# UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

## **FORM 20-F**

# ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended: **December 31, 2004**Commission file number: **001-15030** 

### COMPANHIA VALE DO RIO DOCE

### VALE OVERSEAS LIMITED

(Exact name of Registrant as specified in its charter)

(Exact name of Registrant as specified in its charter)

### Federative Republic of Brazil

Cayman Islands

(Jurisdiction of incorporation or organization)

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

(Address of principal executive offices)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of Each Class

Preferred class A shares of CVRD, no par value per share

American Depositary Shares (as evidenced by American depositary receipts) each representing one preferred class A share of CVRD

Common shares of CVRD, no par value per share

American Depositary Shares (as evidenced by American depositary Rew York Stock Exchange\*

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American Depositary Shares (as evidenced by American depositary Rew York Stock Exchange\*

American Depositary Shares (as evidenced by American depositary Rew York Stock Exchange\*

Securities registered or to be registered pursuant to Section 12(g) of the Act: **None**Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: **None**The number of outstanding shares of each class of stock of CVRD as of December 31, 2004 was:

735,803,919 common shares, no par value per share 415,715,785 preferred class A shares, no par value per share 3 golden shares, no par value per share

ndicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the
Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required
o file such reports) and (2) has been subject to such filing requirements for the past 90 days.

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	Yes 🖂	No 🗌
ndicate by check mark which financial stateme	ent item the regis Item 17	

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<sup>\*</sup> Shares are not listed for trading, but only in connection with the registration of American Depositary Shares pursuant to the requirements of the New York Stock Exchange.

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# GLOSSARY

Alumina	Aluminum oxide. It is extracted from bauxite in a chemical refining process and is the principal raw material in the electro-chemical process from which aluminum is produced.
Anthracite	The hardest coal type which contains a high percentage of fixed carbon and a low percentage of volatile matter. Anthracite is the highest rank coal and it contains approximately 90% fixed carbon, more than any other form of coal. Anthracite has a semi-metallic luster and is capable of burning with little smoke. Mainly used for metallurgical purposes.
Bauxite	A rock composed primarily of hydrated aluminum oxides. It is the principal ore of alumina, the raw material from which aluminum is made.
Beneficiation	The process of separating, concentrating and classifying ore by particle size or some other characteristic ( <i>e.g.</i> , specific gravity, magnetic susceptibility, surface chemistry, etc.) in order to obtain the mineral or metal of interest.
Coal	Coal is a black or brownish-black solid combustible substance formed by the decomposition of vegetable matter without access to air. The rank of coal, which includes anthracite, bituminous coal (both are called hard coal), subbituminous coal, and lignite, is based on fixed carbon, volatile matter, and heating value.
Coke	It is a coking coal beneficiation product essential in transforming iron ore into pig iron.
Coking Coal	A bituminous hard coal with a quality that allows the production of coke suitable to support a blast furnace charge. Normally used in coke ovens for metallurgical purposes (production of pig iron).
Concentration	Physical, chemical or biological process to increase the grade of the metal or mineral of interest.
Copper	A reddish brown metallic element. Copper is remarkably conductive, both thermally and electrically. It is highly malleable and ductile and is easily rolled into sheet and drawn into wire.
Copper Concentrate	Material produced by concentration of copper minerals contained in the copper ore. It is the raw material used by the smelters to produce copper metal.
DR	Direct Reduction. Process that removes oxygen from iron ore by using natural gas. The resulting product has an iron content of 90% to 92%.
DRI	Direct Reduced Iron. Iron ore (lump or pellets) converted by the Direct Reduction process, used mainly as a scrap substitute in electric furnace steel making.

DWT	Deadweight ton. The measurement unit of a vessel's capacity for cargo, fuel oil, stores and crew, measured in metric tons of 1,000 kg. A vessel's total deadweight is the total weight the vessel can carry when loaded to a particular load line.
Fe unit	A measure of the iron content in the iron ore that is equivalent to 1% iron content in 1 ton of iron ore.
Ferroalloys	Ferroalloys are alloys of iron that contain one or more other chemical elements. These alloys are used to add these other elements into molten metal, usually in steel making. The principal ferroalloys are those of chromium, manganese, and silicon. Manganese is essential to the production of virtually all steels and is important in the production of cast iron.
FOB	Free on Board. It indicates that the purchaser pays for shipping, insurance and all the other costs associated with transportation of the goods to their destination.
Gold	A precious metal sometimes found free in nature, but usually found in conjunction with silver, quartz, calcite, lead, tellurium, zinc or copper. It is the most malleable and ductile metal, a good conductor of heat and electricity and unaffected by air and most reagents.
Grade	The proportion of metal or mineral present in ore or any other host material.
HBI	Hot Briquetted Iron. Direct reduced iron that has been processed into briquettes. Because DRI (direct reduced iron) may spontaneously combust during transportation, HBI is preferred when the metallic material must be stored or moved.
Kaolin	A fine white aluminum silicate clay used as a coating agent, filler, extender and absorbent in the paper, ceramics and pharmaceutical industries.
Lump ore	Iron ore or manganese ore with the coarsest particle size in the range of 6.35 mm to 50 mm diameter, but varying slightly between different mines and ores.
Manganese ore	A hard brittle metallic element found primarily in the minerals pyrolusite, hausmannite and manganate.
Methanol	An alcohol fuel largely used in the production of chemical and plastic compounds.
Mineral deposit(s) or mineralized material(s)	Refers to a mineralized body that has been intersected by a sufficient number of closely spaced drill holes and/or underground/surface samples to support sufficient tonnage and grade of metal(s) or mineral(s) of interest to warrant further exploration-development work. The mineral deposit does not qualify as an ore body until it can be legally and economically extracted at the time of ore reserve determination.

Nickel	A silvery white metal that takes on a high polish. It is hard, malleable, ductible, somewhat ferromagnetic, and a fair conductor of heat and electricity. It belongs to the iron-cobalt group of metals and is chiefly valuable for the alloys it forms, such as stainless steel and other corrosion-resistant alloys.
Ntk	Net tons (the weight of the goods being transported excluding the weight of the wagon) per kilometer.
Open pit mining	The extraction method by which surface or barren rock is removed so that ore may be removed using power shovels, front-end loaders, hydraulic excavators, draglines, etc.
Oxides	Compounds of oxygen with another element. For example, magnetite is an oxide mineral formed by the chemical union of iron with oxygen.
Pellet feed (Ultra-fine)	Ultra-fine (less than 0.15 mm) iron ore particles generated by the mining, grading, handling and transporting of iron ore. This material is aggregated into pellets through an agglomeration process.
Pellets	Agglomerated ultra-fine iron ore particles of a size and quality suitable for particular steel making processes. Our pellets range in size from 8 mm to 18 mm.
Pig iron	Melted iron produced in a blast furnace.
Potash	A potassium chloride compound, chiefly KCl, used as simple fertilizer and in the production of mixture fertilizer.
Primary Aluminum	White metal that is obtained in the electro-chemical process of reduction of the aluminum oxide.
Probable (indicated) reserves	Reserves for which quantity and grade and/or quality are computed from information similar to that used for proven (measured) reserves, but the sites for inspection, sampling and measurement are farther apart or are otherwise less adequately spaced. The degree of assurance, although lower than that for proven (measured) reserves, is high enough to assume continuity between points of observation.
Proven (measured) reserves	Reserves for which (1) quantity is computed from dimensions revealed in outcrops, trenches, workings or drill holes; (2) grade and/or quality are computed from the results of detailed sampling; and (3) the sites for inspection, sampling and measurement are spaced so closely and the geologic character is so well defined that size, shape, depth and mineral content of reserves are well-established.
Reserve	Refers to that part of a mineral deposit that could be economically and legally extracted or produced at the time of the reserve determination.
Run-of-mine	Ore in its natural (unprocessed) state, as mined, without having been crushed.

Seaborne market	Comprises the total ore trade (exports) between countries using ocean bulk vessels.
Sinter feed (Fines)	Refers to iron ore with particles in the range of 0.15 mm to 6.35 mm diameter. Suitable for sintering.
Sintering	Refers to the agglomeration of small particles into a coherent mass by heating without melting.
Slabs	The most common type of semi-finished steel. Traditional slabs measure 10 inches thick and 30-85 inches wide (and average approximately 20 feet long), while the output of the recently developed "thin slab" casters is approximately two inches thick. Subsequent to casting, slabs are sent to the hot-strip mill to be rolled into coiled sheet and plate products.
Thermal Coal	Refers to the type of hard coal that is suitable to energy generation after its steaming properties (for use in thermal power stations).
Ton	Metric ton, equaling 1,000 kilograms.
Troy ounce	One troy ounce equals 31.103 grams.
Underground Mining	Mineral exploitation in which extraction operations are carried out beneath the earth's surface.

### PRESENTATION OF FINANCIAL INFORMATION

We have prepared our financial statements appearing in this annual report in accordance with generally accepted accounting principles in the United States (U.S. GAAP), which differ in certain respects from accounting practices adopted in Brazil (defined as Brazilian GAAP). Brazilian GAAP is determined by the requirements of Law No. 6,404, dated December 15, 1976, as amended (the Brazilian Corporate Law), and the rules and regulations of the *Comissão de Valores Mobiliários*, or CVM, the Brazilian Securities Commission. We also publish Brazilian GAAP financial statements in Brazil, which we refer to as our Brazilian Corporate Law financial statements. We use our Brazilian Corporate Law financial statements for:

- reports to Brazilian shareholders;
- filings with the CVM;
- determination of dividend payments; and
- determination of tax liability.

Our financial statements and the other financial information appearing in this annual report have been translated from Brazilian *reais* into U.S. dollars on the basis explained in Note 3 to our financial statements unless we indicate otherwise.

References to "real," "reais" or "R\$" are to Brazilian reais (plural) and to the Brazilian real (singular), the official currency of Brazil. References to "U.S. dollars," "dollars" or "US\$" are to United States dollars.

Unless otherwise specified, metric units have been used, e.g., tons refer to metric tons.

References to "CVRD" are to Companhia Vale do Rio Doce. References to "Vale Overseas" are to Vale Overseas Limited. References to "us" or "we" are to CVRD, its consolidated subsidiaries and its joint ventures and other affiliated companies. References to "affiliated companies" are to companies in which Companhia Vale do Rio Doce has a minority investment, and exclude controlled affiliates that are consolidated for financial reporting purposes.

References to "ANEEL" are to Agência Nacional de Energia Elétrica, the Brazilian energy regulatory agency.

References to "ANTT" are to *Agência Nacional de Transportes Terrestres*, the Brazilian regulatory agency for the transportation sector.

References to our "ADSs" or "American Depositary Shares" include both our common American Depositary Shares (our common ADSs), each of which represents one common share of CVRD, and our preferred American Depositary Shares (our preferred ADSs), each of which represents one preferred class A share of CVRD. American Depositary Shares are represented by American depositary receipts (ADRs) issued by JPMorgan Chase Bank, as depositary.

Reference to "BNDES" are to *Banco Nacional de Desenvolvimento Econômico e Social*, the Brazilian National Development Bank.

### PRESENTATION OF INFORMATION CONCERNING RESERVES

The estimates of the proven and probable reserves at our mines and the estimates of mine life, as of December 31, 2004, included in this annual report have been calculated according to the technical definitions required by the U.S. Securities and Exchange Commission, or the SEC. We derived estimates of mine life described in this annual report from such reserve estimates. We have adjusted ore reserve estimates for extraction losses and metallurgical recoveries during extraction for manganese ore and bauxite deposits. Our reserve estimates of iron ore, kaolin, copper and potash are reported as *in situ* tons with adjustments for dilution and mining losses. See *Item 3. Key Information—Risk Factors—Risks Relating to Our Business* for a description of risks relating to reserves and reserves estimates. We have retained Pincock, Allen & Holt to audit and verify most of our estimates of proven and probable reserves as of December 31, 2004.

### FORWARD-LOOKING STATEMENTS

This annual report contains statements that constitute forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. Many of the forward-looking statements contained in this annual report can be identified by the use of forward-looking words such as "anticipate," "believe," "could," "expect," "should," "plan," "intend," "estimate" and "potential," among others. Those statements appear in a number of places in this annual report and include statements regarding our intent, belief or current expectations with respect to:

- our direction and future operation;
- the implementation of our principal operating strategies, including our potential participation in privatization, acquisition or joint venture transactions or other investment opportunities;
- our acquisition or divestiture plans;
- the implementation of our financing strategy and capital expenditure plans;
- the exploration of mineral reserves and development of mining facilities;
- the depletion and exhaustion of mines and mineral reserves;
- the declaration or payment of dividends;
- industry trends, including the direction of prices and expected levels of supply and demand;

- other factors or trends affecting our financial condition or results of operations; and
- the factors discussed under *Item 3*. *Key Information—Risk Factors*.

We caution you that forward-looking statements are not guarantees of future performance and involve risks and uncertainties. Actual results may differ materially from those in the forward-looking statements as a result of various factors, including those identified under *Item 3. Key Information—Risk Factors*. These risks and uncertainties include factors relating to the Brazilian economy and securities markets, which exhibit volatility and can be adversely affected by developments in other countries, factors relating to the iron ore business and its dependence on the global steel industry, which is cyclical in nature, and factors relating to the highly competitive industries in which we operate. For additional information on factors that could cause our actual results to differ from expectations reflected in forward-looking statements, please see *Item 3. Key Information—Risk Factors*, and our reports filed with the SEC. Forward-looking statements speak only as of the date they are made, and we do not undertake any obligation to update them in light of new information or future developments.

### PART I

### Item 1. Identity of Directors, Senior Management and Advisers

Not applicable.

### Item 2. Offer Statistics and Expected Timetable

Not applicable.

### Item 3. Key Information

### SELECTED FINANCIAL DATA

The table below presents selected consolidated financial information as of and for the periods indicated. You should read this information together with our consolidated financial statements appearing in this annual report.

				For the	year en	ded Dece	mber 3	1,		
	2	000	2	2001	2	002	2	003	2	2004
					(in mil	lions of U	S <del>\$</del> )			
Statement of Income Data										
Net operating revenues	US\$	3,935	US\$	3,935	US\$	4,123	US\$	5,350	US\$	8,066
Cost of products and services		(2,429)		(2,272)		(2,263)		(3,128)		(4,081)
Selling, general and administrative expenses		(225)		(241)		(224)		(265)		(452)
Research and development		(48)		(43)		(50)		(82)		(153)
Employee profit sharing plan		(29)		(38)		(38)		(32)		(69)
Other expenses		(180)		(379)		(119)		(199)		(188)
Operating income		1,024		962		1,429		1,644		3,123
Non-operating income (expenses):										
Financial income (expenses)		(107)		(200)		(248)		(249)		(589)
Foreign exchange and monetary losses, net		(240)		(426)		(580)		242		65
Gain on sale of investments		54		784		_		17		404
Subtotal		(293)		158		(828)		10		(120)
Income before income taxes, equity results and										
minority interests		731		1,120		601		1,654		3,003
Income taxes benefit (charge)		32		218		149		(297)		(749)
Equity in results of affiliates and joint ventures and change in provision for losses on equity										
investments		322		(53)		(87)		306		542
Minority interests		1		2		17		(105)		(223)
Change in accounting practice for asset retirement obligations		_		_		_		(10)		_
Net income	US\$	1,086	US\$	1,287	US\$	680	US\$	1,548	US\$	2,573
Total cash paid to shareholders(1)	US\$	246	US\$	1,066	US\$	602	US\$	675	US\$	787

<sup>(1)</sup> Total cash paid to shareholders consists of cash paid during the period in respect to interest on shareholders' equity and dividends.

				For the	year end	ed Decei	nber 31,			
	200	00(1)	200	1 (1)	200	2 (1)	200.	3 (1)	20	04
		(in U	S\$ excep	ot record	e <mark>d divid</mark> e	ends and	interest	on share	holders	,
			equity p	er share i	in Brazil	ian <i>reais</i>	and sha	re numb	ers)	
Per Share Data – Earnings and Dividends										
Basic earnings per Common and Preferred Class A										
Share(2)	US\$	0.94	US\$	1.11	US\$	0.59	US\$	1.34	US\$	2.23
Diluted Earnings per Common and Preferred Class										
A Share (2)	US\$	0.94	US\$	1.11	US\$	0.59	US\$	1.34	US\$	2.23
Distributions on shareholders' equity per share in										
US\$(3)	US\$	0.22	US\$	0.88	US\$	0.56	US\$	0.59	US\$	0.68
Distributions on shareholders' equity per share in	D.0		<b>D</b> 0	4.00	<b>D</b> 0		<b>D</b> A		<b>D</b> A	4.0.5
Brazilian reais(3)	R\$	0.39	R\$	1.88	R\$	1.66	R\$	1.68	R\$	1.95
Weighted average number of shares outstanding (in thousands):										
Common shares(2)		749,949		749,592		749,592	7	734,804	7	735,804
Preferred class A shares(2)		404,751		405,126	405,126		415,713		415,716	
Total		154,700	1,	154,718	1,	154,718	1,1	51,517	1,1	151,520

In August 2004, a three for one stock split was carried out. Share and per-share amounts are provided after giving effect to the stock split.

<sup>(2)</sup> Each common American depositary share represents one common share and each preferred American depositary share represents one preferred class A share

preferred class A share.

(3) Our distributions to shareholders may take the form of dividends or of interest on shareholders' equity. From 1997 to 2003, all distributions were in the form of interest on shareholders' equity. In 2004, part of the distribution was made in the form of interest on shareholders' equity and part as dividends. The amount shown represents distributions paid during the year.

	At December 31,									
	20	00	20	01	20	002	2	003	2	004
•					in millio	ns of US	5)			
Balance Sheet Data										
Current assets	US\$	2,502	US\$	2,638	US\$	2,589	US\$	2,474	US\$	3,890
Property, plant and equipment, net		3,955		3,813		3,297		6,484		9,063
Investments in affiliated companies and joint ventures										
and other investments		1,795		1,218		732		1,034		1,159
Other assets		1,543		1,839		1,337		1,442		1,603
Total assets	US\$	9,795	US\$	9,508	US\$	7,955	US\$	11,434	US\$	15,715
Current liabilities		2,136		1,921		1,508		2,253		2,455
Long-term liabilities (1)		1,061		772		774		1,201		1,867
Long-term debt (2)		2,020		2,170		2,359		2,767		3,214
Total liabilities		5,217		4,863		4,641		6,221		7,536
Minority interest		9		5		27		329		788
Shareholders' equity:										
Capital stock		1,927		2,211		2,446		2,869		3,209
Additional paid-in capital		498		498		498		498		498
Reserves and retained earnings		2,144		1,931		343		1,517		3,684
Total shareholders' equity		4,569		4,640		3,287		4,884		7,391
Total liabilities and shareholders' equity	TICO	9,795	US\$	9,508	US\$	7,955	US\$	11,434	US\$	15,715

 <sup>(1)</sup> Excludes long-term debt.
 (2) Excludes current portion and long-term loans from related parties. At December 31, 2004, we had extended guarantees for borrowings of joint ventures and affiliated companies in an aggregate amount of US\$ 7 million. These contingent liabilities do not appear on the face of our consolidated balance sheets, but are disclosed in Note 18 to our consolidated financial statements.

#### **EXCHANGE RATES**

The Central Bank of Brazil (the "Central Bank") allows the *real*/U.S. dollar exchange rate to float freely, and it has intervened occasionally to control unstable movements in foreign exchange rates. We cannot predict whether the Central Bank or the Brazilian government will continue to let the *real* float freely or will intervene in the exchange rate market through a currency band system or otherwise. The *real* may depreciate or appreciate against the U.S. dollar substantially in the future. For more information on these risks, see *Item 3*. *Key Information—Risk Factors—Risks Relating to Brazil*.

The following table provides information on the selling exchange rate, expressed in *reais* per U.S. dollar (R\$/US\$), for the periods indicated. Prior to March 14, 2005, under Brazilian regulations, foreign exchange transactions were carried out on either the commercial rate exchange market or the floating rate exchange market. Rates in the two markets were generally the same. The table uses the commercial selling rate prior to March 14, 2005.

The following table sets forth the selling exchange rate, expressed in *reais* per U.S. dollar (R\$/US\$), for the periods indicated.

Year ended December 31,	Average for Period-end Period (1) Low						High		
2000       2001	R\$	1.955 2.320	R\$	1.835 2.353	R\$	1.723 1.936	R\$	1.985 2.801	
2002		3.533		2.998		2.271		3.955	
2003		2.889		3.060		2.822		3.662	
2004		2.654		2.917		2.654		3.205	
Month									
December 2004	R\$	2.654			R\$	2.654	R\$	2.787	
January 2005		2.625				2.625		2.722	
February 2005		2.595				2.562		2.632	
March 2005		2.666				2.601		2.762	
April 2005		2.531				2.520		2.660	
May 2005		2.394				2.378		2.515	

<sup>(1)</sup> Average of the rates of each period, using the average of the exchange rates on the last day of each month during each period. Source: Central Bank of Brazil.

On May 31, 2005, the selling rate was R \$2.4038 per US\$ 1.00.

#### RISK FACTORS

#### **Risks Relating to Our Business**

Due to our dependence on the global steel industry, fluctuations in the demand for steel could adversely affect our business.

Sales prices and volumes in the seaborne iron ore mining industry depend on the prevailing and expected level of demand for iron ore in the world steel industry. The world steel industry is cyclical. A number of factors, the most significant of these being the prevailing level of worldwide demand for steel products, influence the world steel industry. During periods of sluggish or declining regional or world economic growth, demand for steel products generally decreases, which usually leads to corresponding reductions in demand for iron ore.

Driven primarily by strong demand from Chinese steel makers, together with a modest expansion in other markets, the global seaborne iron ore market experienced high demand and rising iron ore and pellet prices in 2004. We cannot guarantee the length of time that demand will remain at current high levels or the direction of future prices. Sustained declines in world contract prices or sales volumes for iron ore could have a material adverse effect on our revenues.

# The mining industry is an intensely competitive industry, and we may have difficulty effectively competing with other mining companies in the future.

Intense competition characterizes the worldwide iron ore industry. We compete with a number of large international mining companies. Some of these competitors possess substantial iron ore mineral deposits at locations closer to our principal Asian and European customers. Competition from foreign or Brazilian iron ore producers may result in our losing market share and revenues. Our aluminum, manganese ore, copper concentrate and other activities are also subject to intense competition and are subject to similar risks.

# Demand for iron ore and pellets in peak periods may outstrip our production capacity, rendering us unable to satisfy customer demand.

Our ability to rapidly increase production capacity to satisfy increases in demand for iron ore is limited. In periods when customer demand exceeds our production capacity, we generally satisfy excess customer demand by reselling iron ore and pellets purchased from joint ventures or third parties. If we are unable to satisfy excess customer demand by purchasing from joint ventures or third parties, we may lose customers. Similarly, because it takes time to increase production capacity, we may fail to complete our iron ore expansion projects in time to take advantage of the current high levels of worldwide demand for iron ore. In addition, operating at or above full capacity may expose us to higher costs, including demurrage fees due to capacity restraints in our mines, railroads and ports.

# Aluminum and copper are actively traded on world commodity exchanges and their prices are subject to significant fluctuations.

Aluminum and copper are sold in an active world market and traded on commodity exchanges, such as the London Metals Exchange and the Commodity Exchange, Inc. Prices for these metals are subject to wide fluctuations and are affected by many factors, including actual and expected international economic and political conditions, levels of supply and demand, the availability and cost of substitutes, inventory levels maintained by producers and others, and actions of participants in the commodity markets. Prices for these metals are more volatile than iron ore and pellet prices because they respond more quickly to actual and expected changes in market conditions.

### Commencement of our copper operations will expose us to new risks.

In 2004, we began producing and marketing copper concentrate from our Sossego mine in Carajás. Copper is a new business for CVRD. Risks involved with our entrance into the copper business include, but are not limited to:

- copper concentrate is sold at prices determined by reference to copper prices on the London Metals Exchange, which are more volatile than prices in our iron ore and pellet businesses;
- we may experience higher than expected treating and refining costs that decrease our margins;
- due to our lack of experience in the copper industry, we may face operational difficulties leading to high operating costs;
- capacity increases by other copper producers may place downward pressure on copper prices; and
- we may encounter unexpected setbacks in expanding our copper operations due to construction delays or difficulties obtaining required environmental licenses.

# Brazilian export products (e.g., grain and steel) could lose their international competitiveness, reducing the internal demand for logistics services.

The Brazilian agriculture and steel industries are currently the primary drivers of demand for our logistics services. In 2004, approximately 78.8% of our logistics revenues were attributable to these markets. A reduction in world demand for Brazilian steel or agriculture exports could reduce demand for our logistics services and harm the profitability of our logistics business.

# Adverse economic developments in our principal markets, especially China, could reduce demand for our products, leading to lower revenues and profitability.

The world economy is the primary driver of demand in the global seaborne market for iron ore and pellets. In recent years, China has been the main driver of our sales increases. In 2004, 16.0% of our iron ore and pellet gross revenues were attributable to customers in China, and customers in China accounted for 11.7% of our total consolidated gross operating revenues. During the same period, 14.1% of our consolidated gross revenues were attributable to customers from Asian countries other than China and 30.1% were attributable to sales to European customers. A weakened global economy or a weakened economy in specific markets where we sell our products, such as China, could reduce demand, leading to lower revenues and profitability.

Our reserve estimates may be materially different from mineral quantities that we may actually recover, our estimates of mine life may prove inaccurate and market price fluctuations and changes in operating and capital costs may render certain ore reserves or mineral deposits uneconomical to mine.

Our reported ore reserves and mineral deposits are estimated quantities of ore and minerals that have the potential to be economically mined and processed under present and anticipated conditions to extract their mineral content. There are numerous uncertainties inherent in estimating quantities of reserves and in projecting potential future rates of mineral production, including many factors beyond our control. Reserve engineering is a subjective process of estimating underground deposits of minerals that cannot be measured in an exact manner, and the accuracy of any reserve estimate is a function of the quality of available data and engineering and geological interpretation and judgment. Estimates of different engineers may vary, and results of our mining and production subsequent to the date of an estimate may lead to revision of estimates. Reserve estimates and estimates of mine life may require revision based on actual production experience and other factors. For example, fluctuations in the market price of metals, reduced recovery rates or increased production costs due to inflation or other factors may render proven and probable reserves containing relatively lower grades of mineralization uneconomic to exploit and may ultimately result in a restatement of reserves.

### We may not be able to replenish our reserves, which could adversely affect our mining prospects.

We engage in mineral exploration, which is highly speculative in nature, involves many risks and frequently is nonproductive. Our exploration programs, which involve significant capital expenditures, may fail to result in the expansion or replacement of reserves depleted by current production. If we do not develop new reserves, we will not be able to sustain our current level of production beyond the remaining life of our existing mines.

# Even if we discover mineral deposits, we remain subject to drilling and production risks, which could adversely affect the mining process.

Once we discover mineral deposits, it can take us a number of years from the initial phases of drilling until production is possible, during which the economic feasibility of production may change. It takes substantial time and expenditures to:

- establish ore reserves through drilling;
- determine appropriate mining and metallurgical processes for optimizing the recovery of metal contained in ore;
- obtain environmental and other licenses;
- construct mining and processing facilities for greenfield properties; and
- obtain the ore or extract the metals from the ore.

If a project proves not to be economically feasible by the time we are able to exploit it, we may incur substantial write-offs. In addition, potential changes or complications involving metallurgical and other technological processes arising during the life of a project may result in cost overruns that may render the project not economically feasible.

### We face rising extraction costs over time as reserves deplete.

Reserves are gradually depleted in the ordinary course of a given mining operation. As mining progresses, distances to the primary crusher and to waste deposits become longer and pits become steeper. As a result, over time, we usually experience rising unit extraction costs with respect to each mine. Several of our mines have operated for long periods, and we will likely experience rising extraction costs per unit in the future at these operations.

#### An increase in fuel costs may adversely affect our business.

Our operations rely heavily on fuel sources. Fuel and gas represented 11% of our cost of goods sold in 2004. Fuel costs are a major component of our total costs in our logistics and pellets businesses, and indirectly affect numerous other areas of our business, including our mining and aluminum-related businesses. An increase in oil and gas prices may lead to lower margins in our logistics, mining and aluminum-related businesses.

# We are involved in ongoing antitrust proceedings that could result in divestitures, fines or other restrictions that could harm our business.

We are currently involved in 14 proceedings before the Conselho Administrativo de Defesa Econômica, or CADE, which is the primary Brazilian antitrust regulator. 11 of these proceedings involve post-transaction review of acquisition or joint venture transactions, which is required for nearly all of our acquisitions and joint ventures. The remaining 3 proceedings are administrative proceedings alleging that we have engaged in illegal anticompetitive conduct in connection with our iron ore, logistics and aluminum businesses. We intend to defend these claims vigorously, but cannot predict their outcome. If CADE were to find that we have engaged in anticompetitive conduct, it could order us to cease the conduct and/or to pay fines, which could be substantial.

Our principal pending post-transaction review proceedings involve CVRD's acquisitions of Socoimex, Samitri, Ferteco, Belém and CAEMI, and the agreement to unwind the cross-shareholdings between CVRD and Companhia Siderúrgica Nacional, or CSN. CADE may decline to approve these transactions or may place conditions on its approval that would have a material adverse effect on our business. In connection with CADE's review, the Brazilian Economic Law Secretariat of the Ministry of Justice, or SDE, and the Brazilian Secretariat for Economic Monitoring, or SEAE, have each issued reports to CADE recommending that CADE condition its approval of these transactions on actions that could have an adverse effect on our business, including maintenance of certain pricing policies, divestiture of certain of our mines, the termination of our rights regarding the Casa de Pedra iron ore mine and the sale and restructuring of certain of our logistics interests. Prior to rendering its decision, CADE must also receive and consider the recommendations of the Ministerio Publico Federal. CADE may adopt some, all or none of the recommendations made by such bodies, or choose to impose other conditions pursuant to its approval that would be harmful to our business.

For more information, see *Item 8*. *Financial Information—Legal Proceedings*.

### Our principal shareholder could have significant influence over our company.

Valepar, our principal shareholder, currently owns 53.3% of our outstanding common stock and 34.1% of our total outstanding capital. For a description of the ownership of our shares, see *Item 7. Major Shareholders and Related Party Transactions—Principal Shareholder.* As a result of its share ownership, Valepar can control the outcome of any action requiring shareholder approval, except for the appointment of certain directors and certain members of our *conselho fiscal*, or fiscal council. Further, the Brazilian government owns three golden shares of CVRD that give it limited veto powers over certain actions that we could otherwise take. For a detailed description of the veto powers granted to the Brazilian government by virtue of its ownership of these golden shares, see *Item 10. Additional Information—Common Shares and Preferred Shares—General.* 

# Many of our operations depend on joint ventures; our business could be adversely affected if our joint venture partners do not observe their commitments.

We currently operate important parts of our pelletizing, electric energy, aluminum, bauxite and steel businesses through joint ventures with other companies. Our forecasts and plans for these joint ventures assume that our joint venture partners will observe their obligations to make capital contributions, purchase products and, in some cases,

provide managerial talent. If any of our joint venture partners fails to observe its commitments, the affected joint venture may not be able to operate in accordance with its business plans or we may have to increase the level of our investment to give effect to these plans. For more information on our joint ventures, see *Item 4. Information on the Company—Lines of Business*.

#### Our market risk management strategy may not be effective.

We are exposed to traditional market risks such as fluctuations in interest rates, exchange rates and commodity prices. In order to partially protect ourselves against market volatility, we enter into hedging transactions to manage some of these risks. See *Item 11. Quantitative and Qualitative Disclosures About Market Risk*. Our hedging strategy may not be successful in minimizing our cash flow exposure to these fluctuations and we may fail to identify correlations between the various market risks to which we are subject. In addition, to the extent we partially hedge our commodity price exposure, we may limit the upside benefits that we would otherwise experience if commodities prices were to increase. We do not currently hedge risks relating to fluctuations in iron ore, manganese, ferroalloys, copper and oil prices.

Failure to maintain effective internal control over financial reporting could harm investor confidence in the integrity of our financial information, which could have an adverse impact on the trading price of our securities.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, beginning with our Annual Report on Form 20-F for the fiscal year ending December 31, 2006, we will be required to furnish a report by our management on our internal control over financial reporting. Such report will contain, among other matters, an assessment of the effectiveness of our internal control over financial reporting as of the end of the fiscal year, including a statement as to whether or not our internal control over financial reporting is effective. This assessment must include disclosure of any material weaknesses in our internal control over financial reporting identified by management. Such report will also contain a statement that our auditors have issued an attestation report on management's assessment of such internal controls.

If we identify material weaknesses in our internal control over financial reporting and we are unable to correct them in a timely manner, our management may be unable to conclude in its internal control report that our internal control over financial reporting is effective, which could cause investor confidence in the integrity of our financial reporting to suffer, lead to a decline in the trading price of our securities or limit our ability to access the capital markets. Similar adverse effects could result if our auditors express an adverse opinion or disclaim or qualify an opinion on management's assessment or on the effectiveness of our internal control over financial reporting.

We may not have adequate, if any, insurance coverage for some business risks that could lead to economically harmful consequences to us.

Our businesses are generally subject to a number of risks and hazards, including:

- industrial accidents;
- · railroad accidents;
- labor disputes;
- slope failures;
- environmental hazards;
- electricity stoppages;
- equipment or vessel failures; and
- severe weather and other natural phenomena.

These occurrences could result in damage to, or destruction of, mineral properties, production facilities, transportation facilities, equipment or vessels. They could also result in personal injury or death, environmental damage, waste of resources or intermediate products, delays or interruption in mining, production or transportation activities, monetary losses and possible legal liability. The insurance we maintain against risks that are typical in our business may not provide adequate coverage. Insurance against some risks (including liabilities for environmental pollution or certain hazards or interruption of certain business activities) may not be available at a reasonable cost or at all. As a result, accidents or other negative developments involving our mining, production or transportation facilities could have a material adverse effect on our operations.

# If we are unable to successfully manage the health and safety risks to which our business exposes our employees, our business may be adversely affected.

We operate in regions where tropical diseases are prevalent, and we are developing a potential coal mining operation in Mozambique, where AIDS is a major public health issue. If we are unable to adequately protect our employees from these diseases or are unable to ensure the health and safety of our employees, our business may be adversely affected.

# Difficulties in implementing enterprise resource planning software may interfere with the normal functioning of our business.

We are in the process of implementing enterprise resource planning software. If we are unable to replace, upgrade or modify our information technology systems to adapt to this new software in a timely and cost effective manner, our ability to capture and process financial transactions may be impacted. Implementing the software may prove more costly or take longer than expected, result in the loss of data or lead to system malfunctions that interfere with the normal functioning of our business. If we are unable to successfully manage the process of implementing the new software our results of operations may be adversely affected.

# We may face a shortage in our supply of off-the-road tires and mining equipment due to increased consumption by mining companies that exceeds suppliers' capacity.

Global demand for off-the-road ("OTR") tires increased significantly in 2004. Although manufacturers of mining and drilling equipment increased their capacity during 2004, capacity increases were not sufficient to compensate for the significant increase in demand for mining equipment. There are only five major tire factories worldwide and each is working at maximum capacity. The three major suppliers have already sold their entire OTR tire production through mid-year 2006. We expect that there will be very limited increases in large radial tire production over the next two years and that delivery lead times will increase significantly. Further capacity increases have been limited by bottlenecks in the distribution of parts and equipment from suppliers to equipment manufacturers. If we are unable to secure sufficient OTR tires to maintain our equipment, we may suffer temporary reductions in our production capacity.

### An increase in the prices of mining equipment may adversely affect our business.

Due to the significant expansion of mining investments worldwide and the surge in steel prices, mining equipment prices have increased significantly. Increases in the cost of mining equipment may have a negative effect on the profitability margins of our mining business.

## Risks Relating to Brazil

The Brazilian government has historically exercised, and continues to exercise, significant influence over the Brazilian economy. Brazilian political and economic conditions have a direct impact on our business and the market price of our securities.

The Brazilian government frequently intervenes in the Brazilian economy and occasionally makes substantial changes in policy, as often occurs in other emerging economies. The Brazilian government's actions to control inflation and carry out other policies have in the past involved wage and price controls, currency devaluations, capital controls and limits on imports, among other things. Our business, financial condition and results of operations may be adversely affected by factors in Brazil including:

- currency volatility;
- inflation acceleration;
- monetary policy and interest rate increases;
- fiscal policy and tax changes;
- international trade policy including tariff and non-tariff trade barriers;
- foreign exchange controls;
- energy shortages; and
- other political, social and economic developments in or affecting Brazil.

Inflation and government measures to curb inflation may contribute significantly to economic uncertainty in Brazil and to heightened volatility in the Brazilian securities markets and, consequently, may adversely affect the market value of our securities.

Brazil has in the past experienced extremely high rates of inflation, with annual rates of inflation reaching as high as 2.567% in 1993 (as measured by the *Índice Geral de Preços do Mercado* published by *Fundação Getúlio Vargas*, or IGP-M Index). More recently, Brazil's rates of inflation were 10.4% in 2001, 25.3% in 2002, 8.7% in 2003, 12.4% in 2004 and 2.4% in the four months ended April 30, 2005 (as measured by the IGP-M Index). Inflation, governmental measures to combat inflation and public speculation about possible future actions have in the past had significant negative effects on the Brazilian economy, and have contributed to economic uncertainty in Brazil and to heightened volatility in the Brazilian securities markets. If Brazil experiences substantial inflation in the future, our costs may increase, our operating and net margins may decrease and, if investor confidence declines, the price of our securities may fall. Inflationary pressures may also curtail our ability to access foreign financial markets and may lead to further government intervention in the economy, which could involve the introduction of government policies that may adversely affect the overall performance of the Brazilian economy.

Fluctuations in the value of the real against the U.S. dollar may result in uncertainty in the Brazilian economy and the Brazilian securities market and could have a material adverse effect on our net income and cash flow.

The Brazilian currency has historically suffered frequent devaluation. In the past, the Brazilian government has implemented various economic plans and exchange rate policies, including sudden devaluations, periodic minidevaluations during which the frequency of adjustments has ranged from daily to monthly, floating exchange rate systems, exchange controls and dual exchange rate markets. Although over long periods depreciation of the Brazilian currency generally is correlated with the differential in the inflation rate in Brazil versus the inflation rate in the U.S., depreciation over shorter periods has resulted in significant fluctuations in the exchange rate between the Brazilian currency and the U.S. dollar and other currencies.

The *real* appreciated by 8.1% against the U.S. dollar in 2004, and appreciated by 4.6% during the first four months of 2005. The exchange rate between the *real* and the U.S. dollar may continue to fluctuate and may rise or decline substantially from current levels.

Depreciation of the *real* against the U.S. dollar reduces the U.S. dollar value of distributions and the dividends on our American Depositary Shares and may also reduce the market value of our securities. In addition, exchange rate variations often have a significant effect on our net income. Depreciation of the *real* relative to the U.S. dollar may require us to record substantial foreign exchange and monetary losses on our U.S. dollar-denominated debt, whereas appreciation of the *real* against the U.S. dollar generally leads to the opposite effect. These foreign exchange and monetary gains or losses can be substantial, which can make our earnings from one period to the next more volatile. Exchange rate variations also have a substantial impact on our revenues and costs, because most of our revenues are in U.S. dollars and most of our costs are in *reais*. As a result, appreciation of the *real* against the U.S. dollar generally results in lower revenues and higher costs, which can hurt our operating profitability.

Exchange rate variations also influence the Brazilian economy and inflation rates, which may lead the Brazilian government to adopt policies that may have an adverse impact on our business. For additional information about historical exchange rates, see *Item 3*. *Key Information—Exchange Rates*.

Access to and the cost of borrowing in international capital markets for Brazilian companies are influenced by investor perceptions of risk in Brazil and other emerging economies, which may hurt our ability to finance our operations at an acceptable cost or reduce the trading price of our securities.

International investors generally consider Brazil to be an emerging market. As a result, economic and market conditions in other emerging market countries, especially those in Latin America, influence the market for securities issued by Brazilian companies. Economic crises in one or more emerging market countries may reduce overall investor appetite for securities of emerging market issuers. Past economic crises in emerging markets, such as in Southeast Asia, Russia and Argentina, have resulted in significant outflows of U.S. dollars from Brazil and caused Brazilian companies to face higher costs for raising funds, both domestically and abroad, and have effectively impeded the access to international capital markets for extended periods. We cannot assure you that international capital markets will remain open to Brazilian companies or that prevailing interest rates in these markets will be advantageous to us. In addition, future financial crises in emerging market countries may have a negative impact on the Brazilian markets, which could adversely affect the trading price of our securities.

# Brazilian government policies in the energy sector may have an adverse impact on the cost or supply of electricity for our aluminum-related and ferroalloy operations.

We are a significant consumer of Brazil's electricity production, and accounted for approximately 4.5% of total consumption in Brazil in 2004. Electricity costs are a significant component of the cost of producing aluminum and ferroalloys and represented 7.7% of our cost of goods sold in 2004.

Brazil faced a shortage of energy during the second half of 2001, which led to an energy-rationing program that required a decrease in energy consumption by at least 20%. As a result of this program, we experienced a temporary reduction in our aluminum and ferroalloy production, both of which use significant amounts of electricity. Although the energy shortages ended in late 2001, and energy-use restrictions were lifted in March 2002, we cannot assure you that Brazil will not experience future energy shortages. Future shortages and government policies to respond to or prevent shortages may have an adverse impact on the cost or supply of electricity for our aluminum and ferroalloy operations.

The Brazilian power generation business depends on concessions granted by the government and is regulated and supervised by ANEEL. A new law for the electricity sector was approved by the Brazilian Congress in March 2004 and established two public auctions in order to trade excess energy available in the market. The first auction occurred in December 2004 and the second in April 2005. The prices established in these auctions were low and may contribute to a decline in investments in future generation projects that could lead to energy shortages in the future. Changes in the laws, regulations or governmental policies regarding the power sector or concession requirements could lower the returns we are expecting from our investments in power generation. For more information on the regulations governing our energy production, see *Item 4. Information on the Company—Regulatory Matters*.

# Our mining and logistics activities depend on authorizations of regulatory agencies, and changes in regulations could have an adverse effect on our business.

Our mining and logistics activities in Brazil depend on authorizations and concessions by regulatory agencies of the Brazilian government. Our exploration, mining, mineral processing and logistics activities are also subject to Brazilian laws and regulations, which can change at any time. If these laws and regulations change in the future, modifications to our technologies and operations could be required, and we could be required to make unbudgeted capital expenditures. For a more detailed discussion about the authorizations and concessions by regulatory agencies of the Brazilian government upon which our mining and logistics activities depend, see *Item 4*. *Information on the Company—Regulatory Matters*.

### Brazilian environmental laws may adversely affect our mining and energy businesses.

Our operations often involve using, handling, disposing and discharging hazardous materials into the environment or the use of natural resources, and are therefore subject to the environmental laws and regulations of Brazil. Environmental regulation in Brazil has become stricter in recent years, and it is possible that more regulation or more aggressive enforcement of existing regulations will adversely affect us by imposing restrictions on our activities, creating new requirements for the issuance or renewal of environmental licenses, raising our costs or requiring us to engage in expensive reclamation efforts.

Our projects often require us to obtain or renew environmental licenses. Difficulties in obtaining those licenses may lead to construction delays or cost increases and in some cases may lead us to abandon a project.

We are also subject to Brazilian environmental legislation that requires companies undertaking projects with significant environmental impact to pay an "environmental compensation" fee in the amount of at least 0.5% of the total investment in the venture. There are numerous uncertainties about how this law will be applied in practice. If the level of the fees actually charged were increased above 0.5%, it would significantly increase our costs and, depending on the magnitude of the fees involved, could have a material adverse effect on our liquidity. Uncertainties regarding calculation and payment of these fees may strain our relations with the Brazilian environmental authorities or lead to delays in obtaining necessary environmental permits.

Brazilian laws restricting development in the Amazon region for legal reserve purposes may place limits on our ability to expand certain of our copper or other operations and to fully exploit our mineral rights in those regions. See *Item 4. Information on the Company—Regulatory Matters—Environmental Matters*.

Several Brazilian states in which we operate are currently considering implementing water usage fees under the National Hydrological Resources Policy. This may require us to pay usage fees in the future for water rights that we currently use for free, which could considerably increase our costs in areas where water resources are scarce.

In addition, we are currently a defendant in an action brought by the municipality of Itabira, in the state of Minas Gerais, Brazil, which alleges that our Itabira iron ore mining operations have caused environmental and social damages. If we do not prevail in this lawsuit, we could incur a substantial expense. For more information on environmental laws and the legal challenges we face, see *Item 4. Information on the Company—Regulatory Matters—Environmental Matters* and *Item 8. Financial Information—Legal Proceedings*.

## Risks Relating to the American Depositary Shares

Restrictions on the movement of capital out of Brazil may hinder your ability to receive dividends and distributions on American Depositary Shares and the proceeds from any sale of American Depositary Shares

The Brazilian government may impose restrictions on capital outflows whenever there is a serious imbalance in Brazil's balance of payments or reason to foresee a serious imbalance. This would hinder or prevent the custodian who acts on behalf of the depositary for the American Depositary Shares from converting proceeds from the shares underlying the American Depositary Shares into U.S. dollars and remitting those proceeds abroad.

The Brazilian government imposed remittance restrictions for approximately six months in 1989 and early 1990. If enacted in the future, similar restrictions would hinder or prevent the conversion of dividends, distributions or the proceeds from any sale of shares from *reais* into U.S. dollars and the remittance of the U.S. dollars abroad. In that event, the custodian, acting on behalf of the depositary, will hold the *reais* it cannot convert for the account of the holders of American depositary receipts who have not been paid. The depositary will not invest the *reais* and will not be liable for interest on those amounts. Furthermore, any *reais* so held will be subject to devaluation risk.

If you exchange American Depositary Shares for the underlying shares, you risk losing the ability to remit foreign currency abroad and Brazilian tax advantages.

The Brazilian custodian for the shares underlying our American Depositary Shares will obtain an electronic registration from the Central Bank to entitle it to remit U.S. dollars abroad for payments of dividends and other distributions relating to the shares underlying our American Depositary Shares or upon the disposition of the

underlying shares. If you decide to exchange your American Depositary Shares for the underlying shares, you will be entitled to continue to rely, for five business days from the date of exchange, on the custodian's electronic registration. Thereafter, you may not be able to obtain and remit U.S. dollars abroad upon the disposition of, or distributions relating to, the underlying shares unless you obtain your own electronic registration by registering your investment in the underlying shares under Resolution No. 2,689 of the National Monetary Council, which entitles foreign investors to buy and sell securities on the São Paulo stock exchange, or BOVESPA. For more information regarding these exchange controls, see *Item 10. Additional Information—Exchange Controls and Other Limitations Affecting Security Holders*. If you attempt to obtain your own electronic registration, you may incur expenses or suffer delays in the application process, which could delay your ability to receive dividends or distributions relating to the underlying shares or the return of your capital in a timely manner. We cannot assure you that the custodian's electronic registration or any certificate of foreign capital registration obtained by you will not be affected by future legislative changes, or that additional restrictions applicable to you, the disposition of the underlying shares or the repatriation of the proceeds from disposition will not be imposed in the future.

# Because we are not obligated to file a registration statement with respect to preemptive rights relating to our shares, you may be unable to exercise those preemptive rights.

Holders of American depositary receipts that are residents of the United States may not be able to exercise preemptive rights, or exercise other types of rights, with respect to the underlying shares. Your ability to exercise preemptive rights is not assured unless a registration statement is effective with respect to those rights or an exemption from the registration requirements of the Securities Act is available. We are not obligated to file a registration statement relating to preemptive rights with respect to the underlying shares or to undertake steps that may be needed to make exemptions from registration available, and we cannot assure you that we will file any registration statement or take such steps. If a registration statement is not filed and an exemption from registration does not exist, JPMorgan Chase Bank, as depositary, will attempt to sell the preemptive rights, and you will be entitled to receive the proceeds of the sale. However, the preemptive rights will expire if the depositary cannot sell them. For a more complete description of preemptive rights with respect to the underlying shares, see *Item 10*. *Additional Information—Common Shares and Preferred Shares—Preemptive Rights*.

## Holders of our American Depositary Shares may encounter difficulties in the exercise of voting rights.

Holders of our common and preferred class A shares are entitled to vote on shareholder matters. You may encounter difficulties in the exercise of some of your rights as a shareholder if you hold our American Depositary Shares rather than the underlying shares. For example, if we fail to provide the depositary with voting materials on a timely basis, you may not be able to vote by giving instructions to the depositary on how to vote for you.

Our corporate affairs are governed by our bylaws and the Brazilian Corporate Law, which differ from the legal principles that would apply if we were incorporated in a jurisdiction in the United States or elsewhere outside Brazil. Under the Brazilian Corporate Law, holders of our common and preferred class A shares may have fewer and less well-defined rights to protect their interests relative to actions taken by our Board of Directors or by Valepar than under the laws of some jurisdictions outside Brazil.

