Vale S.A. Form 6-K April 26, 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

April 2012

# Vale S.A.

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

(Address of principal executive office)

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

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

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(Check One) Yes o No x

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(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.)

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

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Press Release Signature Page

US GAAP

BM&F BOVESPA: VALE3, VALE5

NYSE: VALE, VALE.P

HKEx: 6210, 6230

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#### DEALING WITH SEASONALITY

#### Performance of Vale in 1Q12

Rio de Janeiro, April 25, 2012 Vale S.A. (Vale) financial performance reported for the first quarter of 2012 (1Q12) shows an overall decrease in the main indicators of profitability and cash flow relative to the record levels of the last quarter of 2011.

Seasonality usually makes the first quarter the one with the weakest operational and financial performance in the year. This year, the abnormal rainfall in Brazil has magnified the seasonal effect on revenues and costs, which combined with the reduction in iron ore and pellet prices led to narrower operating margins and lower than expected earnings and cash flow.

The rainy season in the Southern Hemisphere is past, iron ore shipments surged in March and we are confident of delivering the volumes planned for this year. Global market for minerals and metals is estimated to remain tight, and we are well prepared to continue to exploit the opportunities for value creation.

A diversified portfolio of assets, by business bulk materials, base metals and fertilizers including Moatize, Oman, Onça Puma, Tres Valles and Bayóvar, is ramping up. These are new platforms of value creation, whose potential will be materialized in the near future.

The test with the integrated operation of VNC was successful, showing that we are able to produce nickel oxide on a sustainable basis.

Salobo, our third greenfield copper project and with a nominal capacity of 100,000 metric tons (t) of copper in concentrates, is coming on stream in the next few weeks(1).

We signed a leasing contract which allows for the continuation of potash mining at Taquari-Vassouras and the development of the Carnalita project, which is estimated to have a nominal capacity of 1.2 million metric tons (Mt) of potash.

The main highlights of Vale s performance in 1Q12 were:

- Record pellet shipments for a first quarter, 10.4 Mt, 0.9% above the previous record in 1Q11.
- Record coal shipments in 1Q12, at 2.8 Mt.

• Operating revenues of US\$ 11.3 billion in 1Q12, 16.3% below the US\$ 13.5 billion in 1Q11.

<sup>(1)</sup> We already delivered two other greenfield copper projects, Sossego, Brazil, in 2004 and Tres Valles, Chile, in 2010.

<sup>1</sup> 

• Income from existing operations, as measured by adjusted EBIT (earnings before interest and taxes)(a), of US\$ 3.9 billion. In 4Q11, operating income was US\$ 6.0 billion.

• Operating income margin, as measured by adjusted EBIT margin, of 34.8%. In 4Q11, operating margin was 41.7%.

• Net earnings of US\$ 3.8 billion, equal to US\$ 0.74 per share on a fully diluted basis, representing an 18.1% drop against the US\$ 4.7 billion in 4Q11.

• Cash generation, as measured by adjusted EBITDA(b) (earnings before interest, taxes, depreciation and amortization), of US\$ 5.0 billion against the US\$ 7.4 billon in 4Q11. Over the last 12-month period ended at March 31, 2012, adjusted EBITDA was US\$ 31.1 billion.

- Capital expenditures, excluding acquisitions, of US\$ 3.7 billion in 1Q12, rising 34.0% above 1Q11.
- The first tranche of the minimum dividend for 2012, US\$ 3.0 billion, will be paid to shareholders from April 30, 2012 onwards.
- Maintenance of a strong balance sheet, with low debt leverage, measured by total debt/LTM adjusted EBITDA, equal to 0.8x, long average maturity, 9.4 years, and low average cost, 4.69% per year as of March 31, 2012.

#### **Table 1 - SELECTED FINANCIAL INDICATORS**

	1Q11	4Q11	1Q12	%	%
US\$ million	(A)	<b>(B)</b>	(C)	(C/A)	(C/B)
Operating revenues	13,548	14,755	11,339	(16.3)	(23.2)
Adjusted EBIT	6,456(1)	6,023	3,850	(40.4)	(36.1)
Adjusted EBIT margin (%)	48.9(1)	41.7	34.8		
Adjusted EBITDA	7,6631	7,396	4,965	(35.2)	(32.9)
Net earnings	6,826	4,672	3,827	(43.9)	(18.1)
Earnings per share fully diluted basis(US\$ / share)	1.29	0.90	0.74	(42.6)	(17.8)
Total debt/ adjusted EBITDA (x)	0.7	0.7	0.8	9.7	22.4
ROIC(2) (%)	32.9	36.1	33.5		
Capex (excluding acquisitions)	2,743	6,686	3,677	34.0	(45.0)

<sup>(1)</sup> Excluding the non-recurring gain from the transfer of aluminum assets in 1Q11.

<sup>(2)</sup> ROIC LTM=return on invested capital for last twelve-month period.

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: Compañia Minera Misky Mayo S.A.C., Ferrovia Centro-Atlântica (FCA), Ferrovia Norte Sul S.A, PT Vale Indonesia Tbk (formerly International Nickel Indonesia Tbk), Vale Australia Pty Ltd., Vale Canada Limited (formely Vale Inco Limited), Vale Colômbia Ltd., Mineração Corumbaense Reunida S.A., Vale Fertilizantes S.A., Vale International, Vale Manganês S.A., Vale Manganèse France, Vale Manganese Norway S.A. and Vale Nouvelle Caledonie SAS.

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### BUSINESS OUTLOOK

After the softening of economic activity in the last quarter of 2011, the outlook for global growth is gradually improving.

The end of normalization of macroeconomic policies in emerging market economies, with the change in monetary policy stance, reconstruction in Japan and Thailand, accommodative monetary policies by the central banks of major advanced countries and improved financial conditions are contributing to some reacceleration in global economic growth.

Real output in Thailand has rebounded after a collapse caused by severe floods, giving rise to the restoration of the global auto and electronics supply chain, which has had a positive impact on global industrial production.

The long-term refinancing operations (LTROs) implemented by the European Central Bank (ECB) of approximately US\$ 1 trillion, the commitment of European countries and the IMF to build a firewall and the decision of some peripheral economies to adopt fiscal austerity and structural reforms were all instrumental in the removal of uncertainties regarding short-term economic growth. These movements led to a mitigation of tail risks associated to the potential for a disorderly debt default of a Euro Zone member and ultimately another global financial shock. However, the credibility of the fiscal consolidation and reform plans of some countries is still being challenged by financial markets, although with less intensity than late last year.

Despite the contraction in Europe, global industrial output accelerated strongly in 1Q12 at 6% per year, driven primarily by the US, Japan and emerging Asia. The expansion underlies a strong demand for minerals and metals, thus sustaining prices at a relatively high level.

As global economic recovery is concluding its third year, the question now is the sustainability of the industrial growth process, which is key to the demand for minerals and metals.

In the US, labor and credit market conditions have improved, and growth prospects are much better than they were a while ago. After negative growth in 2011, mainly caused by natural disasters, the Japanese economy is expected to continue to expand throughout this year. As mentioned, the spillover into the rest of the world of the sovereign and financial crisis in Europe seems to have been contained, but the recession in the Euro area will last for the next quarters, with contraction of economic activity in Italy, Spain, Portugal and Greece, and sluggish growth in the major economies, such as Germany and France.

A hallmark of the recovery from the Great Recession of 2008/2009 has been the sharp contrast between the very weak performance in developed economies and the strength of emerging economies. The latter have been driven largely by buoyant domestic demand, strong capital inflows and countercyclical expansionary policies supported by stronger macroeconomic frameworks. At the same time, a substantial increase over the last fifteen years in trade and capital flows among emerging markets has contributed to weaken the co-movement of international business cycles, helping these economies to decouple from recessions in developed economies.

Expansion of emerging economies, although at slower pace than last year, is estimated to remain solid and to drive the global economy, giving support to the demand for minerals and metals.

China s GDP growth in 1Q12 slowed to 8.1% on a year-on-year basis from 8.9% in 4Q11, with estimated quarter-on-quarter expansion of 6.7%, the slowest since 1Q09, in the aftermath of the global financial shock. Activity in the property sector has weakened, with sales dropping and housing starts stagnating while infrastructure investment remained moderate. There was destocking in some sectors and exports slowed due to the weaker demand from Europe.

However, Chinese growth is expected to bottom out in 1Q12, and a gradual reacceleration of economic activity is taking shape in the short term.

