

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

**Financial Statements**

**December 31, 2012**

**BR GAAP/IFRS**

Filed with the CVM, SEC and HKEx on

February 27, 2013



Table of Contents

Vale S.A.

**Index to the Financial Statements**

	<b>Page</b>
<u>Report of Independent Registered Public accounting Firm</u>	2
<u>Consolidated Statement of Financial Position as December 31, 2012, 2011 and 2010 and Parent Company as December 31, 2012 and 2011</u>	4
<u>Consolidated Statement of Income for the year ended December 31, 2012 and 2011</u>	6
<u>Parent Company Statement of income for the year ended December 31, 2012 and 2011</u>	7
<u>Consolidated and Parent Company Statement of Other Comprehensive Income for the year ended December 31, 2012 and 2011</u>	8
<u>Statement of Changes in Equity for the year ended December 31, 2012 and 2011</u>	9
<u>Consolidated Statement of Cash Flows for the year ended December 31, 2012 and 2011</u>	10
<u>Parent Company Statement of Cash Flows for the year ended December 31, 2012 and 2011</u>	11
<u>Consolidated Statement of Added Value for the year ended December 31, 2012 and 2011</u>	12
<u>Parent Company Statement of Added Value for the year ended December 31, 2012 and 2011</u>	13
<u>Notes to the Consolidated Financial Statements</u>	14

Table of Contents

**Independent auditor's report**

To the Board of Directors and Shareholders

Vale S.A.

We have audited the accompanying consolidated financial statements of Vale S.A. and its subsidiaries (the Company), which comprise the consolidated balance sheet as at December 31, 2012 and the consolidated statements of income, comprehensive income, changes in equity and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

**Management's responsibility for  
the consolidated financial statements**

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB), and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

**Auditor's responsibility**

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error.

In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### **Opinion**

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Vale S.A. and its subsidiaries as at December 31, 2012, and their financial performance and their cash flows for the year then ended, in accordance with the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB).

Rio de Janeiro, February 27, 2012

PricewaterhouseCoopers  
Auditores Independentes  
CRC 2SP000160/O-5 F RJ

João César de Oliveira Lima Júnior  
Contador CRC 1RJ077431/O-8

Table of Contents**Balance Sheet**

In millions of Brazilian reais

	Notes	December 31, 2012	Consolidated December 31, 2011	January 1, 2011	Parent Company December 31, 2012	December 31, 2011
<b>Assets</b>						
<b>Current assets</b>						
Cash and cash equivalents	7	11,918	6,593	12,636	688	575
Short-term investments	8	506	-	2,987	43	-
Derivatives at fair value	25	575	1,112	87	500	574
Accounts receivable	9	13,885	15,889	13,681	21,839	15,809
Related parties	30	786	154	160	1,347	2,561
Inventories	10	10,320	9,833	7,161	3,283	3,183
Recoverable taxes	12	4,620	4,190	2,671	2,071	2,317
Advances to suppliers		523	733	313	242	382
Others		1,973	1,647	1,010	574	183
		<b>45,106</b>	<b>40,151</b>	<b>40,706</b>	<b>30,587</b>	<b>25,584</b>
Non-current Assets held for sale	11	935	-	11,877	-	-
		<b>46,041</b>	<b>40,151</b>	<b>52,583</b>	<b>30,587</b>	<b>25,584</b>
<b>Non-current assets</b>						
Related parties	30	833	904	48	864	446
Loans and financing agreements to receive		502	399	273	188	158
Judicial deposits	18	3,095	2,735	2,884	2,474	2,091
Deferred income tax and social contribution	20	8,134	3,539	2,263	5,558	2,109
Recoverable taxes	12	1,343	1,097	601	255	201
Derivatives at fair value	25	93	112	502	3	96
Reinvestment tax incentive		327	429	238	302	429
Others		1,234	1,095	788	458	389
		<b>15,561</b>	<b>10,310</b>	<b>7,597</b>	<b>10,102</b>	<b>5,919</b>
Investments	13	13,044	14,984	7,321	123,871	113,150
Intangible assets	14	18,822	17,789	16,829	14,664	13,974
Property, plant and equipment, net	15	173,455	153,855	126,656	61,231	55,503
		<b>220,882</b>	<b>196,938</b>	<b>158,403</b>	<b>209,868</b>	<b>188,546</b>
<b>Total assets</b>		<b>266,923</b>	<b>237,089</b>	<b>210,986</b>	<b>240,455</b>	<b>214,130</b>



Table of Contents**Balance Sheet**

In millions of Brazilian reais

(continued)

	Notes	December 31, 2012	Consolidated December 31, 2011	January 1, 2011	Parent Company December 31, 2012	December 31, 2011
<b>Liabilities</b>						
<b>Current liabilities</b>						
Suppliers and contractors		9,255	8,851	5,928	4,178	3,504
Payroll and related charges		3,025	2,442	1,889	2,001	1,582
Derivatives at fair value	25	710	136	58	558	117
Current portion of long-term debt	17	7,093	2,807	4,707	5,328	892
Short-term debt	17		40	232		
Related parties	30	423	43	35	6,434	4,959
Taxes payable and royalties		664	979	440	333	330
Provision for income taxes		1,310	955	1,251	370	
Employee post retirement benefits obligations	21	420	316	313	220	141
Railway sub-concession agreement payable		133	123	125		
Asset retirement obligations	19	143	136			21
Dividends and interest on capital			2,207	8,068		2,207
Others		2,168	1,650	1,582	751	400
		<b>25,344</b>	<b>20,685</b>	<b>24,628</b>	<b>20,173</b>	<b>14,153</b>
Liabilities directly associated with assets held for sale	11	327		5,340		
		<b>25,671</b>	<b>20,685</b>	<b>29,968</b>	<b>20,173</b>	<b>14,153</b>
<b>Non-current liabilities</b>						
Derivatives at fair value	25	1,601	1,239	102	1,410	953
Long-term debt	17	54,763	40,225	35,978	26,867	18,596
Related parties	30	146	171	3	29,363	28,654
Employee post retirement benefits obligations	21	3,390	2,846	3,337	544	406
Provisions for contingencies	18	4,218	3,145	3,409	2,867	1,928
Deferred income tax and social contribution	20	7,754	10,614	12,828		
Asset retirement obligations	19	5,472	3,427	2,404	1,625	1,095
Stockholders' Debentures	29	3,379	2,496	2,139	3,379	2,496
Redeemable noncontrolling interest		995	943	1,186		
Others		3,901	4,617	3,306	1,839	2,374
		<b>85,619</b>	<b>69,723</b>	<b>64,692</b>	<b>67,894</b>	<b>56,502</b>
<b>Total liabilities</b>		<b>111,290</b>	<b>90,408</b>	<b>94,660</b>	<b>88,067</b>	<b>70,655</b>

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

<b>Stockholders equity</b>	24				
Preferred class A stock - 7,200,000,000 no-par-value shares authorized and 2,108,579,618 (2011 - 2,108,579,618) issued	29,475	29,475	19,650	29,475	29,475
Common stock - 3,600,000,000 no-par-value shares authorized and 3,256,724,482 (2011 - 3,256,724,482) issued	45,525	45,525	30,350	45,525	45,525
Mandatorily convertible votes - common shares		360	445		360
Mandatorily convertible votes - preferred shares		796	996		796
Treasury stock - 140,857,692 (2011 - 181,099,814) preferred and 71,071,482 (2011 - 86,911,207) common shares	(7,838)	(9,917)	(4,826)	(7,838)	(9,919)
Results from operations with noncontrolling stockholders	(840)	(71)	685	(840)	(71)
Results in the translation/issuance of shares	50		1,867	50	
Unrealized fair value gain (losses)	(1,126)	220	(25)	(1,126)	220
Cumulative translation adjustments	8,692	(1,017)	(9,512)	8,692	(1,017)
Retained earnings	78,450	78,105	72,487	78,450	78,106
<b>Total company stockholders equity</b>	<b>152,388</b>	<b>143,476</b>	<b>112,117</b>	<b>152,388</b>	<b>143,475</b>
Noncontrolling interests	3,245	3,205	4,209		
<b>Total stockholders equity</b>	<b>155,633</b>	<b>146,681</b>	<b>116,326</b>	<b>152,388</b>	<b>143,475</b>
<b>Total liabilities and stockholders equity</b>	<b>266,923</b>	<b>237,089</b>	<b>210,986</b>	<b>240,455</b>	<b>214,130</b>

The accompanying notes are an integral part of these Financial Statements.

Table of Contents**Consolidated Statement of Income**

In millions of Brazilian reais, except as otherwise stated

	Notes	Year ended	
		December 31, 2012	December 31, 2011
Net operating revenue		93,511	102,019
Cost of goods solds and services rendered	27	(51,997)	(42,451)
<b>Gross profit</b>		<b>41,514</b>	<b>59,568</b>
<b>Operating (expenses) income</b>			
Selling and administrative expenses	27	(4,381)	(3,985)
Research and development expenses	27	(2,912)	(2,822)
Other operating expenses, net	27	(7,216)	(4,836)
Impairment of assets		(8,211)	
Realized gain (loss) on non-current assets held for sales		(1,036)	2,492
		<b>(23,756)</b>	<b>(9,151)</b>
<b>Operating profit</b>		<b>17,758</b>	<b>50,417</b>
Financial income	28	2,619	4,494
Financial expenses	28	(11,024)	(10,846)
Equity results from associates	13	1,241	1,857
Impairment of investment		(4,002)	
<b>Income before income tax and social contribution</b>		<b>6,592</b>	<b>45,922</b>
<b>Income tax and social contribution</b>			
Current tax	20	(4,987)	(9,077)
<b>Deferred</b>			
Deferred of year	20	1,776	563
Reversal of Deferred Income Tax liabilities (see note 6.b.)		2,533	
Effect of income tax on impairment		3,319	
		<b>2,641</b>	<b>(8,514)</b>
<b>Net income of the year</b>		<b>9,233</b>	<b>37,408</b>
Loss attributable to non-controlling interests		(501)	(406)
<b>Net income attributable to the Company's stockholders</b>		<b>9,734</b>	<b>37,814</b>
<b>Earnings per share attributable to the Company's stockholders:</b>			
<b>Basic and diluted earnings per share:</b>			
Preferred share and Common (in Brazilian reais)		1.91	7.21

The accompanying notes are an integral part of these Financial Statements.



Table of Contents**Parent Company Statement of Income**

In millions of Brazilian reais, except as otherwise stated

	Notes	Year ended	
		December 31, 2012	December 31, 2011
Net operating revenue		57,429	66,082
Cost of goods sold and services rendered	27	(24,245)	(20,958)
<b>Gross profit</b>		<b>33,184</b>	<b>45,124</b>
<b>Operating (expenses) income</b>			
Selling and administrative expenses	27	(2,339)	(2,176)
Research and development expenses	27	(1,619)	(1,460)
Other operating expenses, net	27	(3,023)	(1,704)
Impairment of assets		(5,968)	
Equity results from subsidiaries	13	(350)	5,647
Realized gain (loss) on non-current assets held for sales (equity on parent company) (*)		(1,036)	2,492
<b>Operating profit</b>		<b>18,849</b>	<b>47,923</b>
Financial income	28	1,566	2,958
Financial expenses	28	(10,084)	(8,552)
Equity results from joint controlled entities and associates	13	1,241	1,857
Impairment of investments		(1,804)	
<b>Income before income tax and social contribution</b>		<b>9,768</b>	<b>44,186</b>
<b>Income tax and social contribution</b>			
Current	20	(3,492)	(6,671)
Deferred	20	816	299
Effect of income tax on impairment		2,642	
		<b>(34)</b>	<b>(6,372)</b>
<b>Net income of the exercise</b>		<b>9,734</b>	<b>37,814</b>
<b>Earnings per share:</b>			
<b>Basic and diluted earnings per share:</b>			
Preferred share and Common (in brazilian reais)		1.91	7.21

(\*) Except for the loss of R\$ 722 in 2012 about coal assets sale, recorded in other operating expenses.

The accompanying notes are an integral part of these Financial Statements.

Table of Contents**Statement of Other Comprehensive Income**

In millions of Brazilian reais

	Consolidated Year ended	
	December 31, 2012	December 31, 2011
<b>Net income</b>	<b>9,233</b>	<b>37,408</b>
Cumulative translation adjustments	10,073	8,828
<b>Unrealized gain (loss) on available-for-sale investments</b>		
Gross balance as of the year end	(3)	6
	<b>(3)</b>	<b>6</b>
<b>Cash flow hedge</b>		
Gross balance as of the year end	(230)	219
Effect of tax	(12)	21
	<b>(242)</b>	<b>240</b>
<b>Total comprehensive income of the year</b>	<b>19,061</b>	<b>46,482</b>
<b>Comprehensive income attributable to noncontrolling interests</b>	<b>(137)</b>	<b>(72)</b>
<b>Comprehensive income attributable to the Company's stockholders</b>	<b>19,198</b>	<b>46,554</b>
	<b>19,061</b>	<b>46,482</b>

	Parent Company Year ended	
	December 31, 2012	December 31, 2011
<b>Net income</b>	<b>9,734</b>	<b>37,814</b>
<b>Other comprehensive income</b>		
Cumulative translation adjustments	9,709	8,495
<b>Unrealized gain (loss) on available-for-sale investments</b>		
Gross balance as of the year end	(2)	6
Effect of tax	(1)	
	<b>(3)</b>	<b>6</b>
<b>Cash flow hedge</b>		
Gross balance as of the year end	(229)	218
Effect of tax	(13)	21
	<b>(242)</b>	<b>239</b>
<b>Total comprehensive income of the year</b>	<b>19,198</b>	<b>46,554</b>

The accompanying notes are an integral part of these Financial Statements.





Table of Contents**Statement of Changes in Equity**

In millions of Brazilian reais

	Capital	Results in the translation of shares	Mandatorily convertible notes	Revenue reserves	Treasury stock	Unrealized fair value gain (losses)	Year ended Gain (loss) from operation with noncontrolling stockholders	Cumulative translation adjustment	Retained earnings	Total Company stockholders equity	Noncontrolling stockholders equity
<b>January 01, 2011</b>	<b>50,000</b>	<b>1,867</b>	<b>1,441</b>	<b>72,487</b>	<b>(4,826)</b>	<b>(25)</b>	<b>685</b>	<b>(9,512)</b>		<b>112,117</b>	
<b>Net income of the year</b>									37,814		37,814
Capitalization of reserves	25,000	(1,867)		(23,133)							
Capitalization of noncontrolling stockholders advances											
Gain on conversion of shares					(5,091)						(5,091)
Additional remuneration for mandatorily convertible notes			(285)								(285)
Cash flow hedge, net of taxes						239					239
Unrealized results on valuation at market						6					6
Translation adjustments for the year								8,495			8,495
Dividends to noncontrolling stockholders											
Redeemable noncontrolling stockholders interest											
Acquisitions and disposal of noncontrolling stockholders							(756)				(756)

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

<b>Destination of earnings:</b>									
Interim dividends								(2,207)	(2,207)
Additional remuneration proposed								(6,856)	(6,856)
Appropriation to undistributed retained earnings			28,751					(28,751)	
<b>December 31, 2011</b>	<b>75,000</b>	<b>1,156</b>	<b>78,105</b>	<b>(9,917)</b>	<b>220</b>	<b>(71)</b>	<b>(1,017)</b>		<b>143,476</b>
<b>Net income of the year</b>								9,734	9,734
Capitalization of noncontrolling stockholders advances									
Remuneration for mandatorily convertible notes		(128)							(128)
Cash flow hedge, net of taxes					(242)				(242)
Unrealized results on valuation at market					(3)				(3)
Translation adjustments for the year							9,709		9,709
Dividends to noncontrolling stockholders									
Redeemable noncontrolling stockholders interest									
Acquisitions and disposal of noncontrolling stockholders							(769)		(769)
Gain on conversion of shares	50	(1,028)		2,079	(1,101)				
Realization of expansion and investment reserve			(740)					740	
<b>Destination of earnings:</b>									
Appropriation to undistributed retained earnings			1,085					(1,085)	
Remuneration intermediate								(9,389)	(9,389)
<b>December 31, 2012</b>	<b>75,000</b>	<b>50</b>	<b>78,450</b>	<b>(7,838)</b>	<b>(1,126)</b>	<b>(840)</b>	<b>8,692</b>		<b>152,388</b>

The accompanying notes are an integral part of these Financial Statements.



Table of Contents**Consolidated Statement of Cash Flows**

In millions of Brazilian reais

	Year ended	
	December 31, 2012	December 31, 2011
<b>Cash flow from operating activities:</b>		
Net income	9,233	37,408
<b>Adjustments to reconcile net income to cash from operations</b>		
Results of equity investments and associates	(1,241)	(1,857)
Realized losses (gains) on assets held for sale	1,036	(2,492)
Depreciation, amortization and depletion	8,397	6,638
Deferred income tax and social contribution	(1,776)	(563)
Reversal of deferred income tax	(2,533)	
Deferred Income Tax of impairment	(3,319)	
Foreign exchange and indexation (gain) losses, net	3,590	5,156
Impairment on assets	12,213	
Loss on disposal of property, plant and equipment	422	435
Unrealized derivative (gains) losses, net	1,236	957
Stockholders' Debentures	212	412
Others	218	(208)
<b>Decrease (increase) in assets:</b>		
Accounts receivable from customers	3,704	(1,940)
Inventories	(451)	(2,364)
Recoverable taxes	425	(900)
Others	441	(862)
<b>Increase (decrease) in liabilities:</b>		
Suppliers and contractors	47	2,288
Payroll and related charges	550	502
Taxes and contributions	(301)	(3,026)
Others	978	105
<b>Net cash provided by operating activities</b>	<b>33,081</b>	<b>39,689</b>
<b>Cash flow from investing activities:</b>		
Short-term investments	(506)	2,987
Loans and advances	609	(177)
Guarantees and deposits	(232)	(363)
Additions to investments	(892)	(1,362)
Additions to property, plant and equipment	(31,993)	(26,311)
Dividends/interest on capital received from Joint controlled entities and associates	932	1,766
Proceeds from disposal of investments held for sale	1,989	1,795
Acquisitions/sales of subsidiaries		
<b>Net cash used in investing activities</b>	<b>(30,093)</b>	<b>(21,665)</b>
<b>Cash flow from financing activities:</b>		
<b>Short-term debt</b>		

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

Additions	1,067	2,313
Repayments	(1,106)	(1,601)
Long-term debt	16,812	2,407
<b>Repayments:</b>		
Financial institutions	(2,054)	(4,659)
Dividends and interest on capital paid to stockholders	(11,596)	(15,053)
Dividends and interest on capital attributed to noncontrolling interest	(90)	(72)
Transactions with noncontrolling stockholders	(793)	(2,084)
Capital increase		
Repurchase of treasury stock		(5,092)
<b>Net cash provided by (used in) financing activities</b>	<b>2,240</b>	<b>(23,841)</b>
Increase (decrease) in cash and cash equivalents	5,228	(5,817)
Cash and cash equivalents of cash, beginning of the year	6,593	12,175
Effect of exchange rate changes on cash and cash equivalents	97	235
Cash and cash equivalents from new incorporated subsidiary		
<b>Cash and cash equivalents, end of the year</b>	<b>11,918</b>	<b>6,593</b>
<b>Cash paid during the year for:</b>		
Short-term interest	(16)	(5)
Long-term interest	(2,572)	(1,893)
Income tax and social contribution	(2,320)	(11,662)
<b>Non-cash transactions:</b>		
Additions to property, plant and equipment - interest capitalization	684	289

Conversion of mandatory convertible notes using 56,081,560 treasury stocks. (Note 24c.)

The accompanying notes are an integral part of these Financial Statements.

Table of Contents**Parent Company Statement of Cash Flows**

In millions of Brazilian reais

	Year ended	
	December 31, 2012	December 31, 2011
<b>Cash flow from operating activities:</b>		
Net income	9,734	37,814
<b>Adjustments to reconcile net income to cash from operations</b>		
Results of equity investments	(891)	(7,504)
Realized gain on assets held for sale	1,036	(2,492)
Depreciation, amortization and depletion	2,563	1,964
Deferred income tax and social contribution	(816)	(299)
Deferred Income Tax of impairment	(2,642)	
Foreign exchange and indexation (gain) losses, net	4,363	7,003
Impairment on assets	7,772	
Loss on disposal of property, plant and equipment	372	383
Unrealized derivative (gains) losses, net	1,089	661
Dividends / interest on capital received from subsidiaries		2,196
Stockholders debentures	212	412
Others	(141)	(26)
<b>Decrease (increase) in assets:</b>		
Accounts receivable from customers	(6,030)	2,569
Inventories	267	(630)
Recoverable taxes	927	(433)
Others	932	(43)
<b>Increase (decrease) in liabilities:</b>		
Suppliers and contractors	675	640
Payroll and related charges	419	311
Taxes and contributions	349	(4,583)
Others	964	(463)
<b>Net cash provided by operating activities</b>	<b>21,154</b>	<b>37,480</b>
<b>Cash flow from investing activities:</b>		
Short-term investments	(43)	
Loans and advances	1,141	(33)
Guarantees and deposits	(226)	(72)
Additions to investments	(7,324)	(5,985)
Additions to property, plant and equipment	(15,699)	(14,615)
Dividends/interest on capital received from joint controlled entities and associates	1,190	
Proceeds from disposal of investments held for sale	745	
<b>Net cash used in investing activities</b>	<b>(20,216)</b>	<b>(20,705)</b>
<b>Cash flow from financing activities:</b>		
<b>Short-term debt</b>		
Additions	1,007	1,092

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

Repayments	(4,604)	(5,064)
<b>Long-term debt</b>		
Additions	15,023	3,891
<b>Repayments:</b>		
Financial institutions	(655)	(891)
Dividends and interest on capital attributed to noncontrolling interest	(11,596)	(14,960)
Treasury stock		(5,091)
<b>Net cash provided by (used in) financing activities</b>	<b>(825)</b>	<b>(21,023)</b>
Increase (decrease) in cash and cash equivalents	113	(4,248)
Cash and cash equivalents of cash, beginning of the year	575	4,823
<b>Cash and cash equivalents, end of the year</b>	<b>688</b>	<b>575</b>
<b>Cash paid during the year for:</b>		
Short-term interest	(2)	(1)
Long-term interest	(1,892)	(1,904)
Income tax and social contribution	(312)	(9,638)
<b>Non-cash transactions:</b>		
Additions to property, plant and equipment - interest capitalization	28	(73)

Conversion of mandatory convertible notes using 56,081,560 treasury stocks. (Note 24c.)

The accompanying notes are an integral part of these Financial Statements.

Table of Contents**Consolidated Statement of Added Value**

In millions of Brazilian reais

	Year ended	
	December 31, 2012	December 31, 2011
<b>Generation of added value</b>		
<b>Gross revenue</b>		
Revenue from products and services	95,577	104,350
Gain (loss) on realization of assets available for sale	(1,036)	2,492
Other revenue	(2)	(11)
Revenue from the construction of own assets	29,673	28,389
Allowance for doubtful accounts	20	11
<b>Less:</b>		
Acquisition of products	(2,718)	(3,887)
Outsourced services	(19,319)	(16,593)
Materials	(26,508)	(26,807)
Oil and gas	(4,050)	(3,644)
Energy	(1,689)	(1,540)
Freight	(5,660)	(3,772)
Impairment	(12,213)	
Other costs and expenses	(13,406)	(10,763)
<b>Gross added value</b>	<b>38,669</b>	<b>68,225</b>
Depreciation, amortization and depletion	(8,397)	(6,638)
<b>Net added value</b>	<b>30,272</b>	<b>61,587</b>
<b>Received from third parties</b>		
Financial income	1,760	2,944
Equity results	1,241	1,857
<b>Total added value to be distributed</b>	<b>33,273</b>	<b>66,388</b>
Personnel	9,120	7,342
Taxes, rates and contribution	7,396	3,828
Current income tax	4,987	9,077
Deferred income tax	(7,628)	(563)
Remuneration of debt capital	6,019	5,829
Monetary and exchange changes, net	4,146	3,467
Net income attributable to the Company's stockholders	9,734	37,814
Loss attributable to noncontrolling interest	(501)	(406)
<b>Distribution of added value</b>	<b>33,273</b>	<b>66,388</b>

The accompanying notes are an integral part of these Financial Statements.





Table of Contents**Parent Company Statement of Added Value**

In millions of Brazilian reais

	Year ended	
	December 31, 2012	December 31, 2011
<b>Generation of added value</b>		
<b>Gross revenue</b>		
Revenue from products and services	58,551	67,618
Gain (loss) on realization of assets available for sale	(1,036)	2,492
Revenue from the construction of own assets	16,166	14,824
Allowance for doubtful accounts	13	7
<b>Less:</b>		
Acquisition of products	(1,384)	(2,547)
Outsourced services	(11,313)	(9,222)
Materials	(13,054)	(13,602)
Fuel oil and gas	(2,382)	(1,964)
Energy	(1,207)	(862)
Impairment	(7,772)	
Other costs and expenses	(6,611)	(5,289)
<b>Gross added value</b>	<b>29,971</b>	<b>51,455</b>
Depreciation, amortization and depletion	(2,563)	(1,964)
<b>Net added value</b>	<b>27,408</b>	<b>49,491</b>
<b>Received from third parties</b>		
Financial income	799	1,825
Equity results	891	7,504
<b>Total added value to be distributed</b>	<b>29,098</b>	<b>58,820</b>
Personnel	4,674	3,989
Taxes, rates and contribution	5,339	3,226
Current income tax	3,492	6,671
Deferred income tax	(3,458)	(299)
Remuneration of debt capital	5,181	4,351
Monetary and exchange changes, net	4,136	3,068
Net income attributable to the Company's stockholders	9,734	9,063
Reinvested		28,751
<b>Distribution of added value</b>	<b>29,098</b>	<b>58,820</b>

The accompanying notes are an integral part of these Financial Statements.



Table of Contents**Notes to Financial Statements**

Expressed in millions of Brazilian Reais, unless otherwise stated

**1- Operational Context**

Vale S.A. ( Vale or Parent Company ) is a publicly-listed company with its headquarters at 26 Avenida Graça Aranha, Downtown, Rio de Janeiro, Brazil with shares traded on the stock exchanges of Sao Paulo ( BM&F BOVESPA ), New York ( NYSE ), Paris ( NYSE Euronext ) and Hong Kong ( HKEx ).

The Company and its direct and indirect subsidiaries ( Group , Company or we ) is principally engaged in the research, production and marketing of iron ore and pellets, nickel, fertilizer, copper, coal, manganese, iron alloys, cobalt, platinum group metals and precious metals. The Company also operates in the segments of energy, logistics and steel.

At December 31, 2012, our principal consolidated operating subsidiaries the following:

Subsidiaries	% ownership	% voting capital	Location	Principal activity
Compañia Minera Miski Mayo S.A.C	40.00	51.00	Peru	Fertilizers
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	Fertilizers
Vale International Holdings GMBH	100.00	100.00	Austria	Holding and Research
Vale International S.A	100.00	100.00	Switzerland	Holding and 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	Pellet
Vale Shipping Holding PTE Ltd.	100.00	100.00	Singapore	Logistics

**2 - Summary of the Main Accounting Practices and Accounting Estimates**

**a) Basis of preparation**

The consolidated financial statements of the Company have been prepared in accordance with the International Financial Reporting Standards ( IFRS ) as issued by the International Accounting Standards Board ( IASB ), and the interpretations issued by the International Financial Reporting Interpretations Committee ( IFRIC ), implemented in Brazil by the Accounting Pronouncements Committee ( CPC ) and interpretations ( ICPC ) and guidelines ( OCPC ), approved by the Securities Commission ( CVM ).

The individual financial statements of the Company have been prepared in accordance with accounting practices adopted in Brazil issued by CPC and is published in conjunction with the consolidated financial statements.

In the case of Vale, the accounting practices adopted in Brazil applicable to individual financial statements differ from IFRS applicable to separate financial statements, only the measurement of investments at equity method in subsidiaries, joint controlled entities and affiliates, as under the rules of IFRS would be the cost or at fair value.

The financial statements have been prepared under the historical cost convention adjusted to reflect the fair value of available for sale financial assets, and financial assets and liabilities (including derivative instruments) measured at fair value through the Statement of Income.

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 R\$3,275 (R\$3,054 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.

Table of Contents**b) Functional currency and presentation currency**

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the functional currency), which in the case of the Parent Company is the Brazilian Real ( R\$ or Reais ). For presentation purposes, these consolidated financial statements are presented in United States Dollars ( US\$ ) as a convenience to facilitate analysis by our international investors.

Operations in others currencies are translated into the functional currency of each entity using the actual exchange rates in force on the respective transaction dates. The foreign exchange gains and losses resulting from the settlement of these transactions and from the translation at the exchange rates in force at the end of the year, of monetary assets and liabilities in other currencies, are recognized in the Statement of Income as financial expense or income.

In 2011, based on an entity business assessment, the subsidiary Vale International changed its functional currency from the Brazilian Real to the US Dollar. This change did not have any significant effects on the financial statements presentation.

The exchange rates of the major currencies that impact our operations against the functional currency were:

	Exchange rates used for conversions in reais	
	December 31, 2012	December 31, 2011
US dollar - US\$	2.0435	1.8683
Canadian dollar - CAD	2.0546	1.8313
Australian dollar - AUD	2.1197	1.9092
Euro - EUR or	2.6954	2.4165

Translation differences on non-monetary financial assets and liabilities are recognized in income as part of fair value gain or loss. The exchange rate gain or loss of non-monetary financial assets, such as investments in shares classified as available for sale, are included in Stockholders equity under the caption Unrealized fair value gain (losses).

The net income and balance sheet of all Group entities whose functional currency is different from the presentation currency are translated into the presentation currency as follows: (i) The assets and liabilities for each Statement of Balance Sheet presented are translated at the closing rate at the Statement of Balance Sheet date; (ii) income and expenses for each Statement of Income are translated at the average exchange rates, except in specific transactions that, considering their relevance, are translated at the rate at the dates of transactions and; (iii) The components for each Stockholders equity are translated at the rate at the dates of transactions. All resulting exchange differences are recognized in a separate

component of the Stockholder's equity, named Cumulative Translation Adjustment .

**c) Consolidation and investments**

The consolidated financial statements reflect the balances of assets and liabilities and the transactions of the Parent Company and its direct and indirect subsidiaries. Subsidiaries over which control is achieved through other means, such as stockholders agreement, are also consolidated even if we hold less than 51% of the voting capital.

For associates, entities over which the Company has significant influence but not control, and jointly controlled entities, the investments are accounted for using the equity method.

