

Vale S.A.  
Form 6-K  
September 04, 2012  
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**United States  
Securities and Exchange Commission**

Washington, D.C. 20549

**FORM 6-K**

**Report of Foreign Private Issuer  
Pursuant to Rule 13a-16 or 15d-16  
of the  
Securities Exchange Act of 1934**

**For the month of**

**September 2012**

**Vale S.A.**

**Avenida Graça Aranha, No. 26  
20030-900 Rio de Janeiro, RJ, Brazil**

(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

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(Check One) Form 20-F  Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1)

(Check One) Yes  No

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7)

(Check One) Yes  No

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**INCORPORATION BY REFERENCE**

This report is incorporated by reference in our registration statements on Form F-3 filed with the U.S. Securities and Exchange Commission on November 3, 2009 (File Nos. 333-162822 and 333-162822-01), and shall be deemed to be a part thereof from the date on which this report is furnished to the SEC, to the extent not superseded by documents or reports subsequently filed or furnished.

This report also incorporates by reference the following reports, which are accordingly incorporated by reference in the registration statements on Form F-3 referred to in the preceding paragraph:

- our current report on Form 6-K furnished to the SEC on July 25, 2012 (File No. 001-15030) containing our unaudited condensed consolidated interim financial statements for the six-month periods ended June 30, 2012 and June 30, 2011, prepared in accordance with U.S. generally accepted accounting principles (the June 30, 2012 Financial Statements ); and
- our current report on Form 6-K furnished to the SEC on August 8, 2012, containing the June 30, 2012 Financial Statements in XBRL format.

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Table of Contents**RESULTS OF OPERATIONS FOR THE SIX MONTHS ENDED JUNE 30, 2012 AND 2011****Overview**

In the first six months of 2012, we generated net income attributable to the Company's stockholders of US\$6.489 billion, a decrease of US\$6.789 billion, or 51.1%, compared to the first six months of 2011. The decrease in net income was driven primarily by a US\$7.943 billion decrease in operating income, reflecting lower realized prices and slightly higher costs, as well as the effect of a loss on the sale of our coal assets in Colombia in June 2012, as compared to a gain on the sale of our aluminum assets in the first six months of 2011. The decrease also reflected a similar increase in non-operating expenses during the first six months of 2012, as compared to the same period in 2011. Operating cash flow in the first six months of 2012 reached US\$7.634 billion, a decline of 41.6% compared to operating cash flow of US\$13.073 billion for the first six months of 2011, primarily due to the reduction in prices.

The following table shows average sales prices for our principal products for the first six months of 2012 and 2011.

|                    | <b>Six months ended June 30,</b>              |             |
|--------------------|---|-------------|
|                    | <b>2011</b>                                   | <b>2012</b> |
|                    | <b>(US\$/metric ton, except as indicated)</b> |             |
| Iron ore           | 136.13  | 106.07      |
| Iron ore pellets   | 193.67  | 160.51      |
| Manganese          | 188.76  | 127.12      |
| Ferrous alloys     | 1,470.87                                      | 1,252.48    |
| Nickel             | 26,197.92                                     | 18,672.27   |
| Copper             | 9,447.01                                      | 7,834.71    |
| Potash             | 477.94  | 517.12      |
| Platinum (US\$/oz) | 1,790.61                                      | 1,588.38    |
| Cobalt (US\$/lb)   | 15.63   | 13.05       |
| Coal:              |   |             |
| Thermal coal       | 89.96   | 80.71       |
| Metallurgical coal | 219.33  | 190.71      |
| Phosphates:        |   |             |
| MAP                | 671.07  | 639.86      |
| TSP                | 595.94  | 522.02      |
| SSP                | 272.75  | 242.99      |
| DCP                | 674.22  | 661.86      |
| Phosphate rock     | 105.37  | 124.61      |
| Nitrogen           | 572.77  | 569.79      |

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The following table sets forth, for our principal products, the total volumes sold in the first six months of 2012 and 2011.

|                      | <b>Six months ended June 30,</b> |             |
|----------------------|----------------------------------|-------------|
|                      | <b>2011</b>                      | <b>2012</b> |
|                      | <b>(thousand metric tons)</b>    |             |
| Iron ore             | 120,389                          | 117,771     |
| Iron ore pellets     | 20,560                           | 22,677      |
| Manganese            | 498                              | 826         |
| Ferroalloys          | 206                              | 202         |
| Nickel               | 115                              | 119         |
| Copper               | 108                              | 119         |
| Potash               | 272                              | 292         |
| Precious metals (oz) | 1,319                            | 1,128       |
| PGMs (oz)            | 267                              | 211         |
| Cobalt (metric tons) | 1,213                            | 1,147       |
| Coal:                |                                  |             |
| Thermal coal         | 2,283                            | 2,677       |
| Metallurgical coal   | 932                              | 2,351       |
| Phosphates:          |                                  |             |
| MAP                  | 367                              | 548         |
| TSP                  | 299                              | 327         |
| SSP                  | 1,268                            | 1,192       |
| DCP                  | 295                              | 231         |
| Phosphate rock       | 1,218                            | 1,562       |
| Nitrogen             | 639                              | 676         |

