

Vale S.A.  
Form 6-K  
October 25, 2012  
[Table of Contents](#)

**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**

**October 2012**

**Vale S.A.**

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

(Address of principal executive office)

Edgar Filing: Vale S.A. - Form 6-K

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

(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

(Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.)

(Check One) Yes  No

(If  Yes is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b). 82- .)

---

Table of Contents

Table of Contents

Press Release

Signature Page

---

Table of Contents

BM&F BOVESPA: VALE3, VALE5

NYSE: VALE, VALE.P

HKEx: 6210, 6230

EURONEXT PARIS: VALE3, VALE5

LATIBEX: XVALO, XVALP

**www.vale.com**

**rio@vale.com**

**Departament of  
Investor Relations**

Roberto Castello Branco

Viktor Moszkowicz

Carla Albano Miller

Andrea Gutman

Christian Perlingiere

Marcio Loures Penna

Rafael Rondinelli

Samantha Pons

Tel: (5521) 3814-4540

## FACING THE CHALLENGES

### PERFORMANCE OF VALE IN 3Q12

Rio de Janeiro, October 24, 2012 Vale S.A. (Vale) had a financial performance that reflected the challenges stemming from the downward price volatility typically created by a global economic deceleration, which combines the effects of a weaker demand for minerals and metals with negative expectations. Although our main financial indicators softened in comparison with last quarter, they remained solid.

Mining is fundamentally a cyclical industry and is thus exposed to high price volatility. In such environment and in light of prospects of a more moderate expansion of the world economy in the years to come, higher productivity and lower cost levels are of paramount importance to thrive in a very competitive global market.

Vale is increasingly focused on strengthening capital efficiency, as our priority is to maximize shareholder value creation while maintaining a strong balance sheet to preserve our credit rating status(1).

Investments in world-class assets with long life, low cost, expandability and high quality output - such as Carajás S11D and Moatize, are our focus in project execution. In this context, diversification is still a strategic priority, but only if investment in non-iron ore assets proves to be capable of creating significant value.

Divestiture of non-value adding assets will improve capital allocation and unlock funds to help the financing of investment in world-class assets, allowing for only a moderate use of the balance sheet at this stage of the cycle.

Alongside the efforts to optimize capital management, we are developing initiatives to streamline the cost structure of operating and corporate activities.

A significant improvement in our approach to applying for environmental permits is being rewarded, with the granting of licenses critical to run mining and logistics operations in Brazil as well as to the development of projects, such as Serra Sul S11D.

The competitiveness of our iron ore business is being enhanced through initiatives to cut costs, increase productivity, improve quality and expand the global distribution network. The most important ones are the execution of projects based on the high quality reserves of Carajás Additional 40 Mtpy, Serra Sul S11D, the start-up of production of the 67.1% Fe content N5 South mine in Carajás and the use of technology to counteract the effects of ageing in our Southern/Southeastern Systems reserves.

As the global leader in iron ore, by size and quality of production and reserves, we will continue to benefit from a scenario of growth and structural transformation of emerging market economies.

We strongly believe that the execution of a strategy anchored on a rigorous discipline in capital allocation and the exploitation of our rich endowment of mineral resources will enable us to deliver substantial value over the next few years.

---

(1) Vale is rated A- by Standard & Poors, BBB+ by Fitch, BBB(high) by DBRS and Baa2 by Moody's.

*US GAAP*

*3Q12*

Table of Contents

Financial highlights in 3Q12:

- Gross operating revenues totaled US\$ 11.0 billion, 9.8% below the US\$ 12.2 billion in 2Q12. The decline was a consequence of lower sales prices.
- Income from existing operations, as measured by adjusted EBIT(a) (earnings before interest and taxes), decreased to US\$ 2.7 billion, 32.5% below 2Q12. After excluding the effect of the provision related to mining royalties (CFEM), adjusted EBIT reached US\$ 3.2 billion.
- Operating income margin of 29.7%, as measured by adjusted EBIT margin, after excluding the effect of the CFEM provision.
- Net earnings were US\$ 1.7 billion in 3Q12, equal to US\$ 0.32 per share.
- Cash generation, as measured by adjusted EBITDA(b) (earnings before interest, taxes, depreciation and amortization), of US\$ 3.7 billion, 27.0% lower than the previous quarter. After excluding the effects of non-recurring items, cash generation was US\$ 4.3 billion in 3Q12. Over the last 12-month period ended at September 30, 2012, adjusted EBITDA was US\$ 22.1 billion, after excluding non-recurring accounting charges.
- Capex excluding acquisitions in 3Q12 equaled US\$ 4.3 billion, in line with 2Q12. In the first nine months of the year, capital expenditures totaled US\$ 12.3 billion, 8.4% above the US\$ 11.3 billion spent in the same period of 2011.
- Dividend of US\$ 3.0 billion, US\$ 0.5821 per share, to be paid from October 31, 2012 onward, totaling US\$ 6.0 billion for 2012, and equal to US\$ 1.1771 per common or preferred share.
- Maintenance of a strong balance sheet, with low debt leverage, measured by total debt/LTM adjusted EBITDA, equal to 1.4x, long average maturity, 10.3 years, and low average cost, 4.6% per year as of September 30, 2012.

Table of Contents

3Q12

**Table 1 - SELECTED FINANCIAL INDICATORS**

US\$ million	3Q11 (A)	2Q12 (B)	3Q12 (C)	% (C/A)	% (C/B)
Operating revenues	16,741	12,150	10,963	(34.5)	(9.8)
Adjusted EBIT	8,373	3,923	2,647	(68.4)	(32.5)
Adjusted EBIT excluding non-recurring items	8,373	4,300	3,189	(61.9)	(25.8)
Adjusted EBIT margin excluding non-recurring items(%)	51.2	36.2	29.7		
Adjusted EBITDA	9,631	5,119	3,738	(61.2)	(27.0)
Adjusted EBITDA excluding non-recurring items	9,631	5,496	4,280	(55.6)	(22.1)
Net earnings	4,935	2,662	1,669	(66.2)	(37.3)
Earnings per share on a fully diluted basis (US\$ / share)	0.94	0.52	0.32	(65.5)	(38.0)
Total debt/ adjusted EBITDA (x)	0.6	0.9	1.4	119.0	45.6
ROIC(1) (%)	36.9	33.1	26.2		
Capex (excluding acquisitions)	4,529	4,287	4,289	(5.3)	

(1) ROIC LTM return on invested capital for the last twelve-month period.

US\$ million	9M11 (A)	9M12 (B)	% (B/A)
Operating revenues	45,634	34,452	(24.5)
Adjusted EBIT	24,089	10,420	(56.7)
Adjusted EBIT excluding non-recurring items	22,576	11,339	(49.8)
Adjusted EBIT margin excluding non-recurring items(%)	50.7	33.7	
Adjusted EBITDA	27,876	13,822	(50.4)
Adjusted EBITDA excluding non-recurring items	26,363	14,741	(44.1)
Net earnings	18,213	8,158	(55.2)
Capex (excluding acquisitions)	11,308	12,253	8.4
Acquisitions	299	648	116.6

Except where otherwise indicated the operational and financial information in this release is based on the consolidated figures in accordance with US GAAP and, with the exception of information on investments and behavior of markets, quarterly financial statements are reviewed by the company's independent auditors. The main subsidiaries that are consolidated are the following: Companhia Minera Miski Mayo S.A.C., Ferrovia Centro-Atlântica S.A.(FCA), Ferrovia Norte Sul S.A, Mineração Corumbaense Reunida S.A., PT Vale Indonesia Tbk (formerly International Nickel Indonesia Tbk), Sociedad Contractual Minera Tres Valles, Vale Australia Pty Ltd., Vale International Holdings GMBH, Vale Canada Limited (formerly Vale Inco Limited), Vale Fertilizantes S.A., Vale International S.A., Vale Manganês S.A., Vale Mina do Azul S.A., Vale Moçambique S.A., Vale Nouvelle-Calédonie SAS, Vale Oman Pelletizing Company LLC and Vale Shipping Holding PTE Ltd.



Table of Contents

INDEX

<b><u>FACING THE CHALLENGES</u></b>	<b>1</b>
<u>Table 1 - SELECTED FINANCIAL INDICATORS</u>	3
<b><u>STRATEGY, GROWTH AND VALUE CREATION</u></b>	<b>5</b>
<b><u>BUSINESS OUTLOOK</u></b>	<b>6</b>
<b><u>REVENUES</u></b>	<b>9</b>
<u>Table 2 - OPERATING REVENUE BREAKDOWN</u>	9
<u>Table 3 - OPERATING REVENUE BY DESTINATION</u>	10
<b><u>COSTS AND EXPENSES</u></b>	<b>10</b>
<u>Table 4 - COGS AND EXPENSES BREAKDOWN</u>	12
<b><u>OPERATING INCOME</u></b>	<b>13</b>
<b><u>NET EARNINGS</u></b>	<b>13</b>
<b><u>CASH GENERATION</u></b>	<b>13</b>
<u>Table 5 - QUARTERLY ADJUSTED EBITDA</u>	14
<u>Table 6 - ADJUSTED EBITDA BY BUSINESS AREA</u>	14
<b><u>INVESTMENTS</u></b>	<b>14</b>
<u>Table 7 - TOTAL INVESTMENT BY CATEGORY</u>	15
<u>Table 8 - TOTAL INVESTMENT BY BUSINESS AREA</u>	16
<b><u>DEBT INDICATORS</u></b>	<b>21</b>
<u>Table 9 - DEBT INDICATORS</u>	21
<b><u>FUND RAISING</u></b>	<b>22</b>
<b><u>PERFORMANCE OF THE BUSINESS SEGMENTS</u></b>	<b>22</b>
<u>Table 10 - FERROUS MINERALS</u>	24
<u>Table 11 - COAL</u>	25
<u>Table 12 - BULK MATERIALS</u>	26
<u>Table 13 - BASE METALS</u>	27
<u>Table 14 - FERTILIZER NUTRIENTS</u>	28
<u>Table 15 - LOGISTICS SERVICES</u>	29
<b><u>FINANCIAL INDICATORS OF NON-CONSOLIDATED COMPANIES</u></b>	<b>30</b>
<b><u>CONFERENCE CALL AND WEBCAST</u></b>	<b>30</b>
<b><u>BOX - IFRS RECONCILIATION WITH USGAAP</u></b>	<b>31</b>
<b><u>ANNEX 1 - FINANCIAL STATEMENTS</u></b>	<b>32</b>
<u>Table 16 - INCOME STATEMENTS</u>	32
<u>Table 17 - FINANCIAL RESULT</u>	32
<u>Table 18 - EQUITY INCOME BY BUSINESS SEGMENT</u>	32
<u>Table 19 - BALANCE SHEET</u>	33
<u>Table 20 - CASH FLOW</u>	34
<b><u>ANNEX 2 - VOLUMES SOLD, PRICES AND MARGINS</u></b>	<b>35</b>
<u>Table 21 - VOLUMES SOLD: MINERALS AND METALS</u>	35
<u>Table 22 - AVERAGE SALE PRICES</u>	35
<u>Table 23 - OPERATING MARGINS BY SEGMENT</u>	36
<b><u>ANNEX 3 - RECONCILIATION OF US GAAP and NON-GAAP INFORMATION</u></b>	<b>37</b>

Table of Contents

STRATEGY, GROWTH AND VALUE CREATION

Vale is increasingly focused on strengthening capital efficiency, as our priority is to maximize shareholder value creation while maintaining a strong balance sheet to preserve our credit rating status.

We will conclude projects already under execution, while R&D expenditures are being cut to give rise in the future to a smaller and more select portfolio of projects with high expected rates of return and effective potential to foster value creation. Some mineral exploration efforts were terminated in cases where costs were expected to be higher than risk-adjusted benefits.

2012 is very likely to be the peak year for capital expenditures in the foreseeable future.

Investment in world-class assets with long life, low cost, high quality output and expandability - such as Carajás S11D and Moatize are our focus in project execution. In this context, diversification is still a strategic priority, but only if investment in non-iron ore assets proves to be able to create value.

Divestiture of non-value adding assets will improve capital allocation and will unlock funds to help the financing of investment in world-class assets, allowing for only a moderate use of the balance sheet at this stage of the cycle.

Alongside the efforts to optimize capital management, we are developing initiatives to streamline the cost structure of operating and corporate activities.

The competitiveness of our iron ore business is being enhanced through initiatives to cut costs, increase productivity and improve quality. The most important ones are the execution of projects based on the high quality reserves of Carajás and the use of technology to counteract the effects of ageing in our Southern/Southeastern Systems reserves.

The significant improvement in our approach to applying for environmental permits is being rewarded. This year we obtained a total of 52 licenses, which were critical to the running of our mining and logistics operations in Brazil. Moreover, we received the preliminary license for Serra Sul S11D, a very important project for the future supply of iron ore, and the operating license for the N5 South mine, at Carajás.

N5 South has 1.025 billion metric tons of proven and probable reserves and an average Fe content of 67.1%. It is expected to begin production by year-end, providing approximately 25% of the run-of-mine (ROM) ores to be extracted from Carajás in 2013, boosting quality while leading to lower operating costs. N5 South is important for strengthening Vale's position as the leading global producer of high quality iron ore.

## Edgar Filing: Vale S.A. - Form 6-K

The four Itabirito projects – Conceição, Conceição II, Cauê and Vargem Grande – will replace lost capacity, as well as expand net capacity. The most important implication will be the rise in Fe content to above 65% and a sharp reduction in the silica content through the construction/adaptation of plants with additional phases of crushing and screening.

An estimated fleet of 20 Valemax vessels will be in operation by the end of 2012, leading to stronger global competitiveness by our iron ore business. By the same token, our global distribution network is being expanded with new ports able to receive the Valemax ships, the construction of the Malaysian distribution center and other floating transfer stations in Asia.