Accounting practices of subsidiaries, joint ventures and associated companies are set to ensure consistency with the policies adopted by the Parent Company. Transactions between consolidated companies, as well as balances, unrealized profits and losses on these transactions are eliminated. Unrealized gains on operations with affiliates and joint controlled entities are eliminated on the proportion of Company's participation.

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

For interests in joint arrangements (e.g.: consortium agreements), the assets, liabilities and transactions of these enterprises are recognized in the proportion held by Vale.

Table of Contents

**d) Business Combinations**

When Vale acquires control over an entity, the identifiable assets acquired the liabilities and contingent liabilities assumed and the noncontrolling stockholders' interests recognized are measured initially at their fair values at the acquisition date.

The excess of the consideration transferred plus the fair value as at the acquisition date of any previous equity interests in the acquiree, over the fair value of the identifiable net assets acquired is recorded as goodwill, which is allocated to each cash-generating unit.

**e) Segment Information**

Operating and geographic segments are reported consistently with the internal reporting provide to, and used by, the Company's decision makers when evaluating performance and taking investment decisions. The financial information is analyzed under the following operating 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.

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

**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 our investments in joint ventures and associated companies in other businesses.



**f) Current and non-current assets and liabilities**

Vale classifies assets and liabilities as current when it expects to realize the assets or to settle the liabilities, within 12 months of the end of the reporting period. Others assets and liabilities are classified as non-current.

**g) Cash and Cash Equivalents and Short-term Investments**

The amounts recorded as cash and cash equivalents correspond to the values available in cash, bank deposits and short-term investments that have immediately liquidity and original maturities of 90 days or less and insignificant risk of change in fair value. Other investments with maturities between 91 and 360 days are recognized at fair value through income and recorded in short-term investments.

**h) Accounts Receivables**

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.

**i) Financial Assets**

The Company classifies its financial assets in accordance with the purpose for which they were purchased, and determines the classification and initial recognition according to the following categories:

- Financial assets measured at fair value through the Statement of Income – financial assets held for trading acquired for the purpose of selling in the short term.
- Loans and receivables – non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are initially measured at fair value and subsequently at amortized cost using the effective interest method.
- Available for sale - non-derivative financial assets not classified in another category of financial instrument. They are recognized at fair value in other comprehensive income. After initial recognition, financial assets available for sale which are not quoted in an active market and whose fair values cannot be reliably measured, are held at acquisition cost less impairment.



Table of Contents

**j) Inventory**

Inventory is stated at the lower of the average cost of acquisition or production and the net realizable value. The inventory production cost is determined on the basis of variable and fixed costs, and direct and indirect costs of production, using the average cost method. An allowance for losses on obsolete or slow-moving inventories is recognized.

Stockpiled inventory is accounted for as in processed inventory when ore is extracted from the mine. The cost of finished goods is comprised of depreciation and any direct cost necessary to convert stockpiled inventory into finished goods.

**k) Non-current assets held for sale**

Non-current assets are classified as assets held for sale linked to discontinued operations are recorded as current assets when their carrying amounts are to be recovered principally through a sale transaction and a sale is considered highly probable, evaluated at the lower of their carrying amount and fair value, less cost of sales.

**l) Stripping Costs**

Stripping costs (the cost associated with the removal of overburdened and other waste materials) incurred during the development of mine, before production takes place, are capitalized as part of the depreciable cost of developing the mining 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 new project is developed to permit access to a significant body of ore. In such cases, the costs are capitalized and amortized during the extraction of the ore body.

**m) Intangible Assets**

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

Intangible assets are evaluated at the acquisition cost, less accumulated amortization and impairment losses, when applicable.

Intangible assets that have finite useful lives are amortized considering their effective use, while those with indefinite useful lives are not amortized but are tested at least annually in terms of their recoverability (impairment test).

The Company holds concessions to exploit railway assets over a certain period of time. Railways are classified as intangible assets and amortized over the shorter of their useful lives and the concession term will returned to the government.

Intangible assets acquired in a business combination are recognized separately from goodwill.

### n) **Property, Plant and Equipment**

Property, plant and equipment are carried at acquisition or production cost. The asset costs include costs directly attributable to bringing the asset into use, financial charges incurred during the construction period, acquisition expenses, after deducting trade discounts and rebates, and estimated decommissioning and site restoration expenses (asset retirement obligations - Note 2t).

Assets are depreciated using the straight-line method based on the estimated useful lives, from the date on which the assets become available for their intended use, except for land which is not depreciated. The depletion of reserves is calculated based on the ratio between actual production and the total amount of proven reserves.

The depreciation and depletion are determined in accordance with the following estimated useful lives:

Buildings	between 20 and 50 years
Installations	between 20 and 33 years
Equipment	between 10 and 33 years
Computer Equipment	5 years
Mineral rights	between 2 and 33 years
Locomotives	25 years
Wagon	33 years
Railway equipment	25 years
Ships	between 5 and 20 years
Others	between 2 and 50 years

Table of Contents

The residual values and useful lives of assets are reviewed and adjusted, if necessary, at the end of each fiscal year.

Significant industrial maintenance costs (for example, ships and other such assets), including spare parts, assembly services, and others, are recorded in property, plant and equipment and depreciated through the next programmed maintenance overhaul.

**o) Non-controlling stockholders' interests**

The Company treats transactions with non-controlling stockholders' interests as transactions with equity owners of the Group. For purchases of non-controlling stockholders' interests, the difference between any consideration paid and the portion acquired of the carrying value of net assets of the subsidiary is recorded in stockholders' equity. Gains or losses, on disposals of non-controlling stockholders' interest, are also recorded in stockholders' equity.

When the Company ceases to hold control or significant influence, any retained interest in the entity is remeasured to its fair value, with the change in carrying amount recognized in profit or loss. Furthermore, any amounts previously recognized in other comprehensive income relating to that entity are accounted for as if the Group had directly sold the related assets or liabilities. This means that the amounts previously recognized in other comprehensive income are reclassified in income.

**p) Impairment of assets**

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

For financial assets measured through amortized cost, Vale compare the carrying amount with expected cash flows for the asset, and if there is some indication that the value is not recoverable, the carrying value is adjusted.

For long term non-financial assets, when impairment indication are identified, the test is conducted by determining the recoverable value of these assets grouped at the lowest levels for which there are separately identifiable cash flows of the cash-generating unit to which the asset belongs to their carrying amount. If we identify the need for adjustment, it is consistently appropriate to each asset's cash-generating unit.

For investments in affiliated companies with publicly traded stock, Vale assesses recoverability of assets when there is prolonged or significant decline in market value. The balance of their investments in relation to the market value of the shares, when available. If the market value is less than the carrying value of investments, and reducing for seasonal, the Company performs the adjustment of the investment to the realizable value quoted in the market.

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 cash-generating 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 cash-generating unit, depending on their composition and location.

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

**q) Research and development**

**i. Expenditures on ore research**

Expenditures on ore research are considered operating expenses until the effective proof of the economic feasibility of the commercial exploration of a given ore body. From then on, expenditures incurred are capitalized as mine development costs.

**ii. Expenditures on feasibility studies and new technologies and others research**

Vale also conducts feasibility studies for many other businesses which operate and researching new technologies to optimize the mining process. After proven to generate future benefits to the Company, the expenditures incurred are capitalized.

Table of Contents

**r) Leases**

The Company classifies its contracts as finance leases or operating leases based on the substance of the contract as to whether it is linked to the transfer of substantially all risks and benefits of the assets ownership to the Company during their useful life.

For finance leases, the lower of the fair value of the leased asset and the present value of minimum lease payments is recorded in tangible fixed assets and the corresponding obligation recorded in liabilities. For operating leases, payments are recognized on a straight line basis during the term of the contract as a cost or expense in the Statement of Income.

**s) Accounts payable to suppliers and contractors**

Accounts payable to suppliers and contractors are obligations to pay for goods and services that were acquired in the ordinary course of business, and are initially recognized at fair value and subsequently measured at amortized cost using effective interest rate method.

**t) Loans and Financing**

Loans and Financing are initially measured at fair value, net of transaction costs incurred and are subsequently carried at amortized cost and updated using the effective interest rate method. Any difference between the proceeds (net of transaction costs) and the redemption value is recognized in the Statement of Income over the period of the loans, using the effective interest rate method. The fees paid in obtaining the loan are recognized as transaction costs.

Compound financial instruments include financial liability (debt) components and Stockholders' equity components. The liability component of a compound financial instrument is initially recognized at fair value that is determined using discounted cash flow, considering the interest rate market for a non-convertible debt instrument with similar characteristics (period, value, credit risk). After initial recognition, the liability component of a compound financial instrument is measured at amortized cost using the effective interest rate method. The Stockholders' equity component is recognized at the difference between the total values received by the Company with the issuance of the securities, and the initial recognition amount of the liability component. After initial recognition, the stockholders' equity component of a compound financial instrument is not remeasured until its conversion.

**u) Provision**

Provisions are recognized only when there is a present obligation (legal or constructive) resulting from a past event, and it is probable that settlement of this obligation would result in an outflow of resources and the amount of the obligation may be reasonably estimated. Provisions are reviewed and adjusted to reflect the current best estimate at the end of each reporting period. Provisions are measured at the present value of the expenditure expected to be required to settle an obligation using a pre-tax rate, which reflects current market assessments of time value of money and the risks specific to the obligation. The increase in the obligation due to the passage of time is recognized as interest expense.

**v) Employee benefits**

**i. Current benefits wages, vacations and related taxes**

Payments of benefits such as wages, vacation past due or accrued vacation, as well their related social security taxes over those benefits, are recognized monthly in income, at the accrual basis.

**ii. Current benefits profit sharing**

The Company has a profit sharing policy, based on the achievement of the Company is whole, specific areas as well as employees individual performance goals. The Company recognizes provision based on the recurring measurement of the compliance with goals, using the accrual basis and recognition of present obligation arising from past events in the estimated outflow of resources in the future. The counter entry of the provision is recorded as cost of sales or service rendered or operating expenses in accordance with the activity of each employee.

**iii. Non-current benefits non-current incentive**

The Company has established a procedure to award certain eligible executives (Matching Plan and Long-Term Incentive Plan - ILP) with the goal of encouraging retention and sustained performance among others. The Matching plan establishes that these executives eligible to the plan are entitled to a specific quantity of their own preferred class A stocks of the Company, and shall be entitled at the end of three years to a cash sum corresponding to the market value of the shares lot initially linked by the executives,



Table of Contents

provided that they are under the ownership of executives throughout the entirety of the period. As well as matching, the ILP provides at the end of three years the payment in the amount equivalent to a certain number of shares based on the assessment of the executives' career and Company performance factors in relation to a group of companies of similar size (per group). Liabilities are measured at each reporting date, at fair value, based on market quotations. Obligations are measured at each reporting date, to the fair value based on market quotations. The compensation costs incurred are recognized in income during the three-year vesting period as defined.

**iv. Non-current benefit pension cost and other post-retirement benefits**

The Company maintains several retirement plans for its employees.

For defined contribution plans, the Company's obligation is limited to a monthly contribution linked to a pre-defined percentage over remuneration of employees related to these plans.

For defined benefit plans, actuarial calculations are periodically obtained for liabilities determined in accordance with the Projected Unit Credit Method in order to estimate the Company's obligation. The liability recognized in the Balance Sheet is the present value of the defined benefit obligation at the Balance Sheet date, less the fair value of plan assets, with adjustments for past service cost not recognized. Actuarial gain and loss are appointed and controlled at corridor method. This method separates the amounts which exceed the limits of 10% of amounts of assets or liabilities, whichever is greater; amortizing it based on the remaining life expectancy active participants of plan. For plans without active participants, the excess amount is recognized fully in the income. Past service costs that arise with changes in plans are released immediately in income.

For plans with a surplus position, the Company does not recognize any asset or benefit in the Balance Sheet or Statement of Income, in the absence of a clear position on the use of this surplus. For plans with a deficit position, the Company recognizes liabilities and results arising from the actuarial valuation and actuarial gains and losses generated by the evaluation of these plans in income, according to the corridor method.

**w) Derivative financial instruments and hedging operations**

The Company uses derivative instruments to manage its financial risks as a way to hedge these risks. The Company does not use derivative instruments for speculative purposes. Derivative financial instruments are recognized as assets or liabilities on the Statement of Balance Sheet and are measured at fair value. Changes in fair value of derivatives are recorded in each year as gains or losses in the statements of income or in unrealized fair value gain/ (losses) in stockholders' equity when the transaction is illegible and characterized as an effective cash flow hedge.

The Company documents the relationship between hedging instruments and hedged items with the objective of risk management and strategy for carrying out hedging operations. The Company also documents its assessment, both initially and continuously, that the derivatives used in hedging transactions are highly effective in their changes in fair value or cash flows of hedged items.

The variations in fair value of derivative financial instruments designated as cash flow hedges have their effective component recorded in unrealized fair value gain/ (losses) and recognized as stockholders' equity; and their ineffective component recorded in income. The amounts recorded in Comprehensive Income, will only be transferred to the income in an appropriate account (cost, operating expense or financial expense) when the hedged item is actually performed.

**x) Current and Deferred Income Tax and Social Contribution**

The amounts of income tax and social contribution are recognized in the Statement of Income, except for items recognized directly in stockholders' equity, in which cases the tax is also recognized in stockholders' equity.

The provision for income tax is calculated individually for each entity in the Group based on tax rates and tax rules in force in the location of the entity. The recognition of deferred taxes is based on temporary differences between carrying value and the tax basis of assets and liabilities as well as net operating losses carry forwards. Deferred tax liabilities are fully recognized. The deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against fiscal current liabilities and when the deferred income tax assets and liabilities are related to income taxes recorded by the same taxation authority on the same taxable entity.

Table of Contents

y) **Participation of noncontrolling shareholders**

The Company treats transactions with noncontrolling minority interest as transactions with equity owners of the entity. For purchases from noncontrolling interests, the difference between any consideration paid and the book value of the share of net assets of acquired subsidiary is recorded in equity. Gains or losses on disposals to noncontrolling shareholders are also recorded in equity.

When the control of the Company ceases, any retained interest in the entity is remeasured to fair value, with the change in carrying amount recognized in earnings. In addition, any amounts previously recognized in equity in income from transactions with noncontrolling shareholders, in respect of that entity are accounted for as if the entity had directly disposed of the related assets or liabilities. This means that the amounts previously recognized in operations results with noncontrolling interests in income statement are reclassified.

z) **Capital**

The Company periodically practices the repurchase of shares to remain in treasury for future sale or cancellation. These shares are recorded in a specific account as reduction of stockholders' equity at acquisition value and kept at cost value. These programs are approved by the Board with a term and quantities by determined type of shares.

Incremental costs directly attributable to the issue of new shares or options are demonstrated in Stockholders' equity as a deduction from the amount raised, net of taxes.

aa) **Revenue Recognition**

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 recognised 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.

Amounts billed to customers for shipping correspond to products sold by the Company are recognized as revenue when that is responsible for shipping. Shipping costs are recognized as operating costs.

**bb) Government Grants and Support**

Government grants and support are accounted for when the Company complies with reasonable security conditions set by the government related to grants and support received. The Company records via the Statement of Income, as reductions in taxes or spending according to the nature of the item, through the distribution of results in the Statement of Income, retained earnings in stockholders equity.

**cc) Basic and Diluted earnings per share**

Basic earnings per share are calculated by dividing the income attributable to stockholders of the Company, deducted from the remuneration of holders of equity securities, at the weighted average number of shares outstanding (total shares less treasury shares).

Diluted earnings per share are calculated by adjusting the weighted average number of shares outstanding to assume conversion of all diluted potential shares. Vale has in your records, securities mandatory convertible shares, which will be converted using treasury shares held by the Company. These securities were recorded as an equity instrument, there is no other option, both for Company and the holders to liquidate all or partially using financial resources, therefore, it has recognized as net of finance charges in a specific shareholders equity component.

Table of Contents

**dd) Statement of Added Value DVA**

The company publishes its consolidated and the parent company statements of added value (DVA) in accordance with the accounting practices adopted in Brazil applicable to public companies which are submitted as part of the financial statements in accordance with Brazilian accounting practices. For IFRS, this statement is presented as additional information, without prejudice to the set of financial statements.

**ee) Interest on stockholder's equity (Dividends)**

Vale is 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 benefit to Vale, as opposed to making a dividend payment, is a reduction in our income tax burden because this interest charge is tax deductible in Brazil. 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 24-f). 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.

**3. Critical Accounting Estimates and Assumptions**

The preparation of financial statements requires the use of certain critical accounting estimates and also the exercise of judgments by management of the Company.

These estimates are based on the best knowledge existing in each period. Changes in facts and circumstances may lead to the revision of the estimates, because those actual future results may differ from estimates.

The significant estimates and assumptions used by management in preparing these financial statements are presented as such:

**a) Mineral reserves and mine useful life**

The estimates of proved reserves and probable reserves are regularly evaluated and updated. The proved and probable reserves are determined using generally accepted geological estimates. The calculation of reserves requires the Company to take positions on expected future conditions that are highly uncertain, including future ore prices, exchange rates, inflation rates, mining technology, availability of permits and production costs. Changes in some of these assumptions could have a significant impact on proved reserves and probable reserves recorded.

The estimated volume of mineral reserves is used as basis for the calculation of depletion of the mines, and also for the estimated useful life which is a major factor to quantify the provision for asset retirement obligation and environmental rehabilitation of mines. Any change to the estimates of the volume of mine reserves and the useful life of assets may have significant impact on charges for depreciation, depletion and amortization recognized in the financial statements as cost of goods sold. Changes in estimated useful life of the mines could cause significant impact on the estimates of environmental provision and impairment analysis.

**b) Asset Retirement**

The provision made by the Company refers basically to the cost of mine closure, upon the completion of mining activities and removal of assets related to mine. The provision is set up initially by recording long-term liabilities with a counter entry to property, plant and equipment. The long-term liabilities are subsequently carried at amortize cost, considering the original discount rate with changes registered against the income of the period, as interest expenses. The asset is depreciated on a straight line by useful life of the main asset, and recorded against income.

The Company considers the accounting estimates related to closure costs of a mine as a critical accounting policy because they involve significant values for the provision and are estimated using several assumptions, such as interest rate, inflation, useful life of the asset considering the current state of closure and the projected date of depletion of each mine. The estimates are reviewed annually.

Table of Contents

**c) Deferred income tax and social contribution**

The Company recognizes the effects of deferred taxes arising from tax losses and temporary differences on its consolidated and Parent Company's financial statements. It recognizes impairment where it believes that tax credits are not fully recoverable in the future.

The determination of the provision for income taxes or deferred income tax, assets and liabilities, and any impairment on tax credits requires estimates by the Company. For each future credit tax, the Company assesses the probability that part or all of the tax assets may not be recovered. The impairment made with respect to accumulated tax losses depends on the assessment of the Company on the probability of the generation of future taxable profits based on production and sales planning, commodity prices, operational costs, restructuring plans, reclamation costs and planned capital costs.

**d) Litigation loss**

Provisions are recorded when the possibility of loss is considered probable by our legal department and legal advisors regarding legal processes and contingent liabilities.

The provisions are recorded when the amount of loss can be reasonably estimated. By their nature, contingencies will be resolved when one or more future event occurs or fails to occur. Typically, the occurrence of such events does not depend on our performance, which complicates the realization of precise estimates about the date on which such events are verified.

Assessing such liabilities, particularly in the uncertain Brazilian legal jurisdictions that the Company operates, environment and other jurisdictions, involves the exercise of significant estimates and judgments of management regarding the results of future events.

**e) Post retirement benefits for employees**

The amount recognized and disclosed depend on a number of factors that are determined based on actuarial calculations using several assumptions in order to determine costs, liabilities, among others. One of the assumptions used in determining the amounts to be recorded in accounting is the discount rate. Any changes to these assumptions will affect the amount accounted.

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

The Company, together with external actuaries, reviews at the end of each year, the assumptions that should be used for the following year. These premises are used for upgrades and estimated of fair value of assets and liabilities, costs and expenses and determination of future values of estimated cash outflows, which are recorded in the plan obligations.

### **f) Impairment**

The Company tests impairment of tangible and intangible assets segregated by cash-generating units, usually using discounted cash flow that depends on several estimates, which are influenced by market conditions prevailing at the time the impairment test, is performed.

### **g) Fair Value of derivatives and others financial instruments**

Fair value of financial instruments not traded in active market is determined by using valuation techniques. Vale uses its own judgment to choose the various methods and assumptions and set which are based on market conditions, at the end of the year.

The analysis of the impacts, if actual results were different from management's estimate, is presented in note 25(d) sensitivity analysis.



Table of Contents

**4. Accounting Standards**

The Company prepared its consolidated financial statements under IFRS based on the standards issued by the Brazilian Accountant Standards Committee ( Comitê de Pronunciamentos Contábeis or CPC ) and approved by Securities and Exchange Commission of Brazil ( Comissão de Valores Mobiliários or CVM). The standards issued by the IASB, with adoption required for the years ending after December 31, 2012, but not approved by CVM, will not be adopted by the Company in advance.

**a) Pronouncements, interpretations, guidelines or revisions approved by CVM for adoption prior to December 31, 2012**

Considering the option as last amended by CPC 19 (R1) Investment in joint venture (JV), issued on August 4, 2011 and anticipating the consequences of CPC 18 (R2) - Investments in Associates, Subsidiaries and Colligates (correlative to IFRS 11), the Company, for purposes of the consolidated statements, no longer has participation in joint venture by the proportional consolidation method and decided to present their investment in these entities using equity method in the year of 2012.

Introducing the new policy as if it had always been adopted, apply the amendments retrospectively by adjusting the opening balances of the comparative periods.

**b) Standards, interpretations or updates issued by the IASB for adoption after December 31, 2012**

**Investment Entities** - In October 2012 the IASB issued an update statement to IFRS 10 - Consolidated Financial Statements, IFRS 12 - Disclosure of Interests in other Entities and IAS 27 - Separate Financial Statements, which, among other rules, defines the concept of entity investment and introduces an exception to the consolidation of subsidiaries for specific investment entities. The adoption of the updates will be applied from January 1, 2014 and Vale does not expect those upgrades produce significant impacts on its financial statements.

**Consolidated Financial Statements, Joint Arrangements and Disclosure of Interests in Other Entities: Transition Guidance** - In June 2012 the IASB issued an update statement to IFRS 10 - Consolidated Financial Statements, IFRS 11 - Joint Arrangements and IFRS 12 - Disclosure Of Interests In Other Entities, which, among other rules, clarifies issues on the date of adoption of IFRS 10 and aspects relating to the presentation of comparative information of IFRS 11 and IFRS 12. The adoption of the updates will be applied from January 1, 2013 and Vale does not expect those upgrades produce significant impacts on its financial statements.

**Annual Improvements to IFRSs** - In May 2012 the IASB issued updates consolidated annual for the year 2012. The updates represent changes not urgent, but necessary, to general pronouncements. The standard were affected: IFRS 1 - First-time Adoption of International Financial

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

Reporting Standards, IAS 1 - Presentation of Financial Statements, IAS 16 - Property, Plant and Equipment, IAS 32 - Financial Instruments: Presentation and IAS 34 - Interim Financial Reporting. The adoption of the updates will be applied from January 1, 2013 and Vale does not expect those upgrades produce significant impacts on its financial statements.

**Offsetting Financial Assets and Financial Liabilities** - In December 2011 the IASB issued an update statement to IAS 32 - Financial Instruments: Presentation updated guide to applying this standard about the recognition of financial assets and liabilities on a gross and net. The adoption of required updates will be applied from January 1, 2014 and we are analyzing potential impacts regarding this update on our financial statements.

**Mandatory Effective Date and Transition Disclosures** - In December 2011 the IASB issued an update statement to IFRS 9 - Financial Instruments and IFRS 7 - Financial Instruments: Disclosures postponing the date of initial adoption of IFRS 9 and IFRS 7 updates have occurred in January 1, 2013 to January 1, 2015. Vale does not expect this change to take material impact on its financial statements.

**IFRIC 20 - Stripping Costs in the Production Phase of a Surface Mine** - In October 2011 the IASB issued IFRIC 20 which defines rules for the measurement and recognition of the costs of stripping of surface mine in production. The adoption of this interpretation will be applied from January 1, 2013 and Vale does not expect this interpretation produce relevant impacts on its financial statements.

**IAS 19 - Employee Benefits** - In June 2011 the IASB remitted the standard IAS 19 on employee benefits. Among the amendments, with the most significant highlight: (i) the exclusion of the possibility of using the corridor method - which allowed the actuarial gains and losses up to a maximum of 10% of the present value of the defined benefit obligation or Fair value of plan assets, whichever is higher, would be allocated to income over the average remaining working lives of the employees participating in the plan, (ii) the full recognition of actuarial gains and losses in Other Comprehensive Income and (iii) the financial revenue and expenditure plan shall be recognized on a net basis in the discount rate. The adoption of this standard will be required from January 1, 2013. Vale is quantifying the impact on financial statements.

Table of Contents

**IFRS 10 - Consolidated Financial Statements** - In May 2011 the IASB issued IFRS 10, which, among other changes, creates a specific statement to the consolidated financial statements, determines that the jointly-controlled companies will no longer be consolidated accounts for the aspects of the definition of control and significant influence and eliminates conflicts between this standard, IAS 28 and IAS 27. The adoption of this standard will be applied from January 1, 2013 and Vale does not expect those changes produce significant impacts on its financial statements.

**IAS 28 - Investments in Associates and Joint Ventures** - In May 2011 the IASB remitted the standard IAS 28 on investment related companies, which among other changes, equates the jointly-controlled companies and affiliates determines that investment in both is measured by equity method. The adoption of this standard will be applied from January 1, 2013 and Vale does not expect those changes produce significant impacts on its financial statements.

**IAS 27 - Separate Financial Statements** - In May 2011 the IASB remitted the standard IAS 27 on separate financial statements, which remains the only regulating separate statements and reflects updates introduced by IFRS 10 and IAS 28 remitted, which are the relevant separate statements. The adoption of this standard will be applied from January 1, 2013 and Vale does not expect those changes produce significant impacts on its financial statements.

**IFRS 11 - Joint Arrangements** - In May 2011 the IASB issued IFRS 11, standard on contracts together, which regulates the measurement, recognition and presentation of contracts and operating agreements together, specifically for cases where no constituting entities. The adoption of this standard will be applied from January 1, 2013 and Vale does not expect those upgrades produce significant impacts on its financial statements.

**IFRS 12 - Disclosure of Interests in Other Entities** - In May 2011 the IASB issued IFRS 12 on the standard investments in entities that in general, determine the accounting treatment for investments in other entities, making references to IFRS 10, IFRS 11, IAS 28 remitted and IAS 27 remitted. The adoption of this standard will be applied from January 1, 2013 and Vale does not expect those upgrades produce significant impacts on its financial statements.

**IFRS 13 - Fair Value Measurement** - In May 2011 the IASB issued IFRS 13 on fair value measurements which defines the fair value measurement applied in all cases where it is required and presents specific rules for the disclosure of fair value. The adoption of this standard will be applied from January 1, 2013 and Vale does not expect those upgrades produce significant impacts on its financial statements.

**IFRS 9 - Financial Instruments** - In October 2010 the IASB issued IFRS 9 standard that, among other things, amends and simplifies the criteria for recognizing and measuring financial assets and financial liabilities and some contracts to buy and sell non-financial assets. After update in December 2011, the adoption of the statement will be required from January 1, 2015 and is still worth analyzing potential impacts regarding this update on its financial statements.

For all statements, interpretations and updates above were issued and approved, or are in the process of issuing and approval by the CVM, with the same dates of adoption.

c) **Standards, interpretations, guidelines or revisions approved by the CVM for adoption after December 31, 2012**

**CPC 46 - Fair Value Measurements** - In December 2012, the CVM approved CPC 46 about Fair Value Measurements, substantially correlated with IFRS 13.

**CPC 36(R3) - Consolidated Financial Statements**- In December 2012, the CVM approved the revisions to the standard CPC 36 about consolidated financial statements, substantially correlated with IFRS 10.

**CPC 45 - Disclosure of Interests in other Entities** - In December 2012, the CVM approved CPC 45 about disclosure of interests in other entities, substantially correlated with IFRS 12.

**CPC 18(R2) Investments in Associates, Subsidiaries and Joint Venture** - In December 2012, the CVM approved the revisions to the standard CPC 18 about investments in associates and joint ventures, making it substantially correlated with the updated IAS 28.

**CPC 33(R1) Employee Benefits**- In December 2012, the CVM approved the revisions to the standard CPC 33 about employee benefits, substantially correlated with IAS 19.

**CPC 19(R2) Business Combination**- In November 2012, the CVM approved the revisions to the standard CPC 19 about Business Combination, substantially correlated with IFRS 11.

Table of Contents

**5. Risk Management**

Vale considers that an effective risk management is a key objective to support its growth plan, 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. To do that, Vale evaluates not only the impact in the results of the business caused by variables traded in financial markets (market risk), but also the risk from counterparties obligations (credit risk), those relating to inadequate or failed internal processes, people, systems or external events (operational risk), those arising from liquidity risk, among others.

**a) Risk management policy**

The Board of Directors established a risk management policy in order to support the company's growth plan, strategic planning and business continuity, to improve its capital structure and assets management, to ensure flexibility and strength in financial management and to strengthen its corporate governance practices.

The corporate risk management policy determines that Vale should measure and monitor regularly 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 assessments 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.

**b) Liquidity risk management**

The liquidity risk arises from the possibility that Vale might not perform its obligations on due dates, as well as face difficulties to meet its cash requirements due to market liquidity constraints.

To mitigate such risk, Vale has a revolving credit facility to assist the short term liquidity management and to enable more efficiency in cash management, being consistent with the strategic focus on cost of capital reduction. The revolving credit facility available today was acquired from a syndicate of several global commercial banks.

**c) Credit risk management**

Vale's credit risk arises from potential negative impacts in its cash flows due to uncertainty in the ability of counterparties to meet their contractual obligations. To manage that risk, Vale has procedures and processes, such as the controlling of credit limits, the obligation of exposure diversification through several counterparties and the monitoring of the portfolio's credit risk.

Vale's counterparties can be divided into three main categories: the customers, responsible by obligations regarding receivables from payment term sales; financial institutions with whom Vale keeps its cash investments or negotiates derivatives transactions; and suppliers of equipment, products and services in the case of payments in advance.

