

Vale S.A.
Form 6-K
February 25, 2016
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**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

December, 2015

Vale S.A.

**Avenida das Américas, No. 700
22640-100 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.

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(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- .

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Financial Statements

December 31, 2015

BRGAAP

Filed with the CVM, SEC and HKEx on

February 25, 2016

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Independent auditor's report on the financial statements

(A free translation of the original report in Portuguese as published in Brazil containing financial statement prepared in accordance with accounting practices adopted in Brazil and rules of the International Financial Reporting Standards - IFRS)

To

The Board of Directors and Stockholders of

Vale S.A.

Rio de Janeiro - RJ

1. We have examined the accompanying individual and consolidated financial statements of Vale S.A. (the Company), identified as Parent Company and Consolidated, respectively, which comprise the balance sheet as of December 31, 2015 and the respective statements of income, comprehensive income, changes in stockholders' equity and cash flows for the year then ended, as well as a summary of significant accounting policies and other notes to the financial statements.

Management's responsibility for the financial statements

2. The Company's management is responsible for the preparation and fair presentation of the individual and consolidated financial statements in accordance with accounting practices adopted in Brazil and in accordance with International Financial Reporting Standards (IFRS), issued by the International Accounting Standards Board (IASB) as well as for the internal control as it considers necessary to enable the preparation of financial statements free of material misstatements, regardless of whether due to fraud or error.

Independent auditor's responsibility

3. Our responsibility is to express an opinion on these financial statements based on our audit, conducted in accordance with the Brazilian and International Standards on Auditing. These standards require compliance with ethical requirements by the auditor and that the audit is planned and performed for the purpose of obtaining reasonable assurance that the financial statements are free from material misstatement.

4. An audit involves performing selected procedures to obtain evidence with respect to the amounts and disclosures presented in the financial statements. The procedures selected depend on the auditor's judgment, and include the assessment of the risks of material misstatements of the financial statements, regardless of whether due to fraud or error. In the assessment of these risks, the auditor considers the relevant internal controls for the preparation and fair presentation of the Company's financial statements, in order to plan audit procedures that are appropriate in the circumstances, but not for purposes of expressing an opinion on the effectiveness of the Company's internal controls. An audit also includes evaluating the adequacy of the accounting practices used and the reasonableness of the accounting estimates made by management, as well as evaluating the overall presentation of the financial statements taken as a whole.

KPMG Auditores Independentes, uma sociedade simples brasileira e firma-membro da rede KPMG de firmas-membro independentes e afiliadas à KPMG International Cooperative (KPMG International), uma entidade suíça.

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5. We believe that the audit evidence obtained is sufficient and appropriate for expressing our opinion.

Opinion on the financial statements

6. In our opinion, the aforementioned individual and consolidated financial statements present fairly, in all material respects, the individual and consolidated financial position of Vale S.A. as of December 31, 2015, and of its individual and consolidated financial performance and its cash flows for the year then ended in accordance with accounting practices adopted in Brazil and in accordance with the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB).

Statements of added value

7. We have also examined the individual and consolidated statements of added value for the year ended December 31, 2015, the presentation of which is required by Brazilian Corporation Law for public companies, which is the responsibility of the Company's management, considered as supplementary information by IFRS, which does not require the presentation of the statements of added value. These statements were submitted to the same audit procedures described previously and, in our opinion, are presented adequately, in all material respects, in relation to the financial statements, taken as a whole.

Rio de Janeiro, February 24, 2016

KPMG Auditores Independentes

CRC SP-014428/O-6 F-RJ

Manuel Fernandes Rodrigues de Sousa

Accountant CRC-RJ-052428/O-2

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In millions of Brazilian Reais

	Notes	Consolidated December 31, 2015	December 31, 2014	Parent Company December 31, 2015	December 31, 2014
Assets					
Current assets					
Cash and cash equivalents	7	14,022	10,555	518	685
Financial investments		109	392	18	392
Derivative financial instruments	24	474	441	196	370
Accounts receivable	8	5,763	8,700	36,026	30,599
Inventories	9	13,775	11,956	3,830	3,655
Prepaid income taxes		3,513	4,200	3,176	3,782
Recoverable taxes	10	5,482	4,515	3,352	2,687
Related parties	30	273	1,537	834	2,227
Others		1,215	1,780	581	1,169
		44,626	44,076	48,531	45,566
Assets held for sale	5	15,792	9,669		1,501
		60,418	53,745	48,531	47,067
Non-current assets					
Derivative financial instruments	24	363	231	293	29
Loans		732	609	106	104
Prepaid income taxes		1,840	1,271		
Recoverable taxes	10	1,956	1,064	1,457	566
Deferred income taxes	20	30,867	10,560	17,292	6,430
Judicial deposits	18(c)	3,445	3,370	2,707	2,721
Related parties	30	5	93	1,468	902
Others		2,392	1,873	765	349
		41,600	19,071	24,088	11,101
Investments	11	11,481	10,978	127,517	128,615
Intangibles	13	20,789	18,114	8,557	7,467
Property, plant and equipment	14	211,259	207,507	96,887	87,321
		285,129	255,670	257,049	234,504
Total assets		345,547	309,415	305,580	281,571

Table of Contents**Balance Sheet**

In millions of Brazilian Reais

(continued)

	Notes	Consolidated		Parent Company	
		December 31, 2015	December 31, 2014	December 31, 2015	December 31, 2014
Liabilities					
Current liabilities					
Suppliers and contractors		13,140	11,566	7,084	6,818
Payroll and related charges		1,464	3,089	806	2,017
Derivative financial instruments	24	8,107	3,760	3,559	948
Loans and borrowings	16	9,788	3,768	4,736	2,853
Related parties	30	1,856	813	6,774	5,622
Income taxes - Settlement program	19	1,348	1,213	1,320	1,189
Taxes payable		977	1,461	460	376
Provision for income taxes		943	937		
Employee postretirement obligations	21(a)	266	177	72	66
Asset retirement obligations	17	346	361	83	89
Others		2,531	1,074	825	690
		40,766	28,219	25,719	20,668
Liabilities associated with assets held for sale	5	416	294		
		41,182	28,513	25,719	20,668
Non-current liabilities					
Derivative financial instruments	24	5,581	4,276	4,745	3,866
Loans and borrowings	16	102,878	72,749	55,986	38,542
Related parties	30	830	288	63,837	43,606
Employee postretirement obligations	21(a)	6,831	5,941	483	466
Provisions for litigation	18(a)	3,210	3,405	2,190	2,448
Income taxes - Settlement program	19	15,953	15,572	15,626	15,254
Deferred income taxes	20	6,520	8,874		
Asset retirement obligations	17	9,313	8,588	1,291	3,106
Participative stockholders debentures	29(b)	1,336	4,584	1,336	4,584
Redeemable noncontrolling interest			645		

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Deferred revenue - Gold stream	28	6,830	3,516		
Others		5,664	2,863	3,207	2,617
		164,946	131,301	148,701	114,489
Total liabilities		206,128	159,814	174,420	135,157
Stockholders' equity					
Equity attributable to Vale's stockholders	25	131,160	146,414	131,160	146,414
Equity attributable to noncontrolling interests	12	8,259	3,187		
Total stockholders' equity		139,419	149,601	131,160	146,414
Total liabilities and stockholders' equity		345,547	309,415	305,580	281,571

