

Vale S.A.
Form 6-K
February 28, 2013
[Table of Contents](#)

**United States
Securities and Exchange Commission**

Washington, D.C. 20549

FORM 6-K

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

For the month of

February, 2013

Vale S.A.

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

(Address of principal executive office)

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

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

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

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

(Check One) Yes No

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

(Check One) Yes No

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

(Check One) Yes No

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

Table of Contents

Consolidated Financial Statements

December 31, 2012

US GAAP

Filed with the CVM, SEC and HKEx on

February 27, 2013

Table of Contents

Vale S.A.

Index to Consolidated Financial Statements

	Page
<u>Report of Independent Registered Public Accounting Firm</u>	3
Management's Report on Internal Control over Financial Reporting	3
<u>Consolidated Balance Sheets as of December 31, 2012 and 2011</u>	5
<u>Consolidated Statements of Income for the years ended December 31, 2012, 2011 and 2010</u>	7
<u>Consolidated Statements of Comprehensive Income for the years ended December 31, 2012, 2011 and 2010</u>	8
<u>Consolidated Statements of Cash Flows for the years ended December 31, 2012, 2011 and 2010</u>	9
<u>Consolidated Statements of Changes in Stockholders' Equity for the years ended December 31, 2012, 2011 and 2010</u>	10
<u>Notes to the Consolidated Financial Statements</u>	11

Table of Contents

Report of independent registered

public accounting firm

To the Board of Directors and Stockholders

Vale S.A.

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of income, of comprehensive income, of cash flows and of changes in stockholders' equity present fairly, in all material respects, the financial position of Vale S.A. and its subsidiaries (the Company) at December 31, 2012 and 2011, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2012 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2012, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Table of Contents

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

PricewaterhouseCoopers

Audidores Independentes

Rio de Janeiro, Brazil

February 27, 2013

Table of Contents**Consolidated Balance Sheets**

Expressed in millions of United States dollars

	As of December 31,	
	2012	2011
Assets		
Current assets		
Cash and cash equivalents	5,832	3,531
Short-term investments	246	
Accounts receivable		
Related parties	134	288
Third parties	6,661	8,217
Loans and advances to related parties	384	82
Inventories	5,052	5,251
Deferred income tax	356	203
Unrealized gains on derivative instruments	281	595
Advances to suppliers	256	393
Recoverable taxes	2,260	2,230
Assets held for sale	479	
Others	956	946
	22,897	21,736
Non-current assets		
Property, plant and equipment, net	90,744	88,895
Intangible assets	1,022	1,135
Investments in affiliated companies, joint ventures and others investments	6,492	8,093
Other assets		
Goodwill on acquisition of subsidiaries	2,947	3,026
Loans and advances		
Related parties	408	509
Third parties	246	210
Prepaid pension cost	844	1,666
Judicial deposits	1,515	1,464
Recoverable taxes	658	587
Deferred income tax	2,886	594
Unrealized gains on derivative instruments	45	60
Deposit on incentive / reinvestment	160	229
Others	614	524
	108,581	106,992
Total	131,478	128,728

Table of Contents**Consolidated Balance Sheets**

Expressed in millions of United States dollars

(Except number of shares)

	(Continued) As of December 31,	
	2012	2011
Liabilities and stockholders equity		
Current liabilities		
Suppliers	4,529	4,814
Payroll and related charges	1,481	1,307
Minimum annual remuneration attributed to stockholders		1,181
Current portion of long-term debt	3,468	1,495
Short-term debt		22
Loans from related parties	207	24
Provision for income taxes	641	507
Taxes payable and royalties	324	524
Employee postretirement benefits	205	147
Railway sub-concession agreement payable	65	66
Unrealized losses on derivative instruments	347	73
Provisions for asset retirement obligations	70	73
Liabilities associated with assets held for sale	181	
Others	1,067	810
	12,585	11,043
Non-current liabilities		
Employee postretirement benefits	3,256	2,446
Loans from related parties	72	91
Long-term debt	26,799	21,538
Provisions for contingencies (Note 21 (b))	2,065	1,686
Unrealized losses on derivative instruments	783	663
Deferred income tax	3,538	5,654
Provisions for asset retirement obligations	2,333	1,697
Stockholders debentures	1,653	1,336
Others	2,031	2,460
	42,530	37,571
Redeemable noncontrolling interest	487	505
Commitments and contingencies (Note 21)		
Stockholders equity		
Preferred class A stock - 7,200,000,000 no-par-value shares authorized and 2,108,579,618 (2011 - 2,108,579,618) issued	16,728	16,728

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

Common stock - 3,600,000,000 no-par-value shares authorized and 3,256,724,482 (2011 - 3,256,724,482) issued	25,837	25,837
Treasury stock - 140,857,692 (2011 - 181,099,814) preferred and 71,071,482 (2011 - 86,911,207) common shares	(4,477)	(5,662)
Additional paid-in capital	(529)	(61)
Mandatorily convertible notes - common shares		290
Mandatorily convertible notes - preferred shares		644
Other cumulative comprehensive deficit	(9,613)	(5,673)
Undistributed retained earnings	38,997	41,130
Unappropriated retained earnings	7,298	4,482
Total Company stockholders equity	74,241	77,715
Noncontrolling interests	1,635	1,894
Total stockholders equity	75,876	79,609
Total	131,478	128,728

The accompanying notes are an integral part of these financial statements.

Table of Contents**Consolidated Statements of Income**

Expressed in millions of United States dollars

(Except per share amounts)

	Year ended as of December 31,		
	2012	2011	2010
Operating revenues, net of discounts, returns and allowances			
Sales of ores and metals	41,730	55,156	41,158
Aluminum products		383	2,554
Revenues from logistic services	1,644	1,726	1,465
Fertilizer products	3,777	3,547	1,845
Others	1,602	1,533	1,195
	48,753	62,345	48,217
Taxes on revenues	(1,059)	(1,399)	(1,188)
Net operating revenues	47,694	60,946	47,029
Operating costs and expenses			
Cost of ores and metals sold	(20,581)	(19,854)	(15,062)
Cost of aluminum products		(289)	(2,108)
Cost of logistic services	(1,399)	(1,402)	(1,040)
Cost of fertilizer products	(2,984)	(2,701)	(1,556)
Others	(1,627)	(1,283)	(784)
	(26,591)	(25,529)	(20,550)
Selling and administrative expenses	(2,240)	(2,334)	(1,701)
Research and development expenses	(1,478)	(1,674)	(878)
Impairment on assets	(4,023)		
Gain (loss) on sale of assets	(491)	1,513	
Others	(3,648)	(2,810)	(2,205)
	(38,471)	(30,834)	(25,334)
Operating income	9,223	30,112	21,695
Non-operating income (expenses)			
Financial income	401	718	290
Financial expenses	(2,414)	(2,465)	(2,646)
Gains (losses) on derivatives, net	(120)	75	631
Foreign exchange gains (losses), net	(1,915)	(1,492)	301
Indexation gains (losses), net	247	(149)	43
	(3,801)	(3,313)	(1,381)
Income before discontinued operations, income taxes and equity results	5,422	26,799	20,314
Income taxes			
Current	(2,529)	(5,547)	(4,996)
Deferred			
In the year	799	265	1,291
On impairment	1,327		
Reversal of liabilities (Note 5b.)	1,236		

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

	833	(5,282)	(3,705)
Equity in results of affiliates, joint ventures and other investments	640	1,135	987
Impairment on investments	(1,641)		
Net income (loss) from continuing operations	5,254	22,652	17,596
Discontinued operations, net of tax			(143)
Net income	5,254	22,652	17,453
Net income attributable to noncontrolling interests	(257)	(233)	189
Net income attributable to the Company's stockholders	5,511	22,885	17,264
Earnings per share attributable to Company's stockholders:			
Earnings per preferred share	1.07	4.33	3.23
Earnings per common share	1.07	4.33	3.23
Earnings per convertible note linked to preferred share		6.39	4.76
Earnings per convertible note linked to common share		8.15	6.52

The accompanying notes are an integral part of these financial statements.

Table of Contents**Consolidated Statements of Comprehensive Income**

Expressed in millions of United States dollars

	2012	Year ended as of December 31, 2011	2010
Comprehensive income is comprised as follows:			
Company's stockholders:			
Net income attributable to Company's stockholders	5,511	22,885	17,264
Cumulative translation adjustments	(2,882)	(4,985)	1,519
Unrealized gain (loss) on available-for-sale securities			
Gross balance as of the year end		(13)	12
Tax (expense) benefit	(1)	11	(9)
	(1)	(2)	3
Surplus (deficit) accrued pension plan			
Gross balance as of the year end	(1,322)	(740)	(53)
Tax (expense) benefit	386	232	32
	(936)	(508)	(21)
Cash flow hedge			
Gross balance as of the year end	(113)	130	(16)
Tax (expense) benefit	(8)	25	(10)
	(121)	155	(26)
Total comprehensive income attributable to Company's stockholders	1,571	17,545	18,739
Noncontrolling interests:			
Income (losses) attributable to noncontrolling interests	(257)	(233)	189
Cumulative translation adjustments	46	(210)	104
Pension plan		4	
Cash flow hedge		1	40
Total comprehensive income (deficit) attributable to Noncontrolling interests	(211)	(438)	333
Total comprehensive income	1,360	17,107	19,072

The accompanying notes are an integral part of these financial statements.

Table of Contents**Consolidated Statements of Cash Flows**

Expressed in millions of United States dollars

	Year ended as of December 31,		
	2012	2011	2010
Cash flows from operating activities:			
Net income	5,254	22,652	17,453
Adjustments to reconcile net income to cash from operations:			
Depreciation, depletion and amortization	4,396	4,122	3,260
Dividends received	460	1,038	1,161
Equity in results of affiliates, joint ventures and other investments	(640)	(1,135)	(987)
Deferred income taxes	(799)	(265)	(1,291)
Reversal of deferred tax liability (Note 5a.)	(1,236)		
Deferred taxes on assets Impairment	(1,327)		
Asset and investment impairment charge	5,664		
Loss on disposal of property, plant and equipment	216	223	623
Loss (gain) on sale of assets held for sale	491	(1,513)	
Discontinued operations, net of tax			143
Unrealized foreign exchange and indexation	1,012	2,879	(787)
Unrealized derivative losses (gains), net	613	490	594
Unrealized interest (income) expense, net	(24)	194	187
Stockholders debentures	109	246	449
Others	(310)	(183)	58
Decrease (increase) in assets:			
Accounts receivable	1,900	(821)	(3,800)
Inventories	(296)	(1,343)	(425)
Recoverable taxes	177	(563)	42
Others	530	(315)	307
Increase (decrease) in liabilities:			
Suppliers	(168)	1,076	928
Payroll and related charges	185	285	214
Income taxes	(143)	(2,478)	1,311
Others	531	(93)	(257)
Net cash provided by operating activities	16,595	24,496	19,183
Cash flows from investing activities:			
Short term investments	(246)	1,793	1,954
Loans and advances receivable			
Related parties			
Loan proceeds			(28)
Others	292	(178)	(30)
Judicial deposits	(116)	(186)	(94)
Investments	(474)	(504)	(87)
Additions to property, plant and equipment	(15,777)	(16,075)	(12,647)
Proceeds from disposal of investments	974	1,081	
Acquisition (sale) of subsidiaries			(6,252)

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

Net cash used in investing activities	(15,347)	(14,069)	(17,184)
Cash flows from financing activities:			
Short-term debt			
Additions	593	859	2,233
Repayments	(526)	(955)	(2,132)
Loans			
Related parties			
Proceeds		19	24
Repayments		(1)	(25)
Issuances of long-term debt			
Third parties			
Proceeds	8,740	1,564	4,436
Repayments	(1,186)	(2,621)	(2,629)
Treasury stock		(3,002)	(1,510)
Transactions with noncontrolling interest	(411)	(1,134)	660
Dividends and interest attributed to Company's stockholders	(6,000)	(9,000)	(3,000)
Dividends and interest attributed to noncontrolling interest	(45)	(100)	(140)
Net cash provided by (used in) financing activities	1,165	(14,371)	(2,083)
Increase (decrease) in cash and cash equivalents	2,413	(3,944)	(84)
Effect of exchange rate changes on cash and cash equivalents	(112)	(109)	375
Cash and cash equivalents, beginning of year	3,531	7,584	7,293
Cash and cash equivalents, end of year	5,832	3,531	7,584
Cash paid during the year for:			
Interest on short-term debt	(8)	(3)	(5)
Interest on long-term debt	(1,308)	(1,143)	(1,097)
Income tax	(1,238)	(7,293)	(1,972)
Non-cash transactions			
Income tax paid with credits	(1,129)	(681)	301
Interest capitalized	335	234	164

Conversion of mandatorily convertible notes using 56,081,560 treasury stock (Note 18)

The accompanying notes are an integral part of these financial statements.

Table of Contents**Consolidated Statements of Changes in Stockholders' Equity**

Expressed in millions of United States dollars

(Except number of shares)

	2012	Year ended as of December 31, 2011	2010
Preferred class A stock (including 12 golden shares)			
Beginning of the year	16,728	10,370	9,727
Capital increase		6,358	
Transfer from undistributed retained earnings			643
End of the year	16,728	16,728	10,370
Common stock			
Beginning of the year	25,837	16,016	15,262
Capital increase		9,821	
Transfer from undistributed retained earnings			754
End of the year	25,837	25,837	16,016
Treasury stock			
Beginning of the year	(5,662)	(2,660)	(1,150)
Sales (acquisitions)	1,185	(3,002)	(1,510)
End of the year	(4,477)	(5,662)	(2,660)
Additional paid-in capital			
Beginning of the year	(61)	2,188	411
Change in the year	(468)	(2,249)	1,777
End of the year	(529)	(61)	2,188
Mandatorily convertible notes - common shares			
Beginning of the year	290	290	1,578
Change in the year	(290)		(1,288)
End of the year		290	290
Mandatorily convertible notes - preferred shares			
Beginning of the year	644	644	1,225
Change in the year	(644)		(581)
End of the year		644	644
Other cumulative comprehensive income (deficit)			
Cumulative translation adjustments			
Beginning of the year	(5,238)	(253)	(1,772)
Change in the year	(2,882)	(4,985)	1,519
End of the year	(8,120)	(5,238)	(253)
Unrealized gain (loss) - available-for-sale securities, net of tax			
Beginning of the year	1	3	
Change in the year	(1)	(2)	3
End of the year		1	3
Surplus (deficit) of accrued pension plan			
Beginning of the year	(567)	(59)	(38)
Change in the year	(936)	(508)	(21)

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

End of the year	(1,503)	(567)	(59)
Cash flow hedge			
Beginning of the year	131	(24)	2
Change in the year	(121)	155	(26)
End of the year	10	131	(24)
Total other cumulative comprehensive income (deficit)	(9,613)	(5,673)	(333)
Undistributed retained earnings			
Beginning of the year	41,130	42,218	28,508
Transfer from unappropriated retained earnings	(2,133)	13,221	15,107
Transfer to capitalized earnings		(14,309)	(1,397)
End of the year	38,997	41,130	42,218
Unappropriated retained earnings			
Beginning of the year	4,482	166	3,182
Net income attributable to the Company's stockholders	5,511	22,885	17,264
Remuneration of mandatorily convertible notes			
Preferred class A stock	(44)	(97)	(72)
Common stock	(19)	(70)	(61)
Dividends and interest attributed to stockholders' equity			
Preferred class A stock	(1,929)	(2,143)	(1,940)
Common stock	(2,836)	(3,038)	(3,100)
Appropriation to undistributed retained earnings	2,133	(13,221)	(15,107)
End of the year	7,298	4,482	166
Total Company stockholders' equity	74,241	77,715	68,899
Noncontrolling interests			
Beginning of the year	1,894	2,830	2,831
Disposals (acquisitions) of noncontrolling interests	(198)	(631)	1,629
Cumulative translation adjustments	46	(210)	104
Cash flow hedge		1	40
Losses attributable to noncontrolling interests	(257)	(233)	189
Net income attributable to redeemable noncontrolling interests	181	207	
Dividends and interest attributable to noncontrolling interests	(74)	(105)	(104)
Capitalization of stockholders' advances	43	31	27
Pension plan		4	
Assets and liabilities held for sale			(1,886)
End of the year	1,635	1,894	2,830
Total stockholders' equity	75,876	79,609	71,729
Number of shares issued and outstanding:			
Preferred class A stock (including 12 golden shares)	2,108,579,618	2,108,579,618	2,108,579,618
Common stock	3,256,724,482	3,256,724,482	3,256,724,482
Buy-backs			
Beginning of the year	(211,929,174)	(147,024,965)	(152,579,803)
Acquisitions		(120,987,980)	(69,880,400)
Conversions	56,081,847	1,924	75,435,238
End of the year	(155,847,327)	(268,011,021)	(147,024,965)
	5,209,456,773	5,097,293,079	5,218,279,135

The accompanying notes are an integral part of these financial statements.

Table of Contents**Notes to the Consolidated Financial Statements**

Expressed in millions of United States dollars, unless otherwise stated

1 The Company and its operations

Vale S.A., (Vale , Company or we) is a limited liability company incorporated in Brazil. Operations are carried out through Vale and our subsidiary companies, joint ventures and affiliates, and mainly consist of mining, base metals production, fertilizers, logistics and steel activities.