Table of Contents

**( ) Commercial Credit Risk Management**

For the commercial credit exposure, which arises from sales to final customers, the risk management department, in accordance with the current delegation level, approves or request the approval of credit risk limits for each counterpart. Besides that, the Executive Board sets annually global commercial credit risk limits for the customer´s portfolio. The approved global limit and the working capital cost inbuilt on this limit are monitored on a monthly basis.

Vale attributes an internal credit risk rating for each counterparty using its own quantitative methodology for credit risk analysis, based on three main sources of information: i) Expected Default Frequency (EDF) provided by KMV (Moody´s); ii) credit ratings from the main international credit agencies; iii) customer financial statements from which financial ratios are built.

On 31 December 2012, 83% of accounts receivable due to Vale commercial sales had low or insignificant risk, 14% had moderate risk and only 3% high risk.

Whenever considered necessary, the quantitative credit risk analysis is complemented by a qualitative analysis which takes into consideration the payment history of that counterparty, its commercial relationship with Vale and the customer´s strategic position in its economic sector, among others variables.

Based on the counterparty´s credit risk or based on Vale´s consolidated credit risk profile, risk mitigation strategies are used to minimize the Company´s credit risk in order to meet the acceptable level of risk approved by the Executive Board. The main credit risk mitigation strategies used by the Company are credit insurance, mortgage, letter of credit and corporate guarantees, among others.

Vale has a well-diversified accounts receivable portfolio from a geographical standpoint, being China, Europe, Brazil and Japan the regions with more significant exposures. According to each region, different guarantees can be used to enhance the credit quality of the receivables.

Vale controls its account receivables portfolio through Credit and Cash Collection committees, in which representatives from risk management, cash collection and commercial departments monitor periodically each counterparty´s position. Finally, Vale has an automatic control that blocks additional sales to customers in default.

**(i) Treasury Credit Risk Management**

The management of exposure arising from cash investments and derivatives instruments is realized through the following procedures: annual approval by the Executive Board of the credit limits by counterparty, controls of portfolio diversification, counterparties' credit spread variations and the treasury portfolio overall credit risk. There is also a monitoring of all positions, exposure versus limit control and periodic report to the Executive Risk Management Committee.

The calculation of the exposure to a counterparty that has several derivative transactions with Vale is considered the sum of exposures of each derivative acquired with this counterparty. The exposure for each derivative is defined as the future value calculated within the life of the derivative, considering the variation of the market risk factors that affect the value of the derivative instrument.

Vale also assess the creditworthiness of its counterparties in treasury operations following an internal methodology similar to commercial credit risk management that aims to define a default probability for each counterparty.

Depending on the counterparty's nature (banks, insurance companies, countries or corporations), different inputs will be considered: i) expected default probability given by KMV; ii) CDS (Credit Default Swaps) and bond market spreads; iii) credit ratings defined by the main international rating agencies; iv) financial statements data and indicators analysis.

- **Market risk management**

Vale is exposed to the behavior of 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 objectives.



Table of Contents

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.

**(ii) Foreign exchange and interest rate risk**

The company's cash flow is subjected to volatility of several currencies, once its product prices are predominantly indexed to US dollar, while most of the costs, disbursements and investments are indexed to other currencies, mainly Brazilian real and Canadian dollar.

In order to reduce the potential impact that arises from this currency mismatch, derivatives instruments can be used as a risk mitigation strategy.

In the case of cash flow foreign exchange protection regarding revenues, costs, disbursements and investments, the main risk mitigation strategies used are forwards and swaps.

Vale implemented hedge transactions to protect its cash flow against the market risks that arises from its debt obligations – mainly currency volatility. We use swap transactions to convert debt linked to Brazilian real and Euros 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 case of debt instruments denominated in Brazilian real, in the event of an appreciation (or depreciation) of the Brazilian Real against the US Dollar, the negative (or positive) impact on Vale's debt service (interest and/or principal payment) measured in US dollars will be partially offset by the positive (or negative) effect from the swaps, regardless of the US\$/R\$ exchange rate on the payment date. The same rationale is

applicable to debts denominated in other currencies and their respective swaps.

Vale has also exposure to interest rates risks over loans and financings. The US Dollar floating rate debt in the portfolio consists mainly of loans including export pre-payments, commercial banks and multilateral organizations loans. In general, such debt instruments are indexed to the LIBOR (London Interbank Offer Rate in US dollar). Considering the impact of interest rate volatility on the cash flow, Vale observes the potential natural hedges effects between US Dollar floating rates and commodities prices in the decision process of acquiring financial instruments.

**(iii) Risk of product and Input prices**

Vale is also exposed to market risks regarding commodities prices and input volatilities. In accordance with risk management policy, risk mitigation strategies involving commodities can be used to adjust the cash flow risk profile and reduce Vale's cash flow volatility. For this kind of risk mitigation strategy, Vale uses predominantly forwards, futures or zero-cost collars.

- **Operational risk management**

The operational risk management is the structured approach that Vale uses to manage uncertainty related to possible inadequate or failure in internal processes, people, systems and external events.

Thus, the operational risk mitigation is performed by creating new controls and improving the existing ones, new mitigation plans, as well as the risk transferring through insurance. Therefore, the Company seeks to have a clear view of its major risks, of the best cost-benefit mitigation plans and of the controls in place, monitoring the potential impact of operational risk and allocating capital efficiently.

- **Capital Management**

The Company's policy aims, to manage its capital, to seek a structure that will ensure the continuity of your business in the long term. Within this perspective, the Company has been able to deliver value to stockholders through dividend payments and capital gain, and at the same time maintain a debt profile suitable for its activities, with an amortization well distributed over the years, on average 10 years, thus avoiding a concentration in one specific period.

Table of Contents

• **Insurance**

Vale hires several types of insurance, such as operational risks insurance, civil responsibility, engineering risks insurance (projects), life insurance policy for their employees, among others. The coverage of these policies is similar to the ones used in general by the mining industry and is contracted in line with the objectives defined by the Company, with the corporate risk management policy and the limitation imposed by the insurance and reinsurance global market.

Insurance management is performed with the support of existing insurance committees in the various operational areas of the Company. Among the management instruments, Vale uses captive reinsurance companies that allows to contract insurances on a competitive basis as well as direct access to key international markets of insurance and reinsurance.

**6. Acquisitions and Divestitures**

**a) Belvedere Coal Project**

In 2012 Vale conclude the purchase option on additional 24.5% participation in the Belvedere Coal Project owned by Aquila Resources Limited ( Aquila ) in the amount of AUD 150 million (R\$318).

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 AUD 20 million (R\$42) 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 million (R\$691) for 100% of Belvedere.

**b) Fertilizer Business**

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

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. and 100% of the total capital of Vale Fosfatados. In 2011 and beginning of 2012, we concluded several transactions including a public offer to acquire the free floating of Vale Fertilizantes S.A. and its delisting which resulted in the current ownership of 100% of the total capital of this subsidiary.

The purchase consideration of the business combination effected in 2010, when control was obtained, amounted to R\$10,696. 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 and their tax basis represented by the historical carrying values at the acquired entity. According 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 acquired.

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 at 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 R\$2,533 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 S.A.

### c) **Sale of coal**

In June 2012, we have 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 ), a privately held company.

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 R\$ 722 was recorded in the Statement of income in the line Gain (loss) on sale of assets

Table of Contents

**d) Acquisition of EBM shares**

Continuing the process of optimization its corporate structure, during the second quarter 2012 Vale acquired additional 10.46% of Empreendimentos Brasileiros de Mineração S. A. ( EBM ), whose main asset is the participation in Minerações Brasileiras Reunidas S. A. ( MBR ), which owns mines sites Itabirito, Vargem Grande and Paraopeba. As a result of the acquisition, we increased our share of the capital of EBM to 96.7% and of MBR to 98.3%, and the amount of R\$500 are recognized as a result from operations with non-controlling interest in Stockholders Equity .

**e) Manganese and ferroalloys**

In October 2012, we have 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 million (R\$318) in cash, subject to the fulfillment of certain precedent conditions. We recognized a loss of US\$ 22 million (R\$45) 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 Dunkerque, 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 million (R\$145). We recognized a gain of US\$63 million (R\$129) recorded in Stockholder s Equity.

**7 - Cash and Cash Equivalents**

	December 31, 2012	Consolidated		Parent Company		
		December 31, 2011	January 1, 2011	December 31, 2012	December 31, 2011	
Cash and bank accounts	2,440	1,770	933	36	177	
Short-term investments	9,478	4,823	11,703	652	398	

<b>11,918</b>	<b>6,593</b>	<b>12,636</b>	<b>688</b>	<b>575</b>
---------------	--------------	---------------	------------	------------

Cash and cash equivalents includes cash values, demand deposits, and financial investments with insignificant risk of changes in value, being part Brazilian Reais indexed at the rate of Brazilian interbank certificates of deposit ( DI Rate or CDI ) and part in US Dollars in time deposits with a maturity 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

	December 31, 2012	Consolidated December 31, 2011	January 1, 2011	Parent Company December 31, 2012	December 31, 2011
Short-term investments	<b>506</b>		<b>2,987</b>	<b>43</b>	

This includes the financial investments in low risk investments with a maturity of between 91 and 360 days, classified as a financial asset fair value through profit or loss (note 22).

#### 9 - Accounts Receivables

	December 31, 2012	Consolidated December 31, 2011	January 1, 2011	Parent Company December 31, 2012	December 31, 2011
Denominated in reais					
brazilian Reais	1,734	2,295	2,044	1,519	2,238
Denominated in other currencies, mainly US\$	12,384	13,791	11,833	20,434	13,698
	<b>14,118</b>	<b>16,086</b>	<b>13,877</b>	<b>21,953</b>	<b>15,936</b>
Allowance for doubtful accounts	(233)	(197)	(196)	(114)	(127)
	<b>13,885</b>	<b>15,889</b>	<b>13,681</b>	<b>21,839</b>	<b>15,809</b>

Table of Contents

Accounts receivables related to the steel industry market represent 71,26% and 67,9%, of receivables on December 31, 2012 and December 31, 2011, respectively.

No one customer represents over 10% of receivables or revenues.

The loss estimates for credit losses recorded in income as at December 31, 2012 and December 31, 2011 totaled R\$70 and R\$3, respectively. Write offs as at December 31, 2012, and December 31, 2011 totaled R\$34 and R\$2, respectively.

**10 - Inventory**

	December 31, 2012	Consolidated December 31, 2011	January 1, 2011	Parent Company December 31, 2012	Parent Company December 31, 2011
<b>Inventories of products</b>					
Finished	4,575	4,881	2,976	2,080	2,170
In process	2,776	2,569	1,613		
	<b>7,351</b>	<b>7,450</b>	<b>4,589</b>	<b>2,080</b>	<b>2,170</b>
Inventories of spare parts and maintenance supplies	2,969	2,383	2,572	1,203	1,013
<b>Total</b>	<b>10,320</b>	<b>9,833</b>	<b>7,161</b>	<b>3,283</b>	<b>3,183</b>

On December 31, 2012, Inventories included provisions to adjustment in manganese, nickel e copper products amounting to R\$0, R\$6 and R\$6 (on December 31, 2011 R\$16, R\$ 27 and R\$ 0), respectively.

	Consolidated Year ended	
	December 31, 2012	December 31, 2011
<b>Changes in the inventory</b>		
<b>Balance on begin of year</b>	<b>7,450</b>	<b>4,609</b>
Addition	43,635	40,105
Transfer on maintenance supplies	8,341	6,276
Write-off by sale	(51,997)	(42,451)
Write-off by inventory adjustment		(1,051)
(write-off) by lower cost or market adjustment	(78)	(38)
<b>Balance on ended of year</b>	<b>7,351</b>	<b>7,450</b>

	Parent Company Year ended	
	December 31, 2012	December 31, 2011
<b>Changes in the inventory</b>		
<b>Balance on begin of year</b>	<b>2,170</b>	<b>1,535</b>
Addition	20,486	18,700
Transfer on maintenance supplies	3,730	3,181
Write-off by sale	(24,245)	(20,958)
Write-off by inventory adjustment		(261)
Write-off by lower cost or market adjustment	(61)	(27)
<b>Balance on ended of year</b>	<b>2,080</b>	<b>2,170</b>

	Consolidated Year ended	
	December 31, 2012	December 31, 2011
<b>Changes on Inventory of consumable materials</b>		
<b>Balance on begin of year</b>	<b>2,383</b>	<b>2,563</b>
Addition	8,927	6,096
Consumption	(8,341)	(6,276)
<b>Balance on ended of year</b>	<b>2,969</b>	<b>2,383</b>

	Parent Company Year ended	
	December 31, 2012	December 31, 2011
<b>Changes on Inventory of consumable materials</b>		
<b>Balance on begin of year</b>	<b>1,013</b>	<b>782</b>
Addition	3,920	3,412
Consumption	(3,730)	(3,181)
<b>Balance on ended of year</b>	<b>1,203</b>	<b>1,013</b>



Table of Contents**11 - Non-current assets and liabilities held for sale**

In December 2012, we have signed with Petróleo Brasileiro S.A. (Petrobras) an agreement to sell Araucária, operation for production of nitrogens, located in Araucária, in the Brazilian state of Paraná, for US\$234 million (R\$478). The purchase price will be paid by Petrobras through installments accrued quarterly, adjusted by 100% of the Brazilian Interbank Interest rate (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.

At December 31, 2012 this assets are recognized in Assets Held for Sale, in the subgroup property, plant and equipment.

	<b>December 31, 2012</b>
<b>Assets held for sale</b>	
Accounts receivable	29
Recoverable taxes	42
Inventories	41
Property, plant and equipment	794
Other	29
<b>Total</b>	<b>935</b>
<b>Liabilities related to assets held for sale</b>	
Suppliers	24
Deferred income tax	225
Others	78
<b>Total</b>	<b>327</b>

**12 Recoverable Taxes**

	<b>December 31, 2012</b>	<b>Consolidated December 31, 2011</b>	<b>January 1, 2011</b>	<b>Parent Company December 31, 2012</b>	<b>December 31, 2011</b>
Income tax	2,371	1,496	765	168	169
Value-added tax	2,090	1,913	806	1,056	731
Brazilian Federal Contributions (PIS - COFINS)	1,370	1,768		1,014	1,536
Others	132	110	1,701	88	82
<b>Total</b>	<b>5,963</b>	<b>5,287</b>	<b>3,272</b>	<b>2,326</b>	<b>2,518</b>
Current	4,620	4,190	2,671	2,071	2,317
Non-current	1,343	1,097	601	255	201
<b>Total</b>	<b>5,963</b>	<b>5,287</b>	<b>3,272</b>	<b>2,326</b>	<b>2,518</b>



Table of Contents**13 Investments**

	Consolidated Year ended	
	December 31, 2012	December 31, 2011
<b>Balance on begin of year</b>	<b>14,984</b>	<b>7,321</b>
Additions	892	7,357
Disposals	(62)	(8)
Cumulative translation adjustment	1,087	443
Equity	1,241	1,851
Valuation Adjustment	66	(28)
Dividends declared	(1,162)	(1,952)
Impairment	(4,002)	
<b>Balance on ended of year</b>	<b>13,044</b>	<b>14,984</b>

	Parent Company Year ended	
	December 31, 2012	December 31, 2011
<b>Balance on begin of year</b>	<b>113,150</b>	<b>92,111</b>
Additions	7,334	6,284
Disposals	(1,252)	(579)
Cumulative translation adjustment	8,432	8,168
Equity	749	9,996
Valuation Adjustment	(1,105)	(765)
Dividends declared	(1,461)	(2,065)
Impairment	(1,976)	
<b>Balance on ended of year</b>	<b>123,871</b>	<b>113,150</b>

Table of Contents**Investments (Continued)**

	Investments			Equity results		Received dividends	
	December 31, 2012	As of December 31, 2011	January 1, 2011	Year ended December 31, 2012	Year ended December 31, 2011	Year ended December 31, 2012	Year ended December 31, 2011
<b>Subsidiaries and affiliated companies</b>							
<b>Direct and indirect subsidiaries</b>							
Aços Laminados do Pará S.A.	319	266	85	(7)	(48)		
ALBRAS - Alumínio Brasileiro S.A. (a)			1,088				
ALUNORTE - Alumina do Norte do Brasil S.A. (a)			2,732				
Balderton Trading Corp	326	341	313	(46)	(28)		
Biopalma da Amazonia S.A. (a)	349	442		(115)	(37)		
Companhia Portuária da Baía de Sepetiba - CPBS	454	350	347	231	152	126	155
Compañia Minera Miski Mayo S.A.C (a)	528	446	356	66	6		
Ferrovias Centro-Atlantica S.A. (a)	2,926	2,359	1,916	(190)	(136)		
Ferrovias Norte Sul S.A.	1,717	1,740	1,743	(23)	(4)		3
Mineração Corumbaense Reunida S.A.	1,365	1,113	913	266	297	93	
Mineração Paragominas S.A.			1,813				
Minerações Brasileiras Reunidas S.A. - MBR (b)	4,538	3,792	3,291	224	230	258	
Potasio Rio Colorado S.A. (a)	6,016	2,776	1,736	(31)	(72)		
Rio Doce Australia Pty Ltd.	(36)	752	1,157	(2,080)	(507)		
	6,343	4,625	3,271	(208)	19		

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

Salobo Metais S.A. (a) Sociedad Contractual Minera Tres Valles (a)	460	432	394	(95)	(76)		
SRV Reinsurance Company S.A.	1,248	837	177	24	(184)		
Vale International Holdings GMBH (b)	8,193	7,849	1,626	(2,124)	1,036		
Vale Canada Holdings	1,000	902	899	(22)	(23)		
Vale Canada Limited (b)	11,809	9,746	8,992	(2,602)	(215)		
Vale Colombia Holding Ltd. (f)		1,183	826	(64)	18		
Vale Fertilizantes S.A. (e)		10,735	6,055	(53)	203		
Vale Fertilizantes S.A. (antiga Mineração Naque S.A.) (a) (b)	13,602	1,921	4,932	2,417	(92)		
Vale International S.A. (b)	35,762	38,820	35,977	3,788	8,105		
Vale Manganês S.A.	687	717	890	(29)	25	1	382
Vale Mina do Azul S.A.	203	154		49	13		
Vale Emirates Limited	5,886	771	326	(257)	(438)		
Vale Shipping Holding Pte. Ltd.	5,118	3,944	1,245	226	55		
VBG Vale BSGR Limited (a)	869	757	833	(130)	(175)		
VLI Multimodal S.A. (a) (b)	607	206	174	65	33		
Others	538	190	683	56	(18)	95	55
	<b>110,827</b>	<b>98,166</b>	<b>84,790</b>	<b>(664)</b>	<b>8,139</b>	<b>573</b>	<b>595</b>
<b>Direct and indirect affiliates</b>							
California Steel Industries, INC	342	301	258	29	21	19	11
Companhia Coreano-Brasileira de Pelotização - KOBRASCO	219	208	208	50	55	40	54
Companhia Hispano-Brasileira de Pelotização - HISPANOBRÁS	213	214	212	73	34	74	32
Companhia Ítalo-Brasileira de Pelotização - ITABRASCO	130	150	143	16	78	36	71
Companhia Nipo-Brasileira de Pelotização - NIBRASCO	364	372	333	42	75	51	36
CSP- Companhia Siderugica do PECEM	1,020	499	30	(13)	(6)		
	697	529	416	113	140	107	

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

Henan Longyu Energy Resources CO., LTD.							
LOG-IN - Logística Intermodal S/A (c)	192	212	224	(18)	(12)		
Mineração Rio Grande do Norte S.A. - MRN	277	248	236	42	13	14	
MRS Logística S.A.	1,197	1,028	851	236	219	119	92
Norsk Hydro ASA (d)	4,572	6,029		(77)	160	95	84
Norte Energia S.A.	246	137		(5)			
Samarco Mineração S.A.	1,288	745	676	1,247	1,453	373	1,384
Teal Minerals (Barbados) Incorporated	516	437	150	(9)	(9)		
Tecnored Desenvolvimento Tecnológico S.A. (a)	79	86	66	(42)	(13)		
Thyssenkrupp CSA Companhia Siderúrgica do Atlântico	1,092	3,003	3,065	(327)	(309)		
Vale Florestar Fundo de Investimento em participações	224	227	235	(3)	(8)		
Vale Soluções em Energia S.A.	146	272	199	(110)	(28)		
Zhuhai YPM Pellet Co	48	43	42	1			
Others	182	244	(23)	(4)	(6)	4	2
	<b>13,044</b>	<b>14,984</b>	<b>7,321</b>	<b>1,241</b>	<b>1,857</b>	<b>932</b>	<b>1,766</b>
	<b>123,871</b>	<b>113,150</b>	<b>92,111</b>	<b>577</b>	<b>9,996</b>	<b>1,505</b>	<b>2,361</b>

(a) Investment balance includes the values of advances for future capital increase;

(b) Excluded from equity, investment companies already detailed in note;

(c) Market value on December 31, 2012 was R\$246 and on December 31, 2011 was R\$ 197; and

(d) Available for market;

(e) Incorporated in Vale Fertilizantes S.A. (old Mineração Naque S.A.)

(f) Company sold in June 2012

Dividends received by the Parent company during the year ended at December 31, 2012 and 2011 was R\$1,190 and R\$2,196, respectively.



Table of Contents

	Total %	Voting %	December 31, 2012				December 31, 2011	
			Assets	Liabilities	Adjusted stockholders equity (*)	Adjusted operating results (*)	Adjusted net income for the year (*)	Adjusted net income for the year (*)
<b>Subsidiaries and affiliates</b>								
<b>Direct and indirect subsidiaries</b>								
Aços Laminados do Pará S.A.	100.00	100.00	318	(1)	319	(6)	(7)	(48)
Balderton Trading Corp	100.00	100.00	413	87	326	(44)	(46)	(28)
Biopalma da Amazonia S.A.	70.00	70.00	1,372	883	489	(79)	(165)	(53)
Companhia Portuária da Baía de Sepetiba - CPBS	100.00	100.00	572	118	454	352	231	152
Compañía Minera Miski Mayo S.A.C	40.00	51.00	1,682	432	1,250	230	165	15
Ferrovía Centro-Atlantica S.A.	99.99	99.99	3,289	363	2,926	(191)	(190)	(136)
Ferrovía Norte Sul S.A.	100.00	100.00	1,883	166	1,717	(17)	(23)	(4)
Mineração Corumbaense Reunida S.A.	100.00	100.00	2,159	794	1,365	344	266	297
Minerações Brasileiras Reunidas S.A. - MBR	98.32	98.32	6,357	956	5,401	268	370	392
Potasio Rio Colorado S.A.	100.00	100.00	4,815	339	4,476	(22)	(31)	(72)
Rio Doce Australia Pty Ltd.	100.00	100.00	4,673	4,482	191	(2,893)	(2,080)	(507)
Salobo Metais S.A.	100.00	100.00	7,406	1,063	6,343	(271)	(208)	19
Sociedad Contractual Minera Tres Valles	90.00	90.00	652	197	455	(101)	(106)	(84)
SRV Reinsurance Company S.A.	100.00	100.00	1,638	390	1,248	11	24	(184)
Vale International Holdings GmbH	100.00	100.00	104,250	7,412	96,838	(2,191)	(1,317)	1,036
Vale Canada Holdings	100.00	100.00	29,958	28,958	1,000	(9)	(22)	(23)
Vale Canada Limited	100.00	100.00	69,102	53,161	15,941	(1,393)	(2,573)	(194)
Vale Fertilizantes S.A. (Antiga Mineração Naque S.A.)	100.00	100.00	24,741	3,266	21,475	(142)	2,399	130
Vale International S.A.	100.00	100.00	141,523	59,029	82,494	2,223	1,050	7,796
Vale Manganês S.A.	100.00	100.00	929	242	687	51	(29)	25
Vale Mina do Azul S.A.	100.00	100.00	460	257	203	100	49	13
Vale Emirates Limited	100.00	100.00	6,437	551	5,886	(283)	(257)	(438)
Vale Shipping Holding Pte. Ltd.	100.00	100.00	5,307	189	5,118	84	226	55
VBG Vale BSGR Limited	51.00	51.00	3,815	2,282	1,533	(129)	(255)	(343)
VLI Multimodal S.A.	100.00	100.00	4,981	89	4,892	95	(143)	(118)
<b>Direct and indirect affiliates</b>								
California Steel Industries, INC	50.00	50.00	1,457	774	683	95	58	42
Companhia Coreano-Brasileira de Pelotização - KOBRASCO	50.00	50.00	471	34	437	138	100	109
Companhia Hispano-Brasileira de Pelotização - HISPANOBRÁS	50.89	51.00	506	87	419	78	143	66
Companhia Ítalo-Brasileira de Pelotização - ITABRASCO	50.90	51.00	324	69	255	42	31	153
Companhia Nipo-Brasileira de Pelotização - NIBRASCO	51.00	51.11	814	101	713	108	83	148
CSP- Companhia Siderurgica do PECEM	50.00	50.00	2,171	132	2,039	(41)	(27)	(12)
Henan Longyu Energy Resources CO., LTD.	25.00	25.00	3,322	532	2,790	583	453	561



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

LOG-IN - Logística Intermodal S/A	31.33	31.33	1,831	1,257	574	23	(54)	(35)
Mineração Rio Grande do Norte S.A. - MRN	40.00	40.00	2,043	1,350	693	192	104	33
MRS Logística S.A.	47.59	46.75	6,245	3,730	2,515	756	502	524
Norte Energia S.A.	9.00	9.00	7,463	4,734	2,729	(66)	(47)	
Samarco Mineração S.A.	50.00	50.00	10,272	7,696	2,576	3,393	2,493	2,906
Teal Minerals (Barbados) Incorporated	50.00	50.00	1,962	931	1,031	(11)	(18)	(18)
Tecnored Desenvolvimento Tecnológico S.A.	49.21	49.21	164	11	153	(86)	(86)	(22)
Thyssenkrupp CSA Companhia Siderúrgica do Atlântico	26.87	26.87	16,334	5,558	10,776	(978)	(1,217)	(1,150)
Vale Soluções em Energia S.A.	53.13	53.13	457	183	274	(523)	(532)	(52)
Zhuhai YPM Pellet Co	25.00	25.00	353	160	193	6	6	

(\*) Matches the individual contribution of each entity in consolidated

Table of Contents

## 14 - Intangible Assets

	December 31, 2012			Consolidated December 31, 2011			January 1, 2011		
	Cost	Amortization	Net	Cost	Amortization	Net	Cost	Amortization	Net
<b>Indefinite useful lifetime</b>									
Goodwill	9,407		9,407	8,990		8,990	8,654		8,654
	<b>9,407</b>		<b>9,407</b>	<b>8,990</b>		<b>8,990</b>	<b>8,654</b>		<b>8,654</b>
<b>Finite useful lifetime</b>									
Concession and subconcession	10,981	(3,307)	7,674	9,997	(2,813)	7,184	9,449	(2,936)	6,513
Right to use	732	(113)	619	1,133	(80)	1,053	1,101	(48)	1,053
Others	2,504	(1,382)	1,122	1,682	(1,120)	562	1,465	(856)	609
<b>Total</b>	<b>23,624</b>	<b>(4,802)</b>	<b>18,822</b>	<b>21,802</b>	<b>(4,013)</b>	<b>17,789</b>	<b>20,669</b>	<b>(3,840)</b>	<b>16,829</b>

	December 31, 2012			Parent Company December 31, 2011		
	Cost	Amortization	Net	Cost	Amortization	Net
<b>Indefinite useful lifetime</b>						
Goodwill	9,407		9,407	8,990		8,990
	<b>9,407</b>		<b>9,407</b>	<b>8,990</b>		<b>8,990</b>
<b>Finite useful lifetime</b>						
Concession and subconcession	6,410	(2,414)	3,996	5,920	(2,105)	3,815
Right to use	222	(83)	139	679	(72)	607
Others	2,504	(1,382)	1,122	1,682	(1,120)	562
	<b>9,136</b>	<b>(3,879)</b>	<b>5,257</b>	<b>8,281</b>	<b>(3,297)</b>	<b>4,984</b>
<b>Total</b>	<b>18,543</b>	<b>(3,879)</b>	<b>14,664</b>	<b>17,271</b>	<b>(3,297)</b>	<b>13,974</b>

The useful life of the concessions and sub-concessions are detailed (note 29d).

The rights of use refers basically to the usufruct contract entered into with non-controlling stockholders to use the Empreendimentos Brasileiros de Mineração S.A. shares (owner of the shares of MBR) and intangible identified in business combination of Vale Canada. The amortization of the right to use will expires in 2037 and Vale Canada's intangible will end in September 2046.