Although Brazilian law imposes restrictions on insider trading and price manipulation, the Brazilian securities markets are not as highly regulated and supervised as the U.S. securities markets or markets in certain other jurisdictions. In addition, rules and policies against self-dealing and regarding the preservation of minority shareholder interests may be less well-developed and enforced in Brazil than in the United States, which could potentially disadvantage you as a holder of the underlying shares and American Depositary Shares. For example, when compared to Delaware general corporation law, Brazilian corporate law and practice has less detailed and well-established rules and judicial precedents relating to the review of management decisions against duty of care and duty of loyalty standards in the context of corporate restructurings, transactions with related parties, and sale-of-business transactions. In addition, shareholders in Brazilian companies ordinarily do not have standing to bring a class action.

In addition, as a foreign private issuer, we are not required to follow many of the corporate governance rules that apply to U.S. domestic issuers with securities listed on the New York Stock Exchange, or the NYSE. For more information concerning our corporate governance policies, see *Item 6. Directors, Senior Management and Employees*.

### Item 4. Information on the Company

#### **BUSINESS OVERVIEW**

#### General

We are the world's largest producer and exporter of iron ore and pellets, the largest metals and mining company in the Americas and one of the largest private sector companies in Latin America by market capitalization. We hold exploration claims that cover 12.0 million hectares (29.6 million acres) in Brazil, and 3.8 million hectares (9.4 million acres) in Gabon, Chile, Mozambique, Mongolia, Argentina and Peru. We operate large logistics systems, including railroads and ports that are integrated with our mining operations. Directly and through affiliates and joint ventures, we have major investments in the aluminum-related, energy and steel businesses. We are investing heavily in copper and coal exploration, and our first copper mine began operations in June 2004.

### Our main lines of business are:

- Ferrous minerals (68.9% of 2004 consolidated gross operating revenues). We operate two fully integrated world-class systems in Brazil for producing and distributing iron ore (the Northern System and the Southern System), consisting of mines, railroads and port and terminal facilities, and a third system consisting of CAEMI's mines and port facilities. At December 31, 2004, we had a total of 6,869 million tons of proven and probable iron ore reserves in our three systems in Brazil, with an average grade of 51.7% iron in our Southern System, 66.7% in our Northern System and 65.8% in CAEMI's iron ore mines. We also operate ten pellet-producing facilities, six of which are joint ventures with partners, and have a 50% stake in a joint venture that owns and operates two pelletizing plants. We are one of the world's largest producers of manganese ore and ferroalloys.
- Non-ferrous minerals (5.8% of 2004 consolidated gross operating revenues). We are the world's third largest producer of kaolin and Brazil's largest producer of potash. Our Sossego copper mine in Carajás, in the state of Pará, Brazil, began production of copper concentrate in June 2004 and is Brazil's largest producer of copper. Our non-ferrous minerals business also includes our exploration efforts related to copper, gold and nickel.
- Logistics (10.3% of 2004 consolidated gross operating revenues). We are a leading provider of logistics services in Brazil, with operations in the railroad, coastal shipping and port handling industries. Each of the iron ore complexes of our Northern and Southern Systems incorporates an integrated railroad network linked to automated port and terminal facilities, and is designed to provide our mining products, general cargo and passenger rail transportation, bulk terminal storage and ship loading services to us and third parties. In 2004, our railroads transported approximately 65.6% of the total freight tonnage transported by Brazilian railroads, or approximately 139.0 billion ntk of cargo, of which 110.1 billion ntk were our iron ore and pellets.
- Aluminum-related operations (14.7% of 2004 consolidated gross operating revenues). Through subsidiaries and joint ventures, we conduct major operations in the production of aluminum-related products. They include:
  - Bauxite mining, which we conduct through our 40.0% interest in Mineração Rio do Norte S.A., or MRN, which holds substantial bauxite reserves with a low strip ratio and high recovery rate. MRN, one of the largest bauxite producers in the world, has a nominal production capacity of 16.3 million tons per year and produced 16.7 million tons of bauxite in 2004. We are developing a wholly owned bauxite mine in the Paragominas region, in the state of Pará.
  - O Alumina refining, which we conduct via our alumina refining subsidiary, Alunorte-Alumina do Norte do Brasil S.A., or Alunorte, which currently has a nominal production capacity of 2.4 million tons of alumina per year. In July 2003, Alunorte began work on a capacity expansion designed to increase its annual capacity to 4.2 million tons per year. We are also negotiating the terms of a potential joint venture with the Aluminum Corporation of China Limited (Chalco) to construct a new alumina refinery in the state of Pará.

- Aluminum metal smelting, which we conduct through our subsidiary, Albras Alumínio Brasileiro S.A., or Albras, which produces aluminum ingots and in which we have a 51.0% interest, and our joint venture, Valesul Alumínio S.A., or Valesul, which produces aluminum ingots, billets and alloys and in which we have a 54.5% interest. These companies currently have a combined production capacity of approximately 541,000 tons of aluminum per year.
- Other investments. In addition to our core mining activities, we currently have investments in three steel companies, and we are in the process of conducting feasibility studies to determine whether to implement joint ventures with Baosteel Shanghai Group Corporation (Baosteel), Arcelor Group (Arcelor), Posco, Dongkuk, Danieli, BNDES and ThyssenKrupp Stahl A.G. to construct and operate steel slab plants in São Luís, in the state of Maranhão, Rio de Janeiro, in the state of Rio de Janeiro and Fortaleza, in the state of Ceará, Brazil. We also hold stakes in nine hydroelectric power generation projects with a total projected capacity of 3,364 MW (of which our share is 1,333.5 MW), four of which have already begun operations, and the remainder of which are scheduled to start operations within the next five years. Negotiations are currently underway to return the concession for the Santa Isabel hydroelectric project to the Brazilian government.

Through our mineral prospecting and development activities in Brazil, we have acquired extensive experience in exploration techniques and processes, and maintain an active mineral exploration program in Brazil and overseas. In 2004, our mineral exploration efforts were focused on copper, gold, nickel, manganese ore, kaolin, bauxite, diamond and platinum group metals.

### **Incorporation of CVRD and Vale Overseas**

#### **CVRD**

CVRD's legal and commercial name is Companhia Vale do Rio Doce. CVRD is a stock corporation, or *sociedade por ações*, duly organized on January 11, 1943, and existing under the laws of the Federative Republic of Brazil

CVRD was privatized in three stages between 1997 and 2002, beginning with the sale by the Brazilian government of a controlling stake in CVRD to Valepar in 1997. The last stage of the privatization took place in 2002, when the Brazilian government sold a remaining minority stake of common shares through a global equity offering. It is organized for an unlimited period of time. CVRD's principal executive offices are located at Avenida Graça Aranha, No. 26, 20030-900 Rio de Janeiro, RJ, Brazil, and our telephone number is 55-21-3814-4540.

### Vale Overseas

Vale Overseas is a finance company wholly owned by CVRD. It was registered and incorporated as a Cayman Islands exempted company with limited liability on April 3, 2001. Vale Overseas is incorporated for an indefinite period of time. Its registered office is at Walker House, P.O. Box 908 GT, Mary Street, Georgetown, Grand Cayman, Cayman Islands.

Vale Overseas' business is to issue debt securities to finance CVRD's activities. It has no other operations or employees. Vale Overseas has issued three series of debt securities, including its US\$ 300 million 8.625% Enhanced Guaranteed Notes due 2007, issued in March 2002, its US\$ 300 million 9.0% Notes due 2013, issued in August 2003 and its US\$ 500 million 8.25% Notes due 2034, issued in January 2004. We used the proceeds of these securities for general corporate purposes.

On December 17, 2004, Vale Overseas completed a cash tender offer and repurchased US\$ 187 million of its 8.625% Enhanced Guaranteed Notes due 2007. US\$ 113 million of these Notes remains outstanding.

### **Business Strategy**

Our goal is to strengthen our competitiveness among the world's leading mining companies by focusing on diversified growth in mining operations, principally by organic growth and developing our logistics business. We are pursuing disciplined capital management in order to maximize return on invested capital and total return to

shareholders. Although we are emphasizing organic growth in our core businesses, we may pursue strategic acquisitions in order to create value for our shareholders.

Over the past several years, we have developed a robust long-term strategic planning process. We are building on these changes with ambitious long-range plans in each of our principal business areas, including substantial capital expenditures for organic growth through 2012.

The following paragraphs provide some highlights of our major strategies.

### Maintaining Our Leadership Position in the Seaborne Iron Ore Market

In 2004, we consolidated our leadership in the seaborne iron ore trade market, with an estimated 32.1% of the total 602 million tons traded in the year. We are committed to maintaining our position in the world iron ore market by strengthening relationships with clients, focusing our product line to capture industry trends, increasing our production capacity in line with demand growth and controlling costs. We believe that our strong relationships with major customers (reinforced through long-term contracts), tailored product line and high quality products will likely enable us to achieve this goal.

We are taking steps to encourage several steel makers to develop export-oriented slab plants in Brazil in order to create additional demand for our iron ore.

### **Growing Our Logistics Business**

We believe that the quality of our railway assets and our many years of experience as a railroad and port operator, together with the lack of efficient transportation for general cargo in Brazil, position us as a leader in the logistics business in Brazil. We are also expanding the capacity of our railroads through the purchase of additional locomotives and wagons.

#### Increasing Our Aluminum-Related Activities

We plan to develop and increase production capacity in our aluminum-related operations, focusing on the first steps of the production chain, developing low-cost bauxite and alumina projects. We have large undeveloped high quality bauxite reserves and opportunities for low-cost expansions in our alumina refinery. We are working on the development of these opportunities. We are also investing in mineral exploration to increase our bauxite reserves. We may pursue acquisitions and/or partnerships in the production of primary aluminum to guarantee demand for our alumina.

### **Developing Our Copper Resources**

We believe that our copper projects, which are all situated in the Carajás region, in the state of Pará, can be among the most competitive in the world in terms of investment cost per ton of ore. Our copper mines will benefit from our transportation facilities serving the Northern System.

## Investing in Coal

We are pursuing several efforts to become a large global participant in the coal business. As an important supplier of raw materials to the steel industry, metallurgical coal will complement our portfolio of products.

### Globalization of Multi-Commodity Exploration Efforts

We are engaged in an active mineral exploration program, with efforts in several countries around the globe, including Brazil, Peru, Chile, Argentina, Mongolia, Gabon, Angola and Mozambique. We are mainly seeking new deposits of copper, gold, manganese ore, nickel, kaolin, bauxite, coal, diamond and platinum group metals. Mineral exploration is an important part of our organic growth strategy.

### **Developing Power Generation Projects**

Energy management and efficient supply have become a priority for us. Driven both by structural changes in the industry and regulatory uncertainties, which could increase the risk of rising electricity prices and energy shortages, such as Brazil experienced in the second half of 2001, we have invested in nine projects to develop hydroelectric power generation plants and we plan to use the electricity from these projects for our internal needs. As a large consumer of electricity, we expect that investing in power projects will help protect us against volatility in the price of energy.

#### Acquisitions, Asset Sales and Significant Changes in 2004 and 2005

#### Iron Ore and Pellets

Carajás expansion. In 2004, we completed a major capacity expansion in our wholly owned Northern System, including a new pier at the local port, Ponta da Madeira and expansion at our Carajás iron ore mine operations. As a result, the annual nominal capacity of Carajás is now 70 million tons per year, an increase of 14 million tons. We are currently in the process of further expansions to reach 85 million tons per year in 2006 and 100 million tons per year by 2007.

Leasing of Andrade mine. In 2004, we entered into an agreement to lease the Andrade iron ore mine and explore it for the remaining useful life of the mine. It is located in the state of Minas Gerais, 80 km from the Itabira iron ore mines and connected to the Vitória a Minas railroad. Our project is to expand the current mine capacity of 1.4 million tons to 9.4 million tons by 2008.

Start up of Capão Xavier mine. In June 2004, we started operations at our Capão Xavier iron ore mine in the CAEMI system. The proximity of the Capão Xavier mine to the Mutuca mine, which has been operating in the region for over 40 years, allows the usage of the ore processing and transportation infrastructure that already exists at the location. In 2004, Capão Xavier produced 4.2 million tons of iron ore and it is expected to produce 8 million tons in 2005.

*Long-term contracts*. During 2004, we signed new long-term contracts for the supply of more than 1.1 billion tons of iron ore with an average maturity of ten years.

*Maquiné deposit acquisition*. On March 18, 2005, we acquired Sociedade de Mineração Estrela de Apolo, or Estrela de Apolo, for US\$ 9.3 million. Estrela de Apolo is a mining company that has iron ore and bauxite mineral rights in the state of Minas Gerais. We will develop feasibility studies to estimate the annual production capacity of the deposit.

### Logistics

Cabotage liner service. In May 2003, we agreed with Mitsui & Co. to create DCNDB, a joint venture organized to develop a cabotage liner service. In November 2004, Mitsui acquired 21% of the shares of the joint venture, and we own the remaining 79% interest. We expect this joint venture will allow us to be the first major carrier to offer cabotage service between the ports of Fortaleza, in the state of Ceará, Brazil and Buenos Aires, Argentina. We believe this joint venture will help us increase our share in the cabotage market and enable us to attract additional domestic and international customers.

Ponta da Madeira Pier III. In the first half of 2004, Pier III at Ponta da Madeira Terminal, in the state of Maranhão, began operations. Pier III can accommodate vessels up to 220,000 DWT and has a maximum loading rate of 8,000 tons per hour. The pier is being used for the shipment of iron ore and pellets, supporting the expansion of production capacity at Carajás. Phase II of the Pier III expansion is now underway to install a new ship loader. This phase is expected to be completed by July 2005, see *Item 4. Information on the Company—Capital Expenditures*.

*CPBS maritime terminal expansion.* We plan to expand the capacity of CPBS maritime terminal, in Sepetiba Bay, in the state of Rio de Janeiro, from 16 million tons to 19 million tons by 2005, and to 21 million tons by 2007.

### **Aluminum-Related Operations**

*Alunorte capacity expansion.* In July 2003, Alunorte began work on a new capacity expansion for its alumina refinery. This brownfield project, estimated to start up by 2006, involves the construction of stages 4 and 5 of the plant, and is expected to increase its annual capacity from 2.4 million to 4.2 million tons of alumina per year.

Paragominas project. We are developing a new wholly owned bauxite mine located in Paragominas, in the state of Pará, which is expected to begin commercial production in the first half of 2007 to supply Alunorte's new expansion with 4.5 million tons per year of wet 12% moisture bauxite. The bauxite quality will be similar to MRN's, and the project will use the strip mining method of extraction and have a beneficiation plant including milling and a 244-kilometer long slurry pipeline.

ABC refinery project. In May 2004, we signed a framework agreement with Chalco that sets forth a general outline of some of the principal terms for a potential joint investment in an alumina refinery in Brazil (ABC refinery). Under the agreement, we have agreed with Chalco to develop a joint study for the construction of a greenfield refinery in the state of Pará, near the existing facilities of Alunorte. The alumina refinery is expected to have an initial capacity of 1.8 million tons per year and will require investments currently estimated to be approximately US\$ 810 million. The refinery project would form part of a series of related transactions involving mining, transportation, shipping and port development in Brazil. The framework agreement contemplates that bauxite for the project would be supplied from our Paragominas bauxite mine. If the project proceeds, the first stage of the refinery would be expected to be completed and operational in 2008. Since May 2004, two memoranda of understanding have been signed to define the main guidelines for the project. However, the project remains subject to the negotiation of final documentation and receipt of approvals from the boards of both companies and from the Brazilian government.

*Pitinga bauxite deposit.* In November 2004, CVRD won an international bid from Paranapanema S.A. for US\$ 20 million to research, evaluate and explore a bauxite deposit in the Pitinga region, in the state of Amazonas, Brazil.

### Copper

*Sossego*. In the first half of 2004, our Sossego copper mine began operations. Sossego produced 73 thousand tons of copper contained in concentrate in 2004, generating gross revenues of US\$ 201 million. Our second copper project, 118, is subject to Board of Directors approval. If such approval is obtained, the construction of 118 is expected to start in the first half of 2005.

### Steel and Metallics

Ferro Gusa pig iron joint venture. In April 2003, we signed an investment agreement with Nucor Corporation, a North American steel maker, in order to form a joint venture in Brazil, Ferro Gusa Carajás S.A., or Ferro Gusa, in which 78% and 22% of the voting shares will be held by CVRD and Nucor Corporation (or one of its affiliates), respectively. The main purpose of Ferro Gusa is the production and sale of pig iron. In September 2003, we contributed to Ferro Gusa the forest assets once held by Celmar, a wholly owned subsidiary of CVRD which was merged into CVRD in August 2003. The cultivated forest assets, now owned by Ferro Gusa, will be used as an energy source for its pig iron production. On May 3, 2004 and March 15, 2005, Nucor Brasil Participações Ltda. ("Nucor") an affiliate of Nucor Corporation, invested US\$ 10 million in the capital of Ferro Gusa (as contemplated in the investment agreement). As a result, CVRD currently has approximately 78% and Nucor currently has approximately 22% of the voting shares of Ferro Gusa. We expect the plant to start up in the third quarter of 2005.

Steel slab plant feasibility studies. We are taking steps to encourage several steel makers to develop exportoriented slab plants in Brazil in order to create additional demand for our iron ore.

• Baosteel. In February 2004, we agreed with Baosteel, China's largest steel maker, to commence a study to assess the feasibility of implementing a joint venture to build and operate an integrated steel plant in São Luís, in the state of Maranhão. An Engineering Service Agreement has been signed authorizing the basic engineering and formal feasibility study for the project. The feasibility report is currently under revision and the final version is expected to be issued shortly. As currently planned, the plant is expected to produce approximately 4.1 million tons of steel slabs per year, with a possible future capacity expansion to

7.5 million tons per year. Arcelor has also participated in the feasibility study, but no agreement has been reached regarding its potential participation in the project.

- Dongkuk, Danieli and BNDES. In March 2004, we signed a memorandum of understanding with Dongkuk, a Korean steel maker, Danieli, an Italian supplier of equipment and BNDES to carry out a feasibility study for the construction and implementation of a steel slab plant. The plant would be based on DRI and an electric arc furnace and would be located in Fortaleza, in the state of Ceará. The study contemplates one module of 1.5 million tons per year of slabs and the financial structure for the project is expected to be defined by July 2005.
- *Posco*. In September 2004, we signed a memorandum of understanding with Posco, the largest Korean steel maker, to carry out a pre-feasibility study for the construction of an integrated slab plant in São Luís, in the state of Maranhão. The work is currently in progress and the pre-feasibility report is expected to be issued in the second half of 2005.
- ThyssenKrupp Companhia Siderúrgica do Atlântico. In December 2004, we signed a memorandum of understanding with ThyssenKrupp Stahl A.G., one of the largest European steel makers, for the construction of an integrated slab plant in Brazil. Companhia Siderúrgica do Atlântico will be created as a joint venture to conclude the joint feasibility study and implement the project. If the project proceeds, the slab plant is expected to be located in the state of Rio de Janeiro and to start production in 2008 with an annual capacity of 4.4 million tons.

#### Coal and Coke

We are pursuing several efforts to become a large global participant in the coal business.

- Mozambique coal mine feasibility study. In November 2004, CVRD won an international bid to explore coal deposits in the Moatize region, in the north of Mozambique for US\$ 122.8 million. We own 95% of the winning consortium; American Metals & Coal International (AMCI), an American coal producer, owns the remaining 5%. Moatize is estimated to have coal reserves that might allow the extraction of coking and thermal coal. The project's conceptual study has been concluded and the feasibility study is expected to be completed by June 2006. If the project proceeds, the total investment is estimated to be US\$ 1 billion, which includes mine development costs, the construction of a maritime terminal for ship loading, related investments and social projects.
- Longyu anthracite (coal) project. At the end of 2004 and in the beginning of 2005, we entered into agreements with Yongcheng Coal & Electricity Group and Shanghai Baosteel International Economic & Trading Co., Ltd to acquire a 25% stake in the Chinese anthracite producer Henan Longyu Energy Resources Co. Ltd, or Longyu, for US\$ 86 million. Longyu is engaged in the development, operation and maintenance of coal mines and sales of coal and related products in China. The partnership contemplates that we will have guaranteed off-take rights to a portion of the coal production of the mines, which we intend to consume at our pelletizing plants and to sell to clients in the Brazilian and international markets. If the project proceeds, the mines are expected to produce 1.7 million tons of coal in 2005. The transaction remains subject to the negotiation of final documentation, as well as to the approval of the Chinese government and is expected to close in July 2005.
- Shandong coke and coal projects. In July 2004, we agreed to acquire a 25% stake in a joint venture with the Yankuang Group (Yankuang), one of the largest coal producers in China, and with Itochu Corporation, a Japanese trading company. Our equity investment commitment was approximately US\$ 26 million. The purpose of the joint venture is to operate a plant in Jining City, Shandong Province, China that would produce 2.0 million tons of coke and 200,000 tons of methanol per year. In December 2004, the Chinese government approved the incorporation of the joint venture, which is named Shandong Yankuang International Coking Company Limited. After the incorporation, we made an initial capital contribution of US\$ 10.6 million. Currently, we own an indirect 25% participation interest, Yankuang holds a 70% equity interest and Itochu holds the remaining 5%. As currently planned, the plant would begin operations in 2006 and approximately 25% of the plant's production would be exported primarily to Brazil. We are also exploring with Yankuang the possibility of participating in a joint venture to develop a new coal mine in the city of Zhaolou, Shandong province, China. The Zhaolou mine has an expected production capacity of

approximately 3.0 million tons of coal per year, and if the project proceeds, the mine is expected to start operations in 2007.

#### Other Minerals

*Potash.* In November 2004, we won the concession to research and evaluate a potash deposit in the Neuquen Province, on the banks of the Colorado river in Argentina.

*Phosphates.* In March 2005, CVRD won an international bid to explore the Bayóvar phosphate deposit located in the Piura region in Peru. CVRD will have the right to evaluate and develop a multimodal maritime terminal in the Piura region to ship phosphate and leverage other projects in northern Peru. The feasibility study must be completed within two years, after which, the project must be implemented within a 36-month period.

*Nickel*. We recently concluded the feasibility studies for our Vermelho nickel project. Board of Directors' approval to begin its construction is expected in June 2005. If the project proceeds, the construction of the mine, with an estimated capacity of 45,000 tons of nickel cathode and 2,000 tons of cobalt per year, is expected to be completed in 2008.

### Electricity

Start up of Candonga hydroelectric power plant. In September 2004, the Candonga hydroelectric power plant began operations with the start up of its first turbine. Candonga's other two turbines began operations in October and December 2004. We hold a 50% stake in Consorcio Candonga, which owns the Candonga plant. Candonga has an installed capacity of 140 MW and a generation capacity of 64.5 average MW, equivalent to 565.020 megawatt hour (MWh) per year. We will use our share of the power from Candonga in our iron ore mining, pelletizing, port operations and other facilities in the states of Minas Gerais and Espírito Santo, Brazil.

### **Dispositions and Asset Sales**

In line with our focus on mining and logistics, we have continued to pare down our holdings of non-strategic assets. We summarize below our key dispositions and asset sales since the beginning of 2004.

Companhia Siderúrgica Tubarão. In July 2004, we sold to Arcelor, the world's largest steel maker, 4.42% of the voting capital and 29.96% of the non-voting capital of Companhia Siderúrgica de Tubarão, or CST for US\$ 415 million. In December 2004, we sold our remaining stake in CST to Arcelor for US\$ 164 million. This was possible due to the waiver given by the other parties to CST shareholders' agreement. This resulted in the total divestment of our interest in CST.

Santa Isabel hydroelectric power project. Negotiations are currently underway with ANEEL to return the concession for the Santa Isabel hydroelectric project due to difficulties related to environmental issues.

### LINES OF BUSINESS

Our principal lines of business consist of mining and logistics. We also invest in energy to supply part of our consumption. For internal management purposes, we group our aluminum-related operations together with our other significant equity participations in other companies.

# Mining

#### Ferrous Minerals

Our ferrous minerals business segment includes iron ore mining, pellet production, manganese ore mining and ferroalloy production.

The table below sets forth our ferrous minerals gross revenues by geographic market and by category for the periods indicated as reflected in our consolidated financial statements.

	For the Year ended December 31,					
		2002	2003(1)		2004	
			(in million:	s of US\$)		
Gross revenues classified by geographic destination			`	,		
Americas, except Brazil and United States	US\$	392	US\$	526	US\$	735
Brazil		996		1,142		1,424
United States		340		337		533
Europe		1,799		2,213		3,223
Middle East/Africa/Oceania		239		292		412
Japan		488		569		683
China		574		897		1,392
Asia, other than Japan and China		368		422		611
Subtotal		5,196		6,398		9,013
Eliminations(2)		(2,093)		(2,549)		(3,169)
Total	US\$	3,103	US\$	3,849	US\$	5,844
Gross revenues classified by category						
Iron ore		2,147		2,662		3,995
Pellets		673		838		1,148
Manganese ore and ferroalloys		283		349		701
Total	US\$	3,103	US\$	3,849	US\$	5,844

<sup>(1)</sup> The operations of CAEMI are reflected in the above table as of September 2003, the date on which we acquired and began consolidating its operations.

### Iron Ore

We conduct our iron ore business primarily at the parent company level and through our subsidiaries Urucum Mineração S.A., or Urucum, and CAEMI.

### Reserves

The table below sets forth information regarding our proven and probable iron ore reserves and projected exhaustion dates as of December 31, 2004. The estimates of mineral reserves have been audited and verified by Pincock Allen & Holt, experts in mineral engineering. The projected exhaustion dates are estimated based on our estimates of future production levels.

<sup>(2)</sup> Eliminations of transactions between consolidated figures.

Mine(1)	Began Operations	Projected/Actual Exhaustion Date	Product	Production For the Year Ended December 31,			Proven and Probable Reserves at December 31, 2004	
			2002	2003	2004	Ore Tonnage	Grade	
Southern System			(in millions of tons)			(in millions of tons)	(% Fe)	
Itabira:								
Cauê(2)	1942	2004	20.7	22.3	22.0	_	_	
Conceição(3)	1957	2023	20.0	20.8	21.6	425.7	54.5	
Minas do Meio(4)	1976	2020	_	_	_	587.9	53.3	
Minas Centrais								
Água Limpa / Cururu(5)	2000	2013	3.2	4.0	4.1	70.9	45.0	
Gongo Soco (6)	2000	2009	6.8	3.2	5.4	108.1	59.2	
Brucutu(7)	1994	2027	0.1	1.6	6.0	745.6	51.9	
Baú(8)	2005	2020	_	_	_	37.1	55.7	
Maquiné(9)	2006	2027	_	_	_	278.7	58.3	
Córrego do Meio (10)	2000	2005	1.2	1.2	1.9	_	_	
Mariana								
Alegria(11)	2000	2024	9.9	9.9	12.2	212.9	53.5	
Fábrica Nova(11)	2005	2034	_	_		1046.5	47.1	
Fazendão(12)	1976	2032	0.8	0.3	0.6	353.7	50.1	
Timbopeba(13)	1984	2008	5.2	5.8	6.2	88.1	55.3	
Capanema/Ouro Fino(14)	1982	2003	4.0	6.4	_	_	_	
Minas do Oeste								
Córrego do Feijão(15)	2003	2012	6.3	7.2	7.7	20.5	67.0	
João Pereira(16)	2003	2025	5.2	9.9	11.1	404.6	49.0	
Área 10, Segredo,	2003	2020	0.2	7.7			.,	
Ponto 2 and 3(16)	2005	2025				118.7	57.3	
Total Southern System			83.4	92.6	98.8	4,499.0	51.7	
Urucum(17)	1993	n.a.	0.8	0.8	0.7	n.a.	n.a.	
Northern System (18)								
N4W	1994	2025	12.8	13.2	19.4	634.5	66.5	
N4E	1984	2018	17.8	21.4	21.9	407.1	66.8	
N5W	1998	2020	6.3	6.1	5.0	289.4	66.0	
N5E	1998	2008	17.0	17.9	21.7	50.2	67.4	
N5EN	2003	2016		0.3	1.4	22.2	65.5	
N5S	2006	2017				371.3	67.3	
Total Northern System			53.9	58.9	69.4	1,774.7	66.7	
CAEMI System (19)								
Pico:	1042	2000	11.7	12.6	12.1	(0.2	(2.1	
Pico / Sapecado	1942	2009	11.6	12.6	13.1	60.2	63.1	
Abóboras	2004	2024	_	_	0.2	32.8	66.0	
Tamanduá:	1993	2016	Q 5	10.2	10.5	106.2	66.4	
Tamanduá Capitão do Mato	1993	2016 2016	8.5 6.4	10.2 10.2	10.5 10.8	106.2 161.2	66.4 66.2	
Single mines:	177/	2010	0.4	10.2	10.0	101.2	00.2	
Jangada	2001	2017	2.5	3.0	3.6	68.3	66.2	
Capão Xavier	2004	2021	2.5	J.0 —	4.2	166.7	65.9	
Águas Claras	1973	2002	1.5	_		-	—	
	-,15	2002		-	. ———	· ——		
Total CAEMI System			30.5	35.9	42.4	595.4	65.8	
Total CVRD			167.8	188.3	211.3	6,869.1	56.8	

CVRD's equity interest in mines is 100% unless otherwise noted.
 Reserves were not reported for 2004 due to the mine's depleted state. The plant beneficiates iron ore from Minas do Meio.
 Average product recovery after beneficiation is 76%. The plant beneficiates iron ore from Conceição mine and Minas do Meio.
 Average product recovery after beneficiation is 74%. The run-of-mine is sent to Cauê Concentration Plant and Conceição Concentration Plant. The production is declared in Cauê and Conceição.
 Average product recovery after beneficiation is 49%.

- (6) Average product recovery after beneficiation is 69%.
- (7) Average product recovery is 100% (direct shipping).
   (8) Average product recovery is 84%.
- (9) Average product recovery is 84%.
- (10) Average product recovery is 100% (direct shipping). Reserves were not reported for 2004 due to the mine's depleted state.
- (11) Average product recovery after beneficiation is 72%.
  (12) Average product recovery is 100% (direct shipping). It produces lump ore only.
- (13) Average product recovery after beneficiation is 74%.
- (14) CVRD's ownership interest is 51%. Average product recovery after beneficiation is 84%. Reserves were not reported for 2004 due to the mine's depleted state.
- (15) Average product recovery after beneficiation is 80%.
- (16) Average product recovery is 60%. The run-of-mine is sent to Fábrica Concentration Plant.
- (17) There are no proven and probable iron ore reserves at Urucum.
- (18) Average product recovery after beneficiation is 85%.
- (19) Average product recovery after beneficiation is 77.2%.

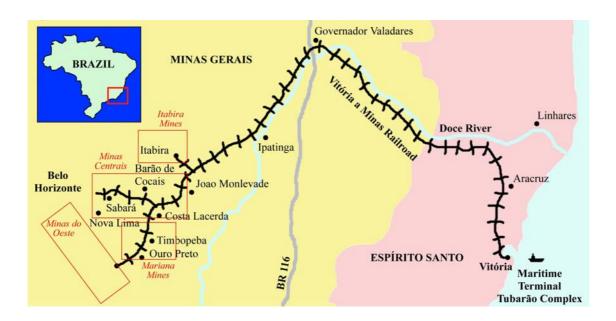
### **Integrated Systems**

The following map shows the location of our current principal operations.



Our iron ore mining and related operations are concentrated in three systems in Brazil, the Southern System, the Northern System and the CAEMI System. The Southern System is located in the states of Minas Gerais, Espírito Santo and Rio de Janeiro, and the Northern System is located in the states of Pará and Maranhão. Each of our Northern and Southern Systems includes iron ore reserves and other mineral deposits, mines, ore processing facilities and integrated railroad and terminal transportation facilities. Our railroads connect the Northern System mines to the Ponta da Madeira Maritime Terminal Complex and the Southern System mines to the Tubarão Maritime Terminal Complex. A small part of the iron ore produced in our Southern System is transported via MRS, a railway company in which we have a 37.2% direct and indirect participation interest, to our wholly owned CPBS maritime terminal. The operation of these separate systems, each with its own transportation capability, enhances the reliability of service to our customers. We also operate the CAEMI System which similarly contracts freight services from MRS to transport all of its products from its mines in the Iron Quadrangle region in the state of Minas Gerais, to the Guaiba maritime terminal in the state of Rio de Janeiro.

#### Southern System

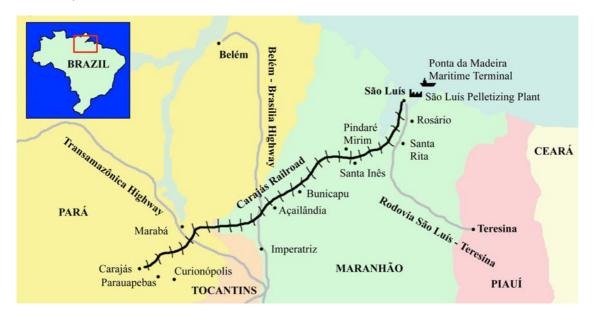


The Southern System is an integrated system consisting of iron ore mines, the Vitória a Minas railroad, and the Tubarão Maritime Terminal (located in Vitória, in the state of Espírito Santo). The iron ore mines of the Southern System are divided in four mining areas (Itabira, Minas Centrais, Mariana and Minas do Oeste) and located in a region called the Iron Quadrangle in the state of Minas Gerais, in the southeast of Brazil. The Southern System is accessible by road or by spur tracks of the Vitória a Minas railroad. A small portion of the iron ore produced in the Southern System mines is transported through the MRS railroad to our CPBS maritime terminal at the Sepetiba Port, in the state of Rio de Janeiro. Transportation of the iron ore produced in the Southern System is discussed below in *Item 4. Information on the Company—Line of Business—Logistics*.

Iron ore in the Southern System is mined by open pit methods. These ore reserves have high ratios of itabirite ore relative to hematite ore. Itabirite is a quartz-hematite rock with an average iron content ranging from 35% to 60% requiring concentration to achieve shipping grade, which is above a 64% average iron content. Hematite is a high-grade ore with an average iron content of approximately 66%. Mines in the Southern System generally process their run-of-mine by means of standard crushing, classification and concentration steps, producing sinter feed, lump ore and pellet feed in the beneficiation plants located at the mining sites.

In 2004, we produced 57.5% of the energy consumed in the Southern System at our Igarapava, Porto Estrela, Funil and Candonga hydroelectric power plants.

### Northern System

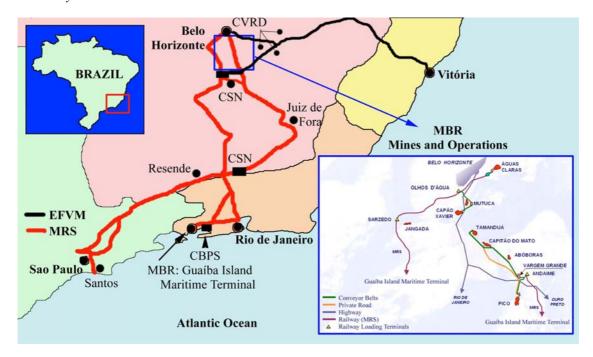


The Northern System is an integrated system, including open pit mines and an ore processing complex in the Carajás region, in the state of Pará, the Carajás railroad and the Ponta da Madeira Maritime Terminal, in the state of Maranhão. The mines are located in the north of Brazil (in the Amazon river basin), on public lands for which we hold mining concessions. The Northern System's reserves are among the largest iron ore deposits in the world. These reserves are divided into two main ranges (north and south), situated approximately 35 kilometers apart. Iron ore mining activities in the Northern System are currently being conducted in the northern range, which is divided into five main mining bodies (N4E, N4W, N5W, N5E and N5EN). Industrial scale mining operations began in 1985.

Because of the high iron content (66.7% on average) in the Northern System, we do not have to operate a concentration plant at Carajás. The beneficiation process consists simply of sizing operations, including screening, hydrocycloning, crushing and filtration. This allows us to produce marketable iron ore in the Northern System at a lower cost than in the Southern System. Output from the beneficiation process consists of sinter feed, pellet feed, special fines for direct reduction processes and lump ore. After the beneficiation process, our Carajás railroad transports Northern System iron ore to the Ponta da Madeira Maritime Terminal.

Our complex in Carajás is accessible by road, air and rail. It obtains electrical power at market rates from regional utilities. To support our Carajás operations we have housing and other facilities in a nearby township.

### CAEMI System



CAEMI operates its iron ore activities through its subsidiary MBR. MBR operates mines in the Iron Quadrangle in the state of Minas Gerais and ships through its own maritime terminal on Guaiba Island in Sepetiba Bay, in the state of Rio de Janeiro.

MBR presently operates two main mining areas, Pico and Tamanduá, and two other single mines, Jangada and Capão Xavier, which have an average iron content of 65.9%. Iron ore is mined by the open pit method in each of the mines. Lump ore, sinter feed fines and pellet feed fines are produced from iron ore extracted from each mine after beneficiation. Each of Jangada, Pico and Tamanduá has its own beneficiation plant.

MBR transports its iron ore to the Guaiba Island maritime terminal at market rates via the MRS railway.

### **Pellets**

The table below sets forth information regarding our share ownership and joint venture partners as of May 31, 2005 and total pellet production by our joint ventures and us for the periods indicated.

	System	Our Dir Indirect S Capi	hare of	Partners	for tl	llet Produc ne Year En cember 31	ded	Nominal Capacity
		Voting	Total		2002	2003	2004	
		%				(in millio	ons of tons)	
CVRD(2)	Northern/ Southern	n.a.	n.a.	_	10.3	13.0	16.3	15.7
GIIC	Bahrain	50.0	50.0	GIC	3.1	3.7	3.7	4.0
Hispanobras	Southern	51.0	50.9	Arcelor	3.7	3.6	4.0	3.8
Itabrasco	Southern	51.0	50.9	Ilva	3.3	3.3	3.5	3.3
Kobrasco	Southern	50.0	50.0	Posco	4.1	4.4	4.5	4.3
Nibrasco	Southern	51.1	51.0	Nippon Steel Sumitomo JFE Steel Kobe Steel Nisshin Steel SOJITZ Corp.	7.1	7.7	8.3	8.4
Samarco	Ponta do Ubú	50.0	50.0	BHP Billiton	11.6	13.3	13.8	14.0
Total	23 <b>u</b>				43.2	49.0	54.1	51.5

We sell pellet feed to our pellet joint ventures at market-based prices. Historically, we have supplied all of the iron ore requirements of our wholly owned pelletizing plants and joint ventures, except for Samarco and GIIC to whom we supply a portion of their needs. Besides blast furnace pellets, some of the pellets we and our pelletizing joint ventures produce are direct reduction pellets, which are used in steel mills that use the direct reduction process rather than blast furnace technology.

We operate our pelletizing joint ventures located in the Tubarão Port area. In 2004, we received US\$ 53 million in fees for operating these joint ventures.

The table below sets forth information regarding iron ore shipments to our pellet joint ventures for the periods indicated.

	For the Year Ended December 31,				
	2002	2003	2004		
<del>-</del>	(in millions of tons)				
GIIC	2.6	2.7	3.5		
Hispanobras	3.7	3.8	4.2		
Itabrasco	3.6	3.5	3.7		
Kobrasco	4.4	4.7	4.8		
Nibrasco	7.3	7.1	7.1		
Samarco	2.0	2.0	2.0		
Total	23.6	23.9	25.3		

Total production by joint venture entity.
 Production and capacity figures include CVRD I and II in Tubarão, the São Luís pelletizing plant and the Fábrica pelletizing plant.

### Customers, Sales and Marketing (Iron Ore and Pellets)

We use all of our iron ore and pellets (including our share of joint venture pellet production) to supply the steel making industry. Prevailing and expected levels of demand for steel products affect demand for our iron ore and pellets. Demand for steel products is influenced by many factors, such as expected rates of economic growth.

Most of our iron ore and pellets are shipped to Asia and Europe, with customers in China, Japan, South Korea, France and Germany accounting for approximately 46.5% of our total iron ore and pellets shipments in 2004. Historically, we have sold to the Brazilian market one-third of our iron ore shipments. In 2004, 36% of the iron ore sold in Brazil was directed to our pelletizing joint ventures, whose pellets are primarily sold to other markets. Our 10 largest customers collectively purchased 89 million tons of iron ore and pellets from us, representing 38.7% of our 2004 iron ore and pellet shipments and 33.6% of our total iron ore and pellets revenues. With the exception of Arcelor which accounted for 11% of our sales of iron ore and pellets in 2004, no individual customer accounted for more than 10% of our sales of iron ore and pellets for any of the three years ended December 31, 2004.

We strongly emphasize customer service in order to improve our competitiveness. We work with our customers to understand their principal objectives and to provide them with iron ore solutions to meet specific customer needs. To provide tailored solutions, we take advantage of our large number of iron ore mines and pellet plants to produce multiple iron ore products with different grades of iron, silica and alumina, and varying physical properties. We believe that our ability to provide our customers with a total iron ore solution, and the quality of our products are very important advantages helping us to improve our competitiveness in relation to competitors who may be more conveniently located geographically. In addition to offering technical assistance to our customers, CVRD operates sales support offices in Tokyo, Brussels, New York and Shanghai. These offices allow us to stay in close contact with our customers, monitor their requirements and our contract performance, and ensure that our customers receive timely deliveries. Our central sales office in Rio de Janeiro coordinates the activities of these offices. CAEMI's sales support offices are located in Westport, Connecticut (United States), The Hague (The Netherlands), Hong Kong and Shanghai (China).

## Distribution (Iron Ore and Pellets)

Our ownership and operation of transportation systems designed for the efficient transportation of iron ore products complement our iron ore mining business in the Northern and Southern Systems. We operate an integrated railroad and terminal network in each of our Northern and Southern Systems. These networks transport our iron ore products from interior mining locations to maritime terminals and domestic customers. For a more detailed description of the networks see *–Logistics* below.

We do not own or operate an integrated transportation system for our CAEMI System. Instead we enter into freight contracts with MRS to transport our iron ore products at market rates from MBR's mines to its maritime terminal on Guaiba Island and to its domestic customers.

## Competition (Iron Ore and Pellets)

In general, the international iron ore market is highly competitive. Several large producers operate in this market. The principal factors affecting competition are price, quality, range of products offered, reliability, operating costs and transportation costs. In 2004, the European market and the Asian market (primarily China, Japan and South Korea) were the primary markets for our iron ore.

Our biggest competitors in the Asian market are located in Australia and include subsidiaries and affiliates of BHP Billiton PLC and Rio Tinto Ltd. Although the transportation costs of delivering iron ore from Australia to Asian customers are generally lower than ours as a result of Australia's geographical proximity, we believe we are able to remain competitive in the Asian market for two principal reasons. First, steel producers generally seek to obtain the types (or blends) of iron ore, which can produce the intended final product in the most economic and efficient manner. Our iron ore has low impurity levels and other properties that generally lead to lower processing costs. For example, the alumina content of our iron ore is very low compared to Australian ore. Our ore also has high iron grade, which improves productivity in blast furnaces, which is important during periods of high demand. Second, steel mills often develop sales relationships based on a reliable supply of a specific mix of iron ore. We have a customer-oriented marketing policy and place specialized personnel in direct contact with our clients to determine the blend that best suits each particular client. We sell most of our products FOB from our ports, which

means that the invoice price includes delivery at our expense to our ports and no further. In general, in the Northern and Southern Systems, our ownership of the process of producing and transporting iron ore to our ports makes it easier for us to ensure that our products get to our ports on schedule and at competitive costs.

We are competitive in the European market for the reasons we described above, as well as the proximity of the Ponta da Madeira and Tubarão ports facilities to European customers. Our principal competitors in Europe are:

- Kumba Resources (South Africa);
- Luossavaara Kiirunavaara AB LKAB (Sweden);
- Sociétè Nationale Industrielle et Minière SNIM (Mauritania);
- Rio Tinto PLC (UK), Rio Tinto Ltd (Australia) and their subsidiaries and affiliates; and
- BHP Billiton (Australia) and its affiliates.

The Brazilian iron ore market is competitive with a wide range of smaller producers and integrated steel producers such as CSN and Mannesmann. Although pricing is relevant, quality and reliability are important competitive factors as well. We believe that our integrated transportation systems, high-quality ore and technical services make us a strong competitor in Brazilian sales. Prices to Brazilian customers are based on global reference prices discounted by the lower transportation costs to their facilities. Therefore, prices to these clients are lower than to clients located outside Brazil.

#### Manganese Ore and Ferroalloys

We conduct our manganese ore and ferroalloy businesses primarily through the following subsidiaries and joint ventures, as of May 31, 2005:

		t or Indirect f Capital	
	Voting	Total	Partners
	(	<del>%</del> )	
Nova Era Silicon S.A. (NES)	49.0%	49.0%	Mitsubishi JFE Steel
Rio Doce Manganèse Europe (RDME)	100.0	100.0	JI E Steel
Rio Doce Manganese Norway AS (RDMN)	100.0	100.0	
Rio Doce Manganês S.A. (RDM)	100.0	100.0	
Urucum Mineração S.A. (Urucum)	100.0	100.0	

In 2004, we were the largest manganese ore producer in the Americas and one of the largest players in the global seaborne market, with total shipments of approximately 1,002 thousand tons of manganese ore and 616 thousand tons of ferroalloys. We had US\$ 701 million in revenues in 2004 from manganese ore and ferroalloy sales.

We produce manganese ore products from the Azul mine in the Carajás region in the state of Pará and from the Urucum mine in the Pantanal region in the state of Mato Grosso do Sul, Brazil. We operate on-site beneficiation plants at both the Azul and Urucum mines. Both mines are accessible by road and obtain electrical power at market rates from regional electric utilities. We also operate five minor mines, Morro da Mina, Coribe, Barnabé, Cobra and São Desidério, in the states of Minas Gerais and Bahia.

Our manganese ore mines produce three types of manganese ore products:

• metallurgical ore used primarily for the production of ferroalloys;

- natural manganese dioxide suitable for the manufacture of electrolytic batteries; and
- chemical ore used in several industries for the production of fertilizer, pesticides and animal food, and used as a pigment in the ceramics industry.

The production of ferroalloys consumes significant amounts of electricity. For information on the risks associated with potential energy shortages, see *Item 3*. *Key Information—Risk Factors*.

The table below sets forth information regarding our manganese ore mines and recent manganese ore production for the periods indicated. The estimates of mineral reserves of Urucum and Azul have been audited and verified by Pincock, Allen & Holt. We own 100% of all mines.

	Began Operations	Projected Exhaustion Date	For the Year E		Production For the Year Ended December 31,		or the Year Ended		or the Year Ended		d Probable Reso	erves
	_		2002	2003	2004	Type	Ore Tonnage (1)	Grade(2)				
Azul	1985	2013	1.8	1.5	2.0	Open Pit	36.8	36.0				
Urucum(3)	1976	2022	0.3	0.4	0.4	Underground	10.0	45.5				
Morro da Mina(4)	1902	n.a.	0.1	0.1	0.2	Open Pit	n.a.	n.a.				
Coribe, Barnabé, Cobra and São Desidério(4) Total	1972	n.a.	0.1	0.2	0.1	Open Pit	n.a. 46.8	n.a. 38.0				

<sup>(1)</sup> Reserves reported as run-of-mine wet tons, in millions of tons.

- (2) Reported as run-of-mine Mn% grade.
- (3) Based on the information gathered during the current drilling process as well as the expansion/erosion method of calculation.
- (4) There are no proven and probable manganese reserves at Morro da Mina, Coribe, Barnabé, Cobra or São Desidério.

We currently operate eight mills that produce ferroalloys and special alloys – Santa Rita, Barbacena, Ouro Preto, São João del Rey (all located in the state of Minas Gerais), Simões Filho (in the state of Bahia), Corumbá (in the state of Mato Grosso do Sul), RDME (in Dunkerque, France) and RDMN (in Mo I Rana, Norway). The table below sets forth information regarding our production in 2004:

	Production Capacity	Production in 2004
	(In thousands of tons per year)	(In thousands of tons)
Rio Doce Manganèse Europe (RDME) (1)(2)	136	106
Rio Doce Manganese Norway (RDMN)	110	106
Rio Doce Manganês S.A. (RDM) (3)	340	338
Urucum Mineração S.A.	20	19
Nova Era Silicon S.A. (NES)	45	40
Total	651	609

<sup>(1)</sup> Production at RDME was interrupted for three months during 2004 to allow the plant furnace to be relined.

## Competition (Manganese Ore and Ferroalloys)

The markets for manganese ore and ferroalloys are highly competitive. Competition in the manganese ore market takes place in two sectors. High-grade (40% Mn or more) manganese ore competes on a seaborne basis, while low grade ore competes on a regional basis. For some ferroalloys high-grade ore is mandatory, while for some others high and low grade ores are complementary. Besides manganese ore content, cost and physical-chemical features play an important role in competition (*e.g.* moisture, impurities). The main suppliers of high-grade (HG) ores are South Africa, Gabon and Australia. The main producers of low-grade (LG) ores are Ukraine,

<sup>(2)</sup> Includes production of 4 thousand tons of special alloys (cored wire).

