leverage ratio is calculated in pesos by dividing funded debt by pro forma Operating EBITDA for the last twelve months as of the calculation date. Funded debt equals debt, as reported in the balance sheet excluding finance leases, plus perpetual debentures and guarantees, plus or minus the fair value of derivative financial instruments, as applicable, among other adjustments.

2 Pro forma Operating EBITDA represents, all calculated in pesos, Operating EBITDA for the last twelve months as of the calculation date, plus the portion of Operating EBITDA referring to such twelve-month period of any significant acquisition made in the period before its consolidation in CEMEX, minus Operating EBITDA referring to such twelve-month period of any significant disposal that had already been liquidated.

3 The coverage ratio is calculated in pesos using the amounts from the financial statements, by dividing the pro forma operating EBITDA by the financial expense for the last twelve months as of the calculation date. Financial expense includes interest accrued on the perpetual debentures.

Table of Contents

Financial Covenants - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

For 2013 and going forward, CEMEX believes that it will continue to comply with its covenants under its Facilities Agreement, as it is expecting to benefit from cost savings programs implemented during 2012 and 2011, favorable market conditions in some of its key markets and decreasing costs for key inputs such as energy. Furthermore, CEMEX has an asset disposal plan in place which, as in prior years, is expected to support CEMEX s efforts to reduce its overall debt.

CEMEX will classify all of its outstanding debt as current debt in its balance sheet if: 1) as of any relevant measurement date on which CEMEX fails to comply with the financial ratios agreed upon pursuant to the Facilities Agreement; or 2) as of any date prior to a subsequent measurement date on which CEMEX expects not to be in compliance with its financial ratios agreed upon under the Facilities Agreement, in the absence of: a) amendments and/or waivers covering the next succeeding 12 months; b) high probability that the violation will be cured during any agreed upon remediation period and be sustained for the next succeeding 12 months; and/or c) a signed refinancing agreement to refinance the relevant debt on a long-term basis. Moreover, concurrent with the aforementioned classification of debt in the short-term, the noncompliance of CEMEX with the financial ratios agreed upon pursuant to the Facilities Agreement or, in such event, the absence of a waiver of compliance or a negotiation thereof, after certain procedures upon CEMEX s lenders request, they would call for the acceleration of payments due under the Facilities Agreement. That scenario will have a material adverse effect on CEMEX s liquidity, capital resources and financial position.

16B) OTHER FINANCIAL OBLIGATIONS

As of December 31, 2012 and 2011, other financial obligations in the consolidated balance sheet are detailed as follows:

		2012				2011		
		Short-term	Long-term	Total		Short-term	Long-term	Total
I. Convertible subordinated notes due 2018	Ps		7,100	7,100	Ps		7,451	7,451
I. Convertible subordinated notes due 2016			10,768	10,768			11,236	11,236
II. Convertible subordinated notes due 2015			8,397	8,397			8,829	8,829
III. Convertible securities due 2019		152	1,561	1,713		131	1,703	1,834
IV. Liabilities secured with accounts receivable		6,013	2,500	8,513		7,052	2,500	9,552
V. Capital leases		813	2,587	3,400		528	1,471	1,999
	Ps	6,978	32,913	39,891	Ps	7,711	33,190	40,901

Financial instruments convertible into CEMEX s CPOs contain components of liability and equity, which are recognized differently depending upon whether the instrument is mandatorily convertible or is optionally convertible by election of the note holders (note 2L).

Table of Contents

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

I. Optional convertible subordinated notes due in 2016 and 2018

On March 15, 2011, CEMEX, S.A.B. de C.V. closed the offering of US$978 (Ps11,632) aggregate principal amount of 3.25% convertible subordinated notes due in 2016 (the 2016 Notes) and US$690 (Ps8,211) aggregate principal amount of 3.75% convertible subordinated notes due in 2018 (the 2018 Notes). The notes are subordinated to all of CEMEX s liabilities and commitments. The notes are convertible into a fixed number of CEMEX s ADSs, at the holder s election, at any time after June 30, 2011 and are subject to antidilution adjustments. As of December 31, 2012 and 2011, the conversion price per ADS was US$10.4327 and US$10.85, respectively. A portion of the net proceeds from this transaction were used to fund the purchase of capped call transactions (note 16D), which are generally expected to reduce the potential dilution cost to CEMEX, S.A.B. de C.V. upon future conversion of the 2016 Notes and the 2018 Notes. The fair value of the conversion option as of the issuance date amounted to approximately Ps3,959, which considering the functional currency of the issuer, was recognized as a derivative instrument within Other non-current liabilities (note 16D). Changes in fair value of the conversion option generated a net loss of approximately Ps1,094 (US$88) in 2012 and a net gain of approximately Ps167 (US$13) in 2011, recognized within other financial (expense) income, net. After antidilution adjustments, the conversion rate as of December 31, 2012 and 2011 was 95.8525 ADS and 92.1659 ADS, respectively, per each 1 thousand dollars principal amount of such notes.

II. Optional convertible subordinated notes due in 2015

On March 30, 2010, CEMEX, S.A.B. de C.V. issued US$715 (Ps8,837) aggregate principal amount of 4.875% Optional Convertible Subordinated Notes due 2015 (the 2015 Notes). The notes are subordinated to all of CEMEX s liabilities and commitments. The notes are convertible into a fixed number of CEMEX s ADSs, at the holder s election, and are subject to antidilution adjustments. As of December 31, 2012 and 2011, the conversion price per ADS was US$12.0886 and US$12.5721, respectively. In connection with the offering, CEMEX, S.A.B. de C.V. entered into a capped call transaction expected to generally reduce the potential dilution cost to CEMEX, S.A.B. de C.V. upon future conversion of the notes (note 16D). The fair value of the conversion option as of the issuance date amounted to Ps1,232, which considering the functional currency of the issuer was recognized as a derivative instrument within Other non-current liabilities (note 16D). Changes in fair value of the conversion option generated a net loss of approximately Ps114 (US$9) in 2012 and a net gain of approximately Ps39 (US$3) in 2011, recognized within other financial (expense) income, net. After antidilution adjustments, the conversion rate as of December 31, 2012 and 2011 was 82.7227 ADS and 79.5411 ADS, respectively, per each 1 thousand dollars principal amount of such notes.

III. Mandatorily convertible securities due in 2019

In December 2009, CEMEX, S.A.B. de C.V. completed its offer to exchange CBs issued in Mexico with maturities between 2010 and 2012, into mandatorily convertible securities for approximately Ps4,126 (US$315). Reflecting antidilution adjustments, at their scheduled conversion in 2019 or earlier if the price of the CPO reaches approximately Ps31.9 the securities will be mandatorily convertible into approximately 194 million CPOs at a conversion price of approximately Ps21.269 per CPO. During their tenure, the securities bear interest at an annual rate of 10% payable quarterly. Holders have an option to voluntarily convert their securities, after the first anniversary of their issuance, on any interest payment date into CPOs. The equity component represented by the fair value of the conversion option as of the issuance date of Ps1,971 was recognized within Other equity reserves.

Table of Contents

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

IV. Liabilities secured with accounts receivable

As mentioned in note 9, as of December 31, 2012 and 2011, CEMEX maintained securitization programs for the sale of trade accounts receivable established in Mexico, the United States, France and the United Kingdom, and terminated its program in Spain during October 2012, by means of which, CEMEX effectively surrenders control associated with the trade accounts receivable sold and there is no guarantee or obligation to reacquire the assets. However, CEMEX retains certain residual interest in the programs and/or maintains continuing involvement with the accounts receivable. Based on IAS 39, CEMEX recognizes cash flows received, that is the funded amounts of the trade receivables sold within Other financial obligations , and maintains the receivables sold in the balance sheet.

V. Capital leases

CEMEX has several operating and administrative assets, including buildings and mobile equipment, under capital lease contracts. Future payments associated with these contracts are presented in note 23E.

16C) FAIR VALUE OF FINANCIAL INSTRUMENTS

Financial assets and liabilities

CEMEX s carrying amounts of cash, trade accounts receivable, other accounts receivable, trade accounts payable, other accounts payable and accrued expenses, as well as short-term debt, approximate their corresponding estimated fair values due to the short-term maturity and revolving nature of these financial assets and liabilities. Temporary investments (cash equivalents) and certain long-term investments are recognized at fair value, considering to the extent available, quoted market prices for the same or similar instruments. The estimated fair value of long-term debt is either based on estimated market prices for such or similar instruments, considering interest rates currently available for CEMEX to negotiate debt with the same maturities, or determined by discounting future cash flows using market-based interest rates currently available to CEMEX. As of December 31, 2012 and 2011, the carrying amounts of financial assets and liabilities and their respective fair values were as follows:

		2012			2011	
		Carrying amount	Fair value		Carrying amount	Fair value
Financial assets						
Derivative instruments (note 13B)	Ps	4,279	4,279	Ps	1,787	1,793
Other investments and non-current accounts receivable (note 13B)		4,321	4,121		8,808	8,453
	Ps	8,600	8,400	Ps	10,595	10,246
Financial liabilities						
Long-term debt (note 16A)		177,539	188,128		203,798	176,867
Other financial obligations (note 16B)		32,913	42,651		33,190	28,788
Derivative instruments (notes 16D and 17)		5,451	5,451		998	998
	Ps	215,903	236,230	Ps	237,986	206,653

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

Fair Value Hierarchy

As mentioned in note 2A, CEMEX applies IFRS 13 for fair value measurements of financial assets and financial liabilities recognized or disclosed at fair value. Assets and liabilities carried at fair value in the consolidated balance sheets as of December 31, 2012 and 2011, are included in the following fair value hierarchy categories:

2012		Level 1	Level 2	Level 3	Total
Assets measured at fair value					
Derivative instruments (note 13B)	Ps		4,279		4,279
Investments available-for-sale (note 13B)		211			211
Investments held for trading (note 13B)			366		366
	Ps	211	4,645		4,856
Liabilities measured at fair value					
Derivative instruments (note 16D and 17)	Ps		5,451		5,451

2011		Level 1	Level 2	Level 3	Total
Assets measured at fair value					
Derivative instruments (note 13B)	Ps		1,793		1,793
Investments available-for-sale (note 13B)		2,572			2,572
Investments held for trading (note 13B)			310		310
	Ps	2,572	2,103		4,675
Liabilities measured at fair value					
Derivative instruments (note 16D and 17)	Ps		998		998

16D) DERIVATIVE FINANCIAL INSTRUMENTS

During the reported periods, CEMEX held interest rate swaps, as well as forward contracts and other derivative instruments on CEMEX, S.A.B. de C.V. s own shares and third parties shares, with the objective of, as the case may be: a) changing the risk profile associated with the price of raw materials and other energy projects; and b) other corporate purposes.

As of December 31, 2012 and 2011, the notional amounts and fair values of CEMEX s derivative instruments were as follows:

	2012		2011	
(U.S. dollars millions)	**Notional amount**	**Fair value**	**Notional amount**	**Fair value**

I.Interest rate swaps	US$	181	49	189	46
II.Equity forwards on third party shares		27		46	1
III.Forward instruments over indexes		5		5	
IV.Options on CEMEX s own shares		2,743	(138)	2,743	11
	US$	2,956	(89)	2,983	58

The fair values determined by CEMEX for its derivative financial instruments are Level 2. There is no direct measure for the risk of CEMEX or its counterparties in connection with the derivative instruments. Therefore, the risk factors

Table of Contents

Derivative financial instruments - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

applied for CEMEX s assets and liabilities originated by the valuation of such derivatives were extrapolated from publicly available risk discounts for other public debt instruments of CEMEX and its counterparties.

The caption Other financial income (expenses), net includes gains and losses related to the recognition of changes in fair values of the derivative instruments during the applicable period and that represented a net loss of approximately Ps98 (US$8) in 2012 and a net gain of approximately Ps329 (US$26) in 2011. As of December 31, 2012 and 2011, pursuant to net balance settlement agreements, cash deposits in margin accounts that guaranteed obligations through derivative financial instruments were offset with the fair value of the derivative instruments for approximately US$91 (Ps1,168) and US$234 (Ps3,266), respectively.

The estimated fair value of derivative instruments fluctuates over time and is determined by measuring the effect of future relevant economic variables according to the yield curves shown in the market as of the reporting date. These values should be analyzed in relation to the fair values of the underlying transactions and as part of CEMEX s overall exposure attributable to fluctuations in interest rates and foreign exchange rates. The notional amounts of derivative instruments do not represent amounts exchanged by the parties, and consequently, there is no direct measure of CEMEX s exposure to the use of these derivatives. The amounts exchanged are determined based on the notional amounts and other terms included in the derivative instruments.

I. Interest rate swap contracts

As of December 31, 2012 and 2011, CEMEX had an interest rate swap maturing in September 2022 associated with agreements entered into by CEMEX for the acquisition of electric energy in Mexico (note 23C), which fair value represented assets of approximately US$49 and US$46, respectively. Pursuant to this instrument, during the tenure of the swap and based on its notional amount, CEMEX will receive a fixed rate of 5.4% and will pay LIBOR, which is the international reference rate for debt denominated in U.S. dollars. As of December 31, 2012 and 2011, LIBOR was 0.513% and 0.7705%, respectively. Changes in the fair value of this interest rate swap generated gains of approximately US$2 (Ps35) in 2012, US$12 (Ps150) in 2011 and US$8 (Ps99) in 2010, recognized in the statements of operations for each period.

II. Equity forwards in third party shares

As of December 31, 2012 and 2011, CEMEX had forward contracts to be settled in cash over the price of 59.5 million and 119 million CPOs of Axtel, respectively. During April 2012, at maturity of one of the contracts for 59.5 million CPOs of Axtel, by agreement with the counterparty CEMEX elected to acquire the underlying shares. The remaining contract matures in October 2013. These contracts were intended to maintain the exposure to changes in the price of such entity. Changes in the fair value of this instrument generated losses of approximately US$7 (Ps100) in 2012, US$35 (Ps437) in 2011 and US$42 (Ps526) in 2010, recognized in the statements of operations for each period.

III. Forward instruments over indexes

As of December 31, 2012 and 2011, CEMEX held forward derivative instruments over the TRI (Total Return Index) of the Mexican Stock Exchange, with maturity in April and July 2013. By means of these instruments, CEMEX maintained exposure to increases or decreases of such index. TRI expresses the market return on stocks based on market capitalization of the issuers comprising the index. Changes in the fair value of these instruments generated a gain of approximately US$1 (Ps13) in 2012, a loss of US$1 (Ps13) in 2011, and a gain of approximately US$5 (Ps67) in 2010, recognized in the statements of operations for each year.

Table of Contents

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

IV. Options on CEMEX s own shares

In August 2011, upon their maturity, CEMEX settled through a payment of approximately US$188 (Ps2,346), options based on the price of CEMEX s ADS for a notional amount of US$500, structured within a debt transaction of US$500 (Ps6,870) issued in June 2008. By means of these options, considering that the price per ADS remained below approximately US$20.5, as adjusted as of December 31, 2010, CEMEX paid the maximum net interest rate of 12% on the related debt transaction. CEMEX could have gradually obtained a net interest rate of zero on this debt, had the ADS price exceeded approximately US$30.4, as adjusted as of December 31, 2010. Changes in the fair value of these options represented losses of approximately US$2 (Ps29) in 2011 and US$27 (Ps346) in 2010.

On March 15, 2011, in connection with the offering of the 2016 Notes and the 2018 Notes and to effectively increase the conversion price for CEMEX CPOs under such notes, CEMEX, S.A.B. de C.V. entered into a capped call transaction over approximately 160 million ADSs (94 million ADS maturing in March 2016 and 66 million ADSs maturing in March 2018), by means of which, for the 2016 Notes, at maturity of the notes in March 2016, if the price per ADS is above US$10.4327, CEMEX will receive in cash the difference between the market price of the ADS and US$10.4327, with a maximum appreciation per ADS of US$4.8151. Likewise, for the 2018 Notes, at maturity of the notes in March 2018, if the price per ADS is above US$10.4327, CEMEX will receive in cash the difference between the market price of the ADS and US$10.433, with a maximum appreciation per ADS of US$6.4201. CEMEX paid a total premium of approximately US$222. As of December 31, 2012 and 2011, the fair value of such options represented an asset of approximately US$226 (Ps2,899) and US$71 (Ps984), respectively. During 2012 and 2011, changes in the fair value of these instruments generated a gain of approximately US$155 (Ps1,973) and a loss of approximately US$153 (Ps1,906), respectively, recognized within Other financial income (expense), net in the statements of operations. In addition, considering that the currency in which the notes are denominated and the functional currency of the issuer differ, CEMEX separates the conversion options embedded in the 2016 Notes and the 2018 Notes and recognizes them at fair value, which as of December 31, 2012 and 2011, resulted in a liability of approximately US$301 (Ps3,862) and US$58 (Ps806), respectively. Changes in fair value of the conversion options generated a loss in 2012 of approximately US$243 (Ps3,078) and a gain in 2011 of approximately US$279 (Ps3,482).