Table of Contents

The table below shows the movement of intangible assets during the period:

	Consolidated Year ended				Total
	Goodwill	Concessions and Subconcessions	Right to use	Others	
<b>Balance at January 1, 2012</b>	<b>8,990</b>	<b>7,184</b>	<b>1,053</b>	<b>562</b>	<b>17,789</b>
Addition through acquisition		1,044		825	1,869
Write off		(20)	(455)		(475)
Amortization		(534)	(32)	(265)	(831)
Translation adjustment	417		53		470
<b>Balance at December 31, 2012</b>	<b>9,407</b>	<b>7,674</b>	<b>619</b>	<b>1,122</b>	<b>18,822</b>

	Consolidated Year ended				Total
	Goodwill	Concessions and Subconcessions	Right to use	Others	
<b>Balance at January 1, 2011</b>	<b>8,654</b>	<b>6,514</b>	<b>1,054</b>	<b>607</b>	<b>16,829</b>
Addition through acquisition		1,378		373	1,751
Write off		(81)		(2)	(83)
Amortization		(858)	(24)	(185)	(1,067)
Translation adjustment	336		23		359
Others		231		(231)	
<b>Balance at December 31, 2011</b>	<b>8,990</b>	<b>7,184</b>	<b>1,053</b>	<b>562</b>	<b>17,789</b>

	Parent Company Year ended				Total
	Goodwill	Concessions and Subconcessions	Right to use	Others	
<b>Balance at January 1, 2012</b>	<b>8,990</b>	<b>3,815</b>	<b>607</b>	<b>562</b>	<b>13,974</b>
Addition through acquisition		537		825	1,362
Write off		(17)	(455)		(472)
Amortization		(339)	(13)	(265)	(617)
Translation adjustment	417				417
<b>Balance at December 31, 2012</b>	<b>9,407</b>	<b>3,996</b>	<b>139</b>	<b>1,122</b>	<b>14,664</b>

	Parent Company Year ended				Total
	Goodwill	Concessions and Subconcessions	Right to use	Others	
<b>Balance at January 1, 2011</b>	<b>8,654</b>	<b>3,824</b>	<b>631</b>	<b>455</b>	<b>13,564</b>
Addition through acquisition		332		294	626
Write off		(30)		(2)	(32)
Amortization		(311)	(24)	(185)	(520)
Translation adjustment	336				336

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

<b>Balance at December 31, 2011</b>	<b>8,990</b>	<b>3,815</b>	<b>607</b>	<b>562</b>	<b>13,974</b>
-------------------------------------	--------------	--------------	------------	------------	---------------

37

---

Table of Contents**15 - Property, plant and equipment**

	December 31, 2012			Consolidated December 31, 2011			January 1, 2011		
	Cost	Accumulated Depreciation	Net	Cost	Accumulated Depreciation	Net	Cost	Accumulated Depreciation	Net
Land	1,381		1,381	1,331		1,331	593		593
Buildings	15,755	(3,304)	12,451	13,977	(2,552)	11,425	10,452	(2,334)	8,118
Installations	33,350	(9,326)	24,024	28,699	(7,885)	20,814	30,821	(5,724)	25,097
Equipment	2,014	(1,245)	769	1,737	(1,053)	684	479	(40)	439
Mineral assets	48,440	(9,887)	38,553	41,954	(7,319)	34,635	45,414	(4,753)	40,661
Others	54,673	(17,526)	37,147	51,290	(15,249)	36,041	44,478	(12,639)	31,839
Construction in progress	59,130		59,130	48,925		48,925	19,909		19,909
	<b>214,743</b>	<b>(41,288)</b>	<b>173,455</b>	<b>187,913</b>	<b>(34,058)</b>	<b>153,855</b>	<b>152,146</b>	<b>(25,490)</b>	<b>126,656</b>

	December 31, 2012			Parent Company December 31, 2011		
	Cost	Accumulated Depreciation	Net	Cost	Accumulated Depreciation	Net
Land	1,162		1,162	762		762
Buildings	5,695	(1,319)	4,376	6,131	(1,111)	5,020
Installations	16,428	(4,128)	12,300	15,674	(3,586)	12,088
Equipment	942	(724)	218	857	(638)	219
Mineral assets	4,402	(588)	3,814	3,750	(529)	3,221
Others	16,821	(7,533)	9,288	16,508	(6,449)	10,059
Construction in progress	30,073		30,073	24,134		24,134
	<b>75,523</b>	<b>(14,292)</b>	<b>61,231</b>	<b>67,816</b>	<b>(12,313)</b>	<b>55,503</b>

Table of Contents

	Consolidated Year ended							Total
	Land	Building	Facilities	Computer equipment	Mineral assets	Others	Constructions in progress	
<b>Balance in January 1, 2012</b>	<b>1,331</b>	<b>11,425</b>	<b>20,814</b>	<b>684</b>	<b>34,635</b>	<b>36,041</b>	<b>48,925</b>	<b>153,855</b>
Acquisitions							33,433	33,433
Disposals	(2)	(127)	(100)	(18)	(114)	(704)	(1,125)	(2,190)
Transfer to non-current assets held for sale		(51)	(67)		(3)	(1,919)	(24)	(2,064)
Impairment		(2,227)	(554)	(2)	(1,074)	(2,841)	(1,684)	(8,382)
Depreciation and amortization		(617)	(1,807)	(179)	(1,598)	(3,791)		(7,992)
Translation adjustment	(199)	714	(273)	334	2,932	2,483	804	6,795
Transfers	251	3,334	6,011	(50)	3,775	7,878	(21,199)	
<b>Balance in December 31, 2012</b>	<b>1,381</b>	<b>12,451</b>	<b>24,024</b>	<b>769</b>	<b>38,553</b>	<b>37,147</b>	<b>59,130</b>	<b>173,455</b>

	Consolidated Year ended							Total
	Land	Building	Facilities	Computer equipment	Mineral assets	Others	Constructions in progress	
<b>Balance in January 1, 2011</b>	<b>593</b>	<b>8,118</b>	<b>25,097</b>	<b>439</b>	<b>40,661</b>	<b>31,839</b>	<b>19,909</b>	<b>126,656</b>
Acquisitions							22,768	22,768
Disposals		(64)	(21)	(1)	(37)	(69)	(191)	(383)
Depreciation and amortization		(197)	(823)	(125)	(251)	(2,962)		(4,358)
Translation adjustment		(6)	(2,368)	7	953	6,290	4,296	9,172
Transfers	738	3,574	(1,071)	364	(6,691)	943	2,143	
<b>Balance in December 31, 2011</b>	<b>1,331</b>	<b>11,425</b>	<b>20,814</b>	<b>684</b>	<b>34,635</b>	<b>36,041</b>	<b>48,925</b>	<b>153,855</b>

Table of Contents

	Parent Company Year ended							Total
	Land	Building	Facilities	Computer equipment	Mineral assets	Others	Constructions in progress	
<b>Balance in January 1, 2012</b>	<b>762</b>	<b>5,020</b>	<b>12,088</b>	<b>219</b>	<b>3,221</b>	<b>10,059</b>	<b>24,134</b>	<b>55,503</b>
Aquisition							14,650	14,650
Disposals		(1)	(19)	(1)	(19)	(87)	(432)	(559)
Impairment		(2,227)	(554)	(2)	(550)	(817)	(1,922)	(6,072)
Depreciation and amortization		(184)	(575)	(95)	(135)	(1,302)		(2,291)
Transfers	400	1,768	1,360	97	1,297	1,435	(6,357)	
<b>Balance in December 31, 2012</b>	<b>1,162</b>	<b>4,376</b>	<b>12,300</b>	<b>218</b>	<b>3,814</b>	<b>9,288</b>	<b>30,073</b>	<b>61,231</b>

	Parent Company Year ended							Total
	Land	Building	Facilities	Computer equipment	Mineral assets	Others	Constructions in progress	
<b>Balance in January 1, 2011</b>	<b>362</b>	<b>2,543</b>	<b>8,579</b>	<b>177</b>	<b>2,765</b>	<b>12,074</b>	<b>17,962</b>	<b>44,462</b>
Aquisition							13,990	13,990
Disposals		(3)	(15)		(25)	(44)	(352)	(439)
Depreciation and amortization		(114)	(509)	(103)	(94)	(1,690)		(2,510)
Others	400	2,594	4,033	145	575	(281)	(7,466)	
<b>Balance in December 31, 2011</b>	<b>762</b>	<b>5,020</b>	<b>12,088</b>	<b>219</b>	<b>3,221</b>	<b>10,059</b>	<b>24,134</b>	<b>55,503</b>

The depreciation of the year, allocated to production cost and expense was R\$ 8,397 and R\$ 6,638 In 2012 and 2011 in the consolidated and R\$2,563 and R\$1,964 in 2012 and 2011 in the parent company, respectively.

The property, plant and equipment (net book value given as guarantee for judicial claims at December 31, 2012 and December 31, 2011 amounted to R\$ 197 and R\$146 in the consolidated and R\$ 161 and R\$134 in the parent company, respectively.

Table of Contents**16 - Impairment**

In 2012 we identified evidence of impairment on some investments and fixed assets of the nickel, aluminium, coal and other cash generating units. Tests were conducted to determine whether the recoverable amount is less than the carrying amount

To determine the fair value of the assets to Vale uses discounted cash flows.

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 weighted average cost of capital is used as a basic point for determining the discount rates, with appropriate adjustments for the risk profile of the countries in which the individual cash-generating units operate.

The following impairment charges were recorded:

Assets	Cash generating unit	As of December 31, 2012		
		Carrying amount	Recoverable amount	Adjustment for impairment
<b>Investment</b>				
Aluminum	Hydro	6.598	4.572	2.026
Steel	Thyssenkrupp CSA	4.387	2.583	1.804
Energy	VSE	207	35	172
		<b>11.192</b>	<b>7.190</b>	<b>4.002</b>
<b>Property plant and equipment</b>				
Nickel	Onça Puma	7.653	1.884	5.769
Coal	Australia	3.365	1.226	2.139
Others		386	83	303
		<b>11.404</b>	<b>3.193</b>	<b>8.211</b>
		<b>22.596</b>	<b>10.383</b>	<b>12.213</b>

**(i) Investment**

- Investment in Hydro**



The volatility of aluminum prices and uncertainties about the European economy have contributed to a reduction in the fourth quarter of 2012 in the traded market value of our 22% stake in Hydro, a Norwegian- controlled aluminum producer, to a level lower than the carrying value of the investment.

The market value of the investment at December 31 was obtained based on the market value of the shares of Hydro, which are traded in the capital market and had odds of US\$ 4.99 per share on that date, resulting in a value of investment of R\$ 4,572.

- **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 VSE**

Changes in the investment strategy of the Company have altered the expected cash flows from operations of our joint venture Vale Soluções de Energia ( VSE ).

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

Table of Contents

**(ii) Propert plant and equipment**

• **Onça Puma nickel assets**

Problems with the two furnaces in the Onça Puma project have led to the total stoppage of its iron-nickel operations since June 2012. After reviewing the case, Vale decided to rebuild one of the furnaces and plans to resume operations in the fourth quarter of 2013. Given this event and the current market environment for iron-nickel, the net book value of Onça Puma s assets required an adjustment for impairment.

The recoverable amount of Onça Puma s assets was ascertained by determining their value in use from cash flow projections based on financial budgets approved by management for 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.

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.

In order to estimate the value in use of the assets, Vale uses the discounted cash flow.

• **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 in use their value in use from cash flow projections based on financial budgets approved by management for 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.

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

The key assumptions used by management to calculate the impairment of coal assets in Australia are the commodities 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 on our other operation, as of oil and gas and other projects.

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

### **(iii) Goodwill and intangible assets of indefinite life**

The goodwill arose from the process of acquisition of part of our business mainly represented by buck materials (R\$4,287), base metals (R\$3,791) and fertilizer (R\$1,329).

The annual impairment review resulted in no impairment charge both for 2012 and 2011. For impairment testing purpose, we used a specific discount rate by asset, which consider a premium for country and business segment risk, ranging from 7.8% to 8.6%.

The key assumption to which the discounted cash flow is more sensitive is the sales prices and production cost.

Table of Contents17 - **Loans and Financing**a) **Short term debts**

	December 31, 2012	Consolidated December 31, 2011	January 1, 2011	Parent Company December 31, 2012	December 31, 2011
Working capital		40	232		
		<b>40</b>	<b>232</b>		

Financings raised in the short term for exports, denominated in U.S. dollars with average interest rates as at December 31, 2012 of 1.81% per years.

b) **Long term**

	December 31, 2012	Current Liabilities December 31, 2011	Consolidated January 1, 2011	December 31, 2012	Non-current liabilities December 31, 2011	January 1, 2011
<b>Long-term contracts abroad</b>						
<b>Loans and financing in:</b>						
United States dollars	1,235	944	3,972	6,906	5,014	4,215
Others currencies	29	17	33	535	97	365
<b>Fixed rates:</b>						
Notes indexed in United States dollars (fixed rates)	253	761		27,499	18,823	17,066
Euro				4,043	1,812	1,671
Perpetual notes						130
Accrued charges	662	413	388			
	<b>2,179</b>	<b>2,135</b>	<b>4,393</b>	<b>38,983</b>	<b>25,746</b>	<b>23,447</b>
<b>Long-term contracts in Brazil</b>						
Indexed to TJLP, TR, IGP-M e CDI	358	461	127	12,395	9,799	6,483
Basket of currencies	4	3	2	21		208

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

Loans in United States dollars	346			2,590		1,230
Non-convertible debentures into shares	4,000		2	774	4,680	4,610
Accrued charges	206	208	183			
	<b>4,914</b>	<b>672</b>	<b>314</b>	<b>15,780</b>	<b>14,479</b>	<b>12,531</b>
	<b>7,093</b>	<b>2,807</b>	<b>4,707</b>	<b>54,763</b>	<b>40,225</b>	<b>35,978</b>

	Parent Company			
	Current liabilities		Non-current liabilities	
	December 31, 2012	December 31, 2011	December 31, 2012	December 31, 2011
<b>Long-term contracts abroad</b>				
<b>Loans and financing in:</b>				
United States dollars	275	165	5,135	3,325
Others currencies			2	
<b>Fixes rates:</b>				
United States dollars			3,065	
Euro			4,043	1,812
Accrued charges	212	81		
	<b>487</b>	<b>246</b>	<b>12,245</b>	<b>5,137</b>
<b>Long-term contracts in Brazil</b>				
Indexed to TJLP, TR, IGP-M e CDI	306	447	12,032	9,459
Loans in United States dollars	346		2,590	
Non-convertible debentures into shares	4,000			4,000
Accrued charges	189	199		
	<b>4,841</b>	<b>646</b>	<b>14,622</b>	<b>13,459</b>
	<b>5,328</b>	<b>892</b>	<b>26,867</b>	<b>18,596</b>

Table of Contents

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

	Consolidated	Parent Company
2014	2,802	2,411
2015	2,459	1,556
2016	3,850	1,610
2017 onwards	45,652	21,290
	<b>54,763</b>	<b>26,867</b>

As at December 31, 2012, the annual interest rates on the long-term debts were as follows:

	Consolidated	Parent Company
Up to 3%	11,123	8,376
3,1% to 5% (*)	11,630	4,864
5,1% to 7%	25,329	9,209
7,1% to 9% (**)	10,056	7,207
9,1% to 11% (**)	2,734	2,539
Over 11% (**)	983	
Variable	1	
	<b>61,856</b>	<b>32,195</b>

(\*) 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 bears interest at the CDI and Brazilian Government Long-term Interest Rates ( TJLP ), plus spread. For these operations, we have entered into derivative transactions to mitigate our exposure to the floating rate debt denominated in Brazilian Real, totaling R\$ 16.812 (US\$ 8.227 million) of which R\$ 16.123 (US\$ 7.890 million) 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.

Non Convertible Debentures	Quantity as of December 31, 2012				Interest	Balance	
	Issued	Outstanding	Maturity	December 31, 2012		December 31, 2011	31 de dezembro de 2010
2nd Series	400,000	400,000	November 20, 2013	4,032	100% CDI + 0.25%	4,049	4,047

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

Tranche	B	-	Salobo	5	5	No date	6.5% p.a + IGP-DI	774	680	611
								<b>4,806</b>	<b>4,729</b>	<b>4,659</b>
<hr/>										
Short-term portion								3,999		
Long-term portion								774	4,680	4,610
Accrued charges								33	49	48
								<b>4,806</b>	<b>4,729</b>	<b>4,659</b>

In October 2012, Vale issued a Export Credit Note by amounting to R\$ 2,5 billion (US\$ 1,2 million) from a Commercial Brazilian bank by 10 years of term. The amount was total paid in December 31,2012.

In September 2012, Vale signed a loan agreement of U.S. \$ 3.9 billion (\$ 1.9 billion) financing agreement with Banco Nacional de Desenvolvimento Econômico Social ( BNDES ) to finance the implementation of the CLN 150 Mtpy project, which will expand logistics infrastructure in Vale s Northern System. As of December 2012, Vale had drawn R\$ 2.1 billion (\$ 1.0 billion) on the line.

In September 2012, Vale issued R\$ 3,065 million (US\$1,5009 million) notes due 2042. The 2042 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.

In August 2012, Vale International entered into a bilateral Pre-export Financing Agreement with a commercial bank in an amount of R\$ 307 million (US\$ 150 million) maturing in 5 years from its disbursement date. As of December 31, 2012, Vale International withdrew the total amount of this facility.

In July 10, 2012 we issued R\$ 1,862 million ( 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 a price of 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 R\$ 2,554 (US\$ 1,250 million) notes due 2022 that were priced in March 2012 at a price of 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 R\$ 2 billion (US\$ 1 billion) 4.375% notes due 2022 issued on January 2012. Those notes issued in January, 2012 were sold at a price of 98.804% of the principal amount.

Table of Contents

	Contractual Currency	Date of agreement	Available until	Credit line Total amount available	Amounts drawn on December 31,		
					2012	2011	2010
<b>Financial Intitution</b>							
<b>Revolving Credit Lines</b>							
Revolving Credit Facility - Vale/ Vale International/ Vale Canada	US\$	April 2011	5 years	6,131			
<b>Credit Lines</b>							
Nippon Export and investment Insurance ( Nexi )	US\$	May 2008*(a)	5 years **	4,087	613	613	307
Japan Bank for International Cooperation ( JBIC )	US\$	May 2008*(b)	5 years **	6,131			
Banco Nacional de Desenvolvimento Econômico Social ( BNDES )	R\$	April 2008*(c)	5 years **	7,300	3,582	2,795	1,922
<b>Loans</b>							
Export-Import Bank of China e Bank of China Limited	US\$	September 2010(d)	13 years	2,511	1,710	954	595
Export Development Canada ( EDC )	US\$	October 2010(e)	10 years	2,044	1,992	1,022	511
Korean Trade Insurance Corporation ( K-Sure )	US\$	August 2011(f)	12 years	1,079	836	329	
<b>Banco Nacional de Desenvolvimento Econômico Social ( BNDES )</b>							
Vale Fertilizantes	R\$	November 2009(g)	9 years	40	40	36	36
PSI 4,50%	R\$	June 2010(h)	10 years	774	700	528	205
Vale Fertilizantes	R\$	October 2010(i)	8 years	247	225	222	185
PSI 5,50%	R\$	March 2011(j)	10 years	103	87	87	
CLN 150	R\$	September 2012(k)	10 years	3,883	2,109		
Vale Fertilizantes	R\$	October 2012(l)	6 years	89	89		
PSI 2,50%	R\$	December 2012(m)	10 years	182			

\* 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.

(d) Acquisition of twelve large ore carriers from Chinese shipyards.

(e) Financing investments in Canada and Canadian exports.



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

- (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.

### **d) Guarantee**

On December 31, 2012, R\$ 2,963 (US\$ 1,450 million) of the total aggregate outstanding debt was secured by property, plant and equipment and receivables.

### **e) 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 - Provision for litigation**

Vale is a party to labor, civil, tax and other ongoing lawsuits and is discussing these issues both administratively and in court. When applicable, these lawsuits are supported by judicial deposits, where required. Provisions for losses resulting from these processes are estimated and updated by the Company, supported by the legal advice of the legal board of the Company and by its legal consultants.

	<b>Consolidated Year ended</b>				<b>Total of litigation provision</b>
	<b>Tax litigation</b>	<b>Civil litigation</b>	<b>Labor litigation</b>	<b>Environmental litigation</b>	
<b>Balance as January 1, 2012</b>	<b>1,224</b>	<b>455</b>	<b>1,405</b>	<b>61</b>	<b>3,145</b>
Additions	1,175	285	638	22	2,120
Reversals	(155)	(111)	(374)	(11)	(651)
Payments	(318)	(74)	(63)	(4)	(459)
Monetary update	113	20	(67)	2	68
Transfer to assets held for sale			(5)		(5)
<b>Balance as December 31, 2012</b>	<b>2,039</b>	<b>575</b>	<b>1,534</b>	<b>70</b>	<b>4,218</b>

	<b>Consolidated Year ended</b>				<b>Total of litigation provision</b>
	<b>Tax litigation</b>	<b>Civil litigation</b>	<b>Labor litigation</b>	<b>Environmental litigation</b>	
<b>Balance as January 1, 2011</b>	<b>1,249</b>	<b>848</b>	<b>1,234</b>	<b>78</b>	<b>3,409</b>
Additions	69	121	711	11	912
Reversals	(85)	(349)	(155)	(16)	(605)
Payments	(57)	(154)	(377)	(26)	(614)
Monetary update	48	(11)	(8)	14	43
<b>Balance as December 31, 2011</b>	<b>1,224</b>	<b>455</b>	<b>1,405</b>	<b>61</b>	<b>3,145</b>

	<b>Parent Company Year ended</b>				<b>Total of litigation provision</b>
	<b>Tax litigation</b>	<b>Civil litigation</b>	<b>Labor litigation</b>	<b>Environmental litigation</b>	
<b>Non-current liabilities</b>					
<b>Balance as January 1, 2012</b>	<b>442</b>	<b>223</b>	<b>1,217</b>	<b>46</b>	<b>1,928</b>
Additions	1,129	107	581	7	1,824
Reversals	(127)	(48)	(384)	(8)	(567)
Payments	(312)	(51)	(38)	(4)	(405)
Monetary update	81	16	(12)	2	87
<b>Balance as December 31, 2012</b>	<b>1,213</b>	<b>247</b>	<b>1,364</b>	<b>43</b>	<b>2,867</b>

	<b>Parent Company Year ended</b>				<b>Total of litigation provision</b>
	<b>Tax litigation</b>	<b>Civil litigation</b>	<b>Labor litigation</b>	<b>Environmental litigation</b>	
<b>Non-current liabilities</b>					

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

<b>Balance as January 1, 2011</b>	<b>325</b>	<b>680</b>	<b>1,072</b>	<b>31</b>	<b>2,108</b>
Additions	37	57	660	11	765
Reversals	(2)	(349)	(145)		(496)
Payments	(7)	(143)	(347)	(15)	(512)
Monetary update	89	(22)	(23)	19	63
<b>Balance as December 31, 2011</b>	<b>442</b>	<b>223</b>	<b>1,217</b>	<b>46</b>	<b>1,928</b>

**Provisions for tax litigation** - The nature of Vale's tax contingencies the tax cases relate substantially to discussions about how to calculate the Financial Compensation for Exploiting Mineral Resources ( CFEM ) and the objectionsto compensation claims for credits in the settlement of federal taxes in Brazil, and mining taxes for our foreign subsidiaries. The other cases refer to claims for Additional Port Workers Compensation ( AITP ) and questions regarding the entity's location for the purpose of charging Service Tax ( ISS ).

In September 2012, we considered as loss related to the deductibility of transportation expenditures to be probable when arriving at the amount upon which the CFEM is calculated, resulting in an increase in the provision by R\$1.1 bilhão. At the fourth quarter of 2012, we paid R\$301 of CFEM. As at December 31, 2012 the total liability in relation to CFEM was R\$1,060.

Table of Contents

**Provisions for civil litigation** Consists of claims involving contracts between Vale group companies and certain service providers, challenging differences in values causing alleged losses due to various Brazilian government stabilization economic plans in the past. Other claims are related to accidents and actions for damages and monetary .

**Provisions for labor and social security litigation** - Consists of lawsuits filed by employees and service providers, questioning employment relationship. The most recurring objects are payment of overtime, travel health and safety issues. The social security contingencies included legal and administrative disputes between the INSS and the Vale/group companies.

Vale has judicial deposits in order to guarantees the actions required in court. They are inflation indexed/accrue interest and reported in the noncurrent assets until it the court's decision release these deposits to the other party or return them to Vale when its position prevails. Judicial deposits are as follows:

	Consolidated			Parent Company	
	December 31, 2012	December 31, 2011	January 1, 2011	December 31, 2012	December 31, 2011
Tax contingencies	889	771	736	549	474
Civil contingencies	350	283	683	286	184
Labor contingencies	1,845	1,671	1,457	1,629	1,425
Environmental contingencies	11	10	8	10	8
<b>Total</b>	<b>3,095</b>	<b>2,735</b>	<b>2,884</b>	<b>2,474</b>	<b>2,091</b>

The Company is involved in administrative and judicial legal actions where the expectation of loss is considered possible, and accordingly, has recorded no provision. These possible contingent are classified as follows:

	Consolidated			Parent Company	
	December 31, 2012	December 31, 2011	January 1, 2011	December 31, 2012	December 31, 2011
Tax contingencies	33,702	33,569	2,854	30,675	30,814
Civil contingencies	2,296	2,772	1,806	1,784	1,567
Labor contingencies	3,531	3,592	3,277	3,053	3,348
Environmental contingencies	3,417	2,010	38	3,388	2,009
<b>Total</b>	<b>42,946</b>	<b>41,943</b>	<b>7,975</b>	<b>38,900</b>	<b>37,738</b>

The increase tax contingencies for which risk of losses are deemed to be possible refers mainly to tax assessments relating to Income Tax and Social Contribution, on the equity results of foreign subsidiaries.

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

The Brazilian federal tax authority (*Receita Federal do Brasil*) contends that Vale should pay income taxes on the earnings of its non-Brazilian subsidiaries and affiliates. The position of the tax authority is based on Article 74 of Brazilian Provisional Measure 2,158-35/2001. The tax authority has issued five tax assessments against us for the requiring the payment of R\$12 billion and R\$12 billion at December 31, 2012 and 2011, respectively, in taxes in accordance pursuant Article 74 for the tax years 1996 through 2008, plus interest and penalties of R\$18 billion as at December 31, 2012 and R\$ 18 billion at December 31, 2011, through December 31, 2012 and 2011, amounting to a total of R\$31 billion and R\$30 billion, respectively.

Table of Contents**19 - Asset retirement obligation**

The Company uses various judgments and assumptions when measuring its obligations related to the retirement of assets. The accrued amounts of these obligations are not deducted from the potential costs covered by insurance or indemnities, because their recovery is considered to be uncertain.

The long term interest rates used to discount these obligations to their present values and to update the provisions as at December 31, 2012 and December 31, 2011 were 5.03% p.a. and 5.82% p.a., respectively. The liability is periodically updated based on these discount rates plus the inflation index ( IGP-M ) for the period in reference.

The changes in the provision for asset retirement obligation areas follows:

	<b>Consolidated</b>	
	<b>Year ended</b>	
	<b>December 31, 2012</b>	<b>December 31, 2011</b>
<b>Balance on begin of exercise</b>	<b>3,563</b>	<b>2,528</b>
Increase expense	333	211
Liquidation in the current exercise	(28)	(95)
Revisions in estimated cash flows	1,598	815
Cumulative translation adjustments	149	104
<b>Balance on ended of exercise</b>	<b>5,615</b>	<b>3,563</b>
Current	143	136
Non-current	5,472	3,427
	<b>5,615</b>	<b>3,563</b>

	<b>Parent Company</b>	
	<b>Year ended</b>	
	<b>December 31, 2012</b>	<b>December 31, 2011</b>
<b>Balance on begin of exercise</b>	<b>1,116</b>	<b>805</b>
Increase expense	154	102
Liquidation in the current exercise	(4)	(52)
Revisions in estimated cash flows	359	261
<b>Balance on ended of exercise</b>	<b>1,625</b>	<b>1,116</b>
Current		21
Non-current	1,625	1,095
	<b>1,625</b>	<b>1,116</b>

**20 - Deferred Income Tax and Social Contribution**

We analyzed the potential tax impact associated with the undistributed earnings of each of its subsidiaries and affiliates. For those subsidiaries in which undistributed earnings are intended to be reinvested indefinitely, no deferred tax is recognized. The 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 R\$ 54,766 (US\$ 26,800 millions) as at December 31, 2012 and R\$ 49,140 (US\$26,300 millions) as at December 31, 2011. These amounts are considered to be indefinitely reinvested in the Company's international businesses. It is not practicable to determine the amount of the unrecognized deferred tax liability associated with these amounts. If at a future date the Company did determine to repatriate these earnings, there would be various methods available to us, each with different tax consequences. There would be also uncertainty as to the timings and amounts, of foreign tax credits that would be available, if any, as the calculation of the available foreign tax credits is dependent upon the timing of the repatriation and the projections of significant and uncertain future events. The wide range of potential outcomes that could result from 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.

Table of Contents

The deferred balances were as follows:

	December 31, 2012	Consolidated December 31, 2011	January 1, 2011	Parent Company December 31, 2012	December 31, 2011
<b>Recoverable income tax</b>	<b>2,604</b>	<b>1,709</b>	<b>1,266</b>		
<b>Temporary differences:</b>					
Pension plan	922	891	1,223	93	134
Provision for litigation	1,173	872	945	1,062	708
Impairment of assets	1,727	1,478	946	853	748
Fair value of financial instruments	1,647	991	631	1,647	994
Allocated goodwill	(10,279)	(12,290)	(11,543)		
Impairment of assets	3,206			2,575	
Others	(620)	(726)	(459)	(672)	(475)
<b>Total</b>	<b>380</b>	<b>(7,075)</b>	<b>(6,991)</b>	<b>5,558</b>	<b>2,109</b>
Social contribution			(3,574)		
<b>Total</b>	<b>380</b>	<b>(7,075)</b>	<b>(10,565)</b>	<b>5,558</b>	<b>2,109</b>
Assets	8,134	3,539	2,263	5,558	2,109
Liabilities	(7,754)	(10,614)	(12,828)		
	<b>380</b>	<b>(7,075)</b>	<b>(10,565)</b>	<b>5,558</b>	<b>2,109</b>

Changes in deferred taxes are presented as follows:

	Assets	Consolidated Liabilities	Total	Parent Company Assets
<b>Total amount in January 1, 2011</b>	<b>2,263</b>	<b>12,828</b>	<b>(10,565)</b>	<b>(1,785)</b>
Net income effect	1,085	525	560	299
Subsidiary acquisition		128	(128)	
Cumulative translation adjustment	170	707	(537)	
Deferred social contribution		(3,574)	3,574	3,574
Other comprehensive Income	21		21	21
<b>Total amount in December 31, 2011</b>	<b>3,539</b>	<b>10,614</b>	<b>(7,075)</b>	<b>2,109</b>
Net income effect	1,238	(538)	1,776	816
Impairments	3,319		3,319	2,642
Subsidiary acquisition	(36)	(411)	375	
Cumulative translation adjustment	87	622	(535)	
Reversal of deferred tax		(2,533)	2,533	
Other comprehensive income	(13)		(13)	(9)
<b>Total amount in December 31, 2012</b>	<b>8,134</b>	<b>7,754</b>	<b>380</b>	<b>5,558</b>



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

The deferred assets and liabilities for income tax and social contributions arising from tax losses and temporary differences are recognized taking into consideration the projections of future performance, based on economic and financial projections, prepared based on internal and macroeconomic assumptions, trade and tax scenarios that may be subject to changes in the future.

These temporary differences in the future:

	Consolidated		January 1, 2011	Parent Company	
	December 31, 2012	December 31, 2011		December 31, 2012	December 31, 2011
<b>Deferred income tax and social contribution</b>					
to be recovered within 12 months	727	581	433	466	316
to be recovered after than 12 months	(347)	(7,656)	(10,998)	5,092	1,793
	<b>380</b>	<b>(7,075)</b>	<b>(10,565)</b>	<b>5,558</b>	<b>2,109</b>

The nominal composite income tax and social contribution statutory rate applicable for the year presented is 34%. In other countries where we have operations, we are subject to various rates depending on the jurisdiction.