<sup>(3)</sup> Includes production of 26 thousand tons of special alloys (cored wire).

China, Ghana, Kazakhstan, India and Mexico. CVRD is the second largest worldwide supplier of manganese ores, with HG ores in Carajás and Urucum mines, and LG ores in the smaller mines in the states of Minas Gerais and Bahia. The ferroalloy market is characterized by a large number of market participants who compete primarily on the basis of price (which is a function of lower costs). CVRD produces several types of ferroalloys, such as manganese ferro-silicon alloys (SiMnFe), ferro-manganese high-carbon alloys (HCFeMn), ferro-manganese mediumcarbon alloys (MCFeMn) and cored wire (special alloys). The principal competitive factors in this market are costs of manganese ore, electricity, logistics and carbon. We compete both with standalone producers and integrated producers that also mine their own ore. Our competitors are located principally in manganese ore or steel producing countries.

#### Non-Ferrous Minerals

Our non-ferrous minerals business segment includes the production of non-ferrous minerals, such as kaolin, potash, copper and gold. The table below sets forth information regarding our non-ferrous minerals gross revenues and sales by geographic market for the periods indicated.

	For the Year Ended December 31,								
	2	002	2003(2)			2004			
Gross revenues classified by geographic destination			(in milli	ons of US\$)					
Americas, except Brazil	US\$	35	US\$	8	US\$	1			
Brazil		96		106		163			
Europe/Middle East/Africa/Oceania		100		76		301			
China		4		7		81			
Japan		3		13		31			
Asia, other than Japan and China		1		1		107			
Subtotal	US\$	239	US\$	211	US\$	684			
Eliminations(1)		_		_		(195)			
Total	US\$	239	US\$	211	US\$	489			
Gross revenues classified by category			-						
Gold	US\$	103	US\$	21	US\$	_			
Potash		91		94		124			
Copper		_		_		201			
Kaolin		45		96		164			
Total	US\$	239	US\$	211	US\$	489			

<sup>(1)</sup> Eliminations of transactions between consolidated entities.

## Kaolin

We conduct our kaolin business through CAEMI, which controls CADAM S.A. ("CADAM"), which began operations in 1976, and Pará Pigmentos S.A. ("PPSA"), which began operations in August 1996. PPSA and CADAM produce kaolin for paper coating. They also conduct research and development in other uses for kaolin products to create a more diversified portfolio.

	Our Direct of		
	Voting	Total	Partners
	(%	6)	
CADAM S.A	100.00%	37.03%	Banco do Brasil S.A. BNDES
Pará Pigmentos S.A.	85.57%	82.05%	Mitsubishi Corporation International Finance Corporation

<sup>(2)</sup> The operations of CAEMI are reflected in the above table as of September 2003, the date on which we acquired and began consolidating its operations.

In December 2004, we sold our interest in PPSA to CAEMI, consolidating the management of our kaolin business in CAEMI.

	Began Operations	Projected Exhaustion Date	For th	roduction ne Year End cember 31,			Proven and	Probable Rese		
			(in t	ons per yea	r)				Grade	
			2002	2003	2004	Туре	Ore Tonnage	Brightness	Grit	PSD
Morro do Felipe	1976	2013	710.7	711.2	750.0	Open Pit	16.3	87.0	7	n.a.
Rio Capim (1)	1996	2008	330.0	423.0	460.1	Open Pit	36.7	82.9	34	66.3
Total			1,040.7	1,134.2	1,210.1		53.0	84.2	26	n.a.

<sup>(1)</sup> Recovery is 37%.

PPSA sold approximately 463 thousand tons of kaolin in 2004, generating revenues of US\$ 72 million. PPSA's open pit Rio Capim mine and beneficiation plant are located in Ipixuna, in the state of Pará. These operations are linked to the dry and port facilities in Barcarena, also in the state of Pará, via a 180km pipeline. The beneficiated kaolin is pumped through the slurry pipeline, which helps preserve the environment, guarantee the product quality and meet delivery schedules, besides being very cost efficient.

PPSA is currently expanding its production and sales, aiming at operating at its full capacity of 600,000 tons per year. In July 2004, it signed a contract with International Paper, the world's largest paper producer, for the supply of 110,000 tons of kaolin per year between 2005 and 2009. This agreement will allow PPSA to operate at a high level of capacity utilization from 2005 onwards. PPSA produces three products: Century HC, Century S and Paraprint, which are sold mainly in the European and Asian markets.

CADAM sold approximately 744 thousand tons of kaolin in 2004, generating revenues of US\$ 92 million. CADAM is located on the border of the states of Pará and Amapá, in the Amazon area in Northern Brazil. Due to the quality and logistics of its products, it has gained a solid competitive global position in its market segment. CADAM's reserves are principally concentrated in the Felipe mine, in Mazagão, in the state of Amapá. The beneficiation plant and private port are situated on the west bank of the Jari river, in Munguba, in the state of Pará. CADAM extracts kaolin from its open pit mine.

CADAM's production process can be summarized as follows: the raw ore (run-of-mine) is extracted and mixed with water and chemicals to create a liquid (kaolin dispersed in water). This liquid is then pumped to a degritting station where natural impurities are removed. The kaolin in liquid form, or slurry, is transported by gravity through a 6-km pipeline to the beneficiation plant on the opposite side of the Jari river. The slurry is then processed by centrifuging, removing iron by magnetic separation and chemical bleaching, and the resulting material is filtered, evaporated and dried to produce lump or spray-dried kaolin. The kaolin is then shipped from CADAM's private port, situated near the beneficiation plant on the west bank of the Jari river. The kaolin can also be shipped in its liquid form, slurry, just before the drying operations.

Coating kaolin is loaded onto ships at CADAM's port in Munguba. Some of the lump production is also processed into slurry form by CADAM's subsidiary located in Antwerp, Belgium. In Holland, an advanced Technical Assistance Center is constantly researching the use of kaolin, offering technical and commercial support to European and Asian customers.

## Potash

We conduct our potash operations at the parent company level. We lease a potash mine (Taquari – Vassouras mine) in Rosario do Catete, in the state of Sergipe, Brazil, from Petrobras – Petróleo Brasileiro S.A. (Petrobras), the Brazilian oil company. The lease was signed in 1991 for a period of 25 years, and is renewable for another 25 years. The mine is the only potash mine in Brazil and has a current nominal capacity of 600,000 tons per year. Taquari – Vassouras is an underground mine with a depth that varies from 430 to 640 meters. In 2004, we produced 638

thousand tons of potash with total shipments of 630 thousand tons, and we had gross revenues of US\$ 124 million. All sales from Taquari – Vassouras mine are destined for the domestic market.

We have budgeted US\$ 78 million in capital expenditures to expand the mine capacity to 850,000 tons per year. Expansion is scheduled to be completed by 2005. Our proven and probable reserves should be sufficient to ensure the estimated production for the next five years.

_	Leased Since	Projected Exhaustion Date	Production For the Year Ended December 31,		For the Year Ended December 31,		For the Year Ended December 31,		Proven an	d Probable Ro	eserves
			`	ands of tons	,	T	Ore	C d-			
			2002	2003	2004	Туре	Tonnage	Grade			
Taquari – Vassouras(1)	1992 (2)	2010	627	658	638	Underground	19.2	31.0			
Total						-	19.2	31.0			

<sup>(1)</sup> Drill spacing is on nominal 200-meter intersections from vertical and sub horizontal drilling. Tons are expressed as ROM dry metric tons. Recovery is 90%.

In November 2004, we won a concession to research and evaluate a potash deposit in the Neuquen Province, on the banks of the Colorado river, in Argentina.

#### Gold

Our gold operations currently consist of gold produced as a by-product of our iron ore operations at Itabira, which we sell to third parties. In 2004, we produced 0.97 thousand troy ounces of gold as a by-product of iron ore production at our Itabira mine. The copper concentrate we produce at our Sossego copper mine also includes gold, but we do not sell the gold separately from the concentrate. The copper concentrate produced at our Sossego mine contained 56.76 thousand troy ounces of gold. Revenues related to gold contained in the copper concentrate are included in our copper revenues. We also continue to invest in mineral exploration aimed at the discovery of gold reserves. Gold sales generated less than US\$ 1 million of revenues in 2004. The table below sets forth information regarding our gold mines and recent gold production for the periods indicated. The projected exhaustion date is based on 2004 production levels.

	Began Operations	Exhaustion Date	For the	Production For the Year Ended December 31,		
			2002	2003	2004	
			(tho	ousands of troy ounces)		
Fazenda Brasileiro (1)	1984	n.a.	153.0	51.3 (2)	_	
Igarapé Bahia	1991	2002	148.2	_`´	_	
Itabira (3)	1984	n.a.	13.1	2.3	0.97	
Total			314.5	53.6 (1)	0.97	

<sup>(1)</sup> Fazenda Brasileiro was sold in August 2003.

#### Copper

*Sossego*. Sossego is our first copper mine and began commercial production of copper concentrate in June 2004. The Sossego copper mine is located in Carajás, in the state of Pará, in northern Brazil. We conduct our Sossego operation at the parent company level.

The Sossego copper mine has two main ore bodies (Sossego and Sequeirinho). The copper ore is mined by open pit method and the run-of-mine is processed by means of standard primary crushing and conveying, SAG (a semi-autogenous grinding mill which uses a large rotating drum filled with ore, water and steel grinding balls which transforms the ore into a fine slurry), ball milling, copper concentrate flotation, tailings disposal, concentrate

<sup>(2)</sup> The mine began operations in 1986.

<sup>(2)</sup> Includes production prior to the sale of Fazenda Brasileiro.

<sup>(3)</sup> Gold in Itabira mine is produced together with iron ore. These are small gold bodies and their production depends on the level of iron ore production.

thickening, filtration and load out. Projected annual operating capacity is 15 million tons of run-of-mine, to produce an average of 140,000 tons of copper contained in concentrate (30% grade). The concentrate is trucked to a storage terminal in Parauapebas and then transported via the Carajás railroad to the Ponta da Madeira Maritime Terminal in São Luís, in the state of Maranhão.

	Began Operations	Projected Exhaustion Date	Production 2004 (tons)	Proven a	nd Probable	Reserves
				Туре	Ore Tonnage	Grade
Sossego(1)	2004	2021	73,000	Open pit	250.3	0.95% Cu and 0.27 Au (GPT)

<sup>(1)</sup> Recovery for Sossego copper reserves is 92% of metal in concentrate. Drill spacing is on nominal 80-meter centers.

We have constructed an 85-kilometer road to link Sossego to the Carajás air and rail facilities and a power line that allows us to purchase electrical power at market rates. We have a long-term energy supply contract with Eletronorte, which sells us energy from the Tucuruí hydroelectric power plant located on the Tocantins river.

Copper exploration projects

The table below sets forth information, at May 31, 2005, regarding our joint ventures and the status and potential productivity of our principal copper prospects, all but one of which features a gold by-product.

	Our Direct or Indirect Share of Capital (Voting and Total) (1)	Status	Total Expected Mineral Deposits (Millions of tons)	Total Expected Capital Expenditures (In millions of USS)	Anticipated Start up Date
118	50.0	Feasibility concluded	64 at 0.95% Cu	218	2007
Salobo	100.0	Feasibility in progress	700 at 0.86% Cu and 0.52 g/t Au	n.a.	n.a.
Cristalino	50.0	Pre-feasibility in progress	375 at 0.64% Cu and 0.12 g/t Au	n.a.	n.a.
Alemão	67.0	Pre-feasibility in progress	161 at 1.3% Cu and 0.87 g/t Au	n.a.	n.a.

<sup>(1)</sup> Where the project is not wholly owned, our partner in the project is BNDES.

In addition, we and BNDES are prospecting the Carajás region for new copper exploration projects. See *Item 4*. *Information on the Company—Lines of Business—Mining—Mineral Risk Contract*.

We will build a semi-industrial plant to process copper using the hydrometallurgical route. The objective of this plant, which will have capacity to produce 10,000 tons of copper cathodes per year, is to test a new technological route to produce the metal from copper sulphide concentrates.

We will use copper concentrate from the Sossego mine to feed the plant, which is expected to start up by the second quarter of 2007 and be productive for two years. We estimate that this period will be sufficient to prove the feasibility of industrial production through the hydrometallurgical route, supporting the construction of a larger plant to process copper ore from other deposits owned by CVRD, including the Salobo project. The capital expenditures estimated for the construction of this semi-industrial plant amount to US\$ 58 million.

## **Exploration**

As part of our mineral prospecting and development activities in Brazil, we have acquired extensive experience in exploration techniques and processes specifically designed for use in tropical areas of the world. Our current mineral exploration efforts are mainly in Brazil, Peru, Chile, Mongolia, Gabon, Mozambique, Angola and Argentina and focus primarily on copper, gold, nickel, manganese ore, kaolin, bauxite, coal, potash, diamond and platinum group metals. Exploration costs are recorded as expenses until viability of mining activities is established (see Note 3 to our financial statements). The capital expenditures budget for research and development for 2005 is US\$ 375 million.

#### Mineral Risk Contract

We and BNDES entered into a Mineral Risk Contract in March 1997, relating to prospecting authorizations for mining regions where drilling and exploration are still in their early stages. The Mineral Risk Contract provides for the joint development of certain unexplored mineral deposits in approximately two million identified hectares of land in the Carajás region, which is part of the Northern System, as well as proportional participation in any financial benefits earned from the development of such resources. Iron ore and manganese ore deposits already identified and subject to development were specifically excluded from the Mineral Risk Contract.

Pursuant to the Mineral Risk Contract, we and BNDES each agreed to provide US\$ 205 million, which represents half of the US\$ 410 million in expenditures estimated as necessary to complete geological exploration and mineral resource development projects in the region. In April 2004, the Mineral Risk Contract was renewed for an additional period of five years or until the total value of US\$ 410 million is spent (including disbursements already made, which amounted to US\$ 357.6 million in December 31, 2004) whichever occurs first.

We will oversee these projects and BNDES will advance us half of our costs on a quarterly basis. Under the Mineral Risk Contract, as of December 31, 2004, the remaining contributions towards exploration and development activities totaled US\$ 52.4 million. The contract provides that each party may choose not to contribute and have its financial interest proportionally diluted. If a party's participation in the Mineral Risk Contract is diluted to an amount lower than 40% of the amount invested in connection with exploration and development projects, then it provides that the diluted party will lose all the rights and benefits provided for in the Mineral Risk Contract and any amounts previously contributed to the project.

Under the Mineral Risk Contract, BNDES has agreed to compensate us for our contribution of existing development and ownership rights in the Carajás region through a finder's fee production royalty on mineral resources that are discovered and placed into production. This finder's fee is equal to 3.5% of the revenues derived from the sale of gold, silver and platinum group metals and 1.5% of the revenues derived from the sale of other minerals, including copper, except for gold and other minerals discovered in the Serra Leste region, for which the finder's fee is equal to 6.5% of revenues.

# Logistics

We operate our logistics business, which is comprised of the transportation of third-party products and passengers, through the following subsidiaries and joint ventures as of May 31, 2005:

	Principal Activity		t or Indirect f Capital	Partners
		Voting	Total	
		(	%)	
Cia. Portuária Baía de Sepetiba (CPBS)	Ports and Terminals	100.00%	100.00%	
DCNDB Overseas S.A. (DCNDB)	Shipping	79.00	79.0	Mitsui
Navegação Vale do Rio Doce S.A- Docenave (Docenave)	Shipping	100.00	100.00	
Ferrovia Centro-Atlântica S.A. (FCA)	Railroad	99.99	99.99	Employees Others
Terminal de Vila Velha S.A. (TVV)	Ports and Terminals	99.89	99.89	Employees
MRS Logística S.A. (MRS) (Includes CVRD and MBR stakes)	Railroad	37.2	29.35	CSN Usiminas Gerdau Employees Others
Ferroban-Ferrovias Bandeirantes S.A. (Ferroban)	Railroad	0.00	3.75	Nova Ferroban Others

The table below sets forth information regarding our third-party logistics gross revenues and sales by geographic market for the periods indicated.

	For the Year Ended December 31,							
	2002		2003(2)		20	04		
Gross Revenues classified by geographic destination:			(in million	ns of US\$)				
Americas, except Brazil and United States	US\$	25	US\$	38	US\$	65		
Brazil		374		472		871		
United States		3		_		15		
Europe		9		30		12		
Middle East		_		4		_		
Japan		1		_		_		
Asia, other than Japan		3		3		_		
Subtotal		415		547		963		
Eliminations(1)		43		57		(86)		
Total	US\$	458	US\$	604	US\$	877		
Revenues classified by category								
Railroads		286		373		612		
Ports		107		144		173		
Ships		65		87		92		
Total	US\$	458	US\$	604	US\$	877		

- (1) Eliminations of transactions between consolidated entities.
- (2) The operations of CAEMI and FCA are reflected in the above table as of September 2003, the date on which we acquired and began consolidating their operations.

#### Railroads

Vitória a Minas railroad. The Vitória a Minas railroad links our Southern System mines in the Iron Quadrangle in the state of Minas Gerais with the Tubarão Port, in Vitória, in the state of Espírito Santo. We operate this 905 kilometer railroad under a 30-year renewable concession, which expires in 2027. The Vitória a Minas railroad consists of two lines of track extending for a distance of 601 kilometers to permit continuous railroad travel in opposite directions, and single-track branches of 304 kilometers. Industrial manufacturers are located near this area and major agricultural regions are adjacent and accessible to the Vitória a Minas railroad. The Vitória a Minas has a daily capacity of 310,000 tons of iron ore. In 2004, the Vitória a Minas railroad carried a total of 64.8 billion ntk of iron ore and other cargo (of which 18.5 billion ntk, or 28%, consisted of cargo transported for third parties). The Vitória a Minas railroad also carried approximately 1.1 million passengers in 2004.

The principal cargo of the Vitória a Minas railroad consists of:

- iron ore and pellets, carried for us and third parties;
- steel, coal, pig iron, limestone and other raw material carried for steel manufacturers located along the railroad;
- agricultural products, such as soybean and soybean meal; and
- other general cargo, such as building materials, pulp, fuel and chemical products.

We charge market rates (which are limited by the tariffs fixed by ANTT) for third-party freight, including pellets originating from joint ventures and other enterprises in which we do not own 100% of the equity interest. Market rates vary based upon the distance traveled, the kind of product and the weight of the freight in question.

Carajás railroad. We operate the Carajás railroad under a 30-year renewable concession, which expires in 2027. This railroad, located in the Northern System, starts at our Carajás iron ore mine in the state of Pará, and extends 892 kilometers to our Ponta da Madeira Maritime Terminal Complex facilities located near the São Luís Port in the state of Maranhão. The Carajás railroad consists of one line of track, with spur tracks and turnouts to permit the passage of trains in opposite directions. The Carajás railroad has a daily capacity of 200,000 tons of iron ore. In 2004, the Carajás railroad carried a total of 63.5 billion ntk of iron ore and other cargo (of which 6.5 billion

ntk, or 10.2%, consisted of cargo transported for third parties). The Carajás railroad also carried approximately 347,000 passengers in 2004. The principal cargo of the Carajás railroad consists of iron ore, principally carried for us

Ferrovia Centro-Atlântica. Our subsidiary FCA operates the central east regional railway network of the Brazilian national railway system under a 30-year renewable concession granted in 1996. The central east network contains approximately 7,000 kilometers of track extending into the states of Sergipe, Bahia, Espírito Santo, Minas Gerais, Rio de Janeiro, Goiás and Distrito Federal, Brazil. It connects with our Vitória a Minas railroad near the cities of Belo Horizonte, in the state of Minas Gerais and Vitória, in the state of Espírito Santo. FCA operates on the same track gauge as our Vitória a Minas railroad. The section of the network of Ferroban-Ferrovias Bandeirantes S.A. (Ferroban) between Araguari and Vale Fértil rail station, near the city of Uberaba, in the state of Minas Gerais, has been operated by FCA since 1998 and in January 2002, FCA began operating the section between Vale Fértil in the state of Minas Gerais and Boa Vista in the state of São Paulo, Brazil. This connection allows FCA to reach the Santos Port, in the state of São Paulo. In 2004, the FCA railroad transported a total of 10.5 billion ntk of cargo for third parties.

*Other investments.* We currently hold 3.8% of the total capital and none of the voting capital of Ferroban. Ferroban operates a 4,236-kilometer railroad linking the states of São Paulo, Minas Gerais, Mato Grosso do Sul and Paraná, Brazil. In 2004, Ferroban reported net revenues of US\$ 57 million and a net loss of US\$ 37 million.

As a result of our acquisition of CAEMI and incorporation of Ferteco, we own, directly and indirectly, 37.2% of the voting capital and 29.4% of the total capital in MRS. MRS is a 1,674-kilometer railroad, which links the states of Rio de Janeiro, São Paulo and Minas Gerais with a capacity to transport 110 million tons per year. MRS operates under a 30-year renewable concession granted in 1996. Under the terms of the concession bid rules, no person may, directly or indirectly, own more than 20% of the voting capital of MRS, unless approved by the ANTT. We are currently discussing the shareholding structure with ANTT and our partners in MRS in order to comply with the applicable requirements. We are also engaged in discussions with CADE regarding our shareholding in MRS.

### Ports and Terminals

We operate ports and terminals principally as a means to complete the distribution of our iron ore and pellets to seaborne vessels serving the export market. See *Item 4. Information on the Company—Lines of Business—Mining—Ferrous Minerals—Pellets—Distribution (Iron Ore and Pellets)*. We also use our ports and terminals to handle third-party cargo. In 2004, 22% of the cargo handled by our ports and terminals represented cargo handled for third parties.

Tubarão Port. The Tubarão Port, which covers an area of approximately 18 square kilometers, is located near the Vitória Port in the state of Espírito Santo. The iron ore maritime terminal located in this area has two piers. Pier I can accommodate two vessels at a time, one of up to 170,000 DWT on the southern side and one of up to 200,000 DWT on the northern side. Pier II can accommodate one vessel of up to 360,000 DWT at a time, limited at 20 meters draft plus tide. In Pier I there are two ship loaders, which can load up to a combined total of 14,000 tons per hour. In Pier II there are two ship loaders that work alternately and can each load up to 16,000 tons per hour. In 2004, 77.7 million tons of iron ore and pellets were shipped through the terminal for us. Praia Mole Terminal, also located in the Tubarão Port, is principally a coal terminal and shipped 13.1 million tons in 2004. We operate a grain terminal called Terminal de Produtos Diversos, in the Tubarão area, which shipped 5.2 million tons of grains and fertilizers in 2004. We also operate a bulk liquid terminal that shipped 0.8 million tons in 2004. Until August 2005, CVRD is authorized to operate the Paul Terminal, which specializes in pig iron handling and is located near the Vitória Port, in the state of Espírito Santo. This terminal has one pier that can accommodate one vessel of up to 75,000 DWT, which can load up to 900 tons per hour. The Paul Terminal shipped 2.5 million tons of pig iron in 2004.

Ponta da Madeira maritime terminal. The Ponta da Madeira maritime terminal is located near the São Luís Port in the state of Maranhão. The terminal facilities can accommodate three vessels. Pier I can accommodate vessels displacing up to 420,000 DWT. Pier II can accommodate vessels of up to 155,000 DWT. The two berths have a maximum loading rate of 16,000 tons per hour at Pier I and 8,000 tons per hour at Pier II. In February 2004, Pier III began operations. Pier III can accommodate vessels of up to 220,000 DWT and has a maximum loading rate of 8,000 tons per hour.

Cargo shipped through our Ponta da Madeira maritime terminal consists principally of our own iron ore production. Other cargo includes manganese ore and copper concentrate produced by us and pig iron and soybeans for third parties. In 2004, 63.1 million tons were shipped through the terminal for us and 3.5 million tons for third parties.

Other investments. Since November 1994, CVRD has operated the Inácio Barbosa maritime terminal located in the state of Sergipe. This terminal was built by Petrobras and transferred to Sergiportos, a state-owned company. In December 2002, Petrobras took over control of Inácio Barbosa maritime terminal in exchange for the cancellation of a liability of the state of Sergipe. CVRD and Petrobras entered into an agreement in 2002, which will allow CVRD to run this terminal for a period of ten years ending on December 30, 2012.

In May 1998, we entered into a 25-year lease for the Capuaba maritime terminal in Vitória, in the state of Espírito Santo. To run this terminal CVRD established Terminal de Vila Velha S.A. (TVV). TVV is a port for loading and unloading of containers, in addition to being an alternative for general cargo (import and export operations) and automobile operations in Southeast and Midwest Brazil. It is connected to the Vitória a Minas railroad and with easy access to the BR101 and BR262 highways. The terminal is formed by berths 203 and 204 at the Capuaba Quay, has a 450-meter berth area and retro-area measuring nearly 100 thousand square meters. It has a covered storage area measuring 13,300 square meters and a yard with capacity for 3,300 containers. TVV is equipped with two quays cranes, two portainers and four transtainers. In 2004, TVV shipped over 144.4 thousand containers and approximately 725.3 thousand tons of general cargo.

Cia. Portuária Baía de Sepetiba (CPBS), a company created to operate a terminal in the Sepetiba Port, in the state of Rio de Janeiro, is one of our subsidiaries. CPBS's maritime terminal has a pier that allows the loading of ships of up to 18.1 meters and up to 230,000 DWT. In 2004, the terminal uploaded approximately 16.8 million tons of iron ore, of which only 3.4 tons were uploaded for companies unrelated to CVRD.

MBR has its own maritime terminal on Guaiba Island, also in the Sepetiba Port. The iron ore terminal has a pier that allows the loading of ships of up to 300,000 DWT. In 2004, the terminal uploaded approximately 34 million tons of iron ore.

## Shipping

We operate in three distinct shipping areas: seaborne dry bulk services, cabotage liner service and tug boat services.

In seaborne dry bulk service, we carried 6.7 million tons of dry bulk, generating a revenue of US\$ 84 million in 2004. The table below sets forth information on the volume of cargo that our seaborne dry bulk shipping service carried for the periods indicated.

	For the Year Ended December 31,			
	2002	2003	2004	
		(thousands of tons)		
Iron ore:				
CVRD	4,287	4,386	5,291	
Third party	1,888	1,860	312	
Coal	437	256	306	
Other	1,294	2,819	830	
Total	7,906	9,321	6,739	

For the transportation of the cargo shown above for 2004, we operated a fleet of bulk vessels which is comprised of three capesize vessels owned by us, one panamax and one capesize vessel that we operate on a chartered basis. Furthermore, we have also contracted for the transportation of steel slabs from Brazil to the United States and for the transportation of iron ore from Ponta da Madeira maritime terminal to Praia Mole terminal, in the Tubarão Port. To perform these contracts, other vessels have been chartered either for short or long periods. We intend to sell our three capesize vessels in the near future.

The cabotage liner service is operated by five vessels, chartered on a bare boat basis from Frota Oceânica S/A, and generated revenues of US\$ 62 million with 98,687 twenty equivalent units (teus) transported in 2004. The container business services ports of Brazil and Argentina, from the city of Fortaleza to Buenos Aires.

We also operate a fleet of sixteen tug boats (seven owned and nine chartered) in the ports of Vitória in the state of Espírito Santo, Trombetas in the state of Pará, São Luís in the state of Maranhão and Aracaju in the state of Sergipe. The services in Vitória and Trombetas generated revenue of US\$ 16 million corresponding to 4,568 operations (maneuvers) in 2004, compared to US\$ 18 million corresponding to 4,892 operations (maneuvers) in 2003. In São Luís and Aracaju we operate through a tug boat consortium with 50% participation in each operation, generating revenue of US\$ 5 million in 2004, which corresponds to 4,274 operations (maneuvers), compared to revenue of US\$ 3 million in 2003, which corresponds to 3,710 operations (maneuvers).

Competition in the logistics industry. Our railroads compete with road transport, including trucks, with the main factors being cost, safety and shipping time. We also have many international competitors in the cabotage liner service.

## **Aluminum-Related Operations**

The table below sets forth information regarding our consolidated bauxite, alumina and aluminum revenues and sales by geographic market for the periods indicated. These figures do not include the revenues of our unconsolidated joint ventures.

	For the Year Ended December 31,					
	2002		(in millions of US\$) 2003			2004
Revenues classified by geographic destination						
Americas, except Brazil and United States	US\$	27	US\$	156	US\$	221
Brazil		75		165		227
Europe/Middle East/Africa/Oceania		318		378		738
Japan		11		96		361
United States		10		32		186
Asia, other than Japan		21		96		129
Subtotal		462		923		1,862
Eliminations(1)		_		(71)		(612)
Total	US\$	462	US\$	852	US\$	1,250
Revenues classified by category						
Bauxite		23		37		53
Alumina		159		495		458
Aluminum		280		320		739
Total	US\$	462	US\$	852	US\$	1,250

<sup>(1)</sup> Eliminations of transactions between consolidated entities.

We operate our aluminum-related businesses through the following subsidiaries and joint ventures, as of May 31, 2005:

	Business	Our Direct or Indirect Share of Capital (Voting, Total)		Partners
		Voting	Total	
		(%	)	
Albras-Alumínio Brasileiro S.A. (Albras)	Aluminum	51.00%	51.00%	Nippon Amazon
Alunorte-Alumina do Norte do Brasil S.A. (Alunorte)	Alumina	60.12	57.03	Companhia Brasileira de Alumínio – CBA JAIC Mitsui Mitsubishi Nippon Amazon Norsk Hydro
Mineração Rio do Norte S.A. (MRN)	Bauxite	40.00	40.00	Abalco Alcoa Alcan BHP Billiton Metais Companhia Brasileira de Alumínio — CBA Norsk Hydro
Valesul Alumínio S.A. (Valesul)	Aluminum	54.50	54.50	BHP Billiton Metais

These subsidiaries and joint ventures engage in:

- mining bauxite,
- refining bauxite into alumina, and
- smelting alumina to produce primary aluminum and aluminum alloys.

In 2004, net revenues from aluminum-related products totaled US \$1,229 million.

### Bauxite

MRN. MRN, one of the largest bauxite producers in the world, produces bauxite for sale to our joint venture partners and us. Excess production may be sold to third parties. MRN operates three open pit bauxite mines, which produce high quality bauxite. In addition, MRN controls substantial additional high quality bauxite resources that it believes can be produced economically in the future. MRN had net revenues of US\$ 325 million and net income of US\$ 142 million in 2004. MRN's mines are located in the northern region of the state of Pará.

The table below sets forth information regarding MRN's bauxite reserves as of December 31, 2004. The estimates of mineral reserves have been audited and verified by Pincock Allen & Holt.

		Proven and Probable Reserves(1)			
	Projected Exhaustion Date	Type	Ore Tonnage (millions of tons)	Grade(2) (% Al <sub>2</sub> 0 <sub>3</sub> )	
Mineração Rio do Norte S.A.			(minions of tons)	(70 711203)	
Almeidas	2009	Open pit	19.8	51.2	
Aviso	2011	Open pit	63.8	51.1	
Saraca V	2009	Open pit	7.4	47.6	
Total			91.0	50.8 (3)	

- (1) Reported as recoverable product, with moisture content of approximately 12% at a wet basis. CVRD's ownership of MRN's bauxite reserves is 40%.
- (2) Expressed as extractable Al<sub>2</sub>0<sub>3</sub>.
- (3) Average grade for the three mines.

Operations at MRN's mines commenced in 1979. For 2002, 2003 and 2004 production equaled 9.9, 14.4, and 16.7 million tons, respectively.

MRN operates ore beneficiation facilities at its mines, which are connected by rail to a loading terminal and port facilities on the Trombetas river. The Trombetas river is a tributary of the Amazon river and MRN's port facilities can handle vessels of up to 60,000 DWT. MRN owns and operates the rail and the port facilities serving its mines. The MRN bauxite mines are accessible by road from the port area and obtain electricity from their own thermoelectric power station. MRN completed the expansion of its capacity from 11.0 million tons to 16.3 million tons in 2003.

Our MRN bauxite joint venture produces bauxite for sale on a take-or-pay basis to us and our joint venture partners at a price that is determined by a formula linked to the prevailing world prices of aluminum and alumina. Our Alunorte alumina subsidiary, which we began consolidating in July 2002, purchases all of its bauxite requirements from MRN. Our annual purchase commitment for 2004 was approximately US\$ 60 million.

Paragominas project. In July 2002, we acquired the remaining outstanding capital of Mineração Vera Cruz, or MVC, which increased our interest to 100% of MVC's total capital. MVC was subsequently merged into CVRD. Through the acquisition of MVC's assets, we hold active mining rights in the Paragominas region in the state of Pará. A new wholly owned bauxite mine located in Paragominas, is expected to begin commercial production in the first half of 2007 to supply Alunorte's new expansion with 4.5 million tons per year of wet 12% moisture bauxite. The bauxite quality will be similar to MRN's, and the project will use the strip mining method of extraction, and have a beneficiation plant including milling and a 244-kilometer long slurry pipeline. We expect that total capital expenditures on this project will be approximately US\$ 352 million.

The table below sets forth information regarding the Paragominas bauxite reserves as of December 31, 2004. The estimates of mineral reserves have been audited and verified by Pincock Allen & Holt.

<u> </u>	Proven and Proba	able Reserves	_
	Ore Tonnage	Grade	
	(millions of tons)	(% Al <sub>2</sub> 0 <sub>3</sub> )	_
Miltonia III	68.0	49.6	

#### Alumina

Alunorte began operations in July 1995 and produces alumina by refining bauxite that MRN supplies. The Alunorte plant concluded an expansion of capacity in 2003 and now has a nominal production capacity of 2.4 million tons of alumina per year. In 2004, Alunorte produced 2.5 million tons. Alunorte sells the major portion of its production to Albras, Valesul and third-party aluminum companies for the production of aluminum. The Alunorte plant is located near Belém, in the state of Pará, next to Albras' aluminum production facilities. This

allows Alunorte and its principal customer, Albras, to share infrastructure and other resources. Alunorte had net revenues of US\$ 545 million and net income of US\$ 166 million in 2004. This refinery has one of the lowest conversion costs in the world (US\$ 67.70 per ton in 2004).

Each Alunorte joint venture partner must purchase on a take-or-pay basis all alumina produced by Alunorte in proportion to its respective interest. The joint ventures each pay the same price, which is determined by a formula based on prevailing world market prices of aluminum.

The table below sets forth information regarding Alunorte's alumina production for the periods indicated.

	For the Year Ended December 31,			
	2002	2003	2004	
		(millions of tons)		
Alunorte production	1.656	2.323	2.548	

*Alunorte capacity expansions*. In April 2003, Alunorte inaugurated its third production line, which has a capacity of 825,000 tons per year. With this third line, Alunorte increased its production capacity to 2.4 million tons of alumina per year.

In July 2003, Alunorte began work on a new capacity expansion for its alumina refinery. This brownfield project, estimated to start up by 2006, involves the construction of stages 4 and 5 of the plant, and is expected to increase its annual capacity from 2.4 million to 4.2 million tons of alumina per year. Alunorte's total investment in this project is expected to be approximately US\$ 583 million of which US\$ 310 million was financed in July 2004.

#### Aluminum

Albras and Valesul each produce aluminum using alumina provided by Alunorte. Alunorte supplied all of Albras' alumina requirements and 54.5% of Valesul's alumina requirements from October 1995 through December 2004. Albras produces aluminum ingots and Valesul produces aluminum ingots, slabs, bars, billets and alloys. Aluminum is produced from alumina by means of a continuous electro-chemical process, which requires substantial amounts of electricity.

*Albras*. The Albras plant is one of the largest aluminum plants in Latin America, with a capacity of approximately 430,000 tons per year. Albras started its operations in 1985 at a plant located near Belém in the state of Pará. Albras had net revenues of US\$ 705 million and net income of US\$ 145 million in 2004.

The Albras joint venture partners must purchase on a take-or-pay basis all aluminum produced by Albras in proportion to their ownership interests. We generally market our aluminum in international export markets to third-party aluminum processing companies.

The table below sets forth information regarding Albras' recent aluminum production.

	For the Year Ended December 31,			
	2002	2003	2004	
•		(thousands of tons)		
Albras production	407.7	432.1	435.0	

The production of aluminum requires a continuous flow of substantial amounts of electricity. Albras purchases electrical power from Eletronorte, a state-owned electric power utility. Eletronorte generates electricity at the Tucuruí hydroelectric power plant located on the Tocantins river. This plant is the sole source of electrical power in the region in the quantities required for Albras' operations. Albras consumes approximately one-quarter of the non-peak period output of the Eletronorte plant.

In May 2004, Albras successfully executed an auction to purchase electricity for a 20-year period. This agreement became effective beginning June 2004. The basic purchase price is R\$ 53.00 per MWh, indexed to the general market price index, IGP-M, as calculated by *Fundação Getúlio Vargas*. In addition to the basic price, a premium is paid that is linked to the amount by which the price of primary aluminum exceeds US\$ 1,450.00 per ton, as registered at the London Metal Exchange (LME). See *Item 4. Information on the Company—Regulatory Matters—Energy*.

*Valesul.* Valesul started its operations in 1982 and operates a plant located in the state of Rio de Janeiro. Valesul produces primary aluminum and aluminum alloys in the form of ingots and billets. Valesul's aluminum is sold primarily in the domestic Brazilian market on a spot basis. Valesul had net revenues of US\$ 185 million and net income of US\$ 26 million in 2004. Valesul sells directly to its own clients.

The table below sets forth information regarding Valesul's recent production and third-party scrap recycled by it.

	For the Year Ended December 31,			
	2002	2003	2004	
<del>-</del>		(thousands of tons)		
Valesul production	92.9	94.0	95.8	
Third-party scrap recycled	19.6	16.7	14.4	

Valesul currently obtains a portion of its electrical energy requirements from four wholly owned small hydroelectric power plants located in the state of Minas Gerais, a portion from the Machadinho hydroelectric power plant, in the state of Santa Catarina, in which Valesul has a share of 7%, and the remainder from a third-party power company at market rates. Valesul is able to supply 40% of its own energy requirements. Valesul is currently engaged in litigation regarding the rates that Light charges Valesul for the transmission of electricity. See *Item 8*. *Financial Information—Legal Proceedings*.

Competition in Bauxite, Alumina and Aluminum

The global aluminum market is highly competitive. The largest producers are Alcoa, Rusal, Alcan, Norsk Hydro, BHP Billiton and Chalco. The alumina and bauxite markets are also competitive, but are much smaller, because many of the major aluminum-producing companies have integrated bauxite, alumina and aluminum operations.

*Bauxite.* Most of global bauxite production is not traded, as it is dedicated to integrated alumina refineries. Competition in the bauxite export market is based primarily on two key factors: quality of bauxite and reliability of supply. We believe that MRN remains competitive in this market because of the high quality of Brazilian bauxite, and our aluminum production system, which ensures internal use of our bauxite production. We use a major part of our take of MRN's bauxite production to supply Alunorte.

Alumina. Competition in the alumina market is based primarily on quality, reliability of supply and price, which is directly related to lower costs. We believe that Alunorte is competitive in the alumina market because of the high quality of its alumina, its advantages in scale and technology, low conversion cost, its efficient port facilities, and the ongoing commitment of its owners to purchase a substantial portion of its annual production. We use a substantial portion of our share of Alunorte's alumina production to supply the domestic market (Albras and Valesul), and sell the remainder on the foreign market. In 2004, the main foreign markets where we sold alumina to were Argentina, China and Canada.

*Aluminum.* As primary aluminum is a commodity, competition in the aluminum market is based primarily on the economics of transportation and the costs of production. We believe that Albras is competitive in the aluminum market because of its relatively efficient and accessible port facilities, and its generally prevailing lower costs of production. We generally market aluminum to third-party aluminum processing companies in Asia and Europe.

#### **Steel Investments**

We have investments in the following joint ventures in the steel business, as of May 31, 2005:

	Our Direct of Share of (Voting-	Capital	Partners		4 Net enues	Principal Products
	Voting	Total		(in million	ns of US\$)	
	(%	·)				
CSI (California, United States)	50.0%	50.0%	JFE Steel	US\$	1,257	Hot-rolled steel; cold-rolled steel; galvanized steel; steel tubes
Siderar (Argentina)	4.85	4.9	Techint Group Employees Usiminas Others		1,205	Steel slabs; hot-rolled steel; cold-rolled steel; galvanized steel; tin plates
Usiminas (Brazil)	23.0	11.5	Nippon Usiminas Previ Caixa dos Empregados da Usiminas Others		4,180	Hot-rolled steel; cold-rolled steel; heavy steel plates; electro galvanized steel

The market value of our investments in Usiminas and Siderar, both of which are publicly traded companies, was US\$ 483 million and US\$ 110 million, respectively, at December 31, 2004. The aggregate net book value of these investments was US\$ 250 million at December 31, 2004. The aggregate net book value of our total investments in steel producing companies (including CSI, a privately held company) was US\$ 399 million at December 31, 2004. We earned US\$ 22 million in dividends from these investments in 2004.

In line with our strategy to consolidate and focus on mining and logistics, in March 2001, we unwound our cross-holding relationships with CSN. As part of the unwinding transaction, CSN granted us the following rights of first refusal relating to CSN's Casa de Pedra iron ore mine, each of which lasts for a period of 30 years:

- the right to purchase at market prices any iron ore produced by the mine beyond CSN's internal requirements,
- the right to purchase or lease the mine should CSN decide to sell or lease it, and
- the right to become a joint venture partner should CSN decide to form a pelletizing joint venture with a third party with iron ore produced by the mine.

In return, we have granted CSN a right of first refusal to participate with us in the construction of any new steel producing facilities undertaken prior to March 2006 relating to slabs, coils and rolled products over which projects we will have direct or indirect control.

The unwinding transaction with CSN, as a whole, is subject to post-notification review by CADE. See *Item 8*. *Financial Information—Legal Proceedings*.

CVRD and Nucor Corporation signed an agreement to construct and operate an environmentally friendly pig iron project in Northern Brazil in April 2003. The project will utilize two conventional mini-blast furnaces to produce approximately 380,000 metric tons of pig iron per year in its initial phase, using iron ore from our Carajás mines in Northern Brazil. The charcoal source will be exclusively from eucalyptus trees grown in a cultivated forest of 82,000 acres with the total project encompassing approximately 200,000 acres. We and Nucor own a joint venture company, Ferro Gusa, to operate the facility. It is anticipated that Nucor Corporation will purchase all of the production of the plant, which is estimated to start-up by the third quarter of 2005.

Approximately 78% and 22% of the voting shares are held by CVRD and Nucor, respectively, see *Item 4*. *Information on the Company—Acquisitions, Asset Sales and Significant Changes in 2003 and 2004—Steel*.

In 2004, we sold our entire participation in CST, see Item 4. Information on the Company—Acquisitions, Assets Sales and Significant Changes in 2003 and 2004—Dispositions and Asset Sales.

## **Energy Investments**

In 2004, we consumed 16.7 TWh of electricity. Energy management and efficient supply have become priorities for us, driven by the uncertainties associated with changes in the regulatory framework, which increased the risk of rising electricity prices and energy shortages, such as the one Brazil experienced in the second half of 2001. We perceived favorable investment opportunities in the Brazilian electricity sector and took advantage of them by investing in the nine hydroelectric power generation projects set forth in the table below. We plan to use the electricity produced by these projects for our internal needs. We could experience construction delays in certain generation projects due to environmental and regulatory issues, which could consequently, lead to higher costs. Analysis of each project's feasibility and investments will depend on the new laws and regulations applicable to the electricity sector, which are currently under review by the Brazilian Federal government, and their impact on electricity prices and supply. As a large consumer of electricity, we expect that investing in power projects will help to reduce costs and protect us against energy price volatility.

Currently we have four hydroelectric power plants under operation and three under construction.

The following table sets forth information regarding our power generation projects as of May 31, 2005:

	Location	Our Ownership Interest	Partners	Begins/Began Operations	Projected Capacity	Our In	vestment
		(%)			(in MW)	As of December 31, 2004	Projected Total ons of US\$)
Aimorés	Rio Doce basin, in the state of Minas Gerais.	51.00%	Cemig G/T	July 2005(1)	330 MW	US\$ 119	US\$ 144
Candonga	Rio Doce basin, in the state of Minas Gerais.	50.00	Novelís	September 2004	140	45	48
Capim Branco I	Araguari river, in the state of Minas Gerais.	48.42	Cemig-Capim Branco Paineiras CMM	February 2006(1)	240	40	90
Capim Branco II	Araguari river, in the state of Minas Gerais.	48.42	Cemig-Capim Branco Paineiras CMM	December 2006(1)	210	20	90
Estreito	Tocantins river, on the border of the states of Maranhão and Tocantins.	30.00	Tractebel Alcoa BHP Billiton Camargo Energia S.A.	August 2009(1)	1,087	1	258
Foz do Chapecó	Uruguai river, on the border of the states of Santa Catarina and Rio Grande do Sul.	40.00	CPFL-G CEEE	June 2009(1)	855	2	247
Funil	Rio Grande river, in the state of Minas Gerais.	51.00	Cemig G/T	December 2002	180	49	53
Igarapava	Rio Grande, on the border of the states of São Paulo and Minas Gerais.	38.15	CMM CSN Cemig G/T Anglogold	January 1999	210	88	88
Porto Estrela	Santo Antonio river, in the state of Minas Gerais.	33.33	Cemig G/T Coteminas	September 2001	112	20	20
Total (2)					3,364 MW	US\$ 384	US\$ 1,038

<sup>(1)</sup> Projected date for commencement of the first unit of the project.

## Our partners in our energy investments include:

- Cemig Geração e Transmissão S.A., known as Cemig G/T, a subsidiary of Cemig, which is a state owned company;
- Cemig Capim Branco Energia S.A., known as Cemig-Capim Branco, a subsidiary of Cemig;
- Comercial e Agrícola Paineiras Ltda., known as Paineiras, which is an affiliate of Suzano Participações S.A.;

<sup>(2)</sup> We also hold 43.85% of a consortium that has the concession right to build the Santa Isabel hydroelectric power plant at the Araguaia river, which would have a projected capacity of 1,087 MW. In view of difficulties in obtaining the necessary environmental license to begin its construction, we are currently negotiating with ANEEL to return this concession

- BHP Billiton Metais S.A., a wholly owned subsidiary of BHP Billiton;
- Companhia Mineira de Metais, known as CMM, which is an affiliate of Votorantim Participações S.A.;
- Alcoa Alumínio S.A., known as Alcoa, which is an affiliate of Alcoa Inc.;
- Mineração Anglogold Ltda., known as Anglogold, which is an affiliate of Anglo American Brasil Ltda., which in turn is affiliated with Anglo American Plc.;
- Companhia de Tecidos do Norte de Minas, known as Coteminas, which is an affiliate of Coteminas International Ltd.;
- Tractebel Egi South America Ltda., known as Tractebel, which is a subsidiary of Tractebel S.A., a SUEZ group energy division;
- CPFL Geração de Energia S.A., known as CPFLs-G, a subsidiary of CPFL Energia, a subsidiary of VBC Participações;
- Companhia Estadual de Energia Elétrica, known as CEEE, is a state-owned power company;
- Novelis do Brasil Ltda., known as Novelis, which is an affiliate of Novelis, Inc.;
- Companhia Siderúrgica Nacional, known as CSN, a subsidiary of Vicunha Siderurgia; and
- Camargo Corrêa Energia S.A., known as Camargo Energia S.A., a subsidiary of Camargo Corrêa S.A.

Our total projected investment in these hydroelectric projects is estimated at approximately US\$ 1 billion. We cannot assure you that the aggregate cost will not escalate or that the projects will be completed on schedule.

In the second half of 2004, Candonga began operations with the start up of three turbines. CVRD has a 50% stake in the Candonga hydroelectric power plant Consortium. The plant is located on the Doce river, in the state of Minas Gerais. It has an installed capacity of 140 MW and generation capacity of 64.5 average MW, equivalent to 565,020 MWh per annum.

In addition to the above, some of our affiliates generate part of their own energy.

### REGULATORY MATTERS

## Mining

Under the Brazilian Constitution, all mineral resources in Brazil belong to the Brazilian government. The Brazilian Constitution requires that mining companies incorporate in accordance with Brazilian law.

The Brazilian Constitution and Mining Code impose on mining companies various regulatory restrictions relating to, among other things:

- the manner in which mineral deposits are exploited,
- the health and safety of workers,
- the protection and restoration of the environment,
- the prevention of pollution, and
- the promotion of local communities where mines are located.