Political risks seem to have diminished, which gives room for increases in public sector investment, including social housing and infrastructure spending, and the implementation of reforms.

There are indications that some financial reforms are being carried out, initially on a very limited extent - in accordance with the Chinese style of

testing reforms with pilot projects - aiming at bolstering financial support for small and medium enterprises and greater private sector investment in the financial system. The announcement of a wider band for fluctuation of the remninbi and the raising although very timidly of limits to international portfolio capital flows are also indicative of the intentions to change the macroeconomic policy framework.

Exports picked up in March from the weaker movement in January-February, and are estimated to expand moderately in 2012, mainly driven by demand from Asia and the US.

Monetary and credit policy easing is taking place, with credit growth rising in March and short-term money market interest rates kept at a low level. With policy easing, fixed investment is expected to increase at a faster pace, led by social housing and infrastructure building, including urban equipment, energy, water work, irrigation and environmental protection. Private sector housing is expected to remain weak in the first half of the year, with potential for some improvement in 2H12.

The medium-term prospects for Chinese demand for minerals and metals depend on the pace and composition of its growth.

China's GDP growth is estimated to run at a slower pace but it will not imply weaker demand. A very simple exercise illustrates this. Over the last decade real GDP reached an annual average rate of 10%, generating an accumulated increase of US\$ 11.2 trillion. If in this decade real GDP expansion occurs at 7% per year, the accumulated increase will reach US\$ 16.2 trillion(2). Even with a 30% drop in the pace of growth, real output would increase by 45%.

The government of China has committed to rebalancing aggregate demand away from investment and towards consumption, which may gradually moderate the demand for commodities which are investment-based. Artificially low cost of capital and energy prices incentivize investment in the manufacturing industry, which is too large by international standards, and is one of the factors underlying the strong commodities demand. However, the transition to a less commodity-intense growth is not expected to take place in the near term as it will require some deep structural changes in the macroeconomic policy framework which will be difficult to implement.

China still needs to invest significantly in infrastructure building and housing to meet pressures stemming from urbanization, a significant housing deficit, and the development of the Central and Western regions of the country. In addition, to accommodate the high population density of Chinese cities, much bigger than in large cities of the Western Hemisphere, the construction of high-rise buildings is widely adopted. This type of building uses a substantial volume of steel per square meter, sometimes more than double that consumed by 10-12 floor buildings.

Global steel production increased by 1.1% in 1Q12, with China's output expanding by 2.4%. Japanese production in March reached the highest level since the Tohoku earthquake a year ago. On a seasonally adjusted basis, Chinese crude steel production is running above 700 Mtpy, about 47% of world output, which is reaching approximately 1.5 billion Mtpy. There are indications of a good performance for Chinese steel production in April driven by the recovery in the demand for construction and infrastructure.

The iron ore market remained tight. Prices are gradually recovering from the lows of 4Q11, rising by 27% compared to the end of October 2011. The demand from Europe remained weak but stable, while demand from China continued to be strong, with iron ore imports reaching an all-time

high figure in 1Q12, at 187.2 Mt, 5.6% higher than 1Q11.

After a soft patch in the first two months of the year, due to production and logistics challenges related to the severe rains in Brazil, Vale's iron ore shipments recovered sharply in March 2012, totaling 31.7 Mt, with 53.4% destined to China.

Global iron ore market tightness is expected to remain, with demand growth driven by China coupled with supply reaction constraints, as no major projects are coming on stream in the near term and Indian exports are trending downward. Percentagewise, Chinese growth is likely to slow, but in absolute terms, meaning additional tonnage of iron ore, which really is the relevant figure for the prospects of our cash flow and profitability, the expansion will continue to be significant as it departs from a very large base.

<sup>(2)</sup> Real GDP figures at purchasing power parity (PPP) exchange rate.

Seasonally adjusted global stainless steel output decreased 1.2% quarter-on-quarter in 1Q12, and was 2.0% lower than the all-time high production level of 1Q11 as consumers and intermediaries continued to run down levels of inventory into 2012. Given that the stainless steel industry is the main consumer of nickel in the world, with about 60-65% of the sales of the metal, a downward price pressure followed, leading by mid-February to the end of a price rally that had started in early December 2011.

A gradual resumption of stainless steel production increase is expected as a consequence of the reacceleration of global economic activity, chiefly in China, the largest global consumer.

Non-stainless steel sources of demand for nickel continue to show growth, largely due to the strong demand by the aerospace industry for high nickel alloys, while the auto industry is adding strength to the consumption of alloy steels, plating and powder.

On the supply side, HPAL projects continue to struggle, with high capex costs and technical challenges to overcome.

However, Vale's VNC test on integrated refinery operations was successful, with the production of 1,100 t of nickel oxide which was shipped to our nickel refinery in Dalian, China. VNC has been producing and selling an intermediate product, nickel hydroxide cake, since last year.

While some ferronickel projects have been delivered, including Vale's Onça Puma, the main source of supply expansion has been the Chinese production of nickel in nickel pig iron (NPI), highly dependent on the supply of lateritic nickel ores mostly from Indonesia, the main supplier and responsible for 53% of China's imports, and the Philippines.

The producers of NPI are high-cost swing producers, who have managed to increase output to levels above 200,000 t, amounting to almost 15% of the world s estimated nickel metal production. In the role of swing producers, they set a floor for nickel prices, contributing to lessen downward and upward price volatility. For instance, nickel prices were less volatile than copper prices over the last six months, breaking a historical pattern.

The Chinese NPI industry is facing the risk posed by the Indonesian ban on exports of nickel ores. The Indonesian government enacted a law to ban these exports and more recently took steps to bring forward enforcement of the law to May 2012. So far, it remains unclear when and how the law will be enforced. At the same time, the government of the Philippines suggested they may raise dramatically export taxes on ores.

Depending on how these restrictions are executed, they may lead to a major constraint to nickel supply, contributing to higher nickel prices.

Copper prices have been range bound, around US\$ 8,000/8,500 per metric ton, a relatively high level, in face of strong demand from China and supply constraints. The US demand is surprising on the upside and European demand is showing some improvement compared to the low level of 4Q11.

The copper industry has been prone to supply disruptions stemming from labor strikes and operational challenges, which is one of the reasons for underlying market tightness. Alongside resource impoverishment of large existing mines, mine expansions seem to be slipping away from schedule and the lack of a group of sizeable projects to come on stream in the near future compounds the scenario for the persistence of high prices.

Salobo, our second greenfield copper project at Carajás with a nominal capacity of 100,000 t per year, will start the ramp-up process in 2Q12. Salobo II, with another 100,000 t, will follow, and is expected to come on stream in 2H13.

Given this scenario, we will continue to invest in a sizeable portfolio of projects, diversified by product, geography and demand driver.

#### • **REVENUES**

Operating revenues totaled US\$ 11.339 billion in 1Q12, dropping 23.2% against the previous quarter. The decrease was a consequence of lower sales volumes of iron ore and base metals US\$ 2.586 billion and lower sales prices of iron ore and pellets US\$ 800 million.

In addition to the regular effects of seasonality caused by adverse weather conditions due to the summer season in the Southern Hemisphere, particularly in Brazil and Australia, and the winter in Canada, this year the abnormal rainfall in the Brazilian iron ore mining sites created challenges to production and logistics constraining shipments.

In 1Q12, revenues generated from the sales of bulk materials iron ore, pellets, manganese ore, ferroalloys, metallurgical and thermal coal represented 72.7% of operating revenues, below the 74.4% in 4Q11. The share of base metals was slightly reduced to 15.7% from 16.0% in 4Q11, while fertilizers contribution rose to 7.3% from 5.8% in 4Q11. Logistics services were responsible for 3.6% of total revenues and other products 0.8%.

The composition of sales by geography was slightly modified, with Asia falling to 51.4% from 55.2% in 4Q11 and the Americas gaining weight, climbing to 28.7% in 1Q12 from 23.7%. Europe continued to trend downward, declining to 16.7% from 19.5% in 1Q11, reflecting the recessionary environment there. Revenues from shipments to the Middle East had another uptick, with 2.4% in 1Q12 against 2.0% in 4Q11 and 1.8% in 1Q11.

On a country basis, sales to China accounted for 31.3% of total revenues in 1Q12, Brazil for 20.7%, Japan 11.8%, Germany 5.9%, South Korea 4.7% and the United States 3.6%.