Table of Contents**Revenues**

Our gross operating revenues were US\$23.489 billion for the first six months of 2012, 18.7% lower than gross operating revenues for the first six months of 2011, mainly as a result of declines in the price of ferrous minerals and base metals. The proportion of our gross operating revenues attributable to the sale of bulk materials decreased to 73.1% in the first six months of 2012, from 73.4% in the first six months of 2011, while the share of our gross operating revenues attributable to the sale of base metals decreased to 15.1% in the first six months of 2012, from 17.2% in the same period last year. In the first six months of 2012, sales to Asia increased to 51.3% of our gross operating revenues from 50.9% in the comparable period in 2011 and sales to the Americas (excluding Brazil) increased to 7.7% from 7.5%, while sales to Europe decreased to 17.9% from 19.7%. The following table presents our gross operating revenues by product and our total net operating revenues for the periods indicated.

|                              | Six-month period ended June 30, |             | % change |
|------------------------------|---------------------------------|-------------|----------|
|                              | 2011                            | 2012        |          |
|                              | (US\$ million)                  |             |          |
| <b>Bulk Materials:</b>       |                                 |             |          |
| Iron ore                     | 16,389                          | 12,492      | (23.8)   |
| Iron ore pellets             | 4,000                           | 3,659       | (8.5)    |
| Manganese                    | 95                              | 105         | 10.5     |
| Ferroalloys                  | 307                             | 253         | (17.6)   |
| Coal                         | 410                             | 665         | 62.2     |
| Subtotal                     | 21,201                          | 17,174      | (19.0)   |
| <b>Base Metals:</b>          |                                 |             |          |
| Nickel and other products(1) | 4,081                           | 3,099       | (24.1)   |
| Copper concentrate(2)        | 515                             | 457         | (11.3)   |
| Aluminum products(3)         | 383                             |             |          |
| Subtotal                     | 4,979                           | 3,556       | (28.6)   |
| <b>Fertilizers:</b>          |                                 |             |          |
| Potash                       | 130                             | 151         | 16.2     |
| Phosphates                   | 1,122                           | 1,178       | 5.0      |
| Nitrogen                     | 366                             | 385         | 5.2      |
| Others fertilizer products   | 36                              | 38          | 5.6      |
| Subtotal                     | 1,654                           | 1,752       | 5.9      |
| <b>Logistics:</b>            |                                 |             |          |
| Railroads                    | 607                             | 559         | (7.9)    |
| Ports                        | 197                             | 252         | 27.9     |
| Subtotal                     | 804                             | 811         | 0.9      |
| Other products and services  | 255                             | 196         | (23.1)   |
| Gross revenues               | 28,893                          | 23,489      | (18.7)   |
| Value added tax              | (691)                           | (542)       | (21.6)   |
| Net operating revenues       | US\$ 28,202                     | US\$ 22,947 | (18.6)   |

(1) Includes nickel co-products and by-products (copper, precious metals, cobalt and others).

(2) Does not include copper produced as a nickel co-product.

(3) Reflects aluminum operations sold in February 2011.



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The following table summarizes, for the periods indicated, the distribution of our gross operating revenues based on the destination of the goods sold.

|                          | 2011           |              | Six-month period ended June 30, 2012 |              |
|--------------------------|----------------|--------------|--------------------------------------|--------------|
|                          | (US\$ million) | (% of total) | (US\$ million)                       | (% of total) |
| <b>North America</b>     |                |              |                                      |              |
| Canada                   | 717            | 2.5%         | 530                                  | 2.2%         |
| United States            | 882            | 3.1          | 818                                  | 3.5          |
| Mexico                   | 42             | 0.1          | 16                                   | 0.1          |
|                          | 1,641          | 5.7          | 1,364                                | 5.8          |
| <b>South America</b>     |                |              |                                      |              |
| Brazil                   | 5,442          | 18.8         | 4,663                                | 19.9         |
| Other                    | 525            | 1.8          | 435                                  | 1.8          |
|                          | 5,967          | 20.6         | 5,098                                | 21.7         |
| <b>Asia</b>              |                |              |                                      |              |
| China                    | 9,029          | 31.2         | 7,353                                | 31.3         |
| Japan                    | 3,298          | 11.4         | 2,608                                | 11.1         |
| South Korea              | 1,054          | 3.6          | 1,123                                | 4.8          |
| Taiwan                   | 622            | 2.2          | 526                                  | 2.2          |
| Other                    | 706            | 2.5          | 447                                  | 1.9          |
|                          | 14,709         | 50.9         | 12,057                               | 51.3         |
| <b>Europe</b>            |                |              |                                      |              |
| Germany                  | 1,903          | 6.6          | 1,410                                | 6.0          |
| United Kingdom           | 752            | 2.6          | 451                                  | 1.9          |
| Italy                    | 1,014          | 3.5          | 813                                  | 3.5          |
| France                   | 405            | 1.4          | 254                                  | 1.1          |
| Other                    | 1,629          | 5.6          | 1,282                                | 5.4          |
|                          | 5,703          | 19.7         | 4,210                                | 17.9         |
| <b>Rest of the world</b> | 873            | 3.1          | 760                                  | 3.3          |
| <b>Total</b>             | US\$ 28,893    | 100.0%       | US\$ 23,489                          | 100.0%       |