Three pellet plants – Tubarão I & II and São Luís - are being temporarily shutdown in order to accommodate the effect of a cyclical weakening of demand, while the feed is reallocated to enhance the supply of iron ore sinter feed.

The size and performance of our coal business will be significantly improved with the development of the mining and logistics operations in Mozambique, taking advantage of an efficient mine-railway-port system and large-scale production of premium hard coking coal coming on stream by 2015.

The base metals business is finding ways to live within its means, pursuing lower costs and higher productivity, and will benefit from the expansion of capacity in copper - Salobo I & II and Lubambe. Loss-making nickel mines in Canada will be shut down.(2) We do not expect an impact on the production of finished nickel as mine output losses will be offset by higher production in Sorowako.

We are finalizing the assessment of costs to reform the furnaces of Onça Puma. Afterwards, the impairment test will be concluded and the results will be publicly disclosed immediately.

---

(2) Labor will be redeployed to other operations.

Table of Contents

BUSINESS OUTLOOK

The global economic outlook presents several challenges. Global GDP growth has slowed since the middle of last year and has been hovering around 2-2.5% over the last two quarters, far below its long-term trend and with the weakest pace since the current cyclical recovery began in 2Q09.

Despite the downside risks, we expect global economic activity to strengthen gradually over the next few months, mostly driven by emerging market economies, although expansion is likely to proceed at a moderate pace.

Prices of industrial metals, much more than energy and food commodities, tend to be predominantly influenced by the fluctuations in economic activity - industrial production - and expectations about the future. Therefore, the downward trend in iron ore, nickel and copper prices, among others, came in line with the cyclical deceleration in global industrial production growth and negative expectations about the evolution of the global economy(3).

Industrial production expansion started a down cycle in 2Q11. Over the last few months global IP growth neared zero, but the global manufacturing PMI increased in September for the first time in five months, which may be signaling the beginning of a trend reversal.

The most encouraging indication is given by the rise in the new orders-to-inventories of finished goods ratio. This is consistent with the increase in global retail sales and suggests that the inventory cycle, which has been holding industrial output from expanding, is coming to an end. Thus, we expect industrial production to pick up by year-end, strengthening the global demand for minerals and metals.

Over the last 2 ½ years at least three crises have emerged in the Euro Zone - sending waves of uncertainty throughout the global economy - and each of them was followed by limited policy response thus leaving room for recurrence in the near future.

The resistance to give up national sovereignty creates barriers to governments making a quantum leap towards the adoption of fiscal and banking union in the Euro Zone, a necessary step to consolidate the monetary union. At the same time, entrenched interests pose obstacles to the implementation of structural reforms to improve competitiveness in most of the Euro Zone members.

The political will to preserve the Euro makes the adjustment feasible albeit at a slow pace. As a consequence, over the next few years the European economy is very likely to move forward very slowly.

The current US recovery has been slower than recoveries from earlier recessions due to the problems left by the financial crisis.

## Edgar Filing: Vale S.A. - Form 6-K

On the one hand, the US private sector has undergone an impressive adjustment, which sets the base for a strong expansion. Corporate profits and cash flow keep growing, banks as well as households have deleveraged, labor costs have lowered relative to European and Asian competitors, the real estate market has stabilized ceasing to be a drag on GDP and the natural gas revolution is reducing the US dependency on oil imports and raising the competitiveness of its manufacturing industry.

On the other hand, the high public debt/GDP ratio, the lack of political resolve on how to deal with it and the impending so-called fiscal cliff, involving more than half a trillion US dollars in 2013, are sources of uncertainty which have been blocking the US economy from growing at a much faster pace in the short-term.

The Japanese economy is recovering from last year's huge natural disaster, and continues to struggle with deflation and persistent weak demand.

The spillover to the rest of the world economy of the lack of confidence in the policies of developed economies, in particular the Euro sovereign debt crisis, is not restricted to the trade channel. It has contributed to create uncertainty which is detrimental to global economic expansion.

Investment demand, consumption of durable goods and hiring plans are negatively affected by macroeconomic uncertainty. Among other things, this leads to a decline in expected returns on projects and to a weakening in investors' and lenders' appetites to provide funding for investment. Liquidity-constrained firms tend to reduce R&D expenditures that will in turn entail slower productivity growth.

The recent announcements by the main central banks, the FED (QE3) and the ECB (OMT), of another

---

(3) Iron ore, nickel and copper prices reached a post-crisis peak in 1Q11 simultaneously to the cyclical peak of global industrial production growth.

Table of Contents

round of non-conventional monetary policy actions contributed to improve risk perception and in particular to mitigate the tail risk associated to the potential for a disruption of the Euro Zone(4). As a consequence of greater confidence, financial markets rallied as well as commodity prices including base metals - but the potential for these initiatives to restore economic growth on a sustainable basis depends of course on further steps.

Following a strong rebound from the Great Recession of 2008/9, the GDP growth of emerging market economies slowed, declining from 9% per year in 4Q09 to around 5.5% recently.

The slowdown in the pace of expansion of the Chinese economy - the largest emerging market and the world's second largest economy - is caused by both cyclical and structural factors. Part of the growth deceleration is the outcome of macroeconomic policy normalization after the big capital spending stimulus program launched in reaction to the global financial shock of 2008.

The main challenge of the Chinese economy is to avoid the so-called middle-income trap, which means that fast growing emerging economies may stall after reaching a middle level of per capita income. More specifically, it means maintaining the high rate of productivity growth recorded by China over the last thirty years, which was relatively easy to reach in face of the pre-existing low level of efficiency and the reallocation of abundant labor from subsistence agriculture to manufacturing. Once these conditions start to fade, large capital spending tends to find diminishing returns.

China's growth model has to be changed towards more capital efficiency, which, among other implications, will entail a more balanced composition of aggregate demand expansion, with a less important role for investment and more for consumption.

In line with the need for change in the macroeconomic policy framework, the Chinese authorities did not launch another big stimulus program and the incoming leadership is not expected to do it either, unless they see the economy on the verge of a recession, which is not the case now. It is likely that a transition towards a new growth model will continue, gradually and cautiously. Initial movements have been observed: some limited interest rate liberalization, more exchange rate flexibility and use of the renminbi for international trade and investment, while a few local experiments on financial liberalization are being conducted.

This does not mean that the China growth story is over. On the contrary, it is expected to expand by 6% to 7% per year on average until the end of this decade - a very high pace of expansion for an already large-sized economy - and substantial investment spending will continue to flow primarily to meet housing and infrastructure needs. As a consequence, China is expected to continue to exert significant pressure on the demand for minerals and metals, including iron ore. As the global leader in iron ore, by size and quality of production and reserves, we will continue to benefit from this scenario.

The long-term potential for iron ore demand growth comes primarily from the requirements to accommodate some 300 million additional people in the cities over the next 20 years and to alleviate the existing large housing shortage. Like other Asian cities, those in China tend to be densely populated, which is solved by constructing high-rise buildings, which are far more steel-intensive than the usual 10-12 floor structures in the western world.

## Edgar Filing: Vale S.A. - Form 6-K

Urbanization demands not only housing investment, but also spending on non-residential buildings, urban infrastructure, cars and home appliances, which will help to drive the demand for iron ore and base metals.

Moreover, the rise of consumption expenditures to a more prominent role in Chinese economic growth will mean an increasing demand for cars the number of passenger vehicles in China is still a lot lower than in other emerging economies - home appliances and proteins, which will imply more demand for iron ore, coal, base metals and fertilizers.

In the short-term, the latest data suggests that China's economy has bottomed in the first half of the year, as pointed out in our 2Q12 report. On a year-on-year basis, GDP expanded 7.4%, lower than the 7.6% y/y in 2Q12, but on a sequential basis (which is actually the relevant move to observe), seasonally adjusted q/q annualized real GDP is estimated to have reached 7.5%, moving up from under 7% as an average in 1H12.

In September, industrial production grew 9.2% y/y, while on the domestic demand side, retail sales expanded by 14.2% y/y and fixed asset investment by 22.2%, the strongest increase since November 2011.

---

(4) QE3 the US Federal Reserve Bank (Fed) will buy US\$ 40 billion per month of mortgage assets for an unlimited period of time. Jointly with other asset buying programs, the Fed will increase its stock of long-term financial assets by some US\$ 85 billion per month.

OMT Outright Monetary Transactions On September 6, the European Central Bank (ECB) announced it will buy sovereign bonds in the secondary market under certain conditions including the effective conditionality attached to a macroeconomic adjustment program.

Table of Contents

Despite the absence of major changes in housing credit conditions, the quarterly data show a rebound in property sales, increasing to +6.0% y/y from -7.7% y/y in 2Q12, contributing to reduce the stock of unsold homes and to stimulate developers to push new projects to the market. Data on house prices released by the National Bureau of Statistics and Soufun continue to indicate price stabilization. Clearly, we do not expect a new housing boom, but a moderate expansion, that will be better from a risk point of view than the policy-driven booms and busts of the last ten years.

Investment in infrastructure – another major source of demand for minerals and metals – has accelerated in 3Q12, with funding increasingly provided by bond issuance by local governments. Newly started investment projects, a forward-looking indicator of fixed investment, have been recovering and climbed to 25.7% y/y for the first nine months of the year and to 29.8% q/q.

Cement, which can be kept in storage only for a very limited period of time, had a rebound in production. Output growth rate accelerated to 12.0% y/y in September from 7.0% in June, reflecting the stronger demand from the pickup in railway and highway investment.

The fall in iron ore prices has been misidentified as an outcome of demand weakness from China. As a matter of fact, Chinese imports did rise by 8.7% in the first nine months of 2012 when compared to the same period of last year. At 552 million metric tons (Mt), it is an all-time high figure, with an increase of 48 Mt, far from showing any weakness. Lower prices are mostly explained by a combination of demand weakness in the rest of the world – which entailed a reallocation of supply from other countries to the Asian market – and the negative global economic outlook, including pessimism about China's economic performance.

The growth in Chinese iron ore imports is partly due to substitution of high-cost local producers as crude steel output increased only 1.2% in January/September 2012, running at around 700 Mt on a yearly basis. The high cost marginal suppliers tend to set a floor to prices, which after reaching a low point in the first week of September recovered to a US\$ 110-115 range.

Given the liquidity and the large and growing size of the Chinese iron ore market, rising prices have attracted many high-cost marginal suppliers from other countries. In 2000, exporters from traditional sources – Australia, Brazil, India and South Africa – were responsible for 95% of China's imports. Over time, the share supplied by non-traditional sources – 16 countries in 2000, 56 countries in 2011 – expanded, reaching 22% in 2011. In a low price environment many of these non-Chinese suppliers will have to retrench as well.

The sharp fall in iron ore prices in the early days of September was caused by destocking and so far there are no indications of a replenishing of inventories. In the downstream of the supply chain, steel traders, who hold the majority of steel stocks in China, have liquidated part of their inventories over the last couple of months, eliminating the excess.

The performance of leading indicators of the property market, the recovery of infrastructure spending and the iron ore and steel destocking create the potential for future strengthening of iron ore demand and for moderate price increases. In addition, we expect non-Chinese demand for iron ore to improve, as a result of better growth performance of some emerging economies, such as Brazil, India and Southeast Asia in 2013.

Nickel and copper prices reacted positively to the announcements of monetary policy actions from major central banks.



The rise in nickel prices was supported by some increase in stainless steel production after the end of the summer season in the Northern Hemisphere. However, the reaction of nickel-in-pig-iron producers most are likely to at least break even at US\$ 17,000 per metric ton - and the rising stocks caused prices to soften.

The case of copper prices is somewhat different as LME stocks are low and supply was negatively impacted by strikes in Chile. Therefore, prices have been supported at US\$ 8,000 per metric ton.

Table of Contents

## REVENUES

Gross operating revenues totaled US\$ 10.963 billion in 3Q12, 9.8% below the US\$ 12.150 billion in 2Q12. The decline was a consequence of lower prices of iron ore and pellets, US\$ 1.513 billion, partially offset by greater sales volumes of iron ore, which added US\$ 333 million to revenues.

Revenues generated from the shipments of bulk materials – iron ore, pellets, manganese ore, ferroalloys, metallurgical and thermal coal – were 69.0% of operating revenues in 3Q12, decreasing from 73.5% in 2Q12. The share of base metals increased to 16.1% from 14.7% in the previous quarter, while fertilizers also expanded its share, rising to 10.0% from 7.6% in 2Q12. Logistics services contributed with 4.1% of total revenues and other products 0.8%.

Shipments to Asia represented 52.3% of total revenues, slightly above the 51.3% figure for the last quarter, while the Americas gained weight, climbing to 27.2% in 3Q12 from 26.4%, due to increased sales to Brazil. Europe lost some ground with 18.0% against 19.1% in the previous quarter. Revenues from sales to the Middle East were 1.3% in 3Q12 compared to 2.2% in 2Q12, while the rest of the world contributed with 1.1%.

On a country basis, the share of sales to China of total revenues amounted to 32.0% in 3Q12, Brazil 21.4%, Japan 11.2%, Germany 6.0%, South Korea 4.7% and Italy 2.6%.