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

Table of Contents**Income Statement**

In millions of Brazilian Reais, except as otherwise stated

	Notes	Year ended December 31				
		2015	Consolidated 2014	2013	Parent Company 2015	2014
Continuing operations						
Net operating revenue	3(c)	85,499	88,275	101,490	42,560	54,346
Cost of goods sold and services rendered	26(a)	(68,658)	(59,087)	(52,511)	(27,522)	(26,093)
Gross profit		16,841	29,188	48,979	15,038	28,253
Operating (expenses) income						
Selling and administrative expenses	26(b)	(2,143)	(2,603)	(2,804)	(1,141)	(1,441)
Research and evaluation expenses		(1,603)	(1,738)	(1,745)	(767)	(1,017)
Pre operating and operational stoppage		(3,408)	(2,563)	(4,035)	(618)	(426)
Equity results from subsidiaries	11				(35,357)	(14,167)
Other operating income (expenses), net	26(c)	(586)	(2,560)	(2,157)	72	(1,996)
		(7,740)	(9,464)	(10,741)	(37,811)	(19,047)
Impairment of non-current assets and onerous contracts	15	(34,553)	(2,713)	(5,390)	270	4,295
Results on measurement or sale of non-current assets	5-6	52	(441)	(508)	546	
Operating income (loss)		(25,400)	16,570	32,340	(21,957)	13,501
Financial income	27	26,167	8,667	5,795	25,822	7,379
Financial expenses	27	(62,705)	(23,420)	(24,237)	(56,950)	(18,495)
Equity results in associates and joint ventures	11	(1,507)	1,141	999	(1,507)	1,141
Results on sale or disposal of investments in associates and joint ventures	5-6	296	(68)	98	55	(68)
Impairment of investments in associates and joint ventures	15	(1,727)	(71)		(510)	(71)
Net income (loss) before income taxes		(64,876)	2,819	14,995	(55,047)	3,387
Income taxes						
Current tax	20	(1,347)	(2,352)	(17,368)	18	(1,344)
Deferred tax		20,226	(248)	2,119	10,816	(1,089)
		18,879	(2,600)	(15,249)	10,834	(2,433)
Net income (loss) from continuing operations		(45,997)	219	(254)	(44,213)	954
Loss attributable to noncontrolling interests	12	(1,784)	(735)	(373)		
Net income (loss) from continuing operations attributable to Vale's stockholders		(44,213)	954	119	(44,213)	954
Discontinued operations						
Loss from discontinued operations				(4)		

Loss from discontinued operations attributable to Vale's stockholders					(4)
Net income (loss)	(45,997)	219	(258)	(44,213)	954
Loss attributable to noncontrolling interests	(1,784)	(735)	(373)		
Net income (loss) attributable to Vale's stockholders	(44,213)	954	115		
Earnings per share attributable to Vale's stockholders:					
Basic and diluted earnings per share:	25(d)				
Preferred share (R\$)	(8.58)	0.19	0.02	(8.58)	0.19
Common share (R\$)	(8.58)	0.19	0.02	(8.58)	0.19

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

Table of Contents**Statement of Comprehensive Income**

In millions of Brazilian Reais

	Year ended December 31				
	2015	Consolidated 2014	2013	Parent Company 2015	2014
Net income (loss)	(45,997)	219	(258)	(44,213)	954
Other comprehensive income					
Items that will not be reclassified subsequently to net income					
Retirement benefit obligations					
Gross balance for the year	261	(661)	1,976	(136)	(261)
Effect of taxes	(4)	204	(614)	46	89
Equity results from entities, net taxes		4		350	(281)
	257	(453)	1,362	260	(453)
Total items that will not be reclassified subsequently to net income	257	(453)	1,362	260	(453)
Items that may be reclassified subsequently to net income					
Cumulative translation adjustments					
Gross balance for the year	32,444	8,771	6,283	34,409	8,480
Effect of taxes	3,500				
Transfer of realized results to net income			939		
	35,944	8,771	7,222	34,409	8,480
Available-for-sale financial instruments					
Gross balance for the year	2	(8)	368		
Equity results from entities, net taxes				2	
Transfer of realized results to net income, net of taxes		8	(370)		
	2		(2)	2	
Cash flow hedge					
Gross balance for the year	2,655	(731)	(25)		
Effect of taxes	(23)	(6)	24		
Equity results from entities, net taxes	(17)	(4)		1,458	(1,044)
Transfer of realized results to net income, net of taxes	(1,157)	(303)	(93)		
	1,458	(1,044)	(94)	1,458	(1,044)
Total of items that may be reclassified subsequently to net income	37,404	7,727	7,126	35,869	7,436
Total comprehensive income	(8,336)	7,493	8,230	(8,084)	7,937
Comprehensive income attributable to noncontrolling interests	(252)	(444)	229		
Comprehensive income attributable to Vale's stockholders	(8,084)	7,937	8,001		

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

Table of Contents**Cash Flow Statement****In millions of Brazilian Reais**

	Year ended December 31				
	2015	Consolidated 2014	2013	Parent Company 2015	2014
Cash flow from continuing operating activities:					
Net income (loss) from continuing operations	(45,997)	219	(254)	(44,213)	954
Adjustments for:					
Equity results from entities	1,507	(1,141)	(999)	36,864	13,026
Results on measurement or sale of non-current assets	(52)	441	508	(546)	
Results on sale or disposal of investments in associates and joint ventures	(296)	68	(98)	(55)	68
Results on disposal of property, plant and equipment and intangibles	(427)	232	(279)	165	198
Impairment of non-current assets and onerous contracts	36,280	2,784	5,390	240	(4,224)
Depreciation, amortization and depletion	13,489	10,108	8,953	4,578	3,649
Deferred income taxes	(20,226)	248	(2,119)	(10,816)	1,089
Foreign exchange and indexation, net	24,364	3,208	1,565	21,671	4,631
Unrealized derivative loss (gain), net	5,796	2,903	1,616	3,708	1,169
Dividends and interest on capital received from subsidiaries				864	560
Participative stockholders' debentures	(3,039)	665	800	(3,039)	665
Others	732	554	305	541	2,031
Changes in assets and liabilities:					
Accounts receivable	5,237	5,296	932	6,404	(12,816)
Inventories	(1,018)	(1,661)	929	228	502
Suppliers and contractors	2,429	2,301	(219)	1,550	3,167
Payroll and related charges	(1,780)	(230)	261	(1,317)	(213)
Income taxes (includes settlement program)	(278)	1,285	12,192	33	1,407
Net other taxes assets and liabilities	(802)	(726)	531	(79)	(800)
Deferred revenue - Gold stream (note 28)	1,670		2,899		
Net other assets and liabilities	(1,870)	1,238	(1,037)	(903)	(1,724)
Net cash provided by continuing operating activities	15,719	27,792	31,876	15,878	13,339
Net cash provided by discontinued operating activities			357		
Net cash provided by operating activities	15,719	27,792	32,233	15,878	13,339
Cash flow from continuing investing activities:					
Financial investments redeemed (invested)	932	(392)	498	373	(384)
Loans and advances received (granted)	(34)	781	(44)	160	730
Guarantees and deposits received (granted)	(238)	156	(324)	(197)	112
Additions to investments	(186)	(570)	(784)	(5,330)	(2,618)
Acquisition of subsidiary (note 6(f))	(237)				
Additions to property, plant and equipment and intangible (note 3(b))	(27,784)	(26,346)	(28,549)	(16,094)	(16,714)
Dividends and interest on capital received from associates and joint ventures (note 11)	1,064	1,302	1,836	881	1,142