Our principal consolidated operating subsidiaries at December 31, 2012 are the following:

Subsidiaries	% ownership	% voting capital	Location	Principal activity
Compañia Minera Miski Mayo S.A.C.	40.00	51.00	Peru	Fertilizer
Ferrovía Centro-Atlántica S.A.	99.99	99.99	Brazil	Logistics
Ferrovía Norte Sul S.A.	100.00	100.00	Brazil	Logistics
Mineração Corumbaense Reunida S.A.	100.00	100.00	Brazil	Iron Ore and Manganese
PT Vale Indonesia Tbk	59.20	59.20	Indonesia	Nickel
Sociedad Contractual Minera Tres Valles	90.00	90.00	Chile	Copper
Vale Australia Pty Ltd.	100.00	100.00	Australia	Coal
Vale Canada Limited	100.00	100.00	Canada	Nickel
Vale Fertilizantes S.A.	100.00	100.00	Brazil	Fertilizer
Vale International Holdings GMBH	100.00	100.00	Austria	Holding and Exploration
Vale International S.A.	100.00	100.00	Switzerland	Trading
Vale Manganês S.A.	100.00	100.00	Brazil	Manganese and Ferroalloys
Vale Mina do Azul S.A.	100.00	100.00	Brazil	Manganese
Vale Moçambique S.A.	95.00	95.00	Mozambique	Coal
Vale Nouvelle-Calédonie SAS	80.50	80.50	New Caledonia	Nickel
Vale Oman Pelletizing Company LLC	70.00	70.00	Oman	Pellets
Vale Shipping Holding PTE Ltd.	100.00	100.00	Singapore	Logistics

2 Basis of consolidation

All majority-owned subsidiaries in which we have both share and management control are consolidated. All significant intercompany accounts and transactions are eliminated. Subsidiaries over which control is achieved through other means, such as stockholders agreement, are also consolidated even if we hold less than 51% of voting capital. Our variable interest entities in which we are the primary beneficiary are

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

consolidated. Investments in unconsolidated affiliates and joint ventures are accounted under the equity method (Note 15).

We evaluate the carrying value of our equity investments in relation to publicly quoted market prices when available. If the quoted market price is lower than book value, and such decline is considered other than temporary, we write-down our equity investments to the level of the quoted market value.

We define joint ventures as businesses in which we and a small group of other partners each participate actively in the overall entity management, based on a stockholders agreement. We define affiliates as businesses in which we participate as a noncontrolling interest but with significant influence over the operating and financial policies of the investee.

Our participation in hydroelectric projects in Brazil is made via consortium contracts under which we have undivided interests in the assets, and are liable for our proportionate share of liabilities and expenses, which are based on our proportionate share of power output. We do not have joint liability for any obligations. No separate legal or tax status is granted to unincorporated consortia under Brazilian law. Accordingly, we recognize our proportionate share of costs and our undivided interest in assets relating to hydroelectric projects (Note 13).

Table of Contents

3 Summary of significant accounting policies

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Estimates are used for, but not limited to, the selection of useful lives of property, plant and equipment, impairment, provisions necessary for contingent liabilities, fair values assigned to assets and liabilities acquired in business combinations, income tax valuation allowances, employee post retirement benefits and other similar evaluations. Actual results could differ from those estimated.

a) Basis of presentation

We have prepared our consolidated financial statements in accordance with United States generally accepted accounting principles (US GAAP), which differ in certain respects from the accounting practices adopted in Brazil (BR GAAP), compliant with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standard Board (IASB), which are the basis for our statutory financial statements.

The Brazilian Real (R\$) is the Parent Company s functional currency. We have selected the US dollar (US\$) a convenience to facilitate analysis by our international investor.

In 2011, based on entity business assessment, Vale International changed its functional currency from the Brazilian Real to the US dollar. This change did not cause significant effects in the financial statements presented.

All assets and liabilities have been translated to US dollars at the closing rate of exchange at each balance sheet date (or, if unavailable, the first available exchange rate). All statement of income accounts have been translated to US dollars at the average exchange rates prevailing during the respective periods. Capital accounts are recorded at historical exchange rates. Translation gains and losses are recorded in the Cumulative Translation Adjustments account (CTA) in stockholders equity.

The results of operations and financial position of our entities that have a functional currency other than the US dollar, have been translated into US dollars and adjustments to translate those statements into US dollars are recorded in the CTA in stockholders equity.

The exchange rates used to translate the assets and liabilities of the Brazilian operations at December 31, 2012 and 2011, were R\$ 2.0435 and R\$1.8683, respectively.

b) Revision of prior year revenue presentation

For certain contracts, we carry the risks concerning the transportation of the products and determine the freight price directly to our customer. However, for these contracts in 2011 and 2010 the major part of the freight related to CFR (Incoterm for cost and freight) for iron ore and pellets sales, was recorded as if Vale was acting as an agent, resulting in the net presentation of freight revenues. We revised the 2011 and 2010 income statement presentation to appropriately reflect the revenue of such sales by the total amount billed to customers and as a consequence present the related freight costs as cost of product sold and therefore we increase the 2011 sales of ore and metals in amount of US\$ 1,955 (US\$1,735 in 2010) with the corresponding increase in cost of ores and metals sold. The revision did not result in any other changes in the income statement presentation.

c) Information by Segment and Geographic Area

The Company discloses information by consolidated operational business segment and revenues by consolidated geographic area, in accordance with the principles and concepts used by decision makers in evaluating performance. The information is analyzed by segment as follows:

Bulk Material - includes the extraction of iron ore and pellet production and the transport systems of Brazil, including railroads, ports and terminals, linked to mining operations. The manganese ore, ferroalloys and coal are also included in this segment.

Base metals includes the production of non-ferrous minerals, including nickel operations (co-products and by-products), copper and investment in aluminum affiliate.

Table of Contents

Fertilizers comprises three major groups of nutrients: potash, phosphate and nitrogen.

Logistical services includes our system of cargo transportation for third parties divided into rail transport, port and shipping services.

Other - comprises sales and expenses of other products and investments in joint ventures and associate in other businesses.

d) Current and non-current assets and liabilities

We classify assets and liabilities as current when it expects to realize the assets and to settle the liabilities, within twelve months after the reporting period. Others assets and liabilities are classified as non-current.

e) Cash equivalents and short-term investments

The amounts recorded as cash and cash equivalents correspond to the values available in cash, bank deposits and investments in the short-term that have immediate liquidity and original maturity within 90 days. Other investments with between 91 and 360 day maturities are recognized at fair value through income and presented in short-term investments.

f) Accounts Receivable

Represent receivables from sales of products and services. Receivables are initially recorded at fair value and subsequently measured at amortized cost, net of impairment losses, when applicable.

g) Inventory

Inventories are recorded at the average cost of purchase or production, reduced to market value (net realizable value less a reasonable margin) when lower. Stockpiled inventories are accounted in process when they are removed from the mine. The cost of finished goods is comprised of depreciation and all direct costs necessary to convert stockpiled inventories into finished goods.

We classify proven and probable reserve quantities attributable to stockpiled inventories as inventories. These reserve quantities are not included in the total proven and probable reserve quantities used in the units of production, depreciation, depletion and amortization calculations.

We periodically assess our inventories to identify obsolete or slow-moving inventories and, if needed, we record allowances as considered necessary.

h) Stripping costs

Stripping costs (the cost associated with the removal of overburden and other waste materials) incurred during the development of mines, before production takes place, are capitalized as part of the depreciable cost of developing the property. These costs are subsequently amortized over the useful life of the mine based on proven and probable reserves.

Post-production stripping costs are included in the cost of inventory, except when a campaign is launched to permit the access to a significant new ore body. In such cases, the cost is capitalized as non-current asset and amortized during the extraction of the ore body.

i) Property, plant and equipment and intangible assets

Property, plant and equipment are recorded at cost, including interest cost incurred during the construction of major new facilities. We compute depreciation on the straight-line method at annual average rates which take into consideration the useful lives of the assets, as follows: 3.73% for railroads, 1.5% for buildings, 4.23% for installations and 7.73% for other equipment. Expenditures for maintenance and repairs are charged to operating costs and expenses as incurred.

We capitalize the costs of developing major new ore bodies or expanding the capacity of operating mines and amortize these to operations on the unit-of-production method based on the total probable and proven quantity of ore to be recovered. Exploration costs are expensed. Once the economic viability of mining activities is established, subsequent development costs are capitalized.

Table of Contents

Separately acquired intangible assets are shown at historical cost. Intangible assets acquired in a business combination are recognized at fair value at the acquisition date. All our intangible assets have definite useful lives and are carried at cost less accumulated amortization, which is calculated using the straight-line method over their estimated useful lives.

j) Business combinations

We apply accounting for business combinations to record acquisitions of interests in other companies. The purchase method, requires that we reasonably determine the fair value of the identifiable tangible and intangible assets and liabilities assumed of acquired companies and segregate goodwill as an intangible asset.

We assign goodwill to reporting units and test each reporting unit's goodwill for impairment at least annually, and whenever circumstances indicating that recognized goodwill may not be fully recovered are identified. We perform the annual goodwill impairment tests during the last quarter of each year.

Goodwill is reviewed for impairment utilizing a two step process. In the first step, we compare a reporting unit's fair value with its carrying amount to identify any potential goodwill impairment loss. If the carrying amount of a reporting unit exceeds the unit's fair value, based on a discounted cash flow analysis, we carry out the second step of the impairment test, measuring and recording the amount, if any, of the unit's goodwill impairment loss.

k) Impairment

The Company assesses, at each reporting date whether there is evidence that the carrying amount of financial assets measured through amortized cost and long-lived non-financial asset, should be impaired.

For financial assets measured through amortized cost, Vale compares the carrying amount with expected cash flows for the asset, and if there when appropriate, the carrying value is adjusted to the cash flow value.

Vale reviews and evaluates its long-lived assets for impairment when events or changes in circumstances indicate that the related carrying amounts may not be recoverable. Long-lived assets, other than indefinite-lived intangible assets, are evaluated for impairment under the two-step

model. An impairment is considered to exist if total estimated future cash flows on an undiscounted basis are less than the carrying amount of the asset. Once it is determined that an impairment exists, an impairment loss is measured as the amount by which the asset carrying value exceeds its fair value. Fair value is generally determined using valuation techniques, such as estimated future cash flows.

The Company determines its cash flows based on approved budgets, considering mineral reserves and mineral resources calculated by internal experts, costs and investments based on the best estimate of past performance, sale prices consistent with the projections used in reports published by industry considering the market price when available and appropriate. Cash flows used are designed based on the life of each reporting unit (consumption of reserve units in the case of minerals) and considering discount rates that reflect specific risks relating to the relevant assets in each reporting unit, depending on their composition and location.

Regardless the indication of impairment of its carrying value, goodwill balances arising from business combinations and intangible assets with indefinite useful lives are tested for impairment at least once a year.

l) Available-for-sale equity securities

Equity securities classified as available-for-sale are recorded pursuant to accounting for certain investments in debt and equity securities. Accordingly, we classify unrealized holding gains and losses, net of taxes, as a separate component of stockholders' equity until realized.

m) Compensated absences

The liability for future compensation for employee vacations is fully accrued as earned.

Table of Contents

n) Derivatives and hedging activities

We apply accounting for derivative financial instruments and hedging activities, as amended. This standard requires 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, in the latter case depending on whether a transaction is designated as an effective hedge and has been effective during the period.

o) Asset retirement obligations

Our asset retirement obligations consist primarily of estimated closure costs. The initial measurement is recognized as a liability discounted to present value and subsequently accreted through earnings. An asset retirement cost equal to the initial liability is capitalized as part of the related asset's carrying value and depreciated during the asset's useful life.

p) Revenues and expenses

Revenue is recognized when Vale transfers to its customers all significant risks and rewards of ownership of the product sold and services rendered. Revenue excludes any applicable sales taxes and is recognized at the fair value of the consideration received or receivable to the extent that it is probable that economic benefits will flow to Vale and the revenues and costs can be reliably measured.

In most instances sales revenue is recognized when the product is delivered to the destination specified by the customer, which is typically the vessel on which it is shipped, the destination port or the customer's premises. However, when the model negotiated with the customer is transferring risks and benefits of the product in shipment, revenue is recognized at the time.

In some cases, the sale price is determined on a provisional basis at the date of sale as the final selling price is subject to escalation clauses in contracts up to the date of final pricing. Revenue from the sale of provisionally priced is recognized when risks and rewards of ownership are transferred to the customer and revenue can be measured reliably. At this date, the amount of revenue to be recognized are estimated based on the forward price of product sold.

Expenses and costs are recognized on the accrual basis.

q) Income taxes

The deferred tax effects of tax loss carryforwards and temporary differences are recognized pursuant to accounting for income taxes. A valuation allowance is made when we believe that it is more likely than not that tax assets will not be fully recovered in the future.

r) Earnings per share

Earnings per share are computed by dividing net income by the weighted average number of common and preferred shares outstanding during the year.

s) Interest attributed to stockholders' equity (dividend)

Brazilian corporations are permitted to distribute interest attributable to stockholders' equity. The calculation is based on the stockholders' equity amounts as stated in the statutory accounting records and the interest rate applied may not exceed the long-term interest rate (TJLP) determined by the Brazilian Central Bank. Also, such interest may not exceed 50% of net income for the year or 50% of retained earnings plus revenue reserves as determined by Brazilian corporate law.

The notional interest charge is tax deductible in Brazil. The benefit to us, as opposed to making a dividend payment, is a reduction in our income tax burden. Income tax of 15% is withheld on behalf of the stockholders relative to the interest distribution. Under Brazilian law, interest attributed to stockholders' equity is considered as part of the annual minimum mandatory dividend (Note 18). This notional interest distribution is treated for accounting purposes as a deduction from stockholders' equity in a manner similar to a dividend and the tax credit recorded in income.

Table of Contents

t) Pension and other post retirement benefits

We sponsor private pensions and other post retirement benefits for our employees which are actuarially determined and recognized as an asset or liability or both depending on the funded or unfunded status of each plan in accordance with employees' accounting for defined benefit pension and other post retirement plans. The cost of our defined benefit and prior service costs or credits that arise during the period and are not components of net periodic benefit costs are recorded in other cumulative comprehensive income (deficit).

4 Accounting pronouncements

a) Newly issued accounting pronouncements

Accounting Standards Update (ASU) number 2013-02: Comprehensive Income (Topic 220): Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Income: The objective of this Update is to improve the reporting of reclassifications out of accumulated other comprehensive income. The amendments in this Update seek to attain that objective by requiring an entity to report the effect of significant reclassifications out of accumulated other comprehensive income on the respective line items in net income if the amount being reclassified is required under US GAAP. The amendments in this ASU are effective for public entities for fiscal years beginning after December 15, 2012.

ASU number 2013-01: Balance Sheet (Topic 210): The main objective in developing this Update is to address implementation issues about the scope of Accounting Standards Update No. 2011-11, Balance Sheet (Topic 210): Disclosures about Offsetting Assets and Liabilities. The amendments clarify that the scope of Update 2011-11 applies to derivatives accounted for in accordance with Topic 815, Derivatives and Hedging, including bifurcated embedded derivatives, repurchase agreements and reverse repurchase agreements, and securities borrowing and securities lending transactions that are either offset in accordance with Section 210-20-45 or Section 815-10-45 or subject to an enforceable master netting arrangement or similar agreement. The effective date is the same as the effective date of Update 2011-11.

ASU number 2012-02: Intangibles - Goodwill and Other (Topic 350). The objective of this ASU is to reduce the cost and complexity of performing an impairment test for indefinite-lived intangible assets by simplifying how an entity tests those assets for impairment and to improve consistency in impairment testing guidance among long-lived asset categories. The amendments in this ASU are effective for annual and interim impairment tests performed for public entities for fiscal years and interim periods beginning after September 15, 2012.

The Company does not expect these updates to have a significant impact on its financial statements.

Table of Contents

5 Major acquisitions and divestitures

a) Belvedere Coal Project

In 2012, Vale concluded the purchase option on additional 24.5% participation in the Belvedere Coal Project owned by Aquila Resources Limited (Aquila) in the amount of AUD150 million (US\$156).

The acquisition is subject to approvals from the government of Queensland, Australia. As a result of this transaction, Vale will increase its participation in Belvedere to 100%. Additionally, Vale agreed to pay AUD20 million (US\$21) to end litigations and disputes relating to the Belvedere with Aquila.

The project is still in stage of development and, consequently, subject to approval of the Board of Directors of Vale. At the end of transaction, Vale will have paid US\$338 for 100% of Belvedere.

b) Fertilizer Business

In 2010, through our wholly owned subsidiary Mineração Naque S.A. (Naque), we acquired 78.92% of the total capital (being 99.83% of the voting capital) of Vale Fertilizantes S.A. (Vale Fertilizantes) and 100% of the total capital of Vale Fosfatados S.A.. In 2011 and beginning of 2012, we concluded several transactions including a public tender to acquire the free float of Vale Fertilizantes shares, and the subsequent delisting of its shares which resulted in the Company owning of 100% of the its capital.