**Table 2 - OPERATING REVENUE BY BUSINESS AREAS**

US\$ million	3Q11	%	2Q12	%	3Q12	%
<b>Bulk materials</b>	<b>12,764</b>	<b>76.2</b>	<b>8,934</b>	<b>73.5</b>	<b>7,565</b>	<b>69.0</b>
<b>Ferrous minerals</b>	<b>12,479</b>	<b>74.5</b>	<b>8,658</b>	<b>71.3</b>	<b>7,340</b>	<b>67.0</b>
Iron ore	10,136	60.5	6,505	53.5	5,541	50.5
Pellets	2,149	12.8	1,952	16.1	1,687	15.4
Manganese ore	46	0.3	63	0.5	57	0.5
Ferroalloys	139	0.8	129	1.1	55	0.5
Pellet plant operation services	9	0.1	9	0.1		
<b>Coal</b>	<b>285</b>	<b>1.7</b>	<b>276</b>	<b>2.3</b>	<b>225</b>	<b>2.1</b>
Thermal coal	124	0.7	79	0.6	21	0.2
Metallurgical coal	161	1.0	197	1.6	204	1.9
<b>Base metals</b>	<b>2,292</b>	<b>13.7</b>	<b>1,781</b>	<b>14.7</b>	<b>1,766</b>	<b>16.1</b>
Nickel	1,437	8.6	1,119	9.2	908	8.3
Copper	646	3.9	458	3.8	650	5.9
PGMs	81	0.5	115	0.9	90	0.8
Gold	78	0.5	58	0.5	83	0.8
Silver	20	0.1	15	0.1	13	0.1
Cobalt	29	0.2	16	0.1	11	0.1
Others					11	0.1
<b>Fertilizer nutrients</b>	<b>1,037</b>	<b>6.2</b>	<b>923</b>	<b>7.6</b>	<b>1,095</b>	<b>10.0</b>
Potash	80	0.5	81	0.7	78	0.7

Edgar Filing: Vale S.A. - Form 6-K

Phosphates	713	4.3	630	5.2	783	7.1
Nitrogen	216	1.3	193	1.6	208	1.9
Others	28	0.2	19	0.2	26	0.2
<b>Logistics services</b>	<b>502</b>	<b>3.0</b>	<b>408</b>	<b>3.4</b>	<b>449</b>	<b>4.1</b>
Railroads	358	2.1	294	2.4	308	2.8
Ports	144	0.9	114	0.9	141	1.3
<b>Others</b>	<b>146</b>	<b>0.9</b>	<b>104</b>	<b>0.9</b>	<b>88</b>	<b>0.8</b>
<b>Total</b>	<b>16,741</b>	<b>100.0</b>	<b>12,150</b>	<b>100.0</b>	<b>10,963</b>	<b>100.0</b>

Table of Contents**Table 3 - OPERATING REVENUE BY DESTINATION**

US\$ million	3Q11	%	2Q12	%	3Q12	%
<b>North America</b>	<b>786</b>	<b>4.7</b>	<b>686</b>	<b>5.6</b>	<b>468</b>	<b>4.3</b>
USA	449	2.7	410	3.4	238	2.2
Canada	304	1.8	265	2.2	229	2.1
Mexico	33	0.2	11	0.1	0	0.0
<b>South America</b>	<b>3,305</b>	<b>19.7</b>	<b>2,521</b>	<b>20.7</b>	<b>2,518</b>	<b>23.0</b>
Brazil	2,985	17.8	2,312	19.0	2,350	21.4
Others	320	1.9	209	1.7	168	1.5
<b>Asia</b>	<b>8,998</b>	<b>53.7</b>	<b>6,230</b>	<b>51.3</b>	<b>5,738</b>	<b>52.3</b>
China	5,927	35.4	3,802	31.3	3,504	32.0
Japan	1,937	11.6	1,273	10.5	1,223	11.2
South Korea	701	4.2	591	4.9	518	4.7
Taiwan	236	1.4	356	2.9	196	1.8
Others	197	1.2	208	1.7	297	2.7
<b>Europe</b>	<b>3,166</b>	<b>18.9</b>	<b>2,321</b>	<b>19.1</b>	<b>1,973</b>	<b>18.0</b>
Germany	1,114	6.7	738	6.1	654	6.0
France	205	1.2	149	1.2	201	1.8
Netherlands	186	1.1	73	0.6	73	0.7
UK	236	1.4	214	1.8	222	2.0
Italy	479	2.9	498	4.1	280	2.6
Turkey	138	0.8	124	1.0	125	1.1
Spain	136	0.8	108	0.9	100	0.9
Others	672	4.0	418	3.4	317	2.9
<b>Middle East</b>	<b>277</b>	<b>1.7</b>	<b>268</b>	<b>2.2</b>	<b>141</b>	<b>1.3</b>
<b>Rest of the World</b>	<b>209</b>	<b>1.2</b>	<b>125</b>	<b>1.0</b>	<b>125</b>	<b>1.1</b>
<b>Total</b>	<b>16,741</b>	<b>100.0</b>	<b>12,150</b>	<b>100.0</b>	<b>10,963</b>	<b>100.0</b>

## COSTS AND EXPENSES

In 3Q12, cost of goods sold (COGS) was US\$ 6.128 billion versus US\$ 6.015 billion in 2Q12.(5) Adjusting for the effects of higher volumes (US\$ 38 million) and favorable exchange rate variation(6) (-US\$ 108 million), COGS was up US\$ 183 million when compared to 2Q12.

Our costs and expenses in 3Q12 were impacted by provisions for mining taxes: (a) mining royalties in Brazil (CFEM), US\$ 542 million, accounted for in other operational expenses, given the change in assessment of the loss associated to the deduction of transportation costs from the revenue base subject to the CFEM; (b) Brazilian state mining taxes (TFRM), US\$ 145 million, accounted for in other operational costs.

In addition to the provision for mining taxes, some extraordinary events produced changes in COGS in 3Q12 relative to the last quarter. The divestiture of the Colombian coal assets led to a reduction of US\$ 33 million in outsourced services and of US\$ 35 million in the purchase of products from third parties. The sale of ferroalloy plants in Europe caused a reduction of US\$ 10 million with costs of electricity services while the leasing of the Hispanobras assets cut US\$ 90 million in expenses with the purchase of pellets. On the other hand, we paid a leasing fee of US\$ 9.3 million.

## Edgar Filing: Vale S.A. - Form 6-K

Finally, in 3Q12 there was no provision for a bonus to employees working in remote areas, versus US\$ 34 million in the previous quarter, given that this part of compensation is paid on a semi-annual basis. Hence, there will be a bonus charge in 4Q12.

---

(5) If we exclude the costs incurred by the Colombian thermal coal and European ferroalloy operations sold in 2Q12, COGS goes down to US\$ 5.878 billion.

(6) COGS currency exposure in 3Q12 was made up as follows: 67% Brazilian reais, 15% Canadian dollars, 14% US dollars, 3% Australian dollars, 1% Indonesian rupiah and other currencies.

Table of Contents

The analysis of individual cost and expenses items are net of the effects of volumes and exchange rate as well as those of extraordinary events.

Costs with outsourced services totaled US\$ 1.236 billion 20.2% of COGS against US\$ 1.285 billion in 2Q12, showing a net decrease of US\$ 14 million.

Cost of materials 19.0% of COGS was US\$ 1.163 billion, up 6.6% against 2Q12. There was a net increase of US\$ 61 million, as a result of a rise of US\$ 30 million in materials dedicated to the iron ore operations and US\$ 33 million to fertilizer operations, mostly to purchase ammonia and urea to fulfill contracts with customers as a consequence of the maintenance stoppages at plants.

Costs with personnel amounted to US\$ 885 million, representing 14.4% of COGS, declining 2.6% against the US\$ 909 million in 2Q12. The lower operating levels of Sudbury and Thompson under planned maintenance stoppages caused a decrease of US\$ 29 million in costs, while the personnel dedicated to our increasing Brazilian copper operations offset the impact.

Expenses with energy consumption accounted for 12.2% of COGS, reaching US\$ 747 million, roughly equal to 2Q12.

Costs with electricity were US\$ 217 million, slightly higher than 2Q12. The net change (US\$ 14 million) was mostly due to higher average prices, which resulted from an additional use of more expensive externally-sourced power in the fertilizers business.

There was a US\$ 3 million rise in expenses with fuel and gas to US\$ 530 million from US\$ 527 million in 2Q12.

The cost of purchasing products from third parties amounted to US\$ 259 million 4.2% of COGS against US\$ 377 million in 2Q12.

The purchase of iron ore and pellets amounted to US\$ 136 million, against US\$ 221 million in the previous quarter. The volume of iron ore bought from smaller miners was 2.5 Mt in 3Q12 compared to 2.6 Mt in 2Q12. The effect of smaller volumes was more than offset by a 6.2% rise in price due to lagged pricing, producing a net increase in cost of US\$ 5 million. In the first nine months of 2012 we purchased 6.9 Mt of iron ore against 6.7 Mt in the same period of last year.

The purchase of base metals products increased to US\$ 91 million from US\$ 85 million in 2Q12 impacted by higher nickel purchases. We bought 3,000 t of finished and intermediary nickel against 1,700 t in 2Q12, which was partially offset by lower copper purchases amounting to 6,500 t from 7,500 t in 2Q12.

Costs with shared services increased slightly to US\$ 77 million in 3Q12.

Other operational costs reached US\$ 829 million against US\$ 559 million in 2Q12. This was mainly due to: (i) higher expenses with royalty taxes, US\$ 119 million, which includes the provision for the TFRM; (ii) increased maritime freight costs to transport iron ore, US\$ 81 million, as volumes increased, (iii) higher leasing costs of the Nibrasco plants, US\$ 41 million, (iv) higher provision for profit sharing, US\$ 21 million, and (v) expenses related to safety measures at Carborough Downs, US\$ 15 million. On the other hand, lower demurrage charges, reflecting better operational and weather conditions in 3Q12, reduced costs by US\$ 20 million.

Depreciation and amortization 15.2% of COGS amounted to US\$ 932 million, against US\$ 977 million in 2Q12.

Sales, general and administrative expenses (SG&A) totaled US\$ 519 million in 3Q12, US\$ 96 million below 2Q12. Lower SG&A expenses were driven by a decrease in selling expenses (US\$ 85 million), mainly due to the positive adjustments in provisional pricing for copper sales (US\$ 88 million) and a reduction in administrative expenses (US\$ 11 million) resulting from lower advertising and travel expenses.

In 3Q12, research and development (R&D) expenditures<sup>(7)</sup>, which reflect our investment in creating long-term growth opportunities, of US\$ 360 million were in line with the US\$ 359 million invested in 2Q12.

---

(7) This is an accounting figure. In the Investment section of this press release we disclose the amount of US\$ 364 million for research and development, computed in accordance with the financial disbursement in 3Q12.

Table of Contents

Other operational expenses increased by US\$ 467 million to US\$ 1.071 billion, from US\$ 604 million in 2Q12. In addition to the provision for the payment of CFEM (US\$ 542 million), there were higher pre-operating, stoppage and start-up expenses (US\$ 40 million). The cessation of damage costs (US\$ 65 million in 2Q12) helped to lower the expenses.

Pre-operating, idle capacity and start-up expenses were US\$ 364 million, including the start-up of VNC (US\$ 144 million), Onça Puma pre-operating expenses (US\$ 87 million) and charges to idle capacity of US\$ 32 million caused by a non-scheduled maintenance of an ammonia plant in the fertilizers business. Additionally, inventory adjustments accounted for US\$ 52 million at VNC, against US\$ 49 million in 2Q12.

**Table 4 - COGS AND EXPENSES****COGS**

US\$ million	3Q11	%	2Q12	%	3Q12	%
<b>Outsourced services</b>	<b>1,202</b>	<b>19.2</b>	<b>1,285</b>	<b>21.4</b>	<b>1,236</b>	<b>20.2</b>
Cargo freight	368	5.9	323	5.4	295	4.8
Maintenance of equipment and facilities	203	3.3	215	3.6	203	3.3
Operational Services	295	4.7	281	4.7	339	5.5
Others	336	5.4	466	7.7	398	6.5
<b>Material</b>	<b>1,025</b>	<b>16.4</b>	<b>1,091</b>	<b>18.1</b>	<b>1,163</b>	<b>19.0</b>
Spare parts and maintenance equipment	374	6.0	357	5.9	394	6.4
Inputs	456	7.3	524	8.7	538	8.8
Tires and conveyor belts	57	0.9	55	0.9	59	1.0
Others	138	2.2	154	2.6	173	2.8
<b>Energy</b>	<b>811</b>	<b>13.0</b>	<b>741</b>	<b>12.3</b>	<b>747</b>	<b>12.2</b>
Fuel and gases	578	9.2	527	8.8	530	8.6
Electric energy	233	3.7	213	3.5	217	3.5
<b>Acquisition of products</b>	<b>608</b>	<b>9.7</b>	<b>377</b>	<b>6.3</b>	<b>259</b>	<b>4.2</b>
Iron ore and pellets	331	5.3	221	3.7	136	2.2
Nickel products	194	3.1	85	1.4	91	1.5
Other products	83	1.3	72	1.2	32	0.5
<b>Personnel</b>	<b>819</b>	<b>13.1</b>	<b>909</b>	<b>15.1</b>	<b>885</b>	<b>14.4</b>
<b>Depreciation and exhaustion</b>	<b>923</b>	<b>14.8</b>	<b>977</b>	<b>16.2</b>	<b>932</b>	<b>15.2</b>
Shared services	105	1.7	76	1.3	77	1.3
<b>Others</b>	<b>759</b>	<b>12.1</b>	<b>559</b>	<b>9.3</b>	<b>829</b>	<b>13.5</b>
<b>Total</b>	<b>6,252</b>	<b>100.0</b>	<b>6,015</b>	<b>100.0</b>	<b>6,128</b>	<b>100.0</b>

**SG&A, R&D and other expenses**

US\$ million	3Q11	%	2Q12	%	3Q12	%
<b>Total administrative</b>	<b>499</b>	<b>28.7</b>	<b>483</b>	<b>30.6</b>	<b>472</b>	<b>24.2</b>
Personnel	184	10.6	193	12.2	195	10.0
Services	126	7.3	118	7.5	118	6.1
Depreciation	50	2.9	52	3.3	64	3.3
Others	139	8.0	120	7.6	95	4.9
<b>Selling</b>	<b>155</b>	<b>8.9</b>	<b>132</b>	<b>8.4</b>	<b>47</b>	<b>2.4</b>



Edgar Filing: Vale S.A. - Form 6-K

<b>Research and development</b>	<b>440</b>	<b>25.3</b>	<b>359</b>	<b>22.8</b>	<b>360</b>	<b>18.5</b>
<b>Others</b>	<b>643</b>	<b>37.0</b>	<b>604</b>	<b>38.3</b>	<b>1,071</b>	<b>54.9</b>
<b>Total(1)</b>	<b>1,737</b>	<b>100.0</b>	<b>1,578</b>	<b>100.0</b>	<b>1,950</b>	<b>100.0</b>

---

(1) Does not include gain/loss on sale of assets

Table of Contents

OPERATING INCOME

Operating income, as measured by adjusted EBIT, decreased to US\$ 2.647 billion from US\$ 3.923 billion in the previous quarter. Excluding the effect of the provision related to the CFEM, adjusted EBIT was US\$ 3.189 billion in 3Q12.

