# RIDING OUT THE TRANSITION SMOOTHLY 

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## Performance of Vale in 2Q09

Rio de Janeiro, July 29, 2009 - Vale S.A. (Vale) announces its 2Q09 results, which reflect the transition to a new phase in which the reaction to the global financial crisis is starting to bear fruit, leading to a gradual lessening in risk aversion, declining costs and to the beginning of a recovery in demand and prices of minerals and metals.

In this dynamic environment, the weakening of the US dollar - one the consequences of the increase in risk tolerance - neutralized in this quarter the effect of our initiatives to cut costs. However, we remain relentless in our campaign to promote a permanent downward shift in our cost structure. In spite of the good performance of iron ore shipments to China, a new quarterly record, it was too soon for the recovery in other regions of the world to be felt in our sales. In addition, the 2Q09 results were hurt by the lagged effect of iron ore negotiated prices. On the other hand, the performance of our non-ferrous minerals businesses is already starting to capture some of the benefits of the ongoing recovery of market fundamentals.

We are working to emerge from the current global downturn stronger than before. Given our endowment of world-class, low-cost assets and financial strength we expect to show an improving operational and financial performance in the near future and to continue to create shareholder value across the cycles.

The main highlights of Vale's performance in 2Q09 were:

- Operating revenue of US\$ 5.1 billion, $6.2 \%$ less than the US\$ 5.4 billion in 1Q09.
- Shipments of iron ore and pellets increased by $3.3 \%$ on a quarter-on-quarter basis.
- Shipments of nickel increased by $16.8 \%$ on a quarter-on-quarter basis.
- Operational profit, as measured by adjusted EBIT ${ }^{(a)}$ (earnings before interest and taxes), of US\$ 976 million, $42.1 \%$ below 1Q09.
- Operational margin, as measured by adjusted EBIT margin, of 19.7\%, against 31.6\% in 1Q09.
- Cash generation, as measured by adjusted EBITDA ${ }^{(b)}$ (earnings before interest, taxes, depreciation and amortization), decreased to US\$ 1.7 billion in 2Q09 from US\$ 2.3 billion in 1Q09.
- Net earnings of US\$ 790 million, equal to US\$ 0.15 per share on a fully diluted basis, against US\$ 1.363 billion in 1Q09.
- Investment - excluding acquisitions - of US\$ 2.1 billion, against US\$ 1.7 billion in the previous quarter.

[^0]
## US GAAP

## Table 1 - SELECTED FINANCIAL INDICATORS

| in US\$ million | $2 Q 08$ <br> $(\mathbf{A})$ | 1Q09 <br> $(\mathbf{B})$ | 2Q09 <br> $(\mathbf{C})$ | \% <br> $(\mathbf{C} / \mathbf{A})$ | \% <br> $(\mathbf{C} / \mathbf{B})$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Operating revenues | 10,897 | 5,421 | 5,084 | -53.3 | -6.2 |
| Adjusted EBIT | 5,235 | 1,685 | 976 | -81.4 | -42.1 |
| Adjusted EBIT margin (\%) | 49.4 | 31.6 | 19.7 |  |  |
| Adjusted EBITDA | 6,218 | 2,281 | 1,725 | -72.3 | -24.4 |
| Net earnings | 5,009 | 1,363 | 790 | -84.2 | -42.0 |
| Earnings per share (US\$) | 1.04 | 0.26 | 0.15 | -85.4 | -42.0 |
| Earnings per share fully diluted basis(US\$) | 1.02 | 0.26 | 0.15 | -85.4 | -42.0 |
| ROE (\%) ${ }^{1}$ | 30.1 | 27.4 | 15.9 |  |  |
| Total debt/ LTM adjusted EBITDA (x) | 1.2 | 1.0 | 1.5 |  |  |
| Capex (excluding acquisitions) | 2,312 | 1,714 | 2,080 | -10.0 | 21.4 |

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## ४ BUSINESS OUTLOOK

After three quarters of steep decline, the global economy is very likely to have bottomed out. Business surveys, coincident and leading indicators of economic activity are suggesting that a recovery from a very low base is already underway.

Global manufacturing PMI for June rose for the sixth month in a row, gaining 13.2 points since December 2008. Simultaneously, the new order to inventory ratio, which usually leads manufacturing output growth by three months, has climbed to its highest level since April 2004.

Global industrial production posted its first gain at the margin after several quarters of deep and unprecedented fall. The pace of contraction in developed economies is softening while in emerging markets industrial production is expanding. In particular, industrial production in emerging Asia surged to a very high pace of growth after the decrease at double-digit rates in 4Q08 and 1Q09. Brazil's industrial production is resuming growth and in some large developed economies, Japan, Germany and France, manufacturing activity has also shown a recovery at the margin.

These developments have far reaching implications. Industrial production is the most volatile and cyclical component of GDP, acting also as a leading indicator of its performance, thus playing a critical role in the global business cycle. Furthermore, it is a key macroeconomic variable for demand for minerals and metals, as these products are essentially industrial raw materials. And emerging market economies are more intensive users of minerals and metals, with a much higher consumption to GDP ratio than developed economies.

Consequently, these movements underlie a broad based rebound in demand and prices for minerals and metals. For instance, in response to the demand improvement, world crude steel production increased by $4.7 \%$ in 2Q09, on a seasonally adjusted quarter-on-quarter basis, after falling by $3.1 \%$ in $3 Q 08,18.8 \%$ in 4Q08 and $2.7 \%$ in 1Q09. Moreover, June statistics are showing production increases in Brazil, the US and the European Union, regions where the carbon steel industry was running at the lowest rates of utilization in the world.

By the same token, global stainless steel output is recovering after two consecutive years of decline: it increased $23.1 \%$ in 2Q09, on a seasonally adjusted quarter-onquarter basis, after dropping by $6.2 \%$ in $3 \mathrm{Q} 08,27.7 \%$ in 4 Q 08 and $2.1 \%$ in 1 Q 09 .

Spot iron ore prices have risen strongly over the last three months. The LMEX, an index for base metal prices, fell by $64.6 \%$ to a low-cyclical point at December 24, 2008 from its peak in early May 2007. Since then it has increased by $55.1 \%$, although reaching a level which is still only $55 \%$ of the previous peak.

Companies responded to the downshift of demand by curtailing production to a level below final sales, which led to inventory consumption. The combination of falling inventories and stable final sales, helped by the massive monetary and fiscal policy stimuli, is forcing firms to react, thus increasing manufacturing output and the consumption of minerals and metals. Therefore, we expect to see global industrial production increase over the next couple of quarters with growth spreading to developed economies as well, shaping a globally synchronized upturn.

On the other hand, we believe that there are still significant downside risks to the recovery scenario.

Business investment is expected to remain weak, as a consequence of excess capacity and lower profitability. Thus, the expansion of final sales will rely mostly
able to stabilize sales and measures of consumer sentiment have moved up from the historical lows, even though the sustainability of this process faces risks.

Another source of downward risk is the tightened credit supply. However, the rise in global sales of autos and other consumer durables, which are highly sensitive to credit, suggests that credit availability is improving alongside the across-the-board improvement of capital market conditions, as suggested by the rise in bond issues and equity offerings, IPOs and equity follow-on transactions.

Finally, the financing of a ballooning public debt in developed economies will tend to crowd out private expenditures through the negative impact of higher real interest rates on consumption, investment and net exports, partially offsetting the expansionary effect of fiscal policy stimulus on aggregate spending.

The Chinese economy, driven by credit expansion and infrastructure investment growth, boomed in 2Q09, expanding at the margin, on a seasonally adjusted basis, well above its long-term trend rate. Domestic demand is growing in a robust fashion, minimizing the negative influence of still declining exports.

Recent Chinese economic dataflow unveils a 12\% year-on-year increase in June in the start of new construction. This naturally follows the rebound in property sales which has been taking place since March. The bounce back in construction activity gives an important support to a sustained recovery of domestic demand while at the same time has positive implications for the evolution of iron ore demand, since property is responsible for almost $40 \%$ of Chinese steel consumption.

Chinese iron ore imports grew 29\% year-on-year in 1H09 to 297.2 million metric tons. As a consequence of the stronger fundamentals of the property sector, the substitution of local high-cost domestic production tends to become gradually replaced by increasing consumption as the main driver for the demand for imported iron ore: China's crude steel output accelerated to an annualized rate of 600 million metric tons in June, increasing by $5.4 \%$ in 2Q09 relative to 1Q09, on a seasonally adjusted basis.

Vale has been successful in its efforts to exploit the strong recovery in Chinese iron ore imports: in 1H09 our shipments increased $42.1 \%$ on a year-on-year basis. The implementation of a new marketing policy, involving among other things a more flexible stance towards iron ore pricing, sales on a C\&F basis and the enlargement of our client base, was very useful to this attainment.

A prominent feature of our stronger competitiveness in China has been the development of a low-cost portfolio of maritime freight primarily supported by our own large capesize vessels and medium and long-term contracts of affreightment with shipping companies. We are employing recently acquired large second-hand ships and in the near future will be able to use the 400,000 dwt very large ore carriers ordered from shipyards.

Simultaneously, the consolidation of a new price structure is underway, in which the recognition of the superior quality of our products is being evidenced through price premia over ores from other sources.

As mentioned earlier, due to the conclusion of the destocking process, steel output in other regions of the world, such as Brazil, the European Union and Japan, and, consequently, iron ore demand, are generating the first signs of recovery. Given that our iron ore production has been running at a relatively high level of idle capacity - production in 2Q09 was at an annualized pace of 230 million metric tons - we are prepared to exploit the upside of the iron ore market; this is quite a different position from our main competitors, who are working at almost full

Vale has settled benchmark prices for 2009 with its main clients in Europe, Japan and South Korea. Prices of fines have decreased $28.2 \%$, lumps $44.5 \%$, and blast furnace and direct reduction pellets both dropped $48.3 \%$. Due to its higher cyclicality and volatility, in the downturn the demand for pellets tends to be negatively affected earlier and more strongly than the demand for iron ore fines. On the other hand, in the upturn its initial reaction is slower but it tends to grow faster than the demand for iron ore.

Given the recent increase in the activities of the global steel industry, the narrowing of the price premium of pellets over iron ore fines is stimulating the beginning of a recovery in pellet sales from the unprecedented low levels of 1H09. In July we resumed operations of one plant at Tubarão while we are taking steps to re-start another Tubarão plant. During 2Q09 we had only five pellet plants in operation out of a total of ten.

While the Atlantic market is still oversupplied, the Pacific market for both metallurgical and thermal coal is showing some tightness, reflecting the better economic performance of Asian economies.

Chinese surging demand for coal imports is pressuring prices in the Pacific market. Thermal coal imports reached 33.5 million metric tons in 1H09, almost twice the volumes imported last year, and metallurgical coal imports were 14.7 million metric tons, up $400 \%$ on a year-on-year basis. Therefore, China is becoming the world largest importer of coal.