Mining companies in Brazil can only prospect and mine for mineral resources pursuant to prospecting authorizations or mining concessions granted by the National Mineral Production Department, Departmento Nacional de Produção Mineral, or DNPM, an agency of the Ministry of Mines and Energy of the Brazilian government. DNPM grants prospecting authorizations to a requesting party for an initial period of three years. These authorizations are renewable at DNPM's discretion for another period of one to three years, provided that the requesting party is able to show that the renewal is necessary for proper conclusion of prospecting activities. On-site prospecting activities must start within 60 days of official publication of the issuance of a prospecting authorization. Upon completion of prospecting activities and geological exploration at the site, the grantee must submit a final report to DNPM. If the geological exploration reveals the existence of a mineral deposit that is economically exploitable, the grantee will have one year (which DNPM may extend) from approval of the report by DNPM to apply for a mining concession or to transfer its right to apply for a mining concession to a third party. When a mining concession is granted, the holder of the concession must begin on-site mining activities within six months. DNPM grants mining concessions for an indeterminate period of time lasting until the exhaustion of the mineral deposit. Extracted minerals that are specified in the concession belong to the holder of the concession. With the prior approval of DNPM, the holder of a mining concession can transfer it to a third party that is qualified to own concessions. In some cases, mining concessions are challenged by third parties.

Pursuant to Article 20 of the Brazilian Constitution of 1988, as implemented by Law No. 8001/1990, the Brazilian government charges us a royalty, known as *Compensação Financeira pela Exploração de Recursos Minerais* (CFEM), on the revenues from the sale of minerals we extract, net of taxes, insurance costs and costs of transportation. The annual rates paid on our products are:

- iron ore and potash fertilizer, 2%;
- bauxite and manganese ore, 3%;
- kaolin, 2%;
- copper, 2%; and
- gold, 1%.

It also imposes other financial obligations. For example, mining companies must compensate landowners for the damages and loss of income caused by the use and occupation of the land (either for exploitation or exploration) and must also share with the landowners the results of the exploration based on 50% of the CFEM. Mining companies must also compensate the government for damages caused to public lands. A substantial majority of our mines and mining concessions are on lands owned by us or on public lands for which we hold mining concessions.

#### Railroads

The Brazilian government, acting through the Ministry of Transportation and the ANTT, regulates and supervises the policies for the railroad transportation sector. The Federal government may grant private companies concessions for the construction, operation or commercial exploration of railroads. Railroad concession contracts granted by the Federal government impose certain shareholder ownership limitations. For FCA and MRS, the concession contracts provide that each shareholder can only own up to 20% of the voting capital of the concessionaire, unless otherwise permitted by ANTT. We are in compliance with the requirements imposed by the concession contracts for our railroad operations. We have received an authorization from the ANTT for our current 99.99% ownership stake in FCA. As part of our acquisition of CAEMI in September 2003, we increased our stake in MRS to 37.2% of the voting capital and 29.4% of the total capital. We are currently discussing the shareholding structure with ANTT, CADE and our partners in MRS in order to comply with the applicable requirements. See *Item 4. Information on the Company—Lines of Business—Logistics* and *Item 8. Financial Information—Legal Proceedings*. The ownership limitation does not apply in the cases of Vitória a Minas and Carajás railroads.

The ANTT also sets different tariff limits for railroad services for each of the concessionaires and each of the different products transported. So long as these limits are respected, the actual prices charged can be negotiated directly with the users of such services.

## **Electric Energy**

The power industry in Brazil is regulated by the Brazilian government, acting through the Ministry of Mines and Energy and ANEEL. The role of ANEEL is to implement and enforce policies and regulations designated by the Ministry of Mines and Energy and aimed at organizing and regulating the electricity sector and power companies. ANEEL should ensure consumers an efficient and economical energy supply through regulation enforcement and the monitoring of prices and the operational efficiency of power companies.

Under the law governing the electricity sector, concessions grant exclusive rights to generate and transmit or to distribute electricity in a particular area for a period of time that should be sufficient for the concessionaire to recover its investment. The concessions for power generation are granted for up to 35 years and may be renewed at the Federal government's discretion for an additional period of up to 35 years. Concessionaires are required to supply electricity for public services, on a continuing basis, in sufficient quantity and within approved standards of quality, provided, however, that concessionaires may be allowed to supply to themselves or sell electricity to non-public third party consumers under certain circumstances.

Given the hydrologic and integrated nature of the Brazilian electricity generation matrix, ANEEL has implemented regulations that created the Mecanismo de Realocação de Energia (Energy Reallocation Mechanism), known as MRE, a mechanism for sharing hydrological risk, and consequently reducing generation volatility among all generators. In order to implement the MRE, ANEEL designates a level of energy production, known as Assured Energy, for each generator, every five years. Assured Energy is calculated in accordance with a statistical model based on average rainfalls in the relevant region, water flows of rivers and water levels in each plant's reservoir over a multi-year time frame. Each generator is allowed to enter into contracts to sell up to 100% of its Assured Energy. To the extent a generator has signed contracts for the sale of its Assured Energy, and as long as MRE members as a whole are able to meet MRE Assured Energy levels, it receives payments based on these contractual terms, regardless of its level of actual generation. If all MRE members meet their contracted energy and there is a surplus of energy remaining, the net regional surplus generation is allocated among generators in different regions and this energy surplus may be sold in the wholesale market.

All contracts for wholesale energy purchases and sales are currently recorded in the wholesale market, *Câmara de Comercialização de Energia Elétrica*, or CCEE. The CCEE is a nonprofit private entity subject to the authorization, regulation and supervision of ANEEL, and is responsible for operating the wholesale energy market and for ensuring that energy transactions in the short-term market are settled and cleared in an efficient manner. The CCEE is primarily designed to effect the settlement of differences between the amount of energy contracted under bilateral contracts of the several market agents (generators, distributors, traders and large consumers), and the amount of energy actually consumed and produced. The settlement is done in accordance with the CCEE spot prices, which are expressed in R\$/MWh and are calculated for each settlement period for each sub-market.

In March 2004, the Brazilian government approved a new law, Law No. 10848/2004, for the electricity sector. Although the full regulations under the law have not yet been enacted, we believe that this new law will create an even tighter regulated sector, especially in the generation segment. The new law transfers jurisdiction of some regulatory areas from ANEEL to the Ministry of Mines and Energy. Under this new law, all consumers of electricity, including large consumers, such as CVRD, must contract the totality of their energy needs through contracts and penalties may apply for errors above 5% of consumed energy. This new law creates two parallel markets for energy: a regulated market, in which a *consumidor cativo*, or regulated consumer, will enter into contracts subject to regulated prices, and an unregulated market, in which a *consumidor livre*, or free consumer, will enter contracts with independent power producers at prevailing market prices. Consumers may migrate from one market to another. However, consumers must wait until the termination of their long-term contracts and, under pending regulations, may have to notify the Ministry of Mines and Energy that they intend to switch markets one, two, three or even five years in advance, depending on the circumstances.

The new energy trading commission, CCEE, also called *pool*, created by the new law in substitution to MAE, will be responsible for settling all energy transactions between distributors and generators. Besides CCEE replaced MAE as the wholesale energy market, we do not expect significant changes in the settlement procedures regarding short-term transactions. Self-generators of energy, such as CVRD, may be required to provide a certain percentage of their generated energy from new concessions acquired after 2004 to the *pool*. The exact percentage, in addition to any tax on the amount of energy used by self-generators, has not yet been determined. Other factors which have not yet been determined and are the subject of pending regulation include sectorial contributions, included into the

regulated prices that ANEEL will charge self-generators for the use of transmission lines, and the way in which energy projects will be auctioned.

Because the regulation for the sector is recent and not yet fully implemented, we cannot be certain of all the material impacts that this new law could have on our energy business. Changes in the regulatory environment could negatively affect our energy investments. Valesul is currently engaged in litigation regarding the rates that Light charges Valesul for the transmission of electricity. See *Item 8. Financial Information—Legal Proceedings*.

#### **Environmental Matters**

Federal, state and municipal legislation contain provisions for the control and protection of the environment in Brazil. These laws govern the use of natural resources, the reclamation and restoration of mined areas, the control of atmospheric emissions, the treatment of industrial effluents, as well as the use, handling and final disposal of hazardous materials, and the control of water resources under the National Hydrological Resources Policy, which establishes hydrologic use rights and the fees applicable to that use. It is possible that environmental regulations will become stricter in the future. Any strengthening of these laws may lead to greater costs for environmental compliance.

In order to conduct our mining, energy generation and industrial activities, we must prepare environmental impact assessments and submit them to authorities that oversee the granting of environmental permits. We seek to comply with all legal requirements and to achieve good relationships with interested parties, especially communities located near our operations. Our environmental management system is designed to provide a systematic approach to environmental issues.

Under Brazilian Federal Law No. 9,605/1998, non-compliance with environmental laws and regulations can result in criminal penalties, such as imprisonment and other restrictions for individuals (including directors, officers and managers of companies), and fines and the mandatory rendering of public services by companies. Administrative penalties range from warnings and fines to the suspension of corporate activities, and may also include the loss or reduction of incentives, or the cancellation or interruption of credit facilities granted by governmental institutions.

Issuance of Environmental Licenses. We must obtain environmental licenses in order to build, develop, expand and operate facilities that use natural resources or may pollute the environment. We seek to obtain the legally required licenses for each of our facilities and activities. In some cases, this process requires a significant amount of time for the preparation of comprehensive environmental reports and their evaluation, as well as for the establishment of appropriate programs for environmental education of communities residing in areas affected by the proposed projects. We have entered into agreements with the appropriate federal and state governmental environmental authorities with respect to facilities where environmental non-compliance has been detected in order to make these facilities compliant.

Environmental Compensation. Environmental Law No. 9,985/2000 requires us to pay "environmental compensation" to state and federal authorities, in order to create and maintain protected sites, in the amount of at least 0.5% of the total investment of each venture with a material environmental impact. There are a number of uncertainties regarding the scope and application of this law, including what rate will be applied by the federal or state governments' environmental agencies, how such a rate will be applied and under what basis an investment will be valued.

Legal Reserve. Under the Brazilian Forest Code, as amended, the exploration of economic activities in the Amazon basin can only reach 20% of a project's land. We have a number of projects in the Amazônia Legal region (comprised by the states of Acre, Amazonas, Amapá, Pará, Rondônia, Roraima and Tocantins, Brazil, as well as part of the states of Mato Grosso and Maranhão), such as the mining sites of MRN, PPSA, Paragominas and CADAM. We are currently below the exploitation threshold in all of these projects. However, some of our mines may approach this threshold as we expand our operations. There are a number of uncertainties regarding the scope and application of the Brazilian Forest Code, as amended, in particular where a company has pre-existing operations, as is the case with our current mining operations.

*Prevention and Environmental Control Measures*. Our environmental policies also aim to prevent, control and reduce the environmental impact caused by our business operations. To that end, we have made significant

environment-related investments in our facilities and in employee training programs (approximately US\$ 29.2 million in 2004). We are also investing to develop environmental projects directed at the communities located near our facilities (approximately US\$ 6.5 million in 2004).

Water Use. We are intensive water users in eleven states with hydrological resources that vary from very high water availability in the Amazon region to the scarcity in the northeast of Brazil. The Hydrological Resources Management System that is being implemented throughout CVRD includes evaluation of the availability of water in the areas where we operate and programs to rationalize and control water use. We continually monitor new water legislation and regulations and take particular interest in requirements adopted under the National Policy of Hydrological Resources, established by Law No. 9433/1997, which defines the conditions for obtaining water use grants and for effluents disposal. CVRD also participates in the National Council of Hydrological Resources and the Local River Basin Committees, which provides the strategic approach and taxation criteria for each basin. Water use taxation has been discussed since 2002. Valesul, which is located in the Paraíba river basin, is the first of our affiliates to be requested to pay a fee for water use and began paying nominal fees in 2004. No decision has yet been made in any other region where CVRD operates.

ISO Certifications. Our environmental management system is based on International Organization for Standardization (ISO) standard 14001. We have obtained 14 certificates covering iron ore, manganese ore and ferroalloys production, pelletizing plants, port operations and our research center. All of the operations of the aluminum production cycle (bauxite, alumina and aluminum) and kaolin production facilities from our subsidiaries and affiliated companies, are also certified by this standard.

Environmental Control Systems: As a mining company, air emissions control is one of our main objectives, including in our pelletizing plants. Control equipment and systems, such as stockpiles and road water aspersion and use of chemical dust suppressants or installation of filters and electrostatic precipitators at our facilities are complemented by comprehensive monitoring systems and control software. Besides achievement of legal compliance, air quality in the installations and its effects in the communities in the vicinities is continuously evaluated and the necessary investments for air quality improvement are made whenever needed.

With respect to improvements in water quality, we strive to treat and control the pollutants disposed into the sea and local rivers or other water sources and also use extensive water recycling in our operations. We are researching new processes and technologies for the improvement of water use and recycling and treatment.

Through our comprehensive waste management system, we aim to achieve greater control of the generation and disposal of our waste, to develop opportunities to reuse, recycle and to reduce waste.

In 2003, our mine decommissioning manual was developed, which described a complete set of directives, including technical practices and procedures to be followed during mine closures. The manual outlines procedures for the rehabilitation and monitoring of degraded areas, the main steps and sequence to be followed during closure, and any liabilities that may result after mine closure. The manual also provides standardized basic criteria and procedures, based on the directives of the CVM and the SEC (FAS 143), for cost evaluation, the establishment of current budgets, future decommissioning and reclamation (see Note 4 to our consolidated financial statements).

Our environmental program also includes reforestation projects, which are intended to protect the soil against erosion and to create buffers between our activities and communities in the surrounding areas. We partner with universities and governmental research entities to conduct extensive research to develop procedures for reforestation, soil protection using native species of the managed regions and for the improvement of the growth and growth rate of seedlings. Comprehensive fauna and flora investigations are performed, mainly in the Carajás region, to comprehend and avoid the environmental risks involved in investing in potentially sensitive areas.

In 2004, we spent US\$ 14.4 million on these activities. We also participate in the maintenance and preservation of approximately 1.3 million hectares of Brazilian forests, including the National Carajás Forest in the Amazon, and we own and preserve the Vale do Rio Doce Natural Reserve, one of the remaining areas of the Atlantic Forest in the state of Espírito Santo. In 2004, US\$ 0.7 million were spent in this activity. In the last twenty years we have provided support to the indigenous communities in the areas of education, health, infrastructure development and technical assistance with the aim of enhancing life quality and self-sustainability of these communities. Expenditures on these programs amounted to US\$ 6.5 million in 2004.

#### PATENTS AND TRADEMARKS

We hold, or have applied for, a significant number of patents with legal intellectual property agencies in 38 countries and in Brazil's *Instituto Nacional de Propriedade Industrial* (INPI), the governmental agency responsible for granting patents and registering trademarks. Most of our patents relate to proprietary rights over iron ore dressing. One of our most successful patents relates to lower grade iron ore concentration, generally known as itabirite, which is widely used by other iron ore mining companies the world over. We are currently conducting technological research to investigate commercial exploration of our hard itabirites. We also hold registration certificates of our marks, including both trademark (logotype) and brand names, filed with INPI and 61 other countries. These registrations are systematically renewed every ten years in Brazil and abroad in accordance with each country's current legislation.

#### **INSURANCE**

We carry insurance covering various types of risks, such as property, liability, vehicles, liability of maritime terminals and transportation, as well as a group life insurance policy for our employees. We believe that our policies are in such amounts and cover such risks as are usually carried by companies in our industry. In 2002, we established SRV Insurance Company Limited, a "captive reinsurance" subsidiary incorporated in the Cayman Islands to enable us to obtain insurance and reinsurance at more competitive rates by assuming a portion of the risk under our insurance policies.

## **CAPITAL EXPENDITURES**

The table below sets forth our historical capital expenditures by business area for the periods indicated. Our capital expenditures have historically been more intensive in the second half of the year. See *Item 5. Overview—Key Factors Affecting Revenues and Results of Operations—Divestitures and Asset Sales*, for a description of our divestitures.

	For the Year Ended December 31,					
		2002	į	2003		2004
			(in milli	ions of US\$)		
Ferrous Minerals	US\$	435	US\$	698	US\$	636
Non-ferrous Minerals		132		332		302
Logistics		33		274		484
Aluminum		63		79		224
Coal		_		_		10
Energy		72		40		79
Corporate center		31		120		178
Acquisitions and other investments		46		448		143
Total	US\$	812	US\$	1,991	US\$	2,056

#### 2004 Capital Expenditures and Budgeted Capital Expenditures for 2005

During the year 2004, CVRD made capital expenditures and other investments of US\$ 2,056 million.

In 2004, CVRD concluded five important projects: the Sossego copper mine, the expansion of iron ore production capacity at Carajás to 70 million tons per year, Pier III at the Ponta de Madeira Maritime Terminal, the Candonga hydroelectric power plant and the start up of Capão Xavier iron ore mine.

We have budgeted US\$ 3,332 million for capital expenditures in 2005. Of this total, 77.9%, or US\$ 2,596 million, will be capital expenditures on items for promoting growth ("growth capital expenditures") and the remaining US\$ 736 million will be capital expenditures on items for maintaining existing operations ("stay-in-business capital expenditures").

The following table describes our expenditures for our main investment projects in 2004 and our budgeted expenditures for projects in 2005, together with estimated total expenditures for each project:

Area	Project	Actual Budgeted		ed	Status
		2004	2005	Total	<del>-</del>
			in millions of US\$)	10001	-
Ferrous Minerals	Expansion of Carajás iron ore mines (Northern System)	104	140	296	We expect to complete Carajás' expansion in 2006 with a resulting increase of 15 million tons per year in capacity, bringing total capacity to 85 million tons per year.
	Brucutu iron ore mine (Southern System)	39	205	448	We expect the new installation in Brucutu to begin production and to produce 15 million tons of iron ore in 2006. Phase II is expected to be concluded in 2007, resulting in an increase in capacity to 24 million tons of iron ore per year.
	Fábrica Nova iron ore mine (Southern System)	35	37	106	Fábrica Nova started its operations in April 2005. The Samarco pipeline is currently being moved to increase the mining area. We expect to complete this project by the end of 2005.
	Timbopeba iron ore mine	_	25	25	Project to extend the useful life of Timbopeba mine to 2008 with an estimated annual production of 2.7 million tons per year.
	Expansion and modernization of Itabira iron ore mines (Southern System)	17	16	75	Mine leveling is in progress and work on the processing plant is scheduled to begin in the first half of 2005. This project is expected to increase the production capacity of Itabira from the current 43 million tons per year to 46 million tons per year, and is expected to be completed in 2006.
	Expansion of Fazendão iron ore mine (Southern System)	_	52	100	Work is scheduled to begin in the first half of 2005 on the implementation of the Fazendão mine and be completed in 2006. Fazendão is expected to have a production capacity of 14 million tons per year of ROM (run-of-mine).
	Expansion of Fábrica iron ore mine (Southern System)	_	38	144	The expansion of the Fábrica mine is expected to begin operations in early 2007, with an estimated capacity increase of 5 million tons per year, from 12 million tons per year to 17 million tons per year.
	Expansion of the Tubarão Port (Southern System)	9	22	65	The expansion of the conveyor belt system and loading machinery and the construction of new stockyards are expected to be completed in 2006.
	Expansion of the São Luís pelletizing plant (Northern System)	_	18	18	We expect the expansion of the plant's capacity to 7 million tons per year to be completed in the second half of 2005.
Coal	Longyu anthracite mine	_	86	86	We have agreed to acquire 25% of the Chinese anthracite producer Henan Longyu Energy Resources Ltd., in partnership with Yongcheng and Baosteel. We expect this mine to produce 1.7 million tons in 2005.
	Shandong Yankuang metallurgical coke plant	10	16	26	We own 25% of the joint venture Shandong Yankuang International Coking Ltd. to produce metallurgical coke. The plant is expected to begin production in 2006 with an estimated capacity of 2 million tons per year of coke and 200,000 tons per year of methanol.
Non- ferrous Minerals	Expansion of the Taquari-Vassouras potash mine	29	9	78	Our project to expand the nominal production from 600,000 to 850,000 tons per year is approximately 90% complete. We expect the complete the expansion in the second half of 2005.
	118 copper mine	6	32	218	Construction will begin in the second half of 2005 with projected completion in 2007. The mine is expected to have an annual production capacity of 36,000 tons of copper cathodes.

	Vermelho nickel mine	_	34	875	Construction of the mine, with an estimated capacity of 45,000 tons of nickel cathode and 2,000 tons of cobalt per year is expected to be completed in 2007.
Aluminum	Expansion of Alunorte: stages 4 and 5—alumina	187	306	583	Stages 4 and 5 will increase the alumina refinery's capacity to 4.2 million tons per year from the current 2.4 million tons per year and are expected to be completed in 2006.
	Paragominas I bauxite mine	29	154	352	Our construction of a mine with estimated production capacity of 4.5 million tons per year is scheduled to be completed in 2006.
Logistics	EFVM, EFC, FCA: acquisition of locomotives and wagons	284	559	559	In 2004, we purchased 109 locomotives (79 for general cargo and 30 for iron ore) and 4,276 wagons (2,212 for general cargo and 2,064 for iron ore). We expect to purchase 123 locomotives (82 for iron ore and 41 for general cargo) and 5,606 wagons (4,742 for iron ore and 864 for general cargo) in 2005.
Power Generation	Aimorés hydroelectric power plant	27	12	144	We expect the 330MW plant on the Doce river, in the state of Minas Gerais, to begin operations in the third quarter of 2005. We have a 51% stake in this project.
	Capim Branco I and II hydroelectric power plants	45	73	181	Both plants are scheduled to begin operation in 2006, with a generation capacity of 240 MW and 210 MW, respectively.

In addition to these projects, CVRD has budgeted US\$ 375 million for research and development. Of the total budgeted, 36% is expected to be spent in the Carajás mineral province and 27% in other areas of Brazil. The remaining 37% is budgeted for exploration overseas.

## Item 5. Operating and Financial Review and Prospects

### Overview

The year 2004 was another record year for CVRD. We generated net income of US\$ 2,573 million in 2004, a 66.2% increase over the amount recorded in 2003.

This performance was driven primarily by a sharp increase in operating income, which rose by 90.0% to US\$ 3,123 million in 2004. The increase in net operating income reflected improved operating margins, which increased from 30.7% in 2003 to 38.7% in 2004, caused by a 50.8% increase in net revenues with costs and expenses decreasing from 69.3% of net revenue in 2003 to 61.3% in 2004. The improved overall margins reflected improvements in our iron ore, pellets and ferroalloy businesses due primarily to higher prices and an increase in our aluminum operating margins due to the consolidation of Albras. These improvements were partially offset by margin declines in our alumina business, as a result of the consolidation of Albras, and in our logistics business, due primarily to the consolidation of FCA. The increase in revenues reflected strong demand and rising prices for our principal products driven principally by continued strong demand from China and expanded demand from our other markets in Asia and Europe, as well as production increases and the impact of consolidating a full year's results from CAEMI, Albras and FCA in 2004.

Our higher operating income was partially offset by net non-operating expenses of US\$ 120 million in 2004, compared with a gain of US\$ 10 million in 2003, resulting primarily from the appreciation of the *real* against the US dollar and higher income taxes of US\$ 749 million in 2004 compared to US\$ 297 million in 2003 due to higher operating income.

## Other highlights of 2004 include:

• Start up of copper mining operations. The Sossego mine, our first copper project, began shipping copper concentrate in June 2004. In its first seven months of operations, Sossego, which is still in the initial rampup phase, contributed US\$ 201 million to our gross revenues and US\$ 92 million to our operating income.

- Exchange rate effects. Changes in exchange rates had a negative effect on our operating income in 2004. The average R\$/US\$ exchange rate was R\$ 3.0722 during 2003 and R\$ 2.9257 during 2004, representing a 5.0% appreciation of the real. This appreciation had a negative effect on our operating income, because most of our revenues are denominated in U.S. dollars and most of our costs are denominated in reais. The U.S. dollar depreciated by 8.1% from year-end 2003 to year-end 2004, compared to 18.2% from year-end 2002 to year-end 2003 resulting in lower foreign exchange and monetary gains in 2004 than in 2003.
- Consolidation of Albras. Effective January 1, 2004, we began consolidating Albras, a primary aluminum producer in which we hold 51% of the voting capital, in accordance with Financial Accounting Standards Board (FASB) Interpretation No. 46R. For more information, see Note 4 to our financial statements. Albras accounted for US\$ 388 million of our aluminum gross revenues and US\$ 250 million of our aluminum operating income during 2004, and led to a reduction in alumina volumes reflecting the elimination by consolidation of the alumina sales by Alunorte to Albras.
- Consolidation of FCA and CAEMI. Our results of operations in 2004 also reflect the consolidation of a full year of FCA and CAEMI's results, compared to only four months in 2003. In 2004, CAEMI contributed US\$ 840 million to our iron ore revenue, US\$ 288 million to our iron ore operating income and US\$ 92 million to our kaolin revenues and US\$ 33 million to our kaolin operating income. FCA contributed US\$ 217 million to our railroad revenues and US\$ 29 million in railroad operating losses.
- Sale of CST. In 2004, we sold our stake in CST for US\$ 579 million. The resultant gain was US\$ 404 million.

## **Key Factors Affecting Revenue and Results of Operations**

#### Demand

Demand for iron ore and pellets

In recent years, we have experienced a significant increase in demand from China and, in 2004, we continued to see a recovery of demand in Europe and Japan. Demand for our iron ore products is a function of worldwide demand for steel, which is, in turn, heavily influenced by worldwide economic activity. A slowdown in global economic activity will generally affect demand for our iron ore products. Worldwide demand for steel has been growing since 2002. Global seaborne demand for iron ore grew at a rate of approximately 12.1% in 2004. In 2005, we expect demand to continue to grow, albeit at a lower growth rate than in 2004.

Demand for iron ore and pellets exceeded our production capacity throughout 2004, and we expect that demand will continue to exceed our production capacity in 2005. We plan to invest US\$ 1,266 million in 2005 in the ferrous minerals division. This amount includes expenditures on seven iron ore projects that will add approximately 90 million tons to our iron ore production capacity, in addition to expanding the capacity of our ports and one of our pelletizing plants. Although our programmed iron ore production for this year is 10% greater than 2004, we still face excess demand. To the extent demand exceeds our production capacity, we expect to purchase and resell iron ore and pellets from third parties to attempt to meet any shortfall. In 2004, we purchased 15.9 million tons of iron ore and pellets from third parties. We expect our purchases from third parties to remain at similar levels in 2005.

Demand for aluminum-related products

Demand for aluminum-related products is driven primarily by world economic conditions. In recent years, China has been the primary driver of demand in the aluminum sector. World demand for bauxite, alumina and aluminum currently exceeds supply, and we expect this trend to continue throughout 2005.

Demand for third-party transportation services

Demand for our third-party transportation services in Brazil is primarily driven by the lack of efficient logistics services and by growth in the Brazilian economy. Demand for third-party transportation services in Brazil continued to exceed supply in 2004 and we expect this trend to continue in 2005 as the Brazilian economy continues to expand. We believe our ability to increase our revenues will be largely dependent on our ability to increase our wagon and locomotive fleets and other equipment to service the excess demand.

### **Production Capacity**

Capacity expansions are a key factor influencing our revenues. In 2004, we completed the following main capacity expansions:

- Expansion of Carajás' annual production capacity to 70 million tons per year from 56 million tons per year. This capacity expansion offset the closure of our Capanema mine, which produced 6.4 million tons of iron ore in 2003 prior to ceasing operations in December 2003;
- Launch of copper concentrate production at our Sossego mine in June 2004; and
- Purchase of 109 locomotives and 4,276 wagons in 2004 to expand the general cargo and iron ore transportation capacity of our railroads.

The principal capacity expansions we expect to complete in 2005 include:

- Capacity expansion of our São Luís pelletizing plant from 6 million tons per year to 7 million tons per year;
- In the first half of 2005, the construction of a greenfield iron ore project at Fábrica Nova, which is expected to have an annual production capacity of 15 million tons per year and to produce approximately 10 million tons in 2005;
- Capacity expansion project at the Taquari-Vassouras potash mine from 600,000 tons per year to 850,000 tons per year;
- Installation of a new ship loader at Pier III at Ponta da Madeira Maritime Terminal;
- Expansion of Guaiba Island Maritime Terminal's capacity to 19 million tons from 16 million tons; and
- Purchase of 123 locomotives and 5,606 wagons in 2005 to expand the general cargo and iron ore transportation capacity of our railroads.

See *Item 4. Information on the Company—Capital Expenditures* for more details concerning our 2005 capital expenditures budget.

## Prices

### Ores and metals

Iron ore. Our iron ore export sales are made pursuant to long-term supply contracts, which provide for annual price adjustments. Cyclical changes in the world demand for steel products affect sales prices and volumes in the world iron ore market. Different factors, such as the iron content of specific ore deposits, the various beneficiation and purifying processes required to produce the desired final product, particle size, moisture content and the type and concentration of contaminants (such as phosphorus, alumina and manganese ore) in the ore, influence prices for iron ore. Fines, lump ore and pellets typically command different prices. We generally conduct annual price negotiations beginning in November of each year and ending early in the following year. Due to the wide variety of iron ore and pellet quality and physical characteristics, iron ore and pellets are not considered commodities. This factor combined with the structure of the market has prevented the development of an iron ore futures market. We do not hedge our exposure to iron ore price volatility and there is no iron ore futures market.

Reference Prices for Europe in US\$ cents/metric ton Fe unit

Year	Carajás fines	Standard sinter feed	Blast furnace pellets
2002	29.31	28.62	47.36
2003	31.95	31.04	52.00
2004	37.90	36.45	61.88
2005	65.00	62.51	115.51

Our reference prices per Fe unit for Carajás iron ore fines increased across-the-board in 2004 by 18.6% from 2003 levels, after increasing by 9% in 2003 from 2002 levels. We experienced similar trends in the market for pellets, where reference prices increased by 19% in 2004, after increasing by 9.8% in 2003. We have reached agreements with major steelmakers under which our iron ore prices for 2005 will increase by an average of 71.5% and our pellet prices will increase by an average of 86.6%. Prices for lump ore will increase by an average of 79.0%.

Aluminum-related operations. We operate our aluminum operations through a combination of subsidiaries and unconsolidated joint ventures. We consolidate the revenues of (i) Alunorte, which refines and sells alumina, (ii) Albras, which produces and sells aluminum and (iii) our wholly owned trading subsidiary Itabira Rio Doce Company Ltd., which we refer to as Itaco, which resells bauxite, alumina and aluminum. Our remaining bauxite and aluminum operations are reflected in the line item "Equity in results of affiliates and joint ventures and change in provision for losses on equity investments" in our consolidated income statement.

Through Itaco, we sell our aluminum in an active world market where prices are determined by reference to prices prevailing on terminal markets, such as the London Metals Exchange and the Commodity Exchange, Inc., or COMEX, at the time of delivery. The following table sets forth the three-month average market prices for aluminum on the London Metals Exchange for the periods indicated.

	Aluminum
	(\$ per ton)
1Q02	1,394.48
2Q02	1,377.17
3Q02	1,330.35
4Q02	1,356.92
1Q03	1,392.04
2Q03	1,379.55
3Q03	1,419.94
4Q03	1,519.80
1Q04	1,667.37
2Q04	1,687.60
3Q04	1,716.60
4Q04	1,813.80
1Q05	1,888.60

Source: Bloomberg.

Albras and Alunorte seek to manage the risks associated with changes in aluminum prices by hedging. For more information about aluminum-related hedging, see *Item 11. Quantitative and Qualitative Disclosures About Market Risk.* During the first quarter of 2005, average market prices for aluminum on the London Metals Exchange rose by 4.1% compared to the previous quarter. Alumina prices remained at high levels during the first quarter of 2005, and we believe that the current structural imbalance between supply and demand in the alumina market will continue to have a positive impact on alumina prices in the near term.

Our unconsolidated joint venture MRN sells a substantial proportion of its bauxite to our consolidated subsidiary Alunorte, which in turn sells a portion of its alumina production to our unconsolidated joint venture Valesul. The basic arrangements under which these sales are made are as follows:

- Our MRN bauxite joint venture produces bauxite for sale on a take-or-pay basis to us and our joint venture
  partners at a price that is determined by a formula based on prevailing world prices of aluminum and
  alumina. Our Alunorte alumina subsidiary purchases all of its bauxite requirements from MRN. Our
  annual purchase commitment for 2004 was approximately US\$ 60 million.
- Each Alunorte partner must purchase on a take-or-pay basis all alumina produced by Alunorte in proportion to its respective interest. Each partner pays the same price, which is determined by a formula linked to the prevailing world prices of aluminum. On June 30, 2002, we increased our stake in and acquired control of Alunorte and began consolidating it in our financial statements. As a result, since that date, payments we make to Alunorte under our take-or-pay commitment are eliminated in preparing our consolidated financial statements. In 2004, we used 51% of our share of Alunorte's production at Albras, sold 47% to the foreign market and sold the remainder in our aluminum operations to Valesul.

• Each Albras aluminum joint venture partner must purchase on a take-or-pay basis all aluminum produced by Albras in proportion to its ownership interest. In 2004, we began consolidating Albras in our financial statements. As a result, we include 100% of Albras' results in our financial statements, and payments made by Itaco to Albras under our take-or-pay commitment are eliminated in preparing our consolidated financial statements for 2004. Prior to 2004, our aluminum sales consisted of the resale by Itaco of our share of Albras' production. We do not have a take-or-pay commitment to Valesul, which sells aluminum products directly to its customers.

Manganese ore and ferroalloys. Manganese ore and ferroalloy prices are strongly influenced by trends in the steel market. Manganese ore prices are generally negotiated on an annual basis using a benchmark established in the Japanese market based on the reference price for the related ferroalloys. Ferroalloy prices are negotiated in open bids, quarterly contracts (particularly in Europe) or on a spot basis. They are influenced by a number of factors and are more volatile than prices for manganese ore. Among the principal factors are the price of manganese ore, the inventories held by producers or traders, occasional interruptions in production and anti-dumping tariffs in the principal markets (U.S., Europe, Japan and South Korea). Average manganese ore prices increased 36.8%, rising from US\$ 55.4 per ton in 2003 to US\$ 75.8 per ton in 2004. Average ferroalloy prices increased 74.7%, from US\$ 547.8 per ton in 2003 to US\$ 957.1 per ton in 2004, reflecting the general increase in the price of raw materials for steel. Ferroalloys are not a standardized product since we sell several kinds of alloys with various prices.

*Potash and kaolin.* Potash prices increased 41.1%, from US\$ 139.5 per ton in 2003 to US\$ 196.8 per ton in 2004, primarily reflecting increased demand for fertilizers. Our average kaolin prices decreased 3.9% from US\$ 142.2 per ton in 2003 to US\$ 136.7 per ton in 2004, primarily reflecting higher international freight costs.

*Copper.* We sell our copper in an active world market where prices are determined by reference to prices prevailing on terminal markets, such as the London Metals Exchange and the COMEX, at the time of delivery. Copper prices increased 57.0% in 2004, relative to 2003. These high prices reflect increased global demand, primarily from China, the weakness of the US dollar and the low level of inventories. Our copper operations began in 2004 and we sold 269 thousand tons, generating revenue of US \$201 million.

#### Logistics

We earn our logistics revenues primarily from fees charged to customers for the transportation of cargo via our railroads, ports and ships. Most of these revenues are earned by our railways, and nearly all of our logistics revenues are denominated in *reais*. Prices in the Brazilian railroad market are subject to maximum levels set by the Brazilian regulatory authorities but, in practice, have historically fallen well below the maximum levels permitted by law, primarily reflecting railroads' need to remain competitive with the trucking industry. Prices vary depending on the type of cargo and the distances shipped.

## Currency Volatility

Most of our revenues are dollar-denominated, while most of our costs (other than debt expenses) are denominated in *reais*. As a result, when the *real* is relatively strong against the dollar, this tends to have a negative effect on our reported financial results from operations, and vice versa. On the other hand, because most of our debt (and debt at the joint venture and affiliate level) is dollar-denominated, a decline in the value of the *real* causes us to record foreign exchange losses.

Changes in exchange rates had a negative effect on our operating income in 2004. The average R\$/US\$ exchange rate was R\$ 3.0722 during 2003 and R\$ 2.9257 during 2004, representing a 5.0% appreciation of the *real*. This appreciation had a negative effect on our operating income, because most of our revenues are denominated in U.S. dollars and most of our costs are denominated in *reais*. The U.S. dollar depreciated by 8.1% from year-end 2003 to year-end 2004, compared to 18.2% from year-end 2002 to year-end 2003, resulting in lower foreign exchange and monetary gains in 2004 than in 2003.

### Acquisitions

We completed several significant acquisitions in 2003, 2004 and the first months of 2005.

- In February 2003, we acquired for US\$ 17.6 million 100% of Elkem Rana AS, a Norwegian ferrochrome producer, which we subsequently renamed RDMN. We invested US\$ 16.7 million to convert RDMN's plant to allow production of ferro manganese alloys. The plant started operations with one furnace in June 2003 and brought its second furnace online in November 2003.
- In September 2003, we completed the acquisition of Mitsui's interest in CAEMI, and now own 100% of CAEMI's common shares and 40% of its preferred shares, totaling 60.2% of CAEMI's share capital. We began consolidating CAEMI as from that date. CAEMI contributed US\$ 840 million to our gross revenues from iron ore for 2004 and US\$ 288 million to our total operating income for iron ore. CAEMI contributed US\$ 92 million to our gross revenues from kaolin for 2004 and US\$ 33 million to our total operating income for kaolin.
- Our acquisition of CAEMI has increased our iron ore revenues, but has had a negative impact on our
  operating margins. The lower margins at CAEMI result primarily from the fact that unlike our Northern
  and Southern systems, which include their own railroads, MBR uses the services of a third-party railway
  operator, MRS, to transport iron ore from its mines to its ports.
- In September 2003, we began consolidating FCA. FCA has lower operating margins than our other railways, principally due to higher concession costs and older infrastructure.
- At the end of 2004 and in the beginning of 2005, we entered into agreements with Yongcheng Coal & Electricity Group and Shanghai Baosteel International Economic & Trading Co., Ltd to acquire a 25% stake in the Chinese anthracite producer Henan Longyu Energy Resources Co. Ltd, or Longyu, for US\$ 86 million. Longyu is engaged in the development, operation and maintenance of coal mines and sales of coal and related products in China. The partnership contemplates that we will have guaranteed off-take rights to a portion of the production of the mines, which we intend to consume at our pelletizing plants and to sell to clients in the Brazilian market. The transaction remains subject to the negotiation of final documentation, as well as to the approval of the Chinese government and is expected to close in July 2005.
- In July 2004, we agreed to acquire for US\$ 26 million a 25% stake in a joint venture with the Yankuang Group (Yankuang), one of the largest coal producers in China, and with Itochu Corporation. We made the initial US\$ 10.6 million of the US\$ 26 million investment in December 2004 upon the incorporation of the joint venture. The joint venture, named Shandong Yankuang International Coking Company Limited, has an estimated production capacity of two million tons of coke and 200,000 tons of methanol per year and is expected to begin operations in 2006. We are also exploring with Yankuang the possibility of participating in a joint venture to develop a new coal mine in the Shandong province in China which would be expected to begin operations in 2007 and have a production capacity of approximately three million tons of coal per year.
- On March 18, 2005, we acquired Estrela de Apolo for US\$ 9.3 million. Estrela de Apolo is a mining
  company that has iron ore and bauxite mineral rights in the state of Minas Gerais. We will develop
  feasibility studies to estimate the annual production capacity of the deposit.
- We obtained mineral exploration rights in several countries, including:
  - Coal in the Moatize region of Mozambique;
  - Potash in Argentina;
  - o Phosphates in Peru; and
  - o Bauxite in the state of Amazonas, Brazil.

#### **Divestitures and Asset Sales**

We completed the following principal divestitures and asset sales in 2003 and 2004.

- In August 2003, we sold our last remaining gold mine, Fazenda Brasileiro, to Yamana Resources Inc., for US\$ 21 million.
- In November 2003, we sold our interest in Sepetiba Tecon S.A. to CSN and our interest in Companhia CFN to CSN and Taquari Participações S.A. These sales were made in connection with the purchase of FCA described above.
- In October 2003, we sold our interest in Fosfértil to Bunge Fertilizantes S.A. for US\$ 84 million.
- In 2004, we sold our stake in CST for US\$ 579 million. The resultant gain was US\$ 404 million.

## Effects of Certain Equity Method Affiliates and Investments Carried at Cost

The financial condition and results of operations of our joint ventures, affiliated companies and investments can have a significant effect on our results of operations and financial condition. See Note 13 to our consolidated financial statements for information on these effects.

#### Rising Unit Extraction Costs

Several of our mines have operated for long periods and will likely experience rising extraction costs per unit in the future. Increases in extraction costs at each of these mines have not materially affected our results of operations as such increases were offset by productivity gains.

#### Electricity Costs

In May 2004, Albras successfully executed an auction, resulting in a contract to purchase electricity for a 20-year period, effective June 2004. The basic purchase price is R\$ 53.00 MWh, indexed to the general market price index, IGP-M, as calculated by *Fundação Getúlio Vargas*. In addition to the basic price, the electricity seller will have the right to participate in earnings from our sale of primary aluminum when the price exceeds US\$ 1,450.00 per ton, as registered at the London Metal Exchange (LME). As noted above, to date, the LME price has exceeded the threshold LME price during the entire contract so far.

## Inflation Rates in Brazil

As measured by the IGP-M Index, the Brazilian inflation rate was approximately 25.3% in 2002, 8.7% in 2003 and 12.4% in 2004. In the first four months of 2005, the Brazilian inflation rate was approximately 2.4%. Most of our costs are incurred in Brazil in *reais*, while most of our revenues are earned outside of Brazil in U.S. dollars. Inflation has a negative impact on our operating margins, although it may be offset by devaluation of the *real* against the U.S. dollar.

## Operating expenses

Our principal operating expenses consist of cost of goods sold, selling, general and administrative expenses and research and development expenses.

- Cost of goods sold. Our cost of goods sold consists principally of costs for raw materials, bauxite
  purchased under take-or-pay arrangements from MRN, iron ore and pellets purchased from third parties,
  logistics services purchased from third parties, labor costs, fuel costs, energy costs, and depreciation and
  exhaustion. Our cost of goods sold declined as a percentage of net operating revenues in 2004, driven
  principally by higher prices and the consolidation of Albras.
- Selling, general and administrative expenses. Our selling, general and administrative expenses consist principally of the expenses of our corporate headquarters.

Research and development expenses. Our research and development expenses consist primarily of
investments related to mineral exploration and studies for the development of projects. We expect our
research and development investments to increase in 2005.

#### Brazilian Taxes

We are subject to a number of Brazilian taxes. The principal taxes we pay are:

- Value-Added Tax and Revenue Taxes. Our gross revenues consist of total revenues from sales, net of
  discounts, returns and allowances, together with amounts we collect in respect of value-added tax (ICMS).
  Net operating revenues represent revenues less value-added tax, which we collect on behalf of, and must
  remit to, state taxing authorities. We also collect other revenue taxes for social programs (PIS and
  COFINS) that are recorded under the line items value-added tax and other financial expenses in our
  financial statements. Export sales are currently exempt from both the value-added tax and the social taxes.
- *Income Tax and Social Contribution on Profits.* We pay income taxes, which include a tax called the social contribution on profits. The social contribution on profits tax rate is currently 9% and income tax rate is 25% representing a statutory composite rate of 34%.

Brazilian tax legislation changes, which are frequent, can have a significant impact on our results of operations. For example, in 2001, changes in Brazilian tax legislation were introduced, including a requirement that earnings from foreign subsidiaries be included in the determination of income taxes payable in Brazil. Based on the advice of legal counsel, we believe that the possibility that we will have to pay certain taxes potentially covered by this legislation is remote and accordingly have not recorded provisions for such taxes in our financial statements.

## **Critical Accounting Policies and Estimates**

We believe that the following are our critical accounting policies. We consider an accounting policy to be critical if it is important to our financial condition and results of operations and requires significant judgments and estimates on the part of our management. For a summary of all of our significant accounting policies, see Note 3 to our consolidated financial statements.

#### **Translation Adjustments**

Our reporting currency is the U.S. dollar, but our functional currency for the majority of our operations is the *real*. In accordance with Statement of Financial Accounting Standards (SFAS) 52 – "Foreign Currency Translation," we translate statement of income items to reflect the approximate results that would have occurred if each transaction had been translated using the exchange rate in effect on the date that the transaction was recognized. Because the separate translation of every transaction is impractical, an appropriate weighted average exchange rate for the period is used. In most cases, we translate our statement of income accounts and those of subsidiaries that use the *real* as their functional currency into U.S. dollars at weighted average monthly rates for the relevant reporting period. In the case of material exceptional items, we translate the amounts into U.S. dollars using the exchange rate on the date of the transaction. Additionally, during periods of high exchange rate volatility, we use estimated daily rates to translate our foreign exchange and monetary losses or gains, financial income and financial expenses. The determination of the appropriate weighted average exchange rate requires significant management judgment and estimates. From January 1 to December 31, 2004, the dollar depreciated by approximately 8.1% against the *real* and generated a credit for the year recorded directly in the cumulative translation adjustment account of US\$ 580 million.

## Mineral Reserves and Life of Mines

We regularly evaluate and update our estimates of proven and probable mineral reserves. Our proven and probable mineral reserves are determined using generally accepted estimation techniques and are audited by Pincock, Allen & Holt, an expert in mineral engineering. Calculating our reserves requires us to make assumptions about future conditions that are highly uncertain, including future ore prices, foreign currency exchange rates, inflation rates, mining technology, availability of permits and production costs. Changes in some or all of these assumptions could have a significant impact on our recorded proven and probable reserves.

One of the ways we use our ore reserve estimates is to determine the mine closure dates used in recording the fair value liability for our asset retirement obligations and the periods over which we amortize our mining assets. Any change in our estimates of total expected future mine or asset lives could have an impact on the depreciation, depletion and amortization charges recorded in our consolidated financial statements under cost of goods sold. Changes in the estimated lives of our mines could also significantly impact our estimates of environmental and site reclamation costs, which are described in greater detail below.

#### Environmental and Site Reclamation Costs

Expenditures relating to ongoing compliance with environmental regulations are charged against earnings or capitalized as appropriate. These ongoing programs are designed to minimize the environmental impact of our activities.

Until December 31, 2002, we provided only for environmental liabilities relating to site restoration at mines already closed or which were expected to close in the next two years. The estimation of environmental costs was based on projections limited to the next two years and was not discounted to present value.

Effective January 1, 2003, we adopted SFAS 143 - "Accounting for Asset Retirement Obligations." SFAS 143 requires that we recognize a liability for the fair value of our estimated asset retirement obligations in the period in which they are incurred, if a reasonable estimate can be made. We consider the accounting estimates related to reclamation and closure costs to be critical accounting estimates because:

- we will not incur most of these costs for a number of years, requiring us to make estimates over a long period;
- reclamation and closure laws and regulations could change in the future or circumstances affecting our
  operations could change, either of which could result in significant changes to our current plans;
- calculating the fair value of our asset retirement obligations in accordance with SFAS 143 requires us to
  assign probabilities to projected cash flows, to make long-term assumptions about inflation rates, to
  determine our credit-adjusted risk-free interest rates and to determine market risk premiums that are
  appropriate for our operations; and
- given the significance of these factors in the determination of our estimated environmental and site reclamation costs, changes in any or all of these estimates could have a material impact on net income. In particular, given the long periods over which many of these charges are discounted to present value, changes in our assumptions about credit-adjusted risk-free interest rates could have a significant impact on the size of our provision.

To evaluate our asset retirement obligations, our Environmental Department developed a guide which defines the rules and procedures that should be used to evaluate such obligations. The future costs of retirement of all of our mines and sites are estimated annually, considering the actual stage of exhaustion and the projected exhaustion date of each mine and site. The future estimated retirement costs are discounted to present value using a credit-adjusted risk-free interest rate. At December 31, 2004, we estimated the fair value of our aggregate total asset retirement obligations to be approximately US\$ 134 million.

## Impairment of Long-Lived Assets and Goodwill

We evaluate our investments and long-lived assets, which primarily include identifiable property, plant and equipment, for impairment whenever events or changes in circumstances indicate that the balance sheet carrying value of the asset may not be recoverable. If the asset is determined to be impaired, we record an impairment loss, and write down the asset, based upon the amount by which the carrying amount of the asset exceeds the higher of net realizable value and value in use. We generally determine value in use by discounting expected future cash flows using a risk-adjusted pre-tax discount rate that we believe is appropriate to the risks inherent in the asset. In order to estimate future cash flows, we must make various assumptions about matters that are highly uncertain, including future production and sales, product prices (which we estimate based on current and historical prices, price trends and related factors), recoverable reserves, operating costs, environmental and site reclamation costs and planned capital costs. Arriving at assumptions and estimates concerning these matters is a complex and often

subjective process. These assumptions and estimates can be affected by a variety of matters, including external factors such as industry and economic trends, and internal factors such as changes in our business strategy and our internal forecasts. Although we believe the assumptions and estimates we have made in the past have been reasonable and appropriate, different assumptions and estimates could materially impact our reported financial results. More conservative assumptions of the anticipated future benefits from these businesses would result in greater impairment charges, which would decrease net income and result in lower asset values on our balance sheet. Conversely, less conservative assumptions would result in smaller impairment charges, higher net income and higher asset values.