**Revenues by segment****Bulk materials**

Revenues from sales of bulk materials decreased 19.0% in the first six months of 2012, as compared to the same period in 2011, primarily due to lower prices of iron ore and iron ore pellets. Our average realized prices were down 22.1% for iron ore and 17.1% for iron ore pellets due to a decline in the average price premium as well as lower average market prices.

The volume of iron ore sold decreased by 2.2% in the first six months of 2012, as compared to the same period in 2011, as a result of the abnormally heavy rains in Brazil, where all of our iron ore operations are located, during the first months of 2012. The volume of iron ore pellets sold increased by 10.3%, reflecting the ramp-up of our pellet plants in Oman.



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Revenues from bulk materials were positively affected by higher coal volumes in the first six months of 2012. The volume of metallurgical coal sold increased by 152.3%, while the volume of thermal coal sold increased 17.3%, in each case mainly due to the start-up of Moatize operations. In the first six months of 2012, our average realized prices for thermal and metallurgical coal were down 10.3% and 13.0%, respectively, relative to the previous year. After the 2011 supply shock arising from the disruption of Australian production and exports due to heavy rains and flooding, prices of metallurgical coal have trended down, in line with the slower growth of global steel consumption.

In the first six months of 2012, revenues from sales of both manganese and ferroalloys declined, mainly as a result of lower prices, partially offset, in the case of manganese, by an increase in the volume sold.

Table of Contents**Base metals**

Revenues from sales of base metals decreased 28.6% in the first six months of 2012, compared to the same period in 2011, primarily due to lower nickel prices worldwide, reflecting increased concerns about the global economy as well as weaker demand from the stainless steel industry. Currently, nickel prices are hovering around US\$16,000 per metric ton, a level estimated to be very close to the industry marginal cost.

Additionally, figures for the first quarter of 2011 include two months of aluminum sales prior to the transfer of our aluminum assets to Norsk Hydro ASA in February 2011.

**Fertilizers**

Revenues from fertilizer sales were 5.9% higher in the first six months of 2012 compared to the same period in 2011, mainly as a result of an overall increase in sales volumes of phosphate nutrients (MAP 49.2%, TSP 9.4% and phosphate rock 28.2%), potash (7.4%) and nitrogen (5.8%), partially offset by lower realized prices of most of the phosphate nutrients.

**Logistics**

Revenues from sales of logistics services remained stable in the first six months of 2012 compared to the same period in 2011. Railroad revenues decreased by 7.9%, mainly due to lower prices and volumes transported. Port revenues increased by 27.9% due to higher prices and slightly higher volumes transported.

**Operating costs and expenses**

The following table summarizes the operating costs and expenses for the periods indicated.

|  | Six-month period ended June 30, |        | % change |
|--|---------------------------------|--------|----------|
|  | 2011                            | 2012   |          |
|  | (US\$ million)                  |        |          |
| Cost of ores and metals                      | 8,462                           | 8,824  | 4.3      |
| Cost of aluminum products                    | 289                             |        |          |
| Cost of logistic services                    | 665                             | 684    | 2.9      |
| Cost of fertilizer products                  | 1,321                           | 1,400  | 6.0      |
| Others                                       | 560                             | 797    | 42.3     |
| Cost of goods sold                           | 11,297                          | 11,705 | 3.6      |
| Selling, general and administrative expenses | 853                             | 1,144  | 34.1     |

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|                                    |             |             |         |
|------------------------------------|-------------|-------------|---------|
| Research and development           | 705         | 658         | (6.7)   |
| Loss (gain) on sale of assets      | (1,513)     | 377         | (124.9) |
| Other costs and expenses           | 1,144       | 1,290       | 12.8    |
| Total operating costs and expenses | US\$ 12,486 | US\$ 15,174 | 21.5    |

Table of Contents*Cost of goods sold*

The following table summarizes the components of our cost of goods sold for the periods indicated.