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Proceeds from disposal of assets and investments	5,211	2,709	4,699	4,366	2,709
Proceeds from gold stream transaction (note 28)	1,156		1,161		
Net cash used in continuing investing activities	(20,116)	(22,360)	(21,507)	(15,841)	(15,023)
Net cash provided by discontinued investing activities			(1,643)		
Net cash used in investing activities	(20,116)	(22,360)	(23,150)	(15,841)	(15,023)
Cash flow from continuing financing activities:					
Loans and borrowings (i)					
Additions	16,603	5,947	7,267	19,571	16,523
Repayments	(10,156)	(4,678)	(7,480)	(14,749)	(8,058)
Transactions with stockholders:					
Dividends and interest on capital paid to Vale's stockholders (note 25(e))	(5,026)	(9,739)	(9,319)	(5,026)	(9,739)
Dividends and interest on capital paid to noncontrolling interest	(46)	(164)	(46)		
Transactions with noncontrolling stockholders (ii)	3,875				
Net cash provided (used) by continuing financing activities	5,250	(8,634)	(9,578)	(204)	(1,274)
Net cash provided by discontinued financing activities			182		
Net cash provided (used) in financing activities	5,250	(8,634)	(9,396)	(204)	(1,274)
Increase (decrease) in cash and cash equivalents	853	(3,202)	(313)	(167)	(2,958)
Cash and cash equivalents in the beginning of the year	10,555	12,465	11,918	685	3,635
Effect of exchange rate changes on cash and cash equivalents	2,614	1,292	860		
Cash and cash equivalents from incorporated subsidiary					8
Cash and cash equivalents at end of the year	14,022	10,555	12,465	518	685
Cash paid for (iii):					
Interest on loans and borrowings (i)	(4,827)	(3,561)	(3,290)	(4,756)	(3,163)
Derivatives received (paid), net	(3,771)	(521)	(605)	(769)	(81)
Income taxes	(1,738)	(1,199)	(5,183)	(58)	(60)
Income taxes - Settlement program	(1,284)	(1,161)	(6,032)	(1,257)	(1,137)
Non-cash transactions:					
Additions to property, plant and equipment - capitalized loans and borrowing costs	2,531	1,387	519	1,258	738
Additions to property, plant and equipment - costs of assets retirement obligations	846	2,217	445	(936)	973
Dividends received				227	349

(i) In the Parent Company includes debt flow with Vale International S.A., its wholly owned. In 2015 was captured R\$4,080 (R\$11,388 2014); repayments of R\$5,229 (R\$5,769 2014); and interest paid of R\$2,318 (R\$1,276 2014), respectively.

(ii) Comprises reduction of participation in MBR (note 6(a)) and other transactions.

(iii) Amounts paid are classified as cash flows from operating activities.

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

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

In millions of Brazilian Reais

	Share capital	Results on conversion of shares	Results from operation with noncontrolling interest	Profit reserves	Treasury stocks	Unrealized fair value gain (losses)	Cumulative translation adjustments	Retained earnings	Equity attributable to Vale's stockholders	Equity attributable to noncontrolling interests	Total stockholders' equity
Balance at December 31, 2012	75,000	50	(840)	78,450	(7,838)	(4,176)	9,002	16	149,664	3,245	152,909
Net income (loss)								115	115	(373)	(143)
Other comprehensive income:											
Retirement benefit obligations						1,362			1,362		1,362
Cash flow hedge Available-for-sale financial instruments						(94)			(94)		(94)
Translation adjustments						(2)			(2)		(2)
						95	6,525		6,620	602	7,217
Transactions with stockholders:											
Dividends and interest on capital of Vale's stockholders								(9,319)	(9,319)		(9,319)
Dividends of noncontrolling interest										(214)	(214)
Redeemable noncontrolling interest										349	349
Capitalization of noncontrolling interest advances										166	166
Realization of reserves				(9,220)				9,220			
Appropriation to undistributed retained earnings				32				(32)			
	75,000	50	(840)	69,262	(7,838)	(2,815)	15,527	(32)	148,346	3,775	152,121

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Balance at December 31, 2013										
Net income (loss)								954	954	(735)
Other comprehensive income:										
Retirement benefit obligations				(453)				(453)		(3)
Cash flow hedge				(1,044)				(1,044)		(1,044)
Translation adjustments				(241)	8,721			8,480	291	8,771
Transactions with stockholders:										
Dividends and interest on capital of Vale's stockholders								(9,739)	(9,739)	(9,739)
Dividends of noncontrolling interest										(18)
Acquisitions and disposal of participation of noncontrolling interest				(130)				(130)	(428)	(558)
Capitalization of noncontrolling interest advances										302
Capitalization of reserves	2,300			(2,300)						
Cancellation of treasury stock				(5,092)	5,092					
Realization of reserves				(8,994)				8,994		
Appropriation to undistributed retained earnings				209				(209)		
Balance at December 31, 2014	77,300	50	(970)	53,085	(2,746)	(4,553)	24,248	146,414	3,187	149,794
Loss								(44,213)	(44,213)	(1,784)
Other comprehensive income:										
Retirement benefit obligations				260				260	(3)	(3)
Cash flow hedge				1,458				1,458		1,458
Available-for-sale financial instruments				2				2		2
Translation adjustments				(1,040)	35,449			34,409	1,535	35,944
Transactions with stockholders:										
Dividends and interest on capital				(5,026)				(5,026)		(5,026)

of Vale's stockholders										
Dividends of noncontrolling interest									(123)	(
Acquisitions and disposal of participation of noncontrolling interest			(911)			(1,233)		(2,144)	5,317	3
Capitalization of noncontrolling interest advances									130	
Appropriation to undistributed retained earnings			(44,213)			44,213				
Balance at December 31, 2015	77,300	50	(1,881)	3,846	(2,746)	(3,873)	58,464	131,160	8,259	139

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

Table of Contents**Value Added Statement**

In millions of Brazilian Reais

	Year ended December 31				
	2015	Consolidated 2014	2013	Parent Company 2015	2014
Generation of value added from continuing operations					
Gross revenue					
Revenue from products and services	86,907	89,911	103,026	43,296	55,198
Results on measurement or sale of non-current assets	348	(509)	(410)	601	(68)
Revenue from the construction of own assets	30,329	27,733	20,792	17,948	17,453
Allowance for doubtful accounts	44	(34)	(22)	(9)	15
Other revenues	1,979	1,153	1,307	569	525
Less:					
Acquisition of products	(2,531)	(3,800)	(3,329)	(684)	(1,071)
Material, service and maintenance	(46,396)	(42,133)	(35,050)	(25,850)	(26,684)
Oil and gas	(4,406)	(4,022)	(3,954)	(2,629)	(2,520)
Energy	(1,920)	(1,430)	(1,546)	(941)	(689)
Freight	(11,878)	(8,502)	(6,979)		
Impairment of non-current assets and contracts onerous	(36,280)	(2,784)	(5,390)	(240)	4,224
Other costs and expenses	(8,680)	(10,010)	(9,481)	(1,087)	(2,297)
Gross value added	7,516	45,573	58,964	30,974	44,086
Depreciation, amortization and depletion	(13,489)	(10,108)	(8,953)	(4,578)	(3,649)
Net value added	(5,973)	35,465	50,011	26,396	40,437
Received from third parties					
Equity results from entities	(1,507)	1,141	999	(36,864)	(13,026)
Financial income	4,791	2,396	1,465	3,377	1,780
Monetary and exchange variation of assets	12,087	3,301	1,802	12,828	4,018
Total value added from continuing operations to be distributed	9,398	42,303	54,277	5,737	33,209
Value added from discontinued operations to be distributed			611		
Total value added to be distributed	9,398	42,303	54,888	5,737	33,209
Personnel	9,497	9,485	9,496	4,573	4,986
Taxes and contributions	8,511	8,379	6,242	6,383	6,925
Current income tax	1,347	2,352	17,368	(18)	1,344
Deferred income tax	(20,226)	248	(2,119)	(10,816)	1,089
Financial expense (includes capitalized interest)	16,951	11,488	14,397	11,050	7,941
Monetary and exchange variation of liabilities	37,598	8,746	8,286	36,282	8,130

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Other remunerations of third party funds	1,717	1,386	861	2,496	1,840
Dividends and interest attributed to Vale's stockholders		745	83		745
Reinvested net income (absorbed loss)	(44,213)	209	36	(44,213)	209
Net income (loss) attributable to noncontrolling interest	(1,784)	(735)	(373)		
Distributed value added from continuing operations	9,398	42,303	54,277	5,737	33,209
Distributed value added from discontinued operations			611		
Distributed value added	9,398	42,303	54,888	5,737	33,209

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

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Notes to the Financial Statements

Expressed in millions of Brazilian Reais, unless otherwise stated

1. Corporate information

Vale S.A. (the Parent Company) is a public company headquartered at 700, Avenida das Américas, Rio de Janeiro, Brazil with securities traded on the stock exchanges of São Paulo - BM&F BOVESPA (Vale3 and Vale5), New York - NYSE (VALE and VALE.P), Paris - NYSE Euronext (Vale3 and Vale5) and Hong Kong - HKEx (codes 6210 and 6230).