In assessing potential impairment of our equity investments, we evaluate the carrying value of our listed equity investments relative to publicly available quoted market prices. If the quoted market price is below carrying value, and we consider the decline to be other than temporary, we write down our equity investments to quoted market value. For investments for which quoted market prices are not readily available, we evaluate the investments for impairment whenever the performance of the underlying entity indicates that impairment may exist. In such cases, the fair value of the investments is estimated principally based on discounted estimated cash flows using assumptions similar to those described above.

In relation to goodwill, each year on September 30, we use a two-step process to test for the recoverability of goodwill for each of our reporting units. Step one requires a comparison of the fair value of the reporting unit to the book value of its net assets. The fair value of the net assets is based on discounted cash flows using assumptions similar to those used in the process described above. Step two requires an estimate of the fair value of the individual assets and liabilities within the reporting unit. In the year ended December 31, 2004, after conducting impairment tests, we concluded that no write-down was necessary.

## **Derivatives and Hedging Activity**

As of January 1, 2001, we adopted SFAS 133 – "Accounting for Derivative Financial Instruments and Hedging Activities," as amended by SFAS 137, SFAS 138 and SFAS 149. Those standards require that we recognize all derivative financial instruments as either assets or liabilities on our balance sheet and measure such instruments at fair value. Changes in the fair value of derivatives are recorded in each period in current earnings or in other comprehensive income (outside net income), in the latter case depending on whether a transaction is designated as an effective hedge. In 2003 and 2004, we did not designate any derivative financial instruments as hedges and the fair value adjustments to our derivatives were thus recorded in current net income. Had we designated our hedging instruments as permitted under SFAS 133, there would have been corresponding fair value adjustments, for certain of our hedging instruments, to the related hedged items in the case of fair value hedges or directly to shareholders' equity in the case of cash flow hedges. During the year ended December 31, 2004, we recorded a charge of US\$ 83 million in relation to fair value adjustments on derivative instruments.

## Income Taxes

In accordance with SFAS 109 - "Accounting for Income Taxes," we recognize deferred tax effects of tax loss carryforwards and temporary differences in our consolidated financial statements. We record a valuation allowance when we believe that it is more likely than not that tax assets will not be fully recoverable in the future.

When we prepare our consolidated financial statements, we estimate our income taxes based on regulations in the various jurisdictions where we conduct business. This requires us to estimate our actual current tax exposure and to assess temporary differences that result from differing treatment of certain items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which we show on our consolidated balance sheet. We must then assess the likelihood that our deferred tax assets will be recovered from future taxable income. To the extent we believe that recovery is not likely, we establish a valuation allowance. When we establish a valuation allowance or increase this allowance in an accounting period, we record a tax expense in our statement of income. When we reduce the valuation allowance, as occurred in 2003 and in 2004, we record a tax benefit in our statement of income.

Determining our provision for income taxes, our deferred tax assets and liabilities and any valuation allowance to be recorded against our net deferred tax assets requires significant management judgment and estimates and assumptions about matters that are highly uncertain. For each income tax asset, we evaluate the likelihood of whether some portion or all of the asset will not be realized. The valuation allowance made in relation to

accumulated income tax losses depends on our assessment of the probability of generation of future taxable profits within the legal entity in which the related deferred tax asset is recorded based on our production and sales plans, selling prices, operating costs, environmental costs, group restructuring plans for subsidiaries and site reclamation costs and planned capital costs.

## **Contingencies**

We disclose material contingent liabilities unless the possibility of any loss arising is considered remote, and material contingent assets where the inflow of economic benefits is probable. We discuss our material contingencies in Note 18 to our financial statements.

We account for contingencies in accordance with SFAS 5 – "Accounting for Contingencies," which requires that we record an estimated loss from a loss contingency when information available prior to issuance of our financial statements indicates that it is probable that a future event will confirm that an asset has been impaired or a liability has been incurred at the date of the financial statements, and the amount of the loss can be reasonably estimated. In particular, given the uncertain nature of Brazilian tax legislation, the assessment of potential tax liabilities requires significant management judgment. By their nature contingencies will only be resolved when one or more future events occur or fail to occur – and typically those events will occur a number of years in the future. Assessing such liabilities, particularly in the uncertain Brazilian legal environment, inherently involves the exercise of significant management judgment and estimates of the outcome of future events.

The provision for contingencies at December 31, 2004, totaling US\$ 914 million, consists of provisions of US\$ 221 million, US\$ 185 million, US\$ 502 million and US\$ 6 million for labor, civil, tax and other claims, respectively.

## **Employee Post-retirement Benefits**

We sponsor a defined benefit pension plan covering substantially all of our employees. We account for these benefits in accordance with SFAS No. 87 "Employers' Accounting for Pensions."

The determination of the amount of our obligations for pension benefits depends on certain actuarial assumptions. These assumptions are described in Note 17 to our consolidated financial statements and include, among others, the expected long-term rate of return on plan assets and increases in salaries. In accordance with U.S. GAAP, actual results that differ from our assumptions are accumulated and amortized over future periods and generally affect our recognized expenses and recorded obligations in such future periods.

## Consolidation of Variable Interest Entities

We perform evaluations of each of our equity affiliates and joint ventures to determine if they constitute variable interest entities, or VIEs, as defined under Interpretation No. 46R, "Consolidation of Variable Interest Entities," or FIN 46R. Applying FIN 46R, we determined that Albras is a VIE and that we are its primary beneficiary. We accordingly have consolidated Albras with effect from January 1, 2005.

FIN 46R requires the primary beneficiary of a variable interest entity to consolidate that entity. A variable interest entity is created when (i) the equity investment at risk is not sufficient to permit the entity from financing its activities without additional subordinated financial support from other parties or (ii) equity holders either (a) lack direct or indirect ability to make decisions about the entity, (b) are not obligated to absorb expected losses of the entity or (c) do not have the right to receive expected residual returns of the entity if they occur. The primary beneficiary of a variable interest entity is the party that absorbs a majority of the variable interest entity's expected losses, receives a majority of the entity's expected residual returns, or both, as a result of ownership, contractual or other financial interests in the entity. Expected losses are the expected negative variability of an entity's net assets exclusive of its variable interests, and expected residual returns are the expected positive variability in the fair value of an entity's assets, exclusive of variable interests. Prior to the issuance of FIN 46R, an enterprise generally consolidated an entity when the enterprise had a controlling financial interest in the entity through ownership of a majority voting interest.

Quantifying the variability of VIEs is complex and subjective, requiring consideration and estimates of a significant number of possible future outcomes as well as the probability of each outcome occurring. The results of

each possible outcome are allocated to the parties holding interests in the VIE and, based on the allocation, a calculation is performed to determine which party, if any, has a majority of the potential negative outcomes (expected losses) or a majority of the potential positive outcomes (expected residual returns). Calculating expected losses and expected residual returns requires modeling potential future results of the entity, assigning probabilities to each potential outcome, and allocating those potential outcomes to the VIE's interest holders. If our estimates of possible outcomes and probabilities are incorrect, it could result in the inappropriate consolidation or deconsolidation of the VIE.

#### Results of Operations—2004 Compared to 2003

#### Revenues

Our gross operating revenues rose to US\$ 8,479 million in 2004, a 52.9% increase over 2003. Our net operating revenues increased 50.8% to US\$ 8,066 million in 2004. The following table summarizes our gross revenues by product and our net operating revenues for the periods indicated:

	2004		2	2003	% Change
		(in million	ns of US\$)		
Iron ore and pellets					
Iron ore	US\$	3,995	US\$	2,662	50.1%
Pellets		1,148		838	37.0
Subtotal		5,143		3,500	46.9
Manganese and Ferroalloys		701		349	100.9
Potash		124		94	31.9
Kaolin		164		96	70.8
Copper		201		_	100.0
Gold		_		21	_
Minerals and metals		6,333		4,060	56.0
Revenues from logistic services		877		604	45.2
Aluminum-related products		1,250		852	46.7
Other products and services		19		29	(34.5)
Gross revenues		8,479		5,545	52.9
Value-added tax		(413)		(195)	111.8
Net operating revenues	US\$	8,066	US\$	5,350	50.8%

#### Iron ore and pellets

In 2004, the global seaborne iron ore market continued to experience high levels of demand. Reflecting these global market conditions, customer demand for iron ore and pellets continued to exceed CVRD's production capacity. We increased our shipments of iron ore by 40.9 million tons, or 25.1%, compared to the prior year and our shipments of pellets by 3.9 million tons, or 16.4%. These increases reflect higher production at our existing mines, the effect of consolidating CAEMI for a full year in 2004, compared to only four months in 2003, and higher purchases from third parties. Our gross revenues for 2004 were also positively affected by price increases. We reached agreements with major steelmakers in January 2004 under which our reference prices for iron ore and pellets increased by an average of 18% and 19% respectively. Reflecting these positive volume and pricing trends, our gross revenues from iron ore and pellets increased 46.9%, from US\$ 3,500 million in 2003 to US\$ 5,143 million in 2004.

*Iron ore.* Gross revenues from iron ore increased by 50.1% from US\$ 2,662 million in 2003 to US\$ 3,995 million in 2004, driven primarily by a 25.1% increase in shipments of iron ore and a 19.9% increase in average selling prices. The increase in shipments was driven primarily by the consolidation of CAEMI for the entire year in 2004 compared to only four months in 2003. CAEMI accounted for 42.7 million tons of shipments and gross revenues of US\$ 840 million in 2004, compared with 13.9 million tons of shipments and gross revenues of (US\$ 240 million) in 2003. The remaining increase in shipments resulted from higher production at our existing mines (primarily Carajás) and an increase in purchases from third parties from 9.2 million tons to 15.9 million tons. The prices reflect the iron ore price increases agreed with major steelmakers in January 2004.

*Pellets*. Gross revenues from pellets increased by 37.0%, from US\$ 838 million in 2003 to US\$ 1,148 million in 2004. The increase was driven by an 16.4% increase in volume shipped, reflecting the demand for our pellets as well as the full operation of our pelletizing plant in São Luís, which contributed 2.4 million tons, and an 18.7% increase in average selling prices. The price increases reflect the pellet prices agreed with major steelmakers in January 2004.

#### Manganese ore and ferroalloys

Gross revenues of manganese ore and ferroalloys increased by 100.9%, from US\$ 349 million in 2003 to US\$ 701 million in 2004. This increase resulted from:

- A 108.3% increase in gross revenues from ferroalloys, from US\$ 300 million in 2003 to US\$ 625 million in 2004. The increase was driven by strong demand for our principal ferroalloy products from the steel industry and the impact of a full year of ferroalloy production from RDMN in 2004, which drove a 22.7% increase in sales volume, and a 74.7% increase in average selling prices.
- A 55.1% increase in gross revenues of manganese ore, from US\$ 49 million in 2003 to US\$ 76 million in 2004. Revenues were positively affected by 36.8% increase in average selling prices compared to 2003 while volumes increased by 13.2%.

#### Potash

Gross revenues from sales of potash increased by 31.9%, from US\$ 94 million in 2003 to US\$ 124 million in 2004, driven by a 41.1% increase in average selling prices, reflecting strong demand. The higher average selling prices were partially offset by lower sales volume, which decreased 6.5% in 2004. Shipments were lower in 2004 because the production was limited as a result of the expansion project at our Taquari-Vassouras potash mine, which is designed to increase its annual production capacity from 600,000 tons to 850,000 tons.

#### Kaolin

Gross revenues from sales of kaolin increased by 70.8%, from US\$ 96 million in 2003 to US\$ 164 million in 2004. US\$ 92 million of our kaolin revenues derives of the consolidation of CADAM through CAEMI, for a full year in 2004, as opposed to US\$ 31 million over four months in 2003. Total volume shipped increased by 84.6%, driven primarily by the CAEMI acquisition. The volume growth was partially offset by a 3.9% decrease in average selling prices, reflecting higher international freight costs.

#### Copper

We began selling copper concentrate from our Sossego copper mine in June 2004. During the period from June 2004 to the end of 2004, gross revenues from sales of copper concentrate amounted to US\$ 201 million.

## Logistic services

Gross revenues from logistic services increased by 45.2% from US\$ 604 million in 2003 to US\$ 877 million in 2004. The improved performance in logistics revenues reflects our efforts to add railroad capacity to exploit opportunities provided by agricultural production, especially grains, and increased shipments due to higher Brazilian steel production in 2004. Our gross revenues were also positively affected by the consolidation of FCA beginning September 2003. In particular, the increase in gross revenues from logistic services reflects:

• A 64.1% increase in gross revenues from railroad transportation, from US\$ 373 million in 2003 to US\$ 612 million in 2004. Of the US\$ 239 million increase in revenues, US\$ 156 million resulted from our consolidation of FCA. The increase reflects a 37.1% increase in volume transported, reflecting the FCA acquisition, the strong demand for general cargo services, which continued to exceed supply, and the expansion of our rolling stock through the addition of wagons and locomotives, as well as a 19.4% increase in average selling prices, reflecting higher prices due to the appreciation of the *real*, as well as higher *real*-denominated prices due to increased demand and inflation.

- A 20.1% increase in gross revenues from port operations, from US\$ 144 million in 2003 to US\$ 173 million in 2004. The increase in port operations gross revenues was driven by a 15.0% increase in average selling prices, reflecting the appreciation of the *real* as well as higher *real*-denominated prices due to high demand and inflation.
- A 5.7% increase in gross revenues from shipping, from US\$ 87 million in 2003 to US\$ 92 million in 2004.

## Aluminum-related products

Gross revenues from aluminum-related products increased 46.7%, from US\$ 852 million in 2003 to US\$ 1,250 million in 2004. The main drivers were:

- A 130.9% increase in gross revenues from sales of aluminum, from US\$ 320 million in 2003 to US\$ 739 million in 2004. Of the US\$ 419 million increase, the consolidation of Albras was responsible for US\$ 384 million, and the remainder is largely due to the increased worldwide demand for aluminum and improvements that helped expand production. Sales volume increased by 104.8% and the average selling price rose by 20.0%. The price increase primarily reflects strong worldwide demand for aluminum.
- A 43.2% increase in gross revenues from sales of bauxite, from US\$ 37 million in 2003 to US\$ 53 million in 2004. This increase was largely the result of a 41.0% increase in volume sold. The price remained relatively stable, reflecting that bauxite prices are established based on the aluminum and alumina prices of the three previous quarters, excluding the quarter immediately preceding price negotiations.
- A 7.5% decrease in gross revenues from sales of alumina, from US\$ 495 million in 2003 to US\$ 458 million in 2004. The decrease in alumina gross revenues resulted primarily from a 32.6% decrease in sales volume due to the consolidation of Albras beginning January 1, 2004 and to higher revenues in 2003 due to resales of alumina purchased in the spot market. The decline in sales volume more than offset a 37.1% increase in average selling prices for alumina driven by the increase in worldwide demand for alumina.

#### Gold

Our gold production declined significantly effective August 15, 2003, with the selling of our Fazenda Brasileiro mine. Our gold production now consists solely of gold produced as a by-product of our iron ore operations at Itabira. The copper concentrate we produce in our Sossego mine contains gold. We record all revenues received in respect of the copper concentrate under copper revenues.

## Other products and services

Gross revenues from other products and services decreased 34.5%, from US\$ 29 million in 2003 to US\$ 19 million in 2004, primarily reflecting the sale, in 2003, by RDMN of excess energy to third parties in the Norwegian market during the conversion of its plants in 2003.

#### Operating costs and expenses

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

	Yea				
	200	4	20	003	% change
	(	in millio	ns of US\$)	)	
Cost of ores and metals	US\$	2,881	US\$	2,066	39.4
Cost of logistic services.		513		370	38.6
Cost of aluminum-related products		674		678	(0.6)
Others		13		14	(7.1)
Cost of goods sold		4,081		3,128	30.5
Selling, general and administrative expenses		452		265	70.6
Research and development		153		82	86.6
Employee profit sharing plan		69		32	115.6
Other costs and expense		188		199	(5.5)
Total operating costs and expenses	US\$	4,943	US\$	3,706	33.4

## Cost of goods sold

*General.* Total cost of goods sold increased 30.5%, from US\$ 3,128 million in 2003 to US\$ 4,081 million in 2004. This increase resulted, in part, from the consolidation of Albras, CAEMI and FCA for the full year in 2004, compared with only four months for CAEMI and FCA in 2003 and no consolidation of Albras in 2003. CAEMI and FCA accounted for US\$ 236 million of our cost of goods sold in 2003 and Albras, CAEMI and FCA accounted for US\$ 708 million in 2004. The other major factors behind the increase in cost of goods sold during 2004 were:

- Material costs, including fuel and gas, increased by US\$ 301 million, or 39.6%, in 2004, driven primarily
  by the significant increase in our total production, resulting primarily from the consolidation of CAEMI,
  FCA and Albras which accounted for US\$ 123 million of the total US\$ 301 million increase, as well as
  increased prices of fuel and gas.
- Appreciation of the *real* against the U.S. dollar and the concurrent increase in inflation as measured by the IGP-M, which reached 12.4% in 2004, led to increased costs, when translated into U.S. dollars, because the majority of our costs and expenses are denominated in *reais*.
- Cost of outsourced services increased by US\$ 239 million, or 42.6%, in 2004, resulting mainly from an increase in costs for outsourced logistics services resulting from our consolidation of CAEMI beginning in September 2003. Unlike our Northern and Southern systems, where we use our own railroads, CAEMI uses a third-party logistics provider—MRS—to transport its iron ore to the port. CAEMI accounted for US\$ 184 million in outsourced logistics costs in 2004 compared with US\$ 94 million in 2003. In 2004, our Minas do Meio mines in the Southern System also transported a portion of their output via MRS, for a total freight cost of US\$ 73 million in 2004 compared with US\$ 39 million in 2003, reflecting higher volumes transported as well as higher prices.
- Expenditures on purchases of products other than iron ore and pellets decreased by 32.0% from US\$ 604 million in 2003 to US\$ 411 million in 2004 due mainly to the consolidation of Albras, which contributed US\$ 240 million.
- Energy expenses increased by US\$ 172 million in 2004 compared to 2003, driven primarily by the consolidation of Albras, which accounted for US\$ 137 million of the total increase.
- Demurrage costs increased from US\$ 46 million in 2003 to US\$ 83 million in 2004, reflecting congestion in the ports due to high demand.

Cost of ores and metals. Cost of ores and metals sold increased by 39.4% to US\$ 2,881 million in 2004 from US\$ 2,066 million in 2003, primarily due to increased sales volumes of iron ore and pellets, copper and manganese and ferroalloys. A portion of the increase in the cost of ores and metals sold also reflects the higher costs associated with purchases of iron ore from third parties to meet excess demand. We purchased 15.9 million tons in 2004, up from 9.2 million tons in 2003. The cost of ores and metals during 2004 also includes US\$ 484 million in costs generated by the full consolidation of CAEMI, compared with four months in 2003, and the beginning of copper operations.

Cost of logistic services. Cost of logistic services increased by 38.6%, from US\$ 370 million in 2003 to US\$ 513 million in 2004. Of the US\$ 143 million increase, US\$ 125 million relates to the consolidation of FCA for the full 2004 compared with four months in 2003.

Cost of aluminum-related products. Cost of aluminum-related products remained stable, from US\$ 678 million in 2003 to US\$ 674 million in 2004.

Cost of other products and services. Cost of other products and services remained stable, from US\$ 14 million in 2003 to US\$ 13 million in 2004.

Selling, general and administrative expenses

Selling, general and administrative expenses increased 70.6%, from US\$ 265 million in 2003 to US\$ 452 million in 2004. This increase resulted primarily from the full consolidation of CAEMI, FCA and Albras over the full year in 2004, compared to four months of results from CAEMI and FCA and no results for Albras for 2003. Taken together, CAEMI, FCA and Albras accounted for US\$ 88 million of the US\$ 187 million increase. The remainder primarily reflects increase in sales expenses due to the increase in revenues sales and increase in salaries as well as the monetary exchange variation.

Research and development

Research and development expenses increased 86.6%, from US\$ 82 million in 2003 to US\$ 153 million in 2004. This increase is in line with CVRD's expansion plans intended to diversify its production and expand production of existing products to meet world demand.

Other costs and expenses

Other costs and expenses decreased by US\$ 199 million in 2003 to US\$ 188 million in 2004. These costs and expenses primarily reflect provisions for contingencies.

## **Operating Income by Segment**

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

	Year ended December 31,										
		2004		2003							
		Operating income (loss)		Operating (los	,	% of net operating revenues					
	(in millions	of US\$)		(in million	s of US\$)						
Ferrous minerals											
Iron ore	US\$	1,8	47.5%	US\$	1,1	45.0%					
Pellets		268	24.3		169	22.0					
Manganese ore		26	36.1		7	_					
Ferroalloys		243	42.4		34	28					
Non-ferrous minerals											
Gold		(2)	_		17	81.0					
Potash		53	48.6		35	43.0					
Kaolin		51	32.3		4	4.0					
Copper		92	46.5		_	_					
Aluminum-related											
Alumina		71	16.1		109	24.0					
Aluminum		435	59.1		25	8.0					
Bauxite		5	9.4		3	8.0					
Logistics											
Railroads		150	29.3		111	33.0					
Ports		51	35.4		46	35.0					
Ships		(39)	_		(38)	_					
Others		(117)	_		(42)	_					
Total	US\$	3,123	38.7	US\$	1,6	30.7					

Our operating income increased as a percentage of net operating revenues from 30.7% in 2003 to 38.7% in 2004. This increase was driven primarily by higher operating margins in the iron ore, pellets, manganese and ferroalloy businesses due to higher prices, higher operating margins in the aluminum business due to the consolidation of Albras, and the start up of copper operations. We also experienced a substantial improvement in the operating margins of our kaolin business, reflecting an increase in volume sold and lower unit costs due to the consolidation of CADAM for a full year in 2004, compared to only four months in 2003, which more than offset a decline in average selling prices. The improvement in these businesses was partially offset by declines in margins in the railroad segment reflecting the consolidation of FCA and declines in alumina segment operating profitability due to the consolidation of Albras.

## Non-operating income (Expenses)

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

Year ended December 31,						
2004			2003			
(millions of US\$)						
US\$	82	US\$	102			
	(671)		(351)			
	65		242			
	404		17			
US\$	(120)	US\$	10			
		2004 (million US\$ 82 (671) 65 404	2004 (millions of US\$) US\$ 82 US\$ (671) 65 404			

We had net non-operating expenses of US\$ 120 million in 2004, compared to net non-operating income of US\$ 10 million in 2003. This change primarily reflects:

• The effect of the 8.1% depreciation of the U.S. dollar from year-end 2003 to year-end 2004 on our net U.S. dollar-denominated liabilities (mainly short and long-term debt, less cash and cash equivalents), which generated a net foreign exchange gain of US\$ 79 million in 2004, compared to a gain of US\$ 222 million in 2003 (where the depreciation from year-end 2002 to year-end 2003 was 18.2%).

- A decrease in financial income from US\$ 102 million in 2003 to US\$ 82 million in 2004 due to reductions in interest rates and the balance of cash equivalents from bonds.
- An increase in financial expenses from US\$ 351 million in 2003 to US\$ 671 million in 2004, principally due to the consolidation of CAEMI, FCA and Albras, which accounted for US\$ 165 million of the increase. The remainder of the increase reflects an increase in average outstanding debt and losses on derivative contracts for alumina and aluminum during 2004 and the premium paid related to the repurchase by us of a portion of Vale Overseas' outstanding 8.625% Enhanced Guaranteed Notes due 2007.
- A gain of US\$ 404 million in 2004, reflecting the sale of our stake in CST compared to a net gain of US\$ 17 million reflecting the selling of Fosfertil.

## **Income Taxes**

In 2004, we recorded a net tax expense of US\$ 749 million, compared to a net tax expense of US\$ 297 million in 2003. The difference resulted primarily from:

- An increase in tax expense at nominal statutory rates from US\$ 562 million in 2003 to US\$ 1,021 million in 2004 due to higher pre-tax income.
- A tax benefit of US\$ 247 million in respect of exempt foreign income in 2004, compared to a US\$ 59 million expense in 2003. This change resulted primarily from the effects of the foreign exchange variations on exempt foreign assets.
- Accrual of a US\$ 240 million expense related to the difference on tax basis of equity investments in 2004, compared to a US\$ 56 million expense in 2003. This resulted mainly from effect of the sale of CST.
- Accrual of a US\$ 57 million expense related to write-offs of derivative-related deferred tax assets as a result of a change in the applicable tax legislation under which we can no longer deduct payments or losses on derivative investments, effective January 1, 2005.
- A tax benefit of US\$ 77 million compared to US\$ 53 million registered in 2003. The US\$ 77 million tax
  benefit relates primarily to a reversal of tax valuation allowances at Albras and Alunorte due to an increase
  in actual and expected future taxable income that made it more likely than not that Albras and Alunorte
  would be able to use their tax loss carryforwards.

#### **Affiliates and Joint Ventures**

Our equity in the results of affiliates and joint ventures and provisions for losses on equity investments resulted in a gain of US\$ 542 million in 2004, compared to a gain of US\$ 306 million in 2003. The following table summarizes the composition of our equity in results of affiliates and joint ventures and provisions for losses on equity investments for the periods indicated.

	,	Year ended December 31,				
	2	2004		003		
		(in milli	ons of US\$	)		
Equity in results of affiliates and joint ventures and provision for losses on						
equity investments						
Ferrous	US\$	170	US\$	133		
Logistics		33		(52)		
Aluminum-related products		71		147		
Steel		271		81		
Others		(3)		(3)		
Total equity in results of affiliates and joint ventures and						
provisions for losses	US\$	542	US\$	306		

Ferrous. Our equity in the results of iron ore and pellet affiliates and joint ventures and provisions for losses on equity investments amounted to a gain of US\$ 170 million in 2004, compared to a gain of US\$ 133 million in 2003. The improvements at each of these affiliates were due to strong demand in the market for iron ore and pellets. Samarco contributed US\$ 117 million in 2004 compared to US\$ 70 million in 2003, reflecting higher prices and a write-off of value-added tax credits due to agreements with the local government, which amounted to US\$ 37 million which was recorded in 2003.

Logistics. In 2004, our equity in the results of logistics affiliates and joint ventures and provisions for losses on equity investments amounted to a gain of US\$ 33 million, compared with a net loss of US\$ 52 million in 2003. The net loss in 2003 primarily reflected a provision for losses related to impairment of assets registered by FCA prior to its consolidation in September 2003.

*Aluminum-related.* Our equity in the results of our aluminum-related affiliates and joint ventures and provisions for losses on equity investments was US\$ 71 million in 2004, compared to US\$ 147 million in 2003. This decrease is due to the consolidation of Albras in 2004, partially offset by improvements in the performance of the other aluminum-related companies.

In 2004, our aluminum-related affiliates recorded exchange gains due to the effects of the appreciation of the *real* on their foreign currency denominated debt. In addition to exchange rate effects, the operating results of Valesul and MRN in 2004 were influenced by the following factors:

- Valesul. In 2004, Valesul generated net income of US\$ 26 million on gross revenues of US\$ 204 million, compared to net income of US\$ 18 million in 2003 on gross revenues of US\$ 172 million. CVRD's portion of the net income of Valesul was US\$ 14 million in 2004, compared to US\$ 10 million in 2003. The improvement of the results was driven by higher average selling prices.
- MRN. In 2004, MRN generated net income of US\$ 142 million on gross revenues of US\$ 351 million, compared to net income of US\$ 81 million in 2003 on gross revenues of US\$ 276 million. Our portion of the net income of MRN was US\$ 57 million in 2004 and US\$ 33 million in 2003. The revenue increase was driven by a 16.5% increase in sales volume, driven primarily by higher demand, as well as an 11% increase in average selling price.

Steel. In 2004, we recorded a net gain of US\$ 271 million in respect of our equity in the results of steel affiliates and joint ventures, compared to a net gain of US\$ 81 million in 2003. The improved performance at Usiminas, CST (during the period prior to the sale of our interest) and CSI were due to strong demand in the market for steel, which drove an increase in sales volumes and average selling prices. The improved performance at CST also reflects the reversal of US\$ 23 million of provisions for contingencies and the final court decision in the "Plano Verão" lawsuit (income tax deductibility of certain charges) for US\$ 75 million. The improved performance at Usiminas primarily reflects higher selling prices and sales volumes. CSI's net income increased in 2004 primarily due to an 11.7% increase in sales volume and a 47.7% increase in average selling prices, reflecting better margins.

#### Results of Operations—2003 Compared to 2002

#### Revenues

Our gross operating revenues increased from US\$ 4,282 million in 2002 to US\$ 5,545 million in 2003. Our net operating revenues increased 29.8% from US\$ 4,123 million in 2002 to US\$ 5,350 million in 2003. The following table summarizes our gross revenues by product and our net operating revenues for the periods indicated:

		2003	2002		% Change
		(in milli			
Iron ore and pellets					
Iron ore	US\$	2,662	US\$	2,147	24.0%
Pellets		838		673	24.5
Subtotal		3,500		2,820	24.1
Gold		21		103	(79.6)
Manganese ore and ferroalloys		349		283	23.3
Potash		94		91	3.3
Kaolin		96		45	113.3
Revenues from logistic services		604		458	31.9
Aluminum-related products		852		462	84.4
Other products and services		29		20	45.0
Gross revenues		5,545		4,282	29.5
Value-added tax		(195)		(159)	22.6
Net operating revenues	US\$	5,350	US\$	4,123	29.8

## Iron ore and pellets

The global seaborne iron ore market is experiencing the highest demand pressure it has faced in the past two decades. Reflecting these global market conditions, in 2003, customer demand for iron ore and pellets exceeded CVRD's production capacity, continuing the trend experienced in the second half of 2002. Our gross revenues for 2003 were also positively affected by price increases. We reached agreements with major steelmakers in May and June 2003 (retroactive to January 2003 for sales to Europe and April 2003 for sales to Asia), respectively, under which our reference prices for iron ore and pellets increased by an average of 9% and 9.8% respectively. Reflecting these positive volume and pricing trends, our gross revenues from iron ore and pellets increased 24.1%, from US\$ 2,820 million in 2002 to US\$ 3,500 million in 2003.

*Iron ore.* Gross revenues from iron ore increased by 24.0% from US\$ 2,147 million in 2002 to US\$ 2,662 million in 2003, driven primarily by a 13.3% increase in shipments of iron ore from 143.6 million tons in 2002 to 162.7 million tons in 2003. The volume growth includes by continued growth in shipments to China, which increased by 7.7 million tons compared to 2002. Shipments for 2003 also include four month's worth of shipments, accounting for 13.9 million tons of iron ore, by CAEMI, which we began consolidating in September 2003. Actual average selling prices for iron ore were 9.4% higher in 2003 than in 2002, primarily reflecting price increases agreed with major steelmakers in May 2003.

*Pellets*. Gross revenues from pellets increased by 24.5%, from US\$ 673 million in 2002 to US\$ 838 million in 2003. The increase was primarily driven by a 14.6% increase in volume shipped, from 20.6 million tons in 2002 to 23.6 million tons in 2003. The average selling price for pellets increased by 8.4% in 2003 compared to the same period in 2002, reflecting the impact of the price increases agreed with major steelmakers in June 2003.

#### Gold

Gross revenues from sales of gold decreased 79.6%, from US\$ 103 million in 2002 to US\$ 21 million in 2003, reflecting the closure of our Igarapé Bahia mine in 2002 and lower yields from our Fazenda Brasileiro mine prior to its sale in August 2003. These developments led to an 81.4% decrease in volume sold. The volume declines were partially offset by a 14.6% increase in average selling prices in 2003, reflecting higher world gold prices due primarily to the devaluation of the U.S. dollar relative to other currencies and the war in Iraq.

On August 15, 2003, we sold Fazenda Brasileiro to Yamana Resources for US\$ 21 million. After completion of the sale, our gold operations now consist only of gold produced as a by-product of our iron ore operations at Itabira and our copper operations in Carajás.

#### Manganese ore and ferroalloys

Gross revenues from sales of manganese ore and ferroalloys increased by 23.3%, from US\$ 283 million in 2002 to US\$ 349 million in 2003. This increase resulted from:

- A 36.1% increase in sales of manganese ore, from US\$ 36 million in 2002 to US\$ 49 million in 2003. The sales increase was driven primarily by higher sales volume, which rose by 33.1%, mainly reflecting higher shipments of manganese ore sinter feed from our Carajás mine to China. Revenues were also positively affected by higher average selling prices, which increased by 2.3% compared to the same period in 2002.
- A 21.5% increase in gross revenues from ferroalloys, from US\$ 247 million in 2002 to US\$ 300 million in 2003. The increase was driven by strong demand for our principal ferroalloy products from the steel industry, which experienced an 18.0% increase in average selling prices and a 5.5% increase in volume. This increase was also impacted by the acquisition of RDMN. The plant started operations with one furnace in June 2003 and bought its second furnace in November 2003.

#### Potash

Gross revenues from sales of potash increased by 3.3%, from US\$ 91 million in 2002 to US\$ 94 million in 2003. The increase was driven by a 12.0% increase in average selling prices, reflecting strong demand. The higher average selling prices were partially offset by lower sales volume, which decreased 7.8% in 2003 due to inventory drawdowns. Shipments were higher in 2002 because we sold inventories on hand in addition to volumes produced in that period. Demand for potash in 2003 exceeded production capacity, and we expect this trend to continue in 2004.

## Kaolin

Gross revenues from sales of kaolin increased by 113.3%, from US\$ 45 million in 2002 to US\$ 96 million in 2003. Of the total US\$ 51 million increase in kaolin revenues, US\$ 31 million resulted from the consolidation of CADAM, the kaolin subsidiary of CAEMI, beginning September 2003. Total volume shipped increased by 98.2%, reflecting the CADAM acquisition as well as increased marketing efforts by our PPSA subsidiary, and average selling prices rose by 7.7%.

## Logistic services

Gross revenues from logistic services increased by 31.9% from US\$ 458 million in 2002 to US\$ 604 million in 2003. The improved performance in logistics revenues reflects in large part our efforts to exploit opportunities provided by agricultural production, especially grains, and by increased shipments due to higher Brazilian steel production in 2003. Our gross revenues were also positively affected by the consolidation of FCA beginning September 2003. In particular, the increase in gross revenues from logistic services reflects:

- A 30.4% increase in revenues from railroad transportation, from US\$ 286 million in 2002 to US\$ 373 million in 2003. Of the US\$ 87 million increase, US\$ 61 million resulted from our consolidation of FCA beginning September 2003. The increase in revenues reflects an 11.2% increase in volume transported and 17.3% increase in average selling prices.
- A 34.6% increase in gross revenues from port operations, from US\$ 107 million in 2002 to US\$ 144 million in 2003. The increase in port operations gross revenues was driven by a 29.8% increase in average selling prices and a 1.8% increase in volume.
- A 33.8% increase in gross revenues from shipping, from US\$ 65 million in 2002 to US\$ 87 million in 2003.

#### Aluminum-related products

Gross revenues from aluminum products increased 84.4%, from US\$ 462 million in 2002 to US\$ 852 million in 2003. This increase resulted from:

- A US\$ 336 million increase in gross revenues from sales of alumina, from US\$ 159 million in 2002 to US\$ 495 million in 2003. The increased alumina gross revenues primarily reflect the completion of a capacity expansion at Alunorte that went on-line in April 2003, increasing Alunorte's capacity from 1.6 million tons per year to 2.4 million tons per year. Average selling prices for alumina were 16.1% higher in 2003, reflecting the increase in worldwide demand for alumina. The inclusion of a full year of Alunorte's results in 2003, compared with only 6 months in 2002, also positively affected gross revenues in 2003.
- A 14.3% increase in gross revenues from sales of aluminum, from US\$ 280 million in 2002 to US\$ 320 million in 2003. The increase in gross revenues from aluminum resulted from increased worldwide demand for aluminum, which led to a 7.1% increase in volume sold, and a 3.1% increase in average selling prices.
- A 60.9% increase in gross revenues from sales of bauxite, from US\$ 23 million in 2002 to US\$ 37 million in 2003. The increase in gross revenues from bauxite resulted from a 30.8% increase in volume sold and a 22.9% increase in average selling prices. The expansion of MRN's capacity from 11 million tons per year to 16 million tons per year completed in 2003 was the primary driver behind the volume increase. The price increase reflected a general rise in worldwide bauxite prices.

# Other products and services

Gross revenues from other products and services increased 45.0%, from US\$ 20 million in 2002 to US\$ 29 million in 2003, primarily reflecting the sale by RDMN of excess energy to third parties in the Norwegian market during the conversion of its plant, which more than offset the decline in revenues due to the sale of our forestry assets, which was completed in 2002.

# Operating costs and expenses

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

	Y	ear ended l			
	20	003	20	002	% change
Cost of ores and metals	US\$	2,066	US\$	1,579	30.8%
Cost of logistic services		370		252	46.8
Cost of aluminum-related products		678		412	64.6
Others		14		20	(30.0)
Cost of goods sold		3,128		2,263	38.2
Selling, general and administrative expenses		265		224	18.3
Research and development		82		50	64.0
Employee profit sharing plan		32		38	(15.8)
Other costs and expense		199		119	67.2
Total operating costs and expenses	US\$	3,706	US\$	2,694	37.6

## Cost of goods sold

*General.* Total cost of goods sold increased 38.2%, from US\$ 2,263 million in 2002 to US\$ 3,128 million in 2003. CVRD's costs, as expressed in U.S. dollars, were positively affected by the depreciation of the *real* against the U.S. dollar because the majority of CVRD's costs and expenses are denominated in *reais*. The average R\$/US\$ exchange was R\$ 2.9286 during 2002 and R\$ 3.0722 during 2003, representing a nominal depreciation of 4.9%. At the same time, inflation as measured by the IGP-M, reached 8.7% in 2003, contributing to increases in our costs.

The major factors behind the increase in cost of goods sold during 2003 were:

- Material costs increased by US\$ 283 million in 2003 due to the significant increase in our total production, combined with a 43% increase in the price of fuel. Fuel and gas expenses accounted for 46.1% of our total materials cost in 2003, compared with 40.5% in 2002.
- Cost of outsourced services increased by US\$ 248 million in 2003. The principal component of this line was an increase in costs for outsourced logistics services resulting from our consolidation of CAEMI beginning in September 2003. Unlike our Northern and Southern systems, where we use our own railroads, CAEMI uses a third-party logistics provider—MRS—to transport its iron ore to the port. CAEMI accounted for US\$ 94 million in outsourced logistics costs in 2003. In 2003, our western mines in the Southern System also transported a portion of their output via MRS, for a total freight cost of US\$ 39 million in 2003 compared with US\$ 28 million in 2002.
- Expenditures on purchases of products other than iron ore and pellets increased from US\$ 422 million in 2002 to US\$ 604 million in 2003. The 40.3% increase in alumina production meant proportional growth in purchases of bauxite from MRN, accounting for US\$ 115 million in expenses. Similarly an increase in sales volume and prices of primary aluminum translated into an increase of approximately US\$ 39 million in our take-or-pay commitment to Albras.
- We incurred US\$ 46 million in demurrage expenses in 2003 due to congestion in our ports resulting from excess demand for iron ore and the resulting pressure on our logistics system.

Cost of ores and metals. Cost of ores and metals sold increased by 30.8% to US\$ 2,066 million in 2003 from US\$ 1,579 million in 2002, primarily due to increased production volumes required by the 13.5% increase in sales of iron ore and pellets. A portion of the increase in the cost of ores and metals sold also reflects the higher costs associated with purchases of iron ore from third parties to meet excess demand. The cost of ores and metals during 2003 also includes US\$ 147 million in costs generated by CAEMI after its consolidation beginning in September 2003

Cost of logistic services. Cost of logistic services increased by 46.8%, from US\$ 252 million in 2002 to US\$ 370 million in 2003. Of the US\$ 118 million increase, US\$ 71 million relates to costs generated by FCA after its consolidation beginning in September 2003. The remaining increase in costs resulted primarily from an increase in the number of ships chartered by Docenave.

Cost of aluminum-related products. Cost of aluminum-related products increased by 64.6%, from US\$ 412 million in 2002 to US\$ 678 million in 2003. The increase is primarily due to the increase in Alunorte's production capacity and the consolidation of Alunorte beginning in June 2002, which increased our consolidated costs by US\$ 205 million during 2003 compared with 2002.

Cost of other products and services. Cost of other products and services declined 30.0%, from US\$ 20 million in 2002 to US\$ 14 million in 2003, primarily due to the end of pulp purchases following our exit from the pulp and paper business.

Selling, general and administrative expenses

Selling, general and administrative expenses increased 18.3%, from US\$ 224 million in 2002 to US\$ 265 million in 2003. We experienced higher *real*-denominated expenses in 2003 related to increased sales volumes. As expressed in U.S. dollars, these expenses were partially offset by the depreciation of the *real* against the U.S. dollar.

Other costs and expenses

Other costs and expenses increased from US\$ 119 million in 2002 to US\$ 199 million in 2003. The US\$ 80 million increase was primarily attributable to a US\$ 31 million increase in provisions for ICMS taxes, a US\$ 12 million write-off of assets at the São Luís pelletizing plant and US\$ 8 million of contingencies. In 2002, we recorded US\$ 49 million of income due to the sale of certain forestry assets of our subsidiary Florestas Rio Doce S.A.

## **Operating Income by Segment**

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

	Year ended December 31,										
		200	13	2002							
	Operating income (loss)		% of net operating revenues		ting income (loss)	% of net operating revenues					
	(in milli	ons of US\$)		(in mill	ions of US\$)						
Ferrous minerals											
Iron ore	US\$	1,164	45%	US\$	1,082	52%					
Pellets		169	22		101	15					
Manganese ore		7	n.a.		5	16					
Ferroalloys		34	28		59	25					
Non-ferrous minerals											
Gold		17	81		(33)	n.a.					
Potash		35	43	32		41					
Kaolin	4	4	4		15	34					
Aluminum-related											
Alumina		109	24		32	21					
Aluminum		25	8		26	9					
Bauxite		3	8		1	4					
Logistics											
Railroads		111	33		128	49					
Ports		46	35		22	23					
Ships		(38)	n.a.		(20)	n.a.					
Others		(42)	n.a.		(21)	n.a.					
Total	US\$	1,644	30.7	US\$	1,429	34.7					

Our operating income as a percentage of net operating revenues declined from 34.7% in 2002 to 30.7% in 2003. The decline was driven primarily by:

- a decline in the operating profitability of our iron ore business due mainly to the consolidation of CAEMI in September 2003. As described above, CAEMI uses a third-party railroad to transport its iron ore from the mine to the port, resulting in higher costs for outsourced services; and
- a decline in the operating profitability of our railroad business due principally to the consolidation of FCA in September 2003. FCA is less profitable than our other railroads, primarily as a result of a more expensive concession contract.

Our margins in our kaolin business dropped sharply in 2003, driven both by a significant increase in operating costs at PPSA in 2003 and by the recording of write-offs in 2003 relating to value-added taxes which proved to be uncollectible at both CADAM and PPSA.

# Non-operating income (Expenses)

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

	Year ended December 31,						
		2003		2002			
	(millions of US\$)						
Financial income	US\$	102	US\$	127			
Financial expenses		(351)		(375)			
Foreign exchange and monetary gains (losses) net		242		(580)			
Gain on sale of investments		17		_			
Non-operating income (expenses)	US\$	10	US\$	(828)			

Net non-operating income in 2003 amounted to US\$ 10 million, compared to net non-operating expenses of US\$ 828 million in 2002. This change primarily reflects:

- The effect of exchange rate movements on our net U.S. dollar-denominated liabilities (mainly short and long-term debt, less cash and cash equivalents), which generated a net foreign exchange gain of US\$ 222 million in 2003, compared to a loss of US\$ 515 million in 2002.
- A decrease in financial income from US\$ 127 million in 2002 to US\$ 102 million in 2003 due to lower cash balances and reductions in interest rates.
- A decrease in financial expenses from US\$ 375 million in 2002 to US\$ 351 million in 2003, principally due
  to the recognition, in 2002, of US\$ 60 million relative to losses on interest rate derivatives against only
  US\$ 3 million in 2003 and lower interest rates.
- A net gain of US\$ 17 million, reflecting a gain of US\$ 61 million on the sale of Fosfértil in October 2003, less a loss of US\$ 44 million on the sale of CFN in November 2003.

#### Income Taxes

In 2003, we recorded a net tax expense of US\$ 297 million, compared to a net tax benefit of US\$ 149 million in 2002. The difference resulted primarily from:

- An increase in tax expense at nominal statutory rates from US\$ 204 million in 2002 to US\$ 562 million in 2003 due to higher pre-tax income.
- Accrual of a US\$ 59 million expense in respect of exempt foreign income in 2003, compared to a tax benefit of US\$ 196 million in 2002. This change resulted primarily from the effects of the foreign exchange variations on the foreign assets that are exempt for tax purposes.
- Accrual of a US\$ 56 million expense related to the difference on tax basis of equity investees in 2003, compared to a tax benefit of US\$ 20 million in 2002. This resulted mainly from effect of the deductible amortization of goodwill for local tax purposes.
- An increase in tax incentives from US\$ 4 million in 2002 to US\$ 60 million in 2003 due to the iron ore and alumina incentives on the higher income tax basis in 2003.
- The primary driver for our reversal of approximately US\$ 53 million in tax valuation allowances in fiscal year 2003 was a US\$ 39 million reversal of tax valuation allowances at Rio Doce Manganês S.A. (RDM), a subsidiary involved in the manganese business. In 2003, after we had bought out significant minority interests in 2002, we planned and carried out a restructuring of our manganese operations in which we centralized all of our manganese operations in RDM. As a result of the restructuring, production at RDM increased, as did RDM's profits. Under Brazilian tax law, each entity in the consolidated group is considered an independent entity for tax purposes, and the increase in taxable income at RDM made it more likely that RDM would be able to use its tax loss carryforwards. We accordingly revised our estimates of RDM's ability to use its tax loss carryforwards and reversed US\$ 39 million in tax valuation allowances. For comparative purposes, RDM's income before income tax increased to US\$ 77 million in 2003 compared to \$ 40 million in 2002. During the first nine months of 2004, RDM's income before income tax was US\$ 116 million.
- The remaining US\$ 14 million of the US\$ 53 million tax valuation allowance not attributable to RDM relates to reversals of tax valuation allowances by two other subsidiaries as a result of the generation of taxable profits in these separate legal entities, neither of which was individually greater than US\$ 10 million.

The above factors were partially offset by the tax benefit of tax-deductible dividends that we pay in the form of interest on shareholders' equity, which amounted to US\$ 271 million in 2003, as compared to US\$ 99 million in 2002.

#### Affiliates and Joint Ventures

Our equity in the results of affiliates and joint ventures and provisions for losses on equity investments resulted in a gain of US\$ 306 million in 2003, compared to a loss of US\$ 87 million in 2002. The following table summarizes the composition of our equity in results of affiliates and joint ventures and provisions for losses on equity investments for the periods indicated.

	,	Year ended December 31, 2003 2002 (in millions of US\$)				
	2003		2	002		
		(in milli	ons of US\$	)		
Equity in results of affiliates and joint ventures and provision for losses on equity investments						
Ferrous	US\$	133	US\$	(66)		
Logistics		(52)		(88)		
Aluminum and Bauxite		147		39		
Steel		81		23		
Others		(3)		5		
Total equity in results of affiliates and joint ventures and						
provisions for losses	US\$	306	US\$	(87)		

Iron ore and pellets. Our equity in the results of iron ore and pellet affiliates and joint ventures and provisions for losses on equity investments amounted to a gain of US\$ 133 million in 2003, compared to a loss of US\$ 66 million in 2002. The higher gain in 2003 resulted primarily from improved results at Samarco and Kobrasco and improved results at CAEMI prior to its consolidation in September 2003. The loss in 2002 also reflected a write-down in the value of our investment in CAEMI to its fair value, which resulted in recognition of a loss of US\$ 86 million. The improvements at each of these affiliates were due to strong demand in the market for iron ore and pellets.

Logistics. In 2003, our equity in the results of logistics affiliates and joint ventures and provisions for losses on equity investments amounted to a net loss of US\$ 52 million, compared with a net loss of US\$ 88 million in 2002. The lower net loss in 2003 was driven primarily by improved results at MRS, which partially offset the recording of higher provisions for losses related to FCA in 2003 than in 2002. We recorded higher provisions for losses related to FCA in 2003 due to asset impairment provisions.