## Table 2 - OPERATING REVENUE BREAKDOWN

US\$ million	1Q11	%	4Q11	%	1Q12	%
Bulk materials	9,519	70.3	10,983	74.4	8,240	72.7
Ferrous minerals	9,365	69.1	10,620	72.0	7,851	69.2
Iron ore	7,287	53.8	8,483	57.5	5,987	52.8
Pellets	1,869	13.8	1,980	13.4	1,688	14.9
Manganese ore	43	0.3	32	0.2	42	0.4
Ferroalloys	153	1.1	115	0.8	124	1.1
Pellet plant operation services	9	0.1	10	0.1	10	0.1
Others	4					
Coal	154	1.1	363	2.5	389	3.4
Thermal coal	67	0.5	181	1.2	137	1.2
Metallurgical coal	87	0.6	182	1.2	251	2.2
Base metals	2,749	20.3	2,363	16.0	1,775	15.7
Nickel	1,557	11.5	1,265	8.6	1,103	9.7
Copper	536	4.0	874	5.9	467	4.1
PGMs	165	1.2	87	0.6	105	0.9
Precious metals	88	0.7	114	0.8	83	0.7
Cobalt	19	0.1	23	0.2	17	0.1
Aluminum	141	1.0				
Alumina	236	1.7				
Bauxite	6					
Fertilizer nutrients	787	5.8	856	5.8	829	7.3
Potash	62	0.5	77	0.5	70	0.6
Phosphates	536	4.0	563	3.8	548	4.8
Nitrogen	172	1.3	199	1.3	192	1.7
Others	17	0.1	17	0.1	19	0.2
Logistics services	328	2.4	420	2.8	403	3.6
Railroads	250	1.8	300	2.0	265	2.3
Ports	78	0.6	120	0.8	138	1.2
Others	165	1.2	133	0.9	92	0.8
Total	13,548	100.0	14,755	100.0	11,339	100.0

#### **Table 3 - OPERATING REVENUE BY DESTINATION**

US\$ million	1Q11	%	4Q11	%	1Q12	%
North America	962	7.1	751	5.1	678	6.0
USA	475	3.5	341	2.3	408	3.6
Canada	463	3.4	382	2.6	265	2.3
Mexico	24	0.2	27	0.2	5	
South America	2,778	20.5	2,749	18.6	2,578	22.7
Brazil	2,538	18.7	2,487	16.9	2,351	20.7
Others	240	1.8	262	1.8	227	2.0
Asia	6,716	49.6	8,151	55.2	5,828	51.4
China	4,024	29.7	4,614	31.3	3,551	31.3
Japan	1,509	11.1	2,002	13.6	1,335	11.8
South Korea	428	3.2	888	6.0	532	4.7
Taiwan	323	2.4	422	2.9	170	1.5
Others	433	3.2	224	1.5	240	2.1
Europe	2,636	19.5	2,567	17.4	1,889	16.7
Germany	918	6.8	774	5.2	672	5.9
France	147	1.1	191	1.3	105	0.9
Netherlands	136	1.0	113	0.8	115	1.0
UK	357	2.6	363	2.5	237	2.1
Italy	468	3.5	415	2.8	315	2.8
Turkey	125	0.9	65	0.4	66	0.6
Spain	109	0.8	93	0.6	106	0.9
Others	377	2.8	552	3.7	272	2.4
Middle East	244	1.8	299	2.0	274	2.4
Rest of the World	212	1.6	238	1.6	93	0.8
Total	13,548	100.0	14,755	100.0	11,339	100.0

## • COSTS

In 1Q12, cost of goods sold (COGS) was down by US\$ 335 million on a quarter-on-quarter basis, amounting to US\$ 5.690 billion. Adjusting for the effects of exchange rate variation(3) (+US\$ 98 million) and lower volumes (US\$ 456 million), COGS was roughly in line with 4Q11.

As mentioned before, severe rain in Brazil contributed not only to lower shipments but also to cost increases.

Additional dredging and corrective maintenance services were needed in order to address the effects of the heavy rain on our open pit mines. Preventive maintenance is usually scheduled for the first quarter in order to take advantage of the seasonally driven slower operational activity at this time of the year, which adds pressures to costs with materials and outsourced services. Moreover, the rainy season contributes to larger demurrage charges, due to the damages caused to railroad transportation, and to a more intense consumption of tires for off-road trucks.

Therefore, in 1Q12 expenses with materials (equipment, parts and inputs) and outsourced services adjusted by the effects of exchange rate variation and lower volumes - rose by US\$ 223 million and US\$ 139 million, respectively, compared to 4Q11. Demurrage charges increased by

US\$ 55 million, caused not only by the effects of the rainy season but due to the accident with one bridge structure of the Carajás railroad.

Our nickel mining operations in Sudbury suffered a temporary suspension in February for the reassessment of safety conditions and resumption of production was slower than expected. The stoppage caused a direct

<sup>(3)</sup> COGS currency exposure in 1Q12 was made up as follows: 60% Brazilian reais, 16% US dollars, 15% Canadian dollars, 3% Australian dollars, 1% Indonesian rupiah and 5% other currencies.

<sup>9</sup> 

impact on COGS, specifically on materials, outsourced services and labor costs amounting to US\$ 54 million.

As we are developing a large portfolio of projects US\$ 48 billion is being invested in the largest twenty projects and there is a global scarcity of skilled workers for the mining industry, in addition to the employees hired for project execution, we have been recruiting workers to provide them with the proper training to operate the assets, once they come on stream. This movement raises fixed costs without the counterpart in the short term of revenues generation.

Our headcount increased to 82,892 employees in March 2012 from 79,646 in December 2011 and 71,975 in March 2011, raising costs by US\$ 48 million on a quarter-on-quarter basis.

Expenses with outsourced services totaled US\$ 1.096 billion 19.3% of COGS against US\$ 1.044 billion in 4Q11. Adjusting for lower volumes (US\$ 104 million) and currency price changes (+US\$ 17 million), costs of outsourced services increased by US\$ 139 million vis-à-vis 4Q11, mainly reflecting higher expenses in the iron ore (US\$ 97 million) and pellet businesses (US\$ 25 million).

The bigger costs are explained by the increases in operational (US\$ 84 million) and maintenance services (US\$ 23 million) and higher railroad freight prices charged by MRS (US\$ 10 million), which is a 45.84%-owned affiliated company transporting our iron ore production from the mines in the Southern System to the maritime terminals of Guaíba Island and Itaguaí.

Cost of materials 17.8% of COGS was US\$ 1.014 billion, up 14.3% against 4Q11, due to the regular scheduled maintenance. Adjusting for the effects of smaller volumes (US\$ 112 million) and currency price changes (+US\$ 16 million), costs of materials increased by US\$ 223 million vis-à-vis 4Q11, mainly reflecting the effect of the maintenance works in iron ore (US\$ 112 million) and pellets (US\$ 36 million). Tubarão plants I&II underwent cold maintenance stoppage in January and February. There was also a 3% increase in the waste removal services, which affects costs with inputs, tires and conveyor belts.

In 1Q12, personnel costs amounted to US\$ 828 million, representing 14.6% of COGS, against US\$ 891 million in 4Q11. The two-year collective labor agreement in Brazil added US\$ 26 million to costs, reflecting a full quarter effect of the 8.6% pay rise. The retention bonus paid to employees as part of the agreement is being accounted linearly over a 24-month period commencing in September 2011. In 1Q12, it contributed with US\$ 65 million in labor costs versus US\$ 62 million in 4Q11, due to the appreciation of the BRL against the USD. As previously described, 3,246 new employees were hired during the first three months of 2012, raising costs by US\$ 48 million.

In 1Q12, expenses with energy consumption accounted for 12.3% of COGS, amounting to US\$ 701 million, showing a decrease of 7.3% when compared to 4Q11.

Costs of electricity consumption were US\$ 217 million, slightly lower than 4Q11, caused by smaller volumes (US\$ 23 million), exchange rate variation (+US\$ 4 million) and higher energy prices (US\$ 17 million).

The reduction of expenses with fuel and gas was more pronounced, down to US\$ 483 million from US\$ 536 million in 4Q11, mainly reflecting the effect of a contraction in sales volumes of US\$ 52 million.

The cost of purchasing products from third parties amounted to US\$ 398 million 7.0% of COGS against US\$ 563 million in 4Q11.

The purchase of iron ore and pellets amounted to US\$ 228 million, against US\$ 425 million in the previous quarter. The volume of iron ore bought from smaller miners was 1.8 Mt in 1Q12 compared to 2.2 Mt in 4Q11. The acquisition of pellets from Hispanobrás amounted to 703,000 t in 1Q12.