Vale and its direct and indirect subsidiaries (Vale , Group or Company) are producers of iron ore and iron ore pellets, key raw materials for steelmaking, and producers of nickel, which is used to produce stainless steel and metal alloys employed in the production of several products. The Group also produces copper, metallurgical and thermal coal, potash, phosphates and other fertilizer nutrients, manganese ore, ferroalloys, platinum group metals, gold, silver and cobalt. The information by segment is presented in notes 3 and 31(d).

2. Basis for preparation of the financial statements

a) Statement of compliance

The consolidated and individual financial statements of the Company (financial statements) have been prepared in accordance with the International Financial Reporting Standards (IFRS) as implemented in Brazil by the Brazilian Accountant Pronouncements Committee (CPC), approved by the Brazilian Securities Exchange Commission (CVM) and by the Brazilian Federal Accounting Council (CFC). All relevant information from its own financial statements, and only this information, are being presented and correspond to those used by the Company 's Management. The consolidated financial statements present the accounts of the Group as described in note 31(b).

b) Basis of presentation

The financial statements have been prepared under the historical cost convention as adjusted to reflect: (i) the fair value of financial instruments measured at fair value through income statement or available-for-sale financial instruments measured at fair value through the statement of comprehensive income; and (ii) impairment of assets.

Subsequent events were evaluated through February 24, 2016, which is the date the financial statements were approved by the Board of Directors.

c) Accounting standards issued but not yet effective

IFRS 9 Financial instruments - In July 2014 the IASB issued IFRS 9, which sets out the requirements for recognizing and measuring financial assets, financial liabilities and some contracts to buy or sell non-financial items. This Standard replaces IAS 39 Financial Instruments: Recognition and Measurement. The adoption will be required from January 1, 2018 and the Company does not expect significant impact from the adoption of this standard.

IFRS 15 Revenue from contracts with customers - In May 2014 the IASB issued IFRS 15, which sets out the requirements for revenue recognition that apply to all contracts with customer to depict the transfer of promised goods or services to the customer in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services, and replaces IAS 18 - revenue, IAS 11 - Construction contracts and the related interpretations. The adoption will be required from January 1, 2018 and the Company is currently analyzing the potential impact regarding this pronouncement on the financial statements.

IFRS 16 Leases - In January 2016 the IASB issued IFRS 16, which sets out the principles for the recognition, measurement, presentation and disclosure of leases. IFRS 16 replaces IAS 17 Leases and the related interpretation. The adoption will be required from January 1, 2019 and the Company is currently analyzing the potential impact regarding this pronouncement on the financial statements.

d) Summary of main accounting practices and critical accounting estimates and judgments

The summary of main accounting practices and the critical accounting estimates and judgments are disclosed in note 31 and 32, respectively.

Table of Contents**3. Information by business segment and by geographic area**

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

a) Operating income (loss) and adjusted EBITDA

Adjusted EBITDA is used by management to support the decision making process for segments. The definition of adjusted EBITDA for the Company is the operating income or loss adding dividends received from associates and joint ventures, and excluding the depreciation, depletion and amortization, impairment, onerous contracts and results on measurement or sales of non-current assets.

	Consolidated Year ended December 31, 2015							Adjusted by			
	Income statement			Pre operating and operational stoppage		Depreciation and others results	Operating income (loss)	Impairment of non-current assets and onerous contracts	Results on measurement or sale of non-current assets	Dividends received from associates and joint ventures	Depreciation and amortization
	Net operating revenue	Costs	Expenses, net	Research and evaluation expenses							
Ferrous minerals											
Iron ore	41,427	(25,505)	(1,140)	(395)	(417)	(8,184)	5,786	3,538	494	87	4,1
Pellets	11,916	(7,008)	34	(13)	(81)	(1,309)	3,539	225		708	1,0
Ferroalloys and manganese	518	(583)	1	(1)	(61)	(79)	(205)				
Others ferrous products and services	1,552	(1,115)	22	(9)	(6)	(327)	117	80		25	2
	55,413	(34,211)	(1,083)	(418)	(565)	(9,899)	9,237	3,843	494	820	5,5
Coal	1,739	(2,857)	(435)	(73)	(208)	(12,432)	(14,266)	11,762		109	6
Base metals											
Nickel and other products	15,534	(11,378)	(506)	(348)	(1,359)	(23,695)	(21,752)	18,180			5,5

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Copper	4,957	(3,049)	(114)	(31)	(2)	(784)	977	138			
Others base metals products			722				722				
	20,491	(14,427)	102	(379)	(1,361)	(24,479)	(20,053)	18,318			6,1
Fertilizers											
Potash	443	(297)	9	(171)	(81)	(2,230)	(2,327)	2,123			1
Phosphates	5,806	(3,912)	(118)	(97)	(139)	653	2,193	(1,515)			8
Nitrogen	999	(687)	(15)	(9)	(12)	(70)	206				
Others fertilizers products	194						194				
	7,442	(4,896)	(124)	(277)	(232)	(1,647)	266	608			1,0
Others	414	(464)	(543)	(456)	(2)	467	(584)	22	(546)	135	
Total	85,499	(56,855)	(2,083)	(1,603)	(2,368)	(47,990)	(25,400)	34,553	(52)	1,064	13,4

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Consolidated Year ended December 31, 2014											
Statement of income											
	Net operating revenue	Costs	Expenses, net	Research and evaluation expenses	Pre operating and operational stoppage	Depreciation and others results	Operating income (loss)	Impairment of non-current assets and onerous contracts	Adjusted by Results on measurement or sale of non-current assets	Dividends received from associates and joint ventures	Depreciation and amortization
Ferrous minerals											
Iron ore	45,341	(22,515)	(3,037)	(758)	(376)	(6,382)	12,273	2,794		108	3,5
Pellets	12,397	(6,397)	(42)	(2)	(88)	(648)	5,220			1,097	6
Ferroalloys and manganese	933	(618)	(27)	(1)	(54)	(75)	158				
Others ferrous products and services	1,724	(1,310)	7	(21)		(239)	161			1	2
	60,395	(30,840)	(3,099)	(782)	(518)	(7,344)	17,812	2,794		1,206	4,5
Coal	1,740	(2,514)	(764)	(43)	(89)	(1,075)	(2,745)	786		75	2
Base metals											
Nickel and other products	14,703	(8,756)	249	(330)	(1,209)	(586)	4,071	(3,667)	441		3,8
Copper	3,434	(2,079)	(35)	(10)	(38)	(414)	858				4
	18,137	(10,835)	214	(340)	(1,247)	(1,000)	4,929	(3,667)	441		4,2
Fertilizers											
Potash	363	(312)	(40)	(45)	(51)	(60)	(145)				
Phosphates	4,259	(3,534)	(163)	(109)	(133)	(3,607)	(3,287)	2,800			8
Nitrogen	820	(560)	(23)	(16)	(16)	(113)	92				1
Others fertilizers products	214						214				
	5,656	(4,406)	(226)	(170)	(200)	(3,780)	(3,126)	2,800			9
Others	2,347	(1,408)	(759)	(403)	(14)	(63)	(300)			21	
Total	88,275	(50,003)	(4,634)	(1,738)	(2,068)	(13,262)	16,570	2,713	441	1,302	10,1