The purchase consideration of the business combination effected in 2010, when control was obtained, amounted to US\$5,795. The purchase price allocation exercise was concluded in 2011 and generated a deferred tax liability on the fair value adjustments, determined based on the temporary differences between the accounting basis of those assets and liabilities at fair values, substantially represented by Property Plant and Equipment, and their tax basis represented by the historical carrying values at the acquired entity. Pursuant to current Brazilian tax regulations, goodwill generated in connection with a business combination as well as the fair values of assets and liabilities acquired are only tax deductible post a legal merger between the acquirer and the acquiree.

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

In June 2012, we have decided to legally merge Naque and Vale Fertilizantes. As a result, the carrying amounts of acquired assets and liabilities accounted for in Naque's consolidated financial statements, represented by their amortized fair values from acquisition date, became their tax basis.

Therefore, upon concluding the merger, there are no longer differences between tax basis and carrying amounts of the net assets acquired, and consequently there is no longer deferred tax liability amount to be recognized. The outstanding balance of the initially recognized deferred tax liability (accounted for in connection with the purchase accounting) totaling US\$1,236 was entirely recycled through P&L for the year ended December 31, 2012, in connection with the legal merger of Vale Fertilizantes into Naque. In addition, Naque was then renamed as Vale Fertilizantes.

c) Sale of coal

In June 2012, we concluded the sale of our thermal coal operations in Colombia to CPC S.A.S., an affiliate of Colombian Natural Resources S.A.S. (CNR).

The thermal coal operations in Colombia constitute a fully-integrated mine-railway-port system consisting of a coal mine and a coal deposit; a coal port facility; and an equity participation in a railway connecting the coal mines to the port.

The loss on this transaction, of US\$355 was recorded in the income statement in the line Gain (loss) on sale of assets

d) Acquisition of EBM shares

As part of its strategy to optimize its corporate structure, Vale acquired additional 10.46% of Empreendimentos Brasileiros de Mineração S.A. (EBM) in 2012, whose main asset is an interest in Minerações Brasileiras Reunidas S.A. (MBR), which owns the Itabirito, Vargem Grande and Paraopeba mining properties. As a result of the acquisition, we increased our share in EBM to 96.7% and in MBR to 98.3%. We recorded US\$62 as result from operations with noncontrolling interest in Stockholders Equity .

Table of Contents

e) Manganese and ferroalloys

In October 2012, we concluded the sale of the manganese ferroalloys operations in Europe to subsidiaries of Glencore International Plc., a company listed on the London and Hong Kong Stock Exchanges, for US\$160 in cash, subject to the fulfillment of certain precedent conditions. We recognized a loss of US\$22 presented in our statement of income as gain (loss) on sale of assets .

The manganese ferroalloys operations in Europe consist of: (a) 100% of Vale Manganèse France SAS, located in Dunkirk France; and (b) 100% of Vale Manganese Norway AS, located in Mo I Rana, Norway.

f) Participation of Vale Oman Pelletizing

In October 2012, Vale sold 30% of participation in Vale Oman Pelletizing LLC for the Oman Oil Company, wholly owned subsidiary of the Government of the Sultanate of Oman, for US\$71. We recognized a gain of US\$63 recorded in equity.

6 Income taxes

We analyze the potential tax impact associated with undistributed earnings of each of our subsidiaries and affiliates. For those subsidiaries in which undistributed earnings are intended to be reinvested indefinitely, no deferred tax is recognized. Undistributed earnings of foreign consolidated subsidiaries and affiliates for which no deferred income tax has been recognized for possible future remittances to the parent company totaled approximately US\$26,800 on December 31, 2012 and US\$26,300 on December 31, 2011. These amounts are considered to be permanently reinvested in the Company's international business. It is not practicable to determine the amount of the unrecognized deferred tax liability associated with these amounts. If we did determine to repatriate these earnings, there would be various methods available to us, each with different tax consequences. There would also be uncertainty as to the timing and amount, if any, of foreign tax credits that would be available, as the calculation of the available foreign tax credit is dependent upon the timing of the repatriation and projections of significant future uncertain events. The wide range of potential outcomes that could result due to these factors, among others, makes it impracticable to calculate the amount of tax that hypothetically would be recognized on these earnings if they were repatriated.

There were no changes in the rates of taxes in the countries where we operate in the years reported. The income tax expense in the statement of income is reconciled with the Brazilian nominal statutory composite rate, as follows:

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

	Year ended as of December 31,								
	Brazil	2012 Foreign	Total	Brazil	2011 Foreign	Total	Brazil	2010 Foreign	Total
Income before discontinued operations, income taxes, equity results and noncontrolling interests	6,210	(788)	5,422	21,267	5,532	26,799	16,586	3,728	20,314
	6,210	(632)	5,578	21,267	5,558	26,825	16,586	3,993	20,579
Tax at Brazilian composite rate	(2,111)	268	(1,843)	(7,231)	(1,881)	(9,112)	(5,639)	(1,268)	(6,907)
Adjustments to derive effective tax rate:									
Tax benefit on interest attributed to stockholders	1,337		1,337	1,655		1,655	995		995
Difference on foreign tax jurisdiction rates		221	221		1,415	1,415		1,673	1,673
Tax incentives	204		204	704		704	642		642
Social contribution contingency payment				506		506			
Reversal/Constitution of allowance for tax loss carryforward		(228)	(228)	129	(426)	(297)			
Reversal of deferred tax liability (Note 5a.)	1,236		1,236						
Other non-taxable, income/non deductible expenses	(41)		(41)	48	(192)	(144)	13	(31)	(18)
Income taxes per consolidated statements of income	625	208	833	(4,189)	(1,093)	(5,282)	(3,989)	284	(3,705)

Vale and some subsidiaries in Brazil were granted tax incentives that provide for a partial reduction of the income tax due related to certain regional operations of iron ore, railroad, manganese, copper, bauxite, alumina, aluminum, kaolin and potash. The tax benefit is calculated based on taxable profit adjusted by the tax incentive (so-called "exploration profit") taking into consideration the operational profit of the projects that benefit from the tax incentive during a fixed period. Generally these tax incentives last for 10 years. The Company's tax incentives will expire in 2020. The tax savings must be recorded in a non distributable capital (profit) reserve in the Stockholders' equity.

Table of Contents

We can also reinvest part of the tax savings from the acquisition of new equipment to be used in the operations, once approved, and covered by the Brazilian regulatory agencies Superintendência de Desenvolvimento da Amazônia - SUDAM and Superintendência de Desenvolvimento do Nordeste - SUDENE. When the reinvestment is approved, the tax benefit must also be accounted for in a non distributable profit reserve.

We also have income tax incentives related to our Goro project under development in New Caledonia (the Goro Project). These incentives include an income tax holiday during the construction phase of the project and throughout a 15-year period commencing in the first year in which commercial production, as defined by the applicable legislation, is achieved followed by a five-year, 50 per cent income tax holiday. The Goro Project also qualifies for certain exemptions from indirect taxes such as import duties during the construction phase and throughout the commercial life of the project. Certain of these tax benefits, including the income tax holiday, are subject to an earlier phase out, should the project achieve a specified cumulative rate of return. We are subject to a branch profit tax commencing in the first year in which commercial production is achieved, as defined by the applicable legislation. To date, we have not recorded any taxable income for New Caledonian tax purposes. The benefits of this legislation are expected to apply with respect to taxes payable once the Goro Project is in operation. We obtained tax incentives for our projects in Mozambique, Oman and Malaysia, that will take effects when those projects start their commercial operation.

The Company's income taxes are subject to audit by the tax authorities for up to five years in Brazil, up to ten years in Indonesia and up to seven years in Canada.

Tax loss carry forwards in Brazil and in most of the jurisdictions where we have tax loss carry forwards have no expiration date, though in Brazil, offset is restricted to 30% of annual taxable income.

The Company's uncertain income tax positions were as follows: (Note 21(b)) tax related actions).

	Year ended as of December 31,		
	2012	2011	2010
Beginning of the year	263	2,555	396
Increase resulting from tax positions taken	20	1,076	2,130
Decrease resulting from tax positions taken (a)	(26)	(3,409)	(24)
Cumulative translation adjustments	7	41	53
End of the year	264	263	2,555

(a) The decrease in the tax positions taken in 2011, was a consequence of the payment we made as a consequence of a Brazilian court decision in a case related to the exemption of the Social Contribution (Contribuição Social sobre o Lucro Líquido).

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

For the year ended December 31, 2012 and December 31, 2011 there were US\$11 and US\$12, respectively, of unrecognized tax benefits that, if recognized, would affect the Company's annual effective tax rate.

Table of Contents

The Company recognizes interest accrued related to unrecognized tax benefits in financial expense and penalties in other operating expenses. The interest and penalties recognized in the statement of income for the year ended December 31, 2012 and December 31, 2011 there were US\$9 and US\$(17), respectively. The Company accrued US\$84 at December 31, 2012 and US\$73 at December 31, 2011 for the payment of interest and penalties.

	Year ended as of	
	December 31, 2012	December 31, 2011
Current deferred tax assets		
Accrued expenses deductible only when disbursed	356	203
Assets		
Employee postretirement benefits provision	855	640
Tax loss carryforwards	2,610	1,709
Fair value of financial instruments	796	610
Impairment	1,269	
Assets retirement obligation	450	389
Other temporary differences (mainly contingencies provisions)	686	794
	6,666	4,142
Liabilities		
Prepaid retirement benefit	(226)	(509)
Fair value adjustments in business combinations	(5,622)	(7,311)
Other temporary differences	(326)	(463)
	(6,174)	(8,283)
Valuation allowance		
Beginning balance	(126)	(110)
Translation adjustments	10	
Change in allowance	(1,328)	(809)
Ending balance	(1,444)	(919)
Net non-current deferred tax liabilities	(952)	(5,060)
Assets	2,586	594
Liabilities	(3,538)	(5,654)
Total	(952)	(5,060)

7 Cash and cash equivalents

	As of December 31,	
	2012	2011
Cash	1,194	945
Short-term investments	4,638	2,586
	5,832	3,531

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

All the above mentioned short-term investments are made through the use of low risk fixed income securities with highly-rated institutions. The investments denominated in Brazilian Reais are mostly investments indexed to the Brazilian Interbank Interest rate (CDI), and those denominated in US dollars are mainly time deposits, with the original maturities of less than three months.

The increase in cash equivalents during the 2012, is mainly related to the cash provided by operating activities and the notes issued during 2012 (Note 17).

8 Short-term investment

	As of December 31,	
	2012	2011
Time Deposits	246	246

Table of Contents**9 Account receivable**

Accounts receivable from customers in the steel industry represent 71.2% and 70.36% of receivables at December 31, 2012 and December 31, 2011.

No single customer accounted for more than 10% of total revenues.

Additional allowances for doubtful accounts charged to the statement of income as expenses in 2012, 2011 and 2010 totaled US\$34, US\$ 2 and US\$ 23, respectively. We wrote-off US\$16 in 2012, US\$ 1 in 2011 and US\$ 37 in 2010.

	As of December 31,	
	2012	2011
Customers		
Denominated in Brazilian Reais	849	1,228
Denominated in other currencies, mainly US dollars	6,060	7,382
	6,909	8,610
Allowance for doubtful accounts	(114)	(105)
Total	6,795	8,505

10 Inventories

	As of December 31,	
	2012	2011
Products		
Nickel (co-products and by-products)	1,662	1,771
Iron ore and pellets	1,086	1,137
Manganese and ferroalloys	90	240
Fertilizer	373	387
Copper concentrate	64	72
Coal	311	277
Others	11	91
Spare parts and maintenance supplies	1,455	1,276
	5,052	5,251

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

On December 31, 2012 and 2011 inventory balances include a provision for adjustment to market value of nickel, in the amount of US\$ 0 and US\$ 14, respectively, manganese in the amount of US\$ 3 and US\$9, respectively and copper in the amount of US\$ 3 and US\$0, respectively.

11 Recoverable Taxes

	As of December 31,	
	2012	2011
Income tax	1,161	814
Value-added tax	1,023	997
Others brazilian federal contributions	734	1,006
Total	2,918	2,817
Current	2,260	2,230
Non-current	658	587
	2,918	2,817

Table of Contents**12 Assets and liabilities held for sale**

In December 2012, we executed an agreement with Petróleo Brasileiro S.A. (Petrobras) to sell our operation for production of nitrogens, located in Araucária, in the Brazilian state of Paraná, for US\$234. The purchase price will be paid by Petrobras through installments accrued quarterly, adjusted by 100% of the CDI, in amounts equivalent to the royalties due by Vale related to the leasing of potash assets and mining of Taquari-Vassouras and of the Carnalita project.

The major classes of assets and liabilities reclassified as held for sale as at December 31, 2012 are as follows:

	2012
Assets held for sale	
Accounts receivable	14
Recoverable taxes	28
Inventories	20
Property, plant and equipment	404
Other	13
Total	479
Liabilities related to assets held for sale	
Suppliers	12
Deferred income tax	109
Others	60
Total	181

13 Property, plant and equipment and intangible assets

By type of assets:

	December 31, 2012			December 31, 2011		
	Cost	Accumulated Depreciation	Net	Cost	Accumulated Depreciation	Net
Land	676		676	695		695
Buildings	8,075	(2,104)	5,971	7,912	(1,890)	6,022
Installations	15,748	(4,096)	11,652	14,886	(3,708)	11,178
Equipment	11,640	(4,373)	7,267	12,549	(4,243)	8,306

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

Railroads	6,504	(2,047)	4,457	6,574	(1,930)	4,644
Mine development costs	27,778	(6,102)	21,676	26,955	(5,180)	21,775
Others	14,530	(4,535)	9,995	14,556	(4,126)	10,430
	84,951	(23,257)	61,694	84,127	(21,077)	63,050
Intangible assets	1,126	(104)	1,022	1,202	(67)	1,135
Construction in progress	29,050		29,050	25,845		25,845
Total	115,127	(23,361)	91,766	111,174	(21,144)	90,030

Losses on disposal of property, plant and equipment totaled US\$216, US\$223 and US\$623 in December 31, 2012, 2011 and 2010 respectively. This mainly related to write-offs of ships and trucks, locomotives and other equipment, which were replaced in the normal course of business.

Assets given in guarantee of judicial processes totaled US\$ 96 as at December 31, 2012 (US\$ 97 as at December 31, 2011).

Hydroelectric assets

We participate in several jointly-owned hydroelectric plants, already in operation or under construction, in which we record our undivided interest in these assets as Property, plant and equipment.

At December 31, 2012 the cost of hydroelectric plants in service totals US\$ 2,165 (December 31, 2011 US\$2,261) and the related depreciation in the year was US\$ 480 (December 31, 2011 US\$ 428). The cost of hydroelectric plant under construction totaled at December 31, 2012 totals US\$ 10 (December 31, 2011 US\$ 59). Income and operating expenses for such plants are not material.

Table of Contents**Intangibles**

All of the intangible assets recognized in our financial statements were acquired from third parties, either directly or through a business combination and have definite useful lives from 6 to 30 years.

At December 31, 2012 the intangibles amount to US\$ 1,022 (December 31, 2011 - US\$ 1,135), and are comprised of rights granted by the government - Ferrovia Norte Sul of US\$ 788 and off take-agreements of US\$ 234.

14 Impairment

In 2012 we identified evidence of impairment in relation to certain investments in affiliates and joint ventures and property, plant and equipment of the nickel, aluminum, coal and other reporting units. The following impairment charges were recorded:

Product	Reporting unit	December 31, 2012		Impairment charge
		Carrying amount	Recoverable amount	
Investment in affiliates and joint ventures				
Aluminum	Norsk Hydro ASA	3,212	2,237	975
Steel	Thyssenkrupp CSA	936	353	583
Energy	Vale Soluções de Energia	100	17	83
		4,248	2,607	1,641
Property, plant and equipment				
Nickel	Onça Puma	3,779	930	2,849
Coal	Australia	1,619	590	1,029
Other		185	40	145
		5,583	1,560	4,023
		9,831	4,167	5,664

(a) Investment

- **Investment in Norsk Hydro**

Volatility of aluminum prices and uncertainties regarding the prospects of the European economy contributed to a decrease in the traded market value of our 22% stake in Norsk Hydro, a Norwegian-listed aluminum producer, to a level below our carrying value of the equity accounted investment.

At December 31, 2012 Norsk Hydro's shares at the close of trading were quoted at US\$ 4.99 per share resulting in a market value of US\$ 2,237.

- **Investment in Thyssenkrupp CSA**

We recorded an impairment charge against the carrying value of our 26.87% interest in Thyssenkrupp CSA to reflect a reduction in the investment recoverable amount. The fair value based on future cash flow and does not take into account the inherent value of our rights as the exclusive suppliers of ore to the mill which comprise an integral component of our investment strategy.

- **Investment in Vale Soluções de Energia (VSE)**

Changes in the Company's investment strategy have altered the expected cash flows from operations of our joint venture VSE.

The recoverable amount for VSE was ascertained from the new cash flow projections from financial budgets recently approved by management for the joint venture.