The reduction of US\$ 1.276 billion in adjusted EBIT was primarily caused by lower prices, US\$ 1.497 billion and the provision for mining royalties, US\$ 542 million. On the other hand, higher sales volumes added US\$ 272 million to operating income.

The adjusted EBIT margin in 3Q12 was 24.7%, or 29.7% after excluding the non-recurring items, down from 33.0% in the previous quarter.

NET EARNINGS

Net earnings were US\$ 1.669 billion in 3Q12, equal to US\$ 0.32 per share, decreasing from the US\$ 2.662 billion in 2Q12.

Net financial expenses totaled US\$ 834 million, against US\$ 2.548 billion in 2Q12, when there was a strong appreciation of the US dollar (USD) against the Brazilian real (BRL). Foreign exchange and monetary variations reduced earnings by US\$ 228 million, due to the USD appreciation of 0.5% against the BRL in 3Q12.

Financial revenues were US\$ 88 million, below the US\$ 120 million figure for the previous quarter. Financial expenses increased to US\$ 682 million from US\$ 559 million in 2Q12. The mark-to-market of shareholders' debentures caused a non-cash charge of US\$ 332 million, compared to US\$ 67 million in 2Q12.

The net effect of the mark-to-market of the transactions with derivatives was a non-cash charge on earnings of US\$ 12 million, against US\$ 416 million in 2Q12. There was a net positive cash flow impact of US\$ 85 million.

Breakdown of the effect of derivatives:

- Currency and interest rate swaps resulted in a negative non-cash effect of US\$ 51 million. There was a positive impact on cash flow of US\$ 35 million.

## Edgar Filing: Vale S.A. - Form 6-K

- Nickel derivatives produced a positive non-cash charge of US\$ 38 million and a positive cash flow impact of US\$ 47 million.
- Derivative transactions related to bunker oil caused a positive cash flow impact of US\$ 1 million.

Equity income from affiliated companies was US\$ 154 million, a slight decrease relative to the US\$ 158 million in 2Q12. It was generated essentially by the non-consolidated affiliates in the bulk materials business with US\$ 196 million Samarco US\$ 169 million and logistics with US\$ 42 million MRS US\$ 36 million. Investments in the base metals business and others caused negative effects on net earnings of US\$ 56 million and US\$ 28 million, respectively.

### CASH GENERATION

Cash generation, as measured by adjusted EBITDA, totaled US\$ 3.738 billion in 3Q12, 27.0% lower than the previous quarter. If we exclude the effects of non-recurring items in 3Q12, cash generation would be US\$ 4.280 billion in 3Q12.

The main factors underlying the decrease of US\$ 1.381 billion were lower realized prices of iron ore and the provision for CFEM, which were partly offset by higher volumes sold. Over the last 12-month period ended September 30, 2012, adjusted EBITDA was US\$ 22.137 billion, excluding non-recurring items.

Table of Contents

In 3Q12, dividends received from non-consolidated affiliates totaled US\$ 25 million, against US\$ 112 million in 2Q12. The only non-consolidated affiliate to pay dividends during 3Q12 was Hispanobras.

Excluding R&D expenditures and miscellaneous items which reduced adjusted EBITDA and the non-recurring items, the share of bulk materials in cash generation decreased to 91.4% in 3Q12 from 92.4% in 2Q12, and base metals continued to trend downward to 3.6% from 4.3%. The share of fertilizers increased to 4.3%, and logistics contributed with 0.7%.

**Table 5 - ADJUSTED EBITDA**

US\$ million	3Q11	2Q12	3Q12
Net operating revenues	16,361	11,893	10,725
COGS	(6,252)	(6,015)	(6,128)
SG&A	(654)	(615)	(519)
Research and development	(440)	(359)	(360)
Other operational expenses	(643)	(604)	(529)
Adjustment for non-recurring items		(377)	(542)
<b>Adjusted EBIT</b>	<b>8,373</b>	<b>3,923</b>	<b>2,647</b>
Depreciation, amortization & exhaustion	1,018	1,084	1,066
Dividends received	240	112	25
<b>Adjusted EBITDA</b>	<b>9,631</b>	<b>5,119</b>	<b>3,738</b>

**Table 6 - ADJUSTED EBITDA BY BUSINESS AREA**

US\$ million	3Q11	2Q12	3Q12
<b>Bulk materials</b>	<b>9,159</b>	<b>5,490</b>	<b>4,309</b>
Ferrous minerals	9,173	5,597	4,375
Coal	(14)	(107)	(66)
<b>Base metals</b>	<b>660</b>	<b>255</b>	<b>168</b>
<b>Fertilizer nutrients</b>	<b>239</b>	<b>183</b>	<b>201</b>
<b>Logistics</b>	<b>107</b>	<b>14</b>	<b>35</b>
<b>Adjustment for non-recurring items</b>		<b>(377)</b>	<b>(542)</b>
<b>Others</b>	<b>(534)</b>	<b>(446)</b>	<b>(433)</b>
<b>Total</b>	<b>9,631</b>	<b>5,119</b>	<b>3,738</b>

## INVESTMENTS

Excluding acquisitions, capex in the first nine months of the year totaled US\$ 12.253 billion, with an increase of US\$ 945 million over the US\$ 11.308 billion spent in the same period of 2011. Our investments reflect the focus on organic growth as the key strategic priority. Of the total expenditures, 75% was allocated to finance growth, involving project execution and R&D. 2012 is very likely to be the peak year for capital expenditures in the foreseeable future.

## Edgar Filing: Vale S.A. - Form 6-K

Investments reached US\$ 4.289 billion in 3Q12. US\$ 2.797 billion was spent on project execution, US\$ 364 million on research and development (R&D), and US\$ 1.128 billion on the maintenance of existing operations.

The allocation of capex by business segment was: US\$ 2.376 billion for bulk materials, US\$ 1.019 billion for base metals, US\$ 531 million for fertilizer nutrients, US\$ 135 million for logistics services for general cargo, US\$ 69 million for power generation, US\$ 36 million for steel projects and US\$ 123 million for corporate activities and other business segments.

Expenditures to sustain capital of US\$ 1.128 billion were concentrated in the iron ore, base metals and logistics assets. The maintenance investments in iron ore included: (i) replacement and acquisition of new equipment (US\$ 114.3 million), (ii) expansion of tailing dams and residual stockpiles (US\$ 65.7 million), (iii) infrastructure enhancement (US\$ 56.8 million) and (iv) initiatives to improve the current standards of health and safety and environmental protection (US\$ 48.3 million).

Table of Contents

Spending on the sustaining of base metals operations were mainly: (i) development of ore bodies, increase in recovery rates and grades in the nickel mines (US\$ 59.6 million), (ii) AER (atmospheric emission reduction) project (US\$ 89.2 million) and (iii) acquisition of equipment related to the improvement of production processes in the copper mines (US\$ 18.0 million). Maintenance of railways and ports in Brazil amounted to US\$ 162.3 million.

In 3Q12, R&D investments comprised expenditures of US\$ 146 million in mineral exploration, US\$ 200 million in conceptual, pre-feasibility and feasibility studies for projects, and US\$ 18 million to develop new processes and for technological innovations and adaptation of technologies.

We are developing the four Itabiritos projects – Conceição, Conceição II, Cauê and Vargem Grande – whose goal is to improve the quality of iron ore in the Southern and Southeastern Systems and replace lost capacity, as well as add net capacity. Those projects are addressing the impoverishment of resources in the Iron Quadrangle in Brazil, allowing the concentration of low-grade ores into high grades, thus enhancing the quality of our supply of iron ore.

The Itabiritos projects involve processing plants with additional stages of crushing, screening and milling. Conceição Itabiritos and Vargem Grande Itabiritos involve the construction of additional plants while Conceição Itabiritos II and Cauê Itabiritos are projects for the adaptation of existing plants.

The Lubambe copper operations – previously Konkola North – produced the first copper concentrate this month. It comprises an underground mine, plant and related infrastructure, located in the African Copperbelt in Zambia, with a nominal production capacity of 45,000 metric tons per year of copper in concentrates. This operation is part of our 50/50 joint venture with African Rainbow Minerals Limited, which has an 80% stake in the operation, with the remaining 20% stake held by Zambia Consolidated Copper Mines Ltd. The JV has entered into contracts with local copper smelters to sell the Lubambe concentrates.

**Portfolio asset management**

In line with Vale's goal to be the best natural resources company by return to shareholders, we continued to implement the portfolio management program with the divestiture of non-core assets.

In 3Q12, we signed an agreement to sell for US\$ 600 million and further charter under long-term contracts 10 large ore carriers with Polaris Shipping Co. Ltd. Those vessels were acquired in 2009/2010 and converted from oil tankers into ore carriers, each with a capacity of approximately 300,000 DWT, for Vale to have at its disposal a fleet of vessels dedicated to transporting iron ore to its customers. In addition to unlocking capital, the transaction preserves Vale's capacity of maritime transportation of iron ore, since the vessels will be available but without the ownership and operational risks.

In October, pursuant to a contract with the Sultanate of Oman, we concluded the transfer of 30% of our pelletizing operation in the industrial site of Sohar, Oman, to Oman Oil Company, a company wholly-owned by the Sultanate, for US\$ 71 million.

**Table 7 - TOTAL INVESTMENT BY CATEGORY**

US\$ million	3Q11	%	2Q12	%	3Q12	%
<b>Organic growth</b>	<b>3,500</b>	<b>77.3</b>	<b>3,260</b>	<b>76.0</b>	<b>3,161</b>	<b>73.7</b>
Projects	3,113	68.7	2,864	66.8	2,797	65.2
R&D	387	8.6	396	9.2	364	8.5
<b>Stay-in-business</b>	<b>1,029</b>	<b>22.7</b>	<b>1,027</b>	<b>24.0</b>	<b>1,128</b>	<b>26.3</b>
<b>Total</b>	<b>4,529</b>	<b>100.0</b>	<b>4,287</b>	<b>100.0</b>	<b>4,289</b>	<b>100.0</b>

Table of Contents**Table 8 - TOTAL INVESTMENT BY BUSINESS AREA**

US\$ million	3Q11	%	2Q12	%	3Q12	%
<b>Bulk materials</b>	<b>2,675</b>	<b>59.1</b>	<b>2,390</b>	<b>55.8</b>	<b>2,376</b>	<b>55.4</b>
Ferrous minerals	2,333	51.5	2,041	47.6	2,084	48.6
Coal	341	7.5	349	8.1	292	6.8
<b>Base metals</b>	<b>1,062</b>	<b>23.4</b>	<b>1,038</b>	<b>24.2</b>	<b>1,019</b>	<b>23.8</b>
<b>Fertilizer nutrients</b>	<b>307</b>	<b>6.8</b>	<b>516</b>	<b>12.0</b>	<b>531</b>	<b>12.4</b>
<b>Logistics services</b>	<b>115</b>	<b>2.5</b>	<b>130</b>	<b>3.0</b>	<b>135</b>	<b>3.2</b>
<b>Power generation</b>	<b>191</b>	<b>4.2</b>	<b>71</b>	<b>1.6</b>	<b>69</b>	<b>1.6</b>
<b>Steel</b>	<b>54</b>	<b>1.2</b>	<b>37</b>	<b>0.9</b>	<b>36</b>	<b>0.8</b>
<b>Others</b>	<b>126</b>	<b>2.8</b>	<b>105</b>	<b>2.4</b>	<b>123</b>	<b>2.9</b>
<b>Total</b>	<b>4,529</b>	<b>100.0</b>	<b>4,287</b>	<b>100.0</b>	<b>4,289</b>	<b>100.0</b>

**INVESTMENT BY BUSINESS AREA - 3Q12**

	Projects		R&D		Stay-in-business		Total	
	US\$ million	%	US\$ million	%	US\$ million	%	US\$ million	%
<b>Bulk materials</b>	<b>1,634</b>	<b>58.4</b>	<b>179</b>	<b>49.2</b>	<b>563</b>	<b>49.9</b>	<b>2,376</b>	<b>55.4</b>
Ferrous minerals	1,431	51.2	141	38.8	511	45.3	2,084	48.6
Coal	203	7.3	38	10.4	52	4.6	292	6.8
<b>Base metals</b>	<b>631</b>	<b>22.6</b>	<b>100</b>	<b>27.6</b>	<b>287</b>	<b>25.4</b>	<b>1,019</b>	<b>23.8</b>
<b>Fertilizer nutrients</b>	<b>377</b>	<b>13.5</b>	<b>45</b>	<b>12.2</b>	<b>109</b>	<b>9.6</b>	<b>531</b>	<b>12.4</b>
<b>Logistics services</b>	<b>62</b>	<b>2.2</b>	<b>3</b>	<b>0.7</b>	<b>71</b>	<b>6.3</b>	<b>135</b>	<b>3.2</b>
<b>Power generation</b>	<b>60</b>	<b>2.1</b>	<b>8</b>	<b>2.2</b>	<b>1</b>	<b>0.1</b>	<b>69</b>	<b>1.6</b>
<b>Steel</b>	<b>33</b>	<b>1.2</b>	<b>3</b>	<b>0.8</b>	<b>0</b>	<b>0.0</b>	<b>36</b>	<b>0.8</b>
<b>Others</b>	<b>0</b>	<b>0.0</b>	<b>27</b>	<b>7.3</b>	<b>98</b>	<b>8.7</b>	<b>123</b>	<b>2.9</b>
<b>Total</b>	<b>2,797</b>	<b>100.0</b>	<b>364</b>	<b>100.0</b>	<b>1,128</b>	<b>100.0</b>	<b>4,289</b>	<b>100.0</b>

- Main approved projects under construction**

The pipeline of main projects approved by the Board of Directors, and under construction, is detailed in this section. Estimated start-up dates may be revised due to changes caused by several factors, including delays in environmental permits.