Expenses with the purchase of base metals products came to US\$ 93 million, which was in line with the US\$ 90 million in 4Q11. On the one hand, volumes of nickel and copper ores were lower, but on the other hand their prices were higher. We bought 1,700 t of nickel intermediates, against 1,800 t in 4Q11, and copper ore purchases totaled 7,900 t, down from 8,300 t in 4Q11.

Costs with shared services were down US\$ 21 million to US\$ 76 million in 1Q12, which is explained by the reallocation of some services previously performed by the shared services center to the business units.

Depreciation and amortization 16.0% of COGS amounted to US\$ 913 million, against US\$ 1.057 billion in 4Q11.

Other operational costs reached US\$ 664 million against US\$ 731 million in 4Q11. Demurrage charges rose by US\$ 55 million, but there were lower expenses with royalties (US\$ 105 million), due to the decrease in sales, and leasing fees (US\$ 37 million) related to the Tubarão joint venture-owned pelletizing assets.

Sales, general and administrative expenses (SG&A) totaled US\$ 529 million in 1Q12, US\$ 298 million below 4Q11. Lower SG&A expenses were primarily caused by a decrease in administrative (US\$ 264 million) and sale expenses (US\$ 34 million). The reduction in administrative expenses was determined by lower services (US\$ 129 million), personnel (US\$ 26 million) and advertising expenses (US\$ 20 million).

In 1Q12, research and development (R&D) expenditures(4), which reflects our investment in creating long-term growth opportunities, were US\$ 299 million, compared to US\$ 529 million invested in 4Q11.

Other operational expenses reached US\$ 686 million, against US\$ 1.023 billion in 4Q11, mainly due to the decrease of pre-operating and start-up expenses, which were US\$ 319 million in 1Q12 against US\$ 488 million.

Pre-operating and start-up costs related to VNC, Onça Puma, Simandou and Moatize were US\$ 135 million, US\$ 37 million, US\$ 10 million and US\$ 7 million, respectively. Additionally, there were US\$ 77 million of inventory adjustments at VNC, against US\$ 68 million in 4Q11.

Expenses with non-scheduled maintenance of phosphate rock mines Araxá and Tapira and phosphates plants Cubatão and Catalão led to charges to idle capacity of US\$ 25 million. The stoppage of the phosphate rock mines in the Brazilian state of Minas Gerais was forced by the damages caused by severe rain.

Provision for contingencies was US\$ 58 million, declining by US\$ 114 million against 4Q11.

<sup>(4)</sup> This is an accounting figure. In the Investment section of this press release we disclose the amount of US\$ 296 million for research and development, computed in accordance with the financial disbursement in 1Q12.

#### Table 4 - COGS BREAKDOWN

US\$ million	1Q11	%	4Q11	%	1Q12	%
Outsourced services	909	16.3	1,044	17.3	1,096	19.3
Cargo freight	246	4.4	293	4.9	278	4.9
Maintenance of equipments and facilities	180	3.2	214	3.6	196	3.4
Operational Services	178	3.2	194	3.2	215	3.8
Others	305	5.5	343	5.7	407	7.2
Material	937	16.8	887	14.7	1,014	17.8
Spare parts and maintenance equipment	342	6.1	299	5.0	365	6.4
Inputs	396	7.1	421	7.0	442	7.8
Tires and conveyor belts	39	0.7	49	0.8	60	1.1
Others	160	2.9	118	2.0	147	2.6
Energy	863	15.5	756	12.5	701	12.3
Fuel and gases	557	10.0	536	8.9	483	8.5
Electric energy	306	5.5	220	3.6	217	3.8
Acquisition of products	549	9.8	563	9.3	398	7.0
Iron ore and pellets	336	6.0	425	7.1	228	4.0
Aluminum products	18	0.3				
Nickel products	144	2.6	90	1.5	93	1.6
Other products	51	0.9	48	0.8	77	1.4
Personnel	687	12.3	891	14.8	828	14.6
Depreciation and exhaustion	864	15.5	1,057	17.5	913	16.0
Shared services	90	1.6	97	1.6	76	1.3
Others	677	12.1	731	12.1	664	11.7
Total	5,576	100.0	6,025	100.0	5,690	100.0

### • OPERATING INCOME

Our financial performance in 1Q12 operating income, operating margin, net earnings and cash flow - was deeply influenced by the decrease in iron ore and pellet prices, the above average effect of seasonality and some downward rigidity in the cost structure, triggered by the intense process of project development.

In 1Q12, our operating income, as measured by adjusted EBIT, was US\$ 3.850 billion, declining from US\$ 6.023 billion in 4Q11. Lower operating income was a consequence of the drop in sales volumes, US\$ 2.194 billion, and prices, US\$ 766 million. Those negative effects were partially offset by the reduction in SG&A, US\$ 298 million, R&D expenditures, US\$ 230 million, pre-operating, US\$ 169 million, and contingencies expenses, US\$ 114 million.

The adjusted EBIT margin in 1Q12 narrowed to 34.8% from 41.7% in 4Q11.

## NET EARNINGS

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Net earnings in 1Q12 totaled US\$ 3.827 billion, equal to US\$ 0.74 per share on a fully diluted basis, falling 18.1% from the U\$ 4.672 billion in 4Q11.

Financial revenues reached US\$ 119 million compared to US\$ 139 million in 4Q11 and financial expenses increased to US\$ 613 million against US\$ 547 million.

Non-cash charges determined by the mark-to-market of shareholders debentures rose to US\$ 101 million from US\$ 72 million in 4Q11, contributing to increase financial expenses.

Mark-to-market of derivatives showed a non-cash gain of US\$ 296 million compared to US\$ 46 million in 4Q11. There was a positive cash effect of US\$ 182 million against US\$ 334 million in 4Q11.

Breakdown of the effect of derivatives:

• Currency and interest rate swaps resulted in a positive non-cash effect of US\$ 248 million. There was a positive cash flow of US\$ 132 million.

• Nickel derivatives produced a positive non-cash charge of US\$ 48 million. There was a positive cash flow impact of US\$ 46 million.

• Derivative transactions related to bunker oil did not have any non-cash effect, but generated a positive impact of US\$ 4 million on our cash flow.

Foreign exchange and monetary variations, as a consequence of the appreciation of our functional currency, the BRL, against the USD(5), caused a positive impact on our net earnings of US\$ 428 million in 1Q12, in a US\$ 536 million positive swing from the previous quarter.

Equity income from affiliated companies totaled US\$ 243 million, increasing by US\$ 76 million quarter-on-quarter. The major contributors were the non-consolidated affiliates in the bulk materials business with US\$ 245 million, followed by base metals with US\$ 35 million and logistics with US\$ 30 million.

Individually, the greatest contributors to equity income were Samarco (US\$ 209 million), MRS (US\$ 40 million) and Norsk Hydro (US\$ 28 million).

## CASH GENERATION

Our cash generation in the first quarter of the year is usually the weakest of the year due to seasonality.

Cash generation, as measured by adjusted EBITDA, was US\$ 4.965 billion in 1Q12, being 32.9% lower than the US\$ 7.396 billion for 4Q11. This was primarily due to the reduction in sales volumes and prices. A much smaller portion of the drop in cash flow was related to the cut of US\$ 145 million in dividends received from non-consolidated affiliates.

Over the last 12-month period ended March 31, 2012, adjusted EBITDA was US 31.061 billion. Before R&D expenditures and miscellaneous items - which reduced adjusted EBITDA - the share of bulk materials in cash generation increased to 89.4% in 1Q12 from 88.3% in 4Q11, while base metals fell to 7.7% from 8.8%. The share of fertilizers was 3.1%, and logistics had a negative contribution of 0.1%.

Our priorities for the allocation of cash generation are:

(i) To finance investment in long life low cost world-class assets;

(ii) To keep a strong balance sheet with a low-risk debt portfolio, with low cost, long average maturity, high interest coverage and low leverage;

(iii) To satisfy shareholders aspirations for dividends;

(iv) To return excess cash to shareholders through additional dividends and/or share buybacks.

(5) From the beginning to the end of the 1Q12 period, the Brazilian real appreciated 2.9% against the US dollar.