(b) Property plant and equipment

- **Onça Puma nickel assets**

The two Onça Puma iron-nickel project furnaces developed problems which led to their total stoppage from June 2012. Vale has decided to rebuild one of the furnaces and plans to resume operations in the fourth quarter of 2013. As a result of this incident and the current market environment for iron-nickel, we recorded an impairment charge to reduce the net carrying value of Onça Puma's assets.

The recoverable amount of Onça Puma's assets once we determined these would not be recovered though undiscounted cash flow was ascertained by determining their value from discounted cash flow projections based on financial budgets approved by management over the life of the mine. The projected cash flow was adjusted to reflect the effects of the quantities sold at the commodity futures prices and on the expected demand for the product.

Table of Contents

The key assumptions used by management to calculate the impairment are the sales values of the commodities and the discount rate, reflecting the volatile nature of the business.

The discount rates applied to the future cash flow forecasts represent an estimate of the rate the market would apply to comply with the risk of the assets under valuation. Vale's weighted average cost of capital is used as a starting point for determining the discount rates, adjusted for the risk profile of the countries in which the individual cash-generating units operate.

- **Coal assets in Australia**

Increasing costs, falling market prices, reduced production levels and financially unfavorable regulatory changes were identified in the coal sector, leading us to carry out impairment tests.

The recoverable amount for the Australian assets was ascertained by determining through the calculation of value from discounted cash flow projections based on financial budgets approved by management over the life of the mine. The discounted net cash flows to reflect quantities expected to be sold at future commodity prices based on projected demand for the product.

The key assumptions used by management to calculate the impairment of coal assets in Australia include estimates of commodity prices and the discount rate, reflecting the volatile nature of the business.

- **Others**

Changes in the Company's strategy have altered the expected cash flows from operations for certain other operations, including oil and gas and other projects.

The recoverable amount of these assets was ascertained from new cash flow projections based on financial budgets recently revised and approved by management.

Table of Contents**15 Investments in affiliated companies, joint ventures and others investments**

	December 31, 2012			Net income (loss) of the year	Investment in earnings (losses) of investee adjusted Year ended as of December 31, ended as of December 31, ended as of December 31,				Dividends Received Year ended as of December 31, ended as of December 31, ended as of December 31,			
	Interest in capital (%)				2012	2011	2012	2011	2010	2012	2011	2010
	Voting	Total	Net equity									
Bulk Material												
Iron ore and pellets												
Companhia Nipo-Brasileira de Pelotização - NIBRASCO (1)												
	51.11	51.00	349	42	178	173	22	45	48	26	22	3
Companhia Hispano-Brasileira de Pelotização - HISPANOBRÁS (1)												
	51.00	50.89	205	74	104	115	38	19	40	36	20	
Companhia Coreano-Brasileira de Pelotização - KOBRASCO (1)												
	50.00	50.00	214	52	107	78	26	32	43	20	32	11
Companhia Ítalo-Brasileira de Pelotização - ITABRASCO (1)												
	51.00	50.90	125	17	64	80	8	47	18	18	38	25
Minas da Serra Geral SA - MSG												
	50.00	50.00	53	8	26	29	2	3	6			
SAMARCO Mineração SA - SAMARCO (2)												
	50.00	50.00	1,380	1,280	743	528	639	878	798	179	812	950
Baovale Mineração SA - BAOVALE												
	50.00	50.00	55	12	28	35	6	8	4	1		
Zhuhai YPM Pellet e Co.Ltd - ZHUHAI												
	25.00	25.00	93	3	23	23	1		9			
Tecnoed Desenvolvimento Tecnológico SA												
	49.21	49.21	74	(43)	38	48	(20)	(7)	(10)			
					1,311	1,109	722	1,025	956	280	924	989
Coal												
Henan Longyu Resources Co Ltd												
	25.00	25.00	1,365	234	341	282	59	85	76	60		83
Shandong Yankuang International Company Ltd												
	25.00	25.00	(239)	(62)	(60)	(43)	(16)	(15)	(19)			
					281	239	43	70	57	60		83
Base Metals												
Bauxite												
Mineração Rio do Norte SA - MRN												
	40.00	40.00	332	53	132	144	21	8	(2)	7		10
					132	144	21	8	(2)	7		10
Copper												
Teal Minerals Incorporated												
	50.00	50.00	505	(9)	252	234	(5)	(6)	(10)			
					252	234	(5)	(6)	(10)			
Nickel												
Heron Resources Inc (3)												
					6	6						

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

Korea Nickel Corp	25.00	25.00	96		24	4			2			
Others (3)					1	1						
					31	11			2			
Aluminum												
Norsk Hydro ASA (4)					2,237	3,227	(35)	99	47	52		
					2,237	3,227	(35)	99	47	52		
Logistic												
LOG-IN Logística												
Intermodal SA	31.33	31.33	281	(29)	94	114	(10)	(7)	4			
MRS Logística SA	46.75	47.59	1,231	259	586	551	122	132	90	57	55	72
					680	665	112	125	94	57	55	72
Others												
Steel												
California Steel Industries Inc - CSI	50.00	50.00	334	31	167	161	16	14	12	9	7	7
Companhia Siderúrgica do PECEM - CSP	50.00	50.00	998	(13)	499	267	(7)	(3)				
THYSSENKRUPP CSA Companhia Siderúrgica do Atlântico	26.87	26.87	5,273	(628)	534	1,607	(169)	(177)	(85)			
					1,200	2,035	(160)	(166)	(73)	9	7	7
Other affiliates and joint ventures												
Norte Energia S.A.	9.00	9.00	1,335	(23)	120	75	(2)					
Vale Soluções em Energia S.A.(1)	53.13	53.13	134	(266)	71	145	(58)	(16)	(33)			
Others					177	209	2	(4)	(4)			
					368	429	(58)	(20)	(37)			
Total					6,492	8,093	640	1,135	987	460	1,038	1,161

(1) Although Vale held a majority of the voting interest of investees accounted for under the equity method, existing veto rights held by noncontrolling shareholders.

(2) Investment includes goodwill of US\$ 53 in December 31, 2012 and US\$58 in December, 2011.

(3) Available for sale.

(4) Investment at market value as at December, accounted for under the equity method until September. We recognized an impairment charge on this investment as described on (Note 14).

Table of Contents**16 Short-term debt**

There were no short-term borrowings outstanding on December 31, 2012.

17 Long-term debt

	Current liabilities		Non-current liabilities	
	December 31, 2012	December 31, 2011	December 31, 2012	December 31, 2011
Foreign debt				
Loans and financing denominated in the following currencies:				
US dollars	601	496	3,380	2,693
Others	14	9	261	52
Fixed Rate Notes				
US dollars	124	410	13,457	10,073
EUR			1,979	970
Accrued charges	324	221		
	1,063	1,136	19,077	13,788
Brazilian debt				
Brazilian Reais indexed to Brazilian Government long-term interest rate - TJLP/CDI and General Price Index-Market (IGP-M)				
	175	247	6,066	5,245
Basket of currencies	2		10	
Non-convertible debentures	1,957		379	2,505
US dollars denominated	170		1,267	
Accrued charges	101	112		
	2,405	359	7,722	7,750
Total	3,468	1,495	26,799	21,538

The long-term portion at December 31, 2012 was as follows:

2014	1,371
2015	1,204
2016	1,884
2017 and after	22,340
	26,799

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

At December 31, 2012 annual interest rates on long-term debt were as follows:

Up to 3%	5,443
3.1% to 5% (*)	5,691
5.1% to 7% (**)	12,393
7.1% to 9% (**)	4,921
9.1% to 11% (**)	1,338
Over 11% (**)	481
	30,267

(*) Includes Eurobonds. For this operation we have entered into derivative transactions at a cost of 4.51% per year in US dollars.

(**) Includes non-convertible debentures and other Brazilian Real denominated debt that bear interest at the CDI and TJLP plus a spread. For these operations, we have entered into derivative transactions to mitigate our exposure to the floating rate debt denominated in Brazilian Real, totaling US\$ 8,227 of which US\$ 7,890 has an original interest rate above 5.1% per year. The average cost of debts not denominated in U.S. Dollars after derivatives contracting is 3.16% per year in US dollars.

Table of Contents

Vale has non-convertible debentures at Brazilian Real denominated as follows:

Non Convertible Debentures	Quantity as of December 31, 2012		Maturity	Interest	Balance	
	Issued	Outstanding			December 31, 2012	December 31, 2011
2nd Series	400,000	400,000	November 20, 2013	100% CDI + 0.25%	1,973	2,167
Tranche B - Salobo	5	5	No date	6.5% p.a + IGP-DI	379	364
					2,352	2,531
Short-term portion					1,957	
Long-term portion					379	2,505
Accrued charges					16	26
					2,352	2,531

The indexation indices/ rates applied to our debt were as follows:

	2012	Year ended as of	
		2011	2010
TJLP - Long-Term Interest Rate (effective rate)	5.7	6.0	6.0
IGP-M - General Price Index - Market	7.6	5.0	10.9
Appreciation (devaluation) of Real against US dollar	(8.6)	(10.8)	4.5

In October 2012, Vale issued a R\$ 2.5 billion (US\$ 1.2 billion) export credit note to a Brazilian commercial bank that will mature in 2022. As of December 31, 2012, we had withdrawn the total amount of this facility.

In September 2012, Vale entered into a R\$3.9 billion financing agreement (US\$ 1.9 billion) with Banco Nacional de Desenvolvimento Econômico Social (BNDES) to finance the implementation of the CLN 150 Mtpy project, which will increase Vale's northern system railway estimated nominal capacity to approximately 150 million tons per year. As of December 31, 2012, we had drawn R\$ 2.1 billion (US\$ 1 billion) under this facility.

In September 2012, Vale issued US\$ 1.5 billion notes due 2042. The notes were sold at a price of 99.198% of the principal amount and will bear a coupon of 5.625% per year, payable semi-annually.

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

In August 2012, Vale International entered into a bilateral Pre-export Financing Agreement with a commercial bank in an amount of US\$ 150 maturing in five years from its disbursement date. As of December 31, 2012, Vale International had drawn down the total amount of this facility.

On July 10, 2012 we issued 750 million, equivalent to US\$919, euro-denominated notes due 2023. These notes will bear a coupon of 3.75% per year, payable annually, at 99.608% of the principal amount.

In April 2012, through our wholly-owned subsidiary Vale Overseas Limited, we received the amount related to the issue of US\$ 1,250 notes due 2022 that were priced in March at 101.345% of the principal amount. The notes will bear a coupon of 4.375% per year, payable semi-annually and will be consolidated with, and form a single series with, Vale Overseas' s US\$ 1 billion 4.375% notes due 2022 issued on January 2012. Those notes issued in January, 2012 were issued at of 98.804% of the principal amount.

All the securities issued through our 100% finance subsidiary Vale Overseas Limited, are fully and unconditionally guaranteed by Vale.

Table of Contents**Credit Lines and Revolving Credit Lines**

Financial Institution	Contractual Currency	Date of agreement	Available until	Credit line Total amount available	Amounts drawn at December 31,		
					2012	2011	2010
Revolving Credit Lines							
Revolving Credit Facility - Vale/ Vale International/ Vale Canada	US\$	April 2011	5 years	3,000			
Credit Lines							
Nippon Export and investment Insurance (Nexi)	US\$	May 2008 *(a)	5 years **	2,000	300	300	150
Japan Bank for International Cooperation (JBIC)	US\$	May 2008 *(b)	5 years **	3,000			
Banco Nacional de Desenvolvimento Econômico Social (BNDES)	R\$	April 2008 *(c)	5 years **	3,572	1,753	1,368	941
Loans							
Export-Import Bank of China e Bank of China Limited	US\$	September 2010(d)	13 years	1,229	837	467	291
Export Development Canada (EDC)	US\$	October 2010(e)	10 years	1,000	975	500	250
Korean Trade Insurance Corporation (K-Sure)	US\$	August 2011(f)	12 years	528	409	161	
Banco Nacional de Desenvolvimento Econômico Social (BNDES)							
Vale Fertilizantes	R\$	November 2009(g)	9 years	20	20	18	18
PSI 4.50%	R\$	June 2010(h)	10 years	379	343	258	100
Vale Fertilizantes	R\$	October 2010(i)	8 years	121	110	109	91
PSI 5.50%	R\$	March 2011(j)	10 years	50	43	43	
CLN 150	R\$	September 2012(k)	10 years	1,900	1,032		
Vale Fertilizantes	R\$	October 2012(l)	6 years	44	44		
PSI 2.50%	R\$	December 2012(m)	10 years	89			

* Memorandum of Understanding (MOU) signature date

** The availability for application of projects is 5 years.

(a) Mining projects, logistics and energy generation. Vale through its subsidiary PT Vale Indonesia Tbk (PTVI) applied in the amount of US\$ 300 million for the financing of the construction of the hydroelectric plant of Karebbe, Indonesia and withdrew totally.

(b) Mining projects, logistics and energy generation.

(c) Credit Lines to finance projects.

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

- (d) Acquisition of twelve large ore carriers from Chinese shipyards.
- (e) Financing investments in Canada and Canadian exports.
- (f) Acquisition of five large ore carriers and two capesize bulkers from two Korean shipyards. The maturity period is counted from each vessel delivery.
- (g) Gypsum storage in Uberaba plant.
- (h) Acquisition of domestic equipments.
- (i) Expansion of production capacity of phosphoric and sulfuric acids at Uberaba plant (Phase III).
- (j) Acquisition of domestic equipments.
- (k) Capacitação Logística Norte 150 Project (CLN 150).
- (l) Supplemental resources to expand production capacity of phosphoric and sulfuric acids at Uberaba plant (Phase III).
- (m) Acquisition of wagons by VLI Multimodal.

Guarantee

On December 31, 2012, US\$1,450 (US\$648 in 2011) of the total aggregate outstanding debt was secured by property, plant and equipment and receivables.

Covenants

Our principal covenants require us to maintain certain ratios, such as debt to EBITDA and interest coverage. We have not identified any events of noncompliance as of December 31, 2012.

Table of Contents

18 **Stockholders' equity**

Stockholders

Each holder of common and preferred class A stock is entitled to one vote for each share on all matters brought before stockholders' meetings, except for the election of the Board of Directors, which is restricted to the holders of common stock. The Brazilian Government holds 12 preferred special golden shares which confer permanent veto rights over certain matters.

Both common and preferred stockholders are entitled to receive a mandatory minimum dividend of 25% of annual adjusted net income under Brazilian GAAP, once declared at the annual stockholders' meeting. In the case of preferred stockholders, this dividend cannot be less than 6% of the preferred capital as stated in the statutory accounting records or, if greater, 3% of the Brazilian GAAP equity value per share.

In October 2012 we paid gross dividends and interest on own capital (JCP), the total gross amount of R\$3,405 (US\$1,670) and R\$2,710 (US\$1,330), respectively, equivalent to US\$0.324136216 and US\$0.258006563 per common and preferred share outstanding.

In April 2012, we paid interest on capital in the total amount of US\$3 billion, corresponding to US\$0.588547644 per outstanding, common or preferred share.

In November 2011, as part of the share buy-back program approved in June 2011, we concluded the acquisition of 39,536,080 common shares, at an average price of US\$26.25 per share, and 81,451,900 preferred shares, at an average price of US\$24.09 per share (including shares of each class in the form of American Depositary Receipts), for a total aggregate purchase price of US\$3 billion.

Mandatorily convertible

In June 2012, the notes series VALE and VALE.P-2012 were converted into American Depositary Shares (ADS) and represent an aggregate of 15,839,592 common shares and 40,241,968 preferred class A shares respectively. The Conversion was made using 56,081,560 treasury stocks held by the Company. The difference between the conversion amount and the book value of the treasury stocks of US\$(251) was accounted for in additional paid-in capital in the stockholders' equity.

In May 2012, Vale paid additional remuneration to holders of those mandatorily convertible notes, in the amount of US\$1.463648 and US\$1.692869 per note, respectively.

Table of Contents**Earnings per share**

Earnings per share amounts have been calculated as follows:

	Year ended as of December 31,		
	2012	2011	2010
Net income from continuing operations	5,511	22,885	17,407
Discontinued operations, net of tax			(143)
Net income for the year	5,511	22,885	17,264
Remuneration attributed to preferred convertible notes	(44)	(97)	(72)
Remuneration attributed to common convertible notes	(19)	(70)	(61)
Net income for the year adjusted	5,448	22,718	17,131
Earnings per share			
Income available to preferred stockholders	2,063	8,591	6,566
Income available to common stockholders	3,385	13,842	10,353
Income available to convertible notes linked to preferred		205	153
Income available to convertible notes linked to common		80	59
	5,448	22,718	17,131
Weighted average number of shares outstanding (thousands of shares)			
- preferred shares	1,933,491	1,984,030	2,035,783
Weighted average number of shares outstanding (thousands of shares)			
- common shares	3,172,179	3,197,063	3,210,023
Total	5,105,670	5,181,093	5,245,806
Weighted average number of convertibles outstanding (thousands of shares) - linked to preferred shares		47,285	47,285
Weighted average number of convertibles outstanding (thousands of shares) - linked to common shares		18,416	18,416
Total		65,701	65,701
Earnings per preferred share	1.07	4.33	3.23
Earnings per common share	1.07	4.33	3.23
Earnings per convertible note linked to preferred		6.39	4.76
Earnings per convertible note linked to common share		8.15	6.52

19 Pension plans

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

In Brazil, the management of the pension plans of the Company is the responsibility of the Fundação Vale do Rio Doce de Seguridade Social (Valia) nonprofit private entity with administrative and financial autonomy.