The strength of Chinese demand is straining against the structural problems in Australian logistics infrastructure, which has resulted in spot prices in the Pacific market climbing to levels above current benchmark prices.

There has been a recovery in global nickel demand from its depressed levels of 2 H 08 and 1Q09. As commented, stainless steel output is in an initial stage of recovery. Its expansion has been led chiefly by China - where mills are operating at high levels of capacity utilization - and Taiwan.

Moreover, the stainless steel industry outside China has started to increase production, adding pressure to nickel demand.

The scrap market has tightened further, with prices rising relative to the LME nickel prices. Due to the low relative prices of the 300 series stainless steel - the highest grade of nickel-intensive steel - its output is increasing strongly. The combination of these two developments means that more nickel has been consumed per ton of stainless steel produced.

Among the non-stainless steel applications of nickel, we have seen improvements in various plating and power markets especially those linked to batteries, electronics and more recently automotives. Sales of hybrid electrical vehicles (HEV) have been booming and Vale is the leading supplier of nickel for their batteries. This is still a very small market for nickel but it has great potential to grow over time as electric cars seem likely to become the dominant product of the auto industry in the future. Of course, there are many uncertainties related to which type of car will prevail, whether HEVs, plug-in HEVs, battery electric vehicles (BEVs) or any other. The same applies to which type of battery will equip them, whether NiMH, Li-ion or any other type. ${ }^{2}$

The significant upward volatility in nickel prices since March has stimulated Chinese nickel pig iron ore producers to resume production as well as some high-

[^1]cost ferronickel producers in other countries. However, the supply expansion has not been sufficient to change the demand-driven price trend.

Our unionized maintenance and production employees at the operations in Sudbury and Port Colborne, in Canada, went on strike on July 12, after rejecting Vale's settlement offer for a new three-year collective bargaining agreement. As previously disclosed, the Sudbury and Port Colborne operations began an eightweek shutdown on June 1, 2009, and prior to the strike they were scheduled to resume operations on July 27, 2009.

Our offer aims to provide the right incentives to labor productivity growth, contributing at the same time to lower costs on a permanent basis.

Copper prices are hovering around US\$ 5,000 per metric ton as Chinese imports continue to set new records. In addition to strategic reserve buying, Chinese demand has been mostly driven by the increased power-sector demand responsible for almost half of copper consumption in China - as a result of the rising fixed asset investment for electricity/heating production and supply infrastructure.

The recent decrease in treatment and refining charges (TC/RC) ${ }^{3}$ reflects a declining supply of copper concentrates - caused by lower grades and production rates - in the face of a recovery in demand for metal and a tight supply of scrap. Although Vale produces copper anodes, we are mostly a producer of copper concentrates.

The aluminum price reaction to the improved demand fundamentals was milder than with other base metals. Inventories are continuing to rise, reflecting lack of discipline on the supply side. In another decision focused on the strengthening of our long-term competitiveness, we transformed our 95,000 metric tons Valesul aluminum smelter into a small producer of aluminum billets, a much less energy intensive operation, processing ingots purchased from third parties.

Since the onset of the intensification of the global recession we have launched wide-ranging initiatives to enhance the foundations of our long-term competitiveness and our capacity to continue to generate value. At the same time, we have accelerated some structural changes, such as our marketing policy towards China, which was already ready to be put in place before the global downturn.

In spite of the downward revision of our capex budget for this year to US\$ 9 billion, we have not canceled any projects, as we strongly believe that the longterm fundamentals of global markets for minerals and metals will remain intact and strong. Although we foresee downward risks to the global economic recovery, we remain confident in the improvement of our performance over the near future, given our low-cost structure, financial strength and world-class assets.

## $\checkmark$ REVENUES

In 2Q09, our operating revenues totaled US\$ 5.084 billion, $6.2 \%$ less than the US\$ 5.421 billion reached in 1Q09. They suffered the negative impact of lower prices, US\$ 755 million, which was counterbalanced by the positive effect of the expansion of shipment volumes, US\$ 418 million.

The decrease in iron ore and pellet prices caused a fall of US\$ 957 million, while price changes of other products added US\$ 202 million to revenues.

[^2]The decline in benchmark prices for iron ore and pellets in 2009 was fully recognized in this quarter, independently of the status of negotiations with each client. In addition to the contemporaneous net negative impact on 2Q09 revenues of US\$ 791 million, there are US\$ 166 million arising from the retroactive adjustment of provisional prices charged to clients in 1Q09.

Due to the relative price changes - average sales prices of iron ore and pellets decreased and non-ferrous minerals prices increased - the share of non-ferrous minerals in total revenues rose to $37.6 \%$ in 2Q09 from $27.9 \%$ in 1Q09 while the ferrous minerals share declined to $53.4 \%$ from $64.7 \%$. Logistics services reached 5.5\% and coal 1.9\%.

Sales to the Americas increased their share to $26.6 \%$ in 2Q09 from $19.9 \%$ in 1Q09, which is explained by the rise in alumina and nickel shipments to Canada and in iron ore and logistics services revenues in Brazil. Asia continued to be the main destination of our sales, being responsible for $58.1 \%$ of total revenues, Europe $13.1 \%$ and the rest of the world $2.3 \%$.

On a country basis, China remains the main market for our products (39.7\%), followed by Brazil (15.8\%), Japan (7.4\%), and Canada (6.2\%).

| in US\$ million | 2Q08 | \% | 1Q09 | \% | 2Q09 | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ferrous minerals | 6,652 | 61.0 | 3,505 | 64.7 | 2,716 | 53.4 |
| Iron ore | 4,947 | 45.4 | 3,129 | 57.7 | 2,423 | 47.7 |
| Pellets | 1,168 | 10.7 | 269 | 5.0 | 176 | 3.5 |
| Manganese ore | 83 | 0.8 | 15 | 0.3 | 43 | 0.8 |
| Ferroalloys | 346 | 3.2 | 77 | 1.4 | 69 | 1.4 |
| Pellet plant operation services | 15 | 0.1 | 4 | 0.1 | 3 | 0.1 |
| Others | 93 | 0.9 | 11 | 0.2 | 2 | - |
| Non-ferrous minerals | 3,579 | 32.8 | 1,515 | 27.9 | 1,909 | 37.6 |
| Nickel | 1,870 | 17.2 | 639 | 11.8 | 916 | 18.0 |
| Copper | 621 | 5.7 | 236 | 4.4 | 271 | 5.3 |
| Kaolin | 54 | 0.5 | 39 | 0.7 | 42 | 0.8 |
| Potash | 105 | 1.0 | 65 | 1.2 | 121 | 2.4 |
| PGMs | 116 | 1.1 | 53 | 1.0 | 54 | 1.1 |
| Precious metals | 28 | 0.3 | 29 | 0.5 | 26 | 0.5 |
| Cobalt | 57 | 0.5 | 13 | 0.2 | 12 | 0.2 |
| Aluminum | 395 | 3.6 | 194 | 3.6 | 193 | 3.8 |
| Alumina | 329 | 3.0 | 245 | 4.5 | 275 | 5.4 |
| Bauxite | 4 | - | 2 | - | - | - |
| Coal | 103 | 0.9 | 134 | 2.5 | 96 | 1.9 |
| Logistics services | 463 | 4.2 | 199 | 3.7 | 280 | 5.5 |
| Railroads | 382 | 3.5 | 157 | 2.9 | 223 | 4.4 |
| Ports | 81 | 0.7 | 42 | 0.8 | 57 | 1.1 |
| Others | 100 | 0.9 | 68 | 1.3 | 83 | 1.6 |
| Total | 10,897 | 100.0 | 5,421 | 100.0 | 5,084 | 100.0 |


| Table 3 - OPERATING REVENUE BY DESTINATION |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| in US\$ million | 2Q08 | \% | 1Q09 | \% | 2 Q 09 | \% |
| North America | 1,359 | 12.5 | 434 | 8.0 | 513 | 10.1 |
| USA | 768 | 7.0 | 220 | 4.1 | 198 | 3.9 |
| Canada | 496 | 4.6 | 214 | 3.9 | 315 | 6.2 |
| Others | 95 | 0.9 | - | - | - | - |
| South America | 2,229 | 20.5 | 645 | 11.9 | 839 | 16.5 |
| Brazil | 1,890 | 17.3 | 611 | 11.3 | 802 | 15.8 |
| Others | 339 | 3.1 | 34 | 0.6 | 37 | 0.7 |
| Asia | 4,278 | 39.3 | 3,434 | 63.3 | 2,952 | 58.1 |
| China | 1,884 | 17.3 | 2,423 | 44.7 | 2,018 | 39.7 |
| Japan | 1,199 | 11.0 | 484 | 8.9 | 378 | 7.4 |
| South Korea | 356 | 3.3 | 254 | 4.7 | 165 | 3.2 |
| Taiwan | 296 | 2.7 | 133 | 2.5 | 193 | 3.8 |
| Others | 543 | 5.0 | 139 | 2.6 | 198 | 3.9 |
| Europe | 2,650 | 24.3 | 814 | 15.0 | 665 | 13.1 |
| Germany | 573 | 5.3 | 207 | 3.8 | 130 | 2.6 |
| Belgium | 240 | 2.2 | 73 | 1.3 | 85 | 1.7 |
| France | 242 | 2.2 | 39 | 0.7 | 41 | 0.8 |
| UK | 441 | 4.0 | 176 | 3.3 | 149 | 2.9 |
| Italy | 249 | 2.3 | 77 | 1.4 | 43 | 0.8 |
| Others | 905 | 8.3 | 242 | 4.5 | 217 | 4.3 |
| Rest of the World | 381 | 3.5 | 95 | 1.7 | 115 | 2.3 |
| Total | 10,897 | 100.0 | 5,421 | 100.0 | 5,084 | 100.0 |

## Y COSTS

Cost of goods sold (COGS) totaled US\$ 3.135 billion in 2Q09, showing a $8.1 \%$ increase relatively to 1Q09, at US\$ 2.9 billion.

Our initiatives to save costs contributed to a quarter-on-quarter reduction in COGS of US\$ 186 million. However, the depreciation of the US dollar ${ }^{4}$ led to a cost increase of US\$ 214 million, more than offsetting in this quarter the outcome of our cost cutting efforts. At the same time, larger sales volumes were responsible for an increase in COGS of US\$ 207 million.

In 2Q09, the cost of materials accounted for $21.1 \%$ of COGS, being the largest component. These expenses amounted to US\$ 660 million, against US\$ 560 million in 1Q09. Higher sales volumes and currency price changes contributed to increase costs by US\$ 60 million and US\$ 52 million, respectively, being partially offset by a US\$ 12 million reduction due to a more moderate pace of maintenance compared to 1Q09.

The main materials items were: spare parts and maintenance equipment, US\$ 222 million (vs. US\$ 172 million in 1Q09), inputs, US\$ 274 million (vs. US\$ 174 million in 1Q09), tires and conveyor belts, US\$ 34 million (vs. US\$ 33 million in 1Q09).