On March 30, 2010, in connection with the offering of the 2015 Notes and to effectively increase the conversion price for CEMEX s CPOs under such notes, CEMEX, S.A.B. de C.V. entered into a capped call transaction over approximately 59.1 million ADSs maturing in March 2015, by means of which, at maturity of the notes, if the price per ADS is above US$12.0086, CEMEX will receive in cash the difference between the market price of the ADS and US$12.0886, with a maximum appreciation per ADS of US$4.6494. CEMEX paid a premium of approximately US$105. As of December 31, 2012 and 2011, the fair value of such options represented an asset of approximately US$58 (Ps751) and US$11 (Ps157), respectively. During 2012, 2011 and 2010, changes in the fair value of this contract generated a gain of approximately US$47 (Ps594), a loss of approximately US$79 (Ps984) and a loss of approximately US$16 (Ps201), respectively, which were recognized within Other financial income (expense), net in the statements of operations. In addition, considering that the currency in which the notes are denominated and the functional currency of the issuer differ, CEMEX separates the conversion option embedded in the 2015 Notes and recognizes it at fair value, which as of December 31, 2012 and 2011, resulted in liabilities of approximately US$64 (Ps828) and US$8 (Ps120), respectively. Changes in fair value of the conversion option generated a loss of approximately US$56 (Ps708) in 2012, a gain of approximately US$97 (Ps1,211) in 2011 and a loss of approximately US$5 (Ps67) in 2010.

Table of Contents

Options on CEMEX s own shares - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

As of December 31, 2012 and 2011, CEMEX had granted a guarantee for a notional amount of approximately US$360, in connection with put option transactions on CEMEX s CPOs entered into by Citibank with a Mexican trust that CEMEX established on behalf of its Mexican pension fund and certain of CEMEX s directors and current and former employees in April 2008, as described in note 23C, which fair value, net of deposits in margin accounts, represented a net liability of approximately US$58 (Ps740) and US$4 (Ps58), as of December 31, 2012 and 2011, respectively. Changes in fair value were recognized in the statements of operations within Other financial income (expense), net, representing a gain of approximately US$95 (Ps1,198) in 2012, a loss of approximately US$92 (Ps1,145) in 2011 and a gain of approximately US$5 (Ps69) in 2010. As of December 31, 2012 and 2011, cash deposits in margin accounts were approximately US$76 (Ps975) and US$225 (Ps3,141), respectively.

16E) RISK MANAGEMENT

Since the beginning of 2009, with the exception of the capped call transactions entered into in March 2010 and March 2011 in connection with CEMEX s 2015 Notes, 2016 Notes and 2018 Notes (notes 16B and 16D), CEMEX has been reducing the aggregate notional amount of its derivatives, thereby reducing the risk of cash margin calls. This initiative included closing substantially all notional amounts of derivative instruments related to CEMEX s debt (currency and interest rate derivatives), which was completed during April 2009. The Facilities Agreement significantly restricts CEMEX s ability to enter into derivative transactions.

Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. Changes in the market interest rates of long-term debt with fixed interest rates only affects CEMEX s results if such debt is measured at fair value. All of CEMEX s fixed-rate long-term debt is carried at amortized cost and therefore is not subject to interest rate risk. CEMEX s exposure to the risk of changes in market interest rates relates primarily to its long-term debt obligations with floating interest rates. As of December 31, 2012 and 2011, CEMEX was subject to the volatility of floating interest rates, which, if such rates were to increase, may adversely affect its financing cost and increase its net loss. CEMEX manages its interest rate risk by balancing its exposure to fixed and variable rates while attempting to reduce its interest costs.

As of December 31, 2012 and 2011, approximately 35% and approximately 52%, respectively, of CEMEX s long-term debt was denominated in floating rates at a weighted average interest rate of LIBOR plus 456 basis points in 2012 and 454 basis points in 2011. As of December 31, 2012 and 2011, if interest rates at that date had been 0.5% higher, with all other variables held constant, CEMEX s net loss for 2012 and 2011 would have increased by approximately US$25 (Ps315) and US$40 (Ps550), respectively, as a result of higher interest expense on variable rate denominated debt.

Foreign currency risk

Foreign currency risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. CEMEX s exposure to the risk of changes in foreign exchange rates relates primarily to its operating activities. Due to its geographic diversification, CEMEX s revenues and costs are generated and settled in various countries and in different currencies. For the year ended December 31, 2012, approximately 21% of CEMEX s net sales, before eliminations resulting from consolidation, were generated in Mexico, 19% in the United States, 7% in the United Kingdom, 7% in Germany, 6% in France, 6% in the Rest of Northern Europe geographic segment, 2% in Spain, 3% in Egypt, 4% in the Rest of Mediterranean segment, 6% in Colombia, 8% in the Rest of South America and the Caribbean, 3% in Asia and 8% in CEMEX s other operations.

Table of Contents

Foreign currency risk - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

As of December 31, 2012, approximately 81% of CEMEX s financial debt was Dollar-denominated, approximately 17% was Euro-denominated, approximately 1% was Peso-denominated and immaterial amounts were denominated in other currencies; therefore, CEMEX had a foreign currency exposure arising from the Dollar-denominated financial debt, and the Euro-denominated financial debt, versus the currencies in which CEMEX s revenues are settled in most countries in which it operates. CEMEX cannot guarantee that it will generate sufficient revenues in Dollars and Euros from its operations to service these obligations. As of December 31, 2012 and 2011, CEMEX had not implemented any derivative financing hedging strategy to address this foreign currency risk.

Foreign exchange fluctuations occur when the Parent Company or any subsidiary incurs monetary assets or liabilities in a currency different from its functional currency. These translation gains and losses are recorded in the consolidated statements of operations, except for exchange fluctuations associated with foreign currency indebtedness directly related to the acquisition of foreign entities and related parties long-term balances denominated in foreign currency, for which the resulting gains or losses are reported in other comprehensive income. As of December 31, 2012 and 2011, excluding from the sensitivity analysis the impact of translating the net assets of foreign operations into CEMEX s reporting currency, considering a hypothetic 10% strengthening of the U.S. dollar against the Mexican peso, with all other variables held constant, CEMEX s net loss for 2012 and 2011 would have increased by approximately US$108 (Ps1,522) and US$41 (Ps578), respectively, as a result of higher foreign exchange losses on CEMEX s dollar-denominated net monetary liabilities held in consolidated entities with other functional currencies. Conversely, a hypothetic 10% weakening of the U.S. dollar against the Mexican peso would have the opposite effect.

As of December 31, 2012 and 2011, CEMEX s consolidated net monetary assets (liabilities) by currency are as follows:

		2012	2011
Monetary assets	Ps	55,435	62,139
Monetary liabilities		(310,102)	(352,275)
Net monetary liabilities	Ps	(254,667)	(290,136)
Out of which:			
Dollars	Ps	(167,157)	(169,139)
Pesos		(30,989)	(26,701)
Other currencies		(56,521)	(94,296)
	Ps	(254,667)	(290,136)

Equity risk

As of December 31, 2012 and 2011, equity risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in the market price of CEMEX s and/or third party s shares. As described in note 16D, CEMEX has entered into equity forward contracts on Axtel CPOs and the TRI index, as well as options and guarantees of a put option transaction based on the price of CEMEX s own CPOs. Under these equity derivative instruments, there is a direct relationship in the change in the fair value of the derivative with the change in value of the underlying share or index. All changes in fair value of such equity derivative instruments are recognized through the statements of operations as part of Other financial income (expense), net. A significant decrease in the market price of CEMEX s CPOs and third party shares would negatively affect CEMEX s liquidity and financial position.

Table of Contents

Equity risk - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

As of December 31, 2012 and 2011, the potential change in the fair value of CEMEX s equity forward contracts in Axtel s shares that would result from a hypothetical, instantaneous decrease of 10% in the market price of Axtel CPOs, with all other variables held constant, would have increased CEMEX s net loss for 2012 and 2011 by approximately US$1 (Ps17) and US$4 (Ps53), respectively, as a result of additional negative changes in fair value associated with such forward contracts. A 10% hypothetical increase in the CPO price would generate approximately the opposite effect.

As of December 31, 2012 and 2011, the potential change in the fair value of CEMEX s forward contracts in the TRI index that would result from a hypothetical, instantaneous decrease of 10% in the aforementioned index, with all other variables held constant, would have increased CEMEX s net loss for 2012 and 2011 by approximately US$1 (Ps6) and US$1 (Ps14), respectively, as a result of additional negative changes in fair value associated with such forward contracts. A 10% hypothetical increase in the TRI index would generate approximately the opposite effect.

As of December 31, 2012 and 2011, the potential change in the fair value of CEMEX s options (capped call) and the put option transaction based on the price of CEMEX s own CPOs that would result from a hypothetical, instantaneous decrease of 10% in the market price of CEMEX s CPOs, with all other variables held constant, would have increased CEMEX s net loss for 2012 and 2011 by approximately US$76 (Ps971) and US$24 (Ps332), respectively, as a result of additional negative changes in fair value associated with these contracts. A 10% hypothetical increase in the CPO price would generate approximately the opposite effect.

In addition, even though the changes in fair value of CEMEX s embedded conversion options in the convertible notes affect the statements of operations, they do not imply any risk or variability in cash flows, considering that through their exercise, CEMEX will settle a fixed amount of debt with a fixed amount of shares. As of December 31, 2012 and 2011, the potential change in the fair value of these embedded conversion options that would result from a hypothetical, instantaneous decrease of 10% in the market price of CEMEX s CPOs, with all other variables held constant, would have decreased CEMEX s net loss for 2012 and 2011 by approximately US$89 (Ps1,148) and US$17 (Ps240), respectively, as a result of additional positive changes in fair value associated with this option. A 10% hypothetical increase in the CPO price would generate approximately the opposite effect.

Liquidity risk

Liquidity risk is the risk that CEMEX will not have sufficient funds available to meet its obligations. CEMEX has satisfied its operating liquidity needs primarily through the operations of its subsidiaries and expect to continue to do so for both the short and long-term. Although cash flow from our operations has historically met CEMEX s overall liquidity needs for operations, servicing debt and funding capital expenditures and acquisitions, its subsidiaries are exposed to risks from changes in foreign currency exchange rates, price and currency controls, interest rates, inflation, governmental spending, social instability and other political, economic and/or social developments in the countries in which they operate, any one of which may materially increase CEMEX net loss and reduce cash from operations. Consequently, in order to meet its liquidity needs, CEMEX also relies on cost-cutting and operating improvements to optimize capacity utilization and maximize profitability, as well as borrowing under credit facilities, proceeds of debt and equity offerings, and proceeds from asset sales. CEMEX s consolidated net cash flows provided by operating activities, as presented in its consolidated statements of cash flows, were approximately Ps5,624 in 2012, Ps6,486 in 2011 and Ps6,674 in 2010. The maturities of CEMEX s contractual obligations are included in note 23E.

The requirement of margin calls based on the relevant master agreements under CEMEX s derivative instruments can have a significant negative effect on CEMEX s liquidity position and can impair CEMEX s ability to service its

Table of Contents

Liquidity risk - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

debt and fund its capital expenditures. In addition to the current amount of margin calls previously described as of December 31, 2012 referring to CEMEX s derivative financial instruments positions of approximately Ps1,169 (US$91), the potential requirement for additional margin calls that would result from reasonable and hypothetical instantaneous changes in the key variables associated with CEMEX s derivative instruments is as follows:

As of December 31, 2012, the potential requirement for additional margin calls that would result from a hypothetical instantaneous decrease of 10% in the value of the shares of Axtel, with all other variables held constant, was approximately US$1.

As of December 31, 2012, the potential requirement for additional margin calls that would result from a hypothetical instantaneous decrease of 10% in CEMEX s CPO price, with all other variables held constant, was approximately US$36.

17) OTHER CURRENT AND NON-CURRENT LIABILITIES

As of December 31, 2012 and 2011, consolidated other current accounts payable and accrued expenses were as follows:

		2012	2011
Provisions	Ps	9,496	11,625
Other accounts payable and accrued expenses		4,174	4,056
Advances from customers		1,641	1,830
Interest payable		3,003	3,134
Current liabilities for valuation of derivative instruments		623	2
Dividends payable		30	33
	Ps	18,967	20,680

Current provisions primarily consist of employee benefits accrued at the balance sheet date, insurance payments, and accruals related to legal and environmental assessments expected to be settled in the short-term. These amounts are revolving in nature and are expected to be settled and replaced by similar amounts within the next 12 months.

As of December 31, 2012 and 2011, other non-current liabilities, which include the best estimate of cash flows with respect to diverse issues where CEMEX is determined to be responsible and which are expected to be settled over a period greater than 12 months, were as follows:

		2012	2011
Asset retirement obligations **1**	Ps	7,062	5,377

Environmental liabilities **2**		520	1,174
Accruals for legal assessments and other responsibilities **3**		7,412	11,816
Non-current liabilities for valuation of derivative instruments		4,828	996
Other non-current liabilities and provisions **4**		12,782	16,179
	Ps	32,604	35,542

1 Provisions for asset retirement include future estimated costs for demolition, cleaning and reforestation of production sites at the end of their operation, which are initially recognized against the related assets and are depreciated over their estimated useful life.

F-70

Table of Contents

Other current and non-current liabilities - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

2 Environmental liabilities include future estimated costs arising from legal or constructive obligations, related to cleaning, reforestation and other remedial actions to remediate damage caused to the environment. The expected average period to settle these obligations is greater than 15 years.

3 Provisions for legal claims and other responsibilities include items related to tax contingencies.

4 As of December 31, 2012 and 2011, includes approximately Ps12,526 and Ps11,717, respectively, of the non-current portion of taxes payable recognized in 2009 as a result of changes to the tax consolidation regime in Mexico (note 19D). Approximately Ps2,020 and Ps693 as of December 31, 2012 and 2011, respectively, were included within current taxes payable.

As of December 31, 2012 and 2011, some significant proceedings that gave rise to a portion of the carrying amount of CEMEX s other current and non-current liabilities and provisions are detailed in note 24A.

Changes in consolidated current and non-current provisions for the years ended December 31, 2012 and 2011 were as follows:

		2012						
		Asset retirement obligations	**Environmental liabilities**	**Accruals for legal assessments**	**Valuation of derivative instruments**	**Other provisions**	**Total**	**Total 2011**
Balance at beginning of period	Ps	5,377	1,174	11,816	998	27,804	47,169	40,362
Additions or increase in estimates		310	75	132	5,241	29,768	35,526	19,602
Releases or decrease in estimates		(154)	(23)	(1,002)		(33,070)	(34,249)	(15,738)
Additions due to business combinations								27
Reclassification from current to non-current liabilities, net		162	133	(312)		(742)	(759)	209
Accretion expense		213				(1,176)	(963)	(708)
Foreign currency translation		1,154	(839)	(3,222)	(787)	(307)	(4,001)	3,415
Balance at end of period	Ps	7,062	520	7,412	5,452	22,277	42,723	47,169
Out of which:								
Current provisions	Ps				623	9,496	10,119	11,627

18) PENSIONS AND POSTRETIREMENT EMPLOYEE BENEFITS

Defined contribution pension plans

The costs of defined contribution plans for the years ended December 31, 2012, 2011 and 2010 were approximately Ps528, Ps357 and Ps550, respectively. CEMEX contributes periodically the amounts offered by the pension plan to the employee s individual accounts, not retaining any remaining liability as of the balance sheet date.