|                            | Six-month period ended June 30, |             | % change |
|----------------------------|---------------------------------|-------------|----------|
|                            | 2011                            | 2012        |          |
|                            | (US\$ million)                  |             |          |
| Outsourced services        | 1,997                           | 2,381       | 19.2     |
| Materials costs            | 1,846                           | 2,105       | 14.0     |
| Energy:                    |                                 |             |          |
| Fuel and gases             | 1,068                           | 1,010       | (5.4)    |
| Electric energy            | 514                             | 431         | (16.1)   |
| Subtotal                   | 1,582                           | 1,441       | (8.9)    |
| Acquisition of products:   |                                 |             |          |
| Iron ore and pellets       | 655                             | 449         | (31.5)   |
| Nickel                     | 322                             | 177         | (45.0)   |
| Other                      | 127                             | 149         | 17.3     |
| Subtotal                   | 1,104                           | 775         | (29.8)   |
| Personnel                  | 1,428                           | 1,736       | 21.6     |
| Depreciation and depletion | 1,755                           | 1,891       | 7.7      |
| Others                     | 1,585                           | 1,376       | (13.2)   |
| Total                      | US\$ 11,297                     | US\$ 11,705 | 3.6      |

During the first six months of 2012, the cost of goods sold increased by 3.6% compared to the same period in 2011, totaling US\$11.705 billion. Of the US\$408 million increase in cost of goods sold, US\$958 million was attributable to higher volumes sold, mainly of pellets and fertilizers, and US\$447 million was attributable to equipment maintenance and actions to enhance iron ore, pellets and nickel operations, as well as to higher personnel costs. These increases were partially offset by a US\$997 million decrease in costs attributable to the depreciation of the Brazilian *real* against the U.S. dollar.

- Outsourced services costs (primarily for operational services such as waste removal, cargo freight and maintenance of equipment and facilities) increased 19.2%, driven primarily by increased maintenance services after heavy rainfall in Brazil during the first months of 2012 and higher maintenance costs for our nickel operations in the first half of 2012, after the temporary suspension of mining activities at Sudbury in the first quarter of 2012 to address certain safety concerns.
- Materials costs increased 14.0%, reflecting the effect of maintenance work in our iron ore, pellet and nickel operations, and higher costs in our fertilizer operations caused by an increase in ammonia and oil products prices (which are the core inputs in the production of fertilizers).
- Energy costs decreased 8.9%, primarily reflecting the depreciation of the Brazilian *real* against the U.S. dollar and the divestment of our aluminum assets in February 2011, which were partially offset by the net impact of higher volumes sold and increased prices of fuel (principally consumed in our nickel operations).

- Costs of purchasing products from third parties decreased 29.8%, driven primarily by lower purchases of nickel. In the first half of 2011, we purchased a large amount of finished nickel in order to honor contracts because of problems with the Copper Cliff smelter in Sudbury.
- Personnel costs increased 21.6%, due primarily to an increased number of employees hired for project execution, as well as the effects of a new two-year collective bargaining agreement in Brazil, which increased wages by 8.6% and provided for a retention bonus to be paid to employees working in remote areas in Brazil.

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- Depreciation and depletion expense increased 7.7% due to the ramp-up of new projects, which expense was partially offset by the depreciation of the Brazilian *real* against the U.S. dollar.
- Other costs of goods sold decreased by 13.2% in the first six months of 2012 compared to the same period of 2011. These costs consist mainly of leasing fees related to our joint-venture pelletizing assets, demurrage and royalties.

***Selling, general and administrative expenses***

Selling, general and administrative expenses increased by 34.1% to US\$1.144 billion for the first six months of 2012, as a result of higher head count due to increased hiring for project execution, the new collective bargaining agreement in Brazil and higher nickel and copper receivable adjustments. These adjustments relate to market price variation during the time between the delivery to the customer and the final invoice.

***Research and development expenses***

Research and development expenses, which reflect our investment in creating long-term growth opportunities, decreased by 6.7%, to US\$658 million in the first six months of 2012, from US\$705 million in the corresponding period in 2011, as a result of lower expenditures for feasibility and other studies for natural gas exploration. This was partially offset by the cost of new projects, additional mineral exploration and the development of new processes and technological improvements, mainly in our iron ore and pellets businesses.

***Gain (loss) on sale of assets***

The reported loss on the sale of assets reflects losses resulting from the sale of our coal assets in Colombia, in the amount of US\$355 million, and our European manganese and ferroalloys operations, in the amount of US\$22 million, in the first six months of 2012, compared to a gain of US\$1.513 billion resulting from the sale of our aluminum assets in the first six months of 2011.

***Other expenses***

Other costs and expenses increased by 12.8%, to US\$1.290 billion in the first six months of 2012, from US\$1.144 billion in the corresponding period of 2011, mainly due to pre-operating and start-up expenses related to Onça Puma, Vale Nouvelle-Calédonie (VNC) and Moatize, and costs associated with the repair and remedying of operational issues at VNC and at Carborough Downs.