Costs for outsourced services, making up 16.6\% of COGS, totaled US\$ 519 million in 2Q09, compared to US\$ 424 million in 1Q09. The cost increase was caused by higher sales volumes (US\$ 69 million) and the US dollar depreciation (US\$ 33 million). On the other hand, lower average service prices reduced expenses by US\$ 7 million.

[^3]The main outsourced services were: (a) cargo freight, which accounted for US\$ 179 million (vs. US\$ 132 million in 1Q09); (b) maintenance of equipment and facilities, US\$ 102 million (vs. US\$ 85 million in 1Q09); and (c) operational services, US\$ 138 million (vs. US\$ 135 million in 1Q09), which include US\$ 38 million for ore and waste removal.

Expenses with railroad freight increased to US\$ 112 million from US\$ 72 million in 1Q09, as we expanded the shipments of iron ore produced by the Southern System mines, which are carried to our maritime terminals, Guaíba Island and Itaguaí, by MRS, a non-consolidated affiliated logistics company.

Costs with maritime freight services - mainly involving the shipping of bauxite from Trombetas to Barcarena - totaled US\$ 39 million and expenses with truck transportation services amounted to US\$ 28 million. Its worth mentioning that this item does not include maritime freight costs of our C\&F sales, which are deducted from our gross revenues.

Expenses with energy consumption reached US\$ 461 million, accounting for $14.7 \%$ of COGS and increasing by US\$ 52 million compared to 1 Q09.

Fuel and gases costs reached US\$ 279 million, increasing $17.2 \%$ on a quarter-onquarter basis. Out of the US\$ 41 million cost increase, US\$ 31 million was due to the increase of our activities, US\$ 21 million to the depreciation of the US dollar, while lower prices contributed to diminish expenses by US\$ 11 million.

The cost of electricity was US\$ 182 million against US\$ 171 million in 1Q09, representing a $6.4 \%$ quarter-on-quarter increase. Higher consumption contributed with US\$ 12 million, currency price changes with US\$ 14 million, while lower tariffs contributed positively with US\$ 15 million.

Personnel expenses reached US\$ 449 million, representing $14.3 \%$ of COGS. The increase of US\$ 6 million relatively to 1Q09 reflected higher sales volume (US\$ 62 million) and exchange rate changes (US\$ 31 million) that were almost offset by US\$ 87 million in savings related to our restructuring plan.

The cost of purchasing products from third parties amounted to US\$ 153 million $4.9 \%$ of COGS - against US\$ 200 million in 1Q09. The behavior of these expenses tends to be pro-cyclical, reaching high levels in the upturn and declining dramatically in an economic downturn. For instance, it was the largest item of COGS during the first three quarters of 2007, with an average share of $21.1 \%$, due to the need to complement our production to meet a booming demand in face of rising prices.

Given the deceleration in our own operating activities, purchases of products were sharply reduced, being restricted only to special cases, such as the production of some special iron ore blends or long-term contracts for nickel feed, and take or pay contracts, as is the case with bauxite.

Our subsidiary Alunorte buys bauxite from our affiliate MRN on a regular basis under a take-or-pay contract. In 2Q09 these expenses amounted to US\$ 52 million.

The cost of purchasing iron ore and pellets was only US\$ 5 million, against US\$ 43 million in 1 Q 09 . The volume of iron ore bought from smaller miners came to 273,000 metric tons in 2Q09 compared with 962,000 metric tons in 1Q09. There was no acquisition of pellets from our joint ventures in 2009.

The purchase of nickel products reached US\$ 79 million, against US\$ 83 million in 1Q09. The effect of lower volumes was partially offset by higher average prices.

Depreciation and amortization - 18.2\% of COGS - amounted to US\$ 571 million, against US\$ 523 million in 1Q09, being negatively impacted by the effect of exchange rate variation.

Other operational costs reached US\$ 267 million, compared to US\$ 283 million in 1Q09. Their performance continues to be determined by the savings derived from the reduction of lease payments of the Tubarão pellet plants, mining royalties and demurrage charges, which are related to the more moderate pace of our operational activities.

In 2Q09, demurrage costs - fines paid for delays in loading ships at our maritime terminals - totaled US\$ 8 million, equivalent to US\$ 0.17 per metric ton of iron ore shipped, against US\$ 4 million in the previous quarter, US\$ 0.09 per metric ton.

Sales, general and administrative expenses (SG\&A) came to US\$ 230 million, almost the same amount spent in the previous quarter, US\$ 233 million. Under the MAMA (month after month of arrival) pricing system, the rise of copper prices required an adjustment in provisional prices producing a revenue increase of US\$ 17 million, decreasing SG\&A expenses. On the other hand, the effect of the US dollar depreciation in our administrative costs offset a major part of that positive contribution.

Research and development (R\&D) expenses, which reflect our investment to create long-term growth opportunities, amounted to US\$ 265 million $^{5}$ in the quarter, compared to US\$ 189 million invested in 1Q09.

Other operational expenses reached US\$ 342 million, against US\$ 317 million in 1Q09.

Expenses related to idle capacity and stoppage of operations totaled US\$ 224 million, US\$ 75 million higher than the previous quarter. This was mainly due to the shutdown of Sudbury operations in June, which added US\$ 110 million to "other operational expenses".

Severance payments reached US\$ 25 million, compared to US\$ 39 million in 1Q09.

| Table 4 - COST OF GOODS SOLD |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| in US\$ million | 2Q08 | \% | 1Q09 | \% | 2 Q 09 | \% |
| Outsourced services | 772 | 16.2 | 424 | 14.6 | 519 | 16.6 |
| Material | 815 | 17.1 | 560 | 19.3 | 660 | 21.1 |
| Energy | 747 | 15.7 | 409 | 14.1 | 461 | 14.7 |
| Fuel and gases | 466 | 9.8 | 238 | 8.2 | 279 | 8.9 |
| Electric energy | 281 | 5.9 | 171 | 5.9 | 182 | 5.8 |
| Acquisition of products | 704 | 14.8 | 200 | 6.9 | 153 | 4.9 |
| Iron ore and pellets | 416 | 8.7 | 43 | 1.5 | 5 | 0.2 |
| Aluminum products | 73 | 1.5 | 71 | 2.4 | 63 | 2.0 |
| Nickel products | 156 | 3.3 | 83 | 2.9 | 79 | 2.5 |
| Other products | 59 | 1.2 | 3 | 0.1 | 6 | 0.2 |
| Personnel | 571 | 12.0 | 443 | 15.3 | 449 | 14.3 |
| Depreciation and exhaustion | 723 | 15.2 | 523 | 18.0 | 571 | 18.2 |
| Shared services | 56 | 1.2 | 58 | 2.0 | 55 | 1.8 |
| Others | 375 | 7.9 | 283 | 9.8 | 267 | 8.5 |
| Total | 4,763 | 100.0 | 2,900 | 100.0 | 3,135 | 100.0 |

[^4]
## $\checkmark$ OPERATING PROFIT

In 2Q09, operating profit, as measured by adjusted EBIT, totaled US\$ 976 million, thus showing a decrease of US\$ 709 million relative to $1 Q 09$. If we reallocate the retroactive adjustment of iron ore and pellet prices, this difference shrinks to US\$ 377 million.

The effect of higher sales prices for non-iron ore products (US\$ 201 million), higher shipment volumes (US\$ 210 million) and cost cutting measures (US\$ 186 million) acted to cushion the negative impact on the operating profit of the fall in iron ore and pellet prices (US\$ 957 million), the weaker US dollar (US\$ 214 million), and higher R\&D expenses (US\$ 76 million).

Adjusted EBIT margin was 19.7\%, against $31.6 \%$ in the previous quarter.

## Y NET EARNINGS

In 2Q09, net earnings reached US\$ 790 million, with a $42.0 \%$ decline related to the 1Q09 figure, at US $\$ 1.363$ billion. Earnings per share, on a fully diluted basis, were US\$ 0.15.

Earnings before income taxes amounted to US\$ 2.414 billion, compared to US\$ 1.669 billion in 1Q09. The impact of the appreciation of the BRL against the USD in our income taxes was exactly the opposite of the effect generated in 3Q08, when there was a tax credit arising from the depreciation of the BRL against the USD. This time the exchange rate variation produced an income tax burden of US\$ 1.279 billion.

Financial revenues totaled US\$ 93 million, US\$ 32 million below the figure for 1Q09, at US\$ 125 million, due to the decrease in cash holdings and interest rates.

Financial expenses reached US\$ 293 million, in line with the US\$ 287 million spent in 1Q09.

As a consequence of the appreciation of our functional currency, the Brazilian real, against the US dollar ${ }^{6}$, foreign exchange and monetary variations caused a positive impact on our net earnings, of US\$ 523 million, against a positive impact of US\$ 16 million in 1Q09.

In 2Q09, the net effect of the mark-to-market of the transactions with derivatives on our results was a gain of US\$ 873 million, against US\$ 18 million in 1Q09. These transactions produced a net positive cash flow impact of US\$ 64 million.

The net result of the currency and interest rate swaps, structured mainly to convert the BRL-denominated debt into US dollar to protect our cash flow from exchange rate volatility, produced a positive effect of US\$ 935 million in 2Q09, of which US\$ 101 million generated a positive impact on the cash flow. The counterpart of this mark-to-market adjustment is an increase in the US dollar value of the BRLdenominated debt.

As nickel prices are moving upward, our positions with nickel derivatives produced a negative charge of US\$ 107 million in 2Q09 against net earnings, contributing to reduce our cash flow by US\$ 41 million.

Our derivative transactions related to bunker oil and freight costs, structured to minimize the volatility of the cost of maritime freight from Brazil to Asia, had a

[^5]positive impact of US\$ 47 million, of which US\$ 6 million generated a positive cash effect.

In this quarter we sold our remaining stake in Usiminas for US\$ 273 million, adding US\$ 153 million to our net earnings.

Equity income amounted to US\$ 135 million, compared to US\$ 72 million in 1Q09.

The non-consolidated affiliates in the ferrous minerals business contributed with $68.9 \%$ to the total, logistics $17.8 \%$, coal $5.9 \%$, steel $5,2 \%$, and non-ferrous $2,2 \%$.

In individual terms, the largest contributors to equity income were Samarco (US\$ 90 million) and MRS (US\$ 24 million).

## r CASH GENERATION

Our cash generation, as measured by the adjusted EBITDA, reached US\$ 1.725 billion in 2Q09, $24.4 \%$ lower than the US\$ 2.281 billion for 1Q09. The reduction of US\$ 556 million was chiefly caused by the drop of US\$ 709 million in the operational profit.

We benefited from US\$ 106 million of dividends distributed by affiliated nonconsolidated companies, of which US\$ 50 million were paid by Samarco, US\$ 34 million by MRS, US\$ 12 million by MRN, US\$ 7 million by Usiminas and US\$ 3 million by Log-In Logística.

As mentioned before, the change in iron ore and pellet prices relatively to nonferrous minerals prices worked to produce a more balanced composition of the sources of operational cash flow, though still highly dominated by ferrous minerals. Its share dropped to $84.6 \%$ from $97.0 \%$ in 1Q09, while non-ferrous minerals increased to $23.9 \%$ from $6.8 \%$ in 1Q09.