Table of Contents

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

Defined benefit pension plans

Actuarial results related to pension and other postretirement benefits are recognized in the results and/or in other comprehensive income (loss) for the period in which they are generated, as applicable. For the years ended December 31, 2012, 2011 and 2010, the effects of pension plans and other postretirement benefits are summarized as follows:

		Pensions			Other benefits			Total		
Net period cost (revenue):		**2012**	**2011**	**2010**	**2012**	**2011**	**2010**	**2012**	**2011**	**2010**
Recorded in operating costs and expenses										
Service cost	Ps	138	330	273	59	63	52	197	393	325
Past service cost		(1,454)	(510)	(2)	(21)	(40)	(6)	(1,475)	(550)	(8)
Loss (gain) for settlements and curtailments		(513)	(254)	(11)	(18)	(95)		(531)	(349)	(11)
		(1,829)	(434)	260	20	(72)	46	(1,809)	(506)	306
Recorded in other financial income (expenses), net										
Interest cost		1,712	1,792	1,826	93	100	99	1,805	1,892	1,925
Actuarial return on plan assets		(1,201)	(1,328)	(1,314)	(2)	(2)	(3)	(1,203)	(1,330)	(1,317)
		511	464	512	91	98	96	602	562	608
Recorded in other comprehensive income for the period										
Actuarial (gains) losses for the period		843	1,123	1,097	97	(81)	95	940	1,042	1,192
	Ps	(475)	1,153	1,869	208	(55)	237	(267)	1,098	2,106

Defined benefit pension plans - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

The reconciliations of the actuarial benefits obligations, pension plan assets, and liabilities recognized in the balance sheet as of December 31, 2012 and 2011 are presented as follows:

		Pensions		Other benefits		Total	
		2012	2011	2012	2011	2012	2011
Change in benefits obligation:							
Projected benefit obligation at beginning of year	Ps	35,716	32,431	1,631	1,653	37,347	34,084
Service cost		138	330	59	63	197	393
Interest cost		1,712	1,792	93	100	1,805	1,892
Actuarial results		1,201	796	99	(86)	1,300	710
Employee contributions		11	55			11	55
Foreign currency translation		(1,525)	3,584	(60)	112	(1,585)	3,696
Settlements and curtailments		(2,209)	(1,447)	(18)	(140)	(2,227)	(1,587)
Benefits paid		(1,604)	(1,825)	(75)	(71)	(1,679)	(1,896)
Projected benefit obligation at end of year		33,440	35,716	1,729	1,631	35,169	37,347
Change in plan assets:							
Fair value of plan assets at beginning of year		22,031	20,388	21	23	22,052	20,411
Return on plan assets		1,558	1,001	2	(2)	1,560	999
Foreign currency translation		(995)	2,409			(995)	2,409
Employer contributions		933	677	75	71	1,008	748
Employee contributions		11	55			11	55
Settlements and curtailments		(243)	(674)			(243)	(674)
Benefits paid		(1,604)	(1,825)	(75)	(71)	(1,679)	(1,896)
Fair value of plan assets at end of year		21,691	22,031	23	21	21,714	22,052
Amounts recognized in the balance sheets:							
Funded status		11,749	13,685	1,706	1,610	13,455	15,295
Unrecognized prior services		3	5	2	25	5	30
Net projected liability recognized in the balance sheet	Ps	11,752	13,690	1,708	1,635	13,460	15,325

As of December 31, 2012 and 2011, plan assets were measured at their estimated fair value and consisted of:

		2012	2011
Cash	Ps	1,353	642
Investments in corporate bonds		3,619	3,354
Investments in government bonds		7,859	9,650
Total fixed-income securities		12,831	13,646
Investment in marketable securities		5,651	4,936
Other investments and private funds		3,232	3,470
Total variable-income securities		8,883	8,406
Total plan assets	Ps	21,714	22,052

Defined benefit pension plans - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

As of December 31, 2012 and 2011, based on the hierarchy of fair values established in IFRS 13 (note 16C), investments in plan assets are summarized as follows:

	2012				2011			
(Millions of pesos)	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Cash	1,353			1,353	319	13	310	642
Investments in corporate bonds	2,685	934		3,619	2,508	846		3,354
Investments in government bonds	7,859			7,859	9,273	377		9,650
Total fixed-income securities	11,897	934		12,831	12,100	1,236	310	13,646
Investment in marketable securities	4,550	1,102		5,652	3,816	1,120		4,936
Other investments and private funds	1,362	1,869		3,231	1,539	1,931		3,470
Total variable-income securities	5,912	2,971		8,883	5,355	3,051		8,406
Total plan assets	17,809	3,905		21,714	17,455	4,287	310	22,052

As of December 31, 2012, estimated payments for pensions and other postretirement benefits over the next ten years were as follows:

		2012
2013	Ps	1,985
2014		1,931
2015		1,940
2016		1,999
2017		2,037
2018 2022		11,344

The most significant assumptions used in the determination of the net periodic cost were as follows:

	2012				2011			
	Mexico	United States	United Kingdom	Range of rates in other countries	Mexico	United States	United Kingdom	Range of rates in other countries
Discount rates	8.0%	5.2%	5.0%	4.2% - 8.5%	8.0%	5.5%	5.3%	4.2% -9.5%
Rate of return on plan assets	9.0%	7.5%	5.6%	3.0% - 9.0%	9.0%	7.5%	6.5%	3.0% -9.0%

Rate of salary increases	4.0%	3.2%	2.5% - 5.0%	4.5%	3.4%	2.3% -4.9%

Table of Contents

Defined benefit pension plans - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

As of December 31, 2012 and 2011, the aggregate projected benefit obligation (PBO) for pension plans and other postretirement benefits and the plan assets by country were as follows:

		2012			2011		
		PBO	Assets	Deficit	PBO	Assets	Deficit
Mexico	Ps	3,595	574	3,021	3,320	269	3,051
United States		5,148	3,106	2,042	5,177	3,426	1,751
United Kingdom		20,162	16,812	3,350	23,039	17,053	5,986
Germany		3,479	272	3,207	3,267	304	2,963
Other countries		2,785	950	1,835	2,544	1,000	1,544
	Ps	35,169	21,714	13,455	37,347	22,052	15,295

Significant events related to employees pension benefits

Applicable regulation in the United Kingdom requires entities to maintain plan assets at a level similar to that of the obligations. In November 2012, in order to better manage CEMEX s obligations under its defined benefit pension schemes and future cash funding requirements thereof, CEMEX implemented an asset backed pension funding arrangement in its operations in the United Kingdom by means of which CEMEX transferred certain operating assets to a non-transferable limited partnership, owned, controlled and consolidated by CEMEX UK with a total value of approximately US$553 and entered into lease agreements for the use of such assets with the limited partnership, in which the pension schemes hold a limited interest. On an ongoing basis CEMEX UK will make annual rental payments of approximately US$20, increasing at annual rate of 5%, which will generate profits in the limited partnership that are then distributed to the pension schemes. As previously mentioned, the purpose of the structure, in addition to provide the pension schemes with secured assets producing an annual return over a period of 25 years, improves the security for the trustees of the pension schemes, and reduces the level of cash funding that CEMEX UK will have to make in future periods. In 2037, on expiry of the lease arrangements, the limited partnership will be terminated and under the terms of the agreement, the remaining assets will be distributed to CEMEX UK. Any future profit distribution from the limited partnership to the pension fund will be considered as an employer contribution to plan assets in the period in which they occur.

On February 29, 2012, CEMEX UK agreed with the trustees of its employees defined benefits pension plans to the modification of certain terms and benefits accrued until February 29, 2012. Beginning on this date, the eligible employees in the United Kingdom started to accrue pension benefits in the existing defined contribution scheme. In addition, during 2012, the adjustment for the change in the consumer price index explained below was extended to retirees under the pension plan. As of the modifications dates, the changes to the defined benefits schemes resulted in a curtailment event and also affected prior service costs, generating a net gain in the operating results for 2012 of approximately Ps1,914 (US$146), mainly related to: 1) the effect of replacing salary increases with inflationary ones for the current retirees, and 2) the removal of certain death and termination benefits. In addition, during 2011, based on the applicable regulation, CEMEX UK communicated to the pension plans trustees its decision to adopt for active beneficiaries the consumer price index for purposes of the restatement by inflation of the related obligations, in replacement of the retail price index, which had been used until 2010, resulting in a decrease in the projected benefit obligation related to past services of approximately Ps509, which is reflected in both the table of the net periodic cost and the table of the reconciliation of the benefits obligations, within the line item of actuarial results. As of December 31, 2012, the deficit in these plans, excluding other postretirement benefits, was approximately Ps2,929 (US$228). These plans in the United Kingdom have been closed to new participants since 2004.

Table of Contents

Significant events related to employees pension benefits - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

During 2011, following the required notices to the plans trustees, CEMEX settled its defined benefit pension plans in the Republic of Ireland. As a result, the available assets were used to provide beneficiaries entitlements in accordance with the agreement reached between CEMEX and the trustees of the relevant pension schemes. As of the wind up date, the total deficit in these schemes was approximately 15 (US$19 or Ps266). As part of the wind up agreement to settle this liability, CEMEX agreed to make contributions of approximately 11, of which approximately 10 will be paid over the next 20 years subject to a compound annual interest rate of 3% from the date of wind up to the date of payment. CEMEX granted security over certain non-operating assets for this payment. The wind up gave rise to a settlement gain in 2011 of approximately 4 (US$6 or Ps70), and the remaining liability as of December 31, 2011 of approximately 10 (US$13 or Ps181) was reclassified to other current and non-current liabilities, as appropriate.

During 2011, CEMEX reduced significantly its workforce subject to defined pension and other postretirement benefits due to the ongoing streamlining of its operations in Mexico. The net periodic cost for 2011 reflects a curtailment gain of approximately Ps107 related to the significant decrease in the number of active participants, of which approximately Ps10 refer to pensions and approximately Ps97 to other postretirement benefits.

Information related to other postretirement benefits

In some countries, CEMEX has established health care benefits for retired personnel limited to a certain number of years after retirement. As of December 31, 2012 and 2011, the projected benefits obligation related to these benefits was approximately Ps1,247 and Ps1,256, respectively. The medical inflation rates used to determine the projected benefits obligation of these benefits for Mexico were 7.0% in 2012 and 7.0% in 2011, for Puerto Rico and the United States were 4.6% in 2012 and 4.7% in 2011, and for the United Kingdom were 6.6% in 2012 and 7.4% in 2011.

During 2012, in Puerto Rico, CEMEX eliminated coverage under the medical plan for any participants who had not retired by January 2, 2012. This event generated a curtailment gain of approximately Ps18 recognized as part of the net periodic cost.

Sensitivity analysis of pension and other postretirement benefits

A 50 basis points decrease in the discount rate would have increased the defined benefit pension obligation by approximately Ps2,192 (US$171) as of December 31, 2012, and the pension service cost in 2012 by approximately Ps32. A 50 basis points increase in the discount rate would have decreased the defined benefit pension obligation by approximately Ps2,170 (US$169) as of December 31, 2012, and the pension service cost in 2012 by approximately Ps26.

A 50 basis points decrease in the discount rate would have increased the postretirement benefit obligation by approximately Ps104 (US$8) as of December 31, 2012, and the postretirement service cost in 2012 by approximately Ps5. A 50 basis points increase in the same discount rate would have decreased the postretirement benefit obligation by approximately Ps96 (US$7) as of December 31, 2012, and the postretirement service cost in 2012 by approximately Ps5.

Table of Contents

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

19) INCOME TAXES

19A) INCOME TAXES FOR THE PERIOD

The amounts for income taxes included in the statements of operations in 2012, 2011 and 2010 are summarized as follows:

		2012	2011	2010
Current income taxes				
From Mexican operations	Ps	1,825	(11,010)	(208)
From foreign operations		4,377	(3,326)	(4,494)
		6,202	(14,336)	(4,702)
Deferred income taxes				
From Mexican operations		1,276	327	1,108
From foreign operations		(13,575)	1,802	1,520
		(12,299)	2,129	2,628
	Ps	(6,097)	(12,207)	(2,074)

As of December 31, 2012, consolidated tax loss and tax credits carryforwards and reserved carryforwards expire as follows:

		Amount of carryforwards	Amount of reserved carryforwards
2013	Ps	1,019	98
2014		10,272	3,042
2015		9,702	2,675
2016		17,082	4,656
2017 and thereafter		341,635	271,260
	Ps	379,710	281,731

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

19B) DEFERRED INCOME TAXES

As of December 31, 2012 and 2011, the main temporary differences that generated the consolidated deferred income tax assets and liabilities are presented below:

		2012	2011
Deferred tax assets:			
Tax loss carryforwards and other tax credits	Ps	16,118	34,826
Accounts payable and accrued expenses		11,734	9,643
Intangible assets and deferred charges, net		9,786	14,992
Others		177	534
Net deferred tax assets		37,815	59,995
Deferred tax liabilities:			
Property, machinery and equipment		(33,672)	(41,165)
Investments and other assets		(3,531)	(2,469)
Others		(426)	(3,366)
Total deferred tax liabilities		(37,629)	(47,000)
Net deferred tax asset	Ps	186	12,995

The breakdown of changes in consolidated deferred income taxes during 2012, 2011 and 2010 were as follows:

		2012	2011	2010
Deferred income tax (charged) credited to the statements of operations **1**	Ps	(12,299)	2,129	2,628
Deferred income tax (charged) credited to stockholders equity		(515)	159	1,467
Reclassification to other captions in the balance sheet		5	(801)	(1,631)
Change in deferred income tax for the period	Ps	(12,809)	1,487	2,464

1 Considering current estimates of future taxable income in Spain and due to changes in the applicable regulations, during 2012, CEMEX reduced its deferred tax assets associated with tax loss carryforwards by approximately Ps17,018, against the deferred income tax expense for the period.

Current and/or deferred income tax relative to items of other comprehensive loss during 2012, 2011 and 2010 were as follows:

		2012	2011	2010
Tax effects relative to foreign exchange fluctuations from debt (note 20B)	Ps	(2,082)	3,391	(566)
Tax effects relative to foreign exchange fluctuations from intercompany balances (note 20B)		(724)	1,424	5,449
Tax effects relative to actuarial (losses) gains (note 20B)		318	343	392
Other effects		(833)	(184)	1,075
	Ps	(3,321)	4,974	6,350

Table of Contents

Deferred income taxes - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

For the recognition of deferred tax assets, CEMEX analyzes the aggregate amount of self-determined tax loss carryforwards included in its income tax returns in each country where CEMEX believes, based on available evidence, that the tax authorities would not reject such tax loss carryforwards; and the likelihood of the recoverability of such tax loss carryforwards prior to their expiration through an analysis of estimated future taxable income. If CEMEX believes that it is probable that the tax authorities would reject a self-determined deferred tax asset, it would decrease such asset. Likewise, if CEMEX believes that it would not be able to use a tax loss carryforward before its expiration or any other tax asset, CEMEX would not recognize such asset. Both situations would result in additional income tax expense for the period in which such determination is made. In order to determine whether it is probable that deferred tax assets will ultimately be realized, CEMEX takes into consideration all available positive and negative evidence, including factors such as market conditions, industry analysis, expansion plans, projected taxable income, carryforward periods, current tax structure, potential changes or adjustments in tax structure, tax planning strategies, future reversals of existing temporary differences, etc. In addition, every reporting period, CEMEX analyzes its actual results versus its estimates, and adjusts, as necessary, its tax asset valuations. If actual results vary from CEMEX s estimates, the deferred tax asset may be affected and necessary adjustments will be made based on relevant information. Any adjustments recorded will affect CEMEX s statements of operations in such period.

As of December 31, 2012, CEMEX s deferred tax loss carryforwards that have been recognized expire as follows:

		Amount of unreserved carryforwards
2013	Ps	921
2014		7,230
2015		7,027
2016		12,426
2017 and thereafter		70,375
	Ps	97,979

In connection with CEMEX s deferred tax loss carryforwards presented in the table above, as of December 31, 2012, in order to realize the benefits associated with such deferred tax assets that have not been reserved, before their expiration, CEMEX would need to generate approximately Ps97,979 in consolidated pre-tax income in future periods. For the years ended December 31, 2012, 2011 and 2010, CEMEX has reported pre-tax losses on a worldwide consolidated basis. Nonetheless, based on the same forecasts of future cash flows and operating results used by CEMEX s management to allocate resources and evaluate performance in the countries in which CEMEX operates, which include expected growth in revenues and reductions in interest expense in several countries due to a reduction in intra-group debt balances, along with the implementation of feasible tax strategies, CEMEX believes that it will recover the balance of its tax loss carryforwards that have not been reserved before their expiration. In addition, CEMEX concluded that, the deferred tax liabilities that were considered in the analysis of recoverability of its deferred tax assets will reverse in the same period and tax jurisdiction of the related recognized deferred tax assets. Moreover, a certain amount of CEMEX s deferred tax assets refer to operating segments and tax jurisdictions in which CEMEX is currently generating taxable income or in which, according to CEMEX s management cash flow projections, will generate taxable income in the relevant periods before the expiration of the deferred tax assets, considering that the amount of taxable income required to recover CEMEX s deferred tax assets over the next four years is not significant, and that approximately Ps70,375 out of the Ps97,979 of consolidated pre-tax income mentioned above would be required over several years in 2017 and thereafter.

Table of Contents

Deferred income taxes - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

CEMEX, S.A.B de C.V. has not provided for any deferred tax liability for the undistributed earnings generated by its subsidiaries recognized under the equity method, considering that such undistributed earnings are expected to be reinvested, and to not generate income tax in the foreseeable future. Likewise, CEMEX does not recognize a deferred income tax liability related to its investments in subsidiaries and interests in joint ventures, considering that CEMEX controls the reversal of the temporary differences arising from these investments.

19C) EFFECTIVE TAX RATE

Differences between the financial reporting and the corresponding tax basis of assets and liabilities and the different income tax rates and laws applicable to CEMEX, among other factors, give rise to permanent differences between the statutory tax rate applicable in Mexico, and the effective tax rate presented in the consolidated statements of operations, which in 2012, 2011 and 2010 were as follows:

	2012	2011	2010
	%	%	%
Consolidated statutory tax rate	(30.0)	(30.0)	(30.0)
Non-taxable dividend income	(0.7)	(1.9)	
Expenses and other non-deductible items	7.7	53.4	10.3
Unrecognized tax benefits in the year	(44.6)	34.8	(33.2)
Non-taxable sale of marketable securities and fixed assets	(14.2)	(14.4)	22.1
Difference between book and tax inflation	34.0	9.9	12.3
Other tax non-accounting benefits **1**	166.4	45.9	33.3
Others	0.4	(0.5)	3.4
Effective consolidated tax rate	119.0	97.2	18.2

1 Includes: a) the effects of the different income tax rates in the countries where CEMEX operates and other permanent differences; b) changes during the period related to deferred tax assets originated by tax loss carryforwards (note 19B); and c) changes in the balance of provisions for tax uncertainties during the period, as described in note 19D.