Certain of the Company's employees, participant in variable contribution defined benefit plan (*Plano de Benefício Vale Mais e Plano de Benefício VALIAPREV* or the New Plan), specific coverage for death pension and disability retirement and other defined contributions for programmable benefits. The defined benefit plan is subject to actuarial evaluations. The defined contribution plan represents a fixed amount held on behalf of the participant.

The Company also maintains sponsorship of a pension plan with defined benefit characteristics, covering almost exclusively retirees and their beneficiaries, due to the migration of more than 98% of active employees for the Vale Mais Plan in May 2000. This plan was funded by monthly contributions made by the Company and participants, calculated based on periodic actuarial valuations.

Certain former employees are entitled to payments over and above the normal Valia benefits from a Complementation Bonus plus a post-retirement benefit that covers medical, dental and pharmaceutical assistance.

Vale Fertilizantes and its wholly owned subsidiaries pay eligible employees the FGTS penalty pursuant to an union agreement and provide certain health benefits for retired eligible employees.

The Company also has defined benefit plans and other post-employment benefits administered by other foundations and social security entities benefiting all employees.

Employers' disclosure about pensions and other post retirement benefits on the status of the defined benefit elements of all plans is provided.

We use a measurement date December 31 for our pension and post retirement benefit plans.

Table of Contentsa) **Change in benefit obligation**

		As of December 31, 2012	
	Overfunded pension plans	Underfunded pension plans	Underfunded other benefits
Benefit obligation at beginning of year	4,611	4,562	1,694
Transfers	(1,500)	1,500	
Service cost		115	35
Interest cost	310	408	102
Plan amendment		4	
Assumptions changes	432	375	58
Effect of curtailment			(34)
Benefits paid/ Actual distribution	(236)	(435)	(76)
Plan settlements		(119)	(26)
Effect of exchange rate changes	(272)	(83)	3
Actuarial loss	222	717	266
Benefit obligation at end of year	3,567	7,044	2,022

		As of December 31, 2011	
	Overfunded pension plans	Underfunded pension plans	Underfunded other benefits
Benefit obligation at beginning of year	3,623	5,667	1,601
Transfers	1,132	(1,132)	
Service cost	18	79	32
Interest cost	517	272	102
Plan amendment		2	(23)
Assumptions changes	141	39	10
Benefits paid/ Actual distribution	(345)	(363)	(82)
Plan settlements		(26)	(8)
Effect of exchange rate changes	(539)	(138)	(67)
Actuarial loss	64	162	129
Benefit obligation at end of year	4,611	4,562	1,694

b) **Change in plan assets**

		As of December 31, 2012	
	Overfunded pension plans	Underfunded pension plans	Underfunded other benefits
Fair value of plan assets at beginning of year	6,277	3,662	1
Transfers	(1,612)	1,612	
Actual return on plan assets	372	745	
Employer contributions		222	76

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

Benefits paid/ Actual distribution	(236)	(435)	(76)
Plan settlements		(109)	
Effect of exchange rate changes	(390)	(93)	
Fair value of plan assets at end of year	4,411	5,604	1

	Overfunded pension plans	As of December 31, 2011 Underfunded pension plans	Underfunded other benefits
Fair value of plan assets at beginning of year	5,585	4,645	13
Transfers	1,105	(1,105)	
Actual return on plan assets	573	125	
Employer contributions	65	512	82
Benefits paid/ Actual distribution	(345)	(363)	(82)
Plan settlements		(26)	(11)
Effect of exchange rate changes	(706)	(126)	(1)
Fair value of plan assets at end of year	6,277	3,662	1

A special contribution was made to the Vale Canada Limited defined underfunded benefit plans of US\$342 during 2011 to secure adequate funding requirements for 2011-2013.

Plan assets managed by Valia on December 31, 2012 and December 31, 2011 include investments in portfolio of our own stock of US\$300 and US\$340, investments in debentures US\$57 and US\$63 and equity investments from related parties amounting to US\$2 and US\$84, respectively. They also include at December 31, 2012 and 31 December 2011, US\$3,882 and US\$3,552 of Brazilian

Table of Contents

Federal Government Securities. The Vale Canada Limited pension plan assets at December 31, 2012 and 2011 included Canadian Government securities amounted to US\$483 and US\$653, respectively. The Vale Fertilizantes and Ultrafertil at December 31, 2012 and December 31, 2011 include Brazilian Federal Government in securities of US\$191 and US\$149, respectively.

c) **Funded Status and Financial Position**

	Overfunded pension plans	As of December 31, 2012 Underfunded pension plans	Underfunded other benefits
Noncurrent assets	844		
Current liabilities		(116)	(89)
Non-current liabilities		(1,324)	(1,932)
Funded status	844	(1,440)	(2,021)

	Overfunded pension plans	As of December 31, 2011 Underfunded pension plans	Underfunded other benefits
Noncurrent assets	1,666		
Current liabilities		(69)	(78)
Non-current liabilities		(831)	(1,615)
Funded status	1,666	(900)	(1,693)

d) **Assumptions used (nominal terms)**

All calculations involve future actuarial projections for some parameters, such as salaries, interest, inflation, the behavior of INSS benefits, mortality, disability, etc. No actuarial results can be analyzed without prior knowledge of the scenario of assumptions used in the assessment.

The economic actuarial assumptions adopted were formulated considering the long life of the plan and should therefore be examined in that light. So, in the short term, they may not necessarily be realized.

For the evaluations the following economic assumptions were adopted:

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

	Brazil		
	As of December 31, 2012		
	Overfunded pension plans	Underfunded pension plans	Underfunded other benefits
Discount rate to determine benefit obligation	8.90% p.a.	9.04% p.a.	9.05% p.a.
Discount rate to determine net cost	8.90% p.a.	9.45% p.a.	9.40% p.a.
Expected return on plan assets	12.48% p.a.	12.55% p.a.	N/A
Rate of compensation increase - up to 47 years	8.15% p.a.	8.15% p.a.	N/A
Rate of compensation increase - over 47 years	5.00% p.a.	5.00% p.a.	N/A
Inflation	5.00% p.a.	5.00% p.a.	5.00% p.a.
Health care cost trend rate	N/A	N/A	8.15% p.a.

	Brazil		
	As of December 31, 2011		
	Overfunded pension plans	Underfunded pension plans	Underfunded other benefits
Discount rate to determine benefit obligation	10,78% p.a.	11,30% p.a.	11,30% p.a.
Discount rate to determine net cost	10,78% p.a.	11,30% p.a.	11,30% p.a.
Expected return on plan assets	14,25% p.a.	13,79% p.a.	N/A
Rate of compensation increase - up to 47 years	8,15% p.a.	8,15% p.a.	N/A
Rate of compensation increase - over 47 years	5,00% p.a.	5,00% p.a.	N/A
Inflation	5,00% p.a.	5,00% p.a.	5,00% p.a.
Health care cost trend rate	N/A	N/A	8,15% p.a.

Table of Contents

	Foreign		
	As of December 31, 2012		
	Overfunded pension plans	Underfunded pension plans	Underfunded other benefits
Discount rate to determine benefit obligation	N/A	4.16% p.a.	4.20% p.a.
Discount rate to determine net cost	N/A	5.08% p.a.	4.20% p.a.
Expected return on plan assets	N/A	6.21% p.a.	6.50% p.a.
Rate of compensation increase - up to 47 years	N/A	4.04% p.a.	3.00% p.a.
Rate of compensation increase - over 47 years	N/A	4.04% p.a.	3.00% p.a.
Inflation	N/A	2.00% p.a.	2.00% p.a.
Initial health care cost trend rate	N/A	N/A	7.01% p.a.
Ultimate health care cost trend rate	N/A	N/A	4.49% p.a.

	Foreign		
	As of December 31, 2011		
	Overfunded pension plans	Underfunded pension plans	Underfunded other benefits
Discount rate to determine benefit obligation	N/A	5.08% p.a.	5.10% p.a.
Discount rate to determine net cost	N/A	5.43% p.a.	5.10% p.a.
Expected return on plan assets	N/A	6.51% p.a.	6.50% p.a.
Rate of compensation increase - up to 47 years	N/A	4.10% p.a.	3.00% p.a.
Rate of compensation increase - over 47 years	N/A	4.10% p.a.	3.00% p.a.
Inflation	N/A	2.00% p.a.	2.00% p.a.
Initial health care cost trend rate	N/A	N/A	7.22% p.a.
Ultimate Health care cost trend rate	N/A	N/A	4.49% p.a.

e) **Pension costs**

	Year ended in December 31, 2012		
	Overfunded pension plans	Underfunded pension plans	Underfunded other benefits
Service cost - benefits earned during the year	26	87	36
Interest cost on projected benefit obligation	424	296	102
Expected return on assets	(766)	(312)	
Amortizations and (gain) / loss		47	(17)
Transfer	4	(4)	
Net pension cost (credit)	(312)	114	121

	Year ended in December 31, 2011		
	Overfunded pension plans	Underfunded pension plans	Underfunded other benefits
Service cost - benefits earned during the year	18	79	32
Interest cost on projected benefit obligation	517	272	102
Expected return on assets	(785)	(258)	

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

Amortizations and (gain) / loss		24	(35)
Net pension cost (credit)	(250)	117	99

	Year ended in December 31, 2010		
	Overfunded pension plans	Underfunded pension plans	Underfunded other benefits
Service cost - benefits earned during the year	2	59	27
Interest cost on projected benefit obligation	329	361	97
Expected return on assets	(531)	(321)	
Amortizations and (gain) / loss		18	(14)
Net deferral	(1)		
Net pension cost (credit)	(201)	117	110

Table of Contentsf) **Accumulated benefit obligation**

	Overfunded pension plans	As of December 31, 2012 Underfunded pension plans	Underfunded other benefits
Accumulated benefit obligation	3,567	6,935	2,022
Projected benefit obligation	3,567	7,044	2,022
Fair value of plan assets	(4,411)	(5,604)	(1)

	Overfunded pension plans	As of December 31, 2011 Underfunded pension plans	Underfunded other benefits
Accumulated benefit obligation	4,610	4,404	1,694
Projected benefit obligation	4,611	4,562	1,694
Fair value of plan assets	(6,277)	(3,662)	(1)

g) **Impact of 1% variation in assumed health care cost trend rate**

	2012	1% Increase	As of December 31, 2011	2012	1% Decrease	2011
Accumulated postretirement benefit obligation (APBO)	360		258	(281)		(206)
Interest and service costs	31		22	(19)		(18)

h) **Other Cumulative Comprehensive Income (Deficit)**

	Overfunded pension plans	As of December 31, 2012 Underfunded pension plans	Underfunded other benefits
Net prior service (cost) / credit		(9)	
Net actuarial (loss) / gain	(1,052)	(1,272)	193
Effect of exchange rate changes	13	(5)	
Deferred income tax	353	346	(70)
Amounts recognized in other cumulative comprehensive income (deficit)	(686)	(940)	123

As of December 31, 2011

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

	Overfunded pension plans	Underfunded pension plans	Underfunded other benefits
Net prior service (cost) / credit		(15)	
Net actuarial (loss) / gain	(181)	(885)	292
Effect of exchange rate changes	(24)	3	
Deferred income tax	70	249	(76)
Amounts recognized in other cumulative comprehensive income (deficit)	(135)	(648)	216

Table of Contentsi) **Change in Other Cumulative Comprehensive Income (Deficit)**

	Overfunded pension plans	As of December 31, 2012 Underfunded pension plans	Underfunded other benefits
Net prior service (cost) / credit not yet recognized in NPPC (a) at beginning of year		(9)	
Net actuarial (loss) / gain not yet recognized in NPPC (a) at beginning of year	(205)	(888)	292
Deferred income tax at beginning of year	70	249	(76)
Effect of initial recognition of cumulative comprehensive income (deficit)	(135)	(648)	216
Amortization of net prior service (cost) / credited		4	
Amortization of net actuarial (loss) / gain		106	80
Total net actuarial (loss) / gain arising during year	(874)	(468)	(179)
Transfers	18	(18)	
Effect of exchange rate changes	13	(4)	
Deferred income tax	292	88	6
Total recognized in other cumulative comprehensive income (deficit)	(686)	(940)	123

	Overfunded pension plans	As of December 31, 2011 Underfunded pension plans	Underfunded other benefits
Net prior service (cost) / credit not yet recognized in NPPC (a) at beginning of year		(14)	
Net actuarial (loss) / gain not yet recognized in NPPC (a) at beginning of year	242	(629)	334
Deferred income tax at beginning of year	(82)	201	(111)
Effect of initial recognition of cumulative comprehensive income (deficit)	160	(442)	223
Amortization of net transition (obligation) / asset		(5)	
Amortization of net prior service (cost) / credited		5	
Amortization of net actuarial (loss) / gain		19	2
Total net actuarial (loss) / gain arising during year	(423)	(290)	(48)
Effect of exchange rate changes	(24)	17	4
Deferred income tax	152	48	35
Total recognized in other cumulative comprehensive income (deficit)	(135)	(648)	216

(a) Net periodic pension cost.

j) **Plan assets****Brazilian Plans**

The Investment Policy Statements of pension plans sponsored for Brazilian employees are based on a long term macroeconomic scenario and expected returns. An Investment Policy Statement was established for each obligation by following results of a strategic asset allocation study.

Plan asset allocations comply with pension funds local regulation issued by CMN - Conselho Monetário Nacional (Resolução CMN 3792/09). We are allowed to invest in six different asset classes, defined as Segments by the law, as follows: Fixed Income, Equity, Structured Investments (Alternative Investments and Infra-Structure Projects), International Investments, Real Estate and Loans to Participants.

The Investment Policy Statements are approved by the Board, the Executive Directors and two Investments Committees. The internal and external portfolio managers are allowed to exercise investment discretion under the limitations imposed by the Board and the Investment Committees.

The pension fund has a risk management process with established policies that intend to identify measure and control all kind of risks faced by our plans, such as: market, liquidity, credit, operational, systemic and legal.

Foreign plans

The strategy for each of the pension plans sponsored by Vale Canada is based upon a combination of local practices and the specific characteristics of the pension plans in each country, including the structure of the liabilities, the risk versus reward trade-off between different asset classes and the liquidity required to meet benefit payments.

Table of Contents**Overfunded pension plans****Brazilian Plans**

The Defined Benefit Plan (the "Old Plan") has the most part of its assets allocated in fixed income, mainly in Brazilian government bonds (such as TIPS) and corporate long term inflation linked corporate bonds with the objective of reducing the asset-liability volatility. The target is 55% of the total assets. This LDI (Liability Driven Investments) strategy, when considered together with the Loans to Participants segment, aims to hedge the plan's liabilities against inflation risk and volatility. The target allocation for each investment segment or asset class in the following:

	December 31, 2012	December 31, 2011
Fixed income	56%	57%
Equity	25%	24%
Structured investments	6%	6%
International investments	1%	1%
Real estate	8%	8%
Loans to participants	4%	4%

The Investment Policy has the objective of achieving the adequate diversification, current income and long term capital growth through the combination of all asset classes described above to fulfill its obligations with the adequate level of risk. This plan has an average nominal return of 20 % p.y. in dollars terms in the last 12 years.

The Vale Mais Plan (the "New Plan") has obligations with both characteristics of defined benefit and variable contribution, as mentioned. The most part of its investments is in fixed income. It also implemented a LDI (Liability Driven Investments) strategy to reduce asset-liability volatility of the defined benefits plan's component by using inflation linked bonds (like TIPS). The target allocation for this strategy is 55% of total assets of this sub-plan. The target allocation for each investment segment or asset class in the following:

	December 31, 2012	December 31, 2011
Fixed income	55%	56%
Equity	24%	24%
Structured investments	4%	3.5%
International investments	1%	0.5%
Real estate	7%	6%
Loans to participants	10%	10%

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

The Defined Contribution Vale Mais component offers four options of asset classes mix that can be chosen by participants. The options are: Fixed Income 100%; 80% Fixed Income and 20% Equities, 65% Fixed Income and 35% Equities and 60% Fixed Income and 40% Equities. Loan to participants is included in the fixed income options. Equities management is done through investment fund that targets Ibovespa index.

The Investment Policy has the objective of achieving the adequate diversification, current income and long term capital growth through the combination of all asset classes described above to fulfill its obligations with the adequate level of risk. This plan has an average nominal return of 16 % p.y. in dollars terms in the last 12 years.