Logistics services were responsible for $5.3 \%$ of the adjusted EBITDA. Other business and expenditures with R\&D reduced it by 13.8\%.

| Table 5 - ADJUSTED EBITDA BY BUSINESS AREA |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| in US\$ million | 2 Q 08 | $\mathbf{1 Q 0 9}$ | 2Q09 |  |
| Ferrous minerals | 4,311 | 2,212 | 1,459 |  |
| Non-ferrous minerals | 1,919 | 155 | 413 |  |
| Logistics | 220 | 29 | 91 |  |
| Coal | 14 | 43 | $(7)$ |  |
| Others | $\mathbf{( 2 4 6 )}$ | $(158)$ | $(231)$ |  |
| Total | $\mathbf{6 , 2 1 8}$ | $\mathbf{2 , 2 8 1}$ | $\mathbf{1 , 7 2 5}$ |  |


| Table 6 $\mathbf{-}$ QUARTERLY ADJUSTED EBITDA |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| in US\$ million | 2 O08 | $\mathbf{1 Q 0 9}$ | $\mathbf{2 Q 0 9}$ |
| Net operating revenues | 10,600 | 5,324 | 4,948 |
| COGS | $(4,763)$ | $(2,900)$ | $(3,135)$ |
| SG\&A | $(344)$ | $(233)$ | $(230)$ |
| Research and development | $(269)$ | $(189)$ | $(265)$ |
| Other operational expenses | 11 | $(317)$ | $(342)$ |
| Adjusted EBIT | $\mathbf{5 , 2 3 5}$ | $\mathbf{1 , 6 8 5}$ | $\mathbf{9 7 6}$ |
| Depreciation, amortization \& exhaustion | 760 | 559 | 643 |
| Dividends received | 223 | 37 | 106 |
| Adjusted EBITDA | $\mathbf{6 , 2 1 8}$ | $\mathbf{2 , 2 8 1}$ | $\mathbf{1 , 7 2 5}$ |

## ४ DEBT INDICATORS

As of June 30, 2009, our total debt was US\$ 19.493 billion, with an average maturity of 8.63 years and an average cost of $5.54 \%$ per year.

Our net debt ${ }^{(\mathrm{c})}$ on June 30, 2009 was US\$ 8.301 billion, against US\$ 6.200 billion on March 31, 2009.

As of June 30, 2009, our cash holdings amounted to US\$ 11.192 billion, including US\$ 3.0 billion invested in liquid low-risk fixed income securities with maturities ranging from 91 to 360 days and an average maturity of 178 days. The expected default frequency of our portfolio, according to Moody's KMV methodology ${ }^{7}$, is less than $1 \%$.

In this quarter, we paid the first installment of the minimum dividend for 2009, which totaled US\$ 1.25 billion and had net disbursement of US\$ 237 million related to asset acquisitions and divestitures.

In July 2009, we issued mandatorily convertible notes due in 2012, with interest at $6.75 \%$ per year. Total proceeds amounted to US\$ 942 million. These hybrid securities are considered $100 \%$ equity and their issuance had no impact on our debt. For a description of the transaction please see box "Mandatorily convertible notes", on page 25.

The mining industry is highly sensitive to economic cycles and is capital intensive. Given these two features, one of the focuses of Vale's financial policy is to pursue low debt leverage during cyclical expansions, as in economic downturns the deceleration in cash flow naturally leads to higher leverage ratios. Our debt leverage, as measured by total debt/LTM adjusted EBITDA ${ }^{(d)}$ ratio, went up to 1.5 x on June 30, 2009 from 1.0x on March 31, 2009, but it is still a sound position.

The total debt/enterprise value ${ }^{(\mathrm{e})}$ ratio was $19.9 \%$ on June 30, 2009, against $25.1 \%$ on March 31, 2009.

Interest coverage, measured by the LTM adjusted EBITDA/LTM interest payment ${ }^{(f)}$ ratio, decreased to 10.8 x from 14.0x on March 31, 2009.

Considering hedge positions, $41 \%$ of our total debt on June 30, 2009 was linked to floating interest rates and $59 \%$ to fixed interest rates, while $97 \%$ was denominated in US dollars and the remainder in other currencies.

| Table 7 - DEBT INDICATORS |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| in US\$ million | 20,08 | $\mathbf{1 0 0 9}$ | 2Q09 |  |
| Total debt | 20,372 | 18,414 | 19,493 |  |
| Net debt | 18,218 | 6,200 | 8,301 |  |
| Total debt / LTM adjusted EBITDA (x) | 1.2 | 1.0 | 1.5 |  |
| LTM adjusted EBITDA / LTM interest expenses (x) | 13.04 | 13.96 | 10.83 |  |
| Total debt / EV (\%) | 11.14 | 25.12 | 19.87 |  |

## Y INVESTMENTS

In 2Q09, Vale's investment, excluding acquisitions, amounted to US\$ 2.080 billion. We invested US\$ 1.363 billion in the development of organic growth

[^6]projects, US\$ 254 million in research and development (R\&D), and US\$ 463 million in the maintenance of existing operations.

The capex in the first half of the year totaled US\$ 3.794 billion. In addition to that, we spent US\$ 1.45 billion in acquisitions of copper (US\$ 65 million), coal (US\$ 306 million) and potash (US\$ 857 million) assets and paid US\$ 216 million for the second installment of a 30-year contract signed in 2007 to exploit a 720 km stretch of the Norte-Sul railroad (FNS). This was paid to the Brazilian government against the delivery of 213.2 km of newly constructed rail tracks. A final installment is due to be paid at the time of the completion of the last part of the railroad, expected to occur in April, 2010.

On the other hand, we sold all of our remaining stake in Usiminas for R\$ 595 million, equivalent to US\$ 273 million, in April 2009.

On July 22, we signed a memorandum of understanding with ThyssenKrupp to increase our stake in Thyssenkrupp CSA (CSA) to $26.9 \%$ from 10\%, through a capital infusion of EUR\$ 965 million. CSA is building a slab plant in Brazil, with a nominal capacity to produce 5 million metric tons per year expected to come on stream in 1H10. Jointly with the steelmaking facilities, the project comprises a power plant and a maritime terminal.

Vale is the sole and exclusive supplier of iron ore and pellets to CSA under a 30year contract.

This investment is in line with our initiatives to expand the Brazilian iron ore market through the attraction of new export oriented steel projects and it is not included in the US\$ 9.0 billion capex budget for 2009.

R\&D investments comprised US\$ 149 million spent in the mineral exploration program, US\$ 100 million in conceptual, pre-feasibility and feasibility studies for projects, and US\$ 4 million to develop new processes, technological innovations and adaptation of technologies.

Investments in the non-ferrous minerals business were US\$ 694 million due to the various projects under development - Onça Puma, Goro, Salobo, Tres Valles, Bayóvar. US\$ 420 million was spent in the ferrous minerals business, US\$ 585 million in logistics - of which US\$ 98 million was invested in the acquisition of second-hand ships - US\$ 155 million in power generation, US\$ 137 million in coal - as we are developing Moatize and Carborough Downs -, US\$ 50 million in steel projects and US\$ 38 million in corporate activities and other business segments.

Table 8 - TOTAL INVESTMENT BY CATEGORY

|  | Table 8 - TOTAL INVESTMENT BY CATEGORY |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| US\$ million | $\mathbf{2 Q 0 8}$ | \% | 1Q09 | $\%$ | 2Q09 | \% |
| Organic growth | 1,788 | 77.3 | 1,303 | 76.0 | 1,617 | 77.7 |
| Projects | 1,521 | 65.8 | 1,121 | 65.4 | 1,363 | 65.5 |
| R\&D | 267 | 11.5 | 182 | 10.6 | 254 | 12.2 |
| Stay-in-business | 524 | 22.7 | 411 | 24.0 | 463 | 22.3 |
| Total | $\mathbf{2 , 3 1 2}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 , 7 1 4}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{2 , 0 8 0}$ | $\mathbf{1 0 0 . 0}$ |

Table 9 - TOTAL INVESTMENT BY BUSINESS AREA

| US\$ million | 2Q08 | $\%$ | $\mathbf{1 Q 0 9}$ | $\%$ | 2Q09 | \% |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Ferrous minerals | 500 | 21.6 | 360 | 21.0 | 420 | 20.2 |
| Non-ferrous minerals | 1,181 | 51.1 | 726 | 42.4 | 695 | 33.4 |
| Logistics | 397 | 17.2 | 317 | 18.5 | 585 | 28.1 |
| Coal | 61 | 2.6 | 88 | 5.1 | 137 | 6.6 |
| Power generation | 81 | 3.5 | 87 | 5.1 | 155 | 7.4 |
| Steel | 14 | 0.6 | 64 | 3.7 | 50 | 2.4 |
| Others | 78 | 3.4 | 72 | 4.2 | 38 | 1.8 |
| Total | $\mathbf{2 , 3 1 2}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 , 7 1 4}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{2 , 0 8 0}$ | $\mathbf{1 0 0 . 0}$ |

## $\checkmark$ Description of the main projects

| Business | Project | Budget US\$ million |  | Status |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 2009 | Total |  |
| Ferrous Minerals/ Logistics | Carajás 130 Mtpy | 455 | 2,478 | This project will add 30 Mtpy to current capacity. comprises investments in the installation of a new plant composed of primary crushing, processing and classification units and significant investments in logistics The purchase of equipment and work on the fourth ca dumper and stockyards is already under way. Start-up planned for 1 H 12 , depending on concession environmental licenses. |
|  | Carajás additional 10 Mtpy | 85 | 290 | This project will add 10 Mtpy of iron ore to the current capacity. It involves investment in the overhauling of a dry plant and the acquisition of a new one. Start-up expected for 1 H 10 . |
|  | Carajás Serra Sul (mine S11D) | 233 | 11,297 | Located in the Southern range of Carajás, in the Brazilian state of Pará, this project will have a capacity of 90 Mtpy Completion is scheduled for 1 H 13 subject to obtaining the environment licenses. The project is still subject to approval by the Board of Directors. |
|  | Apolo | 9 | 2,509 | Project in the Southeastern System with a production capacity of 24 Mtpy of iron ore. Start-up expected for 1 H 13 subject to market conditions. The project is still subject to approval by the Board of Directors. |
|  | Southeastern Corridor | 107 | 553 | Expansion of the Vitória a Minas Railroad (EFVM) and the port of Tubarão. Conclusion planned for 2H09. |
|  | Tubarão VIII | 230 | 636 | Pelletizing plant to be built at the port of Tubarão, in the Brazilian state of Espírito Santo, with a 7.5 Mtpy capacity. Completion originally scheduled for 1 H 11 , subject to market conditions. |
|  | Oman | 353 | 1,356 | Project for the construction of a pelletizing plant in the Sohar industrial district, Oman, in the Middle East, for the production of 9 Mtpy of direct reduction pellets and a distribution center with capacity to handle 40 Mtpy. Start up planned for 2 H 10 . |
| Non-Ferrous Minerals | Onça Puma | 435 | 2,297 | The project will have a nominal production capacity of 58,000 metric tons per year of nickel in ferronickel form, its final product. First line is expected to be commissioned in June 2010. Start-up will depend on market conditions. |

Goro
Totten 5

Salobo 375

Salobo expansion

Tres Valles 5
Bayóvar 30
CAP

Paragominas III12
Carborough 122

## Downs

Coal

## Moatize

319

Karebbe
83
410

Energy
Estreito
4,083

The project will have a nominal production capacity of 60,000 metric tons per year of nickel oxide sinter and 4,600 metric tons of cobalt. First autoclave is scheduled to be turned on in 3Q09. Ramp-up is originally planned to take place over three years to minimize operational risks.
Mine in Sudbury, Canada, aiming to produce 8,200 tpy of nickel, copper and precious metals as by-products. Project being implemented and conclusion planned for 1 H 11 , subject to market conditions.
1,152 The project will have a production capacity of 127,000 metric tons of copper in concentrate. Project implementation under way and civil engineering work has started. Conclusion of work scheduled for 1 H 11 , subject to market conditions.
The project will expand the Salobo mine annual production capacity from 127.000 to 254,000 metric tons of copper in concentrate. Conclusion is estimated for 2 H 13 , subject to market conditions.
102 Located in the Coquimbo region in Chile, with an annual production capacity of 18,000 metric tons of copper cathode. Conclusion expected for 1 H 10 .