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Consolidated Year ended December 31, 2013											
Statement of income											
	Net operating revenue	Costs	Expenses, net	Research and evaluation expenses	Pre operating and operational stoppage	Depreciation and others results	Operating income (loss)	Impairment of non-current assets and onerous contracts	Adjusted by Results on measurement or sale of non-current assets	Dividends received from associates and joint ventures	Depreciation, depletion and amortization
Ferrous minerals											
Iron ore	60,653	(19,736)	(2,714)	(690)	(524)	(3,023)	33,966			149	3,023
Pellets	12,972	(4,994)	(249)	(24)	(280)	(826)	6,599	427		1,441	399
Ferroalloys and manganese	1,140	(677)	(69)	(1)	(31)	(64)	298				64
Others ferrous products and services	903	(351)	11			(301)	262			2	301
	75,668	(25,758)	(3,021)	(715)	(835)	(4,214)	41,125	427		1,592	3,787
Coal	2,188	(2,485)	(536)	(102)	(105)	(373)	(1,413)			90	373
Base metals											
Nickel and other products	12,566	(7,906)	(263)	(373)	(1,633)	(3,416)	(1,025)				3,416
Copper	3,180	(2,182)	(266)	(95)	(22)	(884)	(269)		508		376
Others base metals products			484				484				
	15,746	(10,088)	(45)	(468)	(1,655)	(4,300)	(810)		508		3,792
Fertilizers											
Potash	434	(274)	(80)	(38)	(868)	(5,057)	(5,883)	4,963			94
Phosphates	4,443	(3,621)	(309)	(67)	(56)	(676)	(286)				676
Nitrogen	990	(804)	(46)	(12)	(11)	(158)	(41)				158
Others fertilizers products	171			(4)			167				
	6,038	(4,699)	(435)	(121)	(935)	(5,891)	(6,043)	4,963			928
Others	1,850	(1,450)	(508)	(338)		(73)	(519)			154	73
Total of continued operations	101,490	(44,480)	(4,545)	(1,744)	(3,530)	(14,851)	32,340	5,390	508	1,836	8,953
Discontinued operations	2,762	(2,324)	(157)	(30)		(823)	(572)		484		339
Total	104,252	(46,804)	(4,702)	(1,774)	(3,530)	(15,674)	31,768	5,390	992	1,836	9,292

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b) Assets by segment

	Consolidated Year ended December 31, 2015				
	Trade receivables	Product inventory	Investments	Property, plant and equipment and intangible assets	Additions to property, plant and equipment and intangible
Ferrous minerals					
Iron ore	289	3,168	1,581	104,539	16,177
Pellets	2,792	620	1,156	4,213	129
Ferroalloys and manganese	203	249		547	43
Others ferrous products and services	303	7	3,038	824	50
	3,587	4,044	5,775	110,123	16,399
Coal	176	206	1,195	7,075	5,108
Base metals					
Nickel and other products	1,606	4,460	66	83,118	4,365
Copper	67	92		8,731	797
	1,673	4,552	66	91,849	5,162
Fertilizers					
Potash		52		570	
Phosphates	393	1,063		14,526	853
Nitrogen		41			
	393	1,156		15,096	853
Others	159	10	4,445	7,905	262
Total	5,988	9,968	11,481	232,048	27,784

	Consolidated Year ended December 31, 2014				
	Trade receivables	Product inventory	Investments	Property, plant and equipment and intangible assets	Additions to property, plant and equipment and intangible
Ferrous minerals					
Iron ore	4,035	2,949	1,450	93,747	16,597
Pellets	1,153	498	1,575	4,293	509
Ferroalloys and manganese	402	183		696	133
Others ferrous products and services	181		2,945	810	93
	5,771	3,630	5,970	99,546	17,332
Coal	324	411	943	11,765	4,850

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Base metals					
Nickel and other products	1,747	3,811	56	78,664	1,828
Copper	317	70	515	9,733	1,333
	2,064	3,881	571	88,397	3,161
Fertilizers					
Potash		31		414	
Phosphates	361	822		14,632	92
Nitrogen		62			
	361	915		15,046	92
Others					
	410	8	3,494	10,867	911
Total	8,930	8,845	10,978	225,621	26,346

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c) Results by segment and revenues by geographic area

	Consolidated Year ended December 31, 2015					
	Ferrous minerals	Coal	Base metals	Fertilizers	Others	Total
Results						
Net operating revenue	55,413	1,739	20,491	7,442	414	85,499
Cost and expenses	(36,277)	(3,573)	(16,065)	(5,529)	(1,465)	(62,909)
Impairment of non-current assets and onerous contracts	(3,843)	(11,762)	(18,318)	(608)	(22)	(34,553)
Results on measurement or sale of non-current assets	(494)				546	52
Depreciation, depletion and amortization	(5,562)	(670)	(6,161)	(1,039)	(57)	(13,489)
Operating income (loss)	9,237	(14,266)	(20,053)	266	(584)	(25,400)
Financial result	(35,498)	481	(1,072)	(482)	33	(36,538)
Results on sale or disposal of investments in associates and joint ventures					296	296
Impairment of investment in associates and joint ventures	(511)		(1,216)			(1,727)
Equity results in associates and joint ventures	112	(13)	(495)		(1,111)	(1,507)
Income taxes	18,397	(3,241)	4,211	(460)	(28)	18,879
Loss	(8,263)	(17,039)	(18,625)	(676)	(1,394)	(45,997)
Income (loss) attributable to noncontrolling interests	270	(942)	(1,072)	31	(71)	(1,784)
Loss attributable to Vale's stockholders	(8,533)	(16,097)	(17,553)	(707)	(1,323)	(44,213)
Sales classified by geographic area:						
America, except United States and Brazil	1,185	64	3,697	217		5,163
United States of America	95		2,640		69	2,804
Europe	8,293	347	6,464	431		15,535
Middle East/Africa/Oceania	3,323	314	273	31		3,941
Japan	5,038	237	1,223			6,498
China	28,477	149	2,186			30,812
Asia, except Japan and China	3,545	553	3,325	243		7,666
Brazil	5,457	75	683	6,520	345	13,080
Net operating revenue	55,413	1,739	20,491	7,442	414	85,499

	Consolidated Year ended December 31, 2014					
	Ferrous minerals	Coal	Base metals	Fertilizers	Others	Total
Results						
Net operating revenue	60,395	1,740	18,137	5,656	2,347	88,275

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Cost and expenses	(35,239)	(3,410)	(12,208)	(5,002)	(2,584)	(58,443)
Impairment of non-current assets and onerous contracts	(2,794)	(786)	3,667	(2,800)		(2,713)
Results on measurement or sales of non-current assets			(441)			(441)
Depreciation, depletion and amortization	(4,550)	(289)	(4,226)	(980)	(63)	(10,108)
Operating income (loss)	17,812	(2,745)	4,929	(3,126)	(300)	16,570
Financial result	(14,611)	443	(425)	(125)	(35)	(14,753)
Results on sale or disposal of investments in associates and joint ventures					(68)	(68)
Impairment of investment in associates and joint ventures					(71)	(71)
Equity results in associates and joint ventures	1,527	76	(80)		(382)	1,141
Income taxes	(3,355)	243	(333)	1,059	(214)	(2,600)
Net income (loss)	1,373	(1,983)	4,091	(2,192)	(1,070)	219
Income (loss) attributable to noncontrolling interests	150	(117)	(702)	14	(80)	(735)
Income (loss) attributable to Vale's stockholders	1,223	(1,866)	4,793	(2,206)	(990)	954
Sales classified by geographic area:						
America, except United States and Brazil	1,529	7	3,230	89	45	4,900
United States of America	55		2,590		565	3,210
Europe	9,115	275	6,105	207	30	15,732
Middle East/Africa/Oceania	3,794	259	350	7		4,410
Japan	6,031	453	2,030		16	8,530
China	28,077	178	1,507			29,762
Asia, except Japan and China	5,170	550	1,934	130	1	7,785
Brazil	6,624	18	391	5,223	1,690	13,946
Net operating revenue	60,395	1,740	18,137	5,656	2,347	88,275