19D) UNCERTAIN TAX POSITIONS AND SIGNIFICANT TAX PROCEEDINGS

As of December 31, 2012 and 2011, as part of short-term and long-term provisions and other liabilities (note 17), CEMEX has recognized provisions related to unrecognized tax benefits in connection with uncertain tax positions taken, in which it is deemed probable that the tax authority would differ from the position adopted by CEMEX (note 2O). As of December 31, 2012, the tax returns submitted by some subsidiaries of CEMEX located in several countries are under review by the respective tax authorities in the ordinary course of business. CEMEX cannot anticipate if such reviews will result in new tax assessments, which would, should any arise, be appropriately disclosed and/or recognized in the financial statements.

Table of Contents

Uncertain tax positions and significant tax proceedings - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

A summary of the beginning and ending amount of unrecognized tax benefits for the years ended December 31, 2012, 2011 and 2010, excluding interest and penalties, is as follows:

		2012	2011	2010
Balance of tax positions at beginning of year	Ps	21,936	17,260	20,333
Additions for tax positions of prior years		325	1,162	3,687
Additions for tax positions of current year		110	4,812	765
Reductions for tax positions related to prior years and other items		(14,601)	(2,513)	(2,240)
Settlements and reclassifications		(4,053)	(121)	(81)
Expiration of the statue of limitations		(1,599)	(120)	(4,195)
Foreign currency translation effects		(883)	1,456	(1,009)
Balance of tax positions at end of year	Ps	1,235	21,936	17,260

Tax examinations can involve complex issues, and the resolution of issues may span multiple years, particularly if subject to negotiation or litigation. Although CEMEX believes its estimates of the total unrecognized tax benefits are reasonable, uncertainties regarding the final determination of income tax audit settlements and any related litigation could affect the amount of total unrecognized tax benefits in future periods. It is difficult to estimate the timing and range of possible changes related to the uncertain tax positions, as finalizing audits with the income tax authorities may involve formal administrative and legal proceedings. Accordingly, it is not possible to reasonably estimate the expected changes to the total unrecognized tax benefits over the next 12 months, although any settlements or statute of limitations expirations may result in a significant increase or decrease in the total unrecognized tax benefits, including those positions related to tax examinations being currently conducted.

As of December 31, 2012, certain significant proceedings associated with these tax positions are as follows:

During 2011, the U.S. Internal Revenue Service (IRS) had issued various Notices of Proposed Adjustment (NOPAs) for the years 2005 through 2009 proposing certain adjustments to CEMEX s tax returns. As of December 31, 2012, CEMEX s subsidiaries in the United States and the IRS have reached a resolution regarding the income tax audits for the years 2005 through 2009 and also tax losses to applicable prior years to recover taxes previously paid. CEMEX expects a net refund from the IRS of approximately US$25. In connection with this resolution, CEMEX expects to owe additional state and local income taxes and interest resulting from the IRS audit adjustments. The IRS has recently commenced an audit of years 2010 and 2011. CEMEX believes it has adequately reserved for its uncertain tax position. The amount of which is not specified, as doing so may harm the current negotiations of CEMEX with the IRS. Nonetheless, there can be no assurance that the outcome of the IRS negotiations will not require further provisions for taxes.

Pursuant to amendments to the Mexican income tax law effective January 1, 2005, Mexican companies with investments in foreign entities whose income tax liability is less than 75% of the income tax that would be payable in Mexico, are required to pay taxes in Mexico on net passive income, such as dividends, royalties, interest, capital gains and rental fees obtained by such entities, provided, however, that those revenues are not derived from entrepreneurial activities in such countries. CEMEX challenged the constitutionality of the amendments before the Mexican federal courts. In September 2008, the Supreme Court of Justice ruled the amendments were constitutional for tax years 2005 to 2007. On March 1, 2012 and July 5, 2012, CEMEX

Table of Contents

Uncertain tax positions and significant tax proceedings - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

self-assessed the taxes corresponding to the 2005 and 2006 tax years, respectively, for a total amount, inclusive of surcharges and carry-forward charges, of approximately Ps4,642 (US$358) for 2005 and Ps1,100 (US$86) for 2006, of which 20%, equivalent to approximately Ps928 (US$72) for 2005 and Ps221 (US$17) for 2006, was paid in connection with the submission of amended tax returns. The remaining 80% of such total amounts would have been due in February 2013 and July 2013 for the 2005 and 2006 tax years, respectively, plus additional interest if CEMEX would have elected to extend the payment date in thirty-six monthly installments. On January 31, 2013 in connection with the transitory amnesty provision described below, CEMEX reached a settlement agreement with the tax authorities (note 26). Changes in the provision were recognized through income tax expense for the period.

In November 2009, Mexico approved amendments to the income tax law, which became effective on January 1, 2010. Such amendments modified the tax consolidation regime by requiring entities to determine income taxes as if the tax consolidation provisions did not exist from 1999 onward, specifically turning into taxable items: a) the difference between the sum of the equity of the controlled entities for tax purposes and the equity of the consolidated entity for tax purposes; b) dividends from the controlled entities for tax purposes to CEMEX, S.A.B. de C.V.; and c) other transactions that represented the transfer of resources between the companies included in the tax consolidation. In connection with these changes to the tax consolidation regime, as of December 31, 2009, CEMEX had accrued an aggregate liability of Ps10,461, of which: i) Ps8,216 had been recognized against Other non-current assets before the new tax law became effective, assets which, CEMEX expects to recover through the payment of the related tax liability; and ii) Ps2,245 was recognized in December 2009, in connection with the amendments to the income tax law mentioned above. In December 2010, pursuant to miscellaneous rules, the tax authority in Mexico granted the option to defer the calculation and payment of the income tax over the difference in equity explained above, until the subsidiary is disposed of or CEMEX eliminates the tax consolidation. As a result, CEMEX reduced its estimated tax payable by approximately Ps2,911 against a credit to income taxes for the period in the statements of operations. Tax liabilities associated with the tax loss carryforwards used in the tax consolidation of the Mexican subsidiaries are not offset with deferred tax assets in the balance sheet. The realization of these tax assets is subject to the generation of future tax earnings in the controlled subsidiaries that generated the tax loss carryforwards in the past. Changes in the Parent Company s tax payable associated with the tax consolidation in Mexico in 2012, 2011 and 2010 were as follows:

		2012	2011	2010
Balance at the beginning of the year	Ps	12,410	10,079	10,461
Income tax received from subsidiaries		2,089	2,352	2,496
Restatement for the period		745	485	358
Payments during the period		(698)	(506)	(325)
Effects associated with miscellaneous rules				(2,911)
Balance at the end of the year	Ps	14,546	12,410	10,079

On January 21, 2011, the Mexican tax authority notified CEMEX, S.A.B. de C.V., of a tax assessment for approximately Ps996 (US$77) pertaining to the tax year 2005. The tax assessment is related to the corporate income tax in connection with the tax consolidation regime. As a result of a tax reform in 2005, the law allows the cost of goods sold to be deducted, instead of deducting purchases. Since there were inventories as

Table of Contents

Uncertain tax positions and significant tax proceedings - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

of December 31, 2004, in a transition provision, the law allowed the inventory to be accumulated as income (thus reversing the deduction via purchases) and then be deducted from 2005 onwards as cost of goods sold. In order to compute the income resulting from the inventories in 2004, the law allowed this income to be offset against accumulated tax losses of some of CEMEX s subsidiaries. The authorities argued that because of this offsetting, the right to use such losses at the consolidated level had been lost; therefore, CEMEX had to increase its consolidated income or decrease its consolidated losses. CEMEX believes that there is no legal support for the conclusion of the Mexican tax authority and, on March 29, 2011, CEMEX challenged the assessment before the tax court.

On November 16, 2011, the Mexican tax authorities notified Centro Distribuidor de Cemento, S.A. de C.V. and Mexcement Holdings, S.A. de C.V., subsidiaries of CEMEX in Mexico, of tax assessments related to direct and indirect investments in entities considered to be preferential tax regimes, in the amount of approximately Ps1,251 (US$101) and approximately Ps759 (US$59), respectively. In February 2012, CEMEX filed a claim against these assessments before the corresponding courts. At this stage, CEMEX is not able to assess the likelihood of an adverse result in these proceedings.

On December 17, 2012, the Mexican authorities published the decree of the Federation Revenues Law for the 2013 tax year. The decree contains a transitory amnesty provision that grants tax amnesty of up to 80% of certain tax proceedings originated before the 2007 tax period, and 100% of interest and penalties, as well as 100% of interest and penalties of tax proceedings originated in the 2007 tax period and thereafter. CEMEX is a beneficiary of such transitory amnesty provision in connection with several of the Mexican tax proceedings mentioned in the paragraphs above. The tax authorities must issue the relevant rules for the implementation of such decree no later than March 2013. CEMEX awaits the publication of such rules in order to definitively determine the final amount of taxes payable and benefits that would be obtained pursuant to the decree. Based on CEMEX s best estimates and current understanding of the transitory amnesty provision, CEMEX reduced the provision accrued in prior years related to these tax proceedings and the effect is included as part of the changes of unrecognized tax benefits during the year presented in the table above.

On November 10, 2010, the Colombian tax authority notified CEMEX Colombia of a proceeding in which the Colombian tax authority rejected certain tax losses taken by CEMEX Colombia in its 2008 year-end tax return. In addition, the Colombian tax authority assessed an increase in taxes to be paid by CEMEX Colombia in the amount of approximately 43 billion Colombian pesos (US$24 or Ps308) and imposed a penalty in the amount of approximately 69 billion Colombian pesos (US$39 or Ps501), both amounts as of December 31, 2012. The Colombian tax authority argues that CEMEX Colombia is limited in its use of prior year tax losses to 25% of such losses per subsequent year. CEMEX believes that the tax provision that limits the use of prior year tax losses does not apply in the case of CEMEX Colombia because the applicable tax law was repealed in 2006. Furthermore, CEMEX believes that the Colombian tax authority is no longer able to review the 2008 tax return because the time to review such return has already expired pursuant to Colombian law. The Colombian tax authority issued an official settlement on July 27, 2011, which confirmed its position in the special request. The official settlement was appealed by CEMEX on September 27, 2011. On July 31, 2012, the Colombian tax authority notified CEMEX Colombia of the resolution confirming the official liquidation. In November 2012, CEMEX Colombia appealed the official assessment. CEMEX believes it has adequately reserved for this proceeding. Nonetheless, CEMEX is not able to assess the likelihood of an adverse result or potential damages which could be borne by CEMEX Colombia, but if adversely resolved, this proceeding could have a material adverse impact on CEMEX s liquidity and financial position.

Table of Contents

Uncertain tax positions and significant tax proceedings - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

On April 1, 2011, the Colombian Tax Authority notified CEMEX Colombia of a special proceeding (*requerimiento especial*) in which the Colombian Tax Authority rejected certain deductions taken by CEMEX Colombia in its 2009 year-end tax return. The Colombian Tax Authority assessed an increase in taxes to be paid by CEMEX Colombia in the amount of approximately Ps90 billion Colombian Pesos (approximately US$51 or Ps655) and imposed a penalty in the amount of approximately Ps144 billion Colombian Pesos (approximately US$81 or Ps1,041). The Colombian Tax Authority argues that certain expenses are not deductible for fiscal purposes because they are not linked to direct revenues recorded in the same fiscal year, without taking into consideration that future revenue will be taxed with income tax in Colombia. CEMEX Colombia responded to the special proceeding notice on June 25, 2011. On December 15, 2011, the Colombian Tax Authority issued its final determination, which confirmed the information in the special proceeding. CEMEX Colombia appealed the final determination on February 15, 2012 and it is expected to have a response from the Tax Authorities no later than February, 2013. At this stage, CEMEX is not able to assess the likelihood of an adverse result or potential damages which could be borne by CEMEX Colombia, but if adversely resolved, this proceeding could have a material adverse impact on CEMEX s liquidity and financial position.

20) STOCKHOLDERS EQUITY

As of December 31, 2012 and 2011, stockholders equity excludes investments in CPOs of CEMEX, S.A.B. de C.V. held by subsidiaries of approximately Ps229 (18,028,276 CPOs) and Ps129 (17,334,881 CPOs), respectively, which were eliminated within Other equity reserves. The increase in the number of CPOs held by subsidiaries during 2012 relates to CPOs received by subsidiaries as a result of the recapitalization of retained earnings as described below.

20A) COMMON STOCK AND ADDITIONAL PAID-IN CAPITAL

As of December 31, 2012 and 2011, the breakdown of common stock and additional paid-in capital was as follows:

		2012	2011
Common stock	Ps	4,139	4,135
Additional paid-in capital		113,929	109,309
	Ps	118,068	113,444

As of December 31, 2012 and 2011, the common stock of CEMEX, S.A.B. de C.V. was represented as follows:

	2012		2011	
Shares 1	Series A 2	Series B 3	Series A 2	Series B 3
Subscribed and paid shares	21,872,295,096	10,936,147,548	20,939,727,526	10,469,863,763
	1,155,804,458	577,902,229	250,782,926	125,391,463

Unissued shares authorized for stock compensation programs				
Shares that guarantee the issuance of convertible securities **4**	6,162,438,520	3,081,219,260	5,932,438,520	2,966,219,260
Shares authorized for the issuance of stock or convertible securities **5**	4,146,404	2,073,202	7,561,480	3,780,740
	29,194,684,478	14,597,342,239	27,130,510,452	13,565,255,226

Table of Contents

Common stock and additional paid-in capital - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

1 As of December 31, 2012 and 2011, 13,068,000,000 shares correspond to the fixed portion, and 30,724,026,717 shares in 2012 and 27,627,765,678 shares in 2011, correspond to the variable portion.

2 Series A or Mexican shares must represent at least 64% of CEMEX s capital stock.

3 Series B or free subscription shares may represent up to 36% of CEMEX s capital stock.

4 Shares that guarantee the conversion of both the voluntary and mandatorily convertible securities (note 16B).

5 Shares authorized for the issuance of stock through a public offer or through the issuance of convertible securities.

On February 23, 2012, stockholders at the annual ordinary shareholders meeting approved resolutions to: (i) increase the variable common stock through the capitalization of retained earnings by issuing up to 1,256.4 million shares (418.8 million CPOs), which shares were issued, representing an increase in common stock of approximately Ps3.4, considering a nominal value of Ps0.00833 per CPO, and additional paid-in capital of approximately Ps4,133.8; (ii) increase the variable common stock by issuing up to 345 million shares (115 million CPOs),which will be kept in CEMEX s treasury to be used to preserve the anti-dilutive rights of note holders pursuant CEMEX s convertible securities (note 16B); (iii) the cancellation of 5,122 million treasury shares, which were not subject to public offer or convertible notes issuance in the 24 months period authorized by the extraordinary shareholders meeting held on September 4, 2009; and (iv) increase the variable common stock by issuing up to 1,500 million shares (500 million CPOs) which will be kept in CEMEX s treasury and used to be subscribed and paid pursuant to the terms and conditions of CEMEX s long-term compensation stock program (note 21), without triggering the shareholders preemptive rights.

On February 24, 2011, stockholders at the extraordinary shareholders meeting approved an increase in the variable portion of our capital stock of up to 6 billion shares (2 billion CPOs). Pursuant to the resolution approved by CEMEX, S.A.B. de C.V. s stockholders, the subscription and payment of the new shares may occur through a public offer of CPOs and/or the issuance of convertible securities. These shares are kept in CEMEX s treasury as a guarantee for the potential issuance of shares through CEMEX s convertible securities (note 16B).

On February 24, 2011, stockholders at the annual ordinary shareholders meeting approved resolutions to: (i) increase the variable common stock through the capitalization of retained earnings, issuing up to 1,202.6 million shares (400.9 million CPOs) based on a price of Ps10.52 per CPO. Stockholders received 3 new shares for each 75 shares held (1 new CPO for each 25 CPOs held), through the capitalization of retained earnings. As a result, shares equivalent to approximately 401 million CPOs were issued, representing an increase in common stock of approximately Ps3, considering a nominal value of Ps0.00833 per CPO, and additional paid-in capital of approximately Ps4,213; and (ii) increase the variable common stock by up to 60 million shares (20 million CPOs) issuable as a result of antidilution adjustments upon conversion of CEMEX s convertible securities (note 16B). These shares are kept in CEMEX s treasury. There was no cash distribution and no entitlement to fractional shares.

On April 29, 2010, stockholders at the annual ordinary shareholders meeting approved resolutions to: (i) increase the variable common stock through the capitalization of retained earnings, issuing up to 1,153.8 million shares (384.6 million CPOs) based on a price of Ps14.24 per CPO. Stockholders received 3 new shares for each 75 shares held (1 new CPO for each 25 CPOs held), through the capitalization of retained earnings. As a result, shares equivalent to approximately 384.6 million CPOs were issued, representing an

Common stock and additional paid-in capital - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

increase in common stock of approximately Ps3, considering a nominal value of Ps0.00833 per CPO, and additional paid-in capital of approximately Ps5,476, and (ii) increase the variable common stock by up to 750 million shares (250 million CPOs) issuable as a result of antidilution adjustments upon conversion of CEMEX s convertible securities (note 16B). These shares are kept in CEMEX s treasury. There was no cash distribution and no entitlement to fractional shares.