479 Open pit mine in Peru with nominal capacity of 3.9 million metric tons per year of phosphate concentrate. Main implementation license obtained. Project under implementation with conclusion scheduled for 2 H 10 .
2,200 The new alumina refinery will be located in Barcarena, in the Brazilian state of Pará. The plant will have a production capacity of 1.86 Mtpy of alumina, with potential for a future expansion to produce up to 7.4 mtpy . Completion is expected in 2 H 12 .
The third phase, Paragominas III, will add 4.95 Mtpy of bauxite to existing capacity and completion is scheduled for 2 H 12 .
Expansion of the Carborough Downs underground coal mine in Central Queensland, Australia. This project includes the installation of a longwall and the duplication of the coal handling and preparation plant (CHPP) to be concluded in 2 H 09 . It will allow the mine to achieve 4.4 Mtpy capacity in 2011.
1,322 This project is located in Mozambique and will have a production capacity of 11 Mtpy , of which 8.5 Mtpy of metallurgic coal and 2.5 Mtpy of thermal coal. Completion is currently scheduled for 2 H 10 .
Karebbe hydroelectric power plant in Sulawesi, Indonesia, aims to supply 90 MW for the Indonesian operations, targeting production cost reduction by substitution of oil as fuel. Work started and main equipment purchased. Scheduled to start up in 1 H 11 .
Hydroelectric power plant on the Tocantins river, between the states of Maranhão and Tocantins, Brazil, has already obtained the implementation license, and is being built. Vale has a $30 \%$ share in the consortium that will build and operate the plant, which will have a capacity of 1,087 MW. Start-up is planned for 2 H 10 .

## ४ PERFORMANCE OF THE BUSINESS SEGMENTS

## - Ferrous minerals

In 2Q09, shipments of iron ore and pellets totaled 53.821 million metric tons, $3.3 \%$ above 1Q09. Sales volumes of iron ore amounted to 50.668 million, $1.7 \%$ higher, while pellets accounted for 3.153 million metric tons - 38.8\% up against 1Q09.

We have been successfully exploiting the upward trend in Chinese iron ore imports. Our shipments to China reached another all-time high quarterly figure, totaling 35.611 million metric tons, representing $66.2 \%$ of total shipments, compared to $8.2 \%$ for Brazil, $6.3 \%$ for Japan, and $4.2 \%$ for South Korea.

Shipments to Europe remained around 5 million metric tons only, against 18.9 million metric tons in 2Q08. The European carbon steel industry has been running with an average rate of capacity utilization of $50 \%$ and only very recently has begun to show signs of the end of a de-stocking phase.

Our sales to the Brazilian market reached 4.4 million metric tons, increasing $26.1 \%$ on a quarter-on-quarter basis. It is still a small volume compared to the past, but it is already reflecting an improvement in demand conditions.

Revenues generated on the sale of iron ore amounted to US\$ 2.423 billion, presenting a $22.6 \%$ drop over 1Q09. Average sales prices decreased $23.8 \%$, to US\$ 47.82 per metric ton from US $\$ 62.79$ in the previous quarter.

Pellets sales generated revenues of US\$ 176 million, from US\$ 269 million in 1Q09. Average sales prices declined $52.9 \%$, to US\$ 55.82 per metric ton, from US\$ 118.45 .

As explained before, we have accrued in our 2Q09 revenues the full impact of the changes in the benchmark prices for iron ore and pellets for 2009, regardless of the status of the negotiation with each client.

In this respect, in 2Q09 there was a retroactive adjustment relating to 1Q09 sales made under provisional prices which totaled US\$ 166 million, being US\$ 112 million from iron ore sales and US\$ 54 million from pellets sales.

Excluding the retroactive adjustments, average sales price for iron ore in 2Q09 is US $\$ 50.03$ per metric ton and for pellets US $\$ 72.95$.

It is important to notice that reported revenues are net of the costs of maritime freight, implying that prices of C\&F sales are comparable to average FOB prices. This quarter, we sold 25.4 million metric tons of iron ore and pellets on a C\&F basis.

Volumes of manganese ore sold in 2Q09 reached 297,000 metric tons, 395\% higher than 1 Q09, which amounted to 60,000 - after adjustments made in 2Q09, reflecting some improvement in demand from the steel industry. Sales of ferroalloy amounted to 71,000 metric tons, $34.0 \%$ higher than in 1Q09, when 53,000 metric tons were sold.

Revenues from the sale of manganese ore totaled US\$ 43 million, almost three times the value generated in 1Q09, of US\$ 15 million. Average sales price reached US\$ 144.78 per metric ton, $42.1 \%$ below 1Q09 realized price.

Ferroalloy sales produced revenues of US\$ 69 million, against US\$ 77 million, with average prices declining to US\$ 971.83 from US\$ 1,452.83 per metric ton in 1Q09.

The sales of ferrous minerals products - iron ore, pellets, manganese, ferroalloys and pig iron - produced a total revenue of US\$ 2.716 billion in 2Q09, vis-à-vis US\$ 3.505 billion in 1Q09.

The adjusted EBIT margin for the ferrous minerals business in 2Q09 was $39.8 \%$, against $56.5 \%$ in 1Q09. The drop was mainly determined by the impact of lower benchmark prices for iron ore and pellets, contemporaneous and retroactive, in addition to the effect of exchange rate variation in costs. If we reallocate the
retroactive price adjustment accordingly, EBIT margin would be $43.3 \%$ in 2Q09, against $54.4 \%$ in 1Q09.

Adjusted EBITDA for the ferrous minerals business totaled US\$ 1.459 billion, against US\$ 2.212 billion in 1Q09.

The decline of US\$ 753 million in 2Q09 vis-à-vis 1Q09 was due to lower prices, which negatively impacted EBITDA by US\$ 1.037 billion, and the effect of exchange rate variation in our COGS, of US\$ 91 million. Higher volumes (US\$ 177 million), lower SG\&A (US\$ 104 million), inputs price reduction (US\$ 30 million) and the increase in dividends received from affiliated companies (US\$ 64 million) contributed positively to partially cushion the negative effects.

| '000 metric tons | 2Q08 | \% | 1Q09 | \% | 2Q09 | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Americas | 19,229 | 24.4 | 3,752 | 7.2 | 5,094 | 9.5 |
| Brazil | 15,603 | 19.8 | 3,485 | 6.7 | 4,393 | 8.2 |
| Steel mills and pig iron producers | 12,149 | 15.4 | 3,485 | 6.7 | 4,393 | 8.2 |
| JVs pellets | 3,454 | 4.4 | - | - | - | - |
| USA | 768 | 1.0 | - | - | 77 | 0.1 |
| Others | 2,858 | 3.6 | 267 | 0.5 | 624 | 1.2 |
| Asia | 37,522 | 47.6 | 42,772 | 82.1 | 42,561 | 79.1 |
| China | 25,061 | 31.8 | 34,631 | 66.5 | 35,611 | 66.2 |
| Japan | 8,282 | 10.5 | 4,247 | 8.2 | 3,372 | 6.3 |
| South Korea | 3,274 | 4.2 | 3,192 | 6.1 | 2,269 | 4.2 |
| Others | 905 | 1.1 | 702 | 1.3 | 1,309 | 2.4 |
| Europe | 18,904 | 24.0 | 5,000 | 9.6 | 4,738 | 8.8 |
| Germany | 5,168 | 6.6 | 1,748 | 3.4 | 1,396 | 2.6 |
| United Kingdom | 2,133 | 2.7 | 1,521 | 2.9 | 1,261 | 2.3 |
| France | 2,515 | 3.2 | 296 | 0.6 | 490 | 0.9 |
| Belgium | 2,086 | 2.6 | 44 | 0.1 | - | - |
| Italy | 2,310 | 2.9 | 658 | 1.3 | 595 | 1.1 |
| Others | 4,692 | 5.9 | 733 | 1.4 | 996 | 1.9 |
| Rest of the World | 3,203 | 4.1 | 576 | 1.1 | 1,428 | 2.7 |
| Total | 78,858 | 100.0 | 52,100 | 100.0 | 53,821 | 100.0 |

Table 11 - OPERATING REVENUE BY PRODUCT

| in US\$ million | 2Q08 | 1Q09 | 2Q09 |
| :---: | :---: | :---: | :---: |
| Iron ore | 4,947 | 3,129 | 2,423 |
| Pellet plant operation services | 15 | 4 | 3 |
| Pellets | 1,168 | 269 | 176 |
| Manganese ore | 83 | 15 | 43 |
| Ferroalloys | 346 | 77 | 69 |
| Others | 93 | 11 | 2 |
| Total | 6,652 | 3,505 | 2,716 |
| Table 12 - AVERAGE SALE PRICE |  |  |  |
| in US\$/metric ton | 2 Q 08 | 1 Q 09 | 2 Q 09 |
| Iron ore | 69.80 | 62.79 | 47.82 |
| Pellets | 146.33 | 118.45 | 55.82 |
| Manganese ore | 275.75 | 250.00 | 144.78 |
| Ferroalloys | 2,768.00 | 1,452.83 | 971.83 |
| Table 13 - VOLUMES SOLD |  |  |  |
| in '000 metric tons | 2Q08 | 1Q09 | 2 Q 09 |
| Iron ore | 70,876 | 49,829 | 50,668 |
| Pellets | 7,982 | 2,271 | 3,153 |
| Manganese ore | 301 | 60 | 297 |
| Ferroalloys | 125 | 53 | 71 |


|  | Table $\mathbf{1 4}$ - SELECTED FINANCIAL INDICATORS |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | $2 \mathrm{Q08}$ | $\mathbf{1 Q 0 9}$ | $\mathbf{2 Q 0 9}$ |
| Adjusted EBIT margin (\%) | 59.3 | 56.5 | 39.8 |
| Adjusted EBITDA (US\$ million) | 4,311 | 2,212 | 1,459 |

## - Non-ferrous minerals

Total revenues from the sales of non-ferrous minerals reached US\$ 1.909 billion, US\$ 394 million higher than in 1Q09. Their increase was mostly influenced by higher nickel prices (US\$ 158 million) and shipments (US\$ 119 million), and higher copper prices (US\$ 84 million).