### Table 5 - QUARTERLY ADJUSTED EBITDA

US\$ million	1Q11	4Q11	1Q12
Net operating revenues	13,213	14,427	11,054
COGS	(5,576)	(6,025)	(5,690)
SG&A	(419)	(827)	(529)
Research and development	(342)	(529)	(299)
Other operational expenses	(420)	(1,023)	(686)
Gain on sale of assets	1,513		
Adjusted EBIT	7,969	6,023	3,850
Depreciation, amortization & exhaustion	957	1,168	1,055
Dividends received	250	205	60
Adjusted EBITDA	9,176	7,396	4,965

### Table 6 - ADJUSTED EBITDA BY BUSINESS AREA

US\$ million	1Q11	4Q11	1Q12
Bulk materials	6,735	7,044	4,845
Ferrous minerals	6,803	7,154	4,774
Coal	(68)	(110)	71
Base metals	1,215	700	416
Fertilizer nutrients	143	203	169
Logistics	38	34	(8)
Gain on sale of assets	1,513		
Others	(468)	(585)	(457)
Total	9,176	7,396	4,965

## INVESTMENTS

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Investments, excluding acquisitions, amounted to US\$ 3.677 billion in 1Q12, increasing 34.0% over the US\$ 2.743 billion spent in 1Q11.

Investments of US\$ 1.969 billion were made in the bulk materials business, US\$ 881 million in base metals, US\$ 327 million in fertilizer nutrients, US\$ 225 million in steel projects, US\$ 96 million in logistics services for general cargo, US\$ 74 million in power generation, and US\$ 106 million on corporate activities and other business segments.

Reflecting the focus on organic growth, 77% of the capex was destined to finance project execution and research and development (R&D). US\$ 2.534 billion was allocated to project execution, US\$ 296 million to R&D, and US\$ 847 million to stay-in-business.

R&D expenditures encompassed US\$ 111 million in mineral exploration, US\$ 161 million in conceptual, pre-feasibility and feasibility studies, and US\$ 24 million to develop new processes, technological innovation and adaptation of technologies.

Investment in projects was up 40.5% against 1Q11, even in the face of challenges such as the performance of civil engineering works by contractors and the abnormally heavy rains in Brazil.

In the next few days, Salobo, our second greenfield copper project in the Carajás mining district, will start to ramp up, with an estimated nominal capacity of 100,000 tpy of copper in concentrates. Salobo is the first major project scheduled to come on stream in the year of 2012.

Simultaneously to the conclusion of Salobo, we are investing in Salobo II, with the same estimated nominal capacity. In addition, we have a portfolio of growth options in an earlier stage of development to expand our exposure to the global copper market.

In 1Q12, we acquired for US\$ 69 million an additional 5% stake on the controlling company of Carborough Downs, a metallurgical coal operation in the Bowen Basin, thus increasing it to 85%.

#### Table 7 - TOTAL INVESTMENT BY CATEGORY

US\$ million	1Q11	%	4Q11	%	1Q12	%
Organic growth	2,159	78.7	4,692	70.2	2,830	77.0
Projects	1,803	65.7	4,112	61.5	2,534	68.9
R&D	356	13.0	579	8.7	296	8.1
Stay-in-business	584	21.3	1,995	29.8	847	23.0
Total	2,743	100.0	6,686	100.0	3,677	100.0

## Table 8 - TOTAL INVESTMENT BY BUSINESS AREA

US\$ million	1Q11	%	4Q11	%	1Q12	%
Bulk materials	1,471	53.6	3,805	56.9	1,969	53.5
Ferrous minerals	1,306	47.6	3,415	51.1	1,772	48.2
Coal	165	6.0	391	5.8	196	5.3
Base metals	649	23.7	1,293	19.3	881	24.0
Fertilizer nutrients	156	5.7	590	8.8	327	8.9
Logistics services	72	2.6	161	2.4	96	2.6
Power generation	209	7.6	315	4.7	74	2.0
Steel	65	2.4	299	4.5	225	6.1
Others	121	4.4	224	3.3	106	2.9
Total	2,743	100.0	6,686	100.0	3,677	100.0

#### • 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	Realized capex US\$ million 2012		ted capex million Total	Status(1)
IRON ORE MINING AND LOGISTICS					
<b>Carajás Additional 40 Mtpy</b> Construction of an iron ore dry processing plant, located in Carajás, Pará, Brazil.	2H13	202	622	2,968	Installation license (LI) issued. Continue executing earthworks services to install the conveyor belt. Civil

Estimated nominal capacity of 40 Mtpy.					engineering work and electromechanical pre-assembly continue in progress.
					53% of physical progress of mine and plant. Investments in logistics previously finalized. Total executed capex of US\$1.7 billion.
<b>CLN 150 Mtpy</b> 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.	1H14	270	890	3,477	Offshore civil engineering works in progress at Ponta da Madeira maritime terminal. Onshore equipment assembly already started, including car dumpers, stackers and reclaimers.
Increase estimated EFC s logistics nominal capacity to approximately 150 Mtpy.					Issuance of one of the required railway installation licenses (LI) expected for 2H12.
					73% of physical progress. Total executed capex of US\$2.5 billion.
<b>Carajás Serra Sul S11D</b> Development of a mine and processing plant, located in the Southern range of Carajás, Pará, Brazil.	2H16	111	794	8,039	Preliminary environmental license (LP) issuance expected for 1H12. Installation license (LI) issuance expected for 1H13.
Estimated nominal capacity of 90 Mtpy.					29% of physical progress. Total realized capex of US\$1.2 billion for the construction of basic infrastructure such as access roads and lodging for workers.

	Estimated	Realized capex US\$ million	Expected c US\$ mill		
Project	start-up	2012	2012	Total	Status(1)
Serra Leste	1H13	2012 24	239	478	Civil engineering work for the plant and excavation in progress.
Construction of new processing plant, located in Carajás, Pará, Brazil					Issuance of installation licenses (LI) expected for the 1H12.
Estimated nominal capacity of 6 Mtpy.					35% of physical progress. Total executed capex of US\$ 167 million.
Conceição Itabiritos	2H13	48	184	1,174	The issuance of the pending installation license (LI) for the power transmission line is expected for 1H12. Electromechanical assembly of the primary crusher initiated.
Construction of concentration plant, located in the Southeastern system, Minas Gerais, Brazil.					Plant commissioning is expected to
Estimated nominal capacity of 12 Mtpy.					begin in 2H12.
					89% of physical progress. Total executed capex of US\$ 601 million.
Vargem Grande Itabiritos	1H14	73	429	1,645	Heavy equipment received and assembly already started. Civil engineering work and earthworks in progress.
Construction of new iron ore treatment plant, located in the Southern system, Minas Gerais, Brazil.					Installation license (LI) issued.
Estimated nominal capacity of 10 Mtpy.					Installation license for the power transmission line and for the electrical sub-station expected for 1H12
					52% of physical progress. Total executed capex of US\$ 501 million.
					executed capex of US\$ 501 million.
Conceição Itabiritos II	2H14	47	297	1,189	Heavy equipments received and assembly in progress. Ongoing civil engineering works for the installation of primary crushers.
Adaptation of the plant to process low-grade itabirites, located in the Southeastern system, Minas Gerais, Brazil.					
					Installation licenses (LI) issued.

Estimated nominal capacity of 19 Mtpy (without additional net capacity).					31% of physical progress. Total executed capex of US\$ 206 million.
Simandou I Zogota	1H12	71	380	1,260	Initial production phase with the mobile crushing equipment expected to start in 2Q12, with estimated capacity of 2 Mtpy.
Development of the Zogota mine and processing plant in Simandou South, Guinea.					
Estimated nominal capacity of 15Mtpy					
Teluk Rubiah	1H14	37	367	1,371	Civil engineering work on the auxiliary jetty almost concluded, while
Construction of a maritime terminal with					the main jetty construction is at initial stage. Earthworks in progress.
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 expected for 1H14.
Stockyard capable of handling up to 30 Mtpy of iron ore products.					
					19% of physical progress. Total executed capex is US\$ 252 million.
PELLET PLANTS					
Tubarão VIII	2H12	54	239	968	Currently executing assembly of equipment and metallic structures.
Eighth pellet plant at our existing complex at the Tubarão Port, Espírito Santo, Brazil.					Issuance of operation license (LO) expected for 2H12.
Estimated nominal capacity of 7.5 Mtpy.					85% of physical progress. Total executed capex of US\$ 666 million.
Samarco IV	1H14			1,693(2	2) Civil engineering work for the construction of the pipeline, pumping stations and metallic structures at Ubu port.
Construction of Samarco s fourth pellet plant, and expansion of mine, pipeline and maritime terminal infrastructure. Vale has a 50% stake in Samarco.					No pending installation licenses (LI).
Estimated nominal capacity of 8.3 Mtpy, increasing Samarco s capacity to 30.5 Mtpy.					30% of physical progress of the pellet plant. Budget fully sourced by Samarco.