Table of Contents**- Fair value measurements by category - Overfunded Plans**

Asset by category	As of December 31, 2012			Total
	Level 1	Level 2	Level 3	
Accounts Receivable	5			5
Equity securities - liquid	1,128	1		1,129
Debt securities - Corporate bonds		272		272
Debt securities - Government bonds	1,976			1,976
Investment funds - Fixed Income	1,678			1,678
Investment funds - Equity	252			252
International investments	14			14
Structured investments - Private Equity funds			192	192
Structured investments - Real estate funds			8	8
Real estate			458	458
Loans to Participants			195	195
Total	5,053	273	853	6,179
Funds not related to risk plans				(1,768)
Fair value of plan assets at end of year				4,411

Asset by category	As of December 31, 2011			Total
	Level 1	Level 2	Level 3	
Cash and cash equivalents	2			2
Accounts Receivable	15			15
Equity securities - liquid	1,425	83		1,508
Debt securities - Corporate bonds		560		560
Debt securities - Government bonds	2,134			2,134
Investment funds - Fixed Income	2,292			2,292
Investment funds - Equity	539			539
International investments	13			13
Structured investments - Private Equity funds			194	194
Structured investments - Real estate funds			21	21
Real estate			482	482
Loans to Participants			345	345
Total	6,420	643	1,042	8,105
Funds not related to risk plans				(1,828)
Fair value of plan assets at end of year				6,277

- Fair value measurements using significant unobservable inputs Level 3 (Overfunded)

As of December 31, 2012

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

	Private Equity Funds	Real State Funds	Real State	Loans to Participants	Total
Beginning of the year	194	21	482	345	1,042
Actual return on plan assets	13	(8)	120	26	151
Assets sold during the year	(19)		(31)	(84)	(134)
Assets purchases, sales and settlements	75		27	93	195
Cumulative translation adjustment	(15)	(1)	(38)	(17)	(71)
Transfers in and/or out of Level 3	(56)	(4)	(102)	(168)	(330)
End of the year	192	8	458	195	853

As of December 31, 2011

	Private Equity Funds	Real State Funds	Real State	Loans to Participants	Total
Beginning of the year	128	19	288	182	617
Actual return on plan assets	(8)		79	49	120
Assets sold during the year	(1)		(22)	(117)	(140)
Assets purchases, sales and settlements	37		135	116	288
Cumulative translation adjustment	(16)	(2)	(35)	(36)	(89)
Transfers in and/or out of Level 3	54	4	37	151	246
End of the year	194	21	482	345	1,042

Table of Contents

The target return for private equity assets in 2013 is 11% p.a. for the Old Plan and 11% p.a. for the New Plan. The target allocation is 6% for the Old Plan and 3.5% for the New Plan, ranging between 2% and 10% for the Old Plan and ranging between 1% and 10% for the New Plan. These investments have a longer investment horizon and low liquidity that aim to profit from economic growth, especially in the infrastructure sector of the Brazilian economy. The fair value of usually non-liquid assets is closed to acquisition cost or book value. Some private equity funds, alternatively, apply the following methodologies: discounted cash flows analysis or analysis based on multiples.

The target return for loans to participants in 2013 is 12% p.a. The fair value pricing of these assets includes provisions for non-paid loans, according to the local pension fund regulation.

The target return for real estate assets in 2013 is 12% p.a. Fair value for these assets is closed to book value. The pension fund hires companies specialized in real estate valuation that do not act in the market as brokers. All valuation techniques follow the local regulation.

Underfunded pension plans

Brazilian Obligation

The obligation has an exclusive allocation in fixed income. A LDI (Liability Driven Investments) was also used strategy for this plan. Most of the resources were invested in long term Brazilian government bonds (similar to TIPS) and inflation linked corporate bonds with the objective of minimizing asset-liability volatility and reduce inflation risk.

The Investment Policy Statement has the objective of achieving the adequate diversification, current income and long term capital growth to fulfill its obligations with the adequate level of risk. This obligation had an average nominal return of 17% p.y. in local currency in the last 7 years.

Foreign plans

All pension plans except PT Vale Indonesia TBK, have resulted in a target asset allocation of 60% in equity investments and 40% in fixed income investments, with all securities being traded in the public markets. Fixed income investments are in domestic bonds for each plan's market and involve a mixture of government and corporate bonds. Equity investments are primarily global in nature and involve a mixture of large, mid and small capitalization companies with a modest explicit investment in domestic equities for each plan. The Canadian plans also use

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

a currency hedging strategy (each developed currency's exposure is 50% hedged) due to the large exposure to foreign securities. For PT Vale Indonesia TBK, the target allocation is 20% equity investment and the remainder in fixed income, with the vast majority of these investments being made within the domestic market.

Table of Contents**- Fair value measurements by category - Underfunded Pension Plans**

Asset by category	As of December 31, 2012			Total
	Level 1	Level 2	Level 3	
Cash and cash equivalents	55	34		89
Accounts Receivable	4			4
Equity securities - liquid	1,566	19		1,585
Debt securities - Corporate bonds		511		511
Debt securities - Government bonds	509	484		993
Investment funds - Fixed Income	1,592	426		2,018
Investment funds - Equity	510	412		922
International investments	4			4
Structured investments - Private Equity funds			43	43
Real estate			138	138
Loans to Participants			207	207
Total	4,240	1,886	388	6,514
Funds not related to risk plans				(910)
Fair value of plan assets at end of year				5,604

Asset by category	As of December 31, 2011			Total
	Level 1	Level 2	Level 3	
Cash and cash equivalents	17	24		41
Accounts Receivable	11			11
Equity securities - liquid	1,231	1		1,232
Debt securities - Corporate bonds		259		259
Debt securities - Government bonds	33	627		660
Investment funds - Fixed Income	439	568		1,007
Investment funds - Equity	74	376		450
International investments		2		2
Total	1,805	1,857		3,662
Funds not related to risk plans				
Fair value of plan assets at end of year				3,662

- Fair value measurements using significant unobservable inputs Level 3 (Underfunded)

Beginning of the year	As of December 31, 2012				Total
	Private Equity Funds	Real State Funds	Real State	Loans to Participants	
Actual return on plan assets	1		35	27	63

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

Assets sold during the year	(6)	(1)	(3)	(71)	(81)
Assets purchases, sales and settlements	34		12	106	152
Cumulative translation adjustment	(3)		12	(16)	(7)
Transfers in and/or out of Level 3	17	1	82	161	261
End of the year	43		138	207	388

	As of December 31, 2011				
	Private Equity Funds	Real State Funds	Real State	Loans to Participants	Total
Beginning of the year	15	1	37	151	204
Transfers in and/or out of Level 3	(15)	(1)	(37)	(151)	(204)
End of the year					

Table of Contents

Underfunded other benefits

- Fair value measurements by category Other Benefits

	As of December 31, 2012			Total
	Level 1	Level 2	Level 3	
Asset by category				
Cash and cash equivalents	1			1
Total	1			1
Funds not related to risk plans				
Fair value of plan assets at end of year				1

	As of December 31, 2011			Total
	Level 1	Level 2	Level 3	
Asset by category				
Cash and cash equivalents	1			1
Total	1			1
Funds not related to risk plans				
Fair value of plan assets at end of year				1

k) Cash flows contributions

Employer contributions expected for 2013 are US\$407.

l) Estimated future benefit payments

The benefit payments, which reflect future service, are expected to be disbursed as follows:

2013	As of December 31, 2012		
	Overfunded pension plans	Underfunded pension plans	Underfunded other benefits
	226	565	95

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

2014	223	457	96
2015	219	464	99
2016	215	472	100
2017	211	479	101
2018 and thereafter	981	2,398	490

m) Summary of participant data

		As of December 31, 2012	
	Overfunded pension plans	Underfunded pension plans	Underfunded other benefits
Active participants			
Number	14	76,511	11,727
Average age - years	52	36	40
Average service - years	28	7	7
Terminated vested participants			
Number		6,519	
Average age - years		47	
Retirees and beneficiaries			
Number	16,740	19,245	31,737
Average age - years	67	70	68

Table of Contents

	Overfunded pension plans	As of December 31, 2011 Underfunded pension plans	Underfunded other benefits
Active participants			
Number	202	67,951	74,729
Average age - years	50	36	36
Average service - years	27	7	8
Terminated vested participants			
Number		5,815	
Average age - years		39	
Retirees and beneficiaries			
Number	18,380	18,189	32,663
Average age - years	66	71	64

20 Long-term incentive compensation plan

Under the terms of the long-term incentive compensation plan, the participants, restricted to certain executives, may elect to allocate part of their annual bonus to the plan. The allocation is applied to purchase preferred shares of Vale, through a predefined financial institution, at market conditions and with no benefit provided by Vale.

The shares purchased by each executive are unrestricted and may, at the participant's discretion, be sold at any time. However if, the shares are held for a three-year period and the executive is continually employed by Vale during that period, the participant then becomes entitled to receive from Vale a cash payment equivalent to the total amount of shares held, based on the market rates. The total shares linked to the plan at December 31, 2012 and December 31, 2011, are 4,426,046 and 3,012,538, respectively.

Additionally, as a long-term incentive certain eligible executives have the opportunity to receive at the end of the triennial cycle, a certain number of shares at market rates, based on an evaluation of their career and performance factors measured as an indicator of total return to stockholders.

We account for the compensation cost provided to our executives under this long-term incentive compensation plan, following the requirements for Accounting for Stock-Based Compensation. Liabilities are measured at each reporting date at fair value, based on market rates. Compensation costs incurred are recognized, over the defined three-year vesting period. At December 31, 2012, December 31, 2011 and December 31, 2010 we recognized a liability of US\$87, US\$109 and US\$120, respectively.

21 Commitments and Litigation provisions

a) Nickel project New Caledonia

In regards to the construction and installation of our nickel plant in New Caledonia, we have provided guarantees in respect of our financing arrangements which are outlined below.

In connection with the Girardin Act tax - advantaged lease financing arrangement sponsored by the French government, we provided guarantees to BNP Paribas for the benefit of the tax investors regarding certain payments due from Vale Nouvelle-Calédonie SAS (VNC), associated with the Girardin Act lease financing. Consistent with our commitments, the assets are substantially complete as of December 31, 2012. We also committed that assets associated with the Girardin Act lease financing would operate for a five year period from then on and meet specified production criteria which remain consistent with our current plans, accordingly. We believe the likelihood of the guarantee being called upon is remote.

In October 2012, we entered into an agreement with Nickel Netherland B.V. (Sumic), a stockholder in VNC, whereby Sumic agreed to a dilution in their interest in VNC from 21% to 14.5%. Sumic originally had a put option to sell to us the shares they own of VNC if the defined cost of the initial nickel project, as measured by funding provided to VNC, in natural currencies and converted to U.S. dollars at specified rates of exchange, exceeded US\$4.6 billion and an agreement could not be reached on how to proceed with the project. On May 27, 2010 the threshold was reached and the put option discussion and decision period was extended to July 31, 2012. As a result of the October 2012 agreement, the trigger on the put option has been changed from a cost threshold to a production threshold. The possibility to exercise the put option has been deferred to the first quarter of 2015.

Table of Contents

In addition, in the course of our operations we have provided letters of credit and guarantees in the amount of US\$820 million that are associated with items such as environment reclamation, asset retirement obligation commitments, insurance, electricity commitments, post-retirement benefits, community service commitments and import and export duties.

In the course of our operations, we are subject to routine claims and litigation incidental to our business and various environmental proceedings. With respect to the environmental proceedings currently pending or threatened against us, they include (i) claims for personal injuries, (ii) enforcement actions and (iii) alleged violations of, including exceeding regulatory limits relating to discharges under, certain environmental or similar laws and regulations applicable to our operations. We believe that the ultimate resolution of such proceedings, claims, and litigation will not significantly impair our operations or have material adverse effect on our financial position or results of operations.

b) Provision for litigation

We and our subsidiaries are defendants in numerous legal actions in the normal course of business. Based on the advice of our legal counsel, management believes that the amounts recognized are sufficient to cover probable losses in connection with such actions.

The provision for litigation and the related judicial deposits is as follows:

	December 31, 2012		December 31, 2011	
	Provision for litigation	Judicial deposits	Provision for litigation	Judicial deposits
Labor and social security claims	748	903	751	895
Civil claims	287	172	248	151
Tax - related actions	996	435	654	413
Others	34	5	33	5
	2,065	1,515	1,686	1,464

Labor and social security related actions principally comprise claims by Brazilian current and former employees for (i) payment of time spent travelling from their residences to the work-place, (ii) additional health and safety related payments and (iii) various other matters, often in connection with disputes about the amount of indemnities paid upon dismissal and the one-third extra holiday pay.

Civil actions principally relate to claims made against us by contractors in Brazil in connection with losses alleged to have been incurred by them as a result of various past Government economic plans, during which full inflation indexation of contracts was not permitted, as well as for accidents and land appropriation disputes.

Tax related actions principally comprise challenges initiated by us, on certain taxes on revenues and uncertain tax positions. We continue to vigorously pursue our interests in all these actions but recognize that we probably will incur some losses in the final instance, for which we have made provisions.

On September 2012, we has considered as probable the loss related to the deductibility of transportation expenditures in the amount upon which the Compensação Financeira pela Exploração - CFEM is calculated, increasing the provision of US\$542 (R\$ 1.1 billion). During the fourth quarter we paid US\$147. At December 31, 2012 the total liability in relation to CFEM was US\$519.

Judicial deposits are made by us following court requirements in order to be entitled to either initiate or continue a legal action. These amounts are released to us upon receipt of a final favorable outcome from the legal action, and in the case of an unfavorable outcome, the deposits are transferred to the prevailing part.

Contingencies settled during the year ended December 31, 2012 and December 31, 2011 totaled US\$182 and US\$331, respectively. Provisions net recognized in the year ended December 31, 2012 and December 31, 2011 totaled US\$694 and US\$284, respectively, classified as other operating expenses.

Table of Contents

In addition to the contingencies for which we have made provisions, we are defendants in claims where in our opinion, and based on the advice of our legal counsel, the likelihood of loss is reasonably possible but not probable, in the total amount of US\$21,016 at December 31, 2012, and for which no provision has been made (December 31, 2011 US\$22,449). The main categories of claims are as follows:

	December 31, 2012	December 31, 2011
Labor and social security claims	1,728	1,922
Civil claims	1,124	1,484
Tax - related actions	16,492	17,967
Others	1,672	1,076
	21,016	22,449

The largest individual claim classified as reasonably possible tax contingencies refers to tax assessments against us regarding the payment of Income Tax and Social Contribution calculated based on the equity method in foreign subsidiaries.

The Brazilian federal tax authority (Receita Federal do Brasil) contends that we should pay those taxes and contributions on the net income of our non-Brazilian subsidiaries and affiliates. The position of the tax authority is based on Article 74 of Brazilian Provisional Measure 2,158-35/2001, a tax regulation issued in 2001 by Brazil's President, and on implementing regulations adopted by the tax authority under Article 74. The tax authority has issued five tax assessments (*autos de infração*) against us for payment of US\$5,933 at December 31, 2012 (US\$ 6,644 at December 31 2011) in taxes in accordance with Article 74 for the tax years 1996 through 2008, plus interest and penalties of US\$9,277 at December 31, 2012 (US\$ 9,781 at December 31, 2011) through December 31, 2012, amounting to a total of US\$ 15,210 (US\$ 16,425 at December 31, 2011). The decline in the value from December 31, 2011, was caused by the cancelation by the tax authority of the claim related to the exchange variation over the foreign subsidiaries, in amount of US\$ 815.

c) Participative Stockholders Debentures

At the time of our privatization in 1997, the Company issued debentures to its then-existing stockholders, including the Brazilian Government. The terms of these debentures were set to ensure that the pre-privatization stockholders, including the Brazilian Government, would participate in possible future financial benefits that could be obtained from exploiting certain mineral resources.

A total of 388,559,056 Debentures were issued at a par value of R\$ 0.01 (one cent), whose value will be restated in accordance with the variation in the General Market Price Index (IGP-M), as set forth in the Issue Deed. As at December 31, 2012 the total amount of these debentures was US\$1,653 (US\$ 1,336 in December 31, 2011).

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

The debenture holders have the right to receive premiums, paid semiannually, equivalent to a percentage of net revenues from specific mine resources as set forth in the indenture.

In October 2012 we paid second semester remuneration in the amount of US\$4. In April 2012 we paid first semester remuneration on these debentures in the amount of US\$6.

d) Description of Leasing Arrangements

Vale has operating lease agreements with its joint ventures Nibrasco, Itabasco, and Kobrasco, in which Vale leases its pelletizing plants. These operating lease agreements have duration between 3 and 10 years, renewable.

In July 2012 the Company entered into an operating lease agreement with its joint venture Hispanobrás. The contract has duration of 3 years, renewable.

Table of Contents

The following table presents of the annual future minimum lease payments required under the four pellet plants (Hispanobrás, Nibrasco, and Itabasco Kobrasco), that have initial or remaining non-cancelable lease terms in excess of one year as of December 31, 2012:

2013	74
2014	78
2015	76
2016	74
2017 thereafter	51
Total minimum payments required	353

The total expenses of these operating leases for the year ended December, 31 2012, 2011 and 2010 were US\$205, US\$349 and US\$365, respectively.

Part of our railroad operation includes leased facilities. The 30-year lease is renewable for a further 30 years and expires in August 2026, and is classified as an operating lease. At the end of the lease term, we are required to return the concession and the leased assets. In most cases, management expects that in the normal course of business, leases will be renewed.