Table of Contents**Operating income by segment**

The following table provides information about our operating income by segment and as a percentage of revenues for the periods indicated.

|                               | Six months ended June 30, |                                 |                   |               |
|-------------------------------|---------------------------|---------------------------------|-------------------|---------------|
|                               | 2011                      | Segment operating income (loss) |                   | 2012          |
|                               | (US\$ million)            | % of product                    | (US\$ million)    | % of product  |
|                               | (unaudited)               | net operating                   | (unaudited)       | net operating |
|                               |                           | revenues                        |                   | revenues      |
| <b>Bulk Materials:</b>        |                           |                                 |                   |               |
| Iron ore                      | 11,548                    | 71.5%                           | 7,181             | 58.1%         |
| Iron ore pellets              | 2,181                     | 56.4                            | 1,943             | 55.0          |
| Manganese ore                 | 13                        | 14.3                            | 6                 | 5.9           |
| Ferroalloys                   | 46                        | 16.4                            | (9)               |               |
| Coal                          | (184)                     |                                 | (234)             |               |
| Subtotal                      | 13,604                    | 65.4                            | 8,887             | 52.6          |
| <b>Base Metals:</b>           |                           |                                 |                   |               |
| Nickel and other products(1)  | 856                       | 21.0                            | (355)             |               |
| Copper concentrate(2)         | 109                       | 21.9                            | (15)              |               |
| Aluminum products(3)          | 73                        | 19.3                            |                   |               |
| Subtotal                      | 1,038                     | 20.9                            | (370)             |               |
| <b>Fertilizers:</b>           |                           |                                 |                   |               |
| Potash                        | (37)                      |                                 | 7                 | 5.0           |
| Phosphates                    | 111                       | 10.4                            | 66                | 5.8           |
| Nitrogen                      | (32)                      |                                 | (15)              |               |
| Others fertilizer products    | 30                        | 100.0                           | 33                | 100.0         |
| Subtotal                      | 72                        | 4.7                             | 91                | 5.5           |
| <b>Logistics:</b>             |                           |                                 |                   |               |
| Railroads                     | (48)                      |                                 | (137)             |               |
| Ports                         | 11                        | 6.3                             | 19                | 8.4           |
| Shipping                      |                           |                                 |                   |               |
| Subtotal                      | (37)                      |                                 | (118)             |               |
| Other products and services   | (474)                     |                                 | (340)             |               |
| Subtotal                      | 14,203                    | 50.4                            | 8,150             | 35.5          |
| Gain (loss) on sale of assets | 1,513                     |                                 | (377)             |               |
| <b>Total</b>                  | <b>US\$ 15,716</b>        | <b>55.7%</b>                    | <b>US\$ 7,773</b> | <b>33.9%</b>  |

(1) Includes nickel co-products and by-products (copper, precious metals, cobalt and others).

(2) Does not include copper produced as a nickel co-product.

(3) Reflects aluminum operations sold in February 2011.

The decrease in operating margin before gain (loss) on sale of assets, to 35.5% in the first six months of 2012 from 50.4% in the corresponding period of 2011, is mainly due to:



- A decrease in the operating margin for iron ore, which primarily reflects lower average sale prices and the effect of abnormally heavy rainfall during the first months of 2012.
- A decrease in the operating margin for nickel, which is mainly attributable to expenditures related to the temporary stoppage at Sudbury, start-up costs at Onça Puma and start-up costs and inventory adjustments at VNC.

Table of Contents**Non-operating income (expenses)**

The following table details our net non-operating income (expenses) for the periods indicated.

|                                      | Six-month period ended June 30, |              |
|--------------------------------------|---------------------------------|--------------|
|                                      | 2011                            | 2012         |
|                                      | (US\$ million)                  |              |
| Financial income                     | 391                             | 239          |
| Financial expenses                   | (1,096)                         | (1,172)      |
| Gains (losses) on derivatives, net   | 597                             | (120)        |
| Foreign exchange gains (losses), net | 784                             | (1,511)      |
| Indexation gains (losses), net       | (126)                           | 245          |
| Non-operating income (expenses)      | US\$ 550                        | US\$ (2,319) |

We had net non-operating expenses of US\$2,319 million in the six-month period ended June 30, 2012, compared to non-operating income of US\$550 million in the same period in 2011. This increase primarily reflects the following factors:

- A decrease in financial income of US\$152 million, mainly due to a lower average cash balance.
  
- An increase in financial expenses of US\$76 million, attributable in part to fair value changes in amounts due under our shareholder debentures.
  