Aluminum-related. Our equity in the results of our aluminum-related affiliates and joint ventures and provisions for losses on equity investments improved from a net gain of US\$ 39 million in 2002, compared to a net gain of US\$ 147 million in 2003. The improvement was driven by improved results at Albras, which more than offset a decline in the net gains we recorded on our investments in Valesul and MRN compared to 2002. The result in 2002 included a net loss of US\$ 23 million related to Alunorte prior to its consolidation beginning in June 2002.

In 2003, our aluminum-related affiliates recorded exchange gains due to the effects of the appreciation of the *real* at December 31, 2003, compared to December 31, 2002, on their foreign currency denominated debt. In addition to exchange rate effects, the operating results of Albras, Valesul and MRN in 2003 were influenced by the following factors:

- Albras. In 2003, Albras generated net income of US\$ 198 million on net sales of US\$ 592 million, compared to a net loss of US\$ 22 million in 2002 on net sales of US\$ 529 million. Our portion of net income of Albras was US\$ 104 million in 2003, compared with a reversal of a provision for losses of US\$ 10 million in 2002. The 11.9% increase in net sales at Albras resulted primarily from a 6.9% increase in sales volume due to increased worldwide demand for aluminum and process improvements that helped expand production capacity. This increase in sales volume was reinforced by a 4.4% increase in the average sales price of aluminum from US\$ 1,306.38 per ton in 2002 to US\$ 1,363.68 per ton in 2003. The impact of the appreciation of the *real* on Albras' foreign currency denominated debt was the main driver for the increase in earnings during the period.
- *Valesul*. In 2003, Valesul generated net income of US\$ 18 million on net sales of US\$ 157 million, compared to net income of US\$ 25 million in 2002 on net sales of US\$ 139 million. CVRD's portion of the net income of Valesul was US\$ 10 million in 2003, compared to US\$ 14 million in 2002. The decline

in net income at Valesul was driven primarily by an increase in electricity costs, which more than offset the improvement in net sales.

• MRN. In 2003, MRN generated net income of US\$ 81 million on net sales of US\$ 254 million, compared to net income of US\$ 94 million in 2002 on net sales of US\$ 173 million. Our portion of the net income of MRN was US\$ 33 million in 2003 and US\$ 38 million in 2002. The revenue increase was driven by a 42.2% increase in sales volume, due principally to a capacity expansion completed in March 2003, and a 1.5% increase in average selling prices for bauxite. Net income was lower in 2003 due to higher financial expenses related to the financing of the capacity expansion, and the inclusion in MRN's 2002 results of a gain on the sale by MRN of its shares of Alunorte.

Steel. In 2003, we recorded a net gain of US\$ 81 million in respect of our equity in the results of steel affiliates and joint ventures, compared to a net gain of US\$ 23 million in 2002. The increase reflects improved performance at Usiminas and CST, which more than offset lower returns at CSI. The improved performance at CST primarily reflects a 23.4% increase in average selling prices, reflecting higher slab prices and the start up of sales of hot-rolled coils (HRC), a higher value product. The improved performance at Usiminas primarily reflects the positive impact of exchange rate variations on Usiminas' U.S. dollar-denominated debt. CSI's net income declined in 2003 primarily due to a sharp increase in the cost of steel slabs, an important raw material for its operations, which reduced CSI's gross margins.

## **Liquidity and Capital Resources**

#### **Overview**

Our principal uses of funds are for capital expenditures, dividend payments and repayment of debt. We have historically met these requirements by using cash generated from operating activities and through short-term and long-term debt. We believe these sources of funds, together with our cash and cash equivalents on hand, will continue to be adequate to meet our currently anticipated capital requirements.

In addition, from time to time, we review acquisition and investment opportunities and will, if a suitable opportunity arises, make selected acquisitions and investments to implement our business strategy. We generally make investments directly or through subsidiaries, joint ventures or affiliated companies, and fund these investments through internally generated funds, the issuance of debt or a combination of these methods. We also may dispose of assets. Our sale of our stake in CST in 2004 generated cash flows of US\$ 579 million.

In 2005, we expect our major cash needs to include repayment or refinancing of US\$ 730 million in long-term debt that matures by the end of 2005, as well as budgeted capital expenditures of US\$ 3.3 billion and announced minimum dividend payments for 2005 of US\$ 1 billion. We expect to meet these cash needs through a combination of operating cash flow, cash and cash equivalents on hand, and new debt.

#### Sources of Funds

Our principal sources of liquidity are cash and cash equivalents on hand and cash flow from operating activities. At December 31, 2004, we had cash and cash equivalents of US\$ 1,249 million. Our operating activities generated positive cash flows of US\$ 3,471 million in 2004. In 2005, we expect our cash flow from operations to increase due to the price increases discussed above, see Item 5. Operating and Financial Review and Prospects—Overview—Key Factors Affecting Revenue and Results of Operations—Prices—Ores and metals.

In addition to the above sources of liquidity, CVRD has a committed credit line facility for the purpose of improving the efficiency of its cash management and reducing debt refinancing risks during moments of instability in financial markets. In April 2005, the program was increased to US\$ 750 million from US\$ 500 million. This increase was accompanied by an extension in tenor and a cost reduction. The changes result from the rollover of the US\$ 400 million tranche which was signed by CVRD in May 2004 and was due in May 2005. This tranche was increased to US\$ 650 million on a committed bank facility with a syndicate of 11 commercial banks from the United States, Europe and Asia. The transaction was structured to prevent any restrictions related to sovereign risk on the disbursement of committed funds. The new facility has a utilization term of two years, and a payback period, if drawn down, of two years. Since the beginning of the program in May of 2004, CVRD has never made use of the funds available under the facility.

We believe we are well positioned to raise additional capital in the debt markets to the extent needed. At December 31, 2004, under our shelf registration statement with the SEC, we had remaining capacity of approximately US\$ 1.5 billion. In addition, we are among the most highly rated Brazilian corporate borrowers, which we believe enhances our ability to access the debt markets. Currently, CVRD is rated Ba1 by Moody's Investors Service. Increasing our credit rating is a major strategic objective.

In July 2004, we, through our subsidiary Alunorte, obtained a loan of US\$ 310 million for the financing of stages 4 and 5 of the expansion of the refinery. This financing has a tenor of 10 years, grace period of four years, average life of 7.3 years and a cost of six-month LIBOR plus 2% per year until the conclusion of the project, and six-month LIBOR plus 3% thereafter. The loan carries political risk insurance provided by the German government (GKA) and the Norwegian government (GIEK). The financing, underwritten by a syndicate of banks, will be disbursed in several installments.

In September 2004, we entered into a new tranche of a loan underwritten by a syndicate of commercial banks with political risk insurance provided by the Japanese agency Nippon Export and Investment Insurance (NEXI). This agreement was increased from US\$ 300 million to US\$ 400 million. The term of this tranche is seven years, with an average life of 4.5 years. The cost is 6-month LIBOR plus 0.5% per year. In March and April of 2005, we drew the remaining US\$ 200 million under this facility.

# Uses of Funds

Capital Expenditures

In 2004, our net cash flow used in investing activities was US\$ 1,541 million. Capital expenditures amounted to US\$ 2,056 million. In 2005, we have budgeted US\$ 3.3 billion for capital expenditures. This amount includes expenditures on projects as well as expenditures for maintenance and exploration. For more information about the specific projects for which we have budgeted funds, *see Item 4. Information on the Company—Capital Expenditures*.

Dividends

We paid total dividends and interest on shareholders equity of US\$ 787 million in 2004.

In accordance with our dividend policy, our Executive Officers will announce by January 31 of each year, a proposal to be approved by the Board of Directors, of a minimum dividend to be paid to CVRD shareholders during the year. The minimum value announced, expressed in US dollars (USD), will be based on CVRD's expected performance in the year of distribution. The proposal will establish payment in two semiannual installments, under the form of dividends and/or interest on shareholders equity, to be paid respectively in April and October. If the proposal is approved, the value established will be paid in Brazilian Reais (BRL).

The amount will be obtained from the conversion of the USD amount to BRL using the USD/BRL exchange rate bid value (Ptax – option 5) informed by the Central Bank of Brazil the day prior to the Board meeting regarding the declaration and payment of dividends. During the year, our Executive Officers may propose to our Board of Directors, based on their analysis of our cash flow, the payment of an extra installment, in addition to the minimum dividend announced in January. If approved by the Board of Directors, this extra installment can be paid together with either of the other two installments previously established. The announced minimum dividend amount for 2005 is US\$ 1 billion. In April 2005, the first installment of this dividend was approved by our Board of Directors in the amount of US\$ 500 million and was paid on April 29, 2005.

## Debt

At December 31, 2004, we had aggregate outstanding debt of US\$ 4,088 million, consisting of short-term debt (including US\$ 730 million in current portion of long-term debt and US\$ 52 million of loans from related parties) of US\$ 856 million, and long-term debt (excluding current portion) of US\$ 3,232 million (including US\$ 18 million of loans from related parties). At December 31, 2004, approximately US\$ 1,197 million of our debt was secured by liens on some of our assets.

Our short-term debt consists primarily of U.S. dollar-denominated trade financing, mainly in the form of export prepayments and export sales advances with foreign and Brazilian financial institutions.

Our major categories of long-term indebtedness (including the current portion of long-term debt and excluding the accrued charges) are as follows:

- U.S. dollar-denominated foreign loans and financing (US\$ 1,555 million at December 31, 2004). These loans primarily include export financing lines, import finance from export credit agencies, loans from commercial banks and multilateral organizations. The loans generally bear floating rate interest at spreads over LIBOR. In April 2004, we drew US\$ 200 million under a syndicated loan facility.
- U.S. dollar-denominated fixed rate notes (US\$ 913 million at December 31, 2004). We have issued several series of fixed rate bonds through our finance subsidiary Vale Overseas Limited with a CVRD guarantee. The US\$ 913 million outstanding at December 31, 2004 includes US\$ 500 million of 8.25% Notes due 2034 issued by Vale Overseas in January 2004, US\$ 300 million of 9.0% Notes due 2013 issued by Vale Overseas in August 2003 and the remaining US\$ 113 million of 8.625% Enhanced Guaranteed Notes due 2007 issued by Vale Overseas in March 2002 that remain outstanding after the cash tender offer described below.
- U.S. dollar-denominated export securitizations (US\$ 480 million outstanding at December 31, 2004). We have a US\$ 550 million securitization program based on existing and future receivables generated by our subsidiary CVRD Overseas Ltd that relates to exports of iron ore and pellets to six of our customers in Europe, Asia and the United States. The securitization transaction is divided into three fixed rate tranches and one floating rate tranche.
- Perpetual notes (US\$ 65 million at December 31, 2004). We have issued perpetual notes that are exchangeable for 48,000 million preferred shares of MRN. Interest is payable on the notes in an amount equal to dividends paid on the underlying preferred shares relating to periods beginning with the 2000 fiscal year.
- Local debt (US\$ 821 million at December 31, 2004). We have a series of Brazilian loans, principally from BNDES, most of which are indexed to U.S. dollars, and the remainder of which are linked to baskets of currencies or floating rates in Brazil.

On December 15, 2004 Vale Overseas finalized the cash tender offer for its US\$ 300 million principal amount outstanding 8.625% Enhanced Guaranteed Notes due 2007. The US\$ 186.9 million of Notes were repurchased leaving US\$ 113.1 million outstanding.

Of the total amount of long-term debt outstanding at December 31, 2004:

- US\$ 193 million relates to debt obligations of CAEMI, which we began consolidating on September 1, 2003;
- US\$ 134 million relates to debt obligations of FCA, which we began consolidating on September 1, 2003;
- US\$ 192 million relates to debt obligations of Albras, which we began consolidating on January 1, 2004.

Some of our long-term debt instruments contain financial covenants. Our principal covenants require us to maintain certain ratios, such as debt to equity, net debt to EBITDA and interest coverage. We were in full compliance with our financial covenants as of December 31, 2004, and we believe that our existing covenants will not significantly restrict our ability to borrow additional funds as needed to meet our capital requirements. We believe we will be able to operate within the terms of our financial covenants for the foreseeable future. None of these covenants directly restricts our ability to pay dividends on equity securities at the parent company level.

For additional information about our debt, please see Notes 14 and 15 to our financial statements.

#### **Shareholder debentures**

At the time of the first stage of our privatization in 1997, we issued debentures to our shareholders. The terms of the debentures were established to ensure that our pre-privatization shareholders, including the Brazilian government, would participate alongside us in potential future financial benefits that we derive from exploiting certain mineral resources that were not taken into account in determining the minimum purchase price of our shares in the privatization. In accordance with the debentures deed, holders have the right to receive semiannual payments equal to an agreed percentage of our net revenues (revenues less value-added tax, transport fee and insurance expenses related to the trading of the products) from certain identified mineral resources that we owned at the time of the privatization, to the extent that we exceed defined thresholds of sales volume relating to certain mineral resources, and from the sale of mineral rights that we owned at that time. Our obligation to make payments to the holders will cease when the relevant mineral resources are exhausted. We made no payments under the shareholder debentures in 2003. The total payments made under the shareholder debentures amounted to US\$ 2 million in 2004, relating to 2003 results. We also made a payment of US\$ 3 million in April 2005, relating to 2004 results. See Note 18 to our consolidated financial statements for a description of the terms of the debentures.

## **Contractual Obligations**

The following table summarizes our long-term debt, short-term debt, operating lease obligations, purchase obligations and Alunorte take-or-pay obligations at December 31, 2004. This table excludes other obligations that we may have, including pension obligations (discussed in Note 17 to our consolidated financial statements).

	Payments Due by Period									
	Total				2006-2007		2008-2009		Thereaf	
					(in millio	ons of US\$)	)			
Long-term debt (1)	US\$	3,962	US\$	748	US\$	1,201	US\$	510	US\$	1,503
Short-term debt (2)		126		126		_		_		_
Operating lease obligations		1,025		50		99		96		780
Purchase obligations (3)		6,639		2,016		732		339		3,552
Take-or-pay obligation (MRN)(4)		853		57		114		114		568
Total	US\$	12,605	US\$	2,979	US\$	2,164	US\$	1,059	US\$	6,403

- (1) Includes US\$ 18 million of long-term debt to related parties.
- (2) Includes US\$ 52 million of short-term debt to related parties.
- (3) Amounts, including for purchases of iron ore, are based on 2005 prices.
- (4) We are committed under a take-or-pay agreement to purchase bauxite from MRN at a price that is determined by a formula based on prevailing world prices of aluminum.

#### **Off-balance Sheet Arrangements**

At December 31, 2004, our off-balance sheet arrangements consisted solely of guarantees. At December 31, 2004, we had extended guarantees for borrowings obtained by affiliates and joint ventures in the amount of US\$ 7 million, of which US\$ 6 million is denominated in U.S. dollars and the remaining US\$ 1 million is denominated in *reais*. We expect no losses to arise as a result of these guarantees. We have made charges for extending these guarantees in the case of Samarco. See Note 18 to our consolidated financial statements for more information concerning these guarantees.

## **Recent Accounting Pronouncements**

In December 2004, the FASB issued SFAS No. 123R, "Share-Based Payment" which sets accounting requirements for "share-based" compensation to employees, including employee-stock-purchase-plans (ESPPs) and provides guidance on accounting for awards to non-employees. This Statement will require companies to recognize in the income statement the grant-date fair value of stock options and other equity-based compensation issued to employees, but expresses no preference for a type of valuation model. For public entities, this Statement is effective for the first interim period beginning after June 15, 2005. We do not expect SFAS 123R to have any material impact on our financial position, result of operations or cash flows.

In December 2004, the FASB issued SFAS No. 153, Exchanges of Nonmonetary Assets an amendment of APB No. 29. This Statement amends Opinion 29 to eliminate the exception for nonmonetary exchanges of similar productive assets and replaces it with a general exception for exchanges of nonmonetary assets that do not have commercial substance. The Statement specifies that a nonmonetary exchange has commercial substance if the future cash flows of the entity are expected to change significantly as a result of the exchange. This Statement is effective for nonmonetary asset exchanges occurring in fiscal periods beginning after June 15, 2005. Earlier application is permitted for nonmonetary asset exchanges occurring in fiscal periods beginning after the date this Statement is issued. Retroactive application is not permitted. We will apply this Statement in the event exchanges of nonmonetary assets occur in fiscal periods beginning after June 15, 2005.

In November 2004, the FASB issued SFAS No. 151, Inventory Costs an amendment of ARB No. 43, Chapter 4, which amends Chapter 4 of ARB No. 43 that deals with inventory pricing. The Statement clarifies the accounting for abnormal amounts of idle facility expenses, freight, handling costs, and spoilage. Under previous guidance, paragraph 5 of ARB No. 43, chapter 4, items such as idle facility expense, excessive spoilage, double freight, and rehandling costs might be considered to be so abnormal, under certain circumstances, as to require treatment as current period charges. This Statement eliminates the criterion of "so abnormal" and requires that the costs of conversion be based on the normal capacity of the production facilities. The provisions of this Statement shall be effective for 2005. Also, this Statement requires that allocation of fixed production overheads to inventories by June 15, 2005. Earlier application is permitted for inventory costs incurred during fiscal years beginning after the date this Statement is issued. The provisions of this Statement shall be applied prospectively. We are analyzing the requirements of this new Statement and believe that its adoption will not have any significant impact on the Company's financial position, results of operations or cash flows.

In September 2004, the FASB issued FSP EITF Issue 03-1-1, which delayed the effective date of paragraphs 10-20 of EITF Issue No. 03-1, The Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investments. Paragraphs 10-20 of EITF Issue No. 03-1 give guidance on how to evaluate and recognize an impairment loss that is other that temporary. Application of these paragraphs has been deferred pending issuance, of proposed FSP EITF Issue 03-1a. We do not expect EITF Issue No. 03-01 to have any impact on our financial position, results of operations or cash flows.

At its March 31, 2004 meeting, the Emerging Issues Task Force (EITF) reached final consensus on EITF Issue No. 03-6, Participating Securities and the Two-Class Method under FASB Statement No. 128, Earnings per Share. Typically, a participating security is entitled to share in a company's earnings, often via a formula tied to dividends on the company's common stock. The issue clarifies what is meant by the term participating security, as used in Statement 128. When an instrument is deemed to be a participating security, it has the potential to significantly reduce basic earnings per common share because the two-class method must be used to compute the instrument's effect on earnings per share. The consensus also covers other instruments whose terms include a participation feature. The consensus also addresses the allocation of losses. If undistributed earnings must be allocated to participating securities under the two-class method, losses should also be allocated. However, EITF 03-6 limits this allocation only to situations when the security has (1) the right to participate in the earnings of the company, and (2) an objectively determinable contractual obligation to share in net losses of the company. The consensus reached in EITF 03-6 is effective for fiscal periods beginning after March 31, 2004. EPS in prior periods must be retroactively adjusted in order to comply with the consensus decisions reached in EITF 03-6. We do not expect that this consensus will have any impact on our calculation of Basic and Diluted EPS.

## Item 6. Directors, Senior Management and Employees

# **BOARD OF DIRECTORS**

#### Overview

Our *Conselho de Administração*, or Board of Directors, sets general guidelines and policies for our business and monitors the implementation of those guidelines and policies by our executive officers. The Board of Directors holds regularly scheduled meetings on a monthly basis and holds additional meetings when called by its chairman, vice-chairman or any two directors. Decisions of the Board of Directors require a quorum of a majority of the directors and are taken by majority vote.

Under the Brazilian Corporate Law, the Board of Directors must have at least three members. Each director and his or her respective alternate are elected at a general shareholders' meeting and are subject to removal at any time. Our bylaws state that the Board of Directors must consist of eleven members and eleven alternates. Our current employees have the right to appoint one director and an alternate. Under the Brazilian Corporate Law, members of the Board of Directors must be shareholders of CVRD. Members of the Board of Directors are elected for two-year terms and can be re-elected. Each alternate director serves on behalf of a specific board member. In the absence of the director for whom an alternate director is acting, that alternate director may attend and vote at meetings of the Board of Directors.

Ten of our current directors and nine of our current alternate directors were appointed to their positions directly by Valepar, our principal shareholder, pursuant to Valepar's shareholders' agreement and the provisions of the Brazilian Corporate Law. For a description of the procedures under which our directors are appointed, see *Item 10. Additional Information—Memorandum and Articles of Incorporation—Common Shares and Preferred Shares—General.* For a description of Valepar's shareholders' agreement, see *Item 7. Major Shareholders and Related Party Transactions—Major Shareholders—Principal Shareholder.* 

## **Directors of CVRD**

The table below lists the current members of the Board of Directors. All of our directors were elected or reelected, as the case may be, in 2005, and their terms will expire in 2007.

	Year First		
_	Elected	Position	Age
Sérgio Ricardo Silva Rosa (1)	2003	Chairman	45
Erik Persson (1)	2001	Director	51
Jorge Luiz Pacheco (1)	2005	Director	50
Arlindo Magno de Oliveira (1)	2003	Director	54
Jaques Wagner (1)	2003	Director	55
Renato da Cruz Gomes (1)	2001	Director	52
Mário da Silveira Teixeira Júnior (1)	2003	Vice-Chairman	59
Hiroshi Tada (1)	2005	Director	60
Oscar Augusto de Camargo Filho (1)	2003	Director	67
Francisco Augusto da Costa e Silva (1)	2005	Director	56
Eduardo Fernando Jardim Pinto (2)	2005	Director	42

<sup>(1)</sup> Appointed by Valepar and approved at the annual shareholders' meeting.

The table below lists the alternate members of the Board of Directors.

	Year First		
	Elected	Position	Age
Gerardo Xavier Santiago (1)	2003	Director	45
Rita de Cássia Paz Andrade Robles (1)	2005	Director	38
Sérgio Ricardo Lopes de Farias (1)	2005	Director	40
José Mauro Guahyba de Almeida (1)	2005	Director	60
Luiz Antonio Santos Baptista (1)	2004	Director	48
Rômulo de Mello Dias (1)	2003	Director	43
João Moisés de Oliveira (1)	2003	Director	60
Hidehiro Takahashi (1)	2005	Director	49
Wanderlei Viçoso Fagundes (1)	2003	Director	59
Vacant			
José Horta Mafra Costa (2)	2005	Director	58

<sup>(1)</sup> Appointed by Valepar and approved at the annual shareholders' meeting.

<sup>(2)</sup> Appointed by our employees and approved at the annual shareholders' meeting.

<sup>(2)</sup> Appointed by our employees and approved at the annual shareholders' meeting.

We have summarized below the business experience, areas of expertise, and principal outside business interests of our current directors:

Sérgio Ricardo Silva Rosa. Mr. Rosa joined our Board of Directors in April 2003 and was designated as Chairman in May 2003. Mr. Rosa is currently the chief executive officer of PREVI - Caixa de Previdêcia dos Funcionários do Banco do Brasil, or Previ, where he has been an executive officer since 2000. He is also a director of Valepar S.A., or Valepar, and chief executive officer of Litel Participações S.A., or Litel. Mr. Rosa has been a director of Brasil Telecom Participações since December 2000, and of Sauípe S.A. since May 2001. Prior to joining Previ, Mr. Rosa served as President of the Confederação Nacional dos Bancários from June 1994 to May 2000. From January 1995 to December 1996, Mr. Rosa was an alderman of the municipality of São Paulo. He received his degree in journalism from Universidade de São Paulo.

*Erik Persson.* Mr. Persson joined our Board of Directors in April 2001. Mr. Persson was a planning officer at Previ from June 2000 to May 2003 and has been serving as a pension officer since June 2003. He has worked at Banco do Brasil S.A. since 1977. Mr. Persson has also served as a director of Valepar and Previ since April 2001, and has held an officer position in SEEB and FEEB, both in Rio Grande do Sul, since 1990. He received his degree in economics from Universidade Federal do Rio Grande do Sul – UFRGS.

*Jorge Luiz Pacheco*. Mr. Pacheco joined our Board of Directors in April 2002. Mr. Pacheco has been manager of strategic investments at Previ since December 2000, and prior to this time worked at Banco do Brasil S.A. since 1973. He has also served as a director of Valepar and a director of Litel, and has held an officer position in the fiscal council of Compania Siderúrgica Belgo-Mineira. He received his degree in economics from Faculdade de Ciências Econômicas - FCPE - Cândido Mendes/RJ, and post-graduate degrees in finance and business management from IBMEC/RJ.

Arlindo Magno de Oliveira. Mr. Oliveira joined our Board of Directors in April 2003. Since 1974, he has served in a variety of positions at Banco do Brasil S.A. such as customer service manager. Mr. Oliveira also joined Previ in 1974, and since then, has served as member of the fiscal council, officer for deliberations and executive officer for planning, and currently he serves as Previ's deliberative board member. From April to October 2002, Mr. Oliveira was the executive officer in charge of finance and management at CEDAE – Companhia Estadual de Água e Esgoto. He also acted as a director of several companies, including Companhia de Eletricidade do Estado da Bahia - COELBA, Companhia Energética do Rio Grande do Norte - COSERN, CPFL Energia S.A., CPFL Geração de Energia S.A. and ENERCAN - Campos Novos Energia S.A. He received a degree on economics from Universidade Federal Fluminense – UFF and his post-graduate degree in finance from IBMEC/RJ.

Jaques Wagner. Mr. Wagner joined our Board of Directors in December 2003. As of January 23, 2004, Mr. Wagner serves as Minister of the Council on Economic Development Special Administrative Office. From 1999 to 2003, he was a member of the Parliament and served as the Minister of Labor from 2003 to 2004. He received his degree in engineering from Pontificia Universidade Católica in Rio de Janeiro.

Renato da Cruz Gomes. Mr. Gomes joined our Board of Directors in April 2001. Mr. Gomes has been an executive officer of Bradespar S.A. since 2000. From 1976 through 2000, Mr. Gomes held a variety of positions within BNDES and has participated on the boards of directors of many companies, in the last 15 years, namely Aracruz, Iochpe Maxion, Bahia Sul, Globo Cabo and Latasa. He was also a member of the advisory board of Fator Sinergia - Fundo de Investimento de Valores Mobiliários em Ações and the investment committee of Bradesco Templeton Value and Liquidity Fund. Mr. Gomes has been an executive officer of Valepar since April 2001 and is an alternate member of Valepar's Board of Directors. He received his degree in engineering from Universidade Federal do Estado do Rio de Janeiro – UFRJ, and his post-graduate degree in management development from SDE.

Mário da Silveira Teixeira Júnior. Mr. Teixeira joined our Board of Directors in May 2003. In July 1971, Mr. Teixeira joined Bradesco S.A. Corretora de Títulos e Valores Mobiliários, where he served as an executive officer from March 1983 to January 1984, when he was appointed as chief department officer of Banco Bradesco S.A. In 1992 he became chief managing officer, in 1998 vice-president and from March

1999 until July 2001 he was a member of the Board of Directors. From July 2001 to March 2002, Mr. Teixeira was CEO of Bradespar and, in March 2002, he returned to the Board of Directors of Banco Bradesco S.A. In addition, he is a director of Valepar S.A., VBC Participações S.A., VBC Energia S.A., Companhia Paulista de Força e Luz — CPFL, CPFL Energia S.A., CPFL Geração de Energia S.A., Companhia Piratininga de Força e Luz, Vice-chairman of the Board of Directors of Banco Bradesco S.A., non-voting member of the Managing Board of Banco Espírito Santo S.A., located in Lisbon, Portugal, and Vice-chairman of the Board of Directors of BES Investimento do Brasil S.A. – Banco de Investimento. He also served as Vice-President of ANBID – Associação Nacional dos Bancos de Investimento, member of the Management Board of ABRASCA – Associação Brasileira das Companhias Abertas, and director of Companhia Siderúrgica Nacional - CSN, Latasa S.A., Globo Cabo S.A., São Paulo Alpargatas S.A and Tigre S.A. Tubos e Conexões. Mr. Teixeira received a degree in civil engineering and business administration from Mackenzie Presbyterian University.

*Hiroshi Tada*. Mr. Tada joined our Board of Directors in April 2005. Since 1968, Mr. Tada has served in a variety of positions at Mitsui & Co. Ltd., or Mitsui, where he is currently the Senior Executive Managing Officer. He received his degree in engineering from the University of Kyoto and an Advanced Management degree from Harvard.

Oscar Augusto de Camargo Filho. Mr. Camargo Filho joined our Board of Directors in September 2003. He is currently a partner of CWA Consultoria Empresarial. From 1999 to 2003, Mr. Camargo Filho served as Chairman of the Board of Directors of MRS Logística. From 1973 to 2003, he held various positions with CAEMI, including CEO and member of its Board of Directors. From 1963 until 1973, he held a variety of positions within Motores Perkins S.A., including commercial officer and sales and services manager. He received his law degree from Faculdade de São Francisco at the Universidade de São Paulo.

Francisco Augusto da Costa e Silva. Mr. Costa e Silva joined our Board of Directors in April 2005. He is also a partner of Bocater, Camargo, Costa e Silva - Advogados Associados, a law firm in Rio de Janeiro. Mr. Costa e Silva also serves as a director of Banco do Brasil S.A., Comitê de Ética da Associação dos Analistas e Profissionais de Investimento do Mercado de Capitais (APIMEC), and the development committee of Pontificia Universidade Católica do Rio de Janeiro (PUC/RJ). He started his career at Banco Nacional do Desenvolvimento Econômico e Social - BNDES, where he held a variety of positions, including executive officer. Previously, he served on the Board of Directors of several companies and entities namely Solpart Participações S.A., Aracruz Celulose S.A., Pisa Papel de Imprensa S.A., Fundação de Assistência e Previdência Social do BNDES -FAPES and Rio de Janeiro Stock Exchange – BVRJ. Mr. Costa e Silva also served as President of the CVM and of the Council of Securities Regulators of the Americas – COSRA, joined Comissão da Moeda e do Crédito - COMOC and the Supplemental Pension Plan Council and served on the executive committee of the International Organization of Securities Commissions – IOSCO. Mr. Costa e Silva received his law degree from Universidade do Estado da Guanabara, currently Universidade do Estado do Rio de Janeiro – UERJ, and his MBA degree from COPPEAD, at Universidade Federal do Rio de Janeiro – UFRJ.

Eduardo Fernando Jardim Pinto. Mr. Jardim Pinto joined our Board of Directors in April 2005. Since 1983 he has held several positions with us and currently he serves as a specialized train conductor and President of STEFEM, the railroad employees union in the State of Maranhão. He received his degree in electronic engineering from CEFET, and is currently pursuing a law degree at Faculdade São Luiz.

# **Directors of Vale Overseas**

Vale Overseas' directors are as follows:

	Position	Age
Fabio de Oliveira Barbosa	Director	44
Fernando Ramos Nóbrega	Director	46
Bernardeth Vieira de Souza	Director	53
Leonardo Moretzsohn de Andrade	Director	47

Mr. Barbosa also serves as Vale Overseas' principal executive officer and Mr. Moretzsohn also serves as Vale Overseas' principal financial officer. Mr. Barbosa's experience is summarized below under — *Executive Officers*.

Fernando Ramos Nóbrega. Mr. Nóbrega serves as the Executive Coordinator for Investment Analysis. From 1999 to 2005, he served as the general manager – Finance of CVRD. He has been a board member at Itabrasco, Nibrasco, Hispanobras and Kobrasco since 1998. During the year 2000, Mr. Nóbrega was the financial and administrative director of FCA. Prior to that he held a variety of positions at CVRD and Rio Doce America, Inc., New York. Mr. Nóbrega obtained an engineering degree from Universidade Federal do Rio de Janeiro (UFRJ) and an Executive MBA from New York University in 1997.

Bernardeth Vieira de Souza. Mrs. Vieira de Souza is the general manager – Treasury for CVRD. Mrs. Vieira de Souza obtained an Accounting and Business Administration degree from Universidade do Estado do Rio de Janeiro - UERJ and a masters degree in Management and Administration of Cash Flow from Fundação Getúlio Vargas (FGV-RJ).

Leonardo Moretzsohn de Andrade. Mr. Moretzsohn joined Vale Overseas's Board of Directors in March 2005. Mr. Moretzsohn joined CVRD in 1983, and since then has held several positions within CVRD. He is currently CVRD's internal controls officer. He is also a member of the Board of Directors of Valesul, Nova Era Silicon, a member of the board of trustees of Valia and a member of the Financial and Operational Committee of CSI. From 1998 until 2001, he worked at RDI as manager in the pulp department, and during that period he was also a member of BENECEL – BENELUX Pulp and Paper Agents Association. He received his degree in economics from Universidade de Brasilia and has a post-graduate degree in engineering projects from COPPE/UFRJ and an MBA in Company Management from FGV.

The business address of the Vale Overseas directors is Avenida Graça Aranha, 26, 17th floor, 20030-900 Rio de Janeiro, RJ, Brazil.

#### **EXECUTIVE OFFICERS**

#### Overview

The executive officers are our legal representatives and are responsible for day-to-day operations and the implementation of the general policies and guidelines set forth by the Board of Directors. Our bylaws provide for a minimum of six and a maximum of nine executive officers. The Board of Directors appoints executive officers for two-year terms and may remove them at any time. According to the Brazilian Corporate Law, executive officers must be Brazilian residents. The executive officers hold regularly scheduled meetings on a weekly basis and hold additional meetings when called by any executive officer.

## **Executive Officers**

The table below lists our current executive officers. The term of each of our executive officers expires in 2005.

	Year of Appointment	Position	Age
Roger Agnelli	2001	Chief Executive Officer	46
José Carlos Martins	2005	Executive Officer (Ferrous Minerals)	55
Murilo Ferreira	2005	Executive Officer (Holdings, Energy and Business Development)	51
José Lancaster	2004	Executive Officer (Non-Ferrous Minerals)	58
Guilherme Rodolfo Laager	2001	Executive Officer (Logistics)	48
Fabio de Oliveira Barbosa	2002	Executive Officer (Finance and Investor Relations)	44
Gabriel Stoliar	2001	Executive Officer (Planning and Control)	51
Carla Grasso	2001	Executive Officer (Human Resources and Corporate Services)	43

We have summarized below the experience, areas of expertise, and principal outside business interests of our current executive officers.

Roger Agnelli. Mr. Agnelli was appointed President and CEO of Companhia Vale do Rio Doce in July 2001. He developed his professional career at the Bradesco financial group from 1981 to 2001, where he reached the position of executive director of Banco Bradesco in 1998, remaining in that office until the year 2000; he also was President and CEO of Bradespar S.A., from March 2000 to July 2001. Due to his activities in the areas of investments, mergers and acquisitions, and asset management, he was a member of the board of directors of several major companies in Brazil, such as Companhia Paulista de Força e Luz, Companhia Siderúrgica Nacional, Latas de Alumínio S.A. - LATASA, VBC Energia S.A., Brasmotor S.A., Mahle Metal Leve S.A., Rio Grande Energia S.A. and Serra da Mesa Energia S.A. Mr. Agnelli was also a director of UGB Participações S.A. and Vice-President of ANBID - Brazil's National Association of Investment Banks. Mr. Agnelli was the Chairman of the board of directors of Companhia Vale do Rio Doce, from May 2000 until July 2001 and is presently a member of the board of directors of Asea Brown Boveri, Duke Energy Corporation and Suzano Petroquímica S.A. Mr. Agnelli is a full member of the Economic and Social Development Council ("CDES"), an advisory council to the President of Brazil. He is also President of the Chinese-Brazilian Business Council, and a member of the International Investments Council, formed to advise the President of South Africa, Dr. Thabo Mbeki. Mr. Agnelli has a degree in economics from the Fundação Armando Álvares Penteado, in São Paulo.

José Carlos Martins. Mr. Martins was appointed as an executive officer of our ferrous minerals division in April 2005, and he was originally appointed as an executive officer of holdings, energy and business development in April 2004. He has over 30 years of experience in the metals industry. He was an officer and president of Aços Villares from 1986 to 1996 and chief managing officer of the steel area at CSN, from 1997 to 1999. In 1999, Mr. Martins became President of Latasa, one of the largest aluminum can producers in Latin America. Upon the purchase of Latasa by Rexam, a United Kingdom company, in 2003, he became president and CEO of Rexam's South American beverage can division, Rexam Beverage Can South America. Mr. Martins has a B.A. degree in Economics from Pontificia Universidade Católica de São Paulo.

Murilo Ferreira. Mr. Ferreira was appointed as an executive officer of our holdings, energy and business development areas in April 2005. He joined us in 1977 and has vast experience in several areas of CVRD, particularly Aluminum and Ferroalloys, and in 1998 he was appointed executive officer of commerce and finance at Vale do Rio Doce Alumínio S.A. – ALUVALE, a holding company of CVRD that was merged into CVRD in December 2003. Aside from being the Director of the Department of Aluminum since December 2003, Mr. Ferreira is also the CEO of ALBRAS – Alumínio Brasileiro S.A., and a member of the Board of Directors of MRN - Mineração Rio do Norte S.A., Valesul Alumínio S.A. and ALUNORTE – Alumina do Norte do Brasil S.A. Mr. Ferreira has a B.A. degree from Escola de Administração de Empresas, Fundação Getulio Vargas (FGV), and an MBA from EBAP-FGV.

José Lancaster. Mr. Lancaster was appointed as an executive officer of our non-ferrous minerals division in September 2004. He is also a Chairman of the Board of Directors of Cadam S.A. and Pará Pigmentos S.A., a member of the Board of Directors of Cordillera de Las Minas S.A. and an officer of Compañia Minera Andino Brasileira Ltd., Compañia Minera Latino Americana Ltda., Tethys Mining LLC and Vale do Rio Doce Kaolin S.A. - Valekao. Previously, Mr. Lancaster served as CEO of Mineração Serra do Sossego S.A., and exploration manager of the Brazilian subsidiary of British Petroleum. He graduated from the Federal University of Minas Gerais, Brazil, with a degree in Geology and holds a Ph.D in Economic Geology by Mackay School of Mines, from the University of Nevada, Reno (United States).

Guilherme Rodolfo Laager. Mr. Laager was appointed as an executive officer of our logistics division in September 2001. Mr. Laager served as logistics, procurement and technology information director for Companhia de Bebidas das Américas – AMBEV from 1989 until August 2000. From 1982 until 1988, Mr. Laager worked for Andersen Consulting and, from 1979 until 1981, for IESA, International de Engenharia S.A. Mr. Laager has a B.S. degree in civil engineering from the Universidade Federal do Rio de Janeiro - UFRJ and obtained an MBA from COPPEAD, also at UFRJ.

Fabio de Oliveira Barbosa. Mr. Barbosa was appointed as our chief financial officer in May 2002. He is also an officer of Docepar S.A. and Chairman of the Board of Directors of CAEMI. Prior to that, Mr. Barbosa served as a member of our Board of Directors from April 2000 to March 2002. Previously, he served as chairman of the Board of Directors of BANESPA – Banco do Estado de São Paulo S.A., and also served as a board member of the following companies: Banco do Brasil S.A., Caixa Econômica Federal, CST and TELESP—Telecomunicações de São Paulo. Prior to joining us, Mr. Barbosa has served as secretary of the National Treasury at the Ministry of Finance since July 1999, after serving as assistant secretary in the previous four years. From 1992 to 1995, he served as adviser to the Executive Board of the World Bank, in Washington D.C. From 1990 to 1992, he was Deputy and Head of the Fiscal Policy Unit at the Ministry of Economy and Finance. From 1988 to 1990, he was economic advisor and head of the Economic Analysis Unit, both at the Ministry of Planning. Prior to that time, Mr. Barbosa held a variety of positions at the Ministry of Industry and Commerce, the Paraná State Development Institute, the Ministry of Labor and the Institute for Applied Economic Research. He has a B.A. degree in Economics from Universidade Federal de Minas Gerais and a M.A. in Economics from the Universidade de Brasília (UnB).

Gabriel Stoliar. Since October 2001, Mr. Stoliar has served as the chief planning and control officer of CVRD. In September 1997, he was originally appointed as an executive officer of the Corporate Center. He is also director of Usiminas, CAEMI and PPSA. In 1994, he was appointed director of BNDESPAR. In 1991, Mr. Stoliar assumed the position of superintendent of the operational division responsible for the areas of mining, metallurgy, chemicals, petrochemicals, pulp and paper of BNDESPAR. He was appointed by BNDESPAR in 1988 as manager of operations in the area of capital, electronic and consumer goods. In 1982, he was promoted to manager of BNDES for the project area of FINSOCIAL. In 1978, he was hired by BNDES as an analyst in the area of pulp, paper and petrochemicals. Mr. Stoliar began his career as a business organization consultant at the Institute of Economic and Management Development of the Federation of Industries of Rio de Janeiro. Mr. Stoliar obtained an engineering degree from Universidade Federal do Rio de Janeiro - UFRJ, a post-graduate degree in production engineering and an MBA from PDG/EXE-SDE in Rio de Janeiro.

Carla Grasso. Ms. Grasso was appointed as an executive officer of the human resources and corporate services area in October 2001. From December 1997 to October 2001, Ms. Grasso served as the personnel, management and IT officer to CVRD's Corporate Centre. Before joining CVRD, she acted as secretary of the Brazilian supplementary social security office, from January 1994 to November 1997; as advisor to the Ministry of Social Security, from December 1992 to December 1993; as deputy coordinator of fiscal policy at the Ministry of Finance, from October to December 1992; as finance advisor and coordinator of the Macroeconomics and Social areas of the Brazilian Presidency office, from March 1990 to October 1992; as advisor to the Ministry of Planning, from November 1988 to March 1990; and as advisor to the Presidency of Sebrae – Serviço Brasileiro de Apoio à Pequena e Média Empresa, from January to November 1988. In 1997, she was appointed as an executive officer of Fundação Vale do Rio Doce de Habitação e Desenvolvimento Social. Ms. Grasso has both a B.A. degree in Economics and a M.A. in Economics from UnB.

#### FISCAL COUNCIL

Under the Brazilian Corporate Law, we may appoint a fiscal council, as a corporate body independent of our management and external auditors. The primary responsibility of the fiscal council under the Brazilian Corporate Law is to review management's activities and the financial statements, and to report its findings to the shareholders. We have established a permanent fiscal council, which may have from three to five members.

At present, our Board of Directors serves as our audit committee for purposes of the Sarbanes-Oxley Act of 2002. Under the listed company audit committee rules of the NYSE and the SEC, effective July 31, 2005, we must either establish an audit committee composed of members of the Board of Directors that meets specified requirements or designate and empower our fiscal council to perform the role of the audit committee in reliance on the exemption set forth in Exchange Act Rule 10A-3(c)(3). We expect to take the steps necessary to designate our fiscal council to perform this role and to give it the necessary powers on or before July 31, 2005. At that time, we expect that at least one of the members of the fiscal council will be determined to be a financial expert.

On April 27, 2005, the shareholders appointed or re-appointed the current members of the fiscal council and their respective alternates. Holders of preferred class A shares, including the golden shares, may elect one member of the fiscal council and the respective alternate. Non-controlling holders of common shares comprising at least 10% of the common shares outstanding may also elect one member of the fiscal council and the respective alternate. The terms of the members of the fiscal council expire at the next annual shareholders' meeting following their election.

The table below lists the current members of the fiscal council.

	First Year of
	Appointment
José Bernardo de Medeiros Neto (2)	2005
Marcelo Amaral Moraes (2)	2004
Oswaldo Mário Pêgo de Amorim (2)	
Joaquim Vieira Ferreira Levy (1)	2005

<sup>(1)</sup> Appointed by the preferred shareholders.

The table below lists the alternate members of the fiscal council.

	First Year of
	Appointment
Milton Lourenço Cabral (2)	2004
Carlos Tsuyoshi Yamashita (2)	2005
Anibal Moreira dos Santos (2)	2005
Tarcísio José Massote de Godoy (1)	2004

<sup>(1)</sup> Appointed by the preferred shareholders.

<sup>(2)</sup> Appointed by Valepar.

<sup>(2)</sup> Appointed by Valepar.

#### **ADVISORY COMMITTEES**

## **Advisory Committees**

Our bylaws establish five technical and advisory committees to the Board of Directors, as follows: Executive Development, Strategic, Finance, Audit, and Governance and Ethics. Some committee members are not members of the Board of Directors.

- The Executive Development Committee is responsible for reporting on general human resources policies; recommending compensation levels for our executive officers; and establishing guidelines for evaluating the performance of our executive officers. The members of the executive development committee are: Francisco Valadares Póvoa, João Moisés de Oliveira, Arlindo Magno de Oliveira, Olga Loffredi and Oscar Augusto de Camargo Filho.
- The Strategic Committee is responsible for reviewing and making recommendations to the Board of Directors concerning the strategic guidelines and strategic plan submitted annually to the board by our executive officers; the company's annual and multi-annual investment budgets; investment and/or divestiture opportunities submitted by executive officers; and mergers and acquisitions. The members of the strategic committee are: Roger Agnelli, Gabriel Stoliar, Luciano Coutinho, José Roberto Mendonça de Barros and Cezar Manoel de Medeiros.
- The Finance Committee is responsible for reviewing and making recommendations to the Board of Directors concerning: the financial policies and the internal financial control systems of the company; compatibility between the level of distributions to shareholders and the parameters established in the annual budget; and consistency with the general policy on dividends and the capital structure of the company. The members of the finance committee are: Roger Agnelli, Fabio de Oliveira Barbosa, Rômulo de Mello Dias, Wanderley Rezende de Souza and Wanderlei Viçoso Fagundes.
- The Audit Committee is responsible for recommending the appointment of the independent auditors and the employee responsible for internal auditing of the company to the Board of Directors; reporting on the policies and the company's annual auditing plan submitted by the employee responsible for internal auditing, and on its execution; tracking the results of the company's internal auditing, and identifying, prioritizing, and submitting actions to be accompanied by the executive officers; and analyzing the annual report, as well as the financial statements of the company and making recommendations to the Board of Directors. The members of the audit committee are: Inácio Clemente da Silva, Antonio José de Figueiredo Ferreira, Heitor Ribeiro Filho and Paulo Roberto Ferreira de Medeiros. None of the members of our audit committee is a member of the Board of Directors. Accordingly, the entire Board of Directors is serving as the audit committee for purposes of our obligations under the Sarbanes-Oxley Act of 2002, see—Fiscal Council
- The Governance and Ethics Committee is responsible for evaluating our corporate governance practices and the workings of the Board of Directors, and recommending improvements to the code of ethics and our system of management in order to avoid conflicts of interests between the company and its shareholders or administrators; issuing reports on policies relating to corporate responsibility, such as the environment, health, safety and social responsibility of the company submitted by the executive officers; and issuing reports on potential conflicts of interest between the company and its shareholders or administrators. The members of the governance and ethics committee are: Renato da Cruz Gomes, Ricardo Carvalho Giambroni and Ricardo Simonsen.

# **Significant Corporate Governance Differences**

Pursuant to Section 303A.11 of the New York Stock Exchange Listed Company manual, we have prepared a chart summarizing the ways in which our corporate governance practices differ from those of U.S. domestic companies under the New York Stock Exchange's corporate governance rules. This chart can be accessed on our web site at http://www.cvrd.com.br/cvrd\_us/media/0311NYSEDifferencesChartRevisedi.pdf.

# COMPENSATION OF DIRECTORS, EXECUTIVE OFFICERS, FISCAL COUNCIL MEMBERS AND ADVISORY COMMITTEES

#### General

Under our bylaws, our shareholders are responsible for establishing the aggregate compensation we pay to the members of our Board of Directors and our executive officers. Our shareholders determine this annual aggregate compensation at the general shareholders' meeting each year. In order to establish aggregate director and officer compensation, our shareholders usually take into account various factors, which range from attributes, experience and skills of our directors and executive officers to the recent performance of our operations. Once aggregate compensation is established, the members of our Board of Directors are then responsible for distributing such aggregate compensation in compliance with our bylaws among the directors and executive officers, in the latter case, at the recommendation of the Chief Executive Officer. The executive development committee of our Board of Directors makes recommendations to the board concerning the annual aggregate compensation of the executive officers.

For the year ended December 31, 2004, we paid approximately US\$ 7.2 million in aggregate (including fixed and variable remuneration and benefits in kind granted) to the executive officers and US\$ 533 thousand in aggregate (including fixed and variable remuneration and benefits in kind granted) to the members of our Board of Directors for services in all capacities. For the year ended December 31, 2004, none of our board members and executive officers had any financial or other interests in transactions involving us, which was not in the ordinary course of business.

The total number of common shares owned by our directors and executive officers as of April 30, 2005, was 77,762. The total number of preferred class A shares owned by our directors and executive officers as of April 30, 2005, was 174,517. None of our directors or executive officers beneficially owns one percent or more of any class of our shares.

## **Incentive Compensation**

In addition to fixed compensation, our executive officers are also eligible for bonuses and incentive payments which are recorded as an expense when incurred. Each executive officer may receive a bonus based on his or her individual performance and our performance during the fiscal year. The Board of Directors determines the maximum annual amount of compensation for that year and such amount is approved at the shareholders' meeting. Incentive payments are then calculated with respect to a portion of the bonuses determined at the end of each year. Whereas bonuses are distributed at the beginning of the following year, the incentive payments, which are tied to a number of preferred shares at that time, are made approximately one year after the number of preferred shares has been determined. The executive officers are entitled, however, to any dividends paid on those shares during such time period. The executive officers are required to use the incentive payments to acquire preferred shares based on the market price at the time of payment. As the executive officers are not required to remain with the company to benefit from such incentive payments after their entitlement, the incentive payments are not considered to be share-based compensation during this period.