Project	Estimated start-up	Executed capex		Expected capex		Status(1)
		US\$ million	Total	US\$ million	Total	
<b>IRON ORE MINING AND LOGISTICS</b>						
<b>Carajás Additional 40 Mtpy</b>	2H13	461	1,977	622	2,968	Earthworks services and assembly of metallic structures for conveyor belts being executed. The assembly of
Construction of an iron ore dry processing plant,						



located in Carajás, Pará,  
Brazil.

Estimated nominal capacity  
of 40 Mtpy.

metallic structures for the  
screening building was  
concluded. Advanced stages of  
electromechanical assembly of  
the processing plant and loading  
line.

Issuance of operation license  
(LO) expected for 2H13.

76% of physical progress of  
mine and

Table of Contents

Project	Estimated start-up	Executed capex US\$ million		Expected capex US\$ million		Status(1)
		2012	Total	2012	Total	
<b>CLN 150 Mtpy</b>	1H14	794	3,041	1,085	4,114	plant. Finalizing construction of Pier IV at Ponta da Madeira maritime terminal, with the operational tests in the North berth to start by year-end. Assembly of loading equipment in final phase. Ongoing tests with the car dumpers, unloading lines and a stacker. Ongoing work at the railway.
Increase Northern system railway and port capacity, including the construction of a fourth pier at the Ponta da Madeira maritime terminal, located in Maranhão, Brazil.						
Increase estimated EFC s nominal logistics capacity to approximately 150 Mtpy.						Issuance of the required railway installation licenses (LI) expected for 2H12. Operation license (LO) for the port onshore expected for 2H12 and offshore, 1H13.
<b>Carajás Serra Sul S11D</b>	2H16	478	1,552	794	8,039	81% of physical progress. Ongoing construction of the access road. Receiving equipment for the truckless mining system. Materials for the conveyor belts and equipment for the energy substation delivered. Continuing the off-site assembly of modules.
Development of a mine and processing plant, located in the Southern range of Carajás, Pará, Brazil.						
Estimated nominal capacity of 90 Mtpy.						Preliminary environmental license (LP) issued. Issuance of installation license (LI) expected for 1H13.
<b>Serra Leste</b>	1H13	101	243	239	478	37% of physical progress. Continuing the civil engineering work and assembly of metallic structures of the beneficiation plant. Issuance of installation licenses (LI) expected for 2H12.
Construction of new processing plant, located in Carajás, Pará, Brazil.						
Estimated nominal capacity of 6 Mtpy.						54% of physical progress.
<b>Conceição Itabiritos</b>	2H13	155	708	184	1,174	Project in the final phase of electromechanical assembly.
Construction of a concentration plant, in the Southeastern System, Minas Gerais, Brazil.						Operational license (LO) for the plant expected for 1H13.
Estimated additional nominal capacity of 12 Mtpy. 100% pellet feed, with 67.7% Fe content and 0.8% silica.						93% of physical progress.
<b>Vargem Grande Itabiritos</b>	1H14	346	775	429	1,645	Beginning of mechanical assembly of the primary crusher. Assembly of

Construction of new iron ore processing plant, in the Southern System, Minas Gerais, Brazil.

Estimated additional nominal capacity of 10 Mtpy. 100% pellet feed, with 67.8% Fe content and

metallic structures for the screening building in progress.

Installation license (LI) issued.

Installation license for the power transmission line obtained.

Table of Contents

Project	Estimated start-up	Executed capex US\$ million		Expected capex US\$ million		Status(1)
		2012	Total	2012	Total	
1.2% silica.						68% of physical progress.
<b>Conceição Itabiritos II</b>	2H14	174	333	297	1,189	Mechanical assembly in progress. Civil engineering works for conveyor belts of the primary crusher concluded. Ongoing work at the mills.
Adaptation of the plant to process low-grade itabirites from Conceição, located in the Southeastern system, Minas Gerais, Brazil.						Installation licenses (LI) issued.
Estimated nominal capacity of 19 Mtpy, without additional capacity. 31.6% sinter feed, with 66.5% Fe content and 3.8% of silica, and 68.4% pellet feed, with 68.8% Fe content and 0.9% silica.						50% of physical progress.
<b>Cauê Itabiritos</b>	2H15	60	81	112	1,504	Signing contracts with suppliers of equipment and services. Preparing the site for the construction of new crushing system.
Adaptation of the plant to process low-grade itabirites from Minas do Meio, located in the Southeastern system, Minas Gerais, Brazil.						Preliminary and installation licenses (LI) for new primary crusher expected for 1H14.
Estimated nominal capacity of 24 Mtpy, with net additional capacity of 4 Mtpy in 2017. 29% sinter feed, with 65.3% Fe content and 4.4% of silica, and 71% pellet feed, with 67.8% Fe content and 2.8% silica.						12% of physical progress.
<b>Simandou I Zogota</b>		224	433	249	1,260	Scope and schedule under review.
Development of the Zogota mine and processing plant in Simandou South, Guinea.						
Estimated nominal capacity of 15Mtpy.						
<b>Teluk Rubiah</b>	1H14	176	391	367	1,371	The main jetty construction is ongoing. Earthworks advanced. Ongoing works at the main energy substation.
Construction of a maritime terminal with enough depth for the 400,000 dwt vessels and a stockyard. Located in Teluk Rubiah, Malaysia.						Preliminary environmental license, construction and installation license issued. Issuance of operation license

Stockyard capable of handling up to 30 Mtpy of iron ore products.						expected for 1H14.
						40% of physical progress.
<b>PELLET PLANTS</b>						
<b>Tubarão VIII</b>	1H13	199	811	239	1,088	Ongoing eletromechanical assembly and services at the furnace. Civil engineering work at the conveyor belt system in progress. Commissioning
Eighth pellet plant at our existing site at the Tubarão Port, Espírito Santo, Brazil.						

Table of Contents

Project	Estimated start-up	Executed capex US\$ million		Expected capex US\$ million		Status(1)
		2012	Total	2012	Total	
Estimated nominal capacity of 7.5 Mtpy.						phase already started.
<b>Samarco IV(2)</b>	1H14				1,693	Issuance of operation license (LO) expected for 1H13.
Construction of Samarco's fourth pellet plant, and expansion of mine, pipeline and maritime terminal infrastructure. Vale has a 50% stake in Samarco.						89% of physical progress.
Estimated nominal capacity of 8.3 Mtpy, increasing Samarco's capacity to 30.5 Mtpy.						Civil engineering works of the base for the milling plants concluded. Main pumps delivered and part of the pipes already welded for the slurry pipeline. No pending installation licenses (LI).
						59% of physical progress of the pellet plant. Budget fully sourced by Samarco.
<b>COAL MINING AND LOGISTICS</b>						
<b>Moatize II</b>	2H14	244	317	499	2,068	Earthworks and foundation for the new CHPP concluded.
New pit and duplication of the Moatize CHPP, as well as all related infrastructure, located in Tete, Mozambique.						Beginning of the earthworks for stockyard and primary crusher.
						No pending installation licenses (LI).
Nominal capacity of 11 Mtpy (70% coking coal and 30% thermal).						21% of physical progress.
<b>Nacala corridor</b>	2H14	259	297	691	4,444	Ongoing earthwork services.
Railway and port infrastructure connecting Moatize site to the Nacala-à-Velha maritime terminal, located in Nacala, Mozambique.						Detailed engineering of the port offshore construction completed. Mobilizing contractors for the port onshore and offshore civil engineering works.
						8% of physical progress.
Estimated nominal capacity of 18 Mtpy.						
<b>Eagle Downs(2)</b>	1H16	26	45	87	875	Environmental license and mining lease already obtained.
New underground mine development including longwall, CHPP, as well as all related infrastructure, located in the Bowen Basin, central Queensland,						Project in early stage of engineering development, with 4% of physical progress.

Australia. Vale holds 50% of the joint venture which owns Eagle Downs.

Estimated nominal capacity of 4 Mtpy (100% coking coal).

**COPPER MINING**

<b>Salobo II</b>	1H14	318	671	581	1,707	Ongoing civil engineering work and electromechanical assembly of equipment in the floating, milling and crushing sections.
Salobo expansion, raising height of tailing dam and increase in mine capacity, located in Marabá, Pará, Brazil.						Issuance of plant operation license (LO) expected for 1H14.
Additional estimated nominal						

Table of Contents

Project	Estimated start-up	Executed capex US\$ million		Expected capex US\$ million		Status(1)
		2012	Total	2012	Total	
capacity of 100,000 tpy of copper in concentrate.						63% of physical progress.
<b>Lubambe, previously Konkola North(2)</b>	2H12		172		235	The first copper concentrate was produced, after the conclusion of the plant commissioning. Environmental license was issued.
Development of underground mine, plant and related infrastructure, located in the Zambian Copperbelt. Vale holds 50% of the joint venture that controls the project.						87% of physical progress.  This project is being funded by the JV.
Estimated nominal capacity of 45,000 tpy of copper in concentrate.						
<b>NICKEL MINING AND REFINING</b>						
<b>Long Harbour</b>	2H13	1,028	2,727	1,208	3,600	Ongoing civil engineering. Assembly of metallic structures, and electronic and mechanical equipment. Ongoing work at the neutralization area.
Hydrometallurgical facility. Located in Long Harbour, Newfoundland and Labrador, Canada.						75% of physical progress.
Estimated nominal capacity for refining 50,000 tpy of finished nickel, and associated copper and cobalt.						As a result of cost pressures in the Newfoundland and Labrador province, where nickel, iron ore, oil and logistics projects are being developed simultaneously, it is very likely that the US\$ 3.6 billion should be revised upward.
<b>Totten</b>	2H13	95	497	157	759	Ongoing mechanical work at the return air and mine dewatering systems.
Nickel mine (re-opening) in Sudbury, Ontario, Canada.						69% of physical progress.
Estimated nominal capacity of 8,200 tpy.						
<b>POTASH MINING AND LOGISTICS</b>						
<b>Rio Colorado</b>	2H14	979	1,805	1,081	5,915	Progress in earthworks at the port. Ongoing work at energy substations and well-sinking at the site. Delivery of major part of tracks and beginning of work for the railway.
Investments in a solution mining system, located in Mendoza, Argentina, renovation of railway tracks (440 km), construction of a railway spur (350 km) and a						



maritime terminal in Bahia Blanca, Argentina.

Estimated nominal capacity of 4.3 Mtpy of potash (KCl).

Environmental license for the construction of the new railway and agreements with four Argentinean provinces obtained.

41% of physical progress.

**ENERGY**

Table of Contents

Project	Estimated start-up	Executed capex		Expected capex		Status(1)
		US\$ million		US\$ million		
		2012	Total	2012	Total	
<b>Biodiesel</b>	2015	92	435	227	633	Ongoing tests of oil production and of B25 fuel (25% biodiesel) use in locomotive.
Project to produce biodiesel from palm oil. Plantation of 80,000 ha of palm trees. Located in Pará, Brazil.						
Estimated nominal capacity of 360,000 tpy of biodiesel.						
<b>STEELMAKING</b>						
<b>CSP(2)</b>	1H15	255	536	563	2,648	Earthworks on site in progress. Started the placement of piles.
Development of a steel slab plant in partnership with Dongkuk and Posco, located in Ceará, Brazil. Vale holds 50% of the joint venture. Estimated nominal capacity of 3.0 Mtpy.						
Preliminary environmental license (LP) and installation license (LI) obtained.						

---

(1) as of September 2012.

(2) Realized and expected capex are relative to Vale's stake in the projects.

## DEBT INDICATORS

Total debt was US\$ 29.211 billion as of September 30, 2012, being US\$ 3.693 billion higher than the US\$ 25.518 billion as of June 30, 2012. Net debt decreased to US\$ 20.575 billion as of September 30, 2012 from US\$ 21.436 billion as of June 30, 2012, mainly due to the rise in cash holdings(8) to US\$ 8.636 billion from US\$ 4.082 billion as of June 30, 2012.

Debt leverage, as measured by total debt/LTM adjusted EBITDA(d) ratio, increased to 1.38x on September 30, 2012, up from 0.94x on June 30, 2012. The total debt/enterprise value(e) was 25.3% on September 30, 2012, against 20.1% on June 30, 2012.

Despite the lift in leverage, it is still low for this stage of the cycle. Given the high exposure of the mining business to cyclical fluctuations of prices and cash flow, our policy is to maintain a low leverage during the up cycle to be able to accommodate the effects of a slowdown in economic activity in the down cycle.

## Edgar Filing: Vale S.A. - Form 6-K

In line with our strategy to maintain a low-risk debt portfolio, with low leverage, long average maturity and low cost, the average debt maturity increased to 10.3 years from 9.4 years as of June 30, 2012 and the average cost decreased to 4.59% per annum, against 4.61% per annum on June 30, 2012.

Interest coverage, measured by the LTM adjusted EBITDA/LTM interest payment ratio<sup>(f)</sup>, was 17.9x, compared to 24.5x on June 30, 2012.

Considering hedge positions, the total debt on September 30, 2012 was composed of 23% of floating interest rates and 77% fixed interest rates linked debt, while 97% was denominated in US dollars and the remainder in other currencies.