- The net effect of fair value changes in derivatives had a negative impact on earnings of US\$120 million in the first six months of 2012 and a positive impact of US\$597 million in the first six months of 2011. This reflected the following main categories of derivatives transactions:
  - Currency and interest rate swaps We recognized a net loss of US\$211 million in the first six months of 2012 from currency and interest rate swaps, compared to net income of US\$580 million in first six months of 2011. These swaps are primarily made to convert debt denominated in other currencies into U.S. dollars in order to protect our cash flow from exchange rate volatility.
  
  - Nickel derivatives We recognized net income of US\$91 million in the first six months of 2012 compared or loss of US\$10 million in the first six months of 2011.
  
  - Bunker oil derivatives We did not recognize any gains or losses with respect to bunker oil derivatives in the first six months of 2012, compared to net income of US\$34 million in first six months of 2011. These derivatives were structured to minimize the volatility of the cost of

maritime freight.

- Foreign exchange losses of US\$1,511 million in the first six months of 2012 compared to foreign exchange gains of US\$784 million in the first six months of 2011, principally due to the depreciation of the Brazilian *real* against the U.S. dollar in the first six months of 2012 compared to an appreciation of the Brazilian *real* against the U.S. dollar in the first six months of 2011.

- A net indexation gain of US\$245 million in the first six months of 2012 compared to a net expense of US\$126 million in the first six months of 2011. The net indexation gain or loss reflects the net effect of gain on assets subject to indexation and loss on liabilities subject to indexation. The change was due primarily to a reduction in our provisions subject to indexation, because of the payment in the third quarter of 2011 of social contribution taxes following an adverse decision by a Brazilian court.

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**Income taxes**

In the first six months of 2012, we recorded an income tax gain of US\$507 million, compared to an income tax expense of US\$3.784 billion in the same period in 2011. The tax gain resulted from the reversal of the US\$1.236 billion deferred tax liability generated by the acquisition of Vale Fertilizantes S.A. (Vale Fertilizantes) by our subsidiary Mineração Naque S.A. (Naque) in 2010, following the merger of Naque and Vale Fertilizantes in June 2012. Excluding this effect, the effective tax rate was 16.7% for the first six months of 2012 and 23.1% for the first six months of 2011. The decrease was mainly due to the tax benefit on the payment of interest attributable to stockholders.

**Affiliates and joint ventures**

Our equity in the results of affiliates and joint ventures resulted in a net gain of US\$401 million in the first six months of 2012, compared to a net gain of US\$686 million in the same period in 2011. The amount in both periods is primarily attributable to our joint venture Samarco.

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**LIQUIDITY AND CAPITAL RESOURCES**

**Overview**

In the ordinary course of our business, our principal funding requirements are for capital expenditures, dividend payments and debt service. We have historically met these requirements by using cash generated from operating activities and through borrowings, supplemented occasionally by dispositions of assets.

For 2012, we have budgeted for capital expenditures of US\$21.4 billion, and announced a minimum dividend payment of US\$6.0 billion to be paid in two installments of US\$3.0 billion. The first installment was paid in April and the second is payable in October. We paid US\$9.0 billion in dividends during 2011 and repurchased US\$3.0 billion of our common and preferred shares during the second half of 2011.

We expect our operating cash flow and cash holdings to be sufficient to meet these anticipated requirements. We also regularly review acquisition and investment opportunities and, when suitable opportunities arise, we make acquisitions and investments to implement our business strategy. We may fund these investments with borrowings.

**Sources of funds**

Our main sources of funds are operating cash flow and borrowings. Our operating activities generated cash flows of US\$7.634 billion in the first six months of 2012.

Our major new borrowing transactions in 2012 are summarized below:

- In January 2012, our wholly-owned finance subsidiary Vale Overseas issued US\$1 billion of notes due 2022, guaranteed by Vale, with a coupon of 4.375% per year, payable semi-annually.
- In April 2012, in a reopening of its 4.375% guaranteed notes due 2022, Vale Overseas issued an additional US\$1.25 billion of that series of notes. Those notes will be consolidated and form a single series with the US\$1 billion of notes issued in January 2012.
- In July 2012, we issued 750 million, approximately equivalent to US\$919 million, of notes due 2023. These notes bear a coupon of 3.75% per year, payable annually.

In addition to the transactions described above, through June 30, 2012 we also borrowed US\$568 million under our existing financing agreements.

**Uses of funds**

*Capital expenditures*

We have budgeted US\$21.4 billion for capital expenditures in 2012, and in the first six months of 2012, our capital expenditures, excluding acquisitions, amounted to US\$8.0 billion. These capital expenditure figures include some amounts that are treated as current expenses for accounting purposes, such as expenses for project development, maintenance of existing assets, and research and development.

*Distributions*

The minimum dividend we have announced for 2012 is US\$6.0 billion. The first installment of US\$3.0 billion was paid in April and the second is payable in October.