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	Consolidated					Total
	Year ended December 31, 2013					
	Ferrous minerals	Coal	Base metals	Fertilizers	Others	
Results						
Net operating revenue	75,668	2,188	15,746	6,038	1,850	101,490
Cost and expenses	(30,329)	(3,228)	(12,256)	(6,190)	(2,296)	(54,299)
Impairment of non-current assets and onerous contracts	(427)			(4,963)		(5,390)
Results on measurement or sale of non-current assets			(508)			(508)
Depreciation, depletion and amortization	(3,787)	(373)	(3,792)	(928)	(73)	(8,953)
Operating income (loss)	41,125	(1,413)	(810)	(6,043)	(519)	32,340
Financial result	(18,917)	96	(177)	(195)	751	(18,442)
Results on sale or disposal of investments in associates and joint ventures				65	33	98
Equity results in associates and joint ventures	1,322	91	(53)		(361)	999
Income taxes	(16,025)	616	144	115	(99)	(15,249)
Net income (loss)	7,505	(610)	(896)	(6,058)	(195)	(254)
Income (loss) attributable to noncontrolling interests	(83)	(82)	(115)	30	(123)	(373)
Income (loss) attributable to Vale s stockholders	7,588	(528)	(781)	(6,088)	(72)	119
Sales classified by geographic area:						
America, except United States and Brazil	1,575	1	2,247	132	21	3,976
United States of America	68		2,297		458	2,823
Europe	12,780	177	5,734	255		18,946
Middle East/Africa/Oceania	4,002	297	204	36		4,539
Japan	6,859	649	1,340			8,848
China	39,074	351	1,839			41,264
Asia, except Japan and China	5,074	673	1,914	137	1	7,799
Brazil	6,236	40	171	5,478	1,370	13,295
Net operating revenue	75,668	2,188	15,746	6,038	1,850	101,490

d) Investment, intangible and property, plant and equipment by geographic area

	Consolidated				December 31, 2014			
	December 31, 2015		Property, plant and equipment	Total	December 31, 2014		Property, plant and equipment	Total
Investments	Intangible	Investments			Intangible			
Brazil	9,403	12,825	125,697	147,925	9,059	11,633	108,826	129,518
Canada	8	7,964	41,346	49,318	11	6,248	46,424	52,683

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America, except Brazil and Canada	613		1,781	2,394	489		1,730	2,219
Europe			2,375	2,375			1,674	1,674
Asia	1,433		20,378	21,811	903		18,707	19,610
Australia			290	290		233	2,061	2,294
New Caledonia			13,749	13,749			10,996	10,996
Mozambique			1,727	1,727			14,280	14,280
Oman			3,916	3,916			2,808	2,808
Other regions	24			24	516		1	517
Total	11,481	20,789	211,259	243,529	10,978	18,114	207,507	236,599

Table of Contents**4. Relevant event Dam failure at Samarco Mineração S.A. (Samarco)**

On November 5, 2015, Samarco experienced the failure of an iron ore tailings dam (Fundão) in the state of Minas Gerais - Brazil, which affected communities and ecosystems, including the Rio Doce river.

Following the dam failure, the state government of Minas Gerais ordered the suspension of Samarco's operations. Samarco has been working together with the authorities in order to meet the legal and social requirements to mitigate the environmental and social impacts of the event.

a) Accounting effects at the investment due to the dam failure

Samarco is a Brazilian entity jointly controlled by Vale and BHP Billiton Brasil Ltda. (BHP), in which each shareholder has a 50% ownership interest.

As a consequence of the dam failure, Samarco incurred expenses, wrote off assets and recognized provisions for remediation, which affected its balance sheet and income statement. Because Samarco is a joint venture, the effects of the dam failure are accounted for under equity method by Vale, in which the balance sheet and income statement impact is limited to Vale's interest in Samarco's capital as per the Brazilian Corporation Law. The dam failure had no effect on Vale's cash flow for the year ended December 31, 2015.

The accounting impact of the investment in Samarco in Vale's financial statements, including the effects of the dam failure, are as follows:

	Investments	Consolidated Accounts receivable	Related parties	Total
Balance on December 31, 2014	533	63	822	1,418
Equity results on income statement	(533)			(533)
Dividends received			(459)	(459)
Royalties declared		120		120
Royalties received		(36)		(36)
Transfers	510	(147)	(363)	
Impairment (note 15)	(510)			(510)
Balance on December 31, 2015				

Under Brazilian legislation and the terms of the joint venture agreement, Vale does not have an obligation to provide funding to Samarco. Additionally, Vale has not received any requests for financial assistance from Samarco. As a result, Vale's investment in Samarco was reduced to zero and no liability was recognized in Vale's financial statements. The accounting impact of any future request for funding will be determined when it occurs.

b) Social and environmental remediation - In 2015, Samarco recognized provisions for social and environmental remediation based on current available information. There is a high degree of uncertainty in these provisions since the impact of environmental and social economic assessment is at an early stage. Eventual unrecognized obligations, considered as contingent liabilities, and future possible exposures, including timing of payments cannot be reliably measured. The key assumptions used in the provision will be reviewed periodically considering the assessment of damage progress, which could result in a material change to the amount of Samarco's provision in future reporting periods. In addition, the remediation activities have been submitted to the regulators and other government authorities and are still subject to their approval.

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c) **Contingencies** - In December 2015, the Federal Government, the States of Minas Gerais and Espirito Santo and other entities jointly brought a public civil action against Samarco and its shareholders, Vale and BHP. The plaintiffs seek approximately R\$20.2 billion in damages and a number of measures to remediate alleged damages caused by the Fundão dam failure. Due to the preliminary stage of the proceedings, it is not possible to provide a range of possible outcomes or a reliable estimate of potential future exposure for Vale in relation to this claim. In addition, Samarco and its shareholders are named as a defendant in several other lawsuits brought by individuals, corporations and governmental entities seeking damages for personal injury, wrongful death, commercial or economic injury, breach of contract and violations of statutes. Because these pending lawsuits are at the very early stages, it is not possible to determine a range of outcomes or reliable estimates of the potential exposure at this time. Therefore, no provision has been recognized and no contingent liability has been quantified.

Vale S.A. and certain of its officers have been named as defendants in civil class action suits in federal court in New York brought by holders of Vale's securities under U.S. federal securities laws. The lawsuits allege that Vale made false and misleading statements or omitted to make disclosures concerning the risks and dangers of the operations of Samarco's Fundão dam and assert other causes of action against the defendants for the ownership in and supervision of the Fundão dam. The plaintiffs have not specified an amount of alleged damages in these actions. Vale has notified its insurers of the dam failure event and related civil complaints. Vale intends to defend these actions and mount a full defense against the allegations. The litigation is at a very early stage. Service has not been completed on all defendants, no lead plaintiff or lead plaintiffs' attorney has been named, and no schedule has been established for the filing of any responses, motions or answers. As a consequence of the preliminary nature of these suits, it is not possible to determine a range of outcomes or reliable estimates of the potential exposure at this time, and no provision has been recognized.

d) **Insurance** - Samarco is negotiating with insurers under its operational risk, general liability and engineering risk policies, but these negotiations are still at a preliminary stage. Any payment of insurance proceeds will depend on the coverage definitions under these policies and assessment of the amount of loss. In light of the uncertainties, no indemnification was recognized in Samarco's financial statements.

5. Assets held for sale

	Consolidated			Total
	December 31, 2015 Nacala	Energy	December 31, 2014 Nacala	
Assets held for sale				
Accounts receivable	13		21	21
Other current assets	522		417	417
Investments		233		233
Intangible assets, net	83			
Property, plant and equipment, net	15,174	1,268	7,730	8,998

Total assets	15,792	1,501	8,168	9,669
Liabilities associated with assets held for sale				
Suppliers and contractors	365		143	143
Other current liabilities	51		151	151
Total liabilities	416		294	294
Net assets held for sale	15,376	1,501	7,874	9,375

a) **Coal - Nacala logistic corridor (Nacala)** - In December 2014, the Company signed an agreement with Mitsui & Co., Ltd. (Mitsui) to sell 50% of its stake of 70% in the Nacala corridor. Nacala is a combination of railroad and port concessions under construction located in Mozambique and Malawi. After completion of the transaction, Vale will share control of Nacala with Mitsui and therefore will not consolidate the assets, liabilities and results of those entities. The assets and liabilities were classified as assets held for sale with no impact in the income statement. As at December 2015, completion of the transaction remains dependent upon certain conditions. The Company remains committed to its plan to sell its 50% interest.

b) **Other - Energy generation assets** - In December 2013, the Company signed agreements with CEMIG Geração e Transmissão S.A. (CEMIG GT), as follows:

(i) A new entity Aliança Norte Participações S.A., was incorporated and Vale contributed its 9% investment in Norte Energia S.A. (Norte Energia), which is the company in charge of construction and operation of the Belo Monte Hydroelectric facility. Vale committed to sell 49% and share control of the new entity to CEMIG GT. In the first quarter of 2015, after receiving all regulatory approvals and other customary precedent conditions the Company concluded the transaction and received cash proceeds of R\$306, recognizing a gain of R\$55 as result on sale or disposal of investment in associates and joint ventures (note 6).