**Table 9 - DEBT INDICATORS**

US\$ million	3Q11	2Q12	3Q12
Total debt	22,989	25,518	29,211
Net debt	15,424	21,436	20,575
Total debt / adjusted LTM EBITDA (x)	0.6	0.9	1.4
Adjusted LTM EBITDA / LTM interest expenses (x)	29.2	24.5	17.9
Total debt / EV (%)	17.2	20.1	25.3

---

(8) Cash holdings includes cash and cash equivalents, as well as short-term investments of US\$ 685 million as of September 30, 2012.

Table of Contents

FUND RAISING

We are making more moderate use of the balance sheet in the short-term to reconcile the cyclical decrease in our cash flow with the financing of investments and dividend distribution. Fund raising is in accordance of our strategy of diversification of sources and instruments.

In 3Q12, we issued and placed two bonds: (a) euronotes of EUR 750 million 2023 @3.750% per annum, priced at a spread of 225.7 basis points over the German bund, implying a yield to maturity of 3.798% per annum; (b) US\$ 1.5 billion notes due September 2042 with a coupon of 5.625% per annum, payable semi-annually, priced at a spread of 300 basis points over U.S. Treasuries, with a yield to maturity of 5.681% per annum.

We signed with BNDES – the Brazilian National Development Bank – a contract of R\$ 3.9 billion to finance the CLN 150 Mtpy project, from which we already withdrew US\$ 644 million.

We also made withdrawals from long-term credit lines extended by official credit agencies – BNDES US\$ 274 million, Export Development Canada US\$ 250 million and Korea Exim Corp US\$ 167 million – to finance projects.

In October, Vale entered into a trade finance agreement with a local Brazilian bank in the amount of R\$ 2.5 billion with a 10-year maturity.

PERFORMANCE OF THE BUSINESS SEGMENTS

**Bulk materials**

*Ferrous minerals*

Sales of iron ore and pellets reached 78.171 Mt, 3.9% higher than 2Q12. Shipments of iron ore were 66.205 Mt, 5.1% higher than 2Q12, while pellets sales amounted to 11.966 Mt, slightly below the 12.277 Mt sold in the previous quarter.

In 3Q12, we sold 32.9 Mt of iron ore and pellets – 42.1% of our sales – on a CFR basis, against 28.1 Mt in 2Q12. It is important to note that reported revenues for iron ore and pellets are net of the costs of maritime freight, meaning that FOB prices are comparable to CFR prices.

## Edgar Filing: Vale S.A. - Form 6-K

The average sales price of iron ore was US\$ 83.69 per metric ton, falling by US\$ 19.60/ton (or 19.0%) against the US\$ 103.29 of 2Q12.

The main factor behind the decrease in realized prices was the sharp fall in market prices, which alone impacted sales prices by -US\$ 23.6/ton(9). The lower market premium for Fe content contributed an additional -US\$ 1.2/ton. On the flipside, the effect of VRP(10) (US\$ 2.8/ton), lower freight costs (US\$ 2.0/ton), and lower moisture in iron ore shipments (US\$ 0.4/ton) mitigated the decline in sales prices.

The gap to average Platts index 62% Fe content narrowed to US\$29.52 from US\$ 38.05 in 2Q12.

---

(9) Given the conversion of the Platts IODEX to a wet basis and the timing of our sales during the quarter, the difference in the effect of market price decline in our realized price was limited to -US\$23.60 per metric ton.

(10) *VRP*: The 3-month average price index for the period ending one month before the onset of the current quarter. For more detailed information on iron ore pricing dynamics, please refer to the box *Iron Ore Pricing*, pg. 26, *A robust performance, Performance of Vale in 2Q12*, July 25, 2012, available in our website, [www.vale.com](http://www.vale.com) in the Investors section, under Press Releases.

Table of Contents

The distribution of our sales by pricing system was: 16% VRP, 32% current quarter average, and 52% spot and monthly average.

The average price of pellets was US\$ 140.98 per metric ton, 11.3% below the previous quarter. The lower price decrease for pellets than for iron ore was due to the higher proportion of VRP sales. Pellet prices are higher than those of iron ore primarily due to three factors: (a) the cost of conversion of iron ore into pellets; (b) the higher average Fe content of pellets; (c) the lower average moisture content in pellets, which is around 2.0%, than in iron ore.

An additional portion of our iron ore production will be allocated to increase the supply of sinter feed, consequently reducing the availability of pellet feed for the pelletizing process. This adjustment stems from the change in the composition of steel industry demand for raw materials throughout the cycle, where there is a contraction in pellets consumption in favor of greater use of sinter feed.

Due to these cyclical changes in steel industry demand, operations of the São Luís plant were temporarily halted on October 8 and the Tubarão I & II pellet plants will temporarily stop on November 13, 2012. Employees at these plants will be reassigned to other operational activities at Vale.

China's participation in the sales of iron ore and pellets increased to 49.1% from 43.7% in 2Q12. Sales to Europe decreased to 17.9% from 19.6%, while sales to Japan increased to 10.9% from 9.5% in 2Q12.

Revenues of manganese ore dropped to US\$ 57 million from US\$ 63 million in 2Q12, due to the decrease in volumes sold to 446,000 metric tons in 3Q12, 12.5% below 2Q12. The negative impact in revenues from lower volumes was partially offset by an increase of the average realized price to US\$ 127.80 per metric ton from US\$ 123.53 in 2Q12. Sales of ferroalloys amounted to 31,000 metric tons, far below the 99,000 metric tons in 2Q12, and generated revenues of US\$ 55 million, against US\$ 129 million in 2Q12.

The significant decrease in sales volume and revenues of ferroalloys is due to the agreement to sell our manganese ferroalloys operations in Europe. Although the sale is still subject to the fulfillment of certain precedent conditions, we are no longer consolidating financial or production results from those operations. The average realized price of ferroalloys increased to US\$ 1,774.19 per metric ton from US\$ 1,303.03 in 2Q12.

Sales of products - iron ore, pellets, manganese and ferroalloys - produced a total revenue of US\$ 7.340 billion in 3Q12, decreasing 15.2% vis-à-vis US\$ 8.658 billion in 2Q12.

The adjusted EBIT margin for the ferrous minerals business was 44.4% in 3Q12, against 57.6% in 2Q12. If we exclude the non-recurring effect of the US\$ 542 million CFEM provision, adjusted EBIT margin was 51.9% in 3Q12.

## Edgar Filing: Vale S.A. - Form 6-K

Adjusted EBITDA for the ferrous minerals operations totaled US\$ 3.833 billion in 3Q12, reducing 31.2% compared to 2Q12. The decrease of US\$ 1.742 billion was mainly due to the negative impact of lower sales prices (US\$ 1.493 billion), the CFEM related provision (US\$ 542 million), higher COGS(11) (US\$ 183 million) and lower dividends received from non-consolidated affiliated companies (US\$ 40 million). These effects were partly offset by higher volumes (US\$ 274 million), lower SG&A (US\$ 145 million) and exchange rate variations (US\$ 75 million). If we exclude the non-recurring effect of the CFEM related provision, adjusted EBITDA was US\$ 4.375 billion in 3Q12.

---

(11) Excluding the effects of the US dollar appreciation and volumes.

Table of Contents**Table 10 - FERROUS MINERALS BUSINESS PERFORMANCE  
VOLUME SOLD BY DESTINATION IRON ORE AND PELLETS**

000 metric tons	3Q11	%	2Q12	%	3Q12	%
<b>Americas</b>	<b>12,069</b>	<b>15.6</b>	<b>11,060</b>	<b>14.7</b>	<b>9,677</b>	<b>12.4</b>
Brazil	10,063	13.0	9,151	12.2	8,066	10.3
Steel mills and pig iron producers	8,880	11.5	7,953	10.6	8,001	10.2
JVs pellets	1,183	1.5	1,198	1.6	65	0.1
USA	303	0.4	486	0.6	181	0.2
Others	1,703	2.2	1,423	1.9	1,430	1.8
<b>Asia</b>	<b>48,055</b>	<b>62.0</b>	<b>47,181</b>	<b>62.7</b>	<b>52,269</b>	<b>66.9</b>
China	35,114	45.3	32,896	43.7	38,344	49.1
Japan	8,899	11.5	7,180	9.5	8,487	10.9
South Korea	3,616	4.7	4,772	6.3	3,868	4.9
Others	426	0.6	2,333	3.1	1,570	2.0
<b>Europe</b>	<b>15,339</b>	<b>19.8</b>	<b>14,742</b>	<b>19.6</b>	<b>14,007</b>	<b>17.9</b>
Germany	6,049	7.8	5,839	7.8	4,185	5.4
United Kingdom	910	1.2	530	0.7	1,169	1.5
France	1,329	1.7	1,199	1.6	1,840	2.4
Italy	2,869	3.7	3,451	4.6	2,771	3.5
Turkey	856	1.1	1,025	1.4	1,202	1.5
Spain	696	0.9	847	1.1	656	0.8
Netherlands	1,021	1.3	447	0.6	767	1.0
Others	1,609	2.1	1,404	1.9	1,417	1.8
<b>Middle East</b>	<b>1,085</b>	<b>1.4</b>	<b>1,563</b>	<b>2.1</b>	<b>1,577</b>	<b>2.0</b>
<b>Rest of the World</b>	<b>905</b>	<b>1.2</b>	<b>709</b>	<b>0.9</b>	<b>641</b>	<b>0.8</b>
<b>Total</b>	<b>77,453</b>	<b>100.0</b>	<b>75,255</b>	<b>100.0</b>	<b>78,171</b>	<b>100.0</b>

**OPERATING REVENUE BY PRODUCT**

US\$ million	3Q11	2Q12	3Q12
Iron ore	10,136	6,505	5,541
Pellet plant operation services	9	9	
Pellets	2,149	1,952	1,687
Manganese ore	46	63	57
Ferroalloys	139	129	55
<b>Total</b>	<b>12,479</b>	<b>8,658</b>	<b>7,340</b>

**AVERAGE SALE PRICE**

US\$/ metric ton	3Q11	2Q12	3Q12
Iron ore	151.26	103.29	83.69
Pellets	205.79	159.00	140.98
Manganese ore	129.21	123.53	127.80
Ferroalloys	1,376.24	1,303.03	1,774.19

**VOLUME SOLD**



<b>000 metric tons</b>	<b>3Q11</b>	<b>2Q12</b>	<b>3Q12</b>
Iron ore	67,008	62,978	66,205
Pellets	10,445	12,277	11,966
Manganese ore	356	510	446
Ferrous alloys	101	99	31

**Coal**

Coal revenues totaled US\$ 225 million in 3Q12, 18.5% lower than the US\$ 276 million in 2Q12, mainly due to the decrease in thermal coal volumes after the sale of the assets in Colombia concluded at the end of June.

Table of Contents

Total coal shipments were 1.377 Mt in 3Q12, versus 2.259 Mt in the previous quarter. Coal shipments were comprised of 1.148 Mt of metallurgical coal vs. 1.152 Mt in 2Q12 and 229,000 t of thermal coal vs. 1.107 Mt in 2Q12.

Our metallurgical coal operations at Carborough Downs, in Queensland, Australia, resumed at the end of August, after the stoppage determined by the detection of abnormal levels of carbon monoxide in the mine, and are still ramping up to normal production levels. At the same time, the ramp-up of Moatize, in Tete, Mozambique, is proceeding at a slower pace due to logistics constraints.

Revenues from shipments of met coal were US\$ 204 million, 3.6% higher than 2Q12. The increase was determined by the higher average realized price of US\$ 177.97 per metric ton versus US\$ 171.13 in the last quarter. As sales were priced with a lag, our 3Q12 revenues were not hit by the recent sharp fall in metallurgical coal prices. Therefore, 4Q12 revenues should be impacted by the recent drop in prices.

Revenues from sales of thermal coal fell to US\$ 21 million from US\$ 79 million in 2Q12, due to lower volumes sold. The increase in average sale price, to US\$ 90.91 per metric ton from US\$ 70.97 in 2Q12, helped to soften the drop in volumes.

Adjusted EBITDA for the coal business was minus US\$ 66 million against negative US\$ 107 million in 2Q12, excluding loss on sale of assets(12). The US\$ 41 million rise in adjusted EBITDA is explained by lower SG&A expenses (US\$ 64 million), lower COGS, including volumes and currencies variation effects, (US\$ 28 million) and higher sales prices (US\$ 12 million), which were partially offset by the effect in revenues of lower sales volumes (US\$ 63 million).

**Table 11 - COAL BUSINESS PERFORMANCE**

**OPERATING REVENUE BY PRODUCT**

US\$ million	3Q11	2Q12	3Q12
Thermal coal	124	79	21
Metallurgical coal	161	197	204
<b>Total</b>	<b>285</b>	<b>276</b>	<b>225</b>

**AVERAGE SALE PRICE**

US\$/ metric ton	3Q11	2Q12	3Q12
Thermal coal	98.28	70.97	90.91
Metallurgical coal	282.54	171.13	177.97

**VOLUME SOLD**

Edgar Filing: Vale S.A. - Form 6-K

000 metric tons	3Q11	2Q12	3Q12
Thermal coal	1,263	1,107	229
Metallurgical coal	569	1,152	1,148

---

(12) Adjusted EBITDA improved by US\$ 18 million in 3Q12 if we exclude the Colombian coal operations from 2Q12 figures.