Table of Contents

The total income tax and social contributions in the Statement of Income reconciled with the nominal composite rates, as follows:

	Consolidated Year ended	
	December 31, 2012	December 31, 2011
Income before tax and social contribution	6,592	45,922
(-) Impairment on investments	2,198	
Results of equity investments	(1,241)	(1,857)
Exchange variation - not taxable	346	43
	<b>7,895</b>	<b>44,108</b>
<b>Income tax and social contribution at statutory rates - 34%</b>	<b>(2,684)</b>	<b>(14,997)</b>
<b>Adjustments that affects the basis of taxes:</b>		
Income tax benefit from interest on stockholders equity	2,601	2,776
Tax incentive	393	1,195
Results of overseas companies taxed by different rates which differs from the parent company rate	352	2,315
Deductible Social Contribution paid		886
Reversal of deferred tax	(445)	(485)
Reversal of deferred tax (see note 6b)	2,533	
Deferred Income tax - impairment of assets		
Others	(109)	(204)
<b>Income tax and social contribution on the profit for the year</b>	<b>2,641</b>	<b>(8,514)</b>

	Parent Company Year ended	
	December 31, 2012	December 31, 2011
Income before tax and social contribution	9,768	44,186
Results of equity investments	(576)	(9,996)
	<b>9,192</b>	<b>34,190</b>
<b>Income tax and social contribution at statutory rates - 34%</b>	<b>(3,125)</b>	<b>(11,625)</b>
<b>Adjustments that affects the basis of taxes:</b>		
Income tax benefit from interest on stockholders equity	2,601	2,755
Tax incentive	390	1,188
Deductible Social Contribution paid		886
Others	100	424
<b>Income tax and social contribution on the profit for the year</b>	<b>(34)</b>	<b>(6,372)</b>

In Brazil, Vale has a tax incentive which allows for a partial reduction of income tax from business results in the North and Northeast regions with iron, railroads, manganese, copper, bauxite, kaolin and potash. The incentive is calculated based on the taxable profit from the activity, which takes into consideration the allocation of operating profit according to incentives for production levels during the periods specified for each product as guarantee. Generally, these expire after 10 years and are in the case of Company prescribe in 2020. An amount equal to the tax incentive must be appropriated from retained earnings to a reserve account in Stockholders equity, and may not be distributed as dividends.

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

Vale benefits from the allocation of portion of income tax to be reinvested in the purchase of equipment in incentive operation, subject to subsequent approval by the regulatory agency in the incentive area Superintendence for the Development of Amazonia (SUDAM) and the Northeast Development Superintendence (SUDENE). When the reinvestment is approved, the tax benefit is also appropriated from retained earnings to a non-distributable reserve.

Vale also has tax incentives related to the production of nickel from Vale New Caledonia (VNC). These incentives include temporary exemptions from the income tax during the construction phase of the project, and for a period of 15 years beginning in the first year of commercial production as defined by the applicable law, followed by five years of a refund of 50% . In addition, VNC is eligible for certain exemptions from indirect taxes such as import tax during the construction phase and throughout the commercial life of the project. Some of these tax benefits, including temporary tax incentives, are subject to an earlier interruption if the project achieves a specified cumulative rate of return. VNC is taxable for a portion of the profits starting in the first year in which commercial production commences, as defined by the applicable law. So far, there has been no taxable income realized in New Caledonia. Vale also benefits from tax incentives for projects in Mozambique, Oman and Malaysia.

Vale is subject to revision by local tax authorities for up to five years for its companies operating in Brazil, generally ten years for its operations in Indonesia and up to seven years for companies with operations in Canada.

Table of Contents

**21. Employee Benefits Obligations**

**a) Retirement Benefits Obligations**

The Company is the sponsor of pension plans mixed with characteristics of benefit and defined contribution (such as benefit plan Vale Mais), which includes retirement income and the risk benefits (death pension, retirement for disability and sickness benefit). These plans are calculated based on length of service, age, salary base and supplement to Social Security benefits. These plans are administered by Fundação Vale do Rio Doce de Seguridade Social - VALIA.

The Company also sponsors a pension plan with defined benefit characteristics. This plan was funded through monthly contributions made by the sponsor and employees, calculated on the basis of periodic actuarial estimates. With the creation of the plan Vale Mais in May 2000, more than 98% of active employees opted to transfer. The defined benefit is still there, covering almost exclusively retired participants and their beneficiaries. This plan is also administered by VALIA.

Additionally, a specific group of former employees are entitled to payments in addition to the normal benefits of Valia through a Supplemental Bonus plus a post-retirement benefit that covers medical, dental and pharmaceutical assistance to that specific group.

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

The following information details the status of defined benefit elements of all the plans, as well as costs related to them.

The results of the actuarial valuations were as follows:

**i. Changes in the present value of obligations**

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

	Consolidated			Parent Company		
	Overfunded pension plans	Underfunded pension plans	Others underfunded pension plans	Overfunded pension plans	Underfunded pension plans	Others underfunded pension plans
<b>Present value of obligations on January 1, 2011</b>	<b>6,036</b>	<b>8,820</b>	<b>2,500</b>	<b>5,276</b>	<b>2,767</b>	<b>387</b>
<b>Initial liability recognized with new consolidation</b>						
Current service cost	2	148	52		28	5
Interest cost	650	631	160	573	304	42
Benefits paid	(494)	(688)	(138)	(441)	(166)	(41)
Plan amendment		4				
Net transfers		26				
Alteration of hypotheses		(44)	(52)			
Actuarial loss (gain)	444	(210)	192	404	(4)	78
Exchange rates changes effects		561	200			
<b>Present value of obligations on December 31, 2011</b>	<b>6,638</b>	<b>9,248</b>	<b>2,914</b>	<b>5,812</b>	<b>2,929</b>	<b>471</b>
<b>Initial liability recognized with new consolidation</b>						
Current service cost		196	66		52	7
Interest cost	603	731	185	603	322	50
Benefits paid	(463)	(851)	(149)	(463)	(178)	(49)
Plan amendment		(6)	(68)		1	(52)
Net transfers	(826)	826				
Alteration of hypotheses		(228)	(48)			
Actuarial loss	1,338	1,560	310	1,338	1,002	223
Exchange rates changes effects		757	286			
<b>Present value of obligations on December 31, 2012</b>	<b>7,290</b>	<b>12,233</b>	<b>3,496</b>	<b>7,290</b>	<b>4,128</b>	<b>650</b>

Table of Contents

	Consolidated			Parent Company		
	Overfunded pension plans	Underfunded pension plans	Others underfunded pension plans	Overfunded pension plans	Underfunded pension plans	Others underfunded pension plans
<b>Fair value of assets on January 1, 2011</b>	<b>9,307</b>	<b>7,741</b>	<b>22</b>	<b>8,493</b>	<b>2,482</b>	
<b>Initial asset recognized with new consolidation</b>						
Actual return on assets	1,097	388		994	279	
Sponsor contributions	4	964	138	1	242	41
Benefits paid	(494)	(690)	(138)	(441)	(166)	(41)
Actuarial loss (gain)	(242)	13		(331)	11	
Early termination of the plan		(44)	(18)			
Exchange rates changes effects		526	(1)			
<b>Fair value of assets on December 31, 2011</b>	<b>9,672</b>	<b>8,898</b>	<b>3</b>	<b>8,716</b>	<b>2,848</b>	
<b>Initial asset recognized with new consolidation</b>						
Transfers	(956)	956				
Actual return on assets	1,210	1,034		1,210	393	
Sponsor contributions	1	437	149	1	281	49
Benefits paid	(463)	(851)	(149)	(463)	(178)	(49)
Plan amendment		5			2	
Liquidação antecipada no plano		(208)				
Actuarial loss	(449)	460		(449)	467	
Exchange rates changes effects		727	(1)			
<b>Fair value of assets on December 31, 2012</b>	<b>9,015</b>	<b>11,458</b>	<b>2</b>	<b>9,015</b>	<b>3,813</b>	

A special contribution was made to the Vale Canada Limited defined underfunded benefit plans of R\$ 588 during the period of 2011. The contribution was made to provide suitable indexes to support the Vale Canada Limited with more appropriate financing requirements for 2011 to 2013

Administrative plan assets by Valia at December 31, 2012 and December 31, 2011 include investments in a portfolio of our own stocks amounting to R\$613 and R\$636, investments in debentures amounting to R\$116 and R\$ 117 and investments in the equity of related parties in the amount of R\$4 and R\$157, respectively. They also included on December 31, 2012 and December 31, 2011, R\$7,953 and R\$6,637 of securities of the Federal Government. The assets of the pension plans of Vale Canada Limited are invested in securities of the Government of Canada and as at December 31, 2012 and 2011, amounted to R\$ 987 and R\$1,219, respectively. The plan assets linked to fertilizers assets, at December 31, 2012 and 2011 invested in securities of the Brazilian Federal Government amounted to R\$390 and R\$278, respectively.

## iii. Reconciliation of assets and liabilities recognized in the balance sheet

	December 31, 2012			Consolidated December 31, 2011			1 de janeiro de 2011		
	Overfunded pension plans	Underfunded pension plans	Others underfunded pension plans	Overfunded pension plans	Underfunded pension plans	Others underfunded pension plans	Overfunded pension plans	Underfunded pension plans	Others underfunded pension plans
Present value of obligations in the year-end	(7,290)	(12,233)	(3,496)	(6,638)	(9,248)	(2,914)	(6,037)	(8,849)	(2,561)
Fair value of assets in the year-end	9,015	11,458	2	9,672	8,898	3	9,306	7,738	22
Net value of (gains) and losses not recorded in the balance sheet		500	194		(75)	174		(57)	57
Effect of limit of CPC 33, paragraph 65	(1,725)			(3,034)			(3,269)		
<b>Total</b>		<b>(275)</b>	<b>(3,300)</b>		<b>(425)</b>	<b>(2,737)</b>		<b>(1,168)</b>	<b>(2,482)</b>
<b>Net actuarial asset/liability accrued</b>									
Current assets		235							
Current liabilities		(238)	(182)		(172)	(144)		(163)	(150)
Non-current liabilities		(272)	(3,118)		(253)	(2,593)		(1,005)	(2,332)
<b>Total</b>		<b>(275)</b>	<b>(3,300)</b>		<b>(425)</b>	<b>(2,737)</b>		<b>(1,168)</b>	<b>(2,482)</b>

Table of Contents

	Parent Company					
	December 31, 2012			December 31, 2011		
	Overfunded pension plans	Underfunded pension plans	Others underfunded pension plans	Overfunded pension plans	Underfunded pension plans	Others underfunded pension plans
Present value of obligations in the year-end	(7,290)	(4,128)	(650)	(5,812)	(2,929)	(471)
Fair value of assets in the year-end	9,015	3,813		8,716	2,848	
Net value of (gains) and losses not recorded in the balance sheet		371	65		(74)	79
Effect of limit of CPC 33, paragraph 65	(1,725)			(2,904)		
<b>Total</b>		<b>56</b>	<b>(585)</b>		<b>(155)</b>	<b>(392)</b>
<b>Net actuarial asset/liability accrued</b>						
Current assets		235				
Current Liabilities		(179)	(41)		(120)	(21)
Non-current liabilities			(544)		(35)	(371)
<b>Total</b>		<b>56</b>	<b>(585)</b>		<b>(155)</b>	<b>(392)</b>

## iv. Recorded costs in the statement of income

	Consolidated					
	December 31, 2012			December 31, 2011		
	Overfunded pension plans	Underfunded pension plans	Others underfunded pension plans	Overfunded pension plans	Underfunded pension plans	Others underfunded pension plans
Current service cost	39	157	66	2	147	50
Interest on actuarial liabilities	771	686	189	650	630	160
Expected return on assets	(1,423)	(825)		(1,097)	(640)	(2)
Amortization and (gains) / losses, net (paragraph65)	1,786	183	153	761	46	(11)
Transfers	(22)	22				
Effect of limit described in paragraph 65 in CPC 33	(1,151)			(314)		
<b>Total costs, net</b>		<b>223</b>	<b>408</b>	<b>2</b>	<b>183</b>	<b>197</b>

	Parent Company					
	December 31, 2012			December 31, 2011		
	Overfunded pension plans	Underfunded pension plans	Others underfunded	Overfunded pension plans	Underfunded pension plans	Others underfunded



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

			pension plans		pension plans	
Current service cost	39	13	7		28	5
Interest on actuarial liabilities	771	265	50	573	304	42
Expected return on assets	(1,423)	(319)		(994)	(277)	
Amortization and (gains) / losses, net (paragraph 58a)	1,786	89	185	735		48
Transfers	(22)	22				
Effect of limit described in paragraph 65 in CPC 33	(1,151)			(314)		
<b>Total costs, net</b>		<b>70</b>	<b>242</b>		<b>55</b>	<b>95</b>

v. **Actuarial and economic assumptions**

All of these calculations involve actuarial projections for certain parameters, such as: salaries, interest, inflation, the behavior of INSS benefits, mortality, disability, etc.

The economic actuarial assumptions adopted were based on the long-term securities and should therefore be considered on that basis. Therefore, in the short term, they may not necessarily be realized.

The evaluations adopted the following economic assumptions:

	December 31, 2012		Brazil (p.y.)		December 31, 2011	
	Overfunded pension plans	Underfunded pension plans	Others underfunded pension plans	Overfunded pension plans	Underfunded pension plans	Others underfunded pension plans
Discount rate to determine the actuarial liability	8.90% a.a.	9.04% a.a.	9.05% a.a.	10,78% a.a.	10,30% a.a.	10,30% a.a.
Discount rate to determine the expense / (income)	8.90% a.a.	9.45% a.a.	9.40% a.a.	10,78% a.a.	10,30% a.a.	10,30% a.a.
Expected return on assets	12.48% a.a.	12.55% a.a.	N/A	14.25% a.a.	13.79% a.a.	N/A
Growth rate of payroll and related charges - up to 47 years	8,15% a.a.	8,15% a.a.	N/A	8,15% a.a.	N/A	N/A
Growth rate of payroll and related charges - after 47 years	5,00% a.a.	5,00% a.a.	N/A	5,00% a.a.	5,00% a.a.	N/A
Inflation	5,00% a.a.	5,00% a.a.	5,00% a.a.	5,00% a.a.	5,00% a.a.	5,00% a.a.
Nominal growth rate of medical costs	N/A	N/A	8,15% a.a.	N/A	N/A	8,15% a.a.

Table of Contents

	Foreign (p.y.)			
	December 31, 2012		December 31, 2011	
	Underfunded pension plans	Others underfunded pension plans	Underfunded pension plans	Others underfunded pension plans
Discount rate to determine the actuarial liability	4.16% a.a.	4.20% a.a.	5.43%	5.43%
Discount rate for determinate expenses\income)	5,08% a.a.	4.20% a.a.	5.43%	5.43%
Expected return on assets	6,21% a.a.	6,50% a.a.	6.51%	6.51%
Growth rate of payroll and related charges - up to 47 years	4,04% a.a.	3,00% a.a.	4.10%	4.10%
Growth rate of payroll and related charges - after 47 years	4,04% a.a.	3,00% a.a.	4.10%	4.10%
Inflation	2,00% a.a.	2,00% a.a.	2.00%	2.00%
Nominal growth rate of medical costs	N/A	7.01% a.a.	N/A	N/A

**vi. Data from participants:**

	Consolidated					
	December 31, 2012			December 31, 2011		
	Overfunded pension plans	Underfunded pension plans	Others underfunded pension plans	Overfunded pension plans	Underfunded pension plans	Others underfunded pension plans
Number of actives participants	14	81,324	11,727	202	67,951	74,729
Average age	52	36	40	50	36	36
Average service length	28	7	7	27	7	8
Number of participants with deferred benefit (*)		6,519			5,815	
Average age		47			39	
Number of de retirees and pensioners	16,740	19,253	31,737	18,380	18,189	32,633
Average age	67	70	68	66	71	64

	Parent Company					
	December 31, 2012			December 31, 2011		
	Overfunded pension plans	Underfunded pension plans	Others underfunded pension plans	Overfunded pension plans	Underfunded pension plans	Others underfunded pension plans
Number of actives participants	14	63,735		14	54,179	65,047
Average age	52	34.5		51	35	35
Average service length	27.7	6.1		27	7	7

Number of participants with deferred benefit (*)		5,107			4,141	
Average age		47			35	
Number of de retirees and pensioners	16,740	3,267	7,144	16,901	3,167	7,516
Average age	67.4	64.8	60.7	67.0	65.0	45.0

(\*) Employees dismissed from the Company retaining the right to plan.

**vii. Assets of pension plans**

**Brazilian Plans**

The Investment Policy Statements of the 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 local pension funds regulations issued by the Conselho Monetário Nacional (CMN Resolution 3,792/09). We are allowed to invest in the following six different asset classes, defined as Segments by the law, : Fixed Income, Equity, Structured Investments (Alternative Investments and Infra-Structure Projects), International Investments, Real Estate and Loans to Participants in compliance with pre-approved policies.

The investment policies aims to achieve adequate diversification, revenue and long-term value, through a combination of the asset classes described above to meet their obligations to each plans at the appropriate level of risk.

The pension fund has a risk management process with established policies intended to identify measure and control all , such as: market, liquidity, credit, operational, systemic and legal.

Table of Contents**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 obligations.

**viii. Overfunded pension plans****Brazilian Plans**

The Defined Benefit Plan (the Old Plan) has most of its assets allocated to fixed income, mainly in Brazilian government bonds (such as TIPS) and long term inflation linked corporate bonds with the objective of reducing the asset-liability volatility. The limit allocation for these investments indexed to inflation is of 55% assets total. This Liability Driven Investments (LDI) strategy, together with Loans to Participants segment, aims to hedge the plan's liabilities against inflation risk and volatility. This plan had an average nominal income of 20% per annum, over the past 12 years. The target allocations for each investment segment or asset class are as follow:

	December 31, 2012	December 31, 2011
Fixed income investments	56.00%	57.00%
Variable income investments	25.00%	24.00%
Structures investments	6.00%	6.00%
Foreing investments	1.00%	1.00%
Real Estate	8.00%	8.00%
Operations with participants (loans)	4.00%	4.00%

The Vale Mais Plan has obligations with the characteristics of defined benefit plans and defined contribution plans. Most investments are in fixed income. To reduce the volatility of assets and liabilities from the components with defined benefit characteristics, we used Brazilian government bonds indexed to inflation. The target allocation for this strategy is 55% of the total assets of this sub-plan. The following table shows the target allocations for each investment segment or asset class:

	December 31, 2012	December 31, 2011
Fixed income investments	55.00%	56.00%
Variable income investments	24.00%	24.00%
Structures investments	3.50%	3.50%

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

Foreing investments	0.50%	0.50%
Real Estate	7.00%	6.00%
Operations with participants (loans)	0.00%	10.00%

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

Assets by category are as follows:

	December 31, 2012				Consolidated December 31, 2011				January 1, 2011			
	Level 1	Level 2	Level 2	Total	Level 1	Level 2	Level 2	Total	Level 1	Level 2	Level 2	Total
<b>Assets by category</b>												
Cash and cash equivalents									10			10
Accounts receivable	10			10	28			28	135			135
Equity securities net	2,305	1		2,306	2,391	146		2,537	2,201	125		2,326
Debt securities corporate bonds		557		557		832		832		700		700
Debt securities government bonds	4,037			4,037	3,442			3,442	3,522			3,522
Investment funds Fixed Income	3,430			3,430	2,879			2,879	2,683			2,683
Investment funds equity	516			516	538			538	855			855
Investment funds private equity	28			28	21			21	38			38
Investment funds not listed companies			393	393			331	331			213	213
Investment funds real state			17	17			37	37			32	32
Real estate			935	935			748	748			480	480
Loans from participants			398	398			343	343			303	303
<b>Total</b>	<b>10,326</b>	<b>558</b>	<b>1,743</b>	<b>12,627</b>	<b>9,299</b>	<b>978</b>	<b>1,459</b>	<b>11,736</b>	<b>9,444</b>	<b>825</b>	<b>1,028</b>	<b>11,297</b>
Funds not related to risk plans				(3,612)				(2,064)				(1,991)
<b>Fair value of plan assets at year-end</b>				<b>9,015</b>				<b>9,672</b>				<b>9,306</b>

Table of Contents

	Parent Company				December 31, 2011			Total
	Level 1	December 31, 2012		Total	Level 1	Level 2	Level 2	
	Level 1	Level 2	Level 2	Total	Level 1	Level 2	Level 2	Total
<b>Assets by category</b>								
Accounts receivable	10			10	28			28
Equity securities net	2,305	1		2,306	2,093	146		2,239
Debt securities								
corporate bonds		557		557		782		782
government bonds	4,037			4,037	3,246			3,246
Investment funds								
Fixed Income	3,430			3,430	2,636			2,636
equity	516			516	498			498
private equity	28			28	21			21
Investment funds not listed companies			393	393			258	258
Investment funds real state			17	17			32	32
Real estate			935	935			708	708
Loans from participants			398	398			332	332
<b>Total</b>	<b>10,326</b>	<b>558</b>	<b>1,743</b>	<b>12,627</b>	<b>8,522</b>	<b>928</b>	<b>1,330</b>	<b>10,780</b>
Funds not related to risk plans				(3,612)				(2,064)
<b>Fair value of plan assets at year-end</b>				<b>9,015</b>				<b>8,716</b>

Measurement of overfunded plan assets at fair value with no observable market variables - level 3

	Consolidated					Total
	Investments fund of not listed companies	Fund of real state	Real state	Loans from participants		
<b>On January 1, 2011</b>	<b>213</b>	<b>32</b>	<b>480</b>	<b>303</b>		<b>1,028</b>
Actual return on plan assets	(12)	1	133	39		161
Assets sold during the year	(2)		(36)	(119)		(157)
Assets purchased and settled	59		171	120		350
Transfers between levels	73	4				77
<b>On December 31, 2011</b>	<b>331</b>	<b>37</b>	<b>748</b>	<b>343</b>		<b>1,459</b>
Actual return on plan assets	25	(15)	235	50		295
Assets sold during the year	(36)		(61)	(165)		(262)
Assets purchased and settled	146		53	181		380
Transfers between levels	(73)	(5)	(40)	(11)		(129)

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

<b>On December 31, 2012</b>	<b>393</b>	<b>17</b>	<b>935</b>	<b>398</b>	<b>1,743</b>
-----------------------------	------------	-----------	------------	------------	--------------

	Parent Company					Total
	Investments fund of not listed companies	Fund of real state	Real state	Loans from participants		
<b>On January 1, 2011</b>	<b>213</b>	<b>31</b>	<b>438</b>	<b>292</b>	<b>974</b>	
Actual return on plan assets	(12)	1	132	40	161	
Assets sold during the year	(2)		(33)	(119)	(154)	
Assets purchased and settled	59		171	119	349	
<b>On December 31, 2011</b>	<b>258</b>	<b>32</b>	<b>708</b>	<b>332</b>	<b>1,330</b>	
Actual return on plan assets	25	(15)	235	50	295	
Assets sold during the year	(36)		(61)	(165)	(262)	
Assets purchased and settled	146		53	181	380	
<b>On December 31, 2012</b>	<b>393</b>	<b>17</b>	<b>935</b>	<b>398</b>	<b>1,743</b>	

The targeted return on private equity assets in 2013 is 11% p.a. for the Old Plan and 11% p.a. for the New Plan. The targeted 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 lower liquidity intended to profit from economic growth, especially in the infrastructure sector of the Brazilian economy. Usually the fair values of non-liquid assets are similar to their 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 on loans to participants in 2013 was 12% p.a. The fair value pricing of these assets includes provisions for unpaid loans, according to the local pension fund regulations.

The target return on real estate assets in 2013 is 12% p.a. The fair values of these assets are near to their carrying values. 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 regulations.

Table of Contents**ix. Underfunded pension plans****i. Brazilian Plans**

The obligation is exclusively allocated to fixed income. A Liability Driven Investments( LDI ) strategy was also used 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. This obligation has had an average nominal return of 17% p.a. in local currency over the last seven years.

**ii. Foreign plans**

For all pension plans except that of PT International Nickel Indonésia Tbk, a target asset allocation was 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 represent 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 a currency hedging strategy (each currency exposure is 50% hedged) due to the large exposure to foreign securities. For PT International Nickel Indonésia Tbk, the target allocation is 20% equity investment and the remainder fixed income.

Assets by category are shown below:

	December 31, 2012				Consolidated December 31, 2011				January 1, 2011			
	Level 1	Level 2	Level 2	Total	Level 1	Level 2	Level 2	Total	Level 1	Level 2	Level 2	Total
<b>Assets by category</b>												
Cash and cash equivalents	113	69		182	36	44		80	37	50		87
Accounts receivable	9			9	22			22	33			33
Equity securities net	3,200	39		3,239	2,571	113		2,684	2,704	8		2,712
Debt securities corporate bonds		1,043		1,043		594		594		292		292
Debt securities government bonds	1,041	989		2,030	605	1,171		1,776	616	693		1,309
Investment funds Fixed Income	3,258	871		4,129	2,225	1,061		3,286	1,798	1,200		2,998
Investment funds equity	1,042	842		1,884	610	703		1,313	512	577		1,089



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

Investment funds private equity	9		9	3	4		7	5	5		10
Investment funds not listed companies			88	88			31	31			25
Investment funds real state			1	1			2	2			2
Real estate			282	282			153	153			62
Loans from participants			422	422			301	301			252
<b>Total</b>	<b>8,672</b>	<b>3,853</b>	<b>793</b>	<b>13,318</b>	<b>6,072</b>	<b>3,690</b>	<b>487</b>	<b>10,249</b>	<b>5,705</b>	<b>2,825</b>	<b>341</b>
Funds not related to risk plans				(1,860)				(1,351)			(1,131)
<b>Fair value of plan assets at year-end</b>				<b>11,458</b>				<b>8,898</b>			<b>7,740</b>

	Parent Company				Parent Company			
	Level 1	December 31, 2012		Total	Level 1	December 31, 2011		Total
		Level 2	Level 2			Level 2	Level 2	
<b>Assets by category</b>								
Cash and cash equivalents	1			1	4			4
Accounts receivable	1			1	2			2
Equity securities net	414			414	271	110		381
Equity securities not net		332		332				
Debt securities corporate bonds						212		212
Debt securities government bonds	653			653	555			555
Investment funds Fixed Income	3,040			3,040	2,084			2,084
Investment funds equity	485			485	471			471
Investment funds private equity	5			5	3			3
Investment funds not listed companies			88	88			31	31
Investment funds real state			1	1			2	2
Real estate			231	231			153	153
Loans from participants			422	422			301	301
<b>Total</b>	<b>4,599</b>	<b>332</b>	<b>742</b>	<b>5,673</b>	<b>3,390</b>	<b>322</b>	<b>487</b>	<b>4,199</b>
Funds not related to risk plans				(1,860)				(1,351)
<b>Fair value of plan assets at year-end</b>				<b>3,813</b>				<b>2,848</b>

Table of Contents

Measurement of underfunded plan assets at fair value with non-observable market variables - level 3

	Consolidated				Total
	Investments fund of not listed companies	Fund of real state	Real state	Loans from participants	
<b>On January 1, 2011</b>	<b>25</b>	<b>2</b>	<b>62</b>	<b>252</b>	<b>341</b>
Actual return on plan assets	(3)		15	52	64
Assets sold during the year			(3)	(99)	(102)
Assets purchased and settled	9		79	96	184
<b>On December 31, 2011</b>	<b>31</b>	<b>2</b>	<b>153</b>	<b>301</b>	<b>487</b>
Actual return on plan assets	2	(1)	69	54	124
Assets sold during the year	(12)		(6)	(139)	(157)
Assets purchased and settled	67		26	206	299
Transfers between levels			40		40
<b>On December 31, 2012</b>	<b>88</b>	<b>1</b>	<b>282</b>	<b>422</b>	<b>793</b>

	Parent Company				Total
	Investments fund of not listed companies	Fund of real state	Real state	Loans from participants	
<b>On January 1, 2011</b>	<b>25</b>	<b>2</b>	<b>62</b>	<b>252</b>	<b>341</b>
Actual return on plan assets	(3)		15	52	64
Assets sold during the year			(3)	(99)	(102)
Assets purchased and settled	9		79	96	184
<b>On December 31, 2011</b>	<b>31</b>	<b>2</b>	<b>153</b>	<b>301</b>	<b>487</b>
Actual return on plan assets	2	(1)	62	54	117
Assets sold during the year	(12)		(6)	(139)	(157)
Assets purchased and settled	67		22	206	295
<b>On December 31, 2012</b>	<b>88</b>	<b>1</b>	<b>231</b>	<b>422</b>	<b>742</b>

x. **Assets of underfunded other benefits**

i. **Plans abroad**

Underfunded other benefits by asset category:

December 31, 2012

Consolidated

December 31, 2011

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

	Level 1	Level 2	Level 2	Total	Level 1	Level 2	Level 2	Total
<b>Assets by category</b>								
Cash and cash equivalents		2		2	3			3
<b>Fair value of plan assets at year-end</b>				<b>2</b>				<b>3</b>

**xi. Disbursement of future cash flow**

Vale expects to disburse in 2013 in relation to pension plans and other benefits, R\$827 on the consolidated and R\$286 on the parent company.

**xii. Sensitivity to the nominal growth rate of medical costs**

	Consolidated			
	Increase of 1%		Decrease of 1%	
	December 31, 2012	December 31, 2011	December 31, 2012	December 31, 2011
Present value of obligations	735	483	(573)	(385)
Interest and service cost	61	41	(39)	(32)

	Parent Company			
	Increase of 1%		Decrease of 1%	
	December 31, 2012	December 31, 2011	December 31, 2012	December 31, 2011
Present value of obligations	71	40	(60)	(34)
Interest and service cost	4	4	(5)	(4)

Table of Contents**xiii. Estimated future benefit payments**

The following table presents the expected benefit payments, which reflect future services:

	<b>Consolidated</b>			<b>Total</b>
	<b>Overfunded pension plans</b>	<b>Underfunded pension plans</b>	<b>Others underfunded pension plans</b>	
2013	463	1,004	189	1,656
2014	478	776	196	1,450
2015	494	793	204	1,491
2016	509	808	210	1,527
2017	524	824	216	1,564
2018 onwards	2,820	4,220	1,055	8,095

	<b>Parent Company</b>			<b>Total</b>
	<b>Overfunded pension plans</b>	<b>Underfunded pension plans</b>	<b>Others underfunded pension plans</b>	
2013	463	197	48	708
2014	478	214	51	743
2015	494	235	55	784
2016	509	254	59	822
2017	524	274	63	861
2018 onwards	2,820	1,727	236	4,783

**b) Participation in profit sharing program**

The Company's Participation in Results Program ( PPR ) measured on the evaluation of individual and collective performance of its employees.