Project	Estimated start-up	Realized capex US\$ million 2012	capex Expected capex [S\$ million US\$ million		Status(1)
COAL MINING AND LOGISTICS					
Moatize II	2H14	74	499	2,068	Heavy mine equipment already delivered.
New pit and duplication of the Moatize CHPP, as well as all related infrastructure, located in Tete, Mozambique.					Geological research studies and detailed engineering project in progress.
Nominal capacity of 11 Mtpy (70% coking coal and 30% thermal).					No pending installation licenses (LI).
					13% of physical progress. Total executed capex of US\$ 147 million.
Nacala corridor	2H14	25	691	4,444	Signature of the concession agreement with the government of Malawi for the railway crossing the country.
Railway and port infrastructure connecting Moatize site to the Nacala-à-Velha maritime terminal, located in Nacala, Mozambique. Estimated nominal capacity of 18 Mtpy.					Development of the detailed engineering project in progress. Vegetation clearing licenses obtained for the construction of railway and maritime terminal in Mozambique.
					Project in early stage of development. Total executed capex of US\$ 63 million.
Eagle Downs(2)	1H16	8	87	875	Environmental license and mining lease already obtained. Civil engineering contracts for the box cut construction under revision.
New underground mine development including long wall, CHPP, as well as all related infrastructure, located in the Bowen Basin, central Queensland, Australia. Vale holds 50% of the joint venture which owns Eagle Downs.					Project in early stage of development, with only 3% of physical progress. Total executed capex of US\$ 27 million.
Estimated nominal capacity of 4 Mtpy (100%					

coking coal)

## **COPPER MINING**

COPPER MINING					
Salobo	1H12	101	296	2,337	Start-up of the initial line expected in the next few days.
Development of mine, plant, and related infrastructure, located in Marabá, Pará, Brazil.					98% of physical progress. Total executed capex of US\$ 2.1 billion.
Estimated nominal capacity of 100,000 tpy of copper in concentrate.					
Salobo II	2H13	115	581	1,427	Electromechanical assembly in progress.
Salobo expansion, raising of the tailing dam height and increase in mine capacity, located in Marabá, Pará, Brazil					Plant operation license (LO) issuance expected for 2H13.
Additional estimated nominal capacity of 100,000 tpy of copper in concentrate.					54% of physical progress. Total executed capex of US\$ 469 million.
Konkola North(2) Development of underground mine, plant and related infrastructure, located in the Zambian Copperbelt. Vale holds 50% of the joint	2H12	1	12	235	The assembly of the vertical shafts sinking equipment is expected to be concluded in 2Q12. The development of the underground mine is on schedule.
venture that controls the project.					Concentrator plant hot commissioning expected to begin in 2H12.
Estimated nominal capacity of 45,000 tpy of copper in concentrate.					Environmental license expected for 1H12.
					58% of physical progress. Total executed capex of US\$ 57 million.
NICKEL MINING AND REFINING					
Long Harbour Hydrometallurgical facility. Located in Long	2H13	259	1,208	3,600	Finalizing civil engineering. Electromechanical assembly in progress.
Harbour, Newfoundland and Labrador, Canada.					62% of physical progress. Total executed capex of US\$ 2.0 billion.
Estimated nominal capacity for refining 50,000 tpy of finished nickel, and associated					

	Estimated	Realized capex US\$ million	Expected capex US\$ million		
Project Totten	start-up 2H13	<b>2012</b> 30	<b>2012</b> 157	<b>Total</b> 759	<b>Status(1)</b> 59% of physical progress. Total executed capex of US\$ 432 million.
Nickel mine (re-opening) in Sudbury, Ontario, Canada. Estimated nominal capacity of 8,200 tpy					
POTASH MINING AND LOGISTICS					
Rio Colorado	2H14	243	1,081	5,915	The hiring process for the offshore civil work in the port was finalized.
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.					Environmental licenses for the construction of the new railway and agreements with four Argentinean provinces have been obtained. Issuance of installation license (LI) expected for 1H12.
Estimated nominal capacity of 4.3 Mtpy of potash (KCl).					30% of physical progress. Total executed capex of US\$ 1.1 billion.
ENERGY					
Biodiesel	2015	36	227	633	Planting palm trees. Biodiesel plant FEL III expected for July 2013.
Project to produce biodiesel from palm oil. Plantation of 80,000 ha of palm trees. Located in Pará, Brazil.					Preliminary environmental license (LP) and construction and installation license (LI) issuance expected for 2H13.
Estimated nominal capacity of 360,000 tpy of biodiesel.					Total executed capex of US\$ 379 million.
STEELMAKING					
CSP(2)	1H15	207	563	2,648	The project implementation started in December 2011.
Development of a steel slab plant in partnership with Dongkuk and Posco, located in Ceará, Brazil. Vale holds 50% of the joint venture.					Preliminary environmental license (LP) and installation license (LI) obtained.

Estimated nominal capacity of 3.0 Mtpy.

(1) as of March 2011

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

#### • DEBT INDICATORS

Total debt was US\$ 24.939 billion as of March 31, 2012, increasing by US\$ 1.796 billion when compared to the position on December 31, 2011, of US\$ 23.143 billion. Most of the increase was due to the US\$ 1 billion of notes issued in January 2012 and US\$ 500 million in trade finance instrument.

As of March 31, 2012, cash holdings reached US\$ 4.922 billion and net debt(c) was US\$ 20.017 billion.

The average debt maturity decreased to 9.4 years and the average cost was lowered to 4.69% per annum, against 9.8 years and 4.77% per annum respectively, on December 31, 2011.

Debt leverage, as measured by total debt/LTM adjusted EBITDA(d) ratio, increased to 0.80x on March 31, 2012 from 0.66x on December 31, 2011 and 0.73x on March 31, 2011. The total debt/enterprise value(e) was 17.3% on March 31, 2012, in line with the 17.4% on December 31, 2011.

Interest coverage, measured by the LTM adjusted EBITDA/LTM interest payment ratio(f), was 27.5x, compared to 30.9x on December 31, 2011 and 27.2x on March 31, 2011.

Considering hedge positions, the total debt on March 31, 2012 was composed of 23% of floating interest rates and 77% of fixed interest rates linked debt, while 97% was denominated in US dollars and the remainder in other currencies.

On March 28, 2012, we priced US\$ 1.250 billion of notes bearing a coupon of 4.375% per year, payable semi-annually. These notes will mature in January 2022 and were priced with a spread of 200 basis points over U.S. Treasuries, resulting in a yield to maturity of 4.205% per year. The financial settlement occurred at the beginning of April, consequently this issuance was not included in the total debt of March 31, 2012. The notes will be consolidated, and form a single series with the US\$ 1 billion of 4.375% per year notes we issued in January 2012.

#### **Table 9 - DEBT INDICATORS**

US\$ million	1Q11	4Q11	1Q12
Total debt	23,747	23,143	24,939
Net debt	11,936	19,612	20,017
Total debt / adjusted LTM EBITDA (x)	0.7	0.7	0.8
Adjusted LTM EBITDA / LTM interest expenses (x)	27.2	30.9	27.5
Total debt / EV (%)	13.0	17.4	17.3

#### • PERFORMANCE OF THE BUSINESS SEGMENTS

• Bulk materials

#### • Ferrous minerals

The operations in the first quarter were impacted by extremely heavy rains in Brazil. Rainfall at Carajás was even heavier than last summer and precipitation levels were 57% higher than in 1Q11, reaching a peak in January. Heavy rainfall in the Brazilian states of Minas Gerais, Rio de Janeiro and Espírito Santo caused negative effects on the Southeastern and Southern Systems as it led to stoppages on mining and railroad operations, determining the declaration of force majeure. Lastly, the accident with a metallic structure of a bridge at the Carajás railway also affected shipments.

Sales of iron ore and pellets were 65.193 Mt, slightly below 1Q11 basically due to the accumulation of iron ore inventories.

Two factors are responsible for the current higher level of inventories than in the past: (i) the operation of two pellet plants in the Middle East supplied with feed from Brazil involves a longer production cycle and as a consequence transitory stocks; (ii) the enlargement of our global distribution network with a fleet of bulk carriers, a floating transshipment station in the Philippines and the distribution center in Oman requires also the holding of stocks.

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The accumulation of inventories means iron ore volumes in the process of being delivered to clients. The demand for our products continues strong and iron ore and pellet shipments in March surged to 31.7 Mt.