Table of Contents**Table 12 - BULK MATERIALS: SELECTED FINANCIAL INDICATORS**

US\$ million	3Q11	2Q12	3Q12
<b>Adjusted EBIT margin excluding non-recurring items (%)</b>			
<b>Bulk materials</b>			
Ferrous minerals	68.3	57.6	51.9
Coal	(27.0)	(60.5)	(52.4)
<b>Adjusted EBIT excluding non-recurring items</b>			
<b>Bulk materials</b>	<b>8,292</b>	<b>4,747</b>	<b>3,637</b>
Ferrous minerals	8,369	4,914	3,755
Coal	(77)	(167)	(118)
<b>Adjusted EBITDA</b>			
<b>Bulk materials</b>	<b>9,159</b>	<b>5,113</b>	<b>3,767</b>
Ferrous minerals	9,173	5,575	3,833
Coal	(14)	(462)	(66)
<b>Adjusted EBITDA excluding non-recurring items</b>			
<b>Bulk materials</b>	<b>9,159</b>	<b>5,490</b>	<b>4,309</b>
Ferrous minerals	9,173	5,597	4,375
Coal	(14)	(107)	(66)
<b>Costs and expenses excluding non-recurring items</b>			
<b>Bulk materials</b>	<b>(3,803)</b>	<b>(3,552)</b>	<b>(3,362)</b>
Ferrous minerals	(3,456)	(3,150)	(3,043)
Coal	(347)	(402)	(319)

**Base metals**

Revenues from the sale of base metals and by-products were US\$ 1.766 billion, slightly below US\$ 1.781 billion for 2Q12.

Nickel sales revenues were US\$ 908 million in 3Q12, US\$ 211 million lower than the last quarter. The decrease in shipments contributed negatively to revenues with US\$ 142 million, while prices had a negative impact of US\$ 69 million.

Shipments of nickel decreased to 55,000 t from 63,000 t in 2Q12, reflecting the drop in output. The average nickel price in 3Q12 fell to US\$ 16,509 per metric ton from US\$ 17,762 in the previous quarter.

Copper revenues totaled US\$ 650 million in 3Q12 against US\$ 458 million in 2Q12. The increase was due to higher copper shipments, which reached 84,000 t in 3Q12 against 61,000 t in 2Q12. The growth in sales from Brazilian operations and higher shipments of copper concentrates produced at Voisey's Bay, which tend to be concentrated in the second half of the year due to restrictions posed to navigation by weather conditions, contributed to higher revenues. Additionally, the rise in revenues was related to the positive impact of higher sales prices, US\$ 7,700 per metric ton compared to US\$ 7,566 in the previous quarter.

## Edgar Filing: Vale S.A. - Form 6-K

In 3Q12, PGMs generated US\$ 90 million in revenues, 21.7% lower than 2Q12. Platinum prices increased to US\$ 1,540 per troy ounce from US\$ 1,494 in the previous quarter, but lower sales volumes contributed to the decrease in revenues. Gold sales were 48,000 troy ounces increasing 50.0% quarter-over-quarter, at an average sales price of US\$ 1,717 per troy ounce, generating revenues of US\$ 83 million.

The adjusted EBIT margin for base metals was -19.8% in 3Q12 against -17.8% in 2Q12. Excluding pre-operating expenses of Onça Puma (US\$ 87 million) and start-up expenses and inventory adjustments at VNC (US\$ 196 million), the operating margin comes to -3.8%.

Adjusted EBITDA was US\$ 168 million in 3Q12, 34.1% below 2Q12. Excluding the pre-operating and start-up costs and inventory adjustments, adjusted EBITDA comes to US\$ 399 million, 20.7% lower than the same basis figure for 2Q12.

Table of Contents

Lower prices (US\$ 50 million), and volumes (US\$ 20 million), and no dividends received from non-consolidated affiliated companies against US\$ 47 million in 2Q12 negatively impacted adjusted EBITDA in 3Q12. On the other hand, lower COGS(13) (US\$ 29 million) and SG&A expenses (US\$ 4 million) partly offset the negative effects.

**Table 13 - BASE METALS BUSINESS PERFORMANCE****OPERATING REVENUE BY PRODUCT**

US\$ million	3Q11	2Q12	3Q12
Nickel	1,437	1,119	908
Copper	646	458	650
PGMs	81	115	90
Gold	78	58	83
Silver	20	15	13
Cobalt	29	16	11
<b>Total</b>	<b>2,292</b>	<b>1,781</b>	<b>1,766</b>

**AVERAGE SALE PRICE**

US\$/ metric ton	3Q11	2Q12	3Q12
Nickel	21,132.35	17,761.90	16,509.09
Copper	8,043.63	7,566.00	7,700.20
Platinum (US\$/oz)	1,765.57	1,493.65	1,539.61
Gold (US\$/oz)	1,785.47	1,794.01	1,717.42
Silver (US\$/oz)	30.41	29.74	32.31
Cobalt (US\$/lb)	18.71	12.73	11.55

**VOLUME SOLD**

000 metric tons	3Q11	2Q12	3Q12
Nickel	68	63	55
Copper	80	61	84
Gold ( 000 oz)	44	32	48
Silver ( 000 oz)	684	528	411
PGMs ( 000 oz)	70	114	98
Cobalt (metric ton)	703	570	432

**SELECTED FINANCIAL INDICATORS**

US\$ million	3Q11	2Q12	3Q12
--------------	------	------	------

Edgar Filing: Vale S.A. - Form 6-K

Adjusted EBIT margin (%)	7.9	(17.8)	(19.8)
Adjusted EBIT	181	(316)	(350)
Adjusted EBITDA	660	255	168
Costs and expenses	(1,727)	(1,693)	(1,706)

**Fertilizer nutrients**

In 3Q12, total revenues from fertilizer nutrients continued to grow, reaching US\$ 1.095 billion, 18.7% higher than the US\$ 923 million in 2Q12 and an all-time high for a quarter. Unlike minerals and metals, prices of fertilizers are holding firm as they are influenced by the agricultural cycle, which is more supply driven and more affected by weather related events.

Potash produced revenues of US\$ 78 million in 3Q12, slightly lower than the US\$ 81 million in the previous quarter. The main reason for this decline was lower sales volume, 146,000 metric tons compared to 164,000 metric tons in 2Q12, partly offset by an increase of the average sales price to US\$ 534.25 per metric ton from US\$ 493.90 in 2Q12.

Revenues from sales of phosphate products reached US\$ 783 million in 3Q12, 24.3% higher quarter-on-quarter, due to the increase of volumes, US\$ 88 million, and prices, US\$ 65 million, of almost all phosphate products. Total shipments of MAP were 362,000 t, TSP 245,000 t, SSP 753,000 t, and DCP 120,000 t. Sales of phosphate rock were 798,000 t, 7.0% higher than the 746,000 t in 2Q12, as we continue the ramp-up of Bayóvar.

---

(13) Excluding the effects of exchange rate variation and volumes.

Table of Contents

Sales of nitrogen fertilizers were US\$ 208 million, increasing 7.8% from the US\$ 193 million in 2Q12. Both sales prices and volumes sold increased in 3Q12. Sales of other related products amounted to US\$ 26 million in 3Q12.

The adjusted EBIT margin of the fertilizer nutrients business was 4.3% in 3Q12, slightly lower than 5.3% in the previous quarter. Costs continued to increase as a result of the stoppage of an ammonia production plant and the Araucaria refinery, which led to the purchase of ammonia and urea to comply with contracts.

Adjusted EBITDA for the fertilizers business increased to US\$ 201 million in 3Q12, up from US\$ 183 million in 2Q12, mainly due to higher sales prices, US\$ 83 million, and the positive effect of exchange rate variation, US\$ 19 million, being partly mitigated by higher COGS(14) and SG&A expenses, US\$ 81 million.

**Table 14 - FERTILIZER NUTRIENTS BUSINESS PERFORMANCE**

**OPERATING REVENUE BY PRODUCT**

US\$ million	3Q11	2Q12	3Q12
Potash	80	81	78
Phosphates	713	630	783
Nitrogen	216	193	208
Others	28	19	26
<b>Total</b>	<b>1,037</b>	<b>923</b>	<b>1,095</b>

**AVERAGE SALE PRICE**

US\$/ metric ton	3Q11	2Q12	3Q12
Potash	526.32	493.90	534.25
Phosphates			
MAP	710.70	583.61	656.50
TSP	602.66	505.23	532.93
SSP	299.34	238.76	288.87
DCP	731.32	622.39	599.98
Phosphate rock	118.73	135.39	135.34
Nitrogen	645.51	599.97	624.62

**VOLUME SOLD**

000 metric tons	3Q11	2Q12	3Q12
Potash	152	164	146
Phosphates			



Edgar Filing: Vale S.A. - Form 6-K

MAP	245	268	362
TSP	184	239	245
SSP	774	693	753
DCP	133	123	120
Phosphate rock	680	746	798
Others phosphates	48	36	76
Nitrogen	335	322	333

**SELECTED FINANCIAL INDICATORS**

US\$ million	3Q11	2Q12	3Q12
Adjusted EBIT margin (%)	8.0	5.3	4.3
Adjusted EBIT	78	46	45
Adjusted EBITDA	239	183	201
Costs and expenses	(767)	(709)	(867)

---

(14) Excluding effects of exchange rate variation and volumes.

Table of Contents

**Logistics services**

Logistics services produced revenues of US\$ 449 million in 3Q12, increasing 10.0% from US\$ 408 million in the previous quarter.

Revenues from rail transportation of general cargo improved 4.8% reaching US\$ 308 million compared to US\$ 294 million in 2Q12. This was influenced by the crop season in Brazil, which begins in the second quarter and stretches into the third quarter.

Vale railroads Carajás (EFC), Vitória a Minas (EFVM), Norte-Sul (FNS) and Centro-Atlântica (FCA) transported 8.036 billion ntk(15) of general cargo for clients in 3Q12, a 38.9% quarter-on-quarter increase, reflecting a rise of 17.9% in volumes of agricultural products and 7.8% of fuels transported.

The main cargoes carried by our railroads in 3Q12 were agricultural products (55.3%), steel industry inputs and products (26.2%), building materials and forestry products (11.8%), fuels (6.4%), and others (0.4%).

Port services revenues were US\$ 141 million, against US\$ 114 million in 2Q12. Our ports and maritime terminals handled 5.481 Mt of general cargo, below the 6.421 Mt in 2Q12.

In 3Q12, adjusted EBIT margin was -6.6%.

Adjusted EBITDA improved in 3Q12, increasing to US\$ 35 million from US\$ 14 million in 2Q12. The positive effects of lower COGS(16) (US\$ 46 million), higher sales volumes (US\$ 40 million) and a favorable exchange rate variation (US\$ 9 million) were partly offset by lower prices (US\$ 54 million) and higher SG&A (US\$ 20 million).

**Table 15 - LOGISTICS BUSINESS PERFORMANCE**

**OPERATING REVENUE BY PRODUCT**

US\$ million	3Q11	2Q12	3Q12
Railroads	358	294	308
Ports	144	114	141
Total	502	408	449

**VOLUME SOLD**

<b>000 metric tons</b>	<b>3Q11</b>	<b>2Q12</b>	<b>3Q12</b>
Railroads (million ntk)	6,657	5,787	8,036
Ports	7,755	6,421	5,481

**SELECTED FINANCIAL INDICATORS**

<b>US\$ million</b>	<b>3Q11</b>	<b>2Q12</b>	<b>3Q12</b>
Adjusted EBIT margin (%)	1.4	(12.7)	(6.6)
Adjusted EBIT	6	(45)	(25)
Adjusted EBITDA	107	14	35
Costs and expenses	(356)	(342)	(349)

---

(15) Ntk=net ton kilometer

(16) Excluding the effects of US dollar appreciation and volumes.

Table of Contents

FINANCIAL INDICATORS OF NON-CONSOLIDATED COMPANIES

For selected financial indicators of the main non-consolidated companies, see our quarterly financial statements on [www.vale.com](http://www.vale.com) / Investors/ Financial Performance / SEC Reports.

CONFERENCE CALL AND WEBCAST

On October 25, 2012, Vale will hold a conference call and webcast in Portuguese, at 10:00 a.m. Rio de Janeiro time, 8:00 a.m. US Eastern Time, 1:00 p.m. British Time, 2:00 p.m. Paris Time, 8:00 p.m. Hong Kong Time. Vale will also hold another conference call and webcast in English, at 12:00 p.m. Rio de Janeiro time, 10:00 a.m. US Eastern Time, 3:00 p.m. British Time, 4:00 p.m. Paris Time, 10:00 p.m. Hong Kong Time. To connect the webcast, please dial:

Call in Portuguese:

Participants from Brazil: (55 11) 4688-6341

Participants from USA: (1-855) 281-6021

Participants from other countries: (1-786) 924-6977

Access code: VALE

Call in English:

Participants from Brazil: (55 11) 4688-6341

Participants from USA: (1-866) 262-4553

Participants from other countries: (1-412) 317-6029

Access code: VALE

Instructions for participation will be available on the website [www.vale.com/Investors](http://www.vale.com/Investors). A recording will be available on Vale's website for 90 days as of October 25, 2012.

Table of Contents

## IFRS RECONCILIATION WITH USGAAP

Since December 2010, the convergence of the full year financial statements was completed and therefore IFRS is now the accounting standard adopted in Brazil. During the intermediate periods of 2010, we already adopted all pronouncements issued by the Brazilian Accounting Practice Committee (CPC) which are in conformity with the IFRS.

The net income reconciliation between the net income according to Brazilian rules (in conformity with the IFRS) and USGAAP is as follows:

US\$ million	3Q12
<b>Net income IFRS</b>	<b>1,642</b>
Depletion of assets on business acquired	(37)
Income tax	(14)
Pension plan	78
Other adjustments	
<b>Net income US GAAP</b>	<b>1,669</b>

**Depletion of assets on business acquired:** Refers to additional depletion of the adjustments to fair value of property, plant and equipment on business acquired before the new rules issued by CPC in respect of business combinations. This difference will cease by the end of the useful life of these assets.

**Pension Plan:** This adjustment reflects the return on the overfunded plans, which under IFRS recognition is more restricted.