The CPOs issued pursuant to the exercise of options under the Fixed program (note 21A) generated additional paid-in capital of approximately Ps11 in 2011 and Ps5 in 2010, and increased the number of shares outstanding. In addition, in connection with the long-term executive stock-based compensation programs (note 21), in 2012, 2011 and 2010, CEMEX issued approximately 46.4 million CPOs, 43.4 million CPOs and 25.7 million CPOs, respectively, generating additional paid-in capital of approximately Ps486, Ps495 and Ps312, respectively, associated with the fair value of the compensation received by executives.

20B) OTHER EQUITY RESERVES

As of December 31, 2012 and 2011 other equity reserves are summarized as follows:

		2012	2011
Cumulative translation effect, net of effects from perpetual debentures and deferred income taxes recognized directly in equity (notes 19B and 20D)	Ps	13,635	15,189
Cumulative actuarial gains (losses)		(3,174)	(2,234)
Issuance of convertible securities **1**		1,971	1,971
Treasury shares held by subsidiaries		(229)	(129)
	Ps	12,203	14,797

1 Represents the equity component associated with the issuances of mandatorily convertible notes described in note 16B. Upon mandatory conversion of these securities, these balances will be correspondingly reclassified to common stock and/or additional paid-in capital.

For the years ended December 31, 2012, 2011 and 2010, the translation effects of foreign subsidiaries included in the statements of comprehensive loss were as follows:

		2012	2011	2010
Foreign currency translation adjustment **1**	Ps	(16,031)	30,733	11,144
Foreign exchange fluctuations from debt **2**		6,939	(11,305)	1,886
Foreign exchange fluctuations from intercompany balances **3**		1,756	(8,068)	(20,059)

Ps	(7,336)	11,360	(7,029)

1 These effects refer to the result from the translation of the financial statements of foreign subsidiaries.

2 Generated by foreign exchange fluctuations over a notional amount of debt in CEMEX, S.A.B. de C.V. associated with the acquisition of foreign subsidiaries and designated as a hedge of the net investment in foreign subsidiaries.

Table of Contents

Other equity reserves - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

3 Refers to foreign exchange fluctuations arising from balances with related parties in foreign currencies that are of a long-term investment nature considering that their liquidation is not anticipated in the foreseeable future and foreign exchange fluctuations over a notional amount of debt of a subsidiary of CEMEX España identified and designated as a hedge of the net investment in foreign subsidiaries.

20C) RETAINED EARNINGS

Net income for the year is subject to a 5% allocation toward a legal reserve until such reserve equals one fifth of the capital represented by the common stock. As of December 31, 2012, the legal reserve amounted to Ps1,804.

20D) NON-CONTROLLING INTEREST AND PERPETUAL DEBENTURES

Non-controlling interest

Non-controlling interest represents the share of non-controlling stockholders in the results and equity of consolidated subsidiaries. As of December 31, 2012 and 2011, non-controlling interest in equity amounted to approximately Ps8,410 and Ps3,513, respectively.

As mentioned in note 15B, on May 17, 2012, CEMEX acquired the non-controlling interest in Readymix, the Company s subsidiary in Ireland.

On November 15, 2012, CEMEX Latam Holdings, S.A. (CEMEX Latam), a wholly-owned subsidiary of CEMEX España, S.A., concluded its initial offering of 170,388,000 new common shares, at a price of 12,250 Colombian Pesos per common share. The common shares offered by CEMEX Latam included (a) 148,164,000 new common shares offered in a public offering to investors in Colombia and in a concurrent private placement to eligible investors outside of Colombia, and (b) an additional 22,224,000 new common shares offered in such private placement that were subject to a put option granted to the initial purchasers during the 30-day period following closing of the offering. CEMEX Latam s assets include substantially all of CEMEX s cement and ready-mix assets in Colombia, Panama, Costa Rica, Brazil, Guatemala and El Salvador. After giving effect to the offering, and the exercise of the put option by the initial purchasers, CEMEX España, S.A., owns approximately 73.35% of CEMEX Latam s outstanding common shares, excluding shares held in treasury. CEMEX Latam s common shares are listed on the Colombian Stock Exchange (*Bolsa de Valores de Colombia S.A.*) under the ticker CLH. The net proceeds from the offering of approximately US$960, after deducting commissions and offering expenses and after giving effect to the exercise of the put option by the initial purchasers, were used by CEMEX to repay indebtedness under the Facilities Agreement and the Financing Agreement. During September and October 2012, CEMEX entered into foreign exchange call options and forward contracts for notional amounts of US$200 and US$510, respectively; to hedge the exposure to the exchange rate fluctuations between the Colombian peso to the U.S. dollar. At settlement, changes in the fair value of these instruments generated a loss of approximately US$2 (Ps26).

Perpetual debentures

As of December 31, 2012 and 2011, the balances of the non-controlling interest included approximately US$473 (Ps6,078) and US$938 (Ps13,089), respectively, representing the notional amount of perpetual debentures. The balance in 2012 and 2011 excludes the notional amount of perpetual debentures held by subsidiaries, acquired during 2012 and 2011 through a series of exchange transaction of each series of its then outstanding perpetual debentures for new secured notes or other financial instruments (note 16A). The exchange offers previously mentioned were contemporarily agreed by CEMEX and its perpetual debentures holders, without any existing commitment.

Table of Contents

Perpetual debentures - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

Interest expense on the perpetual debentures, which is accrued based on the principal amount, was included within Other equity reserves and represented expenses of approximately Ps453 in 2012, Ps1,010 in 2011 and Ps1,624 in 2010, excluding in all periods the amount of interest accrued by perpetual debentures held by subsidiaries.

CEMEX s perpetual debentures have no fixed maturity date and there are no contractual obligations for CEMEX to exchange any series of its outstanding perpetual debentures for financial assets or financial liabilities. As a result, these debentures, issued entirely by Special Purpose Vehicles (SPVs), qualify as equity instruments and are classified within non-controlling interest, as they were issued by consolidated entities. In addition, subject to certain conditions, CEMEX has the unilateral right to defer indefinitely the payment of interest due on the debentures. The classification of the debentures as equity instruments was made under applicable IFRS. The different SPVs were established solely for purposes of issuing the perpetual debentures and were included in CEMEX s consolidated financial statements.

As of December 31, 2012 and 2011, the detail of CEMEX s perpetual debentures, giving effect to the exchange transactions that occurred during these periods, as mentioned above, and to the exclusion of perpetual debentures held by subsidiaries, was as follows:

Issuer	Issuance date	2012 Nominal amount	2011 Nominal amount	Repurchase option	Interest rate
C10-EUR Capital (SPV) Ltd.	May 2007	64	147	Tenth anniversary	6.3%
C8 Capital (SPV) Ltd.	February 2007	US$ 137	US$ 288	Eighth anniversary	6.6%
C5 Capital (SPV) Ltd **1**.	December 2006	US$ 69	US$ 111	Fifth anniversary	LIBOR + 4.277%
C10 Capital (SPV) Ltd.	December 2006	US$ 183	US$ 349	Tenth anniversary	6.7%

1 Beginning January 1, 2012, the annual interest rate of this series changed from 6.2% to 3-month LIBOR plus 4.277%, which is reset quarterly. Interest payments on this series will be made quarterly instead of semi-annually. CEMEX is not permitted to call these debentures under the Facilities Agreement. As of December 31, 2012 and 2011, 3-month LIBOR was approximately 0.306% and 0.5810%, respectively.

21) EXECUTIVE STOCK-BASED COMPENSATION

CEMEX has long-term restricted stock-based compensation programs providing for the grant of CEMEX s CPOs to a group of executives, pursuant to which, new CPOs are issued under each annual program over a service period of 4 years. By agreement with the executives, the CPOs of the annual grant (25% of each annual program) are placed in a trust established for the benefit of the executives to comply with a 1 year restriction on sale. Under these programs, CEMEX granted approximately 46.4 million CPOs in 2012, 43.4 million CPOs in 2011 and 25.7 million CPOs in 2010 that were subscribed and pending for payment in CEMEX s treasury. Of the total CPOs granted in 2011, approximately 10.3 million CPOs were related to termination payments associated with restructuring events (note 6). As of December 31, 2012, there are approximately 87.4 million CPOs associated with these annual programs that are expected to be issued during the following years as the executives render services. The compensation expense related to these programs in 2012, 2011 and 2010 recognized in the operating results amounted to approximately Ps486, Ps415 and Ps536, respectively. The weighted average price per CPO granted during the period was approximately Ps10.48 in 2012, Ps11.42 in 2011 and Ps12.12 in 2010.

In 2012, CEMEX initiated a new stock-based compensation program for a group of executives which is linked to both internal performance conditions (increase in Operating EBITDA), as well as market conditions (increase in

Table of Contents

Executive stock-based compensation - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

the price of CEMEX s CPO), over a period of three years. Under this program, CEMEX granted awards over approximately 39.9 million CPOs, which become vested upon achievement of the annual performance conditions. Any CPOs vested would be delivered, fully unrestricted, only to active executives in March 2015. The compensation expense related to this program in 2012 of approximately Ps136 was recognized in the operating results against Other equity reserves.

Until 2005, CEMEX granted stock options to executives based on CEMEX s CPO. Options outstanding under CEMEX s programs represent liability instruments, except for those of its Fixed program, which was designated as equity instruments (note 2S). The information related to options granted in respect of CEMEX, S.A.B. de C.V. shares is as follows:

Options	**Fixed program (A)**	**Variable program (B)**	**Restricted program (C)**	**Special program (D)**
Options at the beginning of 2011	448,743	1,358,920	15,022,272	714,618
Changes in 2011:				
Options cancelled and adjustments	(115,617)	(815,424)		(81,826)
Options exercised	(333,126)			
Options at the end of 2011		543,496	15,022,272	632,792
Changes in 2012:				
Options cancelled and adjustments		(279,720)	(15,022,272)	(125,345)
Options exercised				
Options at the end of 2012		263,776		507,447
Underlying CPOs **1**		1,451,249		10,148,940
Weighted average exercise prices per CPO:				
Options outstanding at the beginning of 2012 **1**		US$ 1.55	US$ 2.00	US$ 1.36
Options exercised in the year **1**				
Options outstanding at the end of 2012 **1**		US$ 1.42		US$ 1.40

Average life of options:	0.6 years	1.4 years
Number of options per exercise price:		
		135,751 - US$1.0
	205,034 - US$1.4	257,291 - US$1.4
	58,742 - US$1.6	114,405 - US$1.9
Percent of options fully vested:	100%	100%

Prices and the number of underlying CPOs are technically adjusted for the dilutive effect of stock dividends and recapitalization of retained earnings.

Table of Contents

Executive stock-based compensation - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

A) Fixed program

From June 1995 through June 2001, CEMEX granted stock options with a fixed exercise price in pesos, equivalent to the market price of the CPO at the grant date and with tenure of 10 years. The employees option rights vested up to 25% annually during the first 4 years after having been granted.

B) Variable program

This program started in November 2001, through an exchange of fixed program options, with exercise prices denominated in dollars increasing annually at a 7% rate.

C) Restricted program

This program started in February 2004 through a voluntary exchange of options mainly from the variable program. These options had an exercise price denominated in dollars which, depending on the program, increased annually at a 5.5% rate or at a 7% rate. Executives gains under these options were settled in the form of CPOs, which were restricted for sale for an approximate period of 4 years from the exercise date.

D) Special program

From June 2001 through June 2005, a CEMEX subsidiary in the United States granted to a group of its employees a stock option program to purchase CEMEX ADSs. The options granted have a fixed exercise price denominated in dollars and tenure of 10 years. The employees option rights vested up to 25% annually after having been granted. The option exercises are hedged using ADSs currently owned by subsidiaries, which increases stockholders equity and the number of shares outstanding. The amounts of these ADS programs are presented in terms of equivalent CPOs.

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

Valuation of options at fair value and accounting recognition

All options of programs that qualify as liability instruments are valued at their estimated fair value as of the date of the financial statements, recognizing changes in valuations in the statements of operations. Changes in the provision for executive stock option programs for the years ended December 31, 2012, 2011 and 2010 were as follows:

		Restricted program	Variable program	Special program	Total
Provision as of January 1, 2010	Ps	114	24	54	192
Net revenue in current period results		(92)	(15)	(40)	(147)
Estimated decrease from exercises of options				2	2
Foreign currency translation effect		(7)	(1)	(3)	(11)
Provision as of December 31, 2010		15	8	13	36
Net revenue in current period results		(17)	(9)	(15)	(41)
Estimated decrease from exercises of options					
Foreign currency translation effect		2	1	2	5
Provision as of December 31, 2011					
Net expense (revenue) in current period results				9	9
Estimated decrease from exercises of options					
Foreign currency translation effect					
Provision as of December 31, 2012	Ps			9	9

The options   fair values were determined through the binomial option-pricing model. As of December 31, 2012, 2011 and 2010, the most significant assumptions used in the valuations were as follows:

Assumptions	2012	2011	2010
Expected dividend yield	4.0%	4.0%	4.0%
Volatility	35%	35%	35%
Interest rate	0.1%	0.1%	1.2%
Weighted average remaining tenure	1.1 years	1.2 years	2.1 years

22) LOSS PER SHARE

Based on IAS 33 *Earnings per Share* (IAS 33   ), basic earnings (loss) per share shall be calculated by dividing profit or loss attributable to ordinary equity holders of the parent entity (the numerator) by the weighted average number of shares outstanding (the denominator) during the period. Shares that would be issued depending only on the passage of time should be included in the determination of the basic weighted average number of shares outstanding. Diluted earnings (loss) per share should reflect in both, the numerator and denominator, the assumption that convertible instruments are converted, that options or warrants are exercised, or that ordinary shares are issued upon the satisfaction of specified conditions, to the extent that such assumption would lead to a reduction in basic earnings per share or an increase in basic loss per share, otherwise, the effects of potential shares are not considered because they generate antidilution.

Table of Contents

Loss per share - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

The amounts considered for calculations of loss per share (LPS) in 2012, 2011 and 2010 were as follows:

		2012	2011	2010
Denominator (thousands of shares)				
Weighted average number of shares outstanding **1**		32,926,445	32,523,572	32,433,494
Capitalization of retained earnings **2**		1,312,380	1,312,380	1,312,380
Effect of dilutive instruments mandatorily convertible securities (note 16B) **3**		582,050	559,663	538,138
Weighted average number of shares outstanding basic		34,820,875	34,395,615	34,284,012
Effect of dilutive instruments stock-based compensation (note 21) **3**		286,042	174,934	153,640
Effect of potentially dilutive instruments optionally convertible securities (note 16B) **3**		6,569,423	6,316,755	1,640,535
Weighted average number of shares outstanding diluted		41,676,341	40,887,304	36,078,187
Numerator				
Consolidated net loss	Ps	(11,219)	(24,767)	(13,436)
Less: non-controlling interest net income		662	21	46
Controlling interest net loss		(11,881)	(24,788)	(13,482)
Plus: after tax interest expense on mandatorily convertible securities		196	209	220
Controlling interest net loss basic loss per share		(11,685)	(24,579)	(13,262)
Plus: after tax interest expense on optionally convertible securities		1,501	1,153	344
Controlling interest net loss diluted loss per share	Ps	(10,184)	(23,426)	(12,918)
Controlling Interest Basic Loss Per Share	Ps	(0.34)	(0.71)	(0.39)
Controlling Interest Diluted Loss Per Share 4	Ps	(0.34)	(0.71)	(0.39)

1 Based on IAS 33, the weighted average number of shares outstanding in 2012 and 2011 reflects the shares issued as a result of the capitalization of retained earnings declared in February 2012 and February 2011, as applicable (note 20A).

2 According to resolution of the stockholders meetings on March 21, 2013 (note 26).

3

The number of CPO to be issued under the executive stock-based compensation programs, as well as the total amount of CPOs committed for issuance in the future under the mandatorily and optionally convertible securities, are computed from the beginning of the reporting period. The number of shares resulting from the executives stock option programs is determined under the inverse treasury method.

4 For 2012, 2011 and 2010, the effects on the denominator and numerator of potential dilutive shares generate antidilution; therefore, there is no change between the reported basic and diluted loss per share.

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

23) COMMITMENTS

23A) GUARANTEES

As of December 31, 2012 and 2011, CEMEX, S.A.B. de C.V. had guaranteed loans to certain subsidiaries of approximately US$9,148 (Ps117,557) and US$8,993 (Ps125,538), respectively.

23B) PLEDGED ASSETS

As of December 31, 2012 and 2011, CEMEX had liabilities amounting to US$84 and US$129, respectively, secured by property, machinery and equipment. These amounts exclude the financial liabilities associated with capital leases (note 16B), as there are no legal liens on the related assets.

In addition, in connection with the Facilities Agreement (note 16A), CEMEX transferred to a guarantee trust and entered into pledge agreements for the benefit of the Facilities Agreement lenders, note holders and other creditors having the benefit of negative pledge clauses, the shares of several of its main subsidiaries, including CEMEX México, S.A. de C.V. and CEMEX España, S.A., in order to secure payment obligations under the Facilities Agreement and other debt instruments. These shares also secure several other financings entered into prior to the date of the Facilities Agreement.