The Participation in Results in the Company for each employee is calculated individually according to the achievement of goals previously established using indicators for the performance of the Company, Business Unit, Team and individual. The contribution of each performance unit to the performance scores of employees is discussed and agreed each year, between Vale and the unions representing the employees.

The Company accrued expenses / costs related to participation in the results as follows:

	Consolidated		Parent Company	
	December 31, 2012	December 31, 2011	December 31, 2012	December 31, 2011
Operational expenses	871	697	575	627
Cost of good sold	954	828	871	715
<b>Total</b>	<b>1,825</b>	<b>1,525</b>	<b>1,446</b>	<b>1,342</b>

c) **Long-Term stock option compensation plan**

In order to promote a stockholder cultures, in addition to increasing the ability to retain executives and to strengthen the culture of sustainability performance, Vale has a Long-term Compensation Plan, for some executives of the Company, covering three years cycles.

Under the terms of the plan, the participants may allocate a portion of their annual bonus to the plan. Part of the bonus allocated to the plan can be used by executive to purchase preferred stock of Vale, through a prescribed financial institution under market conditions and without any benefit being provided by Vale.

The shares purchased by executives have no restrictions and can, be sold at any time. However, the shares need to be held for a period of three years, and the executives need to maintain their employment relationship with Vale during this period. The participant shall be entitled, as long as the shares are not sold and employment relationship is maintained, to receive from Vale a payment in cash equivalent to the value of their stock holdings under this scheme, based on market quotations. The total number of stocks linked to the plan as at December 31, 2012, 2011 was 4,426,046 and 3,012,538, respectively.

Additionally, certain executives eligible for long-term incentives have the opportunity to receive, at the end of three year cycle, an amount in cash equivalent to the Market value of a number of shares based on factors measured using the total return to the stockholders as an indicator.

Table of Contents

Liabilities are measured at fair value as at the date of each issue of the report, based on Market rates.

The compensation costs incurred are recognized according to the defined vesting period of three years. As at December 31, 2012, 2011 we recorded a liability of R\$ 178 and R\$ 204 respectively, in the statement of Income

**22 - Classification of financial instruments**

The classification of financial assets and liabilities is shown in the following tables:

	<b>Consolidated December 31, 2012</b>			
	<b>Loans and receivables (a)</b>	<b>At fair value through profit or loss (b)</b>	<b>Derivatives designated as hedge (c)</b>	<b>Total</b>
<b>Financial assets</b>				
<b>Current</b>				
Cash and cash equivalents	11,918			11,918
Short-term investments		506		506
Derivatives at fair value		543	32	575
Accounts receivable from customers	13,885			13,885
Related parties	786			786
	<b>26,589</b>	<b>1,049</b>	<b>32</b>	<b>27,670</b>
<b>Non current</b>				
Related parties	833			833
Loans and financing	502			502
Derivatives at fair value		83	10	93
	<b>1,335</b>	<b>83</b>	<b>10</b>	<b>1,428</b>
<b>Total of Assets</b>	<b>27,924</b>	<b>1,132</b>	<b>42</b>	<b>29,098</b>
<b>Financial liabilities</b>				
<b>Current</b>				
Suppliers and contractors	9,255			9,255
Derivatives at fair value		708	2	710
Current portion of long-term debt	7,093			7,093
Related parties	423			423
	<b>16,771</b>	<b>708</b>	<b>2</b>	<b>17,481</b>
<b>Non current</b>				
Derivatives at fair value		1,601		1,601
Loans and financing	54,763			54,763

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

Related parties	146			146
Debentures		3,379		3,379
	<b>54,909</b>	<b>4,980</b>		<b>59,889</b>
<b>Total of Liabilities</b>	<b>71,680</b>	<b>5,688</b>	<b>2</b>	<b>77,370</b>

---

(a) Non derivative financial instruments with determinable cash flow.

(b) Financial instruments acquired with the purpose of trading in the short term.

(c) See note 25(a).

Table of Contents

	Consolidated December 31, 2011			
	Loans and receivables (a)	At fair value through profit or loss (b)	Derivatives designated as hedge (c)	Total
<b>Financial assets</b>				
<b>Current</b>				
Cash and cash equivalents	6,593			6,593
Derivatives at fair value		810	302	1,112
Accounts receivable from customers	15,889			15,889
Related parties	154			154
	<b>22,636</b>	<b>810</b>	<b>302</b>	<b>23,748</b>
<b>Non current</b>				
Related parties	904			904
Loans and financing	399			399
Derivatives at fair value		112		112
	<b>1,303</b>	<b>112</b>		<b>1,415</b>
<b>Total of financial assets</b>	<b>23,939</b>	<b>922</b>	<b>302</b>	<b>25,163</b>
<b>Financial liabilities</b>				
<b>Current</b>				
Suppliers and contractors	8,851			8,851
Derivatives at fair value		110	26	136
Current portion of long-term debt	2,807			2,807
Loans and financing	40			40
Related parties	43			43
	<b>11,741</b>	<b>110</b>	<b>26</b>	<b>11,877</b>
<b>Non current</b>				
Derivatives at fair value		1,239		1,239
Loans and financing	40,225			40,225
Related parties	171			171
Debentures		2,496		2,496
	<b>40,396</b>	<b>3,735</b>		<b>44,131</b>
<b>Total of financial liabilities</b>	<b>52,137</b>	<b>3,845</b>	<b>26</b>	<b>56,008</b>

(a) Non derivative financial instruments with determinable cash flow.

(b) Financial instruments acquired with the purpose of trading in the short term.

(c) See note 25(a).

	Consolidated January 1, 2011			
	Loans and receivables (a)	At fair value through profit or loss (b)	Derivatives designated as hedge (c)	Total



<b>Financial assets</b>				
<b>Current</b>				
Cash and cash equivalents	12,636			12,636
Short-term investments		2,987		2,987
Derivatives at fair value		54	33	87
Accounts receivable from customers	13,681			13,681
Related parties	160			160
	<b>26,477</b>	<b>3,041</b>	<b>33</b>	<b>29,551</b>
<b>Non current</b>				
Related parties	48			48
Loans and financing	273			273
Derivatives at fair value		502		502
	<b>321</b>	<b>502</b>		<b>823</b>
<b>Total of financial assets</b>	<b>26,798</b>	<b>3,543</b>	<b>33</b>	<b>30,374</b>
<b>Financial liabilities</b>				
Suppliers and contractors	5,928			5,928
Derivatives at fair value		58		58
Current portion of long-term debt	4,707			4,707
Loans and financing	232			232
Related parties	35			35
	<b>10,902</b>	<b>58</b>		<b>10,960</b>
<b>Non current</b>				
Derivatives at fair value		13	89	102
Loans and financing	35,978			35,978
Related parties	3			3
Debentures		2,139		2,139
	<b>35,981</b>	<b>2,152</b>	<b>89</b>	<b>38,222</b>
<b>Total of financial liabilities</b>	<b>46,883</b>	<b>2,210</b>	<b>89</b>	<b>49,182</b>

(a) Non derivative financial instruments with determinable cash flow.

(b) Financial instruments acquired with the purpose of trading in the short term.

(c) See note 25(a).

Table of Contents

	Loans and receivables (a)	Parent Company December 31, 2012 At fair value through profit or loss (b)	Total
<b>Financial assets</b>			
<b>Current</b>			
Cash and cash equivalents	688		688
Short-term investments		43	43
Derivatives at fair value		500	500
Accounts receivable from customers	21,839		21,839
Related parties	1,347		1,347
	<b>23,874</b>	<b>543</b>	<b>24,417</b>
<b>Non Current</b>			
Related parties	864		864
Loans and financing	188		188
Derivatives at fair value		3	3
	<b>1,052</b>	<b>3</b>	<b>1,055</b>
<b>Total of Assets</b>	<b>24,926</b>	<b>546</b>	<b>25,472</b>
<b>Financial Liabilities</b>			
<b>Current</b>			
Suppliers and contractors	4,178		4,178
Derivatives at fair value		558	558
Current portion of long-term debt	5,328		5,328
Related parties	6,434		6,434
	<b>15,940</b>	<b>558</b>	<b>16,498</b>
<b>Non Current</b>			
Derivatives at fair value		1,410	1,410
Loans and financing	26,867		26,867
Related parties	29,363		29,363
Debentures		3,379	3,379
	<b>56,230</b>	<b>4,789</b>	<b>61,019</b>
<b>Total of Liabilities</b>	<b>72,170</b>	<b>5,347</b>	<b>77,517</b>

(a) Non derivative financial instruments with determinable cash flow.

(b) Financial instruments acquired with the purpose of trading in the short term.

	Loans and receivables (a)	Parent Company December 31, 2011 At fair value through profit or loss (b)	Derivatives designated as hedge (c)	Total
<b>Financial assets</b>				
<b>Current</b>				
Cash and cash equivalents	575			575

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

Derivatives at fair value		573	1	574
Accounts receivable from customers	15,809			15,809
Related parties	2,561			2,561
	<b>18,945</b>	<b>573</b>	<b>1</b>	<b>19,519</b>
<b>Non current</b>				
Related parties	446			446
Loans and financing	158			158
Derivatives at fair value		96		96
	<b>604</b>	<b>96</b>		<b>700</b>
<b>Total of financial assets</b>	<b>19,549</b>	<b>669</b>	<b>1</b>	<b>20,219</b>
<b>Financial liabilities</b>				
<b>Current</b>				
Suppliers and contractors	3,504			3,504
Derivatives at fair value		91	26	117
Current portion of long-term debt	892			892
Related parties	4,959			4,959
	<b>9,355</b>	<b>91</b>	<b>26</b>	<b>9,472</b>
<b>Non current</b>				
Derivatives at fair value		953		953
Loans and financing	18,596			18,596
Related parties	28,654			28,654
Debentures		2,496		2,496
	<b>47,250</b>	<b>3,449</b>		<b>50,699</b>
<b>Total of financial liabilities</b>	<b>56,605</b>	<b>3,540</b>	<b>26</b>	<b>60,171</b>

(a) Non derivative financial instruments with determinable cash flow.

(b) Financial instruments acquired with the purpose of trading in the short term.

(c) See note 25a.

Table of Contents**23 - Fair Value Estimative**

Due to the short-term cycle, it is assumed that the fair value of cash and cash equivalents balances, short-term investments, accounts receivable and accounts payable are close to their book values. For the measurement and determination of fair value, the Company uses various methods including market income or cost approaches, in order to estimate the value that market participants would use when pricing the asset or liability. The financial assets and liabilities recorded at fair value are classified and disclosed in accordance with the following levels:

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

**Level 2** - Quoted prices (adjusted or unadjusted) for identical or similar assets or liabilities in active markets and

**Level 3** - Assets and liabilities, for which quoted prices do not exist, or where prices or valuation techniques are supported by little or no market activity, unobservable or illiquid.

The tables below present the assets and liabilities of the parent and the consolidated company measured at fair value as at December 31, 2012 and December 31, 2011.

	December 31, 2012			Consolidated December 31, 2011			1 de janeiro de 2011		
	Level 1	Level 2	Total (i)	Level 1	Level 2	Total (i)	Level 1	Level 2	Total (i)
<b>Financial Assets</b>									
<b>Current</b>									
Derivatives									
Derivatives at fair value through profit or loss		543	543		810	810	22	32	54
Derivatives designated as hedges		32	32		302	302		33	33
		<b>575</b>	<b>575</b>		<b>1,112</b>	<b>1,112</b>	<b>22</b>	<b>65</b>	<b>87</b>
<b>Non-Current</b>									
Derivatives									
Derivatives at fair value through profit or loss		83	83		112	112		502	502
		10	10						

Derivatives designated as hedges

		<b>93</b>	<b>93</b>		<b>112</b>	<b>112</b>		<b>502</b>	<b>502</b>
<b>Total of Assets</b>		<b>668</b>	<b>668</b>		<b>1,224</b>	<b>1,224</b>	<b>22</b>	<b>567</b>	<b>589</b>

**Financial Liabilities**

**Current**

Derivatives at fair value through profit or loss	3	705	708	1	109	110	20	38	58
Derivatives designated as hedges		2	2		26	26			
	<b>3</b>	<b>707</b>	<b>710</b>	<b>1</b>	<b>135</b>	<b>136</b>	<b>20</b>	<b>38</b>	<b>58</b>

**Non-Current**

Derivatives

Derivatives at fair value through profit or loss		1,601	1,601		1,239	1,239		14	14
Derivatives designated as hedges								88	88
Stockholders debentures		3,379	3,379		2,496	2,496		2,139	2,139
		<b>4,980</b>	<b>4,980</b>		<b>3,735</b>	<b>3,735</b>		<b>2,241</b>	<b>2,241</b>
<b>Total of Liabilities</b>	<b>3</b>	<b>5,687</b>	<b>5,690</b>	<b>1</b>	<b>3,870</b>	<b>3,871</b>	<b>20</b>	<b>2,279</b>	<b>2,299</b>

(i) No classification according to the level 3.

Table of Contents

	Parent Company	
	December 31, 2012 Level 2 (i)	December 31, 2011 Level 2 (i)
<b>Financial Assets</b>		
<b>Current</b>		
Derivatives		
Derivatives at fair value through profit or loss	500	573
Derivatives designated as hedges		1
	<b>500</b>	<b>574</b>
<b>Non-current</b>		
Derivatives at fair value through profit or loss	3	96
	<b>3</b>	<b>96</b>
<b>Total of assets</b>	<b>503</b>	<b>670</b>
<b>Financial Liabilities</b>		
<b>Current</b>		
Derivatives		
Derivatives at fair value through profit or loss	558	91
Derivatives designated as hedges		26
	<b>558</b>	<b>117</b>
<b>Non-current</b>		
Derivatives		
Derivatives at fair value through profit or loss	1,410	953
Stockholders' debentures	3,379	2,496
	<b>4,789</b>	<b>3,449</b>
<b>Total of liabilities</b>	<b>5,347</b>	<b>3,566</b>

---

(i) No classification according to the level 1 and 3.

a) **Methods and Techniques of Evaluation**

i. **Assets and liabilities at fair value through profit or loss**

Comprise derivatives not designated as hedges and stockholders' debentures.

- **Derivatives designated or not as hedge**

The financial instruments were evaluated by calculating their present value through the use of instrument yield curves at verification dates. The curves and prices used in the calculation for each group of instruments are detailed in the market yield curves .

The pricing method used for European options is the Black-Scholes model. In this model, the fair value of the derivative is a function of the volatility in the price of the underlying asset, the exercise price of the option, the interest rate and period to maturity. In the case of options when the income is a function of the average price of the underlying asset over the period of the option, we use the Turnbull & Wakeman model. In this model, besides the factors that influence the option price in the Black-Scholes model, the formation period of the average price is also considered.

In the case of swaps, both the present value of the assets and liability are estimated by discounting the cash flows by the interest rate of the currency in which the swap is denominated. The difference between the present value of the asset and liability of the swap generates its fair value.

In the case of swaps tied to the TJLP the calculation of fair value considers the TJLP as a constant, that is, the projections of future cash flows in Brazilian Reals are made on the basis of the last TJLP disclosed.

Contracts for the purchase or sale of products, inputs and costs of selling with future settlement are priced using the forward yield curves for each product. Typically, these curves are obtained on the stock exchanges where the products are traded, such as the London Metals Exchange ( LME ), the Commodity Exchange ( COMEX ) or other providers of market prices. When there is no price for the desired maturity, Vale uses an interpolation between the available maturities.

Table of Contents

• **Stockholders Debentures**

Comprises the debentures issued during the privatization process (see Note 29(b)), whose fair values are measured based on the market approach. Reference prices are available on the secondary market.

ii. **Assets available-for-sales**

Represents assets that are not held-to-maturity for strategic reasons, investments that are valued based on quoted prices on active markets where available or internal assessments based on the expected future cash flows of the assets.

b) **Fair value measurement compared to book value**

For the loans allocated to Level 1, the evaluation method used to estimate the fair value of debt is the market approach to the contracts listed on the secondary market. For the loans allocated Level 2, the fair value for both fixed-indexed rate debt and floating rate is determined from the discounted cash flow using the future values of the LIBOR rate and the curves of Vale's Bonds (income approach).

The fair values and carrying amounts of non-current loans (net of interest) are shown in the table below:

	<b>Consolidated December 31, 2012</b>			
	<b>Balance</b>	<b>Fair value (a)</b>	<b>Level 1</b>	<b>Level 2</b>
<b>Financial liabilities</b>				
Loans (long term)(i)	60,988	66,872	52,757	14,115
Perpetual notes (ii)	146	146		146

(i) Net interest of R\$ 868

(ii) classified on Related parties (Non-current liabilities)



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

(a) No classification according to the level 3.

	Consolidated December 31, 2011			
	Balance	Fair value (a)	Level 1	Level 2
<b>Financial liabilities</b>				
Loans (long term)(i)	42,410	48,325	35,884	12,441
Perpetual notes (ii)	149	149		149

(i) Net interest of R\$ 622

(ii) classified on Related parties (Non-current liabilities)

(a) No classification according to the level 3.

	Consolidated January 1, 2011			
	Balance	Fair value (a)	Level 1	Level 2
Time deposit	2,987	2,987		2,987
<b>Financial liabilities</b>				
Loans (long term)(i)	(40,107)	(42,095)	(32,874)	(9,221)

(i) Net interest of R\$ 578

(a) No classification according to the level 3.

	Parent Company (a) December 31, 2012			
	Balance	Fair value (a)	Level 1	Level 2
<b>Loans (long term) (i)</b>	31,795	33,183	18,817	14,366

(i) net interest of R\$ 400

(a) There are no level 3 classification.

	Parent Company (a) 40908			
	Balance	Fair value (a)	Level 1	Level 2
<b>Loans (long term) (i)</b>	19,209	19,719	12,010	7,710

(i) net interest of R\$ 279

(a) There are no level 3 classification.

Table of Contents**24. Stockholders Equity****a) Capital**

The Stockholders Equity is represented by common (ON) and preferred non-redeemable shares (PNA) without par value. Preferred shares have the same rights as common shares, with the exception of voting for the election of members of the Board of Directors. The Board of Directors may, regardless of changes to bylaws, issuing new shares (up to the authorized capital), including the capitalization of profits and reserves to the extent authorized.

In December 31 2012, the capital was R\$ 75 billion corresponding to 5.365.304.100 (3.256.724.482 common and 2.108.579.618 preferred) shares with no par value.

Stockholders	December 31, 2012		
	ON	PNA	Total
Valepar S.A.	1,716,435,045	20,340,000	1,736,775,045
Brazilian Government (Golden Share)		12	12
Foreign investors - ADRs	678,752,292	740,850,726	1,419,603,018
FMP - FGTS	93,278,145		93,278,145
PIBB - BNDES	1,921,106	2,859,336	4,780,442
BNDESPar	206,378,881	67,342,071	273,720,952
Foreign institutional investors in the local market	251,342,812	442,520,400	693,863,212
Institutional investors	181,510,919	366,954,770	548,465,689
Retail investors in the country	56,033,800	326,854,611	382,888,411
Treasure stock in the country	71,071,482	140,857,692	211,929,174
<b>Total</b>	<b>3,256,724,482</b>	<b>2,108,579,618</b>	<b>5,365,304,100</b>

**b) Revenue reserves**

The changes in earnings were as follow:

Investment reserve	Legal reserve	Tax incentive reserve	Total of undistributed revenue reserves
-----------------------	---------------	--------------------------	---

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

<b>Total amount in January 1, 2011</b>	<b>65,685</b>	<b>5,700</b>	<b>1,102</b>	<b>72,487</b>
Capitalization of reserves	(22,867)		(266)	(23,133)
Allocation of income	25,864	1,891	996	28,751
<b>Total amount in December 31, 2011</b>	<b>68,682</b>	<b>7,591</b>	<b>1,832</b>	<b>78,105</b>
Allocation of income		486	599	1,085
Realization of reserves	(740)			(740)
<b>Total amount in December 31, 2012</b>	<b>67,942</b>	<b>8,077</b>	<b>2,431</b>	<b>78,450</b>

The investment reserve aims to retain funding for the maintenance and development of the major activities that comprise the Company's corporate purpose in an amount not exceeding 50% of net income.

The legal reserve is a requirement for all Brazilian Public Company and represents appropriations of 5% of annual net income based on Brazilian law, up to 20% of the capital.

The tax incentive reserve resulting from the option to designate a portion of the income tax for investments to projects approved by the Brazilian Government as well as tax incentives (Note 20).

**c) Resources linked to the future mandatory conversion in shares**

In June 2012, the convertible notes series VALE and VALE.P-2012 were converted into ADS and represent an aggregate of 15,839,592 common shares and 40,241,968 preferred class A shares. The Conversion was made using 56,081,560 treasury stocks held by the Company. The difference between the book value of the treasury stocks R\$ 2.079 and the total amount received R\$ 2.129 was recognized in the stockholders' equity, with no profit or loss impact.

**d) Treasury stocks**

In November 2011, as part of the buy-back program approved in June 2011, we concluded the acquisitions 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 R\$44.06 and R\$40.90 per share (including shares of each class in the form of ADR), for a total aggregate purchase price of US\$3 billion. The repurchased

Table of Contents

shares represented 3.1% of the free float of common shares, and 4.24% of the free float of preferred shares, outstanding before the launch of the program. The shares acquired are to be held in treasury for cancellation.

As at December 31, 2012, there are 211,929,174 treasury stocks, in the amount of R\$7,840 as follows:

Classes (milhares)	December 31, 2011	Reduction	December 31, 2012	Acquisition price (R\$)			December 31, 2012	December 31, 2011
				Average	Low(*)	High		
Preferred	181,100	(40,242)	140,858	37.50	14.02	47.77	39.58	45.08
Common	86,911	(15,840)	71,071	35.98	20.07	54.83	38.50	51.50
<b>Total</b>	<b>268,011</b>	<b>(56,082)</b>	<b>211,929</b>					

e) **Basic and diluted earnings per share**

The basic and diluted earnings per shares were calculated as follows:

	Year ended	
	December 31, 2012	December 31, 2011
<b>Net income from continuing operations attributable to the Company's stockholders</b>	<b>9,734</b>	<b>37,814</b>
<b>Basic and diluted earnings per share:</b>		
Income available to preferred stockholders	3,686	14,862
Income available to common stockholders	6,048	22,952
<b>Total</b>	<b>9,734</b>	<b>37,814</b>
Weighted average number of shares outstanding (thousands of shares) - preferred shares	1,933,491	2,031,315
Weighted average number of shares outstanding (thousands of shares) - common shares	3,172,179	3,215,479
<b>Total</b>	<b>5,105,670</b>	<b>5,246,794</b>
<b>Basic and diluted earnings per share</b>		
Basic earnings per preferred share	1.91	7.21
Basic earnings per common share	1.91	7.21

f) **Remuneration of stockholders**

**Remuneration attributed to Stockholders**

	Total amount	Amount per outstanding common or preferred share
<b>Amount paid in 2011 regarding 2010</b>		
First installment, paid in April 2011	3,174	0.608246495
Additional remuneration, paid in August 2011	4,855	0.933403176
Second installment, paid in October 2011	3,507	0.682507540
Additional remuneration, paid in October 2011	1,753	0.341156463
<b>Total</b>	<b>13,289</b>	
<b>Amount paid in 2012 regarding 2011</b>		
First installment, paid in April 2012	5,481	1.075276545
Second installment, paid in October 2012	6,115	1.186523412
<b>Total</b>	<b>11,596</b>	

The following, proposal for allocation of 2012 stockholders remuneration:

<b>Remuneration attributed to Stockholders:</b>	
<b>Net income</b>	<b>9,734</b>
Legal reserve	(486)
Tax incentive reserve	(599)
<b>Adjusted net income</b>	<b>8,649</b>
<b>Dividends:</b>	
Mandatory minimum - 25% (R\$ 0.474418703 per outstanding share) in form of dividends	2,162
Statutory dividend on preferred shares:	
3% of stockholders equity R\$ 0.969324381 per outstanding share	1,907
6% of capital R\$ 0.898761480 per outstanding share	1,769
<b>Remuneration:</b>	
Interest on capital advanced in April 2012	3,274
Interest on capital advanced in October 2012	2,710
Dividends advanced on October 2012	3,405
<b>Remuneration to Stockholders (R\$ 1.828805334 per outstanding shares)</b>	<b>9,389</b>

Table of Contents**25. Derivatives****a) Effects of Derivatives on the Statement of Financial Position**

	December 31, 2012		Consolidated Assets December 31, 2011		1 de janeiro de 2011	
	Current	Non-current	Current	Non-current	Current	Non-current
<b>Derivatives not designated as hedge</b>						
<b>Foreign exchange and interest rate risk</b>						
CDI & TJLP vs. US\$ fixed and floating rate swap	510	3	767	112		502
EURO floating rate vs. US\$ fixed rate swap					2	
Eurobonds Swap		80				
Pre dollar swap	33		35			
	<b>543</b>	<b>83</b>	<b>802</b>	<b>112</b>	<b>2</b>	<b>502</b>
<b>Commodities price risk</b>						
Nickel:						
Fixed price program			1		24	
Bunker Oil Hedge			7		28	
			<b>8</b>		<b>52</b>	
<b>Derivatives designated as hedge</b>						
Strategic Nickel	26		301			
Foreign exchange cash flow hedge	6	10	1			
Aluminum					33	
	<b>32</b>	<b>10</b>	<b>302</b>		<b>33</b>	
<b>Total</b>	<b>575</b>	<b>93</b>	<b>1,112</b>	<b>112</b>	<b>87</b>	<b>502</b>

	December 31, 2012		Consolidated Liabilites December 31, 2011		1 de janeiro de 2011	
	Current	Non-current	Current	Non-current	Current	Non-current
<b>Derivatives not designated as hedge</b>						
<b>Foreign exchange and interest rate risk</b>						
CDI & TJLP vs. US\$ fixed and floating rate swap	696	1,431	91	1,101		
US\$ floating rate vs. US\$ fixed rate swap					7	

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

Eurobonds Swap	9	37	8	61		14
South African randes forward			10			
Pre dollar swap		129		77		
	<b>705</b>	<b>1,597</b>	<b>109</b>	<b>1,239</b>	<b>7</b>	<b>14</b>
<b>Commodities price risk</b>						
Nickel:						
Fixed price program	3		1		20	
Purchase program					25	
Maritime Freight Hiring Protection Program					3	
Coal					3	
	<b>3</b>		<b>1</b>		<b>51</b>	
<b>Embedded derivatives</b>						
Gas		4				
		<b>4</b>				
<b>Derivatives designated as hedge</b>						
Bunker Oil Hedge	2					
Strategic Nickel						88
Foreign exchange cash flow hedge			26			
	<b>2</b>		<b>26</b>			<b>88</b>
<b>Total</b>	<b>710</b>	<b>1,601</b>	<b>136</b>	<b>1,239</b>	<b>58</b>	<b>102</b>



Table of Contents

	Parent Company							
	Assets				Liabilities			
	December 31, 2012		December 31, 2011		December 31, 2012		December 31, 2011	
Current	Non-current	Current	Non-current	Current	Non-current	Current	Non-current	
<b>Derivatives not designated as hedge</b>								
<b>Foreign exchange and interest rate risk</b>								
CDI & TJLP vs. US\$ fixed and floating rate swap	467	3	538	96	558	1,281	91	876
Pre dollar swap	33		35			129		77
	<b>500</b>	<b>3</b>	<b>573</b>	<b>96</b>	<b>558</b>	<b>1,410</b>	<b>91</b>	<b>953</b>
<b>Derivatives designated as hedge</b>								
Foreign exchange cash flow hedge			1				26	
			<b>1</b>				<b>26</b>	
<b>Total</b>	<b>500</b>	<b>3</b>	<b>574</b>	<b>96</b>	<b>558</b>	<b>1,410</b>	<b>117</b>	<b>953</b>

b) **Effects of derivatives in the statement of income**

	Consolidated Year ended	
	December 31, 2012	December 31, 2011
<b>Derivatives not designated as hedge</b>		
<b>Foreign exchange and interest rate risk</b>		
CDI & TJLP vs. US\$ fixed and floating rate swap	(655)	(273)
NDF swap		(2)
Eurobonds Swap	100	(58)
US\$ fixed rate vs. CDI swap		128
Randes Forward		(14)
Treasury future	15	(22)
Pre dollar swap	(17)	(41)
	<b>(557)</b>	<b>(282)</b>
<b>Commodities price risk</b>		
Nickel		
Fixed price program	(4)	69
Strategic program		25
Purchased scrap protection program		1
Bunker Oil Hedge		60
	<b>(4)</b>	<b>155</b>
<b>Embedded derivatives</b>		

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

Gas	(5)	
Energy - Aluminum options		(12)
	(5)	(12)
<b>Derivatives designated as hedge</b>		
Bunker Oil Hedge	4	
Strategic Nickel	337	93
Foreign exchange cash flow hedge	(55)	66
	<b>286</b>	<b>159</b>
<b>Total</b>	<b>(280)</b>	<b>20</b>
Financial income	992	1,722
Financial (expenses)	(1,272)	(1,702)
<b>Total</b>	<b>(280)</b>	<b>20</b>

	Parent Company Year ended	
	December 31, 2012	December 31, 2011
<b>Derivatives not designated as hedge</b>		
<b>Foreign exchange and interest rate risk</b>		
CDI & TJLP vs. US\$ fixed and floating rate swap	(660)	(220)
US\$ fixed rate vs. CDI swap		128
Pre dollar swap	(17)	(45)
	<b>(677)</b>	<b>(137)</b>
<b>Derivatives designated as hedge</b>		
Foreign exchange cash flow hedge	(58)	65
	<b>(58)</b>	<b>65</b>
<b>Total</b>	<b>(735)</b>	<b>(72)</b>
Financial income	274	1,051
Financial (expenses)	(1,009)	(1,123)
<b>Total</b>	<b>(735)</b>	<b>(72)</b>

Table of Contents

## c) Effects of derivatives as Cash Flow hedge

	Consolidated Year ended	
	December 31, 2012	December 31, 2011
<b>Derivatives not designated as hedges</b>		
<b>Exchange risk and interest rates</b>		
CDI & TJLP vs. US\$ fixed and floating rate swap	(628)	(563)
US\$ floating rate vs. US\$ fixed rate swap		7
Euro floating rate vs. US\$ fixed rate swap		(1)
AUD Forward		(4)
EuroBonds Swap	7	2
US\$ fixed rate vs. CDI swap		(128)
South African randes forward		13
Treasury future	(6)	11
Pre dollar swap	(36)	(1)
	<b>(663)</b>	<b>(664)</b>
<b>Risk of product prices</b>		
Nickel		
Fixed price program	1	(69)
Purchased scrap protection program		(1)
Maritime Freight Hiring Protection Program		3
Bunker Oil Hedge	(9)	(80)
Coal		3
	<b>(8)</b>	<b>(144)</b>
<b>Derivatives designated as hedges</b>		
Bunker Oil Hedge	(3)	
Strategic Nickel	(337)	(93)
Foreign exchange cash flow hedge	55	(88)
Aluminum		12
	<b>(285)</b>	<b>(169)</b>
<b>Total</b>	<b>(956)</b>	<b>(977)</b>
<b>Gains (losses) unrealized derivative</b>	<b>(1,236)</b>	<b>(957)</b>

	Parent Company Year ended	
	December 31, 2012	December 31, 2011
<b>Derivatives not designated as hedges</b>		
<b>Exchange risk and interest rates</b>		
CDI & TJLP vs. US\$ fixed and floating rate swap	(375)	(395)
Euro floating rate vs. US\$ fixed rate swap		(1)
US\$ fixed rate vs. CDI swap		(128)
Pre dollar swap	(36)	
	<b>(411)</b>	<b>(524)</b>

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

**Derivatives designated as hedges**

Foreign exchange cash flow hedge	57	(65)
	57	(65)
<b>Total</b>	<b>(354)</b>	<b>(589)</b>
<b>Gains (losses) unrealized derivative</b>	<b>(1,089)</b>	<b>(661)</b>

Table of Contents**d) Effects of derivatives designated as hedge****i. Cash Flow Hedge**

The effects of cash flow hedge impact the stockholders' equity and are presented in the following tables:

	Currency	Parent Company			Year ended		noncontrolling stockholders	Consolidated Total
		Nickel	Others	Total	Total			
Fair value measurements	(46)	437		6	397	1	398	
Reclassification to results due to realization	(65)	(93)			(158)		(158)	
<b>Net change in December 31, 2011</b>	<b>(111)</b>	<b>344</b>		<b>6</b>	<b>239</b>	<b>1</b>	<b>240</b>	
Fair value measurements	(7)	45		1	39		39	
Reclassification to results due to realization	58	(336)		(3)	(281)		(281)	
<b>Net change in December 31, 2012</b>	<b>51</b>	<b>(291)</b>		<b>(2)</b>	<b>(242)</b>		<b>(242)</b>	

**Additional information about derivatives financial instruments****Value at Risk computation methodology**

The Value at Risk of the positions was measured using a delta-Normal parametric approach, which considers that the future distribution of the risk factors - and its correlations - tends to present the same statistic properties verified in the historical data. The value at risk of Vale's derivatives current positions was estimated considering one business day time horizon and a 95% confidence level.