**Income tax:** Income tax related to the previously described adjustments.

Table of Contents

## ANNEX 1 FINANCIAL STATEMENTS

**Table 16 - INCOME STATEMENT**

US\$ million	3Q11	2Q12	3Q12
<b>Gross operating revenues</b>	<b>16,741</b>	<b>12,150</b>	<b>10,963</b>
Taxes	(380)	(257)	(238)
<b>Net operating revenue</b>	<b>16,361</b>	<b>11,893</b>	<b>10,725</b>
Cost of goods sold	(6,252)	(6,015)	(6,128)
<b>Gross profit</b>	<b>10,109</b>	<b>5,878</b>	<b>4,597</b>
Gross margin (%)	61.8	49.4	42.9
Selling, general and administrative expenses	(654)	(615)	(519)
Research and development expenses	(440)	(359)	(360)
Gain (loss) from sale of assets		(377)	
Others	(643)	(604)	(1,071)
<b>Operating profit</b>	<b>8,373</b>	<b>3,923</b>	<b>2,647</b>
Financial revenues	188	120	88
Financial expenses	(822)	(559)	(682)
Gains (losses) on derivatives, net	(568)	(416)	(12)
Monetary and exchange variation	(2,191)	(1,693)	(228)
Tax and social contribution (Current)	(1,197)	(25)	(1,077)
Tax and social contribution (Deferred)	846	(151)	697
Reversal of differed income tax		1,236	
Equity income and provision for losses	282	158	154
Minority shareholding participation	24	69	82
Net earnings	4,935	2,662	1,669
<b>Earnings per share (US\$)</b>	<b>0.95</b>	<b>0.52</b>	<b>0.32</b>

**Table 17 - FINANCIAL RESULTS**

US\$ million	3Q11	2Q12	3Q12
Gross interest	(350)	(325)	(271)
Debt with third parties	(350)	(325)	(264)
Debt with related parties			(7)
Tax and labour contingencies	(22)	(12)	(12)
Others	(450)	(222)	(399)
<b>Financial expenses</b>	<b>(822)</b>	<b>(559)</b>	<b>(682)</b>
<b>Financial income</b>	<b>188</b>	<b>120</b>	<b>88</b>
<b>Derivatives</b>	<b>(568)</b>	<b>(416)</b>	<b>(12)</b>
<b>Exchange and monetary gain (losses), net</b>	<b>(2,191)</b>	<b>(1,693)</b>	<b>(228)</b>
<b>Financial result, net</b>	<b>(3,393)</b>	<b>(2,548)</b>	<b>(834)</b>

**Table 18 - EQUITY INCOME BY BUSINESS SEGMENT**

Edgar Filing: Vale S.A. - Form 6-K

US\$ million	3Q11	%	2Q12	%	3Q12	%
Ferrous minerals	230	81.6	173	109.5	189	122.7
Coal	24	8.5	13	8.2	7	4.5
Base metals	67	23.8	3	1.9	(56)	(36.4)
Logistics	32	11.3	15	9.5	42	27.3
Steel	(70)	(24.8)	(38)	(24.1)	(19)	(12.3)
Others	(1)	(0.4)	(8)	(5.1)	(9)	(5.8)
<b>Total</b>	<b>282</b>	<b>100.0</b>	<b>158</b>	<b>100.0</b>	<b>154</b>	<b>100.0</b>

Table of Contents**Table 19 - BALANCE SHEET**

US\$ million	9/30/2011	6/30/2012	9/30/2012
<b>Assets</b>			
Current	26,778	20,787	25,316
Long-term	8,972	9,438	9,695
Fixed	93,248	99,331	101,443
<b>Total</b>	<b>128,998</b>	<b>129,556</b>	<b>136,454</b>
<b>Liabilities</b>			
Current	11,974	9,220	10,345
Long term	37,140	38,429	42,392
Shareholders' equity	79,884	81,907	83,717
Paid-up capital	38,222	37,719	37,721
Reserves	38,084	42,575	44,429
Non controlling interest	2,644	1,613	1,567
Mandatory convertible notes	934		
<b>Total</b>	<b>128,998</b>	<b>129,556</b>	<b>136,454</b>



Table of Contents**Table 20 - CASH FLOW**

US\$ million	3Q11	2Q12	3Q12
<b>Cash flows from operating activities:</b>			
Net income	4,911	2,593	1,587
Adjustments to reconcile net income with cash provided by operating activities:			
Depreciation, depletion and amortization	1,018	1,084	1,066
Dividends received	240	112	25
Equity in results of affiliates and joint ventures and change in provision for losses on equity investments	(282)	(158)	(154)
Deferred income taxes	(846)	(1,085)	(697)
Loss on sale of property, plant and equipment	17	207	103
Gain on sale of investment		377	
Exchange and monetary losses	2,218	82	442
Net unrealized derivative losses	642	642	95
Net interest payable	78	(29)	(10)
Others	(37)	(73)	(117)
Decrease (increase) in assets:			
Accounts receivable	(730)	425	705
Inventories	(324)	292	(311)
Recoverable taxes	(392)	(287)	336
Others	(219)	(42)	453
Increase (decrease) in liabilities:			
Suppliers	829	92	407
Payroll and related charges	212	284	80
Income tax	(2,745)	(166)	863
Others	(379)	29	796
<b>Net cash provided by operating activities</b>	<b>4,211</b>	<b>4,379</b>	<b>5,669</b>
Cash flows from investing activities:			
Short term investments			(685)
Loans and advances receivable	57	8	317
Guarantees and deposits	(239)	(76)	(10)
Additions to investments	(18)	(53)	(31)
Additions to property, plant and equipment	(3,711)	(3,228)	(4,984)
Proceeds from disposals of investment		366	
<b>Net cash used in investing activities</b>	<b>(3,911)</b>	<b>(2,983)</b>	<b>(5,393)</b>
Cash flows from financing activities:			
Short-term debt, net issuances (repayments)	(43)	21	65
Long-term debt	479	1,809	3,898
Repayment of long-term debt	(769)	(502)	(364)
Treasury stock	(2,001)		
Transactions of noncontrolling interest		(427)	
Interest attributed to shareholders	(3,000)	(3,000)	
Dividends to minority interest		(35)	
<b>Net cash used in financing activities</b>	<b>(5,334)</b>	<b>(2,134)</b>	<b>3,599</b>
Increase (decrease) in cash and cash equivalents	(5,034)	(738)	3,875
Effect of exchange rate changes on cash and cash equivalents	(628)	(101)	(7)
Cash and cash equivalents, beginning of period	13,227	4,922	4,083
<b>Cash and cash equivalents, end of period</b>	<b>7,565</b>	<b>4,083</b>	<b>7,951</b>
Cash paid during the period for:			
Interest on long-term debt	(234)	(350)	(312)
Income tax	(4,097)	(282)	(53)
Non-cash transactions			
Interest capitalized	54	70	33



Table of Contents

## ANNEX 2 VOLUMES SOLD, PRICES AND MARGINS

**Table 21 - VOLUME SOLD - MINERALS AND METALS**

000 metric tons	3Q11	2Q12	3Q12
Iron ore	67,008	62,978	66,205
Pellets	10,445	12,277	11,966
Manganese ore	356	510	446
Ferroalloys	101	99	31
Thermal coal	1,263	1,107	229
Metallurgical coal	569	1,152	1,148
Nickel	68	63	55
Copper	80	61	84
Gold ( 000 oz)	44	32	48
Silver ( 000 oz)	728	561	459
PGMs ( 000 oz)	70	114	98
Cobalt (metric ton)	703	570	432
Potash	152	164	146
Phosphates			
MAP	245	268	362
TSP	184	239	245
SSP	774	693	753
DCP	133	123	120
Phosphate rock	680	746	798
Others phosphates	48	36	76
Nitrogen	335	322	333
Railroads (million ntk)	6,657	5,787	8,036
Ports	7,755	6,421	5,481

**Table 22 - AVERAGE SALE PRICES**

US\$/ton	3Q11	2Q12	3Q12
Iron ore	151.26	103.29	83.69
Pellets	205.79	159.00	140.98
Manganese ore	129.21	123.53	127.80
Ferroalloys	1,376.24	1,303.03	1,774.19
Thermal coal	98.28	70.97	90.91
Metallurgical coal	282.54	171.13	177.97
Nickel	21,132.35	17,761.90	16,509.09
Copper	8,043.63	7,566.00	7,700.20
Platinum (US\$/oz)	1,765.57	1,493.65	1,539.61
Gold (US\$/oz)	1,785.47	1,794.01	1,717.42
Silver (US\$/oz)	30.41	29.74	32.31
Cobalt (US\$/lb)	18.71	12.73	11.55
Potash	526.32	493.90	534.25
Phosphates			
MAP	710.70	583.61	656.50
TSP	602.66	505.23	532.93

Edgar Filing: Vale S.A. - Form 6-K

SSP	299.34	238.76	288.87
DCP	731.32	622.39	599.98
Phosphate rock	118.73	135.39	135.34
Nitrogen	645.51	599.97	624.62

Table of Contents**Table 23- OPERATING MARGIN BY SEGMENT (EBIT ADJUSTED MARGIN)**

%	3Q11	2Q12	3Q12
<b>Bulk materials(1)</b>			
Ferrous minerals	68.3	57.6	51.9
Coal	(27.0)	(60.5)	(52.4)
<b>Base metals</b>	<b>7.9</b>	<b>(17.8)</b>	<b>(19.8)</b>
<b>Fertilizer nutrients</b>	<b>8.0</b>	<b>5.3</b>	<b>4.3</b>
<b>Logistics</b>	<b>1.4</b>	<b>(12.7)</b>	<b>(6.6)</b>
<b>Total(1)</b>	<b>51.2</b>	<b>36.2</b>	<b>29.7</b>

---

(1) excluding non-recurring effects

Table of Contents

## ANNEX 3 RECONCILIATION OF US GAAP and NON-GAAP INFORMATION

**(a) Adjusted EBIT**

US\$ million	3Q11	2Q12	3Q12
Net operating revenues	16,361	11,893	10,725
COGS	(6,252)	(6,015)	(6,128)
SG&A	(654)	(615)	(519)
Research and development	(440)	(359)	(360)
Other operational expenses	(643)	(604)	(529)
Adjustment for non-recurring items		(377)	(542)
<b>Adjusted EBIT</b>	<b>8,372</b>	<b>3,923</b>	<b>2,647</b>

**(b) Adjusted EBITDA**

EBITDA defines profit or loss before interest, tax, depreciation and amortization. Vale uses the term adjusted EBITDA to reflect exclusion, also, of: monetary variations; equity income from the profit or loss of affiliated companies and joint ventures, less the dividends received from them; provisions for losses on investments; adjustments for changes in accounting practices; minority interests; and non-recurrent expenses. However our adjusted EBITDA is not the measure defined as EBITDA under US GAAP, and may possibly not be comparable with indicators with the same name reported by other companies. Adjusted EBITDA should not be considered as a substitute for operational profit or as a better measure of liquidity than operational cash flow, which are calculated in accordance with GAAP. Vale provides its adjusted EBITDA to give additional information about its capacity to pay debt, carry out investments and cover working capital needs. The following table shows the reconciliation between adjusted EBITDA and operational cash flow, in accordance with its statement of changes in financial position:

**RECONCILIATION BETWEEN ADJUSTED EBITDA AND OPERATIONAL CASH FLOW**

US\$ million	3Q11	2Q12	3Q12
Operational cash flow	4,211	4,379	5,669
Income tax	1,197	25	1,077
FX and monetary losses	(27)	1,611	(214)
Financial expenses	1,124	884	616
Net working capital	3,748	(627)	(3,329)
Other	(622)	(1,153)	(81)
<b>Adjusted EBITDA</b>	<b>9,631</b>	<b>5,119</b>	<b>3,738</b>

**(c) Net debt****RECONCILIATION BETWEEN Total debt AND NET DEBT**

Edgar Filing: Vale S.A. - Form 6-K

US\$ million	3Q11	2Q12	3Q12
Total debt	22,989	25,518	29,211
Cash and cash equivalents, and short-term investments	7,565	4,082	8,636
Net debt	15,424	21,436	20,575

(d) Total debt / LTM Adjusted EBITDA

US\$ million	3Q11	2Q12	3Q12
Total debt / LTM Adjusted EBITDA (x)	0.6	0.9	1.4
Total debt / LTM operational cash flow (x)	0.9	1.3	1.4

(e) Total debt / Enterprise value

US\$ million	3Q11	2Q12	3Q12
Total debt / EV (%)	17.16	20.06	25.30
Total debt / total assets (%)	17.82	19.70	21.40

*Enterprise value = Market capitalization + Net debt*

(f) LTM Adjusted EBITDA / LTM interest payments

US\$ million	3Q11	2Q12	3Q12
LTM adjusted EBITDA / LTM interest payments (x)	29.19	24.49	17.91
LTM operational profit / LTM interest payments (x)	24.83	20.03	13.88

Table of Contents

This press release may include statements that present Vale's expectations about future events or results. All statements, when based upon expectations about the future and not on historical facts, involve various risks and uncertainties. Vale cannot guarantee that such statements will prove correct. These risks and uncertainties include factors related to the following: (a) the countries where we operate, especially Brazil and Canada; (b) the global economy; (c) the capital markets; (d) the mining and metals prices and their dependence on global industrial production, which is cyclical by nature; and (e) global competition in the markets in which Vale operates. To obtain further information on factors that may lead to results different from those forecast by Vale, please consult the reports Vale files with the U.S. Securities and Exchange Commission (SEC), the Brazilian Comissão de Valores Mobiliários (CVM), the French Autorité des Marchés Financiers (AMF), and The Stock Exchange of Hong Kong Limited, and in particular the factors discussed under "Forward-Looking Statements" and "Risk Factors" in Vale's annual report on Form 20-F.



Table of Contents

**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.  
(Registrant)

Date: October 24, 2012

By:

/s/ Roberto Castello Branco  
Roberto Castello Branco  
Director of Investor Relations

---