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**Debt**

On June 30, 2012, we had aggregate outstanding debt of US\$25.438 billion. Our outstanding long-term debt (including the current portion of long-term debt and accrued charges) was US\$24.935 billion, compared to US\$23.033 billion at the end of 2011. At June 30, 2012, US\$1.088 billion of the total aggregate outstanding debt was secured by liens on some of our assets, and our average debt maturity was 9.4 years.

At June 30, 2012, we had US\$503 million of outstanding short-term debt. In general, our short-term debt consists primarily of U.S. dollar-denominated trade financing, mainly in the form of export prepayments and export sales advances with financial institutions.

Our major categories of long-term indebtedness are as follows. The amounts given below include the current portion of long-term debt and exclude accrued charges.

- *U.S. dollar-denominated loans and financings (US\$4.376 billion at June 30, 2012).* This category includes export financing lines, import finance from export credit agencies, and loans from commercial banks and multilateral organizations.
- *U.S. dollar-denominated fixed rate notes (US\$11.378 billion at June 30, 2012).* We have issued in public offerings several series of fixed rate debt securities through our finance subsidiary, Vale Overseas Limited, and through our subsidiary Vale Canada. The US\$9.131 billion in debt securities issued by Vale Overseas Limited is guaranteed by Vale.
- *Euro-denominated fixed rate notes (US\$944 million at June 30, 2012).* On March 24, 2010, we issued 750 million of fixed-rate notes in a global public offering. These notes are due in 2018 and have a coupon of 4.375% per year, payable annually.
- *Real-denominated non-convertible debentures (US\$2.375 billion at June 30, 2012).* This category includes debentures issued in the Brazilian market. The largest is an issuance of non-convertible debentures in the amount of approximately US\$2.600 billion, in two series, with four- and seven-year maturities, issued in November 2006. The first series, approximately US\$700 million at issuance, matured in 2010. The second series, approximately US\$1.900 billion at issuance, matures in 2013 and bears interest at the Brazilian CDI interest rate plus 0.25% per year. At June 30, 2012, the total amount of the second series was US\$2.030 billion.
- *Other debt (US\$5.522 billion at June 30, 2012).* We have outstanding debt, principally owed to BNDES and Brazilian commercial banks, denominated in Brazilian *reais* and other currencies.

Part of our debt is incurred under a variety of credit lines, the amounts drawn under which are included in the long-term indebtedness listed above. As of June 30, 2012, these included the following:

- A credit line for US\$530 million with a syndicate of financial institutions to finance the acquisition of five large ore carriers and two capesize bulkers at two Korean shipyards. As of June 30, 2012, we had drawn US\$265 million under this facility.
- A credit line for US\$1 billion with Export Development Canada to finance our investment program. As of June 30, 2012, we had drawn US\$675 million under this facility.
- A US\$1.2 billion facility with The Export-Import Bank of China and the Bank of China Limited to finance the construction of 12 very large ore carriers. As of June 30, 2012, we had drawn US\$712 million under this facility.



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- Framework agreements signed in May 2008 with the Japan Bank for International Cooperation (JBIC) and Nippon Export and Investment Insurance (NEXI) for US\$5.0 billion of financing for mining, logistics and power generation projects. Under the NEXI framework agreement, we have signed and fully drawn a US\$300 million export facility, through our subsidiary PTVI, with Japanese financial institutions to finance the construction of the Karebbe hydroelectric power plant on the Larona River in Sulawesi, Indonesia.
- Credit lines for R\$7.3 billion, or US\$4.0 billion, with BNDES to finance our investment program. As of June 30, 2012, we had drawn the equivalent of US\$1.432 billion under this facility.
- Facilities with BNDES totaling R\$877 million, or US\$441 million, to finance the acquisition of domestic equipment. As of June 30, 2012, we had drawn the equivalent of US\$322 million under these facilities.

In addition to the transactions described above, in August 2012, BNDES approved a financing contract of R\$3.9 billion to implement the CLN 150 Mtpy project, which will expand logistics infrastructure in Vale's Northern System.

We have revolving credit facilities with syndicates of international banks. As of June 30, 2012, the total amount available under these facilities was US\$3.0 billion, which can be drawn by Vale, Vale Canada Limited and Vale International. As of June 30, 2012, we had not drawn any amounts under these facilities.

Some of our long-term debt instruments contain financial covenants. Our principal covenants require us to maintain certain ratios, such as debt to EBITDA and interest coverage. We believe that our existing covenants will not significantly restrict our ability to borrow additional funds as needed to meet our capital requirements.

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**RECENT DEVELOPMENTS**

**CFEM assessments**

As disclosed in our annual report for the year ended December 31, 2011, we have received assessments from the Brazilian National Department of Mineral Production (*Departamento Nacional de Produção Mineral* - DNPM), an agency of the federal Ministry of Mines and Energy, concerning a royalty called *Compensação Financeira pela Exploração de Recursos Minerais* or CFEM, and we are engaged in administrative and judicial proceedings challenging these assessments. One of the issues in dispute is the deductibility of transportation expenditures in arriving at the amount upon which the CFEM is calculated. In the third quarter of 2012, we determined that we have a probable loss and we will recognize a provision of approximately R\$1.4 billion for this probable loss in the third quarter of 2012.