Shipments of iron ore and pellets were 19.3% lower than 4Q11 mainly due to the severe weather conditions in Brazil that affected our operations. Shipments of iron ore were 54.793 Mt, 21.6% less than 4Q11, while pellets amounted to 10.400 Mt, 4.2% below 4Q11 and 0.9% above 1Q11.

Revenues from iron ore and pellet sales reached US\$ 7.675 billion in 1Q12, decreasing 26.6% quarter-on-quarter as a consequence of the drop in volumes and prices. Revenues from iron ore and pellets were US\$ 5.987 billion and US\$ 1.688 billion, respectively.

Although spot prices were slightly higher than in 4Q11, other factors led to a fall in sales prices. Compared to last quarter, the average sale price of iron ore was US\$ 109.26 per metric ton, 10.0% lower, and the average pellet price was US\$ 162.29, 11.0% lower.

First, the average price premium for each 1% Fe declined 8.9% against 4Q11. Second, bunker oil prices increased by 8.0% in 1Q12 influenced by the rise in oil prices. Bunker oil prices affect reference maritime freight costs which are deducted from the iron ore cost and freight (CFR) price in order to convert it to a FOB basis. Third, given higher prices and premia until September 2011, sales priced under the one-month lagged quarterly price system, around 20% of our sales, suffered a more significant decline on a quarter over quarter basis.

The participation of China in the sales of iron ore and pellets reached 47.2% in 1Q12, in line with 4Q11 and higher than the 41.4% in 1Q11. The impact of the recession in Europe persisted, causing the share of our shipments to the region to continue to trend downward, with 16.2% in 1Q12 against 19.9% in 1Q11. Sales share to Brazilian steelmakers and pig iron producers increased to 14.8% from 11.0% in 4Q11. Japan s participation decreased slightly to 11.1% from 11.2% in the previous quarter.

As noted, reported revenues for iron ore and pellets are net of the costs of maritime freight, meaning that prices of CFR sales are comparable to average FOB prices. In 1Q12, Vale sold 20.9 Mt of iron ore and pellets on a CFR basis, against 33.3 Mt in 4Q11. CFR shipments continue to be made mainly to China.

In 1Q12, revenues of manganese ore reached US\$ 42 million, 31.3% higher than the previous quarter, due to the 78.5% increase in shipments, reaching 316,000 t after the sale of inventories, which were partially offset by the decrease of 26.5% in the average realized prices, US\$ 132.91 per metric ton. Sales volumes of ferroalloys totaled 103,000 t, 32.1% higher than 4Q11, and revenues were US\$ 124 million, 7.8% higher on a quarter-on-quarter basis, with an average realized price of US\$ 1,203.88 per metric ton.

Sales of ferrous minerals products - iron ore, pellets, manganese and ferroalloys - produced total revenues of US\$ 7.851 billion in 1Q12, diminishing 26.1% in relation to the previous quarter.

The adjusted EBIT margin for the ferrous minerals business was 54.7% in 1Q12, compared with 60.5% in 4Q11.

Adjusted EBITDA for the ferrous minerals operations totaled US\$ 4.774 billion in 1Q12, with a decrease of 33.3% vis-à-vis 4Q11. The fall of US\$ 2.380 billion was mainly due to the impact of lower sales volumes, of US\$ 1.663 billion, dividends received from non-consolidated affiliated companies, US\$ 199 million, and realized prices, US\$ 803 million. On the other hand, SG&A expenses were reduced by US\$ 366 million.

### Table 10 - FERROUS MINERALS BUSINESS PERFORMANCE

# VOLUME SOLD BY DESTINATION IRON ORE AND PELLETS

000 metric tons	1Q11	%	4Q11	%	1Q12	%
Americas	11,820	17.4	10,646	13.2	10,987	16.9
Brazil	10,267	15.1	8,856	11.0	9,666	14.8
Steel mills and pig iron producers	9,074	13.3	7,947	9.8	8,553	13.1
JVs pellets	1,193	1.8	909	1.1	1,113	1.7
USA			268	0.3	213	0.3
Others	1,553	2.3	1,522	1.9	1,108	1.7
Asia	40,340	59.3	54,077	67.0	41,895	64.3
China	28,165	41.4	38,023	47.1	30,800	47.2
Japan	7,048	10.4	9,011	11.2	7,208	11.1
South Korea	2,598	3.8	5,044	6.2	3,349	5.1
Others	2,528	3.7	1,999	2.5	538	0.8
Europe	13,570	19.9	12,949	16.0	10,546	16.2
Germany	5,846	8.6	5,017	6.2	4,050	6.2
United Kingdom	800	1.2	1,091	1.4	605	0.9
France	895	1.3	1,385	1.7	776	1.2
Italy	2,827	4.2	2,715	3.4	2,135	3.3
Turkey	833	1.2	509	0.6	515	0.8
Spain	754	1.1	419	0.5	905	1.4
Netherlands	917	1.3	847	1.0	749	1.1
Others	698	1.0	967	1.2	811	1.2
Middle East	1,196	1.8	1,925	2.4	1,415	2.2
Rest of the World	1,126	1.7	1,149	1.4	350	0.5
Total	68,052	100.0	80,746	100.0	65,193	100.0

# **OPERATING REVENUE BY PRODUCT**

US\$ million	1Q11	4Q11	1Q12
Iron ore	7,287	8,483	5,987
Pellet plant operation services	9	10	10
Pellets	1,869	1,980	1,688
Manganese ore	43	32	42
Ferroalloys	153	115	124
Others	4		
Total	9,365	10,620	7,851

# AVERAGE SALE PRICE

US\$/ metric ton	1Q11	4Q11	1Q12
Iron ore	126.19	121.38	109.26
Pellets	181.33	182.39	162.29
Manganese ore	197.25	180.79	132.91
Ferroalloys	1,457.14	1,474.36	1,203.88

# VOLUME SOLD

000 metric tons	1Q11	4Q11	1Q12
Iron ore	57,745	69,890	54,793
Pellets	10,307	10,856	10,400
Manganese ore	218	177	316
Ferroalloys	105	78	103
-			

• Coal

In 1Q12, coal revenues reached US\$ 389 million, an all-time high figure, increasing 7.0% relative to the US\$ 363 million in 4Q11 and 152.6% compared to the US\$ 154 million in 1Q11. The improved performance is mainly due to increased sales from our mine in Moatize, Mozambique, which is ramping up.

Our coal assets in Australia and Colombia continued to face the effects of the rainy season in the Southern Hemisphere and geological issues. Integra Coal, in New South Wales, Australia, was impacted by above average rainfall, while geological issues affected Carborough Downs in Queensland, Australia, and El Hatillo, in Colombia.

Total coal shipments reached a record 2.769 Mt in 1Q12, 5.5% higher than 2.625 Mt in 4Q11, and 112.2% above the 1.305 Mt in 1Q11, due to the record high sales of metallurgical coal. Coal shipments were comprised of 1.199 Mt of metallurgical coal vs. 829,000 t in 4Q11 and 1.570 Mt of thermal coal vs. 1.796 Mt in 4Q11.

Revenues from shipments of metallurgical coal were US\$ 251 million, increasing 38.1% on a quarterly basis. Revenues from sales of thermal coal fell to US\$ 137 million against US\$ 181 million in 4Q11.

The average sale prices in 1Q12 were US\$ 209.53 per metric ton for metallurgical coal and US\$ 87.58 for thermal coal, which were 4.9% and 13.0% below the previous quarter, respectively.

Adjusted EBITDA for the coal business was US\$ 71 million, US\$ 181 million higher than 4Q11, mainly due to lower SG&A expenses (US\$ 140 million) an effect of the US\$ 114 million of contingencies recognized on our Australian coal operations in 4Q11, higher dividends received from non-consolidated affiliated companies (US\$ 60 million), lower COGS (US\$ 11 million) and higher volumes sold (US\$ 11 million), which were partially offset by lower prices (US\$ 33 million) and an unfavorable exchange rate effect (US\$ 8 million).