**Contracts subjected to margin calls**

Vale has contracts subject to margin calls only for part of nickel trades executed by its wholly-owned subsidiary Vale Canada Ltd. The total cash amount as of December 31, 2012 is not relevant.

**Initial Cost of Contracts**

The financial derivatives negotiated by Vale and its controlled companies described in this document didn't have initial costs (initial cash flow) associated.

The following tables show as of December 31, 2012, the derivatives positions for Vale and controlled companies with the following information: notional amount, fair value, value at risk, gains or losses in the period and the fair value for the remaining years of the operations per each group of instruments.

Table of Contents

**Interest Rates and Foreign Exchange Derivative Positions**

**Protection program for the Real denominated debt indexed to CDI**

- **CDI vs. USD fixed rate swap** In order to reduce the cash flow volatility, Vale entered into swap transactions to convert the cash flows from debt instruments denominated in Brazilian Reais linked to CDI to U.S. Dollars. In those swaps, Vale pays fixed rates in U.S. Dollars and receives payments linked to CDI.
- **CDI vs. USD floating rate swap** In order to reduce the cash flow volatility, Vale entered into swap transactions to convert the cash flows from debt instruments denominated in Brazilian Reais linked to CDI to U.S. Dollars. In those swaps, Vale pays floating rates in U.S. Dollars (Libor London Interbank Offered Rate) and receives payments linked to CDI.

<b>CDI vs. fixed rate swap</b>										
Payable	US\$ 4,425	US\$ 3,144	US\$+	3.64%	(9,468)	(6,075)	(1,807)			
Receivable	R\$ 428	R\$ 428	CDI	103.50%	443	453	45			
Net					(82)	(33)	37	7	22	23 (127)

**Type of contracts:** OTC Contracts

**Protected Item:** Debts linked to BRL

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

The protected items are the Debts linked to BRL because the objective of this protection is to transform the obligations linked to BRL into obligations linked to USD so as to achieve a currency offset by matching Vale's receivables (mainly linked to USD) with Vale's payables.

### Protection program for the real denominated debt indexed to TJLP

- TJLP vs. USD fixed rate swap** In order to reduce the cash flow volatility, Vale entered into swap transactions to convert the cash flows of the loans with Banco Nacional de Desenvolvimento Econômico e Social (BNDES) from TJLP(1) to U.S. Dollars. In those swaps, Vale pays fixed rates in U.S. Dollars and receives payments linked to TJLP.
- TJLP vs. USD floating rate swap** In order to reduce the cash flow volatility, Vale entered into swap transactions to convert the cash flows of the loans with BNDES from TJLP to U.S. Dollars. In those swaps, Vale pays floating rates in U.S. Dollars and receives payments linked to TJLP.

Swap										
TJLP vs. fixed rate swap										
Payable	US\$ 1,694	US\$ 1,611	US\$+	2.34%	(4,960)	(2,945)	(297)			
Receivable	R\$ 626	R\$ 774	TJLP +	0.90%	576	695	212			
<b>Net</b>					<b>(86)</b>	<b>117</b>	<b>200</b>	<b>9</b>	<b>41</b>	<b>(52) 8 (83)</b>

**Type of contracts:** OTC Contracts

**Protected Item:** Debts linked to BRL

The protected items are the Debts linked to BRL because the objective of this protection is to transform the obligations linked to BRL into obligations linked to USD so as to achieve a currency offset by matching Vale's receivables (mainly linked to USD) with Vale's payables.

(1) Due to TJLP derivatives market liquidity constraints, some swap trades were done through CDI equivalency.





Table of Contents

**Protection program for the Real denominated fixed rate debt**

- **BRL fixed rate vs. USD fixed rate swap:** In order to hedge the cash flow volatility, Vale entered into a swap transaction to convert the cash flows from loans rate with Banco Nacional de Desenvolvimento Econômico e Social (BNDES) in Brazilian Reais linked to fixed rate to U.S. Dollars linked to fixed. In those swaps, Vale pays fixed rates in U.S. Dollars and receives fixed rates in Reais.

**R\$ fixed rate vs.  
US\$ fixed rate  
swap**

Payable	US\$ 442	US\$ 355	US\$+	-1.03%	(829)	(560)	(14)
---------	----------	----------	-------	--------	-------	-------	------

**Type of contracts:** OTC Contracts

**Protected Item:** Debts linked to BRL

The protected items are the Debts linked to BRL because the objective of this protection is to transform the obligations linked to BRL into obligations linked to USD so as to achieve a currency offset by matching Vale's receivables (mainly linked to USD) with Vale's payables.

**Foreign Exchange cash flow hedge**

**Brazilian Real fixed rate vs. USD fixed rate swap** In order to reduce the cash flow volatility, Vale entered into swap transactions to mitigate the foreign exchange exposure that arises from the currency mismatch between the revenues denominated in U.S. Dollars and the disbursements and investments denominated in Brazilian Reais. Vale had no open positions on December 31, 2012 for this program.

Receivable	R\$	820	Fixed		797	870
Net					(25)	(58)

**Type of contracts:** OTC Contracts

**Hedged Item:** part of Vale's revenues in USD

The P&L shown in the table above is offset by the hedged items' P&L due to USD/BRL exchange rate.

**Protection program for Euro denominated debt**

- **EUR fixed rate vs. USD fixed rate swap:** In order to hedge the cash flow volatility, Vale entered into a swap transaction to convert the cash flows from debts in Euros linked to fixed rate to U.S. Dollars linked to fixed rate. This trade was used to convert the cash flows of part of debts in Euros, each one with a notional amount of 750 million, issued in 2010 and 2012 by Vale. Vale receives fixed rates in Euros and pays fixed rates in U.S. Dollars.

Receivable	1,000	500	EUR	4.063%	3,108	1,350	52					
Net					35	(68)	(7)	33	(9)	(41)	(4)	89

**Type of contracts:** OTC Contracts

**Protected Item:** Vale's Debt linked to EUR

The P&L shown in the table above is offset by the hedged items' P&L due to EUR/USD exchange rate.

Table of Contents

**Foreign exchange hedging program for disbursements in Canadian dollars**

- **Canadian Dollar Forward** In order to reduce the cash flow volatility, Vale entered into forward transactions to mitigate the foreign exchange exposure that arises from the currency mismatch between the revenues denominated in U.S. Dollars and the disbursements denominated in Canadian Dollars.



Forward	CAD 1,362	B	1.013	15	23	6	8
---------	-----------	---	-------	----	----	---	---

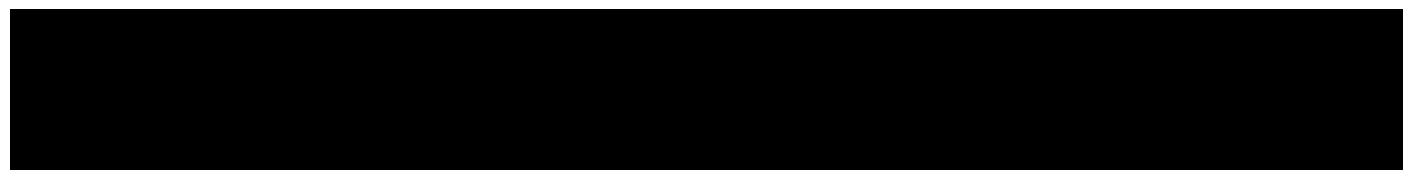
**Type of contracts:** OTC Contracts

**Hedged Item:** part of disbursements in Canadian Dollars

The P&L shown in the table above is offset by the hedged items P&L due to CAD/USD exchange rate.

**Protection program for interest rate**

- **Treasury Future** Vale entered into a treasury 10 year forward transaction (buyer) on the last quarter of 2011 with the objective of partial protection into debt cost indexed to this rate. This program ended in January 2012.



Forwards	US\$	900	B	(10)	6
----------	------	-----	---	------	---

**Type of contracts:** OTC Contracts

**Protected Item:** part of debt emission costs

The P&L shown in the table above was partially offset by emission cost reduction due to treasury variations.

### Commodity Derivative Positions

The Company's cash flow is also exposed to several market risks associated to global commodities price volatilities. To offset these volatilities, Vale contracted the following derivatives transactions:

### Nickel Sales Hedging Program

In order to reduce the cash flow volatility, hedging transactions were implemented. These transactions fixed the prices of part of the sales in the period. Vale had no open positions on December 31, 2012 for this program.

Forward	19,998	S	234	296
---------	--------	---	-----	-----

**Type of contracts:** OTC Contracts

**Protected Item:** part of Vale's revenues linked to Nickel price.

The P&L shown in the table above is offset by the protected items' P&L due to Nickel price.

### Nickel Fixed Price Program

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

In order to maintain the exposure to Nickel price fluctuations, we entered into derivatives to convert to floating prices all contracts with clients that required a fixed price. These trades aim to guarantee that the prices of these operations would be the same of the average prices negotiated in LME in the date the product is delivered to the client. It normally involves buying Nickel forwards (Over-the-Counter) or futures (exchange negotiated). Those operations are usually reverted before the maturity in order to match

Table of Contents

the settlement dates of the commercial contracts in which the prices are fixed. Whenever the Nickel Sales Hedging Program is executed, the Nickel Fixed Price Program is interrupted. Vale had no open positions on December 31, 2012 for this program.

Nickel Futures	162	B				(0.7)		(0.9)	

**Type of contracts:** LME Contracts

**Protected Item:** part of Vale's revenues linked to fixed price sales of Nickel.

The P&L shown in the table above is offset by the protected items' P&L due to Nickel price.

**Nickel Purchase Protection Program**

In order to reduce the cash flow volatility and eliminate the mismatch between the pricing of the purchased nickel (concentrate, cathode, sinter and others) and the pricing of the final product sold to our clients, hedging transactions were implemented. The items purchased are raw materials utilized to produce refined Nickel. The trades are usually implemented by the sale of nickel forward or future contracts at LME or over-the-counter operations.

Flow	Notional (ton)		Buy/Sell	Average Strike (US\$/ton)	Fair value		Realized Gain/Loss December 31, 2012	Value at Risk December 31, 2012	R\$ million Fair value by year 2013
	December 31, 2012	December 31, 2011			December 31, 2012	December 31, 2011			
Nickel Futures	210	228	S	17,045	0	0	0.36	0.2	0

**Type of contracts:** LME Contracts

**Protected Item:** part of Vale's revenues linked to Nickel price.

The P&L shown in the table above is offset by the protected items' P&L due to Nickel price.

### Copper Scrap Purchase Protection Program

This program was implemented in order to reduce the cash flow volatility due to the quotation period mismatch between the pricing period of copper scrap purchase and the pricing period of final products sale to the clients, as the copper scrap combined with other raw materials or inputs to produce copper for the final clients. This program usually is implemented by the sale of forwards or futures at LME or Over-the-Counter operations.

Flow	Notional (lbs)		Buy/ Sell	Average Strike (US\$/lbs)	Fair value		Realized Gain/Loss December 31, 2012	Value at Risk December 31, 2012	R\$ million Fair value by year 2013
	December 31, 2012	December 31, 2011			December 31, 2012	December 31, 2011			
Forward	937,517	892,869	S	3.66	0.01	0.2	(0.2)	0.1	0.01

**Type of contracts:** OTC Contracts

**Protected Item:** of Vale's revenues linked to Copper price.

The P&L shown in the table above is offset by the protected items' P&L due to Copper price

### Bunker Oil Purchase Protection Program

In order to reduce the impact of bunker oil price fluctuation on Vale's freight hiring/supply and consequently reducing the company's cash flow volatility, bunker oil derivatives were implemented. These transactions are usually executed through forward purchases. Vale had no open positions on December 31, 2012 for this program.



Table of Contents

Flow	Notional (ton)		Buy/ Sell	Average	Fair value		Realized Gain/Loss	Value at Risk	R\$ million
	December 31, 2012	December 31, 2011		Strike (US\$/ton)	December 31, 2012	December 31, 2011	December 31, 2012	December 31, 2012	Fair value by year 2013
Forward			B				2		

**Type of contracts:** OTC Contracts

**Protected Item:** part of Vale's costs linked to Bunker Oil price.

The P&L shown in the table above is offset by the protected items' P&L due to Bunker Oil price.

**Embedded Derivative Positions**

The Company's cash flow is also exposed to several market risks associated to contracts that contain embedded derivatives or derivative-like features. From Vale's perspective, it may include, but is not limited to, commercial contracts, procurement contracts, rental contracts, bonds, insurance policies and loans. The following embedded derivatives were observed in December 31, 2012:

**Raw material and intermediate products purchase**

Nickel concentrate and raw materials purchase agreements, in which there are provisions based on nickel and copper future prices behavior. These provisions are considered as embedded derivatives.

Flow	Notional (ton)		Buy/ Sell	Average	Fair value		Realized	Value at Risk	R\$ million
	December 31, 2012	December 31, 2011		Strike (US\$/ton)	December 31, 2012	December 31, 2011	Gain/Loss December 31, 2012	December 31, 2012	
Nickel Forwards	2,475	1,951	\$	16,968	2.0	(0.7)	2		
Copper Forwards	7,272	6,653		7,899	0.9	0.9	(4)		
<b>Total</b>					<b>2.9</b>	<b>0.2</b>	<b>(2)</b>		<b>3</b>

**Gas purchase for Pelletizing Company in Oman**

Our subsidiary Vale Oman Pelletizing Company LLC has a natural gas purchase agreement in which there's a clause that defines that a premium can be charged if pellet prices trades above a pre-defined level. This clause is considered as an embedded derivative.

Flow	Notional (volume)		Buy/ Sell	Average	Fair value		Realized	R\$ million
	December 31, 2012	December 31, 2011		strike (US\$/ton)	December 31, 2012	December 31, 2011	Gain/Loss	Value at Risk
Call Options	746,667		\$	179.36	(4.7)			4

**a) Market Curves**

To build the curves used on the pricing of the derivatives, public data from BM&F, Central Bank of Brazil, London Metals Exchange (LME) and proprietary data from Thomson Reuters and Bloomberg were used. The derivatives prices were calculated based using December 31, 2012 market data..

Table of Contents**1. Commodities****Nickel**

<b>Maturity</b>	<b>Price (US\$/ton)</b>	<b>Maturity</b>	<b>Price (US\$/ton)</b>	<b>Maturity</b>	<b>Price (US\$/ton)</b>
SPOT	17,085.00	JUN13	17,126.28	DEC13	17,233.69
JAN13	17,020.72	JUL13	17,147.96	DEC14	17,453.45
FEB13	17,042.55	AUG13	17,168.28	DEC15	17,591.56
MAR13	17,066.98	SEP13	17,186.00	DEC16	17,691.41
APR13	17,088.71	OCT13	17,201.28		
MAY13	17,107.77	NOV13	17,215.43		

**Copper**

<b>Maturity</b>	<b>Price (US\$/lb)</b>	<b>Maturity</b>	<b>Price (US\$/lb)</b>	<b>Maturity</b>	<b>Price (US\$/lb)</b>
SPOT	3.65	JUN13	3.61	DEC13	3.62
JAN13	3.59	JUL13	3.61	DEC14	3.62
FEB13	3.60	AUG13	3.61	DEC15	3.63
MAR13	3.60	SEP13	3.61	DEC16	3.64
APR13	3.60	OCT13	3.61		
MAY13	3.60	NOV13	3.61		

**Bunker Oil**

<b>Maturity</b>	<b>Price (US\$/ton)</b>	<b>Maturity</b>	<b>Price (US\$/ton)</b>	<b>Maturity</b>	<b>Price (US\$/ton)</b>
SPOT	605.00	JUN13	611.11	DEC13	606.75
JAN13	605.11	JUL13	611.25	DEC14	595.50
FEB13	605.25	AUG13	611.23	DEC15	591.17
MAR13	607.65	SEP13	610.50	DEC16	590.36
APR13	609.10	OCT13	609.50		
MAY13	610.35	NOV13	608.20		

Table of Contents**2. Rates****US\$-Brazil Interest Rate**

<b>Maturity</b>	<b>Rate (% p.a.)</b>	<b>Maturity</b>	<b>Rate (% p.a.)</b>	<b>Maturity</b>	<b>Rate (% p.a.)</b>
02/01/13	0.95	04/01/15	1.64	10/02/17	2.43
03/01/13	1.02	07/01/15	1.69	01/02/18	2.50
04/01/13	1.07	10/01/15	1.78	04/02/18	2.57
07/01/13	1.14	01/04/16	1.83	07/02/18	2.61
10/01/13	1.21	04/01/16	1.92	10/01/18	2.68
01/02/14	1.28	07/01/16	2.00	01/02/19	2.78
04/01/14	1.35	10/03/16	2.06	04/01/19	2.82
07/01/14	1.39	01/02/17	2.16	07/01/19	2.90
10/01/14	1.48	04/03/17	2.26	10/01/19	2.98
01/02/15	1.53	07/03/17	2.33	01/02/20	3.05

**US\$ Interest Rate**

<b>Maturity</b>	<b>Rate (% p.a.)</b>	<b>Maturity</b>	<b>Rate (% p.a.)</b>	<b>Maturity</b>	<b>Rate (% p.a.)</b>
US\$1M	0.21	US\$6M	0.32	US\$11M	0.32
US\$2M	0.25	US\$7M	0.32	US\$12M	0.32
US\$3M	0.30	US\$8M	0.32	US\$2Y	0.40
US\$4M	0.31	US\$9M	0.32	US\$3Y	0.50
US\$5M	0.31	US\$10M	0.32	US\$4Y	0.67

**TJLP**

<b>Maturity</b>	<b>Rate (% p.a.)</b>	<b>Maturity</b>	<b>Rate (% p.a.)</b>	<b>Maturity</b>	<b>Rate (% p.a.)</b>
02/01/13	5.50	04/01/15	5.50	10/02/17	5.50
03/01/13	5.50	07/01/15	5.50	01/02/18	5.50
04/01/13	5.50	10/01/15	5.50	04/02/18	5.50
07/01/13	5.50	01/04/16	5.50	07/02/18	5.50
10/01/13	5.50	04/01/16	5.50	10/01/18	5.50
01/02/14	5.50	07/01/16	5.50	01/02/19	5.50
04/01/14	5.50	10/03/16	5.50	04/01/19	5.50
07/01/14	5.50	01/02/17	5.50	07/01/19	5.50
10/01/14	5.50	04/03/17	5.50	10/01/19	5.50

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

01/02/15 5.50 07/03/17 5.50 01/02/20 5.50

**BRL Interest Rate**

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
02/01/13	6.98	04/01/15	7.86	10/02/17	8.56
03/01/13	7.00	07/01/15	7.98	01/02/18	8.64
04/01/13	7.06	10/01/15	8.08	04/02/18	8.68
07/01/13	7.09	01/04/16	8.19	07/02/18	8.72
10/01/13	7.08	04/01/16	8.30	10/01/18	8.76
01/02/14	7.14	07/01/16	8.36	01/02/19	8.79
04/01/14	7.20	10/03/16	8.43	04/01/19	8.85
07/01/14	7.34	01/02/17	8.44	07/01/19	8.90
10/01/14	7.54	04/03/17	8.46	10/01/19	8.95
01/02/15	7.71	07/03/17	8.53	01/02/20	9.00

**EUR Interest Rate**

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
EUR1M	0.05	EUR6M	0.26	EUR11M	0.32
EUR2M	0.10	EUR7M	0.28	EUR12M	0.32
EUR3M	0.13	EUR8M	0.29	EUR2Y	0.38
EUR4M	0.19	EUR9M	0.30	EUR3Y	0.47
EUR5M	0.23	EUR10M	0.31	EUR4Y	0.61

**CAD Interest Rate**

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
CAD1M	1.05	CAD6M	1.30	CAD11M	1.34
CAD2M	1.15	CAD7M	1.31	CAD12M	1.34
CAD3M	1.23	CAD8M	1.32	CAD2Y	1.42
CAD4M	1.27	CAD9M	1.33	CAD3Y	1.53
CAD5M	1.29	CAD10M	1.33	CAD4Y	1.64

**Currencies - Ending rates**

CAD/US\$	1.0053	US\$/BRL	2.0435	EUR/US\$	1.3197
----------	--------	----------	--------	----------	--------

Table of Contents**Sensitivity Analysis on Derivatives from Parent Company**

We present below the sensitivity analysis for all derivatives outstanding positions as of September 30, 2012 given predefined scenarios for market risk factors behavior. The scenarios were defined as follows:

- Fair Value: the fair value of the instruments as at December 31, 2012;
- Scenario I: unfavorable change of 25% - Potential losses considering a shock of 25% in the market risk factors used for MtM calculation that negatively impacts the fair value of Vale's derivatives positions;
- Scenario II: favorable change of 25% - Potential profits considering a shock of 25% in the market curves used for MtM calculation that positively impacts the fair value of Vale's derivatives positions;
- Scenario III: unfavorable change of 50% - Potential losses considering a shock of 50% in the market curves used for MtM calculation that negatively impacts the fair value of Vale's derivatives positions;
- Scenario IV: favorable change of 50% - Potential profits considering a shock of 50% in the market curves used for MtM calculation that positively impacts the fair value of Vale's derivatives positions;

**Sensitivity analysis - Foreign Exchange and Interest Rate Derivative Positions***Amounts in R\$ million*

Program	Instrument	Risk	Fair Value	Scenario I	Scenario II	Scenario III	Scenario IV	
Protection program for the Real denominated debt indexed to CDI	CDI vs. USD fixed rate swap	USD/BRL fluctuation		(2,367)	2,367	(4,734)	4,734	
		USD interest rate inside Brazil variation	(1,069)	(77)	75	(157)	148	
	CDI vs. USD floating rate swap	Brazilian interest rate fluctuation		(18)	16	(37)	31	
		USD Libor variation		(1)	1	(2)	2	
		USD/BRL fluctuation		(131)	131	(263)	263	
	Protected Items - Real denominated debt	Brazilian interest rate fluctuation		(82)	(0.5)	0.5	(1)	1
		USD Libor variation			(0.03)	0.02	(0.05)	0.05
		USD/BRL fluctuation		n.a.				
	Protection program for the Real	TJLP vs. USD fixed rate swap	USD/BRL fluctuation		(1,240)	1,240	(2,480)	2,480
					(90)	86	(186)	168

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

denominated debt indexed to TJLP		USD interest rate inside Brazil variation					
		Brazilian interest rate fluctuation	(375)	(259)	287	(495)	605
		TJLP interest rate fluctuation		(193)	191	(387)	388
		USD Libor variation		0	0	0	0
	TJLP vs. USD floating rate swap						
		USD/BRL fluctuation		(166)	166	(331)	331
		USD interest rate inside Brazil variation		(14)	13	(28)	25
		Brazilian interest rate fluctuation	(86)	(33)	37	(63)	80
		TJLP interest rate fluctuation		(25)	25	(51)	51
		USD Libor variation		(6)	6	(12)	12
Protected Items - Real denominated debt		USD/BRL fluctuation	n.a.				
Protection program for the Real denominated fixed rate debt	BRL fixed rate vs. USD	USD/BRL fluctuation		(207)	207	(414)	414
		USD interest rate inside Brazil variation	(96)	(11)	11	(23)	21
		Brazilian interest rate fluctuation		(35)	38	(67)	79
		Protected Items - Real denominated debt		USD/BRL fluctuation	n.a.		
	Protection Program for the Euro denominated debt	EUR fixed rate vs. USD fixed rate swap					
	USD/BRL fluctuation		(9)	9	(17)	17	
	EUR/USD fluctuation	35	(777)	777	(1,554)	1,554	
	EUR Libor variation		(49)	53	(96)	110	
	USD Libor variation		(57)	53	(120)	102	
Protected Items - Euro denominated debt		EUR/USD fluctuation	n.a.	777	(777)	1,554	(1,554)
Foreign Exchange hedging program for disbursements in Canadian dollars (CAD)	CAD Forward	USD/BRL fluctuation		(4)	4	(8)	8
		CAD/USD fluctuation	15	(683)	683	(1,366)	1,366
		CAD Libor variation		(12)	12	(24)	25
		USD Libor variation		(3)	3	(7)	7
	Protected Items - Disbursement in Canadian dollars		CAD/USD fluctuation	n.a.	683	(683)	1,366

Sensitivity analysis - Commodity Derivative Positions

Amounts in R\$ million

Program	Instrument	Risk	Fair Value	Scenario I	Scenario II	Scenario III	Scenario IV
Nickel purchase protection program	Sale of nickel future/forward contracts	Nickel price fluctuation		(2)	2	(4)	4
		Libor USD fluctuation	0	0	0	0	0
		USD/BRL fluctuation		0	0	0	0
		Protected Item: Part of Vale's revenues linked to Nickel price	Nickel price fluctuation	n.a.	2	(2)	4
	Copper Scrap Purchase Protection Program	Sale of copper future/forward contracts	Copper price fluctuation		(1.7)	1.7	(3.5)
Libor USD fluctuation			0.01	0	0	0	0
BRL/USD fluctuation				0	0	0	0
Protected Item: Part of Vale's revenues linked to Copper price		Copper price fluctuation	n.a.	1.7	(1.7)	3.5	(3.5)

## Sensitivity analysis - Embedded Derivative Positions

Amounts in R\$ million

Program	Instrument	Risk	Fair Value	Scenario I	Scenario II	Scenario III	Scenario IV
Embedded derivatives - Raw material purchase (Nickel)	Embedded derivatives - Raw material purchase	Nickel price fluctuation		(22)	22	(43)	43
		BRL/USD fluctuation	2.0	0	0	0	0
Embedded derivatives - Raw material purchase (Copper)	Embedded derivatives - Raw material purchase	Copper price fluctuation		(29)	29	(59)	59
		BRL/USD fluctuation	0.9	0	0	0	0
Embedded derivatives - Gas purchase for Pelletizing Company in Oman	Embedded derivatives - Gas purchase	Pellet price fluctuation		(7)	3	(17)	5
		BRL/USD fluctuation	(4.7)	(1)	1	(2)	2



Table of Contents**Sensitivity Analysis on Debt and Cash Investments**

The Company's funding and cash investments linked to currencies different from Brazilian Reais are subjected to volatility of foreign exchange currencies.

*Amounts in R\$ million*

Program	Instrument	Risk	Scenario I	Scenario II	Scenario III	Scenario IV
Funding	Debt denominated in BRL	No fluctuation				
Funding	Debt denominated in USD	USD/BRL fluctuation	(9,828)	9,828	(19,656)	19,656
Cash Investments	Cash denominated in BRL	No fluctuation				
Cash Investments	Cash denominated in USD	USD/BRL fluctuation	(2,507)	2,507	(5,013)	5,013
Cash Investments	Cash denominated in EUR	EUR/BRL fluctuation	(35)	35	(70)	70
Cash Investments	Cash denominated in CAD	CAD/BRL fluctuation	(36)	36	(72)	72
Cash Investments	Cash denominated in GBP	GBP/BRL fluctuation	(6)	6	(12)	12
Cash Investments	Cash denominated in AUD	AUD/BRL fluctuation	(54)	54	(108)	108

**Financial counterparties ratings**

Derivatives transactions are executed with financial institutions that we consider to have a very good credit quality. The exposure limits to financial institutions are proposed annually for the Executive Risk Committee and approved by the Executive Board. The financial institutions credit risk tracking is performed making use of a credit risk valuation methodology which considers, among other information, published ratings provided by international rating agencies. In the table below, we present the ratings in foreign currency published by Moody's and S&P agencies for the financial institutions that we had outstanding trades as of December 31, 2012.