23C) OTHER COMMITMENTS

As of December 31, 2012 and 2011, CEMEX had commitments for the purchase of raw materials for an approximate amount of US$127 (Ps1,632) and US$184 (Ps2,569), respectively.

In 2006, in order to take advantage of the high wind potential in the Tehuantepec Isthmus, CEMEX and the Spanish company ACCIONA formed an alliance to develop a wind farm project for the generation of 250 Megawatts (MW) in the Mexican state of Oaxaca. CEMEX acted as promoter of the project, which was named EURUS. ACCIONA provided the required financing, constructed the facility and currently operates the wind farm. The installation of 167 wind turbines in the farm was finished on November 15, 2009. The agreements between CEMEX and ACCIONA established that CEMEX s plants in Mexico will acquire a portion of the energy generated by the wind farm for a period of at least 20 years, which began in February 2010, when EURUS reached the committed limit capacity. For the years ended December 31, 2012, 2011 and 2010, EURUS supplied (unaudited) approximately 29.1%, 23.7% and 20.1%, respectively, of CEMEX s overall electricity needs in Mexico during such year. This agreement is for CEMEX s own use and there is no intention of trading in energy by CEMEX.

In 1999, CEMEX entered into agreements with an international partnership, which built and operated an electrical energy generating plant in Mexico called *Termoeléctrica del Golfo* (TEG). In 2007, another international company replaced the original operator. The agreements established that CEMEX would purchase the energy generated for a term of not less than 20 years, which started in April 2004. Likewise, CEMEX committed to supply TEG all fuel necessary for its operations, a commitment that has been hedged through a 20-year agreement entered with *Petróleos Mexicanos*, which terminates in 2024. With the change of the operator, in 2007, CEMEX extended the term of its agreement with TEG until 2027. Consequently, for the last 3 years of the TEG fuel supply contract, CEMEX intends to purchase the required fuel in the market. CEMEX is not required to make any capital expenditure in the project. For the years ended December 31, 2012, 2011 and 2010, TEG supplied (unaudited) approximately 67.8%, 69.3% and 72.8%, respectively, of CEMEX s 15 cement plants electricity needs in Mexico during such year. This agreement is for CEMEX s own use and there is no intention of trading in energy by CEMEX.

F-93

Table of Contents

Other commitments - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

In 2007, CEMEX Ostzement GmbH (COZ), CEMEX s subsidiary in Germany, entered into a long-term energy supply contract with *Vattenfall Europe New Energy Ecopower* (VENEE), pursuant to which VENEE committed to supply energy to CEMEX s Rüdersdorf plant for a period of 15 years starting on January 1, 2008. Based on the contract, each year COZ has the option to fix in advance the volume of energy that it will acquire from VENEE, with the option to adjust the purchase amount one time on a monthly and quarterly basis. According to the contract, COZ acquired (unaudited) approximately 27 MW in 2010, 2011 and 2012. COZ expects to acquire 27 MW per year for 2013 and 2014, and expects to acquire between 26 and 28 MW per year starting in 2015 and thereafter. The contract, which establishes a price mechanism for the energy acquired, based on the price of energy future contracts quoted on the European Energy Exchange, did not require initial investments and was expected to be performed at a future date. Based on its terms, this contract qualified as a financial instrument under IFRS. However, as the contract is for CEMEX s own use and CEMEX sells any energy surplus as soon as actual energy requirements are known, regardless of changes in prices and thereby avoiding any intention of trading in energy, such contract is not recognized at its fair value.

In April 2008, Citibank entered into put option transactions on CEMEX s CPOs with a Mexican trust that CEMEX established on behalf of its Mexican pension fund and certain of CEMEX s directors and current and former employees (the participating individuals). The transaction was structured with two main components. Under the first component, the trust sold, for the benefit of CEMEX s Mexican pension fund, put options to Citibank in exchange for a premium of approximately US$38. The premium was deposited into the trust and was used to purchase, on a prepaid forward basis, securities that track the performance of the Mexican Stock Exchange. Under the second component, the trust sold, on behalf of the participating individuals, additional put options to Citibank in exchange for a premium of approximately US$38, which was used to purchase prepaid forward CPOs. These prepaid forward CPOs, together with additional CPOs representing an equal amount in U.S. dollars, were deposited into the trust by the participating individuals as security for their obligations, and represent the maximum exposure of the participating individuals under this transaction. The put options gave Citibank the right to require the trust to purchase, in April 2013, approximately 136 million CPOs at a price of US$2.6498 per CPO (120% of initial CPO price in dollars), as adjusted as of December 31, 2012. If the value of the assets held in the trust (34.7 million CPOs and the securities that track the performance of the Mexican Stock Exchange) were insufficient to cover the obligations of the trust, a guarantee would be triggered and CEMEX, S.A.B. de C.V. would be required to purchase, in April 2013, the total CPOs at a price per CPO equal to the difference between US$2.6498 and the market value of the assets of the trust. The purchase price per CPO in dollars and the corresponding number of CPOs under this transaction are subject to dividend adjustments. CEMEX recognizes a liability for the fair value of the guarantee, and changes in valuation were recorded in the statements of operations (note 16D).

On July 30, 2012, CEMEX signed a 10-year strategic agreement with IBM pursuant to which IBM will provide business processes services and information technology (IT). Moreover, IBM will provide business consulting to detect and promote sustainable improvements in CEMEX s profitability. The 10-year contract assigned to IBM is expected to generate cost reductions to CEMEX of approximately US$1,000 (unaudited) over such period, and includes: data processing services (back office) in finance, accounting and human resources; as well as IT infrastructure services, support and maintenance of IT applications in the countries in which CEMEX operates.

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

23D) COMMITMENTS FROM EMPLOYEE BENEFITS

In some countries, CEMEX has self-insured health care benefits plans for its active employees, which are managed on cost plus fee arrangements with major insurance companies or provided through health maintenance organizations. As of December 31, 2012, in certain plans, CEMEX has established stop-loss limits for continued medical assistance derived from a specific cause (e.g., an automobile accident, illness, etc.) ranging from 23 thousand dollars to 400 thousand dollars. In other plans, CEMEX has established stop-loss limits per employee regardless of the number of events ranging from 350 thousand dollars to 2 million dollars. The contingency for CEMEX if all employees qualifying for health care benefits required medical services simultaneously is significantly larger. However, this scenario is remote. The amount expensed through self-insured health care benefits was approximately US$96 (Ps1,234) in 2012, US$78 (Ps1,089) in 2011 and US$81 (Ps1,026) in 2010.

23E) CONTRACTUAL OBLIGATIONS

As of December 31, 2012 and 2011, CEMEX had the following contractual obligations:

(U.S. dollars millions)				2012			2011
Obligations		**Less than 1 year**	**1-3 Years**	**3-5 Years**	**More than 5 Years**	**Total**	**Total**
Long-term debt	US$	42	1,333	6,600	5,882	13,857	14,924
Capital lease obligations **1**		83	112	51	115	361	182
Convertible notes **2**		12	683	878	604	2,177	2,102
Total debt and other financial obligations **3**		137	2,128	7,529	6,601	16,395	17,208
Operating leases **4**		129	155	76	53	413	565
Interest payments on debt **5**		747	1,437	1,066	463	3,713	4,111
Pension plans and other benefits **6**		154	301	314	884	1,653	1,845
Purchases of raw materials **7**		102	25			127	184
Purchases of fuel and energy **8**		201	413	430	2,495	3,539	3,794
Total contractual obligations	US$	1,470	4,459	9,415	10,496	25,840	27,707
	Ps	18,889	57,298	120,983	134,874	332,044	386,791

1 The amounts of payments under capital leases have been determined on the basis of nominal cash flows. As of December 31, 2012, the net present value of future payments under such leases was approximately US$265 (Ps3,400), of which, approximately US$90 (Ps1,163) refers to cash flows from 1 to 3 years, and approximately US$32 (Ps413) refer to cash flows from 3 to 5 years, and approximately US$79 (Ps1,011) refer to cash flows of more than 5 years.

2 Refers to the convertible notes described in note 16B and assumes repayment at maturity and no conversion of the notes.

3 The schedule of debt payments, which includes current maturities, does not consider the effect of any refinancing of debt that may occur during the following years. In the past, CEMEX has replaced its long-term obligations for others of a similar nature.

4

The amounts for operating leases have been determined on the basis of nominal cash flows. CEMEX has operating leases, primarily for operating facilities, cement storage and distribution facilities and certain transportation and other equipment, under which annual rental payments are required plus the payment of certain operating expenses. Rental expense was US$156 (Ps2,003) in 2012, US$256 (Ps3,195) in 2011 and US$199 (Ps2,521) in 2010.

Table of Contents

Contractual obligations - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

5 For the determination of the future estimated interest payments on floating rate denominated debt, CEMEX used the floating interest rates in effect as of December 31, 2012 and 2011.

6 Represents estimated annual payments under these benefits for the next 10 years (note 18). Future payments include the estimate of new retirees during such future years.

7 Future payments for the purchase of raw materials are presented on the basis of contractual nominal cash flows.

8 Future nominal payments for energy have been estimated for all contractual commitments on the basis of an aggregate average expected consumption of approximately 3,171.4 GWh per year using the future prices of energy established in the contracts for each period. Future payments also include CEMEX s commitments for the purchase of fuel.

24) CONTINGENCIES

24A) PROVISIONS RESULTING FROM LEGAL PROCEEDINGS

CEMEX is involved in various significant legal proceedings, other than tax related matters which are detailed in note 19D, the resolutions of which are deemed probable and imply cash outflows or the delivery of other resources owned by CEMEX. As a result, certain provisions have been recognized in the financial statements, representing the best estimate of the amounts payable. Therefore, CEMEX believes that it will not incur significant expenditure in excess of the amounts recorded.

As of December 31, 2012, the details of the most significant legal proceedings that have required the recognition of certain provisions are as follows:

In January 2007, the Polish Competition and Consumers Protection Office (the Protection Office) notified CEMEX Polska, a subsidiary in Poland, about the initiation of an antitrust proceeding against all cement producers in the country, including CEMEX Polska and another of CEMEX s indirect subsidiaries in Poland. The Protection Office alleged that there was an agreement between all cement producers in Poland regarding prices, market quotas and other sales conditions of cement, and that the producers exchanged confidential information, all of which limited competition in the Polish cement market. In January 2007, CEMEX Polska filed its response to the notification, denying that it had committed the practices listed by the Protection Office, and submitted formal comments and objections gathered during the proceeding, as well as facts supporting its position that its activities were in line with Polish competition law. In December 2009, the Protection Office issued a resolution imposing fines on a number of Polish cement producers, including CEMEX Polska for the period of 1998 to 2006. The fine imposed on CEMEX Polska amounted to approximately 116 million Polish Zloty (US$34 or Ps437), which represents 10% of CEMEX Polska s total revenue for the calendar year preceding the imposition of the fine. CEMEX Polska filed an appeal before the Polish Court of Competition and Consumer Protection (the Court of Consumer Protection). On February 7, 2011, the Protection Office made an application to the Court of Consumer Protection to reject CEMEX Polska s appeal, arguing that such appeal is not justified, and the Protection Office maintained all the statements and arguments from its prior decision. On February 21, 2011, CEMEX Polska sent a letter to the Court of Consumer Protection in which it kept its position and argumentation from the appeal and opposed the arguments and statements of the Protection Office. The decision on the fines will not be enforced until two appeals are exhausted, which CEMEX estimates could take until the end of 2014 to be resolved. As of December 31, 2012, CEMEX recognized a provision of approximately 75 million Polish Zloty (US$24 or Ps308), representing the best estimate on such date of the expected cash outflow in connection with this resolution. The hearing of this case is scheduled to take place on February 19, 2013.

Table of Contents

Provisions resulting from legal proceedings - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

CEMEX has environmental remediation liabilities in the United Kingdom pertaining to closed and current landfill sites for the confinement of waste. As of December 31, 2012, CEMEX had generated a provision for the net present value of such obligations of approximately £131 (US$214 or Ps2,745). Expenditure was assessed and quantified over the period in which the sites have the potential to cause environmental harm, which was accepted by the regulator as being up to 60 years from the date of closure. The assessed expenditure included the costs of monitoring the sites and the installation, repair and renewal of environmental infrastructure.

In August 2005, Cartel Damages Claims, S.A. (CDC), filed a lawsuit in the District Court in Düsseldorf, Germany, against CEMEX Deutschland AG, CEMEX s subsidiary in Germany, and other German cement companies originally seeking approximately 102 (US$132 or Ps1,696) in respect of damage claims by 28 entities relating to alleged price and quota fixing by German cement companies between 1993 and 2002. Since that time, CDC has acquired new claims by assignment, and the claim has increased to 131 (US$170 or Ps2,185). CDC is a Belgian company established in the aftermath of the German cement cartel investigation that took place from July 2002 to April 2003 by Germany s Federal Cartel Office, with the purpose of purchasing potential damage claims from cement consumers and pursuing those claims against the cartel participants. In February 2007, the District Court in Düsseldorf allowed this lawsuit to proceed without going into the merits of this case by issuing an interlocutory judgment. All defendants appealed the resolution but the appeal was dismissed in May 2008 and the lawsuit will proceed at the level of the court of first instance. On March 1, 2012, the District Court in Düsseldorf revealed several preliminary considerations on relevant legal questions and allowed the parties to submit their plea and reply. A new hearing has been rescheduled to June 6, 2013 to allow plaintiff to prepare and submit their plea. As of December 31, 2012, CEMEX Deutschland AG had accrued liabilities regarding this matter of approximately 28 (US$36 or Ps463), including accrued interests over the principal amount of the claim.

As of December 31, 2012, CEMEX s subsidiaries in the United States have accrued liabilities specifically relating to environmental matters in the aggregate amount of approximately US$21 (Ps270). The environmental matters relate to: a) the disposal of various materials in accordance with past industry practice, which might currently be categorized as hazardous substances or wastes, and b) the cleanup of sites used or operated by CEMEX, including discontinued operations, regarding the disposal of hazardous substances or waste, either individually or jointly with other parties. Most of the proceedings are in the preliminary stages, and a final resolution might take several years. For purposes of recording the provision, CEMEX s subsidiaries believe that it is probable that a liability has been incurred and the amount of the liability is reasonably estimable, whether or not claims have been asserted, and without giving effect to any possible future recoveries. Based on the information developed to date, CEMEX s subsidiaries do not believe that they will be required to spend significant sums on these matters in excess of the amounts previously recorded. The ultimate cost that may be incurred to resolve these environmental issues cannot be assured until all environmental studies, investigations, remediation work and negotiations with, or litigation against, potential sources of recovery have been completed.

24B) OTHER CONTINGENCIES FROM LEGAL PROCEEDINGS

CEMEX is involved in various legal proceedings, other than tax related matters which are detailed in note 19D, which have not required the recognition of accruals, as CEMEX believes that the probability of loss is less than probable or remote after considering all the elements of such proceedings, as well as proceedings in which a negative resolution for CEMEX may represent, among other things, the revocation of operating licenses or the

Table of Contents

Other contingencies from legal proceedings - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

assessment of fines, whereby CEMEX may experience a decrease in future revenues, an increase in operating costs or a loss. Where no amount of the estimation is disclosed, it is because such disclosure could impair the outcome of the relevant proceeding.

As of December 31, 2012, the details of the most significant events with a quantification of the potential loss, when it is determinable, were as follows:

On September 13, 2012, Assiut Cement Company (ACC), CEMEX s subsidiary in Egypt, learned about a preliminary non-enforceable decision against ACC made by a court of first instance in Assiut, Egypt, regarding the annulment of a Share Purchase Agreement signed in November 1999 between CEMEX and state-owned Metallurgical Industries Company (MIC) pursuant to which CEMEX acquired a controlling interest in ACC. On September 19, 2012, ACC received the formal notification of the ruling made by the Assiut court of first instance. On October 18, 2012 and October 20, 2012, ACC and MIC, respectively, filed appeals of the decision with the Assiut Court of Appeals. The first hearings were held on December 19, 2012 and January 22, 2013 with such Court of Appeals, and a third hearing is scheduled for April 16, 2013.

On June 21, 2012, one of CEMEX s subsidiaries in Israel was notified about an application for the approval of a class action suit against it. The application, filed by a homeowner who built his house with concrete supplied by CEMEX in October of 2010, claims that the concrete supplied to him did not meet with the Israel Standard for Concrete Strength No. 118 and that as a result CEMEX acted unlawfully toward all of its customers who received concrete that did not comply with the Israeli standard requirements. As per the application, the plaintiff claims that the supply of the alleged non-conforming concrete has caused financial and non-financial damages to those customers, including the plaintiff. CEMEX presumes that the class action would represent the claim of all the clients who purchased the alleged non-conforming concrete from its subsidiary in Israel during the past 7 years, the limitation period according to applicable laws in Israel. The damages that could be sought amount to approximately 276 million Israeli Shekel (US$74 or Ps951). CEMEX s subsidiary has until January 31, 2013 to submit a formal response to the corresponding court. At this stage, CEMEX believes the application is vexatious and should be dismissed without any expense to CEMEX. As of December 31, 2012, CEMEX is analyzing the legal strategy to be employed and is not able to assess the likelihood of the class action application being approved or, if approved, of an adverse result, but if adversely resolved, CEMEX does not believe the final resolutions would have a material adverse impact on its liquidity and financial position.