Sales of nickel generated revenues of US\$ 916 million, against US\$ 639 million in 1Q09. The rise of $22.7 \%$ in nickel sales prices, to US\$ 13,224 per metric ton from US\$ 10,777 in the previous quarter, contributed to $57.0 \%$ of the US\$ 277 million increase in revenues while higher sales volumes accounted for 43.0\%.

Our total shipments of finished nickel reached 69,000 metric tons in 2Q09, increasing by $16.8 \%$ against 1Q09, with sales to Asia representing $70.9 \%$ of the increase.

Revenues from sales of bauxite, alumina and aluminum amounted to US\$ 468 million, compared to US\$ 441 million in 1Q09. The increase was determined by higher shipments (81.5\%) and average prices (18.5\%).

The average sales price of aluminum was US\$ 1,451.61 per metric ton in 2Q09 against US\$ 1,519.69 in 1Q09, while the price of alumina, which is mostly indexed to the metal price, presented a slight change to US\$ 196.01 per metric ton from US\$ 194.91 in 1Q09.

In 2Q09, we sold 124,000 metric tons - vs. 127,000 in 1Q09 - of aluminum, and 1.403 million metric tons - vs. 1.257 million in 1Q09 - of alumina.

Since April 1, 2009, Valesul has ceased its aluminum smelting operations, becoming a small producer of billets for extrusion using purchased primary ingots and scrap metal as its main raw materials.

Sales of copper amounted to US\$ 271 million, compared with US\$ 236 million in 1Q09. Higher average prices more than offset the lower shipments. The average sales price was US\$ 5,051.54 per metric ton in 2Q09, well above the US\$ 3,566.36 for 1Q09.

Copper shipments during this quarter reached 54,000 metric tons, $18.2 \%$ lower than the volume shipped in 1Q09, mainly due to the smaller output of copper in 2Q09, 61,200 metric tons against 73,300 in the previous quarter, due to the smaller production in Sudbury, where operations were shutdown as from June 1.

PGMs reached revenues of US\$ 54 million, similar to the level of the previous quarter. Despite the contraction of the global automobile industry - autocatalyst converters account for $50 \%$ of the consumption of platinum - average sales prices for platinum remained constant, at US\$ 1,028.53 per oz, due to a relatively strong demand for jewelry in emerging market economies and the significant expansion of Chinese auto production.

Revenues from cobalt totaled US\$ 12 million, with a reduction of $7.7 \%$ compared to the last quarter, at US\$ 13 million. Average sales prices declined further, to US\$ 7.99 per lb from US\$ 9.27 in 1Q09, as the demand for superalloys remained subdued.

Potash revenues increased by $86.2 \%$, on a quarter-over-quarter basis, reaching US\$ 121 million in 2Q09, driven by higher shipments. Volumes sold increased to 192,000 metric tons, compared to 105,000 in 1Q09, influenced by the seasonally higher demand in Brazil. The average sale price of US\$ 630.21 per metric ton in 2Q09, was in line with 1Q09, at US\$ 619.05.

In 2Q09, kaolin revenues amounted to US\$ 42 million, against US\$ 39 million in the previous quarter, due to higher shipments to Asia.

The adjusted EBIT margin for non-ferrous minerals improved in 2Q09, reaching $0.2 \%$ after two quarters in a row of negative margins, minus $23.5 \%$ and $17.2 \%$ in 4 Q 08 and 1Q09, respectively. The weight of the poor performance of the aluminum business counterbalanced the effect of the improvement in profitability of the nickel, copper and potash businesses.

Adjusted EBITDA for non-ferrous minerals totaled US\$ 413 million in 2Q09 versus US\$ 155 million in 1Q09.

| Table 15 - OPERATING REVENUE BY PRODUCT |  |  |  |
| :---: | :---: | :---: | :---: |
| in US\$ million | 2Q08 | 1009 | 2 Q 09 |
| Nickel | 1,870 | 639 | 916 |
| Copper | 621 | 236 | 271 |
| Kaolin | 54 | 39 | 42 |
| Potash | 105 | 65 | 121 |
| PGMs | 116 | 53 | 54 |
| Precious metals | 28 | 29 | 26 |
| Cobalt | 57 | 13 | 12 |
| Aluminum | 395 | 194 | 193 |
| Alumina | 329 | 245 | 275 |
| Bauxite | 4 | 2 | - |
| Total | 3,579 | 1,515 | 1,909 |
| Table 16 - AVERAGE SALE PRICE |  |  |  |
| in US\$/metric ton | 2Q08 | 1Q09 | 2Q09 |
| Nickel | 26,992.70 | 10,776.51 | 13,223.86 |
| Copper | 8,483.61 | 3,566.36 | 5,051.54 |
| Kaolin | 189.47 | 217.88 | 217.62 |
| Potash | 580.11 | 619.05 | 630.21 |
| Platinum (US\$/oz) | 2,036.90 | 1,020.56 | 1,028.53 |
| Cobalt (US\$/lb) | 38.88 | 9.27 | 7.99 |
| Aluminum | 3,126.98 | 1,519.69 | 1,451.61 |
| Alumina | 382.11 | 194.91 | 196.01 |
| Bauxite | 38.46 | 40.82 | - |
| Table 17 - VOLUMES SOLD |  |  |  |
| in '000 metric tons | 2 Q 08 | 1009 | 2 Q 09 |
| Nickel | 69 | 59 | 69 |
| Copper | 73 | 66 | 54 |
| Kaolin | 285 | 179 | 193 |
| Potash | 181 | 105 | 192 |
| Precious metals (oz) | 597 | 710 | 522 |
| PGMs (oz) | 102 | 92 | 97 |
| Cobalt (metric tons) | 665 | 636 | 681 |
| Aluminum | 126 | 127 | 124 |
| Alumina | 861 | 1,257 | 1,403 |
| Bauxite | 104 | 49 |  |

Table 18 - SELECTED FINANCIAL INDICATORS

|  | 2 Q 08 | 1Q09 | 2Q09 |
| :---: | :---: | :---: | :---: |
| Adjusted EBIT margin (\%) | 36.0 | -17.2 | 0.2 |
| - Adjusted EBITDA (US\$ million) | 1,919 | 155 | 413 |

- Coal

Revenues from coal reached US\$ 96 million in 2Q09, of which US\$ 50 million from thermal coal and US\$ 46 million from sales of metallurgical coal, compared to total revenues of US\$ 134 million in 1Q09.

In 2Q09 our total shipments reached 1.117 million metric tons, showing a $14.4 \%$ increase vis-à-vis the last quarter, at 976,000 metric tons. We sold 425,000 metric tons of metallurgical coal - vs. 546,000 in 1Q09 - and 692,000 metric tons of thermal coal - vs. 430,000 in 1Q09.

On March 31, 2009, Vale concluded the acquisition of thermal coal assets in Colombia and the figures related to this operation are already consolidated in the 2Q09 results.

In the short-term, the Colombian operations faced several problems that led to a very poor financial performance. On the demand side, the Atlantic market for thermal coal was oversupplied, which restricted sales to minimum, thus leading to inventory building. On the operating side, we faced problems with service suppliers and cost of logistics.

However, demand conditions are slowly improving and the operating problems are being solved. For instance, from August onwards the El Hatillo thermal coal mine sales start to be transported to the port by rail, instead of trucks, which will mean a significant cost reduction.

The average sale price of metallurgical coal in 2Q09 was US\$ 108.64 per metric ton, with a $40.3 \%$ quarter-on-quarter drop. This was explained by the decline in both spot and contract prices for 2009. Contract prices suffered an average reduction of $60 \%$.

The average sale price of thermal coal was US\$ 71.83 per metric ton, $10.7 \%$ lower than in the 1 Q 09 , due to lower spot prices.

The adjusted EBIT margin for coal was minus $31.3 \%$ in 2Q09, against 20.1\% in 1Q09.

Adjusted EBITDA for coal operations totaled minus US\$ 7 million in 2Q09 versus positive US\$ 43 million in 1Q09.

| Table 19 - OPERATING REVENUE BY PRODUCT |  |  |  |
| :---: | :---: | :---: | :---: |
| in US\$ million | 2Q08 | 1Q09 | 2 Q 09 |
| Thermal coal | 18 | 35 | 50 |
| Metallurgical coal | 85 | 99 | 46 |
| Total | 103 | 134 | 96 |
| Table 20 - AVERAGE SALE PRICE |  |  |  |
| in US\$/metric ton | 2Q08 | 1Q09 | 2Q09 |
| Thermal coal | 79.19 | 80.41 | 71.83 |
| Metallurgical coal | 124.49 | 182.01 | 108.64 |
| Table 21 - VOLUMES SOLD |  |  |  |
| in '000 metric tons | 2 Q 08 | 1Q09 | 2Q09 |
| Thermal coal | 231 | 430 | 692 |
| Metallurgical coal | 680 | 546 | 425 |
| Table 22 - SELECTED FINANCIAL INDICATORS |  |  |  |
| in '000 metric tons | 2Q08 | 1Q09 | 2Q09 |
| Adjusted EBIT margin (\%) | 0.0 | 20.1 | -31.3 |
| Adjusted EBITDA (US\$ million) | 14 | 43 | (7) |

## - Logistics services

Logistics services generated revenues of US\$ 280 million in 2Q09, against US\$ 199 million in 1Q09 and US $\$ 463$ million in 2Q08.

Most of the logistics services are priced in BRL. As it has appreciated against the USD in 2Q09, there was an additional revenue of US\$ 20 million arising from the currency price change.

Higher average prices due to the change in the product mix carried in 2 Q 09 were responsible for $53.8 \%$ of the qoq increment in revenue, while the increase in general cargo was responsible for $46.2 \%$.

Rail transportation of general cargo produced revenues of US\$ 223 million and port services US\$ 57 million.

Vale railroads - Carajás (EFC), Vitória a Minas (EFVM), Norte-Sul (FNS) and Centro-Atlântica (FCA) - transported 6.207 billion ntk of general cargo for clients in 2Q09, increasing $22.9 \%$ compared to 1 Q09 levels.

The increase in volumes of general cargo is partially explained by the seasonality in Brazilian agricultural production, increasing the demand for logistics services during the second and third quarters of each year. Volumes of agricultural products transported by our railroads grew $53.5 \%$ qoq and $12.9 \%$ yoy.