Vale's Counterparty	Moody's*	S&P*
Banco Santander	Baa2	A-
Itau Unibanco*	Baa1	BBB
HSBC	Aa3	A+
JP Morgan Chase & Co	A2	A
Banco Bradesco*	Baa2	BBB
Banco do Brasil*	Baa2	BBB
Banco Votorantim*	Baa2	BBB-
Credit Agricole	A2	A
Standard Bank	A3	BBB+

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

Deutsche Bank	A2	A+
BNP Paribas	A2	A+
Citigroup	Baa2	A-
Banco Safra*	Baa2	BBB-
ANZ Australia and New Zealand Banking	Aa2	AA-
Banco Amazônia SA	A1	A+
Societe Generale	A2	A
Bank of Nova Scotia	Aa1	A+
Natixis	A2	A
Royal Bank of Canada	Aa3	AA-
China Construction Bank	A1	A
Goldman Sachs	A3	A-
Bank of China	A1	A
Barclays	A3	A
BBVA Banco Bilbao Vizcaya Argentaria	Baa3	BBB-

---

\* For Brazilian Banks we used local long term deposit rating

Table of Contents**26 - Information by Business Segment and Consolidated Revenues by Geographic Area**

The information presented to the Executive Board on the performance of each segment are derived from the accounting records adjusted for reallocations between segments..

**a) Results by segment**

	<b>Consolidated Year ended December 31, 2012</b>					
	<b>Bulk Materials</b>	<b>Basic Metals</b>	<b>Fertilizers</b>	<b>Logistic</b>	<b>Others</b>	<b>Total</b>
<b>Results</b>						
Net revenue	68,901	13,933	7,008	2,710	959	93,511
Cost and expenses	(34,921)	(12,785)	(5,760)	(2,634)	(2,009)	(58,109)
Impairment of assets	(2,139)	(5,769)			(303)	(8,211)
Loss on sale of assets	(768)		(268)			(1,036)
Depreciation, depletion and amortization	(3,623)	(3,316)	(911)	(466)	(81)	(8,397)
	<b>27,450</b>	<b>(7,937)</b>	<b>69</b>	<b>(390)</b>	<b>(1,434)</b>	<b>17,758</b>
<b>Financial results</b>	(8,463)	248	(95)	(120)	25	(8,405)
Equity results from associates	1,484	(45)		218	(416)	1,241
Income tax and social contribution	(519)	159	2,481	(28)	548	2,641
Impairment on investments		(2,026)			(1,976)	(4,002)
<b>Net income of the exercise</b>	<b>19,952</b>	<b>(9,601)</b>	<b>2,455</b>	<b>(320)</b>	<b>(3,253)</b>	<b>9,233</b>
Net income (loss) attributable to non controlling interests	(132)	(399)	109		(79)	(501)
<b>Income attributable to the company s stockholders</b>	<b>20,084</b>	<b>(9,202)</b>	<b>2,346</b>	<b>(320)</b>	<b>(3,174)</b>	<b>9,734</b>
<b>Sales classified by geographic area:</b>						
America, except United States	1,396	1,939	120	65	29	3,549
United States of America	202	2,209	101		81	2,593
Europe	11,537	4,316	285		43	16,181
Middle East/Africa/Oceania	3,046	180	14			3,240
Japan	8,180	1,416			13	9,609
China	32,925	1,759				34,684
Asia, except Japan and China	5,763	1,965	182		4	7,914
Brazil	5,852	149	6,306	2,645	789	15,741

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

<b>Net revenue</b>	<b>68,901</b>	<b>13,933</b>	<b>7,008</b>	<b>2,710</b>	<b>959</b>	<b>93,511</b>
--------------------	---------------	---------------	--------------	--------------	------------	---------------

	<b>Consolidated Year ended December 31, 2011</b>					
	<b>Bulk Materials</b>	<b>Basic Metals</b>	<b>Fertilizers</b>	<b>Logistic</b>	<b>Others</b>	<b>Total</b>
<b>Results</b>						
Net revenue	77,226	16,070	5,551	2,367	805	102,019
Cost and expenses	(27,129)	(11,323)	(4,416)	(2,160)	(2,428)	(47,456)
Realized gain on assets available for sale		2,492				2,492
Depreciation, depletion and amortization	(2,814)	(2,640)	(769)	(388)	(27)	(6,638)
	<b>47,283</b>	<b>4,599</b>	<b>366</b>	<b>(181)</b>	<b>(1,650)</b>	<b>50,417</b>
<b>Financial results</b>						
Financial results	(6,110)	10	(99)	(54)	(99)	(6,352)
Equity results from associates	1,795	163		206	(307)	1,857
Income tax and social contribution	(6,693)	(1,633)	(176)	(12)		(8,514)
<b>Net income of the exercise</b>	<b>36,275</b>	<b>3,139</b>	<b>91</b>	<b>(41)</b>	<b>(2,056)</b>	<b>37,408</b>
Net income (loss) attributable to non controlling interests	(181)	(152)	49		(122)	(406)
<b>Income attributable to the company's stockholders</b>	<b>36,456</b>	<b>3,291</b>	<b>42</b>	<b>(41)</b>	<b>(1,934)</b>	<b>37,814</b>
<b>Sales classified by geographic area:</b>						
America, except United States	1,973	2,322	72		37	4,404
United States of America	169	2,624	1		4	2,798
Europe	14,657	4,128	255		102	19,142
Middle East/Africa/Oceania	2,969	251	1		2	3,223
Japan	10,069	2,081			14	12,164
China	33,666	2,066			164	35,896
Asia, except Japan and China	6,132	2,309	63			8,504
Brazil	7,591	289	5,159	2,367	482	15,888
<b>Net revenue</b>	<b>77,226</b>	<b>16,070</b>	<b>5,551</b>	<b>2,367</b>	<b>805</b>	<b>102,019</b>

Table of Contents

	December 31, 2012								
	Net revenues	Cost and expenses	Research and Development	Pre Operating and Idle Capacity	Operating profit	Depreciation, depletion and amortization	Impairment on assets	Operating income	Property, plant and equipment and intangibles
<b>Bulk Material</b>									
Iron ore	52,959	(24,745)	(1,219)		26,995	(2,715)		24,280	71
Pellets	12,778	(4,683)		(634)	7,461	(438)		7,023	4
Ferroalloys and manganese	1,055	(627)			428	(83)		345	
Coal	2,109	(2,729)	(229)	(55)	(904)	(387)	(2,139)	(3,430)	7
	<b>68,901</b>	<b>(32,784)</b>	<b>(1,448)</b>	<b>(689)</b>	<b>33,980</b>	<b>(3,623)</b>	<b>(2,139)</b>	<b>28,218</b>	<b>83</b>
<b>Base Metals</b>									
Nickel and other products (a)	11,657	(7,931)	(587)	(2,033)	1,106	(3,052)	(5,769)	(7,715)	62
Copper (b)	2,276	(1,808)	(187)	(239)	42	(264)		(222)	9
Aluminum products									
	<b>13,933</b>	<b>(9,739)</b>	<b>(774)</b>	<b>(2,272)</b>	<b>1,148</b>	<b>(3,316)</b>	<b>(5,769)</b>	<b>(7,937)</b>	<b>71</b>
<b>Fertilizers</b>									
Potash	569	(334)	(145)		90	(44)		46	4
Phosphates	4,926	(3,809)	(72)	(184)	861	(655)		206	16
Nitrogen	1,366	(1,216)			150	(212)		(62)	
Others fertilizers products	147				147			147	
	<b>7,008</b>	<b>(5,359)</b>	<b>(217)</b>	<b>(184)</b>	<b>1,248</b>	<b>(911)</b>		<b>337</b>	<b>21</b>
<b>Logistics</b>									
Railroads	1,828	(1,976)	(25)		(173)	(363)		(536)	4
Ports	882	(626)			256	(103)		153	1
Ships		(7)			(7)			(7)	4
	<b>2,710</b>	<b>(2,609)</b>	<b>(25)</b>		<b>76</b>	<b>(466)</b>		<b>(390)</b>	<b>10</b>
<b>Others</b>	959	(1,561)	(448)		(1,050)	(81)	(303)	(1,434)	3
<b>Loss on sale of assets</b>		(1,036)			(1,036)			(1,036)	
	<b>93,511</b>	<b>(53,088)</b>	<b>(2,912)</b>	<b>(3,145)</b>	<b>34,366</b>	<b>(8,397)</b>	<b>(8,211)</b>	<b>17,758</b>	<b>192</b>

Table of Contents

	December 31, 2011								
	Net revenues	Cost and expenses	Research and Development	Pre Operating and Idle Capacity	Operating profit	Depreciation, depletion and amortization	Impairment on assets	Operating income	Property and equipment
<b>Bulk Material</b>									
Iron ore	61,035	(17,420)	(841)		42,774	(2,079)		40,695	
Pellets	13,270	(5,355)		(185)	7,730	(338)		7,392	
Ferroalloys and manganese	1,126	(986)			140	(114)		26	
Coal	1,795	(1,914)	(252)	(176)	(547)	(283)		(830)	
	<b>77,226</b>	<b>(25,675)</b>	<b>(1,093)</b>	<b>(361)</b>	<b>50,097</b>	<b>(2,814)</b>		<b>47,283</b>	
<b>Base Metals</b>									
Nickel and other products									
(a)	13,596	(7,234)	(428)	(1,701)	4,233	(2,457)		1,776	
Copper (b)	1,842	(1,159)	(270)	(21)	392	(183)		209	
Aluminum products	632	(510)			122			122	
	<b>16,070</b>	<b>(8,903)</b>	<b>(698)</b>	<b>(1,722)</b>	<b>4,747</b>	<b>(2,640)</b>		<b>2,107</b>	
<b>Fertilizers</b>									
Potash	457	(392)	(91)	(45)	(71)	(74)		(145)	
Phosphates	3,898	(2,700)	(89)	(125)	984	(523)		461	
Nitrogen	1,136	(974)			162	(172)		(10)	
Others fertilizers products	60				60			60	
	<b>5,551</b>	<b>(4,066)</b>	<b>(180)</b>	<b>(170)</b>	<b>1,135</b>	<b>(769)</b>		<b>366</b>	
<b>Logistics</b>									
Railroads	1,682	(1,399)	(204)		79	(304)		(225)	
Ports	685	(557)			128	(84)		44	
Ships									
	<b>2,367</b>	<b>(1,956)</b>	<b>(204)</b>		<b>207</b>	<b>(388)</b>		<b>(181)</b>	
<b>Others</b>	805	(1,781)	(647)		(1,623)	(27)		(1,650)	
<b>Loss on sale of assets</b>		2,492			2,492			2,492	
	<b>102,019</b>	<b>(39,889)</b>	<b>(2,822)</b>	<b>(2,253)</b>	<b>57,055</b>	<b>(6,638)</b>		<b>50,417</b>	

Table of Contents**27 - Cost of Goods Sold and Services Rendered, and Sales and Administrative Expenses by Nature, Other Operational Expenses (Income), net****The costs of goods sold and services rendered**

	Consolidated Year ended	
	December 31, 2012	December 31, 2011
Personnel	6,937	5,269
Material	8,341	6,276
Fuel oil and gas	4,050	3,644
Outsourcing services	9,325	7,107
Energy	1,689	1,540
Acquisition of products	2,718	3,887
Depreciation and depletion	7,413	5,980
Freight	5,660	3,772
Others	5,864	4,976
<b>Total</b>	<b>51,997</b>	<b>42,451</b>

	Parent Company Year ended	
	December 31, 2012	December 31, 2011
Personnel	3,270	2,513
Material	3,730	3,181
Fuel oil and gas	2,382	1,964
Outsourcing services	5,954	4,257
Energy	1,207	845
Acquisition of products	1,384	2,547
Depreciation and depletion	2,129	1,704
Others	4,189	3,947
<b>Total</b>	<b>24,245</b>	<b>20,958</b>

**Selling and administrative expenses**

	Consolidated Year ended	
	December 31, 2012	December 31, 2011
Personnel	1,580	1,242
Services (consulting, infrastructure and others)	959	908

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

Advertising and publicity	201	131
Depreciation	466	353
Travel expenses	126	106
Taxes and rents	55	84
Incentive	14	163
Others	417	413
Sales	563	585
<b>Total</b>	<b>4,381</b>	<b>3,985</b>

	Parent Company	
	Year ended	
	December 31, 2012	December 31, 2011
Personnel	966	777
Services (consulting, infrastructure and others)	509	517
Advertising and publicity	154	140
Depreciation	350	260
Travel expenses	65	59
Taxes and rents	32	23
Incentive	14	135
Others	210	271
Sales	39	(6)
<b>Total</b>	<b>2,339</b>	<b>2,176</b>



Table of Contents**Others operational expenses (incomes), net, including research and development**

	<b>Consolidated Year ended</b>	
	<b>December 31, 2012</b>	<b>December 31, 2011</b>
Provision for loss with taxes credits (ICMS)	471	73
Provision for variable remuneration	871	697
Vale do Rio Doce Foundation - FVRD	73	204
Provision for disposal of materials/inventories	253	258
Pre operational, plant stoppages and idle capacity	3,145	2,253
Damage cost	127	
Research and development	2,912	2,822
Others	2,276	1,351
<b>Total</b>	<b>10,128</b>	<b>7,658</b>

	<b>Parent Company Year ended</b>	
	<b>December 31, 2012</b>	<b>December 31, 2011</b>
Others operational expenses (incomes), net, including research and development		
Provision for loss with taxes credits (ICMS)	468	5
Provision for variable remuneration	575	627
Vale do Rio Doce Foundation - FVRD	73	178
Provision for disposal of materials/inventories	221	35
Pre operational, plant stoppages and idle capacity	875	183
Research and development	1,619	1,460
Others	811	676
<b>Total</b>	<b>4,642</b>	<b>3,164</b>

Table of Contents**28 - Financial result**

The financial results, by nature, are as follows:

	<b>Consolidated Year ended</b>	
	<b>December 31, 2012</b>	<b>December 31, 2011</b>
<b>Financial expenses</b>		
Interest	(2,435)	(2,329)
Labor, tax and civil contingencies	(150)	(69)
Derivatives	(1,272)	(1,702)
Monetary and exchange rate variation (a)	(5,005)	(5,017)
Stockholders debentures	(907)	(380)
Financial taxes	(31)	(22)
Others	(1,224)	(1,327)
	<b>(11,024)</b>	<b>(10,846)</b>
<b>Financial income</b>		
Related parties		3
Short-term investments	244	987
Derivatives	992	1,722
Monetary and exchange rate variation (b)	859	1,550
Others	524	232
	<b>2,619</b>	<b>4,494</b>
<b>Financial results, net</b>	<b>(8,405)</b>	<b>(6,352)</b>
<b>Summary of Monetary and exchange rate</b>		
Cash and cash equivalents	58	(2)
Loans and financing	(3,291)	(985)
Related parties	23	
Others	(936)	(2,480)
<b>Net (a + b)</b>	<b>(4,146)</b>	<b>(3,467)</b>

	<b>Parent Company Year ended</b>	
	<b>December 31, 2012</b>	<b>December 31, 2011</b>
<b>Financial expenses</b>		
Interest	(2,436)	(2,227)
Labor, tax and civil contingencies	(133)	(53)
Derivatives	(1,009)	(1,123)
Monetary and exchange rate variation (a)	(4,903)	(4,201)
Stockholders debentures	(907)	(380)
Financial taxes	(28)	(9)
Others	(668)	(559)

	<b>(10,084)</b>	<b>(8,552)</b>
<b>Financial income</b>		
Related parties		14
Short-term investments	182	724
Derivatives	274	1,051
Monetary and exchange rate variation (b)	767	1,133
Others	343	36
	<b>1,566</b>	<b>2,958</b>
<b>Financial results, net</b>	<b>(8,518)</b>	<b>(5,594)</b>
<b>Summary of Monetary and exchange rate</b>		
Loans and financing	(1,104)	(791)
Related parties	(2,508)	72
Others	(524)	(2,349)
<b>Net (a + b)</b>	<b>(4,136)</b>	<b>(3,068)</b>

Table of Contents

**29. Commitments**

**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 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 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 (R\$9.4 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.

In addition, in the course of our operations we have provided letters of credit and guarantees in the amount of US\$820 (R\$1.7billion) 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 (1) claims for personal injuries, (2) enforcement actions and (3) 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) Participative Debentures**

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

A total of 388,559,056 debentures were issued, with a par value of R\$ 0.01 (one cent), whose value will be inflation-indexed per the General Market Price Index (IGP-M), as set out in the Issue Deed. In December 31, 2012, 2011 the total amount of these debentures was R\$ 3.378.845 e R\$ 2.495.995, respectively.

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. As at 2 October 2012 (subsequent Event) company paid a premium refers to second semester amounting to R\$ 9.089. On April 2012, the company paid premium refers to first quarter 2012 amounting to R\$ 11.399.

**c) Operating lease**

• **Pelletize Operations**

Vale entered into operating lease agreemnets with joint venture partners Nibrasco, Itabrasco, Kobrasco and Hispanobras, under which Vale leased your pellet plants. The renewable lease terms are from 3 to 10 years.

In July 2012 Vale signed a operating lease agreement with Hispanobrás (Vale's joint venture). The renewable lease agreement has a duration of 3 years.

Table of Contents

The table below shows the minimum future operating lease payments as at 31 December 2012

2013	151
2014	158
2015	156
2016	151
2017 thereafter	105
Total minimum payments required	721

The total amount of operational leasing expenses on pelletizing operations on 31 December 2012 and 2011 were R\$419, and R\$737, respectively.

• **Railroad operations**

The Parent Company conducts some of its railway operations through a leases. The lease has a term of 30 years, renewable for another 30 years and Expires in August 2026. In most cases, the Company's management expects that in the normal course of business these contracts will be renewed.

2013	174
2014	174
2015	174
2016	174
2017 thereafter	1,728
Total minimum payments required	2,424

The total amount of operational leasing expenses on railroad operations on 31 December 2012 and 2011 were R\$174 and, R\$163, respectively.

d) **Concession Contracts and Sub-concession**

i. **Rail companies**

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

The Company and certain group companies entered into concession agreements with the Brazilian Federal Government, through the Ministry of transport, for the development of the public rail transportation of cargo and the leasing of assets for the provision of such services. The accounting record grants and sub-concessions are presented in Note 14.

<b>Railroad</b>	<b>End of the concession period</b>
Vitória-Minas and Carajás (a)	June 2027
Carajás (a)	June 2027
Centro-Leste	August 2026
Ferrovias Norte Sul S.A.	December 2037

---

(a) Concessions are not onerous.

The grant will be terminated with the completion of one of the following events: the termination of the contract term, expropriation, forfeiture, cancellation, annulment or dissolution and bankruptcy of the concessionaire.

The concessions, sub-concessions and leasing of the subsidiaries companies are recorded in the form of an operating lease, and presented the following:

	FNS	FCA
Total number of plots	3	112
Periodicity of payments	(a)	Quarterly
Update index	IGP-DI FGV	IGP-DI FGV
Plots paid	(b)	54
Plots updated value		
Concession		2
Leasing		31

---

(a) In accordance with the delivery of each stretch of the railway

(b) Two plots have been paid. The third plot had just 80% paid; the 20% they left is to cover existing railroad disputes.

Table of Contents**ii Port**

The Company has the following specialized port terminals:

<b>Terminals</b>	<b>Location</b>	<b>Expiration of the concession term</b>
Terminal of Tubarão, Praia Mole e Granéis Líquidos	Vitória ES	2020
Terminal of Produtos Diversos	Vitória ES	2020
Terminal of Vila Velha	Vila Velha ES	2023
Ferry Terminal of Ponta da Madeira Pier I and III	São Luiz Maranhão	2018
Ferry Terminal of Ponta da Madeira Pier II	São Luiz Maranhão	2010(a)
Inácio Barbosa Ferry Terminal	Aracajú SE	2012
Terminal Operation Ore Port of Itaguaí	Itaguaí RJ	2021
Ferry Terminal of Ilha de Guafba TIG	Mangaratiba RJ	2018

(a) The extension of the duration for 36 months until the date that of a new price bidding

**e) Guarantee issued to affiliates**

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.

Until December 31, 2012, Vale guarantee 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).



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

Transactions with related parties are made by the Company on a third party arms length basis based usual market terms and conditions .

In the normal course of operations, Vale contracts rights and obligations with related parties (subsidiaries, associated companies, jointly controlled entities and Stockholders), derived from the operations of sale and purchase of products and services, leasing of assets, sales of raw material, rail transport services, through prices agreed between the parties.

The balances of these related party transactions and their effect on the financial statements may be identified as follows:

	December 31, 2012		Consolidated Assets December 31, 2011		January 1, 2011	
	Customers	Related parties	Customers	Related parties	Customers	Related parties
Baovale Mineração S.A.	10	18	10	3	2	3
Companhia Coreano-Brasileira de Pelotização - KOBRASCO					1	1
Companhia Hispano-Brasileira de Pelotização - HISPANOBRÁS	3		331		439	
Companhia Ítalo-Brasileira de Pelotização - ITABRASCO	1		1		1	
Companhia Nipo-Brasileira de Pelotização - NIBRASCO	4		1			
Mitsui Co.	44					
MRS Logística S.A.	17	68	15	76		24
Norsk Hydro ASA		827		868		
Samarco Mineração S.A.	68	369	75	13	88	13
Others	126	335	104	98	194	167
<b>Total</b>	<b>273</b>	<b>1,617</b>	<b>537</b>	<b>1,058</b>	<b>725</b>	<b>208</b>
Current	273	786	537	154	725	160
Non-current		833		904		48
<b>Total</b>	<b>273</b>	<b>1,619</b>	<b>537</b>	<b>1,058</b>	<b>725</b>	<b>208</b>

Table of Contents

	December 31, 2012		Consolidated Liabilities December 31, 2011		January 1, 2011	
	Suppliers	Related parties	Suppliers	Related parties	Suppliers	Related parties
Baovale Mineração S.A.	57		37		51	
Companhia Coreano-Brasileira de Pelotização - KOBASCO		67	9		9	2
Companhia Hispano-Brasileira de Pelotização - HISPANOBRÁS	21		303		500	
Companhia Ítalo-Brasileira de Pelotização - ITABRASCO					16	
Companhia Nipo-Brasileira de Pelotização - NIBRASCO	1	356	2	21	18	19
Minas da Serra Geral	16		16		16	
MRS Logística S.A.	81		27		14	
Norsk Hydro ASA		146		149		
Mitsui & CO, LTD	93		69		101	
Others	23		48	44	159	17
<b>Total</b>	<b>292</b>	<b>569</b>	<b>511</b>	<b>214</b>	<b>884</b>	<b>38</b>
Current	292	423	511	43	884	35
Non-current		146		171		3
<b>Total</b>	<b>292</b>	<b>569</b>	<b>511</b>	<b>214</b>	<b>884</b>	<b>38</b>

	December 31, 2012		Parent Company Assets December 31, 2011	
	Customers	Related parties	Customers	Related parties
Baovale Mineração S.A.	10	18	10	3
Biopalma da Amazônia		692		349
Companhia Hispano-Brasileira de Pelotização - HISPANOBRÁS	3		329	
Companhia Ítalo-Brasileira de Pelotização - ITABRASCO	1			
Companhia Nipo-Brasileira de Pelotização - NIBRASCO	4		1	
Companhia Portuária Baía de Sepetiba - CPBS	1		3	
Ferrovias Centro - Atlântica S.A.	5	23	6	36
Minerações Brasileiras Reunidas S.A. - MBR	5	186	18	555
Mineração Corumbaense Reunida S.A.	148		139	80
MRS Logística S.A.	14	28	15	29
Salobo Metais S.A.	20		20	5
Samarco Mineração S.A.	68	369	75	13
Vale International S.A.	20,749	486	14,271	1,705
Vale Manganês S.A.	12		44	
Vale Mina do Azul	87			47
Vale Operações Ferroviárias	111		135	11

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

Vale Potassio Nordeste	49		45	
Others	155	409	138	174
<b>Total</b>	<b>21,442</b>	<b>2,211</b>	<b>15,249</b>	<b>3,007</b>
Current	21,442	1,347	15,249	2,561
Non-current		864		446
<b>Total</b>	<b>21,442</b>	<b>2,211</b>	<b>15,249</b>	<b>3,007</b>

	Parent Company Liabilities			
	December 31, 2012		December 31, 2011	
	Suppliers	Related parties	Suppliers	Related parties
Baovale Mineração S.A.	57		37	
Companhia Coreano-Brasileira de Pelotização - KOBRASCO			9	
Companhia Hispano-Brasileira de Pelotização - HISPANOBRÁS	21		303	
Companhia Nipo-Brasileira de Pelotização - NIBRASCO	1	21	2	21
Companhia Portuária Baía de Sepetiba - CPBS	256		58	
Ferrovias Centro - Atlântica S.A.	11		19	
Minerações Brasileiras Reunidas S.A. - MBR	244		44	
MRS Logística S.A.	92		37	
Salobo Metais S.A.	2			
Mitsui & CO, LTD	93		69	
Vale International S.A.	1	35,764	8	33,582
Vale Mina do Azul			152	
Vale Operações Ferroviárias	22			
Vale Potassio Nordeste	41		37	
Others	130	12	99	10
<b>Total</b>	<b>971</b>	<b>35,797</b>	<b>874</b>	<b>33,613</b>
Current	971	6,434	874	4,959
Non-current		29,363		28,654
<b>Total</b>	<b>971</b>	<b>35,797</b>	<b>874</b>	<b>33,613</b>

Table of Contents

	<b>Consolidated Income Year ended</b>	
	<b>December 31, 2012</b>	<b>December 31, 2011</b>
Baovale Mineração S.A.		3
Companhia Hispano-Brasileira de Pelotização - HISPANOBRÁS	472	1,193
Log-in S.A.		10
Mitsui & Co Ltd		
MRS Logística S.A.	27	26
Samarco Mineração S.A.	725	806
Others	280	390
<b>Total</b>	<b>1,504</b>	<b>2,428</b>

	<b>Consolidated Cost / Expense Year ended</b>	
	<b>December 31, 2012</b>	<b>December 31, 2011</b>
Baovale Mineração S.A.	42	40
Companhia Coreano-Brasileira de Pelotização - KOBRASCO	193	166
Companhia Hispano-Brasileira de Pelotização - HISPANOBRÁS	504	1,397
Companhia Ítalo-Brasileira de Pelotização - ITABRASCO	63	249
Companhia Nipo-Brasileira de Pelotização - NIBRASCO	157	251
Log-in S.A.	9	
Mineração Rio do Norte S.A.		29
Mitsui & Co Ttd	54	245
MRS Logística S.A.	1,368	1,262
Others	80	28
<b>Total</b>	<b>2,470</b>	<b>3,667</b>

	<b>Consolidated Financial Year ended</b>	
	<b>December 31, 2012</b>	<b>December 31, 2011</b>
Companhia Hispano-Brasileira de Pelotização - HISPANOBRÁS	27	(4)
Others	(15)	(84)
<b>Total</b>	<b>12</b>	<b>(88)</b>

	<b>Parent Company Income Year ended</b>	
	<b>December 31, 2012</b>	<b>December 31, 2011</b>
ALBRAS - Alumínio Brasileiro S.A.		31
ALUNORTE - Alumina do Norte do Brasil S.A.		1
Baovale Mineração S.A.		3
Companhia Hispano-Brasileira de Pelotização - HISPANOBRÁS	455	1,163
Ferrovias Centro - Atlântica S.A.	97	195

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

Ferrovia Norte Sul S.A.		12
Vale Canada Limited	4	17
Minerações Brasileiras Reunidas S.A. - MBR	10	1
MRS Logística S.A.	22	21
Samarco Mineração S.A.	723	788
Vale Energia S.A.		13
Vale International S.A.	50,517	57,026
Vale Manganês S.A.	10	68
Vale Operações Ferroviárias	319	246
Vale Operações Portuárias	32	
Vale Mina do Azul	45	21
Others	341	36
<b>Total</b>	<b>52,575</b>	<b>59,642</b>

Table of Contents

	Parent Company Cost/Expense Year ended	
	December 31, 2012	December 31, 2011
ALUNORTE - Alumina do Norte do Brasil S.A.		28
Baovale Mineração S.A.	42	40
Companhia Coreano-Brasileira de Pelotização - KOBRASCO	150	166
Companhia Hispano-Brasileira de Pelotização - HISPANOBRÁS	504	1,397
Companhia Ítalo-Brasileira de Pelotização - ITABRASCO	63	249
Companhia Nipo-Brasileira de Pelotização - NIBRASCO	157	251
Companhia Portuária Baía de Sepetiba - CPBS	402	296
Ferrovia Centro - Atlântica S.A.	92	
Mitsui & Co Ltd	54	245
MRS Logística S.A.	1,353	1,254
Vale Energia S.A.	408	162
Vale Mina do Azul S.A.	21	119
Vale Colombia Holdings	12	
Minerações Brasileiras Reunidas S.A. - MBR	735	576
Others	24	293
<b>Total</b>	<b>4,017</b>	<b>5,076</b>

	Parent Company Financial Year ended	
	December 31, 2012	December 31, 2011
ALUNORTE - Alumina do Norte do Brasil S.A.		5
Companhia Hispano-Brasileira de Pelotização - HISPANOBRÁS	27	(4)
Ferrovia Centro - Atlântica S.A.	(4)	1
Vale Canada Limited	3	31
Vale Internacional S.A.	(1,177)	(988)
Sociedad Contractual Minera Tres Valles	3	4
Mineração Corumbaense Reunida S.A.		(7)
Minerações Brasileiras Reunidas S.A. - MBR	5	
Biopalma da Amazonia S.A.	92	47
Vale Overseas		25
Others	1	13
<b>Total</b>	<b>(1,050)</b>	<b>(873)</b>

Additionally, we have loans payable to Banco Nacional de Desenvolvimento Social and BNDES Participações S.A amounting to R\$ 8.073 and R\$ 1.685 respectively, accruing interest at market rates, which fall due through 2029. The operations generated interest expenses of R\$ 86 and R\$ 29. We also maintain cash equivalent balances with Banco Bradesco S.A. in the amount of R\$ 68 in December 31, 2012. The effect of these operations in results of the exercise was R\$ 1.

Remuneration of key management personnel:

	Year ended	
	December 31, 2012	December 31, 2011
<b>Short term benefits:</b>	<b>68</b>	<b>108</b>
Wages or pro labor	21	19
Direct and indirect benefits	21	40
Bonus	26	49
<b>Long term benefits:</b>		
Based on stock	21	29
<b>Termination of position</b>	<b>16</b>	<b>65</b>
	<b>105</b>	<b>202</b>

Table of Contents

**31 - Subsequent Event**

**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 (R\$3,8 billons) plus ten million warrants of SLW with a strike price of US\$ 65 and a 10-year term, valued at US\$100 million (R\$199). US\$ 1.33 billion (R\$2,64 billons) will be paid for 25% of the gold by-product stream from Salobo while US\$ 570 million (R\$1.133) 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 million (R\$133) to US\$400 million (R\$795) 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

32 - **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**

Gerd Peter Poppinga

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

**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