On January 20, 2012, the United Kingdom Competition Commission (the UK Commission), commenced a market investigation into the supply or acquisition of cement, ready-mix concrete and aggregates. The referral to the UK Commission was made by the Office of Fair Trading, following an investigation by them of the aggregates sector. Those companies and persons invited to participate in the market investigation are required by law to comply with certain requests for information and, if necessary, to attend hearings. The UK Commission is required to report on this investigation by no later than January 17, 2014. CEMEX s subsidiaries in the UK have been invited to participate in the market investigation and will fully cooperate with it. At this stage of the market investigation, as of December 31, 2012, CEMEX is not able to assess what would be the scope of the recommendations made by the UK Commission, if any, or if such recommendations would have a material adverse impact on its results of operations.

On December 8, 2010, the European Commission (EC) informed CEMEX that it has decided to initiate formal proceedings in respect of possible anticompetitive practices in Austria, Belgium, the Czech Republic, France, Germany, Italy, Luxembourg, the Netherlands, Spain and the United Kingdom, which include CEMEX and seven other companies. The proceedings may lead to an infringement decision or, if the

Other contingencies from legal proceedings - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

objections raised by the EC are not substantiated, the case might be closed. In April 2011, the EC requested CEMEX to deliver a material amount of information and documentation. CEMEX filed an appeal before the General Court of the European Union for the annulment of such request for information and documentation on the grounds that it is contrary to several principals of European Union Law. Nonetheless, the request was fulfilled by CEMEX on August 2, 2011. On September 16, 2011, without discussing the main arguments of the claim, the EC rejected the claim from CEMEX asking for the annulment of the request. On December 15, 2011, CEMEX complied with the terms of this decision and submitted a new reply with the amendments and clarifications identified in the revision and audit process. On December 21, 2011, CEMEX filed its reply to the EC s rejection. The EC filed its rejoinder on March 27, 2012. The hearing is scheduled for February 6, 2013. If the alleged infringements are substantiated, the EC may impose a maximum fine of up to 10% of the total turnover of the relevant companies for the last year preceding the imposition of the fine for which the financial statements have been approved. CEMEX intends to defend its position vigorously in this proceeding and is fully cooperating and will continue to cooperate with the EC in connection with this matter. As of December 31, 2012, the extent of the charges and the alleged infringements are unknown, and it is not clear which revenues would be used for the determination of the possible penalties. As a result, CEMEX cannot assess the likelihood of an adverse result or the amount of the potential fine, but, if adversely resolved, it may have a material adverse impact on CEMEX s financial position.

On October 26, 2010, CEMEX, Inc., one of CEMEX s subsidiaries in the United States, received an Antitrust Civil Investigative Demand from the Office of the Florida Attorney General, which seeks documents and information in connection with an antitrust investigation by the Florida Attorney General into the ready-mix concrete industry in Florida. As of December 31, 2012, CEMEX is working with the Office of the Florida Attorney General to comply with the civil investigative demand, and it is unclear at this stage whether any formal proceeding will be initiated by the Office of the Florida Attorney General.

In September 2009, officers from the EC, in conjunction with local officials of the Spanish national competition enforcement authority (*Comisión Nacional de la Competencia* or CNC), conducted an unannounced inspection at CEMEX s offices in Spain. The EC alleges that CEMEX may have participated in anti-competitive agreements and/or concerted practices. This investigation is related to unannounced previous inspections carried out by the EC in the United Kingdom and Germany in November 2008. CEMEX has received requests for information from the EC in September 2009, October 2010 and December 2010, and CEMEX has fully cooperated by providing the relevant information on time. As of December 31, 2012, CEMEX cannot assess the likelihood of an adverse result, or quantify the potential damages that could be borne by CEMEX. Nonetheless, CEMEX would not expect a material adverse effect on its financial position.

On June 5, 2010, the *Secretaría Distrital de Ambiente de Bogotá*, the District of Bogota s environmental secretary (or the Environmental Secretary), ordered the suspension of CEMEX Colombia s mining activities at El Tunjuelo quarry, located in Bogotá, as well as those of other aggregates producers in the same area. The Environmental Secretary claims that during the past 60 years CEMEX Colombia and the other companies have illegally changed the course of the Tunjuelo River, have used the percolating waters without permission and have improperly used the edge of the river for mining activities. In connection with the injunction, on June 5, 2010, CEMEX Colombia received a notification from the Environmental Secretary informing the initiation of proceedings to impose fines against CEMEX Colombia based on the above mentioned alleged environmental violations. CEMEX Colombia responded to the injunction by requesting that it be revoked based on the fact that the mining activities at El Tunjuelo quarry are supported

Other contingencies from legal proceedings - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

by the authorizations required by the applicable environmental laws and that all the environmental impact statements submitted by CEMEX Colombia have been reviewed and permanently authorized by the *Ministerio del Medio Ambiente, Vivienda y Desarrollo Territorial.* On June 11, 2010, the local authorities in Bogotá, in compliance with the environmental secretary s decision, sealed off the mine to machinery and prohibited the removal of our aggregates inventory. Although there is not an official quantification of the possible fine, the environmental secretary has publicly declared that the fine could be as much as 300 billion Colombian pesos (US$170 or Ps2,184). The temporary injunction does not currently compromise the production and supply of ready-mix concrete to our clients in Colombia. CEMEX Colombia is analyzing its legal strategy to defend itself against these proceedings. At this stage, we are not able to assess the likelihood of an adverse result or potential damages which could be borne by CEMEX Colombia.

In October 2009, CEMEX Corp., one of CEMEX s subsidiaries in the United States, and other cement and concrete suppliers were named as defendants in several purported class action lawsuits alleging price fixing in Florida. The purported class action lawsuits are of two distinct types: a) those filed by entities purporting to have purchased cement or ready-mix concrete directly from one or more of the defendants; and b) those filed by entities purporting to have purchased cement or ready-mix concrete indirectly from one or more of the defendants. Underlying all proposed suits is the allegation that the defendants conspired to raise prices of cement and concrete and hinder competition in Florida. After a period of amended claims and responses in 2010 and 2011, in which all parties presented their arguments, on September 21, 2011, both groups of plaintiffs filed motions for class certification. On January 3, 2012, the court denied both motions, ruling that the cases cannot proceed as class certification. On January 5, 2012, the court stayed both cases pending the resolution of any potential appeal of the court s ruling denying the motions for class certification. On January 17, 2012, the plaintiffs in the action involving entities that purchased ready-mix concrete directly from one or more of the defendants filed a petition with the Eleventh Circuit Court of Appeals, requesting such court to exercise its discretion to review the trial court s decision denying their class certification motion. In March 2012, CEMEX Corp. and the other defendants effected a settlement of both cases resulting in CEMEX having to pay approximately 460 thousand dollars. CEMEX did not admit any wrongdoing as part of the settlements and denies allegations of misconduct.

In September 2009, the CNC separately conducted its own inspection in the context of possible anticompetitive practices in the production and distribution of mortar, ready-mix and aggregates within the Chartered Community of Navarre (Navarre). In December 2009, the CNC started a procedure against CEMEX España for alleged practices prohibited under the Spanish competition law. In November 2010, the CNC provided CEMEX España with a Statement of Facts that included a possible infringement by CEMEX España of Spanish competition law in Navarre. The Statement of Facts indicated to CEMEX España that its parent company, New Sunward Holding B.V., could be jointly and severally liable for the investigated behavior. On December 10, 2010, the CNC Investigative Department notified CEMEX of its proposed decision, which declared an existence of infringement, and that it would submit the proposed decision to the CNC Council. The notification of the proposed decision marked the end of the investigation phase. On December 29, 2010, CEMEX submitted its opposition to the proposed decision denying all charges formulated by the CNC. On May 17, 2011, the CNC Council decided to accept CEMEX s request to review the evidence presented by the other parties. The maximum fine that the CNC could have imposed would be 10% of the total revenues of CEMEX España s ready-mix production activities within Navarre for the calendar year preceding the imposition of the fine. On January 12, 2012, the CNC notified CEMEX of its final decision on this matter, imposing a fine of 500 thousand euro (660 thousand dollars or Ps8,481) against CEMEX España for price-fixing and market sharing in the concrete market of Navarre from June 2008

Other contingencies from legal proceedings - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

through September 2009. CEMEX España denies any wrongdoing and on March 1, 2012, filed an appeal before the competent court (*Audiencia Nacional*) requesting the interim suspension of the decision from the court until a final judgment is issued. To that effect, CEMEX España has requested the CNC Council to suspend the implementation of its decision until the court has decided on the requested interim measure. On July 10, 2012, the court has issued a resolution agreeing to the suspension of payment of the fine.

In June 2009, the Texas General Land Office (GLO) alleged that CEMEX failed to pay approximately US$550 in royalties related to mining activities by CEMEX and its predecessors since the 1940s on lands that, when transferred originally by the State of Texas, contained a reservation of mineral rights. On December 17, 2009, the Texas court handling this matter granted CEMEX s motion for summary judgment finding that the GLO s claims had no merit. The GLO filed an appeal on March 25, 2010 and its appellate brief on May 28, 2010. The GLO requested that the Texas Court of Appeals hear oral arguments in this matter. On May 3, 2011, the GLO and CEMEX submitted briefs and the Court of Appeals heard oral arguments on this matter. On August 31, 2011, the El Paso Court of Appeals reversed the trial court s judgment and rendered judgment in favor of the State of Texas with respect to the ownership of the mineral rights on the lands mined by CEMEX and its predecessors in interest. On February 23, 2012, the GLO and CEMEX entered into an agreement to settle all claims, including claims for past royalties, without any admission of liability by CEMEX. Pursuant to the settlement, CEMEX will pay 750 thousand dollars in five equal installments of 150 thousand per year and will enter into a royalty mining lease at the royalty rate required by the Texas Natural Resources Code on a going forward basis, beginning in September 2012. Further, CEMEX s pending appeal to the Texas Supreme Court has been withdrawn and all ancillary claims that were held in abeyance have been dismissed.

In January and March 2009, one of CEMEX s subsidiaries in Mexico was notified of two findings issued by the Mexican Competition Authority (*Comisión Federal de Competencia* or CFC), for presumptive violations of Mexican antitrust laws. During the CFC investigation, CEMEX filed constitutional challenges for both cases considering that these findings contain substantial violations of rights granted by the Mexican Constitution. In both challenges, the Circuit Courts resolved that CEMEX lacked standing since the notice of presumptive responsibility did not affect any of CEMEX s rights. CEMEX appealed such resolutions. On October 14, 2011, the CFC determined to close one of the cases due to a lack of evidence to impose any sanctions. Third parties subsequently filed an appeal before the CFC to reconsider its ruling, but CEMEX believes that legal precedent exists that establishes that third parties lack standing in these cases. On February 14, 2012, CEMEX was fined approximately Ps10.2 million for anticompetitive practices and was ordered to implement certain measures. CEMEX has appealed the resolution before the CFC and the Circuit Court and denies any wrongdoing. In June 2012, the CFC confirmed its resolution. As a result, in July 2012, CEMEX filed a constitutional challenge and simultaneously filed a claim against the CFC s resolution before the Circuit Court, which nullified the fine imposed on CEMEX. On December 18, 2012, the CFC ratified its resolution, which CEMEX expects to appeal. As of December 31, 2012, a resolution regarding the constitutional challenge has not been issued.

In January 2009, in response to litigation brought by environmental groups concerning the manner in which certain federal quarry permits were granted, a judge from the U.S. District Court for the Southern District of Florida ordered the withdrawal of the federal quarry permits of CEMEX s SCL, FEC and Kendall Krome quarries, in the Lake Belt area in South Florida, which were granted in 2002 to CEMEX Construction Materials Florida, LLC (CEMEX Florida), one of CEMEX s subsidiaries in the United States. The judge ruled that there were deficiencies in the procedures and analysis undertaken by the relevant governmental agencies involved with the issuance of the permits. On January 29, 2010, in connection with the withdrawal

Other contingencies from legal proceedings - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

of federal quarry permits in Lake Belt, Florida, the Army Corps of Engineers concluded a revision and determined procedures for granting new federal quarry permits in the area. During February 2010, new quarry permits were granted to the SCL and FEC quarries. However, at December 31, 2012, a number of potential environmental impacts must be addressed at the wetlands located at the Kendall Krome site before a new federal quarry permit may be issued for mining at that quarry. If CEMEX Florida were unable to maintain the new Lake Belt permits, CEMEX Florida would need to source aggregates, to the extent available, from other locations in Florida or import aggregates. The cessation or significant restriction of quarrying operations in the Lake Belt area could have a significant adverse effect on CEMEX s Florida operating results.

In November 2008, AMEC/Zachry, the general contractor for CEMEX s expansion program in Brooksville, Florida, filed a lawsuit against CEMEX Florida in the United States, alleging delay damages and seeking an equitable adjustment to the contract and payment of change orders. In its claim, AMEC/Zachry sought indemnity for US$60 (Ps771). During 2009, FLSmidth (FLS), a supplier for the mining and cement industry, became a co-defendant in the lawsuit. During 2009 and 2010, CEMEX filed counterclaims against both suppliers. On November 18, 2010, the court denied AMEC/Zachry s motion to dismiss against CEMEX Florida, and denied FLS s motion on the pleading against CEMEX Florida. On January 6, 2011, CEMEX Florida amended its pleadings in accordance with the court s rulings. On March 17, 2011, FLS filed another motion seeking dismissal of one of CEMEX Florida s new claims asserted in the amended pleading. The parties have exchanged documents, and depositions are scheduled for the next several months. On July 1, 2011, AMEC/Zachry filed a motion for substitution of counsel and a motion for a limited stay of discovery proceedings. As of December 31, 2012, the parties to this proceeding finalized the terms and conditions of a settlement. The settlement of this matter will not have a material adverse effect on CEMEX s liquidity and financial position.

In July 2008, Strabag SE (Strabag), one of the leading suppliers of building materials in Europe, entered into a Share Purchase Agreement (SPA) to purchase CEMEX s operations in Austria and Hungary for 310 (US$409 or Ps5,256), subject to authorization of the competition authorities in such countries. On July 1, 2009, Strabag notified CEMEX of its purported rescission of the SPA, arguing that the regulatory approvals were not obtained before June 30, 2009. In October 2009, CEMEX filed a claim against Strabag before the International Arbitration Court of the International Chamber of Commerce (ICC), requesting a declaration that Strabag s rescission of the SPA was invalid and claiming the payment of damages caused to CEMEX for the alleged breach of the SPA for 150 (US$198 or Ps2,544). After a period of hearings, counterclaims, responses and the conformation of the arbitration tribunal, a final award dated May 29, 2012, was notified to CEMEX on June 1, 2012. According to this final award, the arbitral tribunal declared that Strabag s rescission of the SPA was unlawful and ineffective, and ordered Strabag to pay to CEMEX a compensation for damages (including accrued interest), arbitration and legal costs. Also, Strabag s counterclaim was dismissed. Strabag filed an annulment action before the Swiss Federal Supreme Court (the Swiss Court) on July 2, 2012. In relation to the annulment process with the Swiss Court, on July 20, 2012, Strabag paid CEMEX, through RMC Holdings B.V., the amounts ordered by the arbitral tribunal on its final award (principal plus surplus accrued interest and expenses) for approximately 43 (US$57 or Ps732), and, in order to secure the potential obligation for RMC Holdings B.V. to repay these amounts to Strabag in the event that the Swiss Court resolves to annul the May 29, 2012 final award, RMC Holdings B.V. pledged in favor of Strabag 496,355 shares (representing approximately a 33% stake) in its subsidiary Cemex Austria AG. On September 6, 2012, CEMEX presented its reply to the annulment action before the Swiss Court, and expects a final judgment during the first quarter 2013. CEMEX considers the likelihood of a negative

Table of Contents

Other contingencies from legal proceedings - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

resolution from the Swiss Court to be very remote. As a result, the amount of the final award mentioned above was recorded in the statement of operations in 2012, of which approximately 35 (US$46 or Ps591) identified with CEMEX s damages was recognized as part of other expenses, net, and approximately 8 (US$11 or Ps141) related to the recovery of operating losses and expenses caused by Strabag was recognized as part of costs and administration expenses.

In April 2006, the cities of Ka tela and Solin in Croatia published their respective development master plans, adversely impacting the mining concession granted to a CEMEX s subsidiary in Croatia by the Croatian government in September 2005. In May 2006, CEMEX filed an appeal before a constitutional court seeking a declaration by the court of its rights and seeking prohibition of the implementation of the master plans. The municipal courts in Ka tela and Solin had previously rejected the appeals presented by CEMEX. These resolutions were appealed. These cases are currently under review by the Constitutional Court in Croatia, and it is expected that these proceedings will continue for several years before resolution. During the proceedings, the Administrative Court in Croatia ruled in favor of CEMEX, validating the legality of the mining concession granted by the government of Croatia. This decision was final. However, as of December 31, 2012, CEMEX has not been notified of an official declaration from the Constitutional Court as to whether the cities of Ka tela and Solin, within the scope of their master plans, can unilaterally change the borders of exploited fields. CEMEX believes that a declaration of the Constitutional Court will enable it to seek compensation for the losses caused by the proposed changes to the borders of the land available for extraction.