#### **Table 11 - COAL BUSINESS PERFORMANCE**

#### **OPERATING REVENUE BY PRODUCT**

US\$ million	1Q11	4Q11	1Q12
Thermal coal	67	181	137
Metallurgical coal	87	182	251
Total	154	363	389

### AVERAGE SALE PRICE

US\$/ metric ton	1Q11	4Q11	1Q12
Thermal coal	80.62	100.71	87.58
Metallurgical coal	183.70	220.27	209.53

# VOLUME SOLD

000 metric tons	1Q11	4Q11	1Q12
Thermal coal	829	1,796	1,570
Metallurgical coal	476	829	1,199

# Table 12 - BULK MATERIALS: SELECTED FINANCIAL INDICATORS

US\$ million	1Q11	4Q11	1Q12
Adjusted EBIT margin (%)			
Bulk materials	63.6	56.4	51.3
Ferrous minerals	66.0	60.5	54.7
Coal	(80.5)	(61.4)	(17.2)
Adjusted EBITDA			
Bulk materials	6,735	7,044	4,845
Ferrous minerals	6,803	7,154	4,774
Coal	(68)	(110)	71

#### Base metals

Revenues from the sale of base metals and by-products in 1Q12 totaled US\$ 1.775 billion, 24.9% lower than 4Q11. The decline over the previous quarter was due to the impact of lower sales volumes of US\$ 681 million, partly offset by the recovery in sales prices of US\$ 93 million.

Nickel sales revenues amounted to US\$ 1.103 billion in 1Q12, 12.8% lower than US\$ 1.265 billion in 4Q11. The decrease in nickel shipments was the reason for the decline in revenues, with an impact of US\$ 238 million, which was mitigated by the effect of higher sales prices of US\$ 76 million.

In 1Q12, the nickel and copper sales volumes were lower than their production volumes in the quarter. The main reasons for this difference were: (i) the rebuilding of finished nickel inventories back to normal levels from the low levels reached in 4Q11; (ii) the increase in inventories involved in the ramp-up of our operations at Onça Puma; and (iii) due to the severe winter in Northern Labrador, Voisey s Bay shipments of copper concentrate take place entirely in the second half of each year.

Nickel shipments dropped to 56,000 t from 69,000 t in 4Q11. When comparing with 1Q11, to minimize the seasonality effects, there was only a slight decrease of 2,000 t. The average nickel price in 1Q12 increased to US\$ 19,696 per metric ton, 7.4% higher than the previous quarter s price of US\$ 18,333. It was the first quarter that the average realized nickel prices showed an increase since the downward trend that began in May 2011.

The test of the integrated operations of VNC was successful, proving that we can produce nickel oxide (NiO) on a sustainable basis. Now a general overhaul of the refinery is taking place and the upstream the high pressure acid leaching circuit is operating to produce the intermediate product, nickel hydroxide cake (NHC). The refinery will come back to operation in June and after the installation of all new solvent extraction columns, likely by October, we will be ready to move towards reaching maximum capacity in 2013. For 2012, we plan to produce 22,000 t of nickel contained in NHC and NiO.

Copper revenues totaled US\$ 467 million in 1Q12, 46.5% lower than the US\$ 874 million in the previous quarter. The decrease in revenues was due to the negative impact of lower shipments, US\$ 427 million, partly offset by higher sales prices, US\$ 20 million.

Copper shipments in 1Q12 were 58,000 t, 49.2% lower than 4Q11 but 7.8% higher than in 1Q11. The average realized copper price increased in 1Q12, reaching US\$ 8,117 per metric ton versus US\$ 7,712 in 4Q11.

In 1Q12, PGMs produced revenues of US\$ 105 million, 20.2% higher than 4Q11. The platinum sales price increased to US\$ 1,741 per troy ounce from US\$ 1,490 in the previous quarter, but their positive impact on revenues were partly mitigated by the impact of lower sales volumes.

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The adjusted EBIT margin of the base metals was -3.0% in 1Q12 versus 3.1% in 4Q11. However the operating income margin would have been 14.0% in 1Q12, after excluding some one-off effects: (a) the expenditures of US\$ 54 million due to the temporary downtime to address safety issues in our Sudbury mining operations, in Canada; (b) the start-up costs at Onça Puma of US\$ 37 million; and (c) the start-up costs and inventory adjustments at VNC of US\$ 135 million and US\$ 77 million, respectively.

Adjusted EBITDA was US\$ 416 million in 1Q12, 40.6% lower than the previous quarter. The decrease of US\$ 284 million was mainly due to lower sales volumes (US\$ 431 million) and higher COGS (US\$ 113 million), which were partly offset by lower SG&A expenses (US\$ 179 million) and higher sales prices (US\$ 98 million).

### Table 13 - BASE METALS BUSINESS PERFORMANCE

# **OPERATING REVENUE BY PRODUCT**

US\$ million	1Q11	4Q11	1Q12
Nickel	1,557	1,265	1,103
Copper	536	874	467
PGMs	165	87	105
Precious metals	88	114	83
Cobalt	19	23	17
Aluminum	141		
Alumina	236		
Bauxite	6		
Total	2,749	2,363	1,775

### AVERAGE SALE PRICE

US\$/ metric ton	1Q11	4Q11	1Q12
Nickel	26,851.19	18,333.33	19,696.43
Copper	10,043.78	7,711.71	8,117.28
Platinum (US\$/oz)	1,814.02	1,489.93	1,741.17
Cobalt (US\$/lb)	15.38	12.96	13.36

# VOLUME SOLD

000 metric tons	1Q11	4Q11	1Q12
Nickel	58	69	56
Copper	53	113	58
Precious metals (oz)	617	776	567
PGMs (oz)	131	110	97
Cobalt (metric ton)	554	805	577
Aluminum	57		
Alumina	755		
Bauxite	188		

#### SELECTED FINANCIAL INDICATORS

US\$ million	1Q11	4Q11	1Q12
Adjusted EBIT margin (%)	28.7(1)	3.1	(3.0)
Adjusted EBITDA	1,215(1)	700	416

<sup>(1)</sup> Excluding the non-recurring gain from the transfer of aluminum assets in 1Q11.

#### Fertilizer nutrients

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In 1Q12, sales revenues of fertilizer nutrients were US\$ 829 million, decreasing 3.1% from US\$ 856 million in 4Q11, but representing an increase of 5.3% in comparison to the 1Q11 figure of US\$ 787 million.

Given that most of our sales are destined for the Brazilian market, which is one of the world s largest consumers of fertilizers, we are exposed to the seasonally low demand in the first half of the year.

In 1Q12, potash sales reached US\$ 70 million, 9.1% less than 4Q11. The reason for the reduction in revenues was the lower sales volume, which declined to 128,000 t in 1Q12 from 144,000 t in 4Q11. The drop in volumes sold was mainly due to the lower average grade of the feed received by the plant. The average sales price increased to US\$ 546.88 per metric ton from US\$ 534.72 in 4Q11, contributing to partially offset the impact of the decrease in volume.

Revenues from sales of phosphates products were US\$ 548 million in 1Q12, 2.7% below the US\$ 563 million in 4Q11, which is explained by the lower sales volume. Total shipments of MAP were 280,000 t, TSP 88,000 t, SSP 499,000 t, and DCP 108,000 t. Sales of phosphate rock were 816,000 t, 8.2% higher than the 754,000 t in 4Q11 reflecting Bayóvar s production ramp-up.

Sales of nitrogen fertilizers were US\$ 192 million, slightly lower than the US\$ 199 million in 4Q11. The reason for the decrease in revenues was lower prices, 17.1% below the previous quarter. Sales of other related products amounted to US\$ 19 million in 1Q12.

The adjusted EBIT margin of the fertilizer nutrients business decreased to 5.8% in 1Q12, from 10.2% in the previous quarter.

Adjusted EBITDA for the fertilizers business totaled US\$ 169 million in 1Q12, 16.7% lower than 4Q11. The decrease of US\$ 34 million from last quarter was mainly caused by lower prices, higher COGS, exchange rate variation and lower quantities shipped, which had a negative impact of US\$ 32 million, US\$ 16 million, US\$ 9 million and US\$ 8 million, respectively, partially compensated by lower SG&A expenses of US\$ 31 million.

#### Table 14 - FERTILIZER NUTRIENTS BUSINESS PERFORMANCE

### **OPERATING REVENUE BY PRODUCT**

US\$ million	1Q11	4Q11	1Q12
Potash	62	77	70
Phosphates	536	563	548
Nitrogen	172	199	192
Others	17	17	19
Total	787	856	829

#### AVERAGE SALE PRICE

US\$/ metric ton	1Q11	4Q11	1Q12
Potash	462.69	534.72	546.88
Phosphates			
MAP	644.27	664.45	693.67
TSP	559.04	531.61	567.80
SSP	266.35	275.74	248.86
DCP	644.58	638.51	706.88
Phosphate rock	100.64	119.45	114.76
Nitrogen	577.18	654.25	542.37

### **VOLUME SOLD**