The main cargoes carried by our railroads in 2Q09 were agricultural products (57.3\%), steel industry inputs and products (24.6\%), fuels (6.1\%), building materials and forestry products (4.6\%), and others (7.4\%).

Our ports and maritime terminals handled 5.238 million metric tons of general cargo, against 3.929 million metric tons in the previous quarter, as a result of higher seasonal demand to handle agricultural products mainly in the North region of Brazil.

In 2Q09, there was a swing in adjusted EBIT margin, climbing to $15.3 \%$, from minus $8.2 \%$ in 1Q09.

Adjusted EBITDA reached US\$ 91 million, compared to US\$ 29 million in 1Q09. The increase of US\$ 62 million relative to 1Q09 was mainly a result of cost savings (US\$ 27 million), higher average sales prices (US\$ 26 million) and higher transported volume (US\$ 16 million).

| Table 23 - OPERATING REVENUE BY PRODUCT |  |  |  |
| :---: | :---: | :---: | :---: |
| in US\$ million | 2Q08 | 1009 | 2Q09 |
| Railroads | 382 | 157 | 223 |
| Ports | 81 | 42 | 57 |
| Total | 463 | 199 | 280 |
| Table 24 - LOGISTICS SERVICES |  |  |  |
|  | 2 Q 08 | 1009 | 2Q09 |
| Railroads (million ntk) | 7,211 | 5,049 | 6,207 |
| Table 25 - SELECTED FINANCIAL INDICATORS |  |  |  |
|  | 2 Q 08 | 1Q09 | 2Q09 |
| Adjusted EBIT margin (\%) | 22.2 | -8.2 | 15.3 |
| Adjusted EBITDA (US\$ million) | 220 | 29 | 91 |

For selected financial indicators of the main companies not consolidated, see our quarterly financial statements on www.vale.com/ Investors/ Financial Performance / SEC Reports.

## ४ CONFERENCE CALL AND WEBCAST

Vale will hold a conference call and webcast on July 30, at 11:00 am Rio de Janeiro time, 10:00 am US Eastern Standard Time, 3:00 pm UK time and 4:00 pm Paris time. To connect the webcast, please dial:

Participants from Brazil: (55 11) 4688-6318
Participants from USA: (1-800) 860-2442
Participants from other countries: (1-412) 858-4600
Access code: VALE
Instructions for participation will be available on the website www.vale.com/ Investors. A recording will be available on Vale's website for 90 days from July 30, 2009.

## ४ BOX - MANDATORILY CONVERTIBLE NOTES

On July 7, 2009, we issued two series of mandatorily convertible notes, VALE-2012 and VALE.P-2012, due in 2012, raising US\$ 942 million. This transaction had exactly the same characteristics as the one made in July 2007, when we raised US\$ 1.88 billion through the issuance of two series of mandatorily convertible notes due in 2010.

Both issues of mandatorily convertible notes - 2007 and 2009 - were classified by our independent auditors and credit rating agencies as $100 \%$ equity and, consequently, had no impact on our debt and/or debt leverage.
The US\$ 292,445,150 notes due 2012, Series VALE-2012, will bear interest at $6.75 \%$ per year. At their maturity on June 15, 2012, they will be mandatorily converted into ADRs, each representing one common share of Vale. Additional remuneration will be payable based on the net amount of cash distributions paid to ADR holders.

The US\$ 649,213,250 notes due 2012, Series VALE.P-2012, will also bear interest at $6.75 \%$ per year. At their maturity on June 15, 2012, they will be mandatorily converted into ADRs, each representing one preferred class A share of Vale. Additional remuneration will be payable based on the net amount of cash distributions paid to ADR holders.

The ADRs into which the Series VALE-2012 Notes and the Series VALE.P-2012 Notes are convertible will represent up to an aggregate of $18,415,859$ common shares and $47,284,800$ preferred class A shares of Vale, all of which Vale currently holds in treasury.
Given our expectations of stronger fundamentals of minerals and metals markets for the following years, along with our low-cost structure, financial strength and world-class assets, we believe that it was a very attractive transaction for both Vale and investors.

Due to the conversion premium of $17.5 \%$, Vale retains some upside on future appreciation of its share price. If at the maturity date prices are higher than the initial price, Vale will deliver less than $100 \%$ of the underlying shares up to a limit of $85 \%$. This limit is reached if prices at the maturity date are equal to 1.175 times the initial price or higher than that. As a result, the issuer could end up paying a lower cost than the coupon rate plus the additional remuneration.
If the share price at the maturity date is higher than the initial price but lower than 1.175 times the initial price, the investor will receive $100 \%$ of the principal invested. The investor will enjoy all the marginal upside arising from share prices at the maturity date being higher than 1.175 times the initial price.
On the other hand, the investor earns interest payments and the additional remuneration in exchange for bearing the risk of loss of principal, which will materialize if the share price is lower than the initial price at the maturity date.

For further details about the mandatorily convertible notes, please see the Final Prospectus available in our website: www.vale.com / Investors / Equity and Debt / Hybrid Securities.

## US GAAP

$\checkmark$ ANNEX 1 - FINANCIAL STATEMENTS

| Table 26 - INCOME STATEMENTS |  |  |  |
| :---: | :---: | :---: | :---: |
| in US\$ million | 2 Q 08 | 1Q09 | 2 Q 09 |
| Gross operating revenues | 10,897 | 5,421 | 5,084 |
| Taxes | (297) | (97) | (136) |
| Net operating revenue | 10,600 | 5,324 | 4,948 |
| Cost of goods sold | $(4,763)$ | $(2,900)$ | $(3,135)$ |
| Gross profit | 5,837 | 2,424 | 1,813 |
| Gross margin (\%) | 55.1 | 45.5 | 36.6 |
| Selling, general and administrative expenses | (344) | (233) | (230) |
| Research and development expenses | (269) | (189) | (265) |
| Others | 11 | (317) | (342) |
| Operating profit | 5,235 | 1,685 | 976 |
| Financial revenues | 23 | 125 | 93 |
| Financial expenses | (349) | (287) | (293) |
| Gains (losses) on derivatives, net | 655 | 18 | 873 |
| Monetary variation | 838 | 16 | 523 |
| Gains on sale of affiliates | - | - | 157 |
| Tax and social contribution (Current) | $(1,173)$ | (477) | $(1,494)$ |
| Tax and social contribution (Deferred) | (333) | 171 | (130) |
| Equity income and provision for losses | 260 | 72 | 135 |
| Minority shareholding participation | (147) | 40 | (50) |
| Net earnings | 5,009 | 1,363 | 790 |
| Earnings per share (US\$) | 1.04 | 0.26 | 0.15 |
| Diluted earnings per share (US\$) | 1.02 | 0.26 | 0.15 |


| Table 27 - FINANCIAL RESULT |  |  |  |
| :---: | :---: | :---: | :---: |
| in US\$ million | 2Q08 | 1009 | 2Q09 |
| Gross interest | (254) | (239) | (213) |
| Debt with third parties | (252) | (236) | (212) |
| Debt with related parties | (2) | (3) | (1) |
| Tax and labour contingencies | (8) | (16) | (14) |
| Others | (87) | (32) | (66) |
| Financial expenses | (349) | (287) | (293) |
| Financial income | 23 | 125 | 93 |
| Derivatives | 655 | 18 | 873 |
| Foreign exchange and monetary gain (losses), net | 838 | 16 | 523 |
| Financial result, net | 1,167 | (128) | 1,196 |

Table 28 - EQUITY INCOME BY BUSINESS SEGMENT

| in US\$ million | 2008 | $\%$ | 1Q09 | $\%$ | $2 Q 09$ | $\%$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Ferrous minerals | 236 | 90.8 | 51 | 70.8 | 93 | 68.9 |
| Non-ferrous minerals | 8 | 3.1 | - | - | 3 | 2.2 |
| Logistics | $(41)$ | -15.8 | 21 | 29.2 | 24 | 17.8 |
| Coal | 20 | 7.7 | 11 | 15.3 | 8 | 5.9 |
| Steel | 32 | 12.3 | $(11)$ | -15.3 | 7 | 5.2 |
| Others | 5 | 1.9 | - | - | - | - |
| Total | $\mathbf{2 6 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{7 2}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 3 5}$ | $\mathbf{1 0 0 . 0}$ |


| Table 29 - BALANCE SHEET |  |  |  |
| :---: | :---: | :---: | :---: |
| in US\$ million | 06/30/08 | 03/31/09 | 06/30/09 |
| Assets |  |  |  |
| Current | 13,791 | 22,033 | 20,528 |
| Long-term | 9,035 | 5,189 | 6,264 |
| Fixed | 63,106 | 54,508 | 62,264 |
| Total | 85,932 | 81,730 | 89,056 |
| Liabilities |  |  |  |
| Current | 8,595 | 6,924 | 5,788 |
| Long term | 35,632 | 28,894 | 30,914 |
| Shareholders' equity | 41,705 | 45,912 | 52,354 |
| Paid-up capital | 12,804 | 24,231 | 24,231 |
| Reserves | 27,032 | 17,727 | 23,777 |
| Non controlling interest | 0 | 2,085 | 2,477 |
| Mandatory convertible notes | 1,869 | 1,869 | 1,869 |
| Total | 85,932 | 81,730 | 89,056 |


| Table 30 - CASH FLOW | in US\$ million |  |  |
| :---: | :---: | :---: | :---: |
|  | 2 Q 08 | 1Q09 | 2 Q 09 |
| Cash flows from operating activities: |  |  |  |
| Net income | 5,156 | 1,323 | 840 |
| Adjustments to reconcile net income with cash provided by operating activities: |  |  |  |
| Depreciation, depletion and amortization | 760 | 559 | 643 |
| Dividends received | 223 | 37 | 106 |
| Equity in results of affiliates and joint ventures and change in provision for losses on equity investments | (260) | (72) | (135) |
| Deferred income taxes | 333 | (171) | 130 |
| Loss on sale of property, plant and equipment | 86 | 41 | 46 |
| Gain on sale of investment | - | - | (157) |
| Foreign exchange and monetary losses | $(1,300)$ | (57) | (817) |
| Net unrealized derivative losses | (655) | (18) | (873) |
| Net interest payable | (45) | 3 | (54) |
| Others | (3) | (16) | (18) |
| Decrease (increase) in assets: |  |  |  |
| Accounts receivable | (802) | 391 | 271 |
| Inventories | (283) | 119 | 98 |
| Recoverable taxes | 32 | (104) | 1,275 |
| Others | 47 | (77) | (8) |
| Increase (decrease) in liabilities: |  |  |  |
| Suppliers | 320 | (103) | (227) |
| Payroll and related charges | 177 | (139) | 62 |
| Income tax | 750 | 216 | (276) |
| Others | (455) | 233 | 160 |
| Net cash provided by operating activities | 4,081 | 2,165 | 1,066 |
| Cash flows from investing activities: |  |  |  |
| Short term investments | - | (909) | 217 |
| Loans and advances receivable | (33) | (12) | (52) |
| Guarantees and deposits | (2) | (19) | (34) |
| Additions to investments | (11) | (138) | (291) |
| Additions to property, plant and equipment | $(2,105)$ | $(1,688)$ | $(2,008)$ |
| Proceeds from disposals of investment | - | - | 277 |
| Net cash used to acquire subsidiaries | - | (850) | (300) |
| Net cash used in investing activities | $(2,151)$ | $(3,616)$ | $(2,191)$ |
| Cash flows from financing activities: |  |  |  |
| Short-term debt, net issuances (repayments) | (240) | 29 | 9 |
| Loans | 1 | (68) | (155) |
| Long-term debt | 236 | 185 | 296 |
| Repayment of long-term debt | (647) | (110) | (52) |
| Treasury stock | - | (10) | - |
| Interest attributed to shareholders | $(1,250)$ | - | $(1,255)$ |
| Dividends to minority interest | (87) | - | - |
| Net cash used in financing activities | $(1,987)$ | 26 | $(1,157)$ |
| Increase (decrease) in cash and cash equivalents | (57) | $(1,425)$ | $(2,282)$ |
| Effect of exchange rate changes on cash and cash equivalents | (53) | 91 | 1,477 |
| Cash and cash equivalents, beginning of period | 2,264 | 10,331 | 8,997 |
| Cash and cash equivalents, end of period | 2,154 | 8,997 | 8,192 |
| Cash paid during the period for: |  |  |  |
| Interest on short-term debt | (5) | - | - |
| Interest on long-term debt | (357) | (277) | (311) |
| Income tax | (320) | (143) | (85) |
| Non-cash transactions |  |  |  |
| Interest capitalized | 14 | 65 | 50 |