## **Fiscal Council**

During 2004, the monthly amount we paid to the members of the fiscal council was US\$ 1,606 to each member, excluding benefits. We paid an aggregate of US\$ 61,645 to members of the fiscal council in 2004. In addition, the members of the fiscal council are reimbursed for travel expenses related to the performance of their functions.

# **Advisory Committees**

We paid an aggregate of US\$ 233,291 to members of CVRD's advisory committees in 2004. In addition, the members of CVRD's advisory committees are reimbursed for travel expenses related to the performance of their functions.

#### **EMPLOYEES**

#### General

The table below sets forth the number of our employees by category as of the dates indicated.

	At December 31,	
2002	2003	2004
10,622	13,107	14,845
7,613	8,820	9,842
1,104	1,332	1,957
733	810	979
7,503	5,563	2,915
27,575	29,632	30,538
	7,613 1,104 733 7,503	10,622 13,107 7,613 8,820 1,104 1,332 733 810 7,503 5,563

#### **Wages and Benefits**

Wages and benefits for CVRD and its subsidiaries are generally established on a company-by-company basis. CVRD establishes its annual wage and benefits programs in July of each year following negotiations with its unions. In July 2004, CVRD reached an agreement with the unions for a 4.5% salary increase and maintenance of current benefits, which is valid until June 2005. The provisions of CVRD's collective bargaining agreements with its unions also apply to CVRD's non-union employees. CVRD has never suffered any material economic loss as a result of labor strikes or stoppages.

#### **Pension Plans**

Employees of CVRD and most of its subsidiaries are eligible to participate in pension plans managed by Fundação Vale do Rio Doce de Seguridade Social-VALIA ("Valia"). Sponsored by CVRD, Valia is a closed, nonprofit, complementary social security plan with financial and administrative autonomy. Substantially all of the participants in plans sponsored by Valia are participants in a new plan Valia implemented in May 2000. The new plan is primarily a defined contribution plan with a defined benefit feature relating to service prior to May 2000. Valia also sponsors the "old plan" which is a defined benefit plan, with benefits based on years of service, salary and social security benefits. This plan covers retired participants and their beneficiaries, as well as a relatively small number of employees that declined to transfer from the old plan to the new plan when it was established in May 2000

Employees of CAEMI and its subsidiaries, MBR and CADAM, and employees of Alunorte participate in different pension plans. CAEMI and MBR contribute to an open supplementary pension plan that is principally a defined contribution, maintained by Bradesco Vida e Previdência S.A. This plan had its origin in the social security and pension plan maintained by Fundação CAEMI de Previdência Social and sponsored by CAEMI and MBR. The benefits granted by CAEMI and MBR include pensions for retirement, disability and death. Benefits related to health care and group life insurance provided by CAEMI and its subsidiaries to the employees come to an end when the beneficiary leaves the company, whether retired or not. On December 1, 2001, CADAM joined a defined contribution supplementary pension plan managed by Bradesco Vida e Previdência S.A. Alunorte's employees are covered by a pension plan managed by Bradesco Previdência Privada.

## **Other Benefits**

All CVRD employees and their dependants are entitled to supplementary medical assistance, which offers coverage for outpatient and in-hospital treatment, dental care and prescription drug costs. Beneficiaries have free choice of care providers, with part of expenses being reimbursed. Other important fringe benefits offered to employees are an annual amount for school materials, group life insurance, funeral assistance and reimbursement of nursery school costs for employees' children up to the age of three years.

## **Equity Ownership**

CVRD's employees previously had an equity stake in our business through Clube de Investimentos dos Empregados da Vale, or Investvale, an association of our current and retired employees. During 2002, Investvale contributed all of its shares in CVRD in exchange for an interest in Valepar S.A., our principal shareholder. On November 14, 2003, Investvale sold its stake in Valepar to BNDESPAR and now has no remaining direct or indirect stake in CVRD.

CVRD's bylaws authorize us to establish stock option plans, but to date we have not done so.

## **Employee Profit Sharing**

All CVRD employees receive incentive compensation each year in an amount based on the performance of CVRD, the performance of the employee's department and the employee's individual performance. Similar incentive compensation arrangements are in place in other companies within the CVRD group.

# Item 7. Major Shareholders and Related Party Transactions

## **MAJOR SHAREHOLDERS**

## Overview

*Major CVRD Shareholders*. The table below sets forth certain information regarding beneficial ownership of our common and preferred class A shares as of April 30, 2005, by each person we know to be the beneficial owner of more than 5% of any class of our outstanding capital stock, and by all directors and executive officers as a group.

	Shares Owned	Percent of Class
Common Shares Valepar S.A(1) BNDESPAR(2) Directors and executive officers as a group.	392,147,133 52,189,680 77,762	53.3% 7.1 *
Preferred Class A Shares(3) Directors and executive officers as a group	174,517	*
Golden Shares Brazilian government	3	100.0

<sup>(1)</sup> See the table below for more information on Valepar's shareholders. Because each of the shareholders of Valepar has the right to veto the transfer by Valepar of any shares it holds in CVRD, each of the Valepar shareholders may be deemed a beneficial owner of the entire Valepar stake under the rules of the SEC. In general, a person who has or shares voting power or investment power with respect to securities is treated as a beneficial owner of those securities. It does not necessarily imply that the named person has the economic or other benefits of ownership.

<sup>(2)</sup> Excludes common shares owned directly by Valepar, in which BNDESPAR has an ownership interest.

<sup>(3)</sup> The Brazilian government (National Treasury) owns 15,226,023 preferred class A shares representing 3.7% of the outstanding preferred class A shares, and BNDESPAR owns 3,054,645 preferred class A shares representing 0.7% of the outstanding preferred class A shares.

<sup>(\*)</sup> Represents less than 1% of the outstanding shares of the class.

*Valepar Shareholders*. The tables below set forth information as of April 30, 2005 regarding share ownership of the common shares of Valepar S.A. and Litel Participações S.A.

	Number of Valepar Common Shares Owned	Percent of Valepar Common Shares Owned
Valepar S.A.		
Litel Participações S.A(1)	157,991,298	49.00%
Eletron S.A.	94,359	0.03
Bradespar S.A. (2)	1,977,852	0.61
Bradesplan Participações S.A.(2)	66,420,639	20.60
Mitsui & Co. Ltda.	58,822,071	18.24
BNDESPAR	37,125,000	11.51
Total	322,431,219	100.00%

- (1) Litel owns 49,784,472 preferred Class B shares of Valepar, which represents 71.41% of the preferred shares. Litela, an affiliate of Litel owns 19,931,442 preferred Class B shares of Valepar, which represents 28.59% of the preferred shares.
- (2) Bradespar and Bradesplan are controlled by a control group consisting of Cidade de Deus Cia Comercial Participações, Fundação Bradesco, NCF Participações S.A. and Nova Cidade de Deus Participações S.A.

Litel Participações S.A.		
BB Carteira Ativa 0(1)	202,753,508	73.59%
BB Carteira Ativa II(1)	53,388,025	19.38%
BB Renda Fixa IV(1)	19,371,990	7.03%
Others	822	_
Directors and Executive Officers as a group	4	_
Total	275,514,349	100.00%

<sup>(1)</sup> Each of BB Carteira Ativa 0, BB Carteira Ativa II and BB Renda Fixa IV is a Brazilian investment fund. BB Carteira Ativa 0 is 100% owned by Previ. BB Carteira Ativa II is 59.36% owned by Funcef, 35.8% owned by Petros and 4.84% owned by Fundação Cesp. BB Renda Fixa IV is 100% owned by Previ. Each of Previ, Petros, Funcef and Fundação Cesp is a Brazilian pension fund.

Brazilian Government Holdings. In 1997, we were privatized by the Brazilian government, which sold its voting control to Valepar. As part of the privatization process, the National Treasury and BNDES, the government-owned development bank, together retained 32% of our common shares and 4% of our preferred class A shares. On March 20, 2002, as the final step of the privatization process, the Brazilian government and BNDES each sold 39,393,919 shares, in the form of common shares or American Depositary Shares, which together represented 32.1% of our outstanding common shares. Currently, BNDESPAR, a wholly owned subsidiary of BNDES, owns common shares representing approximately 7.1% of our outstanding common shares and 0.7% of our outstanding preferred class A shares. The Brazilian government now owns approximately 3.7% of our outstanding preferred class A shares (not counting shares held by BNDESPAR), and three golden shares in us, which gives it veto powers over certain actions that we could propose to take. For a detailed description of the veto powers granted to the Brazilian government by virtue of its ownership of the golden share, see *Item 10. Additional Information—Common and Preferred Shares—General*.

*Stock Split.* Our shareholders approved a forward stock split at an Extraordinary General Shareholders' Meeting held on August 18, 2004. Therefore, on August 19, 2004, each of our shares listed on the São Paulo Stock Exchange (Bovespa), both common (VALE3) and preferred (VALE5), was split into three shares.

On September 7, 2004 each ADR representing our common shares (RIO) or preferred shares (RIOPR) of the Company listed on the New York Stock Exchange had a similar forward split. As a result, the proportion of one ADR to one underlying common or preferred share was maintained.

## **Principal Shareholder**

Our principal shareholder is Valepar. The shareholders of Valepar have entered into a shareholders' agreement, ending in 2017. This agreement:

- grants rights of first refusal on any transfer of Valepar shares and preemptive rights on any new issue of Valepar shares;
- prohibits the direct acquisition of CVRD shares by Valepar's shareholders unless authorized by the other shareholders;
- prohibits encumbrances on Valepar shares (other than in connection with financing our acquisition);
- requires each party generally to retain control of its special purpose company holding its interest in shares of Valepar, unless the rights of first refusal mentioned above are observed;
- allocates Valepar's and our board seats;
- provides for the maintenance by CVRD of a dividend policy requiring CVRD to distribute a specific percentage of CVRD's net profit for each fiscal year;
- provides for the maintenance by CVRD of a capital structure that does not exceed specified debt to equity thresholds;
- requires the Valepar shareholders to vote their indirectly held CVRD shares and to cause their representatives on CVRD's Board of Directors to vote only in accordance with decisions made at Valepar pre-meetings held prior to meetings of CVRD's Board of Directors or shareholders; and
- establishes supermajority voting requirements for certain significant actions relating to Valepar or to us.

Pursuant to the shareholders' agreement, holders of at least 75% of the Valepar shares must agree to any of the following matters:

- any amendment of CVRD's bylaws;
- any increase of CVRD's capital stock by share subscription, creation of a new class of shares, change in the characteristics of the existing shares or any capital reduction of CVRD;
- any issuance of any debentures of CVRD, whether convertible into shares of CVRD, participation certificates upon compensation, call options or any other security of CVRD;
- any determination of issuance price for any new shares of capital stock or other security of CVRD;
- any amalgamation, spin-off or merger to which CVRD is a party, as well as any change to CVRD's corporate form;
- any dissolution, receivership, bankruptcy or any other voluntary act for financial reorganization or any suspension thereof;
- the election and replacement of CVRD's Board of Directors, including the chairman of the board, and any
  officer of CVRD;
- the disposal or acquisition of equity participation in any other company by CVRD, as well as the acquisition of any shares of capital stock of CVRD by Valepar, or of Valepar by CVRD, to be held in the acquirer's treasury;
- the participation by CVRD in a group of companies or in a consortium of any kind;

- the execution of distribution, investment, sales exportation, technology transfer, trademark license, patent exploration, license to use and lease agreements, to which CVRD will be a party;
- the approval and amendment of CVRD's business plan;
- the determination of the compensation of the directors of CVRD, as well as the duties of the board;
- any profit sharing among the administrators of CVRD;
- the determination of the compensation of CVRD's officers;
- any change in the corporate purpose of CVRD;
- the distribution or non-distribution of any dividends on any shares of capital stock of CVRD other than as provided in CVRD's bylaws and any payment of interest on the net equity of CVRD;
- the appointment and replacement of CVRD's independent auditor;
- the creation of any "in rem" guarantee, granting of guarantees including rendering of sureties by CVRD with respect to obligations of any third party, including any related companies or subsidiaries;
- the passing of any resolution on any matter which, pursuant to applicable law, entitle a shareholder to cease being a shareholder upon return of its shares to CVRD;
- the appointment and replacement by the Board of Directors of any representative of CVRD in subsidiaries, companies related to CVRD or other companies in which CVRD is entitled to appoint administrators; and
- any change in the debt to equity threshold, as defined in the shareholders' agreement.

In addition, the shareholders' agreement provides that any issuance of participation certificates by CVRD or any disposition of CVRD's shares held by Valepar requires the unanimous consent of all of Valepar's shareholders.

## **American Depositary Shares**

As of April 30, 2005, American Depositary Shares represented 27.4% of our outstanding common shares and 43.9% of our outstanding preferred class A shares.

#### RELATED PARTY TRANSACTIONS

At December 31, 2004, we had extended guarantees for borrowings obtained by affiliates and joint ventures in the amount of US\$ 7 million, of which US\$ 6 million is denominated in U.S. dollars and the remaining US\$ 1 million in Brazilian currency. See Note18 to our consolidated financial statements.

We have commercial relationships in the ordinary course of our business with a number of companies that are affiliated with Previ and Bradespar S.A., which may be deemed to beneficially own the shares owned by Valepar, our principal shareholder. The most significant of these are our relationships with CST and Usiminas, in which both we and Previ hold an interest. In 2004, CST accounted for approximately 3.0% of our total operating revenues, 3.2% of our sales of iron ore and metals and 5.7% of our logistics revenue and Usiminas accounted for approximately 1.3% of our total operating revenues and 1.7% of our sales of iron ore and metals. All of our sales to CST and Usiminas are made on arms' length terms.

We also have commercial relationships in the ordinary course of our business with Mitsui.

For information regarding investments in affiliated companies and joint ventures and for information regarding transactions with major related parties, see Notes 13 and 20 to our consolidated financial statements.

## **Item 8. Financial Information**

#### LEGAL PROCEEDINGS

We and our subsidiaries are defendants in numerous legal actions in the normal course of business, including civil, administrative, tax, social security and labor proceedings. We have set aside or deposited in court amounts to cover estimated contingency losses due to adverse legal judgments. Based on the advice of legal counsel, we believe that the provision made against contingent losses is sufficient to cover probable losses in connection with such actions.

We are currently involved in 14 proceedings before the Conselho Administrativo de Defesa Econômica, or CADE, which is the primary Brazilian antitrust regulator. 11 of these proceedings involve post-transaction review of acquisition or joint venture transactions, which is required for nearly all of our acquisitions and joint ventures. The remaining 3 proceedings are administrative proceedings alleging that we have engaged in illegal anticompetitive conduct in connection with our iron ore, logistics and aluminum businesses. We intend to defend these claims vigorously, but cannot predict their outcome. If CADE were to find that we have engaged in anticompetitive conduct, it could order us to cease the conduct and/or to pay fines, which could be substantial.

Our principal pending post-transaction review proceedings involve CVRD's acquisitions of Socoimex, Samitri, Ferteco, Belém and CAEMI, and the agreement to unwind the cross-shareholdings between CVRD and Companhia Siderúrgica Nacional, or CSN. CADE may decline to approve these transactions or may place conditions on its approval that would have a material adverse effect on our business. In connection with CADE's review, the Brazilian Economic Law Secretariat of the Ministry of Justice, or SDE, and the Brazilian Secretariat for Economic Monitoring, or SEAE, have each issued reports to CADE recommending that CADE condition its approval of these transactions on actions that could have an adverse effect on our business, including maintenance of certain pricing policies, divestiture of certain of our mines, the termination of our rights regarding the Casa de Pedra iron ore mine and the sale and restructuring of certain of our logistics interests. Prior to rendering its decision, CADE must also receive and consider the recommendations of the Ministério Público Federal. CADE may adopt some, all or none of the recommendations made by such bodies, or choose to impose other conditions pursuant to its approval that would be harmful to our business, but it may also decide to impose no restrictions.

The CAEMI acquisition was approved by the European Commission subject to certain conditions, including the sale of the Quebec Cartier Mining Company (QCM). We are still in the process of disposing of class B preferred shares retained by CAEMI in QCM. For more details, see Note 7(a) to our consolidated financial statements.

Numerous lawsuits challenging the legality of our privatization are pending, including a number of class action lawsuits. The lower courts issued favorable decisions in these lawsuits that are being appealed by the plaintiff. We do not believe that, individually or in the aggregate, these actions will adversely affect the course of the privatization process or otherwise have a material adverse effect on us.

We are a defendant in a public civil action seeking to annul the concession agreement through which we and certain other defendants operate the Praia Mole port terminal. The case, which was first filed in 1998, is still in its pre-trial stages and we believe the claim to be without merit.

We are currently a defendant in two separate actions brought by the municipality of Itabira, in the state of Minas Gerais. It alleges that our Itabira iron ore mining operations have caused environmental and social damages. In one of the actions, filed in August 1996, the municipality of Itabira alleges that our Itabira iron ore mining operations have caused environmental and social damages and claims damages with respect to the degradation of the site of one of our mines, as well as the immediate restoration of the affected ecological complex and the performance of compensatory environmental programs in the region. The damages sought, as adjusted from the date of the claim, amount to approximately US\$ 1.0 billion. We believe that this amount is significantly higher than the amount we would actually be responsible for in the event that we were found liable. We have requested the annulment of this action as it represents no actual controversy. In fact, on June 5, 2000, the local environmental authorities granted an operating license to our Itabira iron ore mining operations. This license sets forth conditions regarding the environmental restoration of the degraded site and the performance of compensatory environmental programs. We intend to continue to comply with these conditions. In the other action, the municipality of Itabira is claiming the right to be reimbursed for expenses it has incurred in connection with public services rendered as a consequence of

our mining activities. The damages sought, as adjusted from the date of the claim, amount to approximately US\$ 986 million. We believe that this action is without merit. We are vigorously defending both pending actions.

We are engaged in litigation with respect to certain aspects of recent tax regulation that requires earnings from foreign subsidiaries to be included in the determination of income taxes payable in Brazil. We obtained an injunction in February 2003, suspending our obligation to pay amounts in dispute. Based on the advice of legal counsel, we believe that the likelihood that we will have to pay certain such taxes is remote and, accordingly, we have not recorded provisions for these taxes in our financial statements.

In accordance with ANEEL Resolution No. 591, dated as of November 2003, ANEEL authorized LIGHT - Serviços de Eletricidade S.A. ("Light") to charge *consumidores livres* or free consumers in the state of Rio de Janeiro, and among them Valesul, several additional fees included in the tariff for the use of the distribution system. Valesul has commenced litigation contesting the legality of this charge. Valesul had an injunction under which it could either make judicial deposits or pay directly to Light the amounts requested. In May 2004, Valesul obtained a favorable decision relieving it from the payment of such fees and the judicial deposits. Light appealed from this decision and the final outcome is still pending. In the meantime, the injunction was lifted, forcing Valesul to resume making payments pending the resolution of the matter.

## DIVIDENDS AND INTEREST ON SHAREHOLDERS' EQUITY

Under the Brazilian Corporate Law, shareholders are generally entitled to receive an annual mandatory dividend set forth in the company's bylaws, and according to our bylaws, such mandatory dividends may not be lower than 25% of adjusted net income for the relevant year, calculated in accordance with the Brazilian Corporate Law. For a discussion on dividend distribution provisions in our bylaws, see *Item 10. Additional Information*.

Under our dividend policy, our management proposes to our Board of Directors, no later than January 31 of each year, a minimum value per share, expressed in U.S. dollars that will be distributed in that year to our shareholders. Dividends and/or interest on shareholders equity are determined in U.S. dollars, considering our expected free cash flow generation in the year of distribution. The proposal establishes two semiannual installments to be paid in the months of April and October of each year. It is submitted to the Board of Directors in the meetings scheduled for the months of April and October. Once approved, dividends and/or interest on shareholders equity are paid in Brazilian *reais*, and converted at prevailing exchange rates on the last business day before the board meetings in April and October of each year. Management can also propose to the Board of Directors, depending on the evolution of our cash flow performance, a further payment to shareholders of an additional amount per share over and above the minimum dividend initially established. For 2005, our management proposed to the Board of Directors a minimum dividend of US\$ 1 billion. Our normal practice is to pay the same dividend or interest on shareholders equity on both common and preferred class A shares. The announced minimum dividend amount for 2005 is US\$ 1 billion. In April 2005, the first installment of this dividend representing US\$ 500 million was approved by our Board of Directors. The first installment was paid on April 29, 2005.

In addition, since our privatization in 1997, and following a recommendation from Valepar, our principal shareholder, we have distributed a minimum dividend equal to at least 50% of the amount of net income for distribution with respect to each fiscal year.

We may make distributions either in the form of dividends or in the form of interest on shareholders' equity. Dividends with respect to the American Depositary Shares, and to non-resident holders of common shares or preferred class A shares, will not be subject to Brazilian withholding tax, except for dividends declared based on profits generated prior to December 31, 1995. These dividends will be subject to Brazilian withholding tax at varying rates. Distributions of interest on shareholders' equity to shareholders, including holders of American depositary receipts, are currently subject to the applicable Brazilian law related to withholding tax. See *Item 10*. *Additional Information—Taxation—Brazilian Tax Considerations* 

By law, we are required to hold an annual shareholders' meeting by April 30 of each year at which an annual dividend may be declared. Additionally, our Board of Directors may declare interim dividends. Under the Brazilian Corporate Law, dividends are generally required to be paid to the holder of record on a dividend declaration date within 60 days following the date the dividend was declared, unless a shareholders' resolution sets forth another date of payment, which, in either case, must occur prior to the end of the fiscal year in which the dividend was declared. A shareholder has a three-year period from the dividend payment date to claim dividends (or payments of interest on

shareholders' equity) in respect of its shares, after which we will have no liability for such payments. From 1997 to 2003, all distributions took the form of interest on shareholders' equity. In 2004, part of the distribution was made in the form of interest on shareholders' equity and part as dividends. See *Item 10. Additional Information—Common Shares and Preferred Shares—Payments on Shareholders' Equity*.

We make cash distributions on the common shares and preferred class A shares underlying the American Depositary Shares in Brazilian currency to the custodian on behalf of the depositary. The custodian then converts such proceeds into U.S. dollars and causes such U.S. dollars to be delivered to the depositary for distribution to holders of American depositary receipts. For more information on Brazilian tax policies regarding dividend distributions, see *Item 10. Additional Information—Taxation—Brazilian Tax Considerations*.

The table below sets forth the cash distributions we paid to holders of common shares and preferred class A shares for the periods indicated. Amounts subsequent to August 19, 2004 reflect a 3 for 1 stock split that occurred in August 2004. We have calculated U.S. dollar conversions using the commercial selling rate in effect on the date of payment. We stated amounts gross of any applicable withholding tax.

Year	Payment Date	Reais per Share at Payment Date	U.S. Dollars per Share at Payment Date
2000	March 1	1.17	0.66
2001	February 20	3.33	1.66
	December 10	2.305	0.98
2002	April 30	2.305	0.98
	December 10	2.68	0.71
2003	April 30	1.62	0.56
	October 31	3.42	1.20
2004	April 30	2.06	0.70
	October 29 (1) (2)	1.27	0.45
2005	April 29 (2)	1.11	0.43

<sup>(1)</sup> On October 29, 2004, we paid 1.03 reais per share in interest on shareholders equity and 0.24 reais per share in dividends.

<sup>(2)</sup> Reflects a 3 for 1 stock split.

## Item 9. The Offer and Listing

#### **SHARE PRICE HISTORY**

The table below sets forth trading information for our preferred and common American Depositary Shares, as reported by the New York Stock Exchange (and for periods prior to June 2000, reported by the National Quotations Bureau, Inc.), and our preferred class A shares and our common shares, as reported by the BOVESPA, for the periods indicated. Share prices in the table for periods after August 19, 2004 (for our common and preferred shares) and after September 7, 2004 (for our common and preferred ADSs) reflect a 3 for 1 stock split.

		Reais per Common Share			i	Reais per Preferred Class A Share			U.S. Dollars per Preferred Class A American Depositary Share			U.S. Dollars per Common American Depositary Share				
		High		Low		High Low		High Lo		Low High		Low				
2000	R\$	52.40	R\$	33.00	R\$	59.00	R\$	38.82	US\$	33.13	US\$	19.75	US\$		US\$	_
2001		55.00		42.70		58.70		44.00		26.98		18.65		_		_
2002		109.00		50.00		102.20		50.90		29.51		20.51		30.00		21.75
2003		170.80		80.90		148.00		77.45		51.90		24.30		59.59		25.71
2004		77.50		43.33		64.19		37.67		24.38		12.10		29.01		14.08
1Q03		104.00		91.00		100.00		87.50		27.87		24.30		29.50		25.71
2Q03		91.99		80.90		88.78		77.45		28.70		25.66		30.80		26.85
3Q03		119.00		85.00		108.60		79.10		37.49		28.02		41.60		29.92
4Q03		170.80		121.50		148.00		108.79		51.90		37.35		59.59		42.00
1Q04		180.00		145.10		159.00		124.40		55.50		42.45		62.87		49.96
2Q04		163.92		129.99		142.74		113.01		49.77		36.30		57.09		42.24
3Q04 (1)		65.00		47.00		55.50		39.38		19.41		12.88		22.66		15.47
4Q04		77.50		58.50		64.19		50.61		24.38		17.68		29.01		20.32
1Q05		95.75		71.00		79.02		59.50		30.00		22.05		36.55		26.05
December 2004		77.50		65.00		64.19		54.20		24.38		19.77		29.01		23.70
January 2005		81.75		71.00		69.18		59.50		25.76		22.05		30.69		26.05
February 2005		95.75		75.71		78.79		64.58		30.00		24.59		36.55		29.00
March 2005		95.50		80.20		79.02		68.20		29.74		25.01		36.10		29.61
April 2005		84.50		67.70		72.00		58.10		26.90		22.50		32.00		26.60
May 2005		95.75		64.00		61.25		55.00		29.70		25.60		25.40		21.93

<sup>(1) 3</sup> for 1 stock split took place during this quarter.

Source: Bloomberg LLP.

# TRADING MARKETS

Our publicly traded share capital consists of common shares and preferred class A shares, each without par value. Our common shares and our preferred class A shares are publicly traded in Brazil on BOVESPA, under the ticker symbols VALE3 and VALE5, respectively. Our common shares and preferred class A shares also trade on the LATIBEX, under the ticker symbols XVALO and XVALP, respectively. The LATIBEX is an electronic market created in 1999 by the Madrid stock exchange in order to enable trading of Latin American equity securities in euro denomination.

On December 12, 2003, we agreed to comply with heightened corporate governance and disclosure requirements established by the BOVESPA in order to qualify as a company admitted to BOVESPA's "Level 1 of Corporate Governance Requirements."

To become a Level 1 company, an issuer must agree to:

- ensure that shares of the issuer representing 25% of its total capital are effectively available for trading;
- adopt offering procedures that favor widespread ownership of shares whenever making a public offering;
- comply with minimum quarterly disclosure standards;
- follow stricter disclosure policies with respect to transactions made by controlling shareholders, directors and officers involving securities issued by the issuer;

- disclose any existing shareholders' agreements and stock option plans; and
- make a schedule of corporate events available to the shareholders.

Our common American Depositary Shares, each representing one common share, have been traded on the New York Stock Exchange since March 2002, under the ticker symbol RIO. Our preferred American Depositary Shares, each representing one preferred class A share, have been traded on the New York Stock Exchange since June 2000, under the ticker symbol RIOPR. Since 1994, the preferred class A American Depositary Shares traded in the overthe-counter market. JPMorgan Chase Bank serves as the depositary for both the common and the preferred American Depositary Shares. At April 30, 2005, there were 383,989,885 American Depositary Shares outstanding, representing 43.9% of our preferred class A shares, 27.4% of our common shares or 33.3% of our total share capital.

## Item 10. Additional Information

# MEMORANDUM AND ARTICLES OF ASSOCIATION

## **Company Objects and Purposes**

Our corporate purpose is defined by our bylaws to include:

- the exploitation of mineral deposits in Brazil and abroad by means of extraction, processing, industrialization, transportation, shipment and commerce of mineral goods;
- the building and operation of railways and the exploitation of own or third-party rail traffic;
- the building and operation of own or third-party maritime terminals, and the exploitation of nautical activities for the provision of support within the harbor;
- the provision of logistics services integrated with cargo transport, comprising generation, storage, transshipment, distribution and delivery within the context of a multimodal transport system;
- the production, processing, transport, industrialization and commerce of all and any source and form of
  energy, also involving activities of production, generation, transmission, distribution and commerce of its
  products, derivatives and sub products;
- the carrying-on, in Brazil or abroad, of other activities that may be of direct or indirect consequence for the
  achievement of its corporate purpose, including research, industrialization, purchase and sale, importation
  and exportation, the exploitation, industrialization and commerce of forest resources and the provision of
  services of any kind whatsoever; and
- constituting or participating in any fashion in other companies, consortia or associations directly or indirectly related to its business purpose.

# **Directors' Powers**

Under the Brazilian Corporate Law, if a director or an executive officer has a conflict of interest with the company in connection with any proposed transaction, the director or executive officer may not vote in any decision of the Board of Directors or of the board of executive officers regarding such transaction and must disclose the nature and extent of the conflicting interest for transcription in the minutes of the meeting. In any case, a director or an executive officer may not transact any business with the company, including any borrowings, except on reasonable or fair terms and conditions that are identical to the terms and conditions prevailing in the market or offered by third parties. Under our bylaws, shareholders set the aggregate compensation payable to directors and executive officers. The Board of Directors allocates the compensation among its members and the executive officers. See *Item 6. Directors, Management and Employees—Compensation*. Our bylaws do not establish any mandatory retirement age limits.

#### **COMMON SHARES AND PREFERRED SHARES**

Set forth below is certain information concerning our authorized and issued share capital and a brief summary of certain significant provisions of our bylaws and the Brazilian Corporate Law. This description does not purport to be complete and is qualified by reference to our bylaws (an English translation of which has been filed with the SEC) and to the Brazilian Corporate Law.

#### General

Our bylaws authorize the issuance of up to 900 million common shares and up to 1,800 million preferred class A shares, in each case based solely on the approval of the Board of Directors without any additional shareholder approval.

Each common share entitles the holder thereof to one vote at meetings of our shareholders. Holders of common shares are not entitled to any preference relating to our dividends or other distributions.

Holders of preferred class A shares and the golden shares are generally entitled to the same voting rights as holders of common shares, except with respect to the election of members of the Board of Directors, and are entitled to a minimum annual non-cumulative preferential dividend of (i) at least 3% of the book value per share, calculated in accordance with the financial statements, which serve as reference for the payment of dividends, or (ii) 6% of their pro rata share of our paid-in capital, whichever is higher. Non-controlling shareholders holding common shares representing at least 15% of our voting capital, and preferred class A shares representing at least 10% of our total share capital, have the right to appoint each one member and an alternate to our Board of Directors. If no group of common or preferred class A shareholders meets the thresholds described above, shareholders holding preferred class A or common shares representing at least 10% of our total share capital are entitled to combine their holdings to appoint one member and an alternate to our Board of Directors. Holders of preferred class A shares and the golden shares may elect one member of the permanent fiscal council and the respective alternate. Non-controlling holders of common shares comprising at least 10% of the common shares outstanding may also elect one member of the fiscal council and an alternate.

The Brazilian government holds three golden shares in us. The golden shares are preferred shares that entitles its holder to the same rights (including with respect to voting and dividend preference) as holders of preferred class A shares. In addition, the holder of the golden shares is entitled to veto any proposed action relating to the following matters:

- (1) a change in our name;
- (2) a change in the location of our head office;
- (3) a change in our corporate purpose as regards the mining activities;
- (4) any liquidation of our company;
- (5) any disposal or winding up of activities of any one or more of the following stages of our iron ore mining integrated systems:
  - (a) mineral deposits, ore deposits, mines;
  - (b) railways; or
  - (c) ports and maritime terminals;
- (6) any change in the bylaws relating to the rights accorded to the classes of capital stock issued by us; and
- (7) any change in the bylaws relating to the rights accorded the golden shares.

#### **Calculation of Distributable Amount**

At each annual shareholders' meeting, the Board of Directors is required to recommend, based on the executive officers' proposal, how to allocate our earnings for the preceding fiscal year. For purposes of the Brazilian Corporate Law, a company's net income after income taxes and social contribution taxes for such fiscal year, net of any accumulated losses from prior fiscal years and amounts allocated to employees' and management's participation in earnings represents its "net profits" for such fiscal year. In accordance with the Brazilian Corporate Law, an amount equal to our "net profits," as further reduced by amounts allocated to the legal reserve, to the contingency reserve or to the unrealized income reserve established by us in compliance with applicable law (discussed below) and increased by reversals of reserves constituted in prior years, will be available for distribution to shareholders in any particular year. Such amount, the adjusted net profits, is herein referred to as the distributable amount. We may also establish discretionary reserves, reserves for investment projects and fiscal investment reserves, as discussed below.

*Legal reserve.* Under the Brazilian Corporate Law, we are required to maintain a legal reserve to which we must allocate 5% of our "net profits" for each fiscal year until the amount of the reserve equals 20% of our paid-in capital. Net losses, if any, may be charged against the legal reserve.

Discretionary reserves. Under the Brazilian Corporate Law, a company may also provide for discretionary allocations of "net profits" to the extent set forth in its bylaws. Our bylaws provide for one discretionary depletion reserve, which may be taken into account in allocating net profits for any fiscal year. We currently maintain a tax incentive depletion reserve established in respect of certain mining operations. Appropriations to the tax incentive depletion reserve are deductible for tax purposes. The discretionary depletion reserve has not been used since 1996, when the related tax incentive expired. For more details, see Note 16 to our consolidated financial statements. There are no limits on the size or amount of proceeds that may be retained in the discretionary depletion reserve. However, the sum of the legal reserve, the depletion reserve and the reserve for investment projects may not exceed the amount of our paid-in capital.

Contingency reserve. Under the Brazilian Corporate Law, a portion of our "net profits" may also be discretionally allocated to a "contingency reserve" for an anticipated loss that is deemed probable in future years. Any amount so allocated in a prior year must be either reversed in the fiscal year in which the loss was anticipated if such loss does not in fact occur or charged off in the event that the anticipated loss occurs. We have never allocated an amount to the contingency reserve.

Reserve for investment projects. Under the Brazilian Corporate Law, we may allocate a portion of our "net profits" for discretionary appropriations for plant expansion and other capital investment projects, the amount of which is based on a capital budget previously presented by management and approved by shareholders. Under Law No. 10,303/2001, capital budgets with a duration longer than one year must be reviewed at each annual shareholders' meeting. After completion of the relevant capital projects, we may retain the appropriation until shareholders vote to transfer all or a portion of the reserve to capital or retained earnings.

Unrealized income reserve. As of March 1, 2002, under Law No. 10,303/2001, which amended the Brazilian Corporate Law, the amount by which the mandatory dividend exceeds the "realized" portion of net profits for any particular year may be allocated to the unrealized income reserve. The "realized" portion of net profits is the amount by which "net profits" exceed the sum of (i) our net positive results, if any, from the equity method of accounting for earnings and losses of our subsidiaries and certain affiliates, and (ii) the profits, gains or return obtained on transactions completed after the end of the following fiscal year.

*Tax incentive investment reserve*. Under the Brazilian tax laws, a portion of "net profits" may also be allocated to a general "tax incentive investment reserve" in amounts corresponding to reductions in our income tax generated by credits for particular government-approved investments.

The Brazilian Corporate Law provides that all discretionary allocations of "net profits," including discretionary reserves, the contingency reserve, the unrealized income reserve and the reserve for investment projects, are subject to approval by the shareholders voting at the annual meeting and can be transferred to capital or used for the payment of dividends in subsequent years. The fiscal incentive investment reserve and legal reserve are also subject to approval by the shareholders voting at the annual meeting and may be transferred to capital but are not available for the payment of dividends in subsequent years.

Our calculation of "net profits" and allocations to reserves for any fiscal year are determined on the basis of financial statements prepared in accordance with the Brazilian Corporate Law. Our consolidated financial statements have been prepared in accordance with U.S. GAAP and, although our allocations to reserves and dividends will be reflected in these financial statements, investors will not be able to calculate such allocations or required dividend amounts from our consolidated financial statements.

#### **Mandatory Dividend**

Our bylaws prescribe that we must distribute to our shareholders in the form of dividends or interest on shareholders' equity an annual amount equal to not less than 25% of the distributable amount, referred to as the mandatory dividend, unless the Board of Directors advises our shareholders at our general shareholders' meeting that payment of the mandatory dividend for the preceding year is inadvisable in light of our financial condition. The fiscal council must review any such determination and report it to the shareholders. In addition to the mandatory dividend, our Board of Directors may recommend to the shareholders payment of dividends from other funds legally available therefore. Any payment of interim dividends will be netted against the amount of the mandatory dividend for that fiscal year. The shareholders must also approve the recommendation of the Board of Directors with respect to any required distribution. The amount of the mandatory dividend is subject to the size of the legal reserve, the contingency reserve, and the unrealized income reserve. The amount of the mandatory dividend is not subject to the size of the discretionary depletion reserve. See *Item 10. Additional Information—Common Shares and Preferred Shares—Calculation of Distributable Amount.* To date, our Board of Directors has never determined that payment of the mandatory dividend was inadvisable.

Since our privatization in 1997, and following a recommendation from Valepar, our principal shareholder, we have distributed a dividend equal to at least 50% of the amount of net income for distribution with respect to each fiscal year.

In November 2002, our Board of Directors approved a new dividend policy. See *Item 8. Financial Information—Dividends and Interest on Shareholders' Equity.* 

# **Dividend Preference of Preferred Shares**

Pursuant to our bylaws, holders of preferred class A shares and the golden shares are entitled to a minimum annual non-cumulative preferential dividend equal to (i) at least 3% of the book value per share, calculated in accordance with the financial statements which serve as reference for the payment of dividends, or (ii) 6% of their pro rata share of our paid-in capital, whichever is higher. To the extent that we declare dividends in any particular year in amounts which exceed the preferential dividends on preferred class A shares, and after holders of common shares have received distributions equivalent, on a per share basis, to the preferential dividends on preferred class A shares, holders of common shares and preferred class A shares shall receive the same additional dividend amount per share. Since the first step of our privatization in 1997, we have had sufficient distributable amounts to be able to distribute equal amounts to both common and preferred shareholders.

# Other Matters Relating to Preferred Class A Shares

Our bylaws do not provide for the conversion of preferred class A shares into common shares. In addition, the preferred class A shares do not have any preference upon our liquidation and there are no redemption provisions associated with the preferred class A shares.

# Payments on Shareholders' Equity

Pursuant to a change in Brazilian tax law effective January 1, 1996, Brazilian companies are permitted to pay limited amounts to shareholders and treat such payments as an expense for Brazilian income tax purposes. In accordance with Law No. 9,249 dated December 26, 1995, our bylaws provide for the distribution of interest on shareholders' equity as an alternative form of payment to shareholders. The interest rate applied is limited to the Brazilian long-term interest rate, or TJLP, for the applicable period. The deduction of the amount of interest paid cannot exceed the greater of (1) 50% of net income (after the deduction of the provision of social contribution on net profits and before the deduction of the provision of the corporate income tax) before taking into account any such distribution for the period in respect of which the payment is made or (2) 50% of the sum of retained earnings and profit reserves. Any payment of interest on shareholders' equity to shareholders is subject to Brazilian withholding

income tax at the rate of 15%, except for a beneficiary located in a tax haven jurisdiction (*i.e.* a country that does not impose income tax or that imposes it at a maximum rate lower than 20%), in which case the rate is 25%. Under our bylaws, the amount paid to shareholders as interest on shareholders' equity (net of any withholding tax) may be included as part of any mandatory and minimum dividend. Under the Brazilian Corporate Law, we are obligated to distribute to shareholders an amount sufficient to ensure that the net amount received, after payment by us of applicable Brazilian withholding taxes in respect of the distribution of interest on shareholders' equity, is at least equal to the mandatory dividend.

#### **Voting Rights**

Each common share entitles the holder thereof to one vote at meetings of our shareholders. Holders of preferred class A shares are entitled to the same voting rights as holders of common shares except that they may not vote on the election of members of the Board of Directors, except in the event of dividend arrearages, as described below. One of the members of the permanent fiscal council and his or her alternate are elected by majority vote of the holders of preferred class A shares. Holders of preferred class A shares and common shares may, in certain circumstances, combine their respective holdings to elect members of our Board of Directors.

The golden shares entitle the holder thereof to the same voting rights as holders of preferred class A shares. The golden shares also confer certain other significant voting rights in respect of particular actions, as described under *Item 10. Additional Information—Common Shares and Preferred Shares—General.* 

The Brazilian Corporate Law provides that non-voting or restricted-voting shares, such as the preferred class A shares, acquire unrestricted voting rights beginning when a company has failed for three consecutive fiscal years (or for any shorter period set forth in a company's constituent documents) to pay any fixed or minimum dividend to which such shares are entitled and continuing until payment thereof is made. Our bylaws do not set forth any such shorter period.

Any change in the preferences or advantages of our preferred class A shares, or the creation of a class of shares having priority over the preferred class A shares, would require the approval of holders of a majority of the outstanding preferred class A shares, voting as a class at a special meeting.

# Shareholders' Meetings

A general shareholders' meeting convenes each year to decide all matters relating to our corporate purposes and to pass such resolutions as they deem necessary for our protection and well being.

Pursuant to the Brazilian Corporate Law, shareholders voting at a general shareholders' meeting have the power, among other powers, to:

- amend the bylaws;
- elect or dismiss members of the Board of Directors and members of the fiscal council at any time;
- receive annual reports by management and accept or reject management's financial statements and
  recommendations including the allocation of net profits and the distributable amount for payment of the
  mandatory dividend and allocation to the various reserve accounts;
- authorize the issuance of debentures;
- suspend the rights of a shareholder in default of obligations established by law or by the bylaws;
- accept or reject the valuation of assets contributed by a shareholder in consideration for issuance of capital stock;
- pass resolutions to reorganize our legal form, to merge, consolidate or split us, to dissolve and liquidate us, to elect and dismiss our liquidators and to examine their accounts; and

• authorize management to file for bankruptcy or to request a *concordata*.

All shareholders' meetings, including the annual shareholders' meeting, are convened by publishing, no fewer than fifteen days prior to the scheduled meeting date and no fewer than three times, a notice in the *Diário Oficial do Estado do Rio de Janeiro* and in a newspaper with general circulation in the city where we have our registered office, which is Rio de Janeiro. Our shareholders have previously designated *Jornal do Commercio* for this purpose. Also, as our shares are traded on BOVESPA, we must publish a notice in a São Paulo based newspaper. Such notice must contain the agenda for the meeting and, in the case of an amendment to our bylaws, an indication of the subject matter. In addition, under our bylaws, the holder of the golden share is entitled to a minimum of 15 days prior formal notice to its legal representative of any general shareholders' meeting to consider any proposed action subject to the veto rights accorded to the golden shares. See *Item 10. Additional Information—Common Shares and Preferred Shares—General*.

A shareholders' meeting may be held if shareholders representing at least one-quarter of the voting capital are present. If no such quorum is present, notice must again be given in the same manner as described above except for the eight-days prior notice, and a meeting may then be convened without any specific quorum requirement, subject to the minimum quorum and voting requirements for certain matters, as discussed below. A shareholder without a right to vote may attend a general shareholders' meeting and take part in the discussion of matters submitted for consideration.

Except as otherwise provided by law, resolutions of a shareholders' meeting are passed by a simple majority vote, abstentions not being taken into account. Under the Brazilian Corporate Law, the approval of shareholders representing at least one-half of the issued and outstanding voting shares is required for the types of action described below, as well as, in the case of clause (a) and clause (b), a majority of issued and outstanding shares of the affected class:

- (a) creating a new class of preferred shares or disproportionately increasing an existing class of preferred shares relative to the other classes of shares, other than to the extent permitted by the bylaws;
- (b) changing a priority, preference, right, privilege or condition of redemption or amortization of any class of preferred shares or creating any class of non-voting preferred shares that has a priority, preference, right, condition or redemption or amortization superior to an existing class of shares, such as the preferred shares;
  - (c) reducing the mandatory dividend;
  - (d) changing the corporate purposes;
  - (e) merging us with another company or consolidating or splitting us;
  - (f) dissolving or liquidating us;
  - (g) participating in a centralized group of companies as defined under the Brazilian Corporate Law; and
  - (h) canceling any ongoing liquidation of us.

Whenever the shares of any class of capital stock are entitled to vote, each share is entitled to one vote. Annual shareholders' meetings must be held by April 30 of each year. Shareholders' meetings are called, convened and presided over by the Chairman or by the Vice-Chairman of our Board of Directors. A shareholder may be represented at a general shareholders' meeting by an attorney-in-fact appointed not more than one year before the meeting, who must be a shareholder, a company officer or a lawyer. For a public company, such as us, the attorney-in-fact may also be a financial institution.

## **Redemption Rights**

Our common shares and preferred class A shares are not redeemable, except that a dissenting shareholder is entitled under the Brazilian Corporate Law to obtain redemption upon a decision made at a shareholders' meeting by shareholders representing at least 50% of the voting shares:

- (1) to create a new class of preferred shares or to disproportionately increase an existing class of preferred shares relative to the other classes of shares (unless such actions are provided for or authorized by the bylaws);
- (2) to modify a preference, privilege or condition of redemption or amortization conferred on one or more classes of preferred shares, or to create a new class with greater privileges than the existing classes of preferred shares;
- (3) to reduce the mandatory distribution of dividends;
- (4) to change our corporate purposes;
- (5) to merge us with another company or consolidate us;
- (6) to transfer all of our shares to another company in order to make us a wholly owned subsidiary of such company, an *incorporação de ações*;
- (7) to approve the acquisition of control of another company at a price which exceeds certain limits set forth in the Brazilian Corporate Law;
- (8) to approve our participation in a centralized group of companies as defined under the Brazilian Corporate Law; or
- (9) in the event that the entity resulting from (a) a merger, (b) an *incorporação de ações* as described in clause (6) above or (c) a spin-off that we conduct fails to become a listed company within 120 days of the general shareholders' meeting at which such decision was taken.

Only holders of shares adversely affected by the changes mentioned in items (1) and (2) above may require us to redeem their shares. The right of redemption mentioned in items (5), (6) and (8) above may only be exercised if our shares do not satisfy certain tests of liquidity at the time of the shareholder resolution. The right of redemption lapses 30 days after publication of the minutes of the relevant general shareholders' meeting, unless, in the case of items (1) and (2) above, the resolution is subject to confirmation by the preferred shareholders (which must be made at a special meeting to be held within one year), in which case the 30-day term is counted from the publication of the minutes of the special meeting.

We would be entitled to reconsider any action giving rise to redemption rights within 10 days following the expiration of such rights if the redemption of shares of dissenting shareholders would jeopardize our financial stability. Law No. 9,457 dated May 5, 1997, which amended the Brazilian Corporate Law, contains provisions, which, among other provisions, restrict redemption rights in certain cases and allow companies to redeem their shares at their economic value, subject to certain requirements. Our bylaws currently do not provide that our capital stock will be redeemable at its economic value and, consequently, any redemption pursuant to the Brazilian Corporate Law would be made at no less than the book value per share, determined on the basis of the last balance sheet approved by the shareholders; *provided* that if the general shareholders' meeting giving rise to redemption rights occurred more than 60 days after the date of the last approved balance sheet, a shareholder would be entitled to demand that his or her shares be valued on the basis of a new balance sheet dated within 60 days of such general shareholders' meeting.

# **Preemptive Rights**

Each of our shareholders has a general preemptive right to subscribe for shares in any capital increase, in proportion to his or her shareholding. A minimum period of 30 days following the publication of notice of a capital increase is allowed for the exercise of the right and the right is negotiable. Under our bylaws, our Board of Directors may decide not to extend preemptive rights to our shareholders or, under Law No. 10,303/2001, to reduce the 30-day period for the exercise of preemptive rights, in each case with respect to any issuance of shares, debentures convertible into shares and warrants in the context of a public offering, subject to the limit on the number of shares that may be issued with the approval of the board without any additional shareholder approval. In the event of a capital increase that would maintain or increase the proportion of capital represented by preferred class A

shares, holders of preferred American depositary receipts will have preemptive rights to subscribe only to newly issued preferred class A shares. In the event of a capital increase that would reduce the proportion of capital represented by preferred class A shares, shareholders will have preemptive rights to subscribe for preferred class A shares, in proportion to their shareholdings, and for common shares only to the extent necessary to prevent dilution of their overall interest in us. In the event of a capital increase that would maintain or increase the proportion of capital represented by common shares, shareholders will have preemptive rights to subscribe only to newly issued common shares. In the event of a capital increase that would reduce the proportion of capital represented by common shares, holders of common shares will have preemptive rights to subscribe for preferred class A shares only to the extent necessary to prevent dilution of their overall interest in us.