The following table presents of the annual future minimum rental payments required under the railroad operating leases that have initial or remaining non-cancelable lease terms in excess of one year as December 31, 2012.

2013	85
2014	85
2015	85
2016	85
2017 thereafter	845
Total minimum payments required	1,185

The total expenses of these operating leases for the year ended December, 31 2012, 2011 and 2010 were US\$89, US\$87 and US\$ 90, respectively.

e) Guarantee issued to affiliates

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

The Associate Norte Energia acquired in 2012 a credit line from BNDES, Caixa Economica Federal and Banco BTG Pactual in order to finance his investments in energy in the totaling up to R\$22.5 billion (US\$11.01 billion). About this facility, Vale, like other stockholders, is committed to providing a corporate guarantee on the amount withdrawn, limited to his participation of 9% in the entity. In addition to this guarantee, the Company also offered all shares in Norte Energia in pledge to financial institutions, limited to R\$4.1 billion (US\$2.0 billion).

At December 31, 2012 Vale guaranteed on the value drawn the amount of R\$282 (US\$126).

On January 2, 2013 (Subsequent Events) Norte Energia withdrawn of another installment of your loan, increasing the amount guaranteed by Vale for R\$188 (US\$92) to R\$470 (US\$218).

Table of Contents**f) Asset retirement obligations**

We use various judgments and assumptions when measuring our asset retirement obligations.

Changes in circumstances, law or technology may affect our cash flow estimates and we periodically review the amounts accrued and adjust them as necessary. Our accruals do not reflect unasserted claims because we are currently not aware of any such issues. Also the amounts provided are not reduced by any potential recoveries under cost sharing, insurance or indemnification arrangements because such recoveries are considered uncertain.

The changes in the provisions for asset retirement obligations are as follows:

	Year ended as of December 31,		
	2012	2011	2010
Beginning of year	1,770	1,368	1,116
Accretion expense	167	125	113
Liabilities settled in the current year	(25)	(57)	(45)
Revisions in estimated cash flows	560	420	125
Cumulative translation adjustment	(69)	(86)	59
End of year	2,403	1,770	1,368
Current liabilities	70	73	75
Non-current liabilities	2,333	1,697	1,293
Total	2,403	1,770	1,368

22 Other expenses

	Year ended as of December 31,		
	2012	2011	2010
Litigation (*)	694	284	141
Provision for loss assets	366	278	108
Fundação Vale do Rio Doce - FVRD	37	123	55
Damage cost	65	98	
Pre operating, stoppage and start up	1,592	1,293	1,117
Others	894	734	784
	3,648	2,810	2,205

(*) See note 21 (b)

23 Fair value disclosure of financial assets and liabilities

The Financial Accounting Standards Board, through Accounting Standards Codification and Accounting Standards Updates, defines fair value and sets out a framework for measuring fair value, including valuation concepts and practices and requires certain disclosures about fair value measurements.

a) Measurements

The standards define fair value as the price that would be received for an asset, or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability, in an orderly transaction between market participants on the measurement date. In determining fair value, the Company uses various methods including market, income and cost approaches. Based on these approaches, the Company often utilizes certain assumptions that market participants would use in pricing the asset or liability, including assumptions about risk and or the inherent risks in the inputs to the valuation technique.

These inputs can be readily observable, market corroborated, or generally unobservable inputs. The Company utilizes techniques that maximize the use of observable inputs and minimize the use of unobservable inputs. Under this standard, those inputs used to measure the fair value are required to be classified on three levels. Based on the characteristics of the inputs used in valuation techniques the Company is required to provide the following information according to the fair value hierarchy. The fair value hierarchy ranks the quality and reliability of the information used to determine fair values. Financial assets and liabilities carried at fair value are classified and disclosed as follows:

Table of Contents

Level 1 Unadjusted quoted prices on an active, liquid and visible market for identical assets or liabilities that are accessible at the measurement date;

Level 2 Quoted prices for identical or similar assets or liabilities on active markets, inputs other than quoted prices that are observable, either directly or indirectly, for the term of the asset or liability;

Level 3 Assets and liabilities, for which quoted prices do not exist, or those prices or valuation techniques are supported by little or no market activity, unobservable or illiquid. At this point, fair market valuation becomes highly subjective.

b) Measurements on a recurring basis

The description of the Company's valuation methodologies used for assets and liabilities measured at fair value are summarized below:

- **Available-for-sale securities**

They are securities that are not classified either as held-for-trading or as held-to-maturity for strategic reasons and have readily available market prices. We evaluate the carrying value of some of our investments in relation to publicly quoted market prices when available. When there is no market value, we use inputs other than quoted prices.

- **Derivatives**

The market approach is used to estimate the fair value of the swaps discounting their cash flows using the interest rate of the currency they are denominated in. It is also used for the commodities contracts, since the fair value is computed by using forward curves for each commodity.

- **Stockholders debentures**

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

The fair value is measured by the market approach method, and the reference price is available on the secondary market.

The tables below presents the balances of assets and liabilities measured at fair value on a recurring basis as follows:

	December 31, 2012			
	Carrying amount	Fair value	Level 1	Level 2
Available-for-sale securities	7	7	7	
Unrealized losses on derivatives	(804)	(804)		(804)
Stockholders debentures	(1,653)	(1,653)		(1,653)

	December 31, 2011			
	Carrying amount	Fair value	Level 1	Level 2
Available-for-sale securities	7	7	7	
Unrealized losses on derivatives	(81)	(81)		(81)
Stockholders debentures	(1,336)	(1,336)		(1,336)

c) Measurements on a non-recurring basis

The Company also has assets under certain conditions that are subject to measurement at fair value on a non-recurring basis. These assets include goodwill and assets acquired and liabilities assumed in business combinations. During the year ended at December 31, 2012, we have not recognized any impairment for those items. However, we did recognized impairment of our investee Norsk Hydro based on fair value. (Note14)

d) Financial Instruments

Long-term debt

The valuation method used to estimate the fair value of our debt is the market approach for the contracts that are quoted on the secondary market, such as bonds and debentures. The fair value of both fixed and floating rate debt is determined by discounting future cash flows of Libor and Vale's bonds curves (income approach).

Table of Contents

Time deposits

The method used is the income approach, through the prices available on the active market. The fair value is close to the carrying amount due to the short-term maturities of the instruments.

Our long-term debt is reported at amortized cost, and the income of time deposits is accrued monthly according to the contract rate. The estimated fair value measurement is disclosed as follows:

	December 31, 2012			
	Carrying amount	Fair value	Level 1	Level 2
Long-term debt (less interests) (a)	(29,842)	(32,724)	(25,817)	(6,907)
Perpetual Notes (b)	(72)	(72)		(72)

	December 31, 2011			
	Carrying amount	Fair value	Level 1	Level 2
Long-term debt (less interests) (a)	(22,700)	(24,312)	(18,181)	(6,131)
Perpetual Notes (b)	(80)	(80)		(80)

(a) Less accrued charges of US\$ 425 and US\$ 333 as of December 31, 2012 and December 31, 2011, respectively.

(b) Classified on LT Loans and related parties (Non-current liabilities).

Table of Contents**24 Segment and geographical information**

The information presented to the Executive Board with the respective performance of each segment are usually derived from the accounting records maintained in accordance with the best accounting practices, with some reallocation between segments.

Consolidated net income and principal assets are reconciled as follows:

Results by segment

	2012						Year ended as of December 31, 2011						Bulk Material
	Bulk Material	Base Metals	Fertilizers	Logistic	Others	Consolidated	Bulk Material	Base Metals	Fertilizers	Logistic	Others	Consolidated	
RESULTS													
Gross revenues	35,662	7,133	3,777	1,644	537	48,753	46,904	9,627	3,547	1,726	541	62,345	36,2
Cost and expenses	(17,542)	(6,135)	(3,036)	(1,591)	(838)	(29,142)	(16,422)	(6,350)	(2,753)	(1,467)	(958)	(27,950)	(13,3
Research and development	(732)	(395)	(109)	(12)	(230)	(1,478)	(649)	(413)	(104)	(121)	(387)	(1,674)	(2
Depreciation, depletion and amortization	(2,007)	(1,647)	(463)	(238)	(41)	(4,396)	(1,847)	(1,572)	(458)	(229)	(16)	(4,122)	(1,5
Gain (Loss) on sale of assets	(377)		(114)			(491)		1,513				1,513	
Impairment on assets	(1,029)	(2,848)			(146)	(4,023)							
Operating income	13,975	(3,892)	55	(197)	(718)	9,223	27,986	2,805	232	(91)	(820)	30,112	21,0
Financial Result	(3,902)	195	(48)	(60)	14	(3,801)	(2,966)	(1)	(55)	(207)	(84)	(3,313)	(3
Foreign exchange and monetary gains (losses), net													
Discontinued operations, net of tax													
Impairment on investments		(975)			(666)	(1,641)							
Equity in results of affiliates and joint ventures and others													
investments	765	(19)		112	(218)	640	1,095	101		125	(186)	1,135	1,0
Income taxes	(389)	69	1,203	(18)	(32)	833	(4,202)	(954)	(114)	(12)		(5,282)	(3,9
Noncontrolling interests	65	207	(54)		39	257	105	88	(31)		71	233	
Net income attributable to the	10,514	(4,415)	1,156	(163)	(1,581)	5,511	22,018	2,039	32	(185)	(1,019)	22,885	17,7

Company's
stockholdersSales classified by
geographic
destination:

Foreign market

America, other than

United States	715	996	60	36	16	1,823	1,181	1,380	44	21	2,626	8	
United States	108	1,137	53		36	1,334	98	1,571	1	2	1,672		
Europe	5,834	2,194	148		23	8,199	8,815	2,456	153	62	11,486	6,8	
Middle													
East/Africa/Oceania	1,550	96	7			1,653	1,767	150	1	1	1,919	1,5	
Japan	4,202	722			7	4,931	5,987	1,243		8	7,238	3,8	
China	16,743	895				17,638	20,086	1,235		99	21,420	16,0	
Asia, other than													
Japan and China	2,947	1,009	91		2	4,049	3,640	1,394	35	1	5,070	2,7	
Brazil	3,563	84	3,418	1,608	453	9,126	5,330	198	3,313	1,726	347	10,914	4,2
	35,662	7,133	3,777	1,644	537	48,753	46,904	9,627	3,547	1,726	541	62,345	36,2

Table of Contents**Operating segment**

	Year ended in December 31, 2012										
	Revenue	Value added tax	Net revenues	Cost and expenses	Research and Development	Pre Operating and Idle Capacity	Operating profit	Depreciation, depletion and amortization	Impairment on assets	Operating income	Pro
Bulk Material											
Iron ore	27,202	(271)	26,931	(12,519)	(617)		13,795	(1,529)		12,266	
Pellets	6,776	(216)	6,560	(2,387)		(321)	3,852	(235)		3,617	
Manganese	592	(49)	543	(353)			190	(45)		145	
Coal	1,092		1,092	(1,398)	(115)	(28)	(449)	(198)	(1,029)	(1,676)	
	35,662	(536)	35,126	(16,657)	(732)	(349)	17,388	(2,007)	(1,029)	14,352	
Base Metals											
Nickel and other products (a)	5,975		5,975	(4,107)	(299)	(1,029)	540	(1,508)	(2,848)	(3,816)	
Copper (b)	1,158	(2)	1,156	(876)	(96)	(121)	63	(139)		(76)	
Aluminum products											
	7,133	(2)	7,131	(4,983)	(395)	(1,150)	603	(1,647)	(2,848)	(3,892)	
Fertilizers											
Potash	308	(18)	290	(171)	(73)		46	(23)		23	
Phosphates	2,583	(76)	2,507	(1,947)	(36)	(93)	431	(331)		100	
Nitrogen	801	(102)	699	(618)			81	(109)		(28)	
Others fertilizers products	85	(11)	74				74			74	
	3,777	(207)	3,570	(2,736)	(109)	(93)	632	(463)		169	
Logistics											
Railroads	1,135	(199)	936	(1,012)	(12)		(88)	(182)		(270)	
Ports	509	(58)	451	(322)			129	(56)		73	
Ships											
	1,644	(257)	1,387	(1,334)	(12)		41	(238)		(197)	
Others	537	(57)	480	(781)	(230)		(531)	(41)	(146)	(718)	
Loss on sale of assets				(491)			(491)			(491)	
	48,753	(1,059)	47,694	(26,982)	(1,478)	(1,592)	17,642	(4,396)	(4,023)	9,223	

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

(b) Includes copper concentrate.

Table of Contents**Operating segment**

	Year ended in December 31, 2011										
	Revenue	Value added tax	Net revenues	Cost and expenses	Research and development	Pre operating and idle capacity	Operating profit	Depreciation, depletion and amortization	Operating income	Property, plant and equipment	Additions property, p and equipm
Bulk Material											
Iron ore	36,910	(494)	36,416	(10,471)	(497)		25,448	(1,418)	24,030	32,944	7
Pellets	8,204	(266)	7,938	(3,209)		(106)	4,623	(196)	4,427	2,074	
Manganese and ferroalloys	732	(56)	676	(594)			82	(69)	13	333	
Coal	1,058		1,058	(1,125)	(152)	(101)	(320)	(164)	(484)	4,081	1
	46,904	(816)	46,088	(15,399)	(649)	(207)	29,833	(1,847)	27,986	39,432	9
Base Metals											
Nickel and other products (a)	8,118		8,118	(4,328)	(254)	(976)	2,560	(1,487)	1,073	29,097	2
Copper (b)	1,126	(23)	1,103	(702)	(159)	(12)	230	(84)	146	4,178	1
Aluminum products	383	(5)	378	(304)			74	(1)	73		
	9,627	(28)	9,599	(5,334)	(413)	(988)	2,864	(1,572)	1,292	33,275	3
Fertilizers											
Potash	287	(14)	273	(239)	(50)	(26)	(42)	(45)	(87)	2,137	
Phosphates	2,395	(95)	2,300	(1,634)	(54)	(72)	540	(297)	243	6,430	
Nitrogen	782	(103)	679	(557)			122	(116)	6	896	
Others fertilizers products	83	(13)	70				70		70	364	
	3,547	(225)	3,322	(2,430)	(104)	(98)	690	(458)	232	9,827	1
Logistics											
Railroads	1,265	(222)	1,043	(882)	(121)		40	(179)	(139)	1,307	
Ports	461	(48)	413	(315)			98	(50)	48	576	
Ships										2,485	
	1,726	(270)	1,456	(1,197)	(121)		138	(229)	(91)	4,368	
Others	541	(60)	481	(898)	(387)		(804)	(16)	(820)	1,993	
Gain on sale of assets				1,513			1,513		1,513		
	62,345	(1,399)	60,946	(23,745)	(1,674)	(1,293)	34,234	(4,122)	30,112	88,895	16

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

(b) Includes copper concentrate.

Table of Contents**Operating segment**

	Year ended in December 31, 2010										
	Revenue	Value added tax	Net revenues	Cost and expenses	Research and development	Pre operation and idle capacity	Operating profit	Depreciation, depletion and amortization	Operating income	Property, plant and equipment	Additions property, p and equipm
Bulk Material											
Iron ore	28,120	(366)	27,754	(8,856)	(226)	(18)	18,654	(1,307)	17,347	30,412	4
Pellets	6,402	(266)	6,136	(2,510)		(5)	3,621	(110)	3,511	1,445	
Manganese and ferroalloys	922	(69)	853	(442)			411	(36)	375	316	
Coal	770		770	(684)	(63)	(109)	(86)	(83)	(169)	3,020	
	36,214	(701)	35,513	(12,492)	(289)	(132)	22,600	(1,536)	21,064	35,193	4
Base Metals											
Nickel and other products (a)	4,712		4,712	(2,297)	(171)	(934)	1,310	(1,145)	165	28,623	1
Copper (b)	934	(29)	905	(475)	(95)	(51)	284	(87)	197	3,579	1
Aluminum products	2,554	(32)	2,522	(2,098)	(11)		413	(127)	286	395	
	8,200	(61)	8,139	(4,870)	(277)	(985)	2,007	(1,359)	648	32,597	3
Fertilizers											
Potash	280	(11)	269	(213)	(56)			(29)	(29)	474	
Phosphates	1,211	(47)	1,164	(1,054)	(16)		94	(121)	(27)	7,560	
Nitrogen	337	(43)	294	(285)			9	(50)	(41)	809	
Others fertilizers products	17	(5)	12	(11)			1		1	146	
	1,845	(106)	1,739	(1,563)	(72)		104	(200)	(96)	8,989	
Logistics											
Railroads	1,107	(183)	924	(641)	(75)		208	(123)	85	1,278	
Ports	353	(47)	306	(236)			70	(23)	47	297	
Ships	5		5	(13)			(8)		(8)	747	
	1,465	(230)	1,235	(890)	(75)		270	(146)	124	2,322	
Others	493	(90)	403	(264)	(165)		(26)	(19)	(45)	3,995	2
	48,217	(1,188)	47,029	(20,079)	(878)	(1,117)	24,955	(3,260)	21,695	83,096	12

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

(b) Includes copper concentrate.