(ii) A new entity Aliança Geração de Energia S.A. (Aliança Geração) was incorporated and Vale committed to contribute its shares over several power generation assets which use to supply energy for the Company's operations. In exchange, CEMIG GT committed to contribute its stakes in some of its power generation assets. In the first quarter of 2015, after receiving all regulatory approvals and other customary precedent conditions, the exchange of assets was completed and Vale holds 55% and shares control of the new entity with CEMIG GT. A long term contract was signed between Vale and Aliança Geração for the energy supply. Due to the completion of this transaction, the Company (i) derecognized the assets held for sale related to this transaction; (ii) recognized as investment its share in the joint venture Aliança Geração; and (iii) recognized a gain of R\$546 as results on measurement or sales of non-current assets (note 6) based on the fair value of the assets transferred by CEMIG GT. This transaction has no cash proceeds or disbursements.

Table of Contents**6. Acquisitions and divestitures**

The effects of divestitures in the income statement are presented as follow:

	Year ended December 31				
	2015	Consolidated 2014	2013	Parent Company 2015	2014
Results on measurement or sale of non-current assets					
Shipping assets	(494)				
Energy generation assets (note 5)	546			546	
Mineral rights - CoW Indonesia (note 29(a))		(441)			
Sociedad Contractual Minera Tres Valles			(508)		
	52	(441)	(508)	546	
Results on sale or disposal of investments in associates and joint ventures					
Shandong Yankuang International Coking Co., Ltd.	241				
Energy generation assets (note 5)	55			55	
Vale Florestar Fundo de Investimento em Participações		(68)			(68)
Log-in Logística Intermodal S.A.			33		
Fosbrasil S.A.			65		
	296	(68)	98	55	(68)
Financial income					
Norsk Hydro ASA			491		
			491		

2015

a) **Divestiture of participation in Minerações Brasileiras Reunidas S.A. (MBR)** - The Company and Fundo de Investimento em Participações Multisetorial Plus II, whose shares are held by Banco Bradesco BBI S.A. (related party), completed the sale of class A preferred shares of MBR, representing 36.4% of its share capital. The Company received cash proceeds of R\$4 billion and will keep a stake of 62.5% of the total capital of MBR, maintaining its stake in ordinary capital at 98.3%. The participation and rights of the new shareholder were recognized as noncontrolling interest in stockholders equity.

b) **Divestiture of shipping assets** - The Company completed the sale of 12 very large ore carriers with capacity of

400,000 tons each. The Company received cash proceeds of R\$4,770 and recognized a loss of R\$494 as results on measurement or sale of non-current assets.

c) **Integra and Isaac Plains mining complexes** - The Company signed agreements to sell its participation in the Integra and Isaac Plains mining complexes which were put into care and maintenance in 2014 (note 15). The transaction had no impact in cash flow.

d) **Divestiture of Shandong Yankuang International Coking Co., Ltd. (Yankuang)** - The Company completed the sale of its participation in Yankuang, a producer of coking coal, methanol and other products. In this transaction, Vale recognized a gain of R\$241 as results on sale or disposal of investments in associates and joint ventures.

e) **Divestiture of VBG-Vale BSGR Limited (VBG)** - VBG is the holding company which held the Simandou mining rights located in Guinea. In April 2014, the Government of Guinea revoked VBG mining rights, without any finding of wrongdoing by Vale. During 2014, as a result of the loss of the mining rights, Vale recognized full impairment of the assets related to VBG (note 15). During the first quarter of 2015, the Company sold its stake in VBG to its partner in the project and kept the right to any recoverable amount it may derive from the Simandou project. The transaction had no impact on cash or in the income statement.

f) **Acquisition of Facon Construção e Mineração S.A. (Facon)** - The Company acquired all shares of Facon, a wholly owned subsidiary of Fagundes Construção e Mineração S.A. (FCM). FCM is a logistic service provider for Vale Fertilizantes S.A. The Facon business was carved out from FCM with assets and liabilities directly related to the fertilizer business being transferred to Vale Fertilizantes S.A. The purchase price allocation based on the fair value of acquired assets and liabilities was calculated based on studies performed by the Company. Subsequently, Facon was merged into Vale Fertilizantes S.A.

Purchase price	237
Book value of property, plant and equipment	203
Book value of other assets acquired and liabilities assumed, net	(182)
Adjustment to fair value of property, plant and equipment and mining rights	114
Goodwill	102

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2014

g) **Divestiture of Vale Florestar Fundo de Investimento em Participações (Vale Florestar)** - The Company signed an agreement with a subsidiary of Suzano Papel e Celulose S.A. for the sale of its entire stake in Vale Florestar. A loss on this transaction of R\$68 was recorded as a result on sale or disposal of investments in associates and joint ventures in 2014.

2013

h) **Divestitures of Sociedad Contractual Minera Tres Valles (Tres Valles)** - The Company sold its total participation in Tres Valles for US\$58. On this transaction, Vale recognized a loss of R\$508 presented in the income statement as results on measurement or sale of non-current assets of the year ended as at December 31, 2013. The total loss includes an amount of R\$13 transferred from cumulative translation adjustments.

i) **Divestitures of Log-In Logística Intermodal S.A. (Log-in)** - Vale conducted an auction to sell its common shares of Log-in. All the shares were sold for R\$233 and a gain of R\$33 on this transaction was recorded in the income statement as result on sale or disposal of investments in associates and joint ventures for the year ended as at December 31, 2013.

j) **Divestitures of Fosbrasil S.A. (Fosbrasil)** - The Company entered into an agreement to sale its minority participation in the associate Fosbrasil, producer of purified phosphoric acid, for R\$105. On this transaction, Vale recognized a gain of R\$65 presented in the income statement as result on sale or disposal of investments in associates and joint ventures for the year ended as at December 31, 2013.

k) **Divestitures of Norsk Hydro ASA (Hydro)** - The Company sold its Hydro common shares for R\$4,218. As result of this operation, the Company recognized a gain of R\$491 in the income statement as financial income for the year ended as at December 31, 2013, as below:

Balance on the date of sale

4,309

Cumulative translation adjustment	(952)
Results on available for sale investment	370
	3,727
Amount received	4,218
Gain on sale	491

7. Cash and cash equivalents

	Consolidated		Parent Company	
	December 31, 2015	December 31, 2014	December 31, 2015	December 31, 2014
Cash and bank deposits	7,881	5,601	77	41
Short-term investments	6,141	4,954	441	644
	14,022	10,555	518	685

Cash and cash equivalents includes cash, immediately redeemable deposits and short-term investments with an insignificant risk of change in value. They are readily convertible to cash, part in R\$, indexed to the Brazilian Interbank Interest rate (DI Rate or CDI) and part denominated in US\$, mainly time deposits.

8. Accounts receivable

	Consolidated		Parent Company	
	December 31, 2015	December 31, 2014	December 31, 2015	December 31, 2014
Trade receivables	5,988	8,930	36,107	30,675
Provision for doubtful debts	(225)	(230)	(81)	(76)
	5,763	8,700	36,026	30,599
Trade receivables related to the steel sector - %	75.32%	77.79%	88.83%	93.98%
Reversal (provision) for doubtful debts recorded in the income statement	44	(34)	(9)	(4)
Trade receivables write-offs recorded in the income statement	(18)	(14)	(5)	(1)

Trade receivables by segments are presented in note 3(b). No individual customer represents over 10% of receivables or revenues.