#### Tag-along rights

According to the Brazilian Corporate Law, in the event of a sale of control of the Company, the acquirer is obliged to offer to holders of common voting shares the right to sell their shares for a price equal to at least 80% of the price paid for the common voting shares representing control.

## Form and Transfer

Our preferred class A shares and common shares are in book-entry form registered in the name of each shareholder or its nominee. The transfer of such shares is made under the Brazilian Corporate Law, which provides that a transfer of shares is effected by our transfer agent, Banco Bradesco S.A., upon presentation of valid share transfer instructions to us by a transferor or its representative. When preferred shares or common shares are acquired or sold on a Brazilian stock exchange, the transfer is effected on the records of our transfer agent by a representative of a brokerage firm or the stock exchange's clearing system. Transfers of shares by a foreign investor are made in the same way and are executed by the investor's local agent, who is also responsible for updating the information relating to the foreign investment furnished to the Central Bank.

BOVESPA operates a central clearing system through *Companhia Brasileira de Liquidação e Custódia*, or CBLC. A holder of our shares may participate in this system and all shares elected to be put into the system will be deposited in custody with CBLC (through a Brazilian institution that is duly authorized to operate by the Central Bank and maintains a clearing account with CBLC). The fact that such shares are subject to custody with the relevant stock exchange will be reflected in our registry of shareholders. Each participating shareholder will, in turn, be registered in the register of our beneficial shareholders that is maintained by CBLC and will be treated in the same way as registered shareholders.

# **MATERIAL CONTRACTS**

For information concerning our material contracts, see *Item 4. Information on the Company* and *Item 5. Operating and Financial Review and Prospects.* 

# EXCHANGE CONTROLS AND OTHER LIMITATIONS AFFECTING SECURITY HOLDERS

There are no restrictions on ownership of our capital stock by individuals or legal entities domiciled outside Brazil. However, the right to convert dividend payments and proceeds from the sale of preferred class A shares or common shares into foreign currency and to remit such amounts outside Brazil is subject to restrictions under foreign investment legislation which generally requires, among other things, that the relevant investment be registered with the Central Bank. These restrictions on the remittance of foreign capital abroad could hinder or prevent the custodian for the preferred class A shares or common shares represented by American Depositary Shares, or holders who have exchanged American Depositary Shares for preferred class A shares or common shares, from converting dividends, distributions or the proceeds from any sale of preferred class A shares or common shares, as the case may be, into U.S. dollars and remitting such U.S. dollars abroad. Delays in, or refusal to grant any required government approval for conversions of Brazilian currency payments and remittances abroad of amounts owed to holders of American Depositary Shares could adversely affect holders of American depositary receipts.

Under Resolution No. 2,689/2000, foreign investors may invest in almost all financial assets and engage in almost all transactions available in the Brazilian financial and capital markets, provided that certain requirements are fulfilled. In accordance with Resolution No. 2,689/2000, the definition of foreign investor includes individuals, legal entities, mutual funds and other collective investment entities, domiciled or headquartered abroad.

Under Resolution No. 2,689/2000, a foreign investor must:

- appoint at least one representative in Brazil, with powers to perform actions relating to its investment,
- complete the appropriate foreign investor registration form,
- register as a foreign investor with the CVM, and
- register its foreign investment with the Central Bank.

Securities and other financial assets held by foreign investors pursuant to Resolution No. 2,689/2000 must be registered or maintained in deposit accounts or under the custody of an entity duly licensed by the Central Bank or the CVM. In addition, securities trading is restricted to transactions carried out on stock exchanges or through organized over-the-counter markets licensed by the CVM, except for subscription, bonification, conversion of debentures into shares, securities indexes, purchase and sale of investment funds quotas and, if permitted by the CVM, going private transactions, canceling or suspension of trading. Moreover, the offshore transfer or assignment of the securities or other financial assets held by foreign investors pursuant to Resolution No. 2,689/2000 are prohibited, except for transfers resulting from a corporate reorganization, or occurring upon the death of an investor by operation of law or will.

Resolution No. 1,927/1992 of the National Monetary Council, which is the restated and amended Annex V to Resolution No. 1,289/1997, which we call the Annex V Regulations, provides for the issuance of depositary receipts in foreign markets in respect of shares of Brazilian issuers. It provides that the proceeds from the sale of American Depositary Shares by holders of American depositary receipts outside Brazil are free of Brazilian foreign investment controls and holders of American Depositary Shares who are not resident in a tax haven jurisdiction (*i.e.* a country or location that does not impose taxes on income or where the maximum income tax rate is lower than 20%, or where the legislation imposes restrictions on disclosure of the shareholding composition or the ownership of the investment) will be entitled to favorable tax treatment.

An electronic registration has been issued by the custodian in the name of JPMorgan Chase Bank, the depositary, with respect to the American Depositary Shares. Pursuant to this electronic registration, the custodian and the depositary are able to convert dividends and other distributions with respect to the preferred class A shares or common shares represented by American Depositary Shares into foreign currency and to remit the proceeds outside Brazil. If a holder exchanges American Depositary Shares for preferred class A shares or common shares, the holder may continue to rely on the custodian's electronic registration for only five business days after the exchange. After that, the holder must seek to obtain its own electronic registration with the Central Bank under Law No. 4,131/1962 or Resolution No. 2,689/2000. Thereafter, unless the holder has registered its investment with the Central Bank, such holder may not convert into foreign currency and remit outside Brazil the proceeds from the disposition of, or distributions with respect to, such preferred class A shares or common shares. A holder that obtains an electronic registration generally will be subject to less favorable Brazilian tax treatment than a holder of American Depositary Shares. See *Item 10. Additional Information—Taxation—Brazilian Tax Considerations*.

As of March 14, 2005, there is a single foreign exchange market in Brazil. Foreign currencies may only be purchased through a Brazilian bank authorized to operate in this market. In the past, under Brazilian regulations, foreign exchange transactions were carried out on either the commercial rate exchange market or the floating rate exchange market. Rates in the two markets were generally the same. Although rates are freely negotiated in the foreign exchange market, they may be strongly influenced by the Central Bank's intervention. See *Item 3. Key Information—Exchange Rates*.

Under Brazilian law, whenever there is a serious imbalance in Brazil's balance of payments or reasons to foresee a serious imbalance, the Brazilian government may impose temporary restrictions on the remittance to foreign investors of the proceeds of their investments in Brazil, and on the conversion of Brazilian currency into foreign currencies. Such restrictions may hinder or prevent the custodian or holders who have exchanged American

Depositary Shares for underlying preferred class A shares or common shares from converting distributions or the proceeds from any sale of such shares, as the case may be, into U.S. dollars and remitting such U.S. dollars abroad.

#### **TAXATION**

The following summary contains a description of the principal Brazilian and U.S. federal income tax consequences of the ownership and disposition of preferred class A shares, common shares or American Depositary Shares. You should know that it does not purport to be a comprehensive description of all the tax considerations that may be relevant to a holder of preferred class A shares, common shares or American Depositary Shares.

Holders of preferred class A shares, common shares, or American Depositary Shares should consult their own tax advisors to discuss the tax consequences of the purchase, ownership and disposition of preferred class A shares, common shares or American Depositary Shares, including, in particular, the effect of any state, local or other national tax laws.

Although there is at present no income tax treaty between Brazil and the United States, the tax authorities of the two countries have had discussions that may result in such a treaty. We cannot predict whether or when such a treaty will enter into force or how it will affect the U.S. holders, as defined below, of preferred class A shares, common shares, or American Depositary Shares.

## **Brazilian Tax Considerations**

The following discussion summarizes the principal Brazilian tax consequences of the acquisition, ownership and disposition of preferred class A shares, common shares or American Depositary Shares by a holder not deemed to be domiciled in Brazil for purposes of Brazilian taxation ("non-Brazilian holder"). It is based on the tax laws of Brazil and regulations thereunder in effect on the date hereof, which are subject to change (possibly with retroactive effect). This discussion does not specifically address all of the Brazilian tax considerations applicable to any particular non-Brazilian holder. Therefore, each non-Brazilian holder should consult his or her own tax advisor concerning the Brazilian tax consequences of an investment in preferred class A shares, common shares, or American Depositary Shares.

Taxation of dividends. Dividends, including dividends paid in kind, paid by us from profits of periods beginning on or after January 1, 1996 (1) to the depositary in respect of the preferred class A shares or common shares underlying the American Depositary Shares or (2) to a non-Brazilian holder in respect of preferred class A shares or common shares will generally not be subject to Brazilian withholding income tax. Dividends paid from profits generated before January 1, 1996 may be subject to Brazilian withholding income tax at varying rates depending on the year the profits were generated, except in the case of stock dividends, which are not subject to withholding income tax in Brazil unless we redeem the stock within five years from such distribution or the non-Brazilian holder sells the stock in Brazil within this five-year period.

Distributions of interest on shareholders' equity. Since January 1, 1996, Brazilian corporations may attribute interest on shareholders' equity as an alternative form of making dividend distributions, which they may pay in cash. They base the calculation on shareholders' equity as stated in the statutory accounting records. The interest rate applied may not exceed the TJLP as determined by the Central Bank of Brazil from time to time. Also, the amount paid may not be higher, for tax purposes, than the greater of (1) 50% of net income (after the deduction of the provision of social contribution on net profits but before taking into account such payment of interest and the provision of corporate income tax) for the relevant period or (2) 50% of the sum of retained earnings and profit reserves as of the beginning of the year in respect of which the payment is made.

The amount of interest attributed to shareholders is deductible for corporate income tax and social contribution on net profit purposes, as far as the limits described above are observed. Therefore, the benefit to us, as opposed to making a dividend payment, is a reduction in our corporate taxes charge equivalent to 34% of such amount. Subject to certain limitations, income tax is withheld from the shareholders on interest payments at the rate of 15%, except if the beneficiary is exempt from tax in Brazil, which payments are free of Brazilian tax, and except if the beneficiary is located in a tax haven jurisdiction (as defined below), in which case the applicable rate is 25%.

Taxation of capital gains. For purposes of Brazilian taxation, two types of non-Brazilian holders should be considered: (1) non-Brazilian holders that are not resident or domiciled in tax haven jurisdictions (as defined below),

which are registered before the Central Bank of Brazil and the CVM to invest in Brazil in accordance with Resolution No. 2,689 or are holders of American Depositary Shares; and (2) other non-Brazilian holders, which include any and all non-residents in Brazil who invest in the country through any other means and all type of investors that are located in a tax haven jurisdiction (i.e., a jurisdiction that does not impose income tax or where the maximum income tax rate is lower than 20% and/or where internal legislation imposes restrictions on the disclosure of share or investment ownership),. The investors identified in item (1) are subject to a favorable tax treatment, as described below.

According to the Law No. 10,833, dated December 29, 2003, capital gains earned abroad derived from the disposition of assets located in Brazil by non-residents to other non-residents may become subject to taxation in Brazil. Although we believe that the ADSs do not fall within the definition of assets located in Brazil for the purposes of this rule, considering the general and unclear scope of the rule and the lack of judicial court rulings in respect thereto, we are unable to predict whether such understanding will ultimately prevail in the courts of Brazil.

The deposit of preferred class A shares or common shares in exchange for American Depositary Shares is not subject to Brazilian income tax if the preferred class A shares or common shares are registered under Resolution No. 2,689 and the respective holder is not located in a tax haven jurisdiction. If the preferred class A shares or common shares are not registered, or if they are registered but the respective holder is located in a tax haven jurisdiction, the deposit of preferred class A shares or common shares in exchange for American Depositary Shares may be subject to Brazilian capital gains tax at the rate of 15%, or 25% in the case of a resident of a tax haven jurisdiction. The withdrawal of preferred class A shares or common shares in exchange for American Depositary Shares is not subject to Brazilian income tax.

Non-Brazilian holders are subject to income tax imposed at a rate of 15%, or 25% in the case of a resident of a tax haven jurisdiction, on gains realized on sales or dispositions of preferred class A shares or common shares other than on the Brazilian stock, future and commodities exchange. With reference to proceeds of a redemption or of a liquidating distribution with respect to the preferred class A shares or common shares, the difference between the amount received and the acquisition cost of the corresponding shares will be treated as a sale or disposition carried out outside of the Brazilian stock, future and commodities exchange.

Gains realized arising from transactions on a Brazilian stock, future and commodities exchange, by an investor under Resolution No. 2,689 and not located in a tax haven jurisdiction are exempt from income tax. The preferential treatment under Resolution No. 2,689 is no longer applicable if the non-Brazilian holder of preferred class A shares or common shares is resident in a tax haven jurisdiction or if the non-Brazilian holder invest in preferred class A shares or common shares through any mechanism different from the Resolution No. 2,689. As a consequence, gains realized on transactions performed by such holder on the Brazilian stock, futures and commodities exchange are subject to income tax at a rate of 15%, being also subject to a withholding income tax of 0.005% on the value of the transaction (to be offset against tax due on eventual capital gains).

Therefore, non-Brazilian holders are subject to income tax imposed at a rate of 15% on gains realized on sales or dispositions of preferred class A shares or common shares that occur on a Brazilian stock, future and commodities exchange unless such sale or disposition is made by a non-Brazilian holder who is not resident in a tax haven jurisdiction and (1) such sale is made within five business days of the withdrawal of such common shares in exchange for American Depositary Shares and the proceeds thereof are remitted abroad within such five-day period, or (2) such sale is made under Resolution No. 2,689 by a registered non-Brazilian holder who obtains registration with the Brazilian securities commission, in which cases the non-Brazilian holder is exempt from income tax.

The gain realized as a result of a transaction on a Brazilian stock, future and commodities exchange is the difference between the amount in Brazilian currency realized on the sale or disposition and the acquisition cost, without any correction for inflation, of the shares sold. It is possible that the current preferential treatment for holders of American depositary receipts and non-Brazilian holders of preferred class A shares and common shares under Resolution No. 2,689 will not continue in the future.

Any exercise of preemptive rights relating to the preferred class A shares or common shares will not be subject to Brazilian taxation. Any gain on the transaction will be subject to Brazilian income taxation according to the same rules applicable to the sale or disposition of preferred class A shares or common shares.

Other Brazilian taxes. There are no Brazilian inheritance, gift or succession taxes applicable to the ownership, transfer or disposition of preferred class A shares or common shares or American Depositary Shares by a non-Brazilian holder, except for gift and inheritance taxes which are levied by some states of Brazil on gifts made or inheritances bestowed by individuals or entities not resident or domiciled in Brazil or in the relevant State to individuals or entities resident or domiciled within such state in Brazil. There are no Brazilian stamp, issue, registration, or similar taxes or duties payable by holders of preferred class A shares or common shares or American Depositary Shares.

A financial transaction tax (the "IOF tax") may be imposed on a variety of foreign transactions, including the conversion of Brazilian currency into foreign currency (e.g., for purposes of paying dividends and interest) or viceversa (the "IOF/Câmbio"). The IOF/Câmbio is currently 0% with some specific exceptions, but the Minister of Finance has the legal power to increase the rate to a maximum of 25%. Any such increase will be applicable only prospectively.

IOF tax may also be levied on transactions involving bonds or securities (the "IOF/Títulos") even if the transactions are effected on the Brazilian stock, futures or commodities exchange. The rate of the IOF/Títulos with respect to preferred class A shares or common shares or American Depositary Shares is currently 0%. The Minister of Finance, however, has the legal power to increase the rate to a maximum of 1.5% per day. Any such increase will be applicable only prospectively.

In addition to the IOF tax, the temporary contribution on financial transactions (the "CPMF tax") will be imposed through December 2007 on all fund transfers in connection with financial transactions in Brazil.

## **U.S. Federal Income Tax Considerations**

This discussion only applies to U.S. holders, as defined below, who hold their preferred class A shares or common shares or American Depositary Shares as capital assets. This discussion does not describe all of the tax consequences that may be relevant in light of a holder's particular circumstances or to holders subject to special rules, such as:

- certain financial institutions,
- insurance companies,
- dealers or traders in securities or foreign currencies,
- persons holding preferred class A shares, common shares or American Depositary Shares as part of hedge, straddle, conversion or other integrated transaction,
- holders whose functional currency is not the U.S. dollar,
- partnerships or other entities classified as partnerships for U.S. federal income tax purposes,
- persons subject to the alternative minimum tax, or
- persons owning, actually or constructively, 10% or more of our voting shares.

This discussion is based on the Internal Revenue Code of 1986, as amended to the date hereof, administrative pronouncements, judicial decisions and final, temporary and proposed Treasury Regulations, changes to any of which may affect the tax consequences described herein. Holders should consult their tax advisors with regard to the application of the United States federal income tax laws to their particular situations as well as any tax consequences arising under the laws of any state, local or non-U.S. taxing jurisdiction.

This discussion is also based, in part, on representations of the depositary and the assumption that each obligation in the deposit agreement and any related agreement will be performed in accordance with its terms.

As used herein, the term "United States holder" means a beneficial owner of preferred class A shares, common shares, or American Depositary Shares that is for U.S. federal income tax purposes:

- a citizen or resident alien individual of the United States.
- a corporation created or organized in or under the laws of the United States or of any political subdivision thereof, or
- an estate or trust, the income of which is subject to United States federal income taxation regardless of its source.

The term United States holder also includes certain former citizens of the United States.

In general, for U.S. federal income tax purposes, holders of American depositary receipts evidencing American Depositary Shares will be treated as the beneficial owners of the preferred class A shares or common shares represented by those American Depositary Shares. Deposits and withdrawals of preferred class A shares or common shares by holders in exchange for American Depositary Shares will not result in the realization of gain or loss for U.S. federal income tax purposes.

Taxation of dividends. Distributions paid on American Depositary Shares, preferred class A shares or common shares, including distributions paid in the form of payments of interest on capital for Brazilian tax purposes, out of our current or accumulated earnings and profits, as determined for U.S. federal tax purposes, before reduction for any Brazilian income tax withheld by us, will be taxable to you as foreign source dividend income and will not be eligible for the dividends-received deduction allowed to corporations.

You will be required to include dividends paid in *reais* in income in an amount equal to their U.S. dollar value calculated by reference to an exchange rate in effect on the date such items are received. If you hold American Depositary Shares, you will be considered to receive a dividend when the dividend is received by the depositary.

Subject to certain exceptions for short-term and hedged positions, the U.S. dollar amount of dividends received by an individual prior to January 1, 2009 with respect to the American depository shares will be subject to taxation at a maximum rate of 15% if the dividends are "qualified dividends." Dividends paid on the American depository shares will be treated as qualified dividends if (i) the American depository shares are readily tradable on an established securities market in the United States and (ii) the Company was not, in the year prior to the year in which the dividend was paid, and is not, in the year in which the dividend is paid, (a) a passive foreign investment company ("PFIC") or (b) for dividends paid prior to the 2005 tax year, a foreign personal holding company ("FPHC") or foreign investment company ("FIC"). The American depository shares are listed on the New York Stock Exchange and will qualify as readily tradable on an established securities market in the United States so long as they are so listed. Based on CVRD's audited financial statements and relevant market and shareholder data, CVRD believes that it was not treated as a PFIC, FPHC or FIC for U.S. federal income tax purposes with respect to its 2003 or 2004 taxable year. In addition, based on CVRD's audited financial statements and its current expectations regarding the value and nature of its assets, the sources and nature of its income, and relevant market and shareholder data, we do not anticipate becoming a PFIC for its 2005 taxable year.

Based on existing guidance, it is not entirely clear whether dividends received with respect to the preferred class A shares and common shares will be treated as qualified dividends, because the preferred class A shares and common shares are not themselves listed on a U.S. exchange. In addition, the U.S. Treasury has announced its intention to promulgate rules pursuant to which holders of American depository shares, preferred class A shares or common stock and intermediaries through whom such securities are held will be permitted to rely on certifications from issuers to establish that dividends are treated as qualified dividends. Because such procedures have not yet been issued, it is not clear whether we will be able to comply with them. Holders of American depository shares, preferred class A shares and common shares should consult their own tax advisers regarding the availability of the reduced dividend tax rate in the light of their own particular circumstances.

Subject to generally applicable limitations and restrictions, you will be entitled to a credit against your United States federal income tax liability, or a deduction in computing your U.S. federal taxable income, for Brazilian income taxes withheld by us. You must satisfy minimum holding period requirements to be eligible to claim a foreign tax credit for Brazilian taxes withheld on dividends. The limitation on foreign taxes eligible for credit is

calculated separately for specific classes of income. For this purpose dividends paid by us on our shares will generally constitute "passive income" (or, for some holders, "financial services income").

Taxation of capital gains. Upon a sale or exchange of preferred class A shares, common shares or American Depositary Shares, you will recognize a capital gain or loss for U.S. federal income tax purposes equal to the difference, if any, between the amount realized on the sale or exchange and your adjusted tax basis in the preferred class A shares, common shares or American Depositary Shares. Long-term capital gains recognized by an individual United States holder are subject to taxation at a reduced rate. This gain or loss will be long-term capital gain or loss if your holding period in the American Depositary Shares exceeds one year. Any gain or loss will be U.S. source gain or loss for U.S. foreign tax credit purposes. Consequently, if a Brazilian withholding tax is imposed on the sale or disposition of American Depositary Shares, preferred class A shares or common shares, and you do not receive significant foreign source income from other sources you may not be able to derive effective U.S. foreign tax credit benefits in respect of such Brazilian withholding tax. You should consult your own tax advisor regarding the application of the foreign tax credit rules to your investment in, and disposition of, American Depositary Shares, preferred class A shares or common shares.

If a Brazilian tax is withheld on the sale or disposition of shares, the amount realized by a U.S. holder will include the gross amount of the proceeds of such sale or disposition before deduction of the Brazilian tax. See *Item* 10. Additional Information—Taxation—Brazilian Tax Considerations.

Information reporting and backup withholding

Information returns may be filed with the Internal Revenue Service in connection with distributions on the preferred class A shares, common shares or American Depositary Shares and the proceeds from their sale or other disposition. You may be subject to United States backup withholding tax on these payments if you fail to provide your taxpayer identification number or comply with certain certification procedures or otherwise establish an exemption from backup withholding.

The amount of any backup withholding from a payment to you will be allowed as a credit against your U.S. federal income tax liability and may entitle you to a refund, provided that the required information is furnished to the Internal Revenue Service.

#### DOCUMENTS ON DISPLAY

We are subject to the information requirements of the Securities Exchange Act of 1934, as amended, and accordingly file reports and other information with the SEC. Reports and other information filed by us with the SEC may be inspected and copied at the public reference facilities maintained by the SEC at Room 1024, 450 Fifth Street, N.W., Washington, D.C. 20549. You may obtain copies of these materials by mail from the Public Reference Section of the SEC, 450 Fifth Street, N.W., Washington, D.C. 20549, at prescribed rates. You may also inspect CVRD's reports and other information at the offices of the New York Stock Exchange, 11 Wall Street, New York, New York 10005, on which CVRD's American Depositary Shares are listed. Our SEC filings are also available to the public from the SEC's website at <a href="http://www.sec.gov">http://www.sec.gov</a>. For further information on obtaining copies of CVRD's public filings at the New York Stock Exchange, you should call (212) 656-5060.

We also file financial statements and other periodic reports with the CVM.

# Item 11. Quantitative and Qualitative Disclosures About Market Risk

The principal market risks we face are interest rate risk, exchange rate risk and commodity price risk. We manage some of these risks through the use of derivative instruments. Our policy has been to settle all commodity derivatives contracts in cash without physical delivery of product.

Our risk management activities follow policies and guidelines reviewed and approved by our Board of Directors. These policies and guidelines generally prohibit speculative trading and short selling and require diversification of transactions and counter-parties. We monitor and evaluate our overall position daily in order to evaluate financial results and impact on our cash flow. We also periodically review the credit limits and creditworthiness of our hedging counter-parties. We report the results of our hedging activities to senior management on a monthly basis.

As of January 1, 2001, we have adopted SFAS 133 – "Accounting for Derivative Financial Instruments and Hedging Activities," as amended by SFAS 137 and SFAS 138, and we recognize all derivatives on our balance sheet at fair value. Accordingly we recognized an initial transition adjustment of US\$ 12 million as a charge in our statement of income relative to net unrealized losses on contracts open as of December 31, 2000. Since January 1, 2001, all derivatives have been adjusted to fair market value at each balance sheet date and the gain or loss included in current earnings.

The asset (liability) balances at December 31, 2004 and 2003 and the movement in fair value of derivative financial instruments is as follows:

				rest								
	G	old		tes SOR)	Curr	encies	Δln	ımina	Alum	inum	Ta	otal
Initial unrealized gains and (losses) at January 1, 2003	US\$	(15)	US\$	(60)	US\$	(1)	US\$	3	US\$	<u> </u>	US\$	(73)
Financial settlement		8		30				_		_		38
Unrealized gains (losses) in the period		(24)		(3)		6		(22)		_		(43)
Effect of exchange rate changes		(1)		(13)		_		1		_		(13)
Unrealized gains and (losses) at December 31, 2003	US\$	(32)	US\$	(46)	US\$	5	US\$	(18)	US\$	_	US\$	(91)
Loss recognized upon consolidation of Albras		_		_		_		_		(20)		(20)
Financial settlement		4		29		(2)		_		_		31
Unrealized gains (losses) in the period		(5)		1		1		(33)		(98)		(134)
Effect of exchange rate changes		(4)		(1)				(4)		(9)		(18)
Unrealized gains and (losses) at December 31, 2004	US\$	(37)	US\$	(17)	US\$	4	US\$	(55)	US\$	(127)	US\$	(232)

# INTEREST RATE AND EXCHANGE RATE RISK

The table below sets forth our floating and fixed rate long-term debt, categorized by local and foreign currency, and as a percentage of our total long-term debt portfolio at the dates indicated, including loans from both related and unrelated parties, as reflected in our consolidated financial statements.

	At December 31,							
	2003				2004			
		(in	millions of US	\$, except j	percentages)			
Floating rate debt:								
Real-denominated	US\$	208	7.5%	US\$	104	3.2%		
Foreign currency denominated		1,427	51.6		1,640	51.0		
Fixed rate debt:								
Foreign currency denominated		1,132	40.9		1,464	45.6		
Real-denominated		_	_		6	0.2		
Total	US\$	2,7	100.0	US\$	3,214	100.0		

The table below provides information about our total debt obligations as of December 31, 2004, which are sensitive to changes in interest rates and exchange rates. The table presents the principal cash flows and related weighted average interest rates of these obligations by expected maturity date. Weighted average variable interest rates are based on the applicable reference rate at December 31, 2004. The debt obligations' actual cash flows are denominated mainly in U.S. dollars or Brazilian *reais* or other currencies, as indicated.

	Weighted average interest rate					То		Fair Value Cash Flow at December	Fair Value Accounting at December
	(%)(1)(2)	2006	2007	2008	2009	2034	Total	31, 2004	31, 2004
				(in	n millions o	f US\$)			
U.S. dollar-denominated Fixed rate									
Bonds	8.54	0	113	0	0	800	913	996	1,054
Loans	5.02	95	37	18	11	10	171	167	171
Securitization Notes	5.61	55	57	53	55	150	370	370	370
Trade Finance	4.87	5	2	0	0	0	7	7	7
Floating Rate									
Loans	5.02	215	225	180	158	322	1,100	965	1,100
Securitization Notes	5.61	27	29	0	0	0	56	52	56
Trade Finance	4.87	266	14	0	0	0	280	269	280
Subtotal		663	477	251	224	1,282	2,897	2,826	3,038
Real-denominated									
Fixed rate loans	10.76	4	2	0	0	0	6	6	6
Floating Rate Loans	10.76	24	21	15	<u>12</u> 12	32	104	102	104
Subtotal		28	23	15	12	32	110	108	110
Other currency-denominated									
Fixed rate loan	3.9	1	1	1	0	0	3	3	3
Floating rate loan	5.57	4	4	4	3	7	22	22	22
Subtotal		33	28	20	15	39	135	133	135
No maturity		0	0	0	0	0	182	182	182
Total		696	505	271	239	1,321	3,214	3,141	3,355

<sup>(1)</sup> Weighted average interest rates do not take into account the effect of the derivatives.

## **Interest Rate Risk**

We are exposed to interest rate risk on our outstanding borrowing and in future debt issuances. Our floating rate debt consists principally of U.S. dollar borrowings related to trade finance and loans from commercial banks and multilateral organizations. In general, our foreign currency floating rate debt is principally subject to changes in the London Interbank Offered Rate, (USD LIBOR). Our floating rate debt denominated in *reais* is mainly subject to changes in the TJLP, as fixed by the Central Bank.

We enter into interest rate derivative transactions primarily to hedge the exposure we hold on our USD floating rate debt. In the case we issue debt in a currency other than USD or *reais*, we usually enter into derivative contracts to protect against interest rate movements in the other currencies against USD. We generally do not hedge our TJLP-based debt. Our interest rate derivatives portfolio consists of options and interest rate swaps to convert floating rate exposures to fixed rate exposures or to cap our exposure to interest rate fluctuations. A cap is the maximum rate we will be required to pay on the notional amount of the debt. Conversely, a floor is the minimum rate we will be required to pay on the notional amount of the debt. In our current portfolio, there is a swap subject to knock-out provisions, which, if triggered, eliminate the protection provided by it. The table below sets forth certain information with respect to our interest rate derivatives portfolio at December 31, 2003 and 2004:

Libor

_	A	At December 31, 20	03	At December 31, 2004						
	Notional Value	Interest Rate Range	Unrealized Gain (Loss)	Notional Value	Interest Rate Range	Unrealized Gain (Loss)	Final Maturity			
			(in millions of US\$, except interest rate ranges)							
Floor	500	5.7 – 6.0 %	(16)	150	5.7 – 6.0%	(3.5)	Nov 2006			
Cap	850	5.75 - 11.0%	0	300	5.75 - 11.0%	0.0	Oct 2007			
Swap	454	5.8 - 6.7%	(30)	231	5.8 - 6.7%	(13.4)	Oct 2007			
Total			US\$ (46)			US\$ (16.9)				

<sup>(2)</sup> Weighted average variable interest rates are based on the applicable reference rate at December 31, 2004.

The unrealized loss in the amount of US\$ 46 million and US\$ 16.9 million represents the amount payable if all transactions had been settled on December 31, 2003 and 2004, respectively.

# **Exchange Rate Risk**

We are exposed to exchange rate risk associated with our foreign currency denominated debt. On the other hand, a substantial proportion of our revenues are denominated in, or automatically indexed to, the U.S. dollar, while the majority of our costs are expressed in *reais*. This provides a natural hedge against any devaluation of the Brazilian *real* against the U.S. dollar. When devaluation occurs, the immediate negative impact on foreign currency denominated debt is offset over time by the positive effect of devaluation on future cash flows. In light of this framework, we generally do not use derivative instruments to manage the currency exposure on our long-term dollar-denominated debt. However, we do monitor market fluctuations and occasionally use derivatives to minimize the effects of the volatility of the exchange rates in the cash flow.

From time to time we enter into foreign exchange derivative swap transactions seeking to change the characteristics of our *real*-denominated cash investments to US dollar-indexed instruments. The extent of such transactions depends on our perception of market and currency risk, and they have been designated as cash flow hedging transactions. All such deals are marked-to-market daily, and the respective results are reflected in the P&L account at the end of each reporting period. During the years ended December 31, 2004 and 2003 our use of such instruments was not significant.

We have other exposures associated with our outstanding debt portfolio. We have currency exposure associated with a BNDES credit line linked to a basket of currencies, including US dollars, Euros and Japanese Yens and we have Euro exposure associated with a credit line extended by KFW (Kreditanstalt fur Wiedeaufbau). To mitigate the foreign currency risk, we entered into some forward transactions that will be specified in the next table. The table below sets forth certain information with respect to our exchange rate derivatives portfolio at December 31, 2003 and 2004.

Exchange Rate Risk

Tibor-Libor (JPY—USD)

		At December 31, 2	003	At December 31, 2004					
	Notional Value	Rate Range	Unrealized Gain (Loss)	Notional Value	Rate Range	Unrealized Gain (Loss)	Final Maturity		
			(in millio	ns, except rat					
Floating Rate purchased									
	¥ 3,178	Tibor + Spread 1		_	_	_	_		
Floating Rate sold	USD 26	Libor + Spread 2		_	_	_	_		
Total			US\$ 3.6						

# Euribor-Libor (EUR—USD)

		At December 31, 200	3	At December 31, 2004						
	Notional Value	Rate Range	Unrealized Gain (Loss)	Notional Value	Rate Range	Unrealized Gain (Loss)	Final Maturity			
			(in millions, except rate ranges)							
Floating Rate purchased										
	€ 19.13	Euribor + Spread 1		€ 16.74	Euribor + Spread 1		Dec 2011			
Floating Rate sold	USD	Libor + Spread 2		USD	Libor + Spread 2		Dec 2011			
Total	21.59		US\$ 2.4	18.89		US\$ 3.7				

		At December 31, 2003		<b>At December 31, 2004</b>						
	Notional Value	Price Range	Unrealized Gain (Loss)	Notional Value	Price Range	Unrealized Gain (Loss)	Final Maturity			
		(in millions, except rate ranges)								
Yen purchased	¥ 206.6	¥ 79 – 83 per US\$	US\$ (0.59)	¥ 64.7	¥ 79 – 83 per US\$	(0.2)	Apr 2005			
Euro purchased	€ 2.87	US\$ 1.22 – 1.23 per €	US\$ 0.11	€ 0.90	US\$ 1.22 – 1.23 per €	0.1	Apr 2005			
Euro sold				€ 3.3	€ 1.327	(0.1)	Jan 2005			
Total			US\$ (0.48)			US\$ (0.2)				

The unrealized gains in the amount of US\$ 5.52 million and the unrealized gain of US\$ 3.5 million represent the amounts received if all transactions had been settled on December 31, 2003 and 2004, respectively.

#### PRODUCTS PRICE RISK

We are also exposed to various market risks relating to the volatility of world market prices for:

- iron ore and pellets, which represented 60.7% of our 2004 gross consolidated revenues;
- manganese ore and ferroalloys, which represented 8.3% of our 2004 gross consolidated revenues;
- aluminum-related products, which represented 14.7% of our 2004 gross consolidated revenues;
- gold, which represented less than 0.1% of our 2004 gross consolidated revenues; and
- copper, which we began producing in 2004 as copper concentrate and represented 2.4% of our 2004 gross consolidated revenues.

We do not enter into derivatives transactions to hedge our iron ore, copper, manganese ore or ferroalloys exposure. See *Item 5. Operating and Financial Review and Prospects*.

To manage the risk associated with fluctuations in aluminum prices, our affiliates Albras and Alunorte engage in hedging transactions involving put and call options, as well as forward contracts. These derivative instruments allow Albras and Alunorte to establish minimum average profits for their future aluminum production in excess of their expected production costs and therefore ensure stable cash generation. However, they also have the effect of reducing potential gains from price increases in the spot market for aluminum.

The table below sets forth certain information with respect to Albras' derivatives portfolio at December 31, 2003 and 2004. Effective January 1, 2004, Albras is consolidated in our financial statements.

		At December 31, 200	3	<b>At December 31, 2004</b>						
	Notional Value	Price Range	Unrealized Gain (Loss)	Notional Value	Price Range	Unrealized Gain (Loss)	Final Maturity			
	(tons of aluminum)	(US\$ per ton)	(in millions of US\$)	(tons of aluminum)	(US\$ per ton)	(in millions of US\$)				
Puts purchased	148,500	US\$ 1,390-1,450	US\$ 1.9	104,000	US\$1,395-1,400	US\$ 0.1	Sep 2006			
Forwards sold	27,000	1,400-1,600	(5.4)	9,000	1,545-1,650	(23.7)	Dec 2006			
Calls sold	160,500	1,570-1,630	(9.8)	116,000	1,540-1,590	(27.2)	Sep 2006			
Other instruments	246,000	1,390-1,680	(6.9)	155,000	1,395-1,700	(8.0)	Dec 2008			
Total			US\$ (20.2)			US\$ (58.8)				

The table below sets forth certain information with respect to Alunorte's derivatives portfolio at December 31, 2003 and 2004. We consolidate Alunorte's operations in our financial statements.

		At December 31, 2003	i	At December 31, 2004						
	Notional Value	Price Range	Unrealized Gain (Loss)	Notional Value	Price Range	Unrealized Gain (Loss)	Final Maturity			
	(tons of aluminum)	(US\$ per ton)	(in millions of US\$)	(tons of aluminum)	(US\$ per ton)	(in millions of US\$)				
Puts purchased	101,000	US\$ 1,390 – 1,400	US\$ 0.7	113,000	US\$ 1,385 – 1,395 —	US\$ 0.1	Sep 2006			
Calls sold		1,540 - 1,580	(6.1)	125,000	1,535 - 1,590	(29.7)	Sep 2006			
Other instruments	240,000	1,380 - 1,690	(12.6)	108,000	1,390 - 1,625	(25.9)	Dec 2008			
Total			US\$ (18.0)			US\$ (55.5)				

To manage the risk associated with fluctuations in gold prices, we enter into derivative instruments, which allow us to establish a minimum price level for future gold production or the content of gold associated with the copper concentrate production. However, they may also have the effect of eliminating potential gains on certain price increases in the spot market for gold.

The table below sets forth certain information with respect to our gold derivatives portfolio at December 31, 2003 and 2004.

		At December 3	31, 2003	At December 31, 2004						
	Quantity Price Range		Unrealized Price Range Gain (Loss)		Price Range	Unrealized Gain (Loss)	Final Maturity			
	(oz.)	(US\$ per oz.)	(in millions of US\$)	(oz.)	(US\$ per oz.)	(in millions of US\$)				
Puts purchased	393,000	270 - 385	US\$ 1.1	303,000	285 - 385	0.7	Dec 2008			
Calls sold	423,000	317 - 440	(31.5)	393,000	330 - 440	(37.4)	Dec 2008			
Other instruments	20,000	_	(1.4)	_	_	_	_			
Total			US\$ (31.8)			US (36.7)				

The unrealized loss in the amount of US\$ 32 million and US\$ 37 million represents the amount payable if all transactions had been settled on December 31, 2003 and 2004, respectively.

#### **CREDIT RISK**

## Financial Institutions Risk & Exposure

We have a strict policy regarding financial credit risk arising from derivative and other financial transactions executed with Financial Institutions. The credit policy was approved by the Board and makes the Executive Board responsible for selecting institutions and setting the exposure limits for each institution as well as for the global portfolio. On a semiannual basis, our credit exposures on the portfolio of institutions are required to be submitted to the financial committee and to the Executive Board.

The credit quality of each institution is evaluated based on its financial strength, foreign currency ratings published by international rating agencies, shareholder's equity size and range of financial products provided.

The policy only allows CVRD to perform financial transactions with institutions that hold at least an A- foreign currency credit rating. In the case the rating of the institution is capped by the sovereign ceiling, the rating of the country in which the institution is incorporated has to be at least equal to Brazil rating, and the local currency rating of the institution has to be at least A-. In addition, we can only invest our cash holdings and enter into derivative transactions with institutions whose limits are consistent with our credit policy.

# **Commercial Credit Exposure**

CVRD's commercial credit policy establishes a set of rules under which the Executive Board approves an Annual Commercial Exposure Limit, representing the maximum commercial credit exposure CVRD is willing to take. This exposure limit is applied to each business segment of CVRD. The policy outlines a procedure for measuring, granting and controlling commercial credit within CVRD which requires that each customer seeking commercial credit has to be evaluated considering its credit quality measured by the strength of its financial statements, company size, past payment performance and country risk. In 2005, we expect to extend the commercial credit policy to all of CVRD's consolidated companies. For those companies in which CVRD is the controlling shareholder, the limits are established according to such policy. For the other companies, CVRD's Executive Board recommended a credit limit in line with CVRD's policy.

## Item 12. Description of Securities Other than Equity Securities

Not applicable.

## **PART II**

#### Item 13. Defaults, Dividend Arrearages and Delinquencies

None.

# Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds

None.

# **Item 15.** Controls and Procedures

## **Evaluation of Disclosure Controls and Procedures**

CVRD has carried out an evaluation under the supervision and with the participation of CVRD's management, including the Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of CVRD's disclosure controls and procedures as of the end of the period covered by this annual report. Vale Overseas carried out a similar evaluation that relied primarily on CVRD's evaluation of its controls. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives. Based upon the evaluation described above, the Chief Executive Officer and Chief Financial Officer of CVRD and the Director and Principal Executive Officer and Director and Principal Financial Officer of Vale

Overseas concluded that, as of the end of the period covered by this annual report, the disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed in the reports CVRD or Vale Overseas, as applicable, files and submits under the Exchange Act is recorded, processed, summarized and reported as and when required.

## **Changes in Internal Controls**

Our management identified no change in CVRD's or Vale Overseas' internal control over financial reporting during CVRD's and Vale Overseas fiscal year ended December 31, 2004 that has materially affected or is reasonably likely to materially affect CVRD's or Vale Overseas' internal control over financial reporting.

## Item 16A. Audit Committee Financial Expert

Our Board of Directors currently serves as our audit committee for purposes of the Sarbanes-Oxley Act of 2002. CVRD's Board of Directors has determined that CVRD board members Arlindo Magno de Oliveira, Mário da Silveira Teixeira Júnior and Renato da Cruz Gomes are audit committee financial experts.

As described in *Item 6. Directors, Senior Management and Employees - fiscal council*, on or before July 31, 2005, we expect to designate and empower CVRD's fiscal council to act as our audit committee for purposes of the Sarbanes-Oxley Act of 2002. At that time, we expect that at least one of the members of the fiscal council will be determined by our Board of Directors to be an audit committee financial expert.

## Item 16B. Code of Ethics

CVRD has adopted a code of ethics that applies to all board members, executive officers and employees, including the Chief Executive Officer and the Chief Financial Officer and Principal Accounting Officer of CVRD. CVRD's code of ethics is also applicable to Vale Overseas and applies to its directors. We have posted copies of these codes of ethics on our website: <a href="http://www.cvrd.com.br/cvrd\_us/media/CVRD\_%20Codigodeetica\_i.pdf">http://www.cvrd.com.br/cvrd\_us/media/CVRD\_%20Codigodeetica\_i.pdf</a>. Copies of our codes of ethics may be obtained without charge by writing to us at the address set forth on the front cover of this Form 20-F. Neither CVRD nor Vale Overseas has granted any implicit or explicit waivers from any provision of its code of ethics to the officers described above since adoption of the code.

# Item 16C. Principal Accountant Fees and Services

# **Principal Accountant Fees**

PricewaterhouseCoopers Auditores Independentes billed the following fees to us for professional services in 2003 and 2004.

	Year ended December 31, 2003 2004			
		(thousands of US\$)		
Audit Fees	US\$	673	US\$	1,075
Audit-Related Fees		_		2,455
Tax Fees		_		94
All Other Fees		_		_
Total Fees.	US\$	673	US\$	3,624

"Audit Fees" are the aggregate fees billed by PricewaterhouseCoopers for the audit of our consolidated and annual financial statements, reviews of interim financial statements and attestation services that are provided in connection with statutory and regulatory filings or engagements. "Audit-Related Fees" are fees charged by PricewaterhouseCoopers for assurance and related services that are reasonably related to the performance of the audit or review of our financial statements and are not reported under "Audit Fees."

"Audit-Related Fees" refers primarily to internal control-related expenses related to CVRD's preparation for the assessment required under Section 404 of the Sarbanes-Oxley Act.

#### **Audit Committee Pre-Approval Policies and Procedures**

Our Board of Directors currently serves as our audit committee for purposes of the Sarbanes-Oxley Act of 2002. Our Board of Directors requires management to obtain the board's approval before engaging independent auditors to provide any audit or permitted non-audit services to us or our subsidiaries. Pursuant to this policy, our Board of Directors is required to pre-approve all audit and non-audit services provided to CVRD and its subsidiaries by their respective independent auditors.

Our Board of Directors has adopted a pre-approval policy for audit and non-audit services provided to CVRD and its consolidated subsidiaries. Under the policy, the Board of Directors has pre-approved a detailed list of services based on detailed proposals from our auditors up to specified monetary limits set forth in the policy. Services that are not listed or that exceed the specified limits must be separately pre-approved by the Board of Directors. The Board of Directors is provided with reports on the services provided under the policy on a periodic basis, and the list of pre-approved services is updated periodically. The policy also sets forth a list of prohibited services. Internal control related services must be specifically pre-approved by the Board of Directors.

# Item 16D. Exemptions from the Listing Standards for Audit Committees

Under the listed company audit committee rules of the NYSE and the SEC, effective July 31, 2005, we must comply with Exchange Act Rule 10A-3, which requires that we either establish an audit committee composed of members of the Board of Directors that meets specified requirements or designate and empower our fiscal council to perform the role of the audit committee in reliance on the exemption set forth in Exchange Act Rule 10A-3(c)(3). We expect to take the steps necessary to designate and empower our fiscal council to perform this role on or before July 31, 2005. In our assessment, our fiscal council will be able to act independently in performing the responsibilities of an audit committee under the Sarbanes-Oxley Act and to satisfy the other requirements of Exchange Act Rule 10A-3.

# Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers

In 2004, neither CVRD nor any affiliated purchaser purchased or repurchased any of CVRD's equity securities.

# **PART III**

#### **Item 17.** Financial Statements

The Registrant has responded to *Item 18* in lieu of responding to this Item.

#### **Item 18.** Financial Statements

Reference is made to pages F-1 to F-48.

# Item 19. Exhibits

	Exhibit	
	Number	
٠	1.1	Bylaws of Companhia Vale do Rio Doce, as amended April 27, 2005 (English translation)
	1.2 (*)	Memorandum & Articles of Association of Vale Overseas Limited
	1.3 (**)	Amendment to the Memorandum & Articles of Association of Vale Overseas Limited dated March $6,2002.$
	1.4 (**)	Amendment to the Memorandum & Articles of Association of Vale Overseas Limited dated July 23, 2003.
	1.5 (**)	Amendment to the Memorandum & Articles of Association of Vale Overseas Limited dated January 7, 2004

List of Subsidiaries
Certification of Chief Executive Officer of CVRD pursuant to Rules 13a-14 and 15d-14 under the Securities Exchange Act of 1934.
Certification of Chief Financial Officer of CVRD pursuant to Rules 13a-14 and 15d-14 under the Securities Exchange Act of 1934.
Certification of Director and Principal Executive Officer of Vale Overseas pursuant to Rules 13a-14 and 15d-14 under the Securities Exchange Act of 1934.
Certification of Director and Principal Financial Officer of Vale Overseas pursuant to Rules 13a-14 and 15d-14 under the Securities Exchange Act of 1934.
Certification of Chief Executive Officer and Chief Financial Officer of CVRD, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
Certification of Director and Principal Executive Officer and Director and Principal Financial Officer of Vale Overseas, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
Consent of PricewaterhouseCoopers (CVRD and Vale Overseas).
Consent of Trevisan (Albras).
Consent of Deloitte Touche Tohmatsu (Albras).
Consent of Trevisan (Alunorte).
Consent of Deloitte Touche Tohmatsu (Alunorte).
Consent of KPMG LLP (CSI).
Consent of Deloitte Touche Tohmatsu (Docenave).
Consent of Deloitte Touche Tohmatsu (Hispanobras).
Consent of Deloitte Touche Tohmatsu (Itabrasco).
Consent of Deloitte Touche Tohmatsu (Kobrasco).
Consent of Deloitte Touche Tohmatsu (MRN).
Consent of Deloitte Touche Tohmatsu (Nibrasco).
Consent of Deloitte Touche Tohmatsu (Valesul).
Consent of KPMG Auditores Independentes (Valesul).
Consent of Deloitte Touche Tohmatsu (RDM).
Consent of Deloitte Touche Tohmatsu (Urucum).
Consent of Pincock, Allen & Holt

<sup>(\*)</sup> Incorporated by reference to the annual report on Form 20-F of CVRD and Vale Overseas Limited for the year ended December 31, 2002.

<sup>(\*\*)</sup> Incorporated by reference to the annual report on Form 20-F of CVRD and Vale Overseas Limited for the year ended December 31, 2003.

# **SIGNATURES**

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

## COMPANHIA VALE DO RIO DOCE

/s/ Roger Agnelli By:

Roger Agnelli Name:

Chief Executive Officer Title:

By: /s/ Fabio de Oliveira Barbosa

> Name: Fabio de Oliveira Barbosa Title: Chief Financial Officer

## VALE OVERSEAS LIMITED

By: /s/ Fabio de Oliveira Barbosa

Name: Fabio de Oliveira Barbosa Title: Director and Principal Executive

Officer

/s/ Leonardo Moretzsohn de Andrade By:

Leonardo Moretzsohn de Andrade Name: Title:

Director and Principal Financial

Officer

Date: June 2, 2005