In August 2005, a lawsuit was filed against a subsidiary of CEMEX Colombia and other members of the *Asociación Colombiana de Productores de Concreto*, or ASOCRETO, a union formed by all the ready-mix concrete producers in Colombia. The lawsuit claimed that CEMEX Colombia and other ASOCRETO members were liable for the premature distress of the roads built for the mass public transportation system in Bogotá using ready-mix concrete supplied by CEMEX Colombia and other ASOCRETO members. The plaintiffs alleged that the base material supplied for the road construction failed to meet the quality standards offered by CEMEX Colombia and the other ASOCRETO members and/or that they provided insufficient or inaccurate information in connection with the product. The plaintiffs sought the repair of the roads and estimated that the cost of such repair would be approximately 100 billion Colombian pesos (US$57 or Ps732). In January 2008, CEMEX Colombia was subject to a court order, sequestering a quarry called El Tunjuelo, as security for a possible future money judgment to be rendered against CEMEX Colombia in these proceedings. The court determined that in order to lift this attachment and prevent further attachments, CEMEX Colombia would be required to deposit with the court 337.8 billion Colombian pesos (US$191 or Ps2,454) in cash. CEMEX appealed this decision and also requested that the guarantee be covered by all defendants in the case. In March 2009, the Superior Court of Bogotá allowed CEMEX to offer security in the amount of 20 billion Colombian pesos (US$11 or Ps141). CEMEX deposited the security and, in July 2009, the attachment was lifted. The preliminary hearing to dismiss was unsuccessful and the final argument stage concluded on August 28, 2012. On October 10, 2012, the court nullified the accusation made against two ASOCRETO officials, but the judgment convicted the former director of the Urban Development Institute, and legal representatives of the builder and the auditor to a prison term of 85 months and a fine of 32 million Colombian Pesos (Ps18 thousand dollars). As a consequence of the annulment the judge ordered a restart of the proceedings against the ASOCRETO officers. The ruling can be appealed, but the practical effect of this decision is that the criminal action against ASOCRETO officers will prescribe and therefore there will be no condemnation against CEMEX. As of December 31, 2012, CEMEX Colombia has not recorded any provision as it feels it has sufficient arguments to overcome this action, but if adversely resolved it could have a negative effect on CEMEX s liquidity and financial position.

Other contingencies from legal proceedings - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

As of December 31, 2012, CEMEX is involved in various legal proceedings of minor impact that have arisen in the ordinary course of business. These proceedings involve: 1) product warranty claims; 2) claims for environmental damages; 3) indemnification claims relating to acquisitions; 4) claims to revoke permits and/or concessions; and 5) other diverse civil actions. CEMEX considers that in those instances in which obligations have been incurred, CEMEX has accrued adequate provisions to cover the related risks. CEMEX believes these matters will be resolved without any significant effect on its business, financial position or results of operations. In addition, in relation to certain ongoing legal proceedings, CEMEX is sometimes able to make and disclose reasonable estimates of the expected loss or range of possible loss, as well as disclose any provision accrued for such loss, but for a limited number of ongoing legal proceedings, CEMEX may not be able to make a reasonable estimate of the expected loss or range of possible loss or may be able to do so but believes that disclosure of such information on a case-by-case basis would seriously prejudice CEMEX s position in the ongoing legal proceedings or in any related settlement discussions. Accordingly, in these cases, CEMEX has disclosed qualitative information with respect to the nature and characteristics of the contingency, but has not disclosed the estimate of the range of potential loss.

25) RELATED PARTIES

All significant balances and transactions between the entities that constitute the CEMEX group have been eliminated in the preparation of the consolidated financial statements. These balances with related parties resulted primarily from: (i) the sale and purchase of goods between group entities; (ii) the sale and/or acquisition of subsidiaries shares within the CEMEX group; (iii) the invoicing of administrative services, rentals, trademarks and commercial name rights, royalties and other services rendered between group entities; and (iv) loans between related parties. Transactions between group entities were conducted on arm s length terms based on market prices and conditions.

The definition of related parties includes entities or individuals outside the CEMEX group, which, pursuant to their relationship with CEMEX, may take advantage of being in a privileged situation. Likewise, this applies to cases in which CEMEX may take advantage of such relationships and obtain benefits in its financial position or operating results.

CEMEX s transactions with related parties are executed under market conditions. CEMEX has identified the following transactions between related parties:

Mr. Bernardo Quintana Isaac, a member of the board of directors of CEMEX, S.A.B. de C.V., is the current chairman of the board of directors of *Empresas ICA, S.A.B. de C.V.* (Empresas ICA). Empresas ICA is one of the most important engineering and construction companies in Mexico. In the ordinary course of business, CEMEX extends financing to Empresas ICA in connection with the purchase of CEMEX s products, on the same credit conditions that CEMEX awards to other customers.

Mr. José Antonio Fernández Carbajal, former member of the board of directors of CEMEX, S.A.B. de C.V. until February 23, 2012, is president and chief executive officer of *Fomento Empresarial Mexicano, S.A.B. de C.V.* (FEMSA), a large multinational beverage company. In the ordinary course of business, CEMEX pays and receives various amounts to and from FEMSA for products and services for varying amounts on market terms. Mr. Fernández Carbajal is the actual chairman of the board of *Consejo de Enseñanza e Investigación Superior, A.C.* (the managing entity of *Instituto Tecnológico y de Estudios Superiores de Monterrey* or ITESM). Mr. Lorenzo Zambrano, chief executive officer and chairman of CEMEX s board of

Related parties - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

directors, was chairman of the board of ITESM until February 13, 2012. ITESM has received contributions from CEMEX for amounts that were not material in the periods presented.

Mr. Rafael Rangel Sostmann, a member of the board of directors of CEMEX, S.A.B. de C.V., was the dean of ITESM until September 12, 2011.

On April 12, 2011, Juan Pablo San Agustín Rubio was appointed to the role of executive vice president for strategic planning and business development, which is part of CEMEX s senior management. In 2007, in compliance with CEMEX s then applicable policies, CEMEX extended a loan to Mr. San Agustín Rubio for the construction of a house. During the first quarter of 2012, the loan was repaid in full. The loan bore interest at an annual rate of 1.2% and the largest amount outstanding from January 1, 2011 until it was repaid was approximately 275 thousand. Except for the previously described loan, during 2012, 2011 and 2010, there were no loans between CEMEX and its board members or other members of its top management.

For the years ended December 31, 2012, 2011 and 2010, the aggregate amount of compensation of CEMEX, S.A.B. de C.V. s board of directors, including alternate directors, and top management executives, was approximately US$37 (Ps490), US$24 (Ps300) and US$11 (Ps139), respectively. Of these amounts, approximately US$26 (Ps343) in 2012, US$18 (Ps225) in 2011 and US$8 (Ps101) in 2010, was paid as compensation plus performance bonuses, including pension and postretirement benefits. In addition, approximately US$11 (Ps147) in 2012, US$6 (Ps75) in 2011 and US$3 (Ps38) in 2010 of the aggregate amount in each year, corresponded to allocations of CPOs under CEMEX s executive stock-based compensation programs. In 2012, the amount of CPOs allocated included approximately US$3 (Ps39) of compensation earned under the program that is linked to the fulfillment of certain performance conditions and that is payable through March 2015 to then still active members of CEMEX, S.A.B. de C.V. s board of directors and top management executives (note 21).

26) SUBSEQUENT EVENTS

In connection with the put option transactions on CEMEX s CPOs entered into by Citibank with a Mexican trust that CEMEX established on behalf of its Mexican pension fund and certain of CEMEX s directors and current and former employees in April 2008 (notes 16D and 23C). As of April 17, 2013, the notional amount of the guarantee was completely closed, as a result of the unwinding of 136 million put options over CEMEX s CPOs (100% of the original underlying amount). Cash deposits in margin accounts, after deducting the proceeds from the sale of securities that track the performance of the Mexican Stock Exchange and CEMEX s CPOs held by the Mexican trust, in an aggregate amount of US$112 were used to settle the unwinding of these put options.

In connection with the tax proceeding related to the taxes payable in Mexico from passive income generated by foreign investments for the years 2005 and 2006 and the transitory amnesty provision both of which are described in note 19D, on January 31, 2013, CEMEX, S.A.B. de C.V. was notified that an agreement had been reached with the Mexican tax authorities regarding the settlement of such tax proceeding pursuant to a final payment according to the rules of the transitory provision. CEMEX paid the amount on February 1, 2013.

Considering the guidance under IFRS set forth by International Accounting Standard 21, *The Effects of Changes in Foreign Exchange Rates* (IAS 21), and based on changing circumstances on the net monetary position in foreign currencies of CEMEX, S.A.B. de C.V. (on a parent company only basis) resulting mainly from: a) a significant decrease in tax liabilities denominated in Mexican Pesos; b) a significant increase in its U.S. Dollar-denominated

Subsequent events - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

debt and other financial obligations; and c) the expected increase in U.S. Dollar-denominated intra-group administrative expenses associated with the externalization of major back office activities with IBM; effective as of January 1, 2013, CEMEX, S.A.B. de C.V., for purposes of its parent company only financial statements, was required to prospectively change its functional currency from the Mexican Peso to the U.S. Dollar, as the U.S. Dollar was determined to be the currency of CEMEX, S.A.B. de C.V. s primary economic environment. The aforementioned change has no effect on the functional currencies of CEMEX, S.A.B. de C.V. s subsidiaries, which continue to be the currency in the primary economic environment in which each subsidiary operates. Moreover, the reporting currency for the consolidated financial statements of CEMEX, S.A.B. de C.V. and its subsidiaries and the parent company only financial statements of CEMEX, S.A.B. de C.V. continues to be the Mexican Peso.

The main effects in CEMEX, S.A.B. de C.V. s parent company only financial statements beginning on January 1, 2013, associated with the change in functional currency, as compared to prior years are: a) all transactions, revenues and expenses in any currency are recognized in U.S. Dollars at the exchange rates prevailing at their execution dates; b) monetary balances of CEMEX, S.A.B. de C.V. denominated in U.S. Dollars will not generate foreign currency fluctuations, while monetary balances in Mexican Pesos and other non-U.S. Dollar-denominated balances will now generate foreign currency fluctuations through CEMEX, S.A.B. de C.V. s statement of operations; and c) the conversion option embedded in CEMEX, S.A.B. de C.V. s Mandatory Convertible Notes denominated in Mexican Pesos will now be treated as a stand-alone derivative instrument through CEMEX, S.A.B. de C.V. s statement of operations, while the options embedded in CEMEX, S.A.B. de C.V. s U.S. Dollar-Denominated 2010 Optional Convertible Subordinated Notes and 2011 Optional Convertible Subordinated Notes will cease to be treated as stand-alone derivatives through CEMEX, S.A.B. de C.V. s statement of operations. Prior period financial statements are not required to be restated.

On March 21, 2013, stockholders at the annual ordinary shareholders meeting approved resolutions to: (i) increase the variable common stock through the capitalization of retained earnings by issuing up to 1,312.3 million shares (437.4 million CPOs), which shares were issued, representing an increase in common stock of approximately Ps3.6, considering a nominal value of Ps0.00833 per CPO; (ii) increase the variable common stock by issuing up to 369 million shares (123 million CPOs),which will be kept in CEMEX s treasury to be used to preserve the anti-dilutive rights of note holders pursuant CEMEX s convertible securities (note 16B).

On March 25, 2013, CEMEX, S.A.B. de C.V. issued U.S.$600 aggregate principal amount of its 5.875% Senior Secured Notes due 2019 (the March 2013 Notes). The net proceeds from the offering of approximately U.S.$595 were used for the repayment in full of the remaining indebtedness under the 2009 Financing Agreement of approximately U.S.$55 and the remainder for general corporate purposes, including the purchase of Eurobonds in the Eurobond Tender Offer.

On March 27, 2013, CEMEX paid Ps 2,035 in connection with the account payable with the amendments to the tax consolidation regime in Mexico described in note 19D.

On March 28, 2013, CEMEX purchased 183 aggregate principal amount of Eurobonds through a cash tender offer using a portion of the proceeds from the issuance of the March 2013 Notes, which Eurobonds were immediately cancelled.

Table of Contents

Subsequent events - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

During the court hearing regarding the appeal filed by CEMEX Polska held on February 27, 2013, (note 24A) in reference to the antitrust proceeding against Cemex Polska, the judge presiding over the case confirmed the court s decision to combine the separate appeals of six Polish cement producers in one joint case, as per the motion presented by CEMEX Polska, and reviewed the witness list proposed by CEMEX Polska. The next joint court hearing for all appeals is scheduled for September 18, 2013.

In connection with the Egypt Share Purchase Agreement proceeding, in which CEMEX acquired a controlling interest in ACC (note 24B), on April 16, 2013, the court decided to schedule a new hearing on June 16, 2013.

In connection to the Antitrust Investigations in Europe by the European Commission proceedings, (note 24 B) a hearing with respect to the proceedings against CEMEX, S.A.B. de C.V. and several of its affiliates in Europe was held on February 6, 2013, with the hearings for all other companies being investigated expected to be held during April 2013. CEMEX, S.A.B. de C.V estimates a judgment could be issued during September 2013.

27) MAIN OPERATING SUBSIDIARIES

The main operating subsidiaries as of December 31, 2012 and 2011 were as follows:

		% interest	
Subsidiary	**Country**	**2012**	**2011**
CEMEX México, S. A. de C.V. **1**	Mexico	100.0	100.0
CEMEX España, S.A. **2**	Spain	99.9	99.9
CEMEX, Inc.	United States	100.0	100.0
CEMEX Latam Holdings, S.A. **3**	Spain	74.4	
CEMEX (Costa Rica), S.A.	Costa Rica	99.1	99.1
CEMEX Nicaragua, S.A.	Nicaragua	100.0	100.0
Assiut Cement Company	Egypt	95.8	95.8
CEMEX Colombia S.A.	Colombia	99.7	99.7
Cemento Bayano, S.A.	Panama	99.5	99.5
CEMEX Dominicana, S.A.	Dominican Republic	100.0	100.0
CEMEX de Puerto Rico Inc.	Puerto Rico	100.0	100.0
CEMEX France Gestion (S.A.S.)	France	100.0	100.0
Solid Cement Corporation **4**	Philippines	100.0	100.0
APO Cement Corporation **4**	Philippines	100.0	100.0
CEMEX (Thailand) Co., Ltd. **4**	Thailand	100.0	100.0
CEMEX Holdings (Malaysia) Sdn Bhd **4**	Malaysia	100.0	100.0
CEMEX U.K.	United Kingdom	100.0	100.0
CEMEX Deutschland, AG.	Germany	100.0	100.0
CEMEX Austria, AG.	Austria	100.0	100.0
CEMEX Hrvatska d.d.	Croatia	100.0	100.0
CEMEX Czech Operations, s.r.o.	Czech Republic	100.0	100.0

CEMEX Polska sp. Z.o.o.	Poland	100.0	100.0
CEMEX Hungária Kft.	Hungary	100.0	100.0
Readymix PLC. **5**	Ireland	100.0	61.2
CEMEX Holdings (Israel) Ltd.	Israel	100.0	100.0
CEMEX SIA	Latvia	100.0	100.0

Table of Contents

Main operating subsidiaries - continued

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

As of December 31, 2012, 2011 and 2010

(Millions of Mexican pesos)

Subsidiary	Country	% interest 2012	% interest 2011
CEMEX Topmix LLC, CEMEX Supermix LLC and CEMEX Falcon LLC **6**	United Arab Emirates	100.0	100.0
CEMEX AS	Norway	100.0	100.0
Cimentos Vencemos do Amazonas, Ltda. .	Brazil	100.0	100.0
Global Cement, S.A.	Guatemala	100.0	51.0
CEMEX El Salvador, S.A.	El Salvador	100.0	100.0
Readymix Argentina, S.A.	Argentina	100.0	100.0
CEMEX Jamaica	Jamaica	100.0	100.0
Neoris N.V.	The Netherlands	99.6	99.6

1. CEMEX México, S.A. de C.V. is the indirect holding company of CEMEX España, S.A. and subsidiaries.
2. CEMEX España, S.A. is the indirect holding company of all CEMEX s international operations.
3. CEMEX Latam Holdings, S.A., which is listed in the Colombian stock exchange, is subsidiary of CEMEX España and the indirect holding company of CEMEX s operations in Colombia, Costa Rica, Panama, Brazil, Guatemala and El Salvador (note 20D).
4. Represents CEMEX s indirect interest in the economic benefits of these entities.
5. Readymix plc was listed in the Irish stock exchange until May 17, 2012 (note 15A).
6. CEMEX owns 49% of the common stock of these entities and obtains 100% of the economic benefits, through arrangements with other stockholders.