Table of Contents**25 Related party transactions**

Balances from transactions with major related parties are as follows:

	December 31, 2012		December 31, 2011	
	Assets	Liabilities	Assets	Liabilities
Affiliated Companies and Joint Ventures				
Companhia Hispano-Brasileira de Pelotização - HISPANOBRÁS	2	10	177	162
Companhia Nipo-Brasileira de Pelotização - NIBRASCO	2	175	1	13
Companhia Coreano-Brasileira de Pelotização - KOBRASCO		33		5
Baovale Mineração S.A.	14	28	8	20
Minas da Serra Geral S.A. (MSG)		8		9
MRS Logística S.A.	44	45	50	20
Norsk Hydro ASA	405	72	489	80
Samarco Mineração S.A.	213		47	
Mitsui & CO, LTD	22	46		37
Others	224	8	107	49
	926	425	879	395
Current	518	353	370	304
Long-term	408	72	509	91
Total	926	425	879	395

These balances are included in the following balance sheet classifications:

	December 31, 2012		December 31, 2011	
	Assets	Liabilities	Assets	Liabilities
Current assets				
Accounts receivable	134		288	
Loans and advances to related parties	384		82	
Non-current assets				
Loans and advances to related parties	408		509	
Current liabilities				
Suppliers		146		280
Loans from related parties		207		24
Non-current liabilities				
Long-term debt		72		91
	926	425	879	395

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

Income and expenses from the principal transactions and financial operations carried out with major related parties are as follows:

	2012		As of December 31, 2011		2010	
	Income	Expenses	Income	Expenses	Income	Expenses
Affiliated Companies and Joint Ventures						
Companhia Nipo-Brasileira de Pelotização - NIBRASCO		80		151		149
Samarco Mineração S.A.	371		511		448	
Companhia Ítalo-Brasileira de Pelotização - ITABRASCO		32		150		50
Companhia Hispano-Brasileira de Pelotização - HISPANOBRÁS	266	265	729	521	462	513
Companhia Coreano-Brasileira de Pelotização - KOBRASCO		70		98		117
Mineração Rio Norte S.A.						156
MRS Logística S.A.	14	702	16	759	16	561
Others	142	101	103	53	17	18
	793	1,250	1,359	1,732	943	1,564

Table of Contents

These amounts are included in the following statement of income line items:

	2012		As of December 31, 2011		2010	
	Income	Expenses	Income	Expenses	Income	Expenses
Sales / Cost of iron ore and pellets	624	468	1,337	952	910	785
Revenues / expense from logistic services	14	706	16	759	23	603
Sales / Cost of aluminum products				18		156
Financial income/expenses	14	7	6	3	10	20
Others	141	68				
	793	1,249	1,359	1,732	943	1,564

Additionally we have loans payable to Banco Nacional de Desenvolvimento Econômico Social and BNDES Participações S.A in the amounts of US\$ 3,951 and US\$ 825 respectively, accruing interest at market rates, which fall due through 2029. These operations generated interest expenses of US\$41 and US\$14. We also maintain cash equivalent balances with Banco Bradesco S.A. in the amount of US\$33 in December 31, 2012. The effect of these operations on our results was US\$1.

26 Derivative financial instruments

Risk management policy

Vale considers that the effective management of risks is a key objective to support its growth strategy, strategic planning and financial flexibility. Therefore, Vale has developed its risk management strategy in order to provide an integrated approach of the risks the Company is exposed to. Vale evaluates not only the impact of market risk factors in the business results (market risk), but also the risk arising from third party obligations with Vale (credit risk), those inherent to inadequate or failed internal processes, people, systems or external events (operational risk), those arising from liquidity risk, among others.

The Board of Directors established the corporate risk management policy in order to support the growth strategy, strategic planning and business continuity of the Company, strengthening its capital structure and asset management, ensure flexibility and consistency on the financial management and strengthen corporate governance practices.

The corporate risk management policy determines that Vale measures and monitors its corporate risk on a consolidated approach in order to guarantee that the overall risk level of the Company remains aligned with the guidelines defined by the Board of Directors and the Executive Board.

The Executive Risk Management Committee, created by the Board of Directors, is responsible for supporting the Executive Board in the risk analysis and for issuing opinion regarding the Company's risk management. It is also responsible for the supervision and revision of the principles and instruments of corporate risk management.

The Executive Board is responsible for the approval of the policy deployment into norms, rules and responsibilities and for reporting to the Board of Directors about such procedures.

The risk management norms and instructions complement the corporate risk management policy and define practices, processes, controls, roles and responsibilities in the Company regarding risk management.

The Company may, when necessary, allocate specific risk limits to management activities, including but not limited to, market risk limit, corporate and sovereign credit limit, in accordance with the acceptable corporate risk limit.

Market Risk Management

Vale is exposed to the various market risk factors that can impact its cash flow. The assessment of this potential impact arising from the volatility of risk factors and their correlations is performed periodically to support the decision making process and the growth strategy of the Company, ensure its financial flexibility and monitor the volatility of future cash flows.

When necessary, market risk mitigation strategies are evaluated and implemented in line with these objectives. Some strategies may incorporate financial instruments, including derivatives. The portfolios of the financial instruments are monitored on a monthly basis, enabling financial results surveillance and its impact on cash flow, and ensuring strategies adherence to the proposed

Table of Contents

objectives.

Considering the nature of Vale's business and operations, the main market risk factors which the Company is exposed to are:

- Interest rates;
- Foreign exchange;
- Product prices and input costs.

Foreign exchange rate and interest rate risk

Vale's cash flows are exposed to volatility of several currencies. While most of the product prices are indexed to US dollars, most of the costs, disbursements and investments are indexed to currencies other than the US dollar, primarily the Brazilian real and the Canadian dollar.

Derivative instruments may be used to mitigate Vale's potential cash flow volatility arising from its currency mismatch.

For hedging revenues, costs, expenses and investment cash flows, the main risk mitigation strategies used are currency forward transactions and swaps.

Vale implemented hedge transactions to protect its cash flow from market risks that arises from its debt obligations - mainly currency volatility. We use swap transactions to convert debt linked to Brazilian real into US dollar that have similar - or sometimes shorter - settlement dates than the final maturity of the debt instruments. Their notional amounts are similar to the principal and interest payments, subjected to liquidity market conditions.

Swaps with shorter settlement dates are renegotiated through time so that their final maturity matches - or becomes closer - to the debts' final maturity. At each settlement date, the results of the swap transactions partially offset the impact of the foreign exchange rate in Vale's obligations, contributing to stabilize the cash disbursements in US dollar.

In the event of an appreciation (depreciation) of the Brazilian real against the US dollar, the negative (positive) impact on Brazilian real denominated debt obligations (interest and/or principal payment) measured in US dollars will be partially offset by a positive (negative) effect from a swap transaction, regardless of the US dollar / Brazilian real exchange rate in the payment date. The same rationale applies to debt denominated in other currencies and their respective swaps.

Vale is also exposed to interest rate risks on loans and financings. Its floating rate debt consists mainly of loans including export pre-payments, commercial banks and multilateral organizations loans. In general, the US dollar floating rate debt is subject to changes in the LIBOR (London Interbank Offer Rate in US dollar). To mitigate the impact of the interest rate volatility on its cash flows, Vale considers the natural hedges resulting from the correlation of commodities prices and US dollar floating rates. If such natural hedges are not present, Vale may search for the same effect by using financial instruments.

Product price and Input Cost risk

Vale is also exposed to several market risks associated with commodities prices volatility. In line with the risk management policy, risk mitigation strategies involving commodities can also be used to adjust its risk profile and reduce the volatility of cash flow. In these cases, the mitigation strategies used are primarily forward transactions, futures contracts or zero-cost collars.

Embedded derivatives

The cash flow of the Company is also exposed to market risks associated with contracts that contain embedded derivatives or behave as derivatives. The derivatives may be embedded in, but are not limited to, commercial contracts, purchase agreements, leases, bonds, insurance policies and loans.

Vale's wholly-owned subsidiary Vale Canada Ltd has nickel concentrate and raw materials purchase agreements, in which there are provisions based on the movement of nickel and copper prices. These provisions are considered embedded derivatives.

Table of Contents**Hedge Accounting**

The Accounting for Derivative Financial Instruments and Hedging Activities Standard determines that all derivatives, whether designated in hedging relationships or not, are required to be recorded in the balance sheet at fair value and the gain or loss in fair value is included in current earnings, unless if qualified as hedge accounting. A derivative must be designated in a hedging relationship in order to qualify for hedge accounting. These requirements include a determination of what portions of hedges are deemed to be effective versus ineffective. In general, a hedging relationship is effective when a change in the fair value of the derivative is offset by an equal and opposite change in the fair value of the underlying hedged item. In accordance with these requirements, effectiveness tests are performed in order to assess effectiveness and quantify ineffectiveness for all designated hedges.

At December 31, 2012, Vale had outstanding positions designated as cash flow hedge. A cash flow hedge is a hedge of the exposure to variability in expected future cash flows that is attributable to a particular risk, such as a forecasted purchase or sale. If a derivative is designated as cash flow hedge, the effective portion of the changes in the fair value of the derivative is recorded in other comprehensive income and recognized in earnings when the hedged item affects earnings. However, the ineffective portion of changes in the fair value of the derivatives designated as hedges is recognized in earnings. If a portion of a derivative contract is excluded for purposes of effectiveness testing, the value of such excluded portion is included in earnings.

	Assets				Liabilities			
	December 31, 2012		December 31, 2011		December 31, 2012		December 31, 2011	
	Short-term	Long-term	Short-term	Long-term	Short-term	Long-term	Short-term	Long-term
<u>Derivatives not designated as hedge</u>								
<u>Foreign exchange and interest rate risk</u>								
CDI & TJLP vs. USD fixed and floating rate swap	249	1	410	60	340	700	49	590
EuroBond Swap		39			4	18	4	32
Pre Dollar Swap	16		19			63		41
Treasury future							5	
	265	40	429	60	344	781	58	663
<u>Commodities price risk</u>								
Nickel								
Fixed price program			1		2		1	
Bunker Oil			4					
			5		2		1	
<u>Embedded derivatives:</u>								
Gas						2		
						2		
<u>Derivatives designated as hedge</u>								
Bunker Oil					1			

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

Strategic Nickel	13		161					
Foreign exchange cash flow hedge	3	5					14	
	16	5	161		1		14	
Total	281	45	595	60	347	783	73	663

Table of Contents

	Gain or (loss) recognized as financial income			Financial settlement (Inflows)/ Outflows			Gain or (loss) recognized in OCI		
	(expense)						Year ended as of December 31,		
	Year ended as of December 31, 2012	2011	2010	Year ended as of December 31, 2012	2011	2010	Year ended as of December 31, 2012	2011	2010
<u>Derivatives not designated as hedge</u>									
<u>Foreign exchange and interest rate risk</u>									
CDI & TJLP vs. USD fixed and floating rate swap	(315)	(92)	451	(325)	(337)	(956)			
EURO floating rate vs. USD floating rate swap			(1)			1			
USD floating rate vs. fixed USD rate swap			(2)		4	3			
EuroBond Swap	50	(30)	(5)	4	1	(1)			
Pre Dollar Swap	(7)	(23)	4	(19)	(1)	(2)			
Swap USD fixed rate vs. CDI		69			(68)				
South African Rande Forward		(8)			8				
AUD floating rate vs. fixed USD rate swap			3		(2)	(9)			
Treasury Future	9	(12)		(3)	6				
Swap Convertibles			37			(37)			
	(263)	(96)	487	(343)	(389)	(1,001)			
<u>Commodities price risk</u>									
Nickel									
Fixed price program	(1)	39	4	2	(41)	(7)			
Strategic program		15	(87)			105			
Copper		1							
Aluminum					7	16			
Bunker Oil	1	37	4	(5)	(48)	(34)			
Coal			(4)		2	3			
Maritime Freight Protection Program			(5)		2	(24)			
		92	(88)	(3)	(78)	59			
<u>Embedded derivatives:</u>									
Gas	(2)								
Energy - Aluminum options		(7)	(51)						
	(2)	(7)	(51)						
<u>Derivatives designated as hedge</u>									
Bunker Oil				(1)		47	(1)		
Aluminum								4	31
Strategic Nickel	172	49	(1)	(172)	(48)		(149)	211	(52)
Foreign exchange cash flow hedge	(27)	37	284	26	(50)	(330)	29	(60)	(5)
	145	86	283	(147)	(98)	(283)	(121)	155	(26)
Total	(120)	75	631	(493)	(565)	(1,225)	(121)	155	(26)

Table of Contents

Unrealized gains (losses) in the period are included in our income statement under the gains (losses) on derivatives, net.

Final maturity dates for the above instruments are as follows:

Interest rates / Currencies	January 2023
Gas	April 2016
Nickel	April 2013
Copper	April 2013

27 Subsequent events

Sales of Gold by-product

At February 5, 2013, Vale informed that it has entered into an agreement with Silver Wheaton Corp. (SLW), to sell 25% of the payable gold by-product stream from the Salobo copper mine for the life of the mine and 70% of the payable gold by-product stream from its Sudbury nickel mines Coleman, Copper Cliff, Creighton, Garson, Stobie, Totten and Victor for 20 years.

Vale will receive an initial cash payment of US\$ 1.9 billion plus ten million warrants of SLW with a strike price of US\$ 65 and a 10-year term, valued at US\$ 100. US\$ 1.33 billion will be paid for 25% of the gold by-product stream from Salobo while US\$ 570 plus ten million SLW warrants will be paid for 70% of the Sudbury gold by-product stream.

In addition, Vale will also receive future cash payments for each ounce (oz) of gold delivered to SLW under the agreement, equal to the lesser of US\$ 400 per oz (plus a 1% annual inflation adjustment from 2016 in the case of Salobo) and the prevailing market price. Vale may also receive an additional cash payment contingent on its decision to expand the capacity to process Salobo copper ores to more than 28 Mtpy before 2031. The additional amount would range from US\$ 67 to US\$ 400 depending on timing and size of the expansion.

There is no firm commitment from Vale to quantities of gold delivered SLW is entitled not to specific volumes but to a percentage of the gold by-product stream from Salobo and Sudbury. Company will be subject to gold price risk for the SLW's deliveries only if the price of gold drops below the US\$ 400/oz trailing payment.

Table of Contents

28 Board of Directors, Fiscal Council, Advisory committees and Executive Officers

Board of Directors

Dan Antônio Marinho Conrado

Chairman

Mário da Silveira Teixeira Júnior

Vice-President

Fuminobu Kawashima

José Mauro Mettrau Carneiro da Cunha

Luciano Galvão Coutinho

Marcel Juvinião Barros

Nelson Henrique Barbosa Filho

Oscar Augusto de Camargo Filho

Paulo Soares de Souza

Renato da Cruz Gomes

Robson Rocha

Alternate

Deli Soares Pereira

Eduardo de Oliveira Rodrigues Filho

Eustáquio Wagner Guimarães Gomes

Hajime Tonoki

Luiz Carlos de Freitas

Luiz Maurício Leuzinger

Marco Geovanne Tobias da Silva

Paulo Sergio Moreira da Fonseca

Raimundo Nonato Alves Amorim

Sandro Kohler Marcondes

Advisory Committees of the Board of Directors

Controlling Committee

Luiz Carlos de Freitas

Paulo Ricardo Ultra Soares

Paulo Roberto Ferreira de Medeiros

Executive Development Committee

José Ricardo Sasseron

Luiz Maurício Leuzinger

Oscar Augusto de Camargo Filho

Strategic Committee

Governance and Sustainability Committee

Gilmar Dalilo Cezar Wanderley

Renato da Cruz Gomes

Ricardo Simonsen

Fiscal Council

Marcelo Amaral Moraes

Chairman

Aníbal Moreira dos Santos

Antonio Henrique Pinheiro Silveira

Arnaldo José Vollet

Alternate

Cícero da Silva

Oswaldo Mário Pêgo de Amorim Azevedo

Paulo Fontoura Valle

Executive Officers

Murilo Pinto de Oliveira Ferreira

President & CEO

Vânia Lucia Chaves Somavilla

Executive Director, HR, Health & Safety, Sustainability and Energy

Luciano Siani Pires

Chief Financial Officer

Roger Allan Downey

Executive Director, Fertilizers and Coal

José Carlos Martins

Executive Director, Ferrous and Strategy

Galib Abrahão Chaim

Executive Director, Capital Projects Implementation

Humberto Ramos de Freitas

Executive Director, Logistics and Mineral Research

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

Murilo Pinto de Oliveira Ferreira
Dan Antônio Marinho Conrado
Luciano Galvão Coutinho
Mário da Silveira Teixeira Júnior
Oscar Augusto de Camargo Filho

Finance Committee

Luciano Siani Pires
Eduardo de Oliveira Rodrigues Filho
Luciana Freitas Rodrigues
Luiz Maurício Leuzinger

Gerd Peter Poppinga
Executive Director, Base Metals and IT

Marcus Vinicius Dias Severini
Chief Officer of Accounting and Control Department

Vera Lucia de Almeida Pereira Elias
Chief Accountant
CRC-RJ - 043059/O-8

Table of Contents

Signatures

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

Vale S.A.
(Registrant)

Date: February 27, 2013

By:

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