## Y ANNEX 2 - VOLUMES SOLD, PRICES, MARGINS AND CASH FLOWS

## Table 31 - VOLUMES SOLD: MINERALS AND METALS

|  | Table 31 - VOLUMES SOLD: MINERALS AND METALS |  |  |
| :--- | ---: | ---: | ---: | ---: |
| in '000 metric tons | 2Q08 | 1009 | 2Q09 |
| Iron ore | 70,876 | 49,829 | 50,668 |
| Pellets | 7,982 | 2,271 | 3,153 |
| Manganese ore | 301 | 60 | 297 |
| Ferroalloys | 125 | 53 | 71 |
| Nickel | 69 | 59 | 69 |
| Copper | 73 | 66 | 54 |
| Kaolin | 285 | 179 | 193 |
| Potash | 181 | 105 | 192 |
| Precious metals (oz) | 597 | 710 | 522 |
| PGMs (oz) | 102 | 92 | 97 |
| Cobalt (metric ton) | 665 | 636 | 681 |
| Aluminum | 126 | 127 | 124 |
| Alumina | 861 | 1,257 | 1,403 |
| Bauxite | 104 | 49 | 0 |
| Thermal coal | 231 | 430 | 692 |
| Metallurgical coal | 680 | 546 | 425 |
| Railroads (million ntk) | 7,211 | 5,049 | 6,207 |


|  | Table 32 - AVERAGE SALE PRICE |  |  |
| :--- | ---: | ---: | ---: |
| in US\$/metric ton | 2Q08 | $\mathbf{1 0 0 9}$ | 2Q09 |
| Iron ore | 69.80 | 62.79 | 47.82 |
| Pellets | 146.33 | 118.45 | 55.82 |
| Manganese ore | 275.75 | 250.00 | 144.78 |
| Ferroalloys | $2,768.00$ | $1,452.83$ | 971.83 |
| Nickel | $26,992.70$ | $10,776.51$ | $13,223.86$ |
| Copper | $8,483.61$ | $3,566.36$ | $5,051.54$ |
| Kaolin | 189.47 | 217.88 | 217.62 |
| Potash | 58.11 | 619.05 | 630.21 |
| Platinum (US\$/oz) | $2,036.90$ | $1,020.56$ | $1,028.53$ |
| Cobalt (US\$/lb) | 38.88 | 9.27 | 7.99 |
| Aluminum | $3,126.98$ | $1,519.69$ | $1,451.61$ |
| Alumina | 382.11 | 194.91 | 196.01 |
| Bauxite | 38.46 | 40.82 | - |
| Thermal coal | 79.19 | 80.41 | 71.83 |
| Metallurgical coal | 124.49 | 182.01 | 108.64 |


| Table 33 - ADJUSTED EBIT MARGIN BY BUSINESS SEGMENT |  |  |  |
| :---: | :---: | :---: | :---: |
|  | 2 Q 08 | 1009 | 2 Q 09 |
| Ferrous minerals | 59.3\% | 56.5\% | 39.8\% |
| Non-ferrous minerals | 36.0\% | -17.2\% | 0.2\% |
| Logistics | 22.2\% | -8.2\% | 15.3\% |
| Coal | 0.0\% | 20.1\% | -31.3\% |
| Total | 49.4\% | 31.6\% | 19.7\% |

Table 34 - ADJUSTED EBITDA BY BUSINESS SEGMENT

| in US\$ million | $2 \mathrm{Q08}$ | $\mathbf{1 Q 0 9}$ | $\mathbf{2 Q 0 9}$ |
| :--- | ---: | ---: | ---: |
| Ferrous minerals | 4,311 | 2,212 | 1,459 |
| Non- ferrous minerals | 1,919 | 155 | 413 |
| Logistics | 220 | 29 | 91 |
| Coal | 14 | 43 | $(7)$ |
| Others | $(246)$ | $(158)$ | $(231)$ |
| Total | $\mathbf{6 , 2 1 8}$ | $\mathbf{2 , 2 8 1}$ | $\mathbf{1 , 7 2 5}$ |

## r ANNEX 3 - RECONCILIATION OF US GAAP and "NONGAAP" INFORMATION

## (a) Adjusted EBIT

| Table 35 - Adjusted EBIT |  |  |  |
| :--- | ---: | ---: | ---: |
| in US\$ million | $\mathbf{2 Q 0 8}$ | $\mathbf{1 0 0 9}$ | $\mathbf{2 Q 0 9}$ |
| Net operating revenues | 10,600 | 5,324 | 4,948 |
| COGS | $(4,763)$ | $(2,900)$ | $(3,135)$ |
| SG\&A | $(344)$ | $(233)$ | $(230)$ |
| Research and development | $(269)$ | $(189)$ | $(265)$ |
| Other operational expenses | 11 | $(317)$ | $(342)$ |
| Adjusted EBIT | $\mathbf{5 , 2 3 5}$ | $\mathbf{1 , 6 8 5}$ | $\mathbf{9 7 6}$ |

## (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:

| Table 36 - Adjusted EBITDA |  |  |  |
| :---: | :---: | :---: | :---: |
| RECONCILIATION BETWEEN ADJUSTED EBITDA AND OPERATIONAL CASH FLOW |  |  |  |
| in US\$ million | 2Q08 | 1Q09 | 2Q09 |
| Operational cash flow | 4,081 | 2,165 | 1,066 |
| Income tax | 1,173 | 477 | 1,494 |
| FX and monetary losses | 462 | 41 | 294 |
| Financial expenses | (284) | 141 | (619) |
| Net working capital | 214 | (536) | $(1,355)$ |
| Other | 572 | (7) | 845 |
| Adjusted EBITDA | 6,218 | 2,281 | 1,725 |

(c) Net debt

Table 37 - Net debt

| RECONCILIATION BETWEEN GROSS DEBT AND NET DEBT |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| in US\$ million | 2008 | $\mathbf{1 Q 0 9}$ | 2Q09 |
| Total debt | 20,372 | 18,414 | 19,493 |
| Cash and cash equivalents | 2,154 | 12,214 | 11,192 |
| Net debt | 18,218 | 6,200 | 8,301 |

(d) Total debt / LTM adjusted EBITDA

(e) Total debt / Enterprise value

| Table 39 - Total debt / Enterprise value |  |  |  |
| :---: | :---: | :---: | :---: |
|  | 2Q08 | 1009 | 2 Q 09 |
| Total debt / EV (\%) | 11.14 | 25.12 | 19.87 |
| Total debt / total assets (\%) | 23.71 | 22.53 | 21.89 |

Enterprise value $=$ Market capitalization + Net debt
(f) LTM EBITDA adjusted / LTM interest payments

|  | 2008 | 1009 |  |
| :---: | :---: | :---: | :---: |
| LTM adjusted EBITDA / LTM interest payments (x) | 13.04 | 13.96 | 10.83 |
| LTM operational profit / LTM interest payments (x) | 10.64 | 11.49 | 8.45 |

[^7]
[^0]:    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: Vale Inco, MBR, Cadam, PPSA, Alunorte, Albras, Valesul, Vale Manganês S.A., Vale Manganèse France, Vale Manganese Norway AS, Urucum Mineração S.A., Ferrovia Centro-Atlântica (FCA), Vale Australia, Vale International and Vale Overseas.

[^1]:    ${ }^{2}$ NiMH=nickel metal hydride, Li-ion= lithium ion

[^2]:    ${ }^{3}$ A composite fee charged by smelters to process copper concentrates - produced by miners - into copper anodes and to refine them into copper cathodes.

[^3]:    ${ }^{4}$ COGS currency exposure in 2Q09 was made up as follows: $61 \%$ in Brazilian reais, $19 \%$ in Canadian dollars, $15 \%$ in US dollars, 2\% in Indonesian rupiah and 3\% in other currencies.

[^4]:    ${ }^{5}$ This is an accounting figure. In the Investment section of this press release, we disclose a figure of US\$ 254 million for research \& development, computed in accordance with financial disbursements in 2Q09.

[^5]:    ${ }^{6}$ From the beginning to the end of the 2Q09 period, the Brazilian real appreciated $18.6 \%$ against the US dollar.

[^6]:    ${ }^{7}$ Expected default frequency ( $E \mathrm{DF}^{\mathrm{TM}}$ ) is a market-based credit measure developed by Moody's KMV. It measures the probability of default over the subsequent twelve-month period. Because it is based on observable information in equity markets, EDF provides a timely and objective assessment of credit risk, and it has shown a very good track record as a predictor of defaults.

[^7]:    This press release may include declarations about Vale's expectations regarding future events or results. All declarations based upon future expectations, rather than historical facts, are subject to various risks and uncertainties. Vale cannot guarantee that such declarations will prove to be correct. These risks and uncertainties include factors related to the following: (a) the countries where Vale operates, mainly Brazil and Canada; (b) the global economy; (c) capital markets; (d) the mining and metals businesses and their dependence upon global industrial production, which is cyclical by nature; and (e) the high degree of global competition in the markets in which Vale operates. To obtain further information on factors that may give rise to results different from those forecast by Vale, please consult the reports filed with the Brazilian Comissão de Valores Mobiliários (CVM), the French Autorité des Marchés Financiers (AMF), and with the U.S. Securities and Exchange Commission (SEC), including Vale's most recent Annual Report on Form 20F and its reports on Form 6K.