**Nickel operations interruptions**

As described more fully in our production report for the three-month period ended June 30, 2012, which was furnished to the SEC on Form 6-K on July 19, 2012, in May 2012, we stopped our nickel operations in New Caledonia due to an incident in the acid supply plant. An independent investigation concluded that a technical defect caused a water leak inside the plant, which diluted the acid and caused some corrosion. The issues with the acid plant are not related to our HPAL (high pressure acid leaching) technology; the acid plant at issue merely supplies an input to the HPAL process. Repairs at the acid plant are underway and all the equipment is expected to be operational once again by year-end. The solvent extraction circuit is itself expected to be commissioned and ready to operate by the fourth quarter of 2012 and once it is operational VNC will begin producing nickel oxide, cobalt and hydroxide cake.

Onça Puma, our ferronickel operation in Brazil, stopped operating during the second quarter of 2012 due to problems with both of its furnaces. We are still assessing the extent of the repairs needed and the period of time required to perform them, but based on initial indications, we believe that is likely that both furnaces will be out of operation for at least the next few months.

Table of Contents**RATIO OF EARNINGS TO FIXED CHARGES**

|  | 2007   | Year ended December 31, |        |                | 2011   | Six-month period ended |       |
|--|--------|-------------------------|--------|----------------|--------|------------------------|-------|
|  |        | 2008                    | 2009   | 2010           |        | 2011                   | 2012  |
|  |        |                         |        | (US\$ million) |        |                        |       |
|  |        |                         |        | (unaudited)    |        |                        |       |
| Income before discontinued operations, income taxes and equity results | 15,233 | 13,217                  | 7,123  | 20,314         | 26,799 | 16,266                 | 5,454 |
| Fixed charges:   |        |                         |        |                |        |                        |       |
| Interest costs capitalized   | 78     | 230                     | 266    | 164            | 234    | 102                    | 126   |
| Interest costs expensed  | 2,517  | 1,765                   | 1,558  | 2,646          | 2,465  | 1,096                  | 1,172 |
| Guaranteed preferred stock dividend                                    | 370    | 475                     | 638    | 881            | 1,265  | 1,318                  | 1,125 |
|  | 2,965  | 2,470                   | 2,462  | 3,691          | 3,964  | 2,516                  | 2,423 |
| Amortization of capitalized interest                                   | 18     | 26                      | 38     | 45             | 54     | 46                     | 57    |
| Distributed income of equity investees                                 | 394    | 513                     | 386    | 1,161          | 1,038  | 593                    | 172   |
|  | 18,610 | 16,226                  | 10,009 | 25,211         | 31,855 | 19,421                 | 8,106 |
| Less: interest capitalized   | (78)   | (230)                   | (266)  | (164)          | (234)  | (102)                  | (126) |
|  | 18,532 | 15,996                  | 9,743  | 25,047         | 31,621 | 19,319                 | 7,980 |
| Ratio of earnings to combined fixed charges and preferred dividends    | 6.25   | 6.48                    | 3.96   | 6.79           | 7.98   | 7.68                   | 3.29  |

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**EXHIBIT INDEX**

**Exhibit A:** Awareness Letter of PricewaterhouseCoopers Auditores Independentes

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**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

VALE S.A.

By: /s/ Luciana Ribeiro da Costa Werner  
Name: Luciana Ribeiro da Costa Werner  
Title: Attorney-in-Fact

By: /s/ Bruna Gonçalves Botelho  
Name: Bruna Gonçalves Botelho  
Title: Attorney-in-Fact

Date: September 4, 2012

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**Exhibit A**

Securities and Exchange Commission

100 F Street, N.E.

Washington, DC 20549

Commissioners:

We are aware that our report dated July 25, 2012 on our review of interim financial information of Vale S.A. for the three-month periods ended June 30, 2012, March 31, 2012 and June 30, 2011 and for the six-month periods ended June 30, 2012 and June 30, 2011, which is included in this report on Form 6-K is incorporated by reference in Vale's registration statement on Form F-3 filed with the U.S. Securities and Exchange Commission on November 3, 2009 (File Nos. 333-162822 and 333-162822-01).

/s/ PricewaterhouseCoopers  
PricewaterhouseCoopers  
Auditores Independentes

Rio de Janeiro, Brazil

September 4, 2012

PricewaterhouseCoopers, Av. José Silva de Azevedo Neto 200, 1º e 2º, Torre Evolution IV, Barra da Tijuca, Rio de Janeiro, RJ, Brasil  
22775-056

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