Table of Contents**9. Inventories**

	Consolidated		Parent Company	
	December 31, 2015	December 31, 2014	December 31, 2015	December 31, 2014
Product inventory	9,968	8,845	2,655	2,436
Consumable inventory	3,807	3,111	1,175	1,219
Total	13,775	11,956	3,830	3,655

Product inventories by segments are presented in note 3(b).

As at December 31, 2015 product inventory is stated net of provisions for nickel, coal, phosphate, manganese and iron ore in the amount of R\$275 (R\$50 as at December 31, 2014), R\$1,652 (R\$757 as at December 31, 2014), R\$8 (R\$0 as at December 31, 2014), R\$16 (R\$0 as at December 31, 2014) and R\$72 (R\$0 as at December 31, 2014), respectively.

10. Recoverable taxes

Recoverable taxes are presented net of provisions for losses on tax credits.

	Consolidated		Parent Company	
	December 31, 2015	December 31, 2014	December 31, 2015	December 31, 2014
Value-added tax	2,949	2,806	1,291	1,189
Brazilian federal contributions	4,392	2,682	3,480	2,006
Others	97	91	38	58
Total	7,438	5,579	4,809	3,253
Current	5,482	4,515	3,352	2,687
Non-current	1,956	1,064	1,457	566
Total	7,438	5,579	4,809	3,253

11. Investments

Changes in investments are as follows:

	Year ended December 31				
	2015	Consolidated 2014	2013	Parent Company 2015	2014
Balance at beginning of the year	10,978	8,397	13,044	128,615	123,370
Acquisitions (i)	1,836			1,818	
Additions	90	509	784	5,265	2,565
Capitalizations	965				
Disposals (ii)	241		(229)	(4,000)	
Translation adjustment	642	189	(50)	34,229	8,302
Equity results on income statement	(1,507)	1,141	999	(36,864)	(13,026)
Equity results on statement of comprehensive income and others	(21)	(5)	(406)	(460)	(1,537)
Dividends declared	(271)	(1,959)	(1,649)	(835)	(3,095)
Impairment (note 15)	(1,727)	(71)		(510)	(71)
Transfer to held for sale - Others (iii)		2,596	(4,096)	(30)	2,596
Goodwill from intangible assets (Note 11)					9,987
Other	255	181		289	(476)
Balance at end of the year	11,481	10,978	8,397	127,517	128,615

(i) Includes Aliança Geração transaction, see note 5.

(ii) In consolidated refers to Yankuang, see note 6, for the year ended December 31, 2015.

(iii) Refers to Vale Florestar and VLI for the year ended as at December 31, 2014 and Hydro for the year ended as at December 31, 2013.

Table of Contents**Investments (continued)**

	% ownership	% voting capital	Investments		Equity results in net income			Dividends received (v)		
			As at December 31 2015	2014	Year ended December 31 2015	2014	2013	Year ended December 31 2015	2014	2013
Subsidiaries										
Aços Laminados do Pará S.A.	100.00	100.00	339	332			(5)			
Biopalma da Amazônia S.A.	93.90	93.90	436	646	(593)	(267)	(219)			
Companhia Portuária da Baía de Sepetiba	100.00	100.00	531	385	456	349	259	188	341	263
Compañía Minera Miski Mayo S.A.C.	40.00	51.00	679	563	20	10	20	83		81
Mineração Corumbaense Reunida S.A.	100.00	100.00	46	1,150	(1,184)	394	351	147	456	279
Minerações Brasileiras Reunidas S.A.	58.93	98.32	6,549	5,201	557	225	(211)	324		341
Minerações Brasileiras Reunidas S.A. - Goodwill			4,060	4,060						
Potássio Rio Colorado S.A.	100.00	100.00	42	1,474	5	(78)	(5,883)			
Salobo Metais S.A.	100.00	100.00	8,166	7,591	696	142	(68)			
Vale International Holdings GmbH	100.00	100.00	13,359	7,283	2,069	(4,238)	(126)			
Vale Canada Holdings Inc.	100.00	100.00	6,206	5,127	(21)	(20)	(16)			
Vale Canada Limited	100.00	100.00	16,794	21,769	(18,189)	(566)	(1,798)			
Vale Fertilizantes S.A.	100.00	100.00	14,842	13,342	(780)	(2,042)	(189)			
Vale International S.A.	100.00	100.00	25,182	21,212	(3,056)	(8,248)	3,921			
Vale Malaysia Minerals Sdn. Bhd.	100.00	100.00	4,201	3,251	(467)	(100)	70			
Vale Manganês S.A.	100.00	100.00	676	721	(45)	57	(22)			
Vale Mina do Azul S.A.	100.00	100.00				88	163		19	
Vale Moçambique S.A.	100.00	100.00	2,108	14,480	(13,942)	(378)	(73)			
Vale Shipping Holding Pte. Ltd.	100.00	100.00	10,945	7,432	(99)	528	379			
Others			875	1,618	(784)	(23)	529	538	93	72
			116,036	117,637	(35,357)	(14,167)	(2,918)	1,280	909	1,036
Joint ventures										
Aliança Geração de Energia S.A. (i)	55.00	55.00	1,876		173			115		
Aliança Norte Energia Participações S.A. (i)	51.00	51.00	316		2					
California Steel Industries, Inc.	50.00	50.00	613	489	(90)	27	44			
Companhia Coreano-Brasileira de Pelotização	50.00	50.00	242	228	85	72	42	67	39	47
Companhia Hispano-Brasileira de Pelotização (i)	50.89	51.00	222	213	50	60	3	44	25	20
Companhia Ítalo-Brasileira de Pelotização (i)	50.90	51.00	194	162	69	60	15	36	13	
Companhia Nipo-Brasileira de Pelotização (i)	51.00	51.11	406	378	152	152	40	102	114	51

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Companhia Siderúrgica do Pecém (ii)	50.00	50.00	879	1,925	(1,047)	(101)	(24)			
Minas da Serra Geral S.A. (vi)	50.00	50.00	50	53	(1)	2				
MRS Logística S.A.	48.16	46.75	1,436	1,355	143	179	222	87	108	149
Norte Energia S.A. (ii) (iii)				241		(28)	(4)			
Samarco Mineração S.A. (iv)	50.00	50.00		533	(533)	884	1,069	459	906	1,323
Others			92	43	(4)	11	(23)	2	1	2
			6,326	5,620	(1,007)	1,318	1,384	912	1,206	1,592
Associates										
Henan Longyu Energy Resources Co., Ltd.	25.00	25.00	1,194	943	(13)	76	91	109	75	90
Mineração Rio Grande do Norte S.A.	40.00	40.00	364	243	144	17	21	12	21	39
Teal Minerals Inc.	50.00	50.00		514	(482)	(81)	(53)			
Thyssenkrupp Companhia Siderúrgica do Atlântico Ltd.	26.87	26.87		545	(274)	(142)	(351)			
VLI S.A.	37.60	37.60	3,038	2,945	156	114		25		
Zhuhai YPM Pellet Co.	25.00	25.00	92	64	1	1	1			
Others			467	104	(32)	(162)	(94)	6		115
			5,155	5,358	(500)	(177)	(385)	152	96	244
Total of joint ventures and associates			11,481	10,978	(1,507)	1,141	999	1,064	1,302	1,836
Total			127,517	128,615	(36,864)	(13,026)	(1,919)	2,344	2,211	2,872

- (i) Although the Company held majority of the voting capital, the entities are accounted under equity method due to shareholders agreements.
- (ii) Pre-operational stage.
- (iii) The Company's interest in Norte Energia S.A. is indirectly owned by Aliança Norte Energia Participações S.A. (note 5).
- (iv) Note 4.
- (v) Dividends received by the Parent Company during the years ended at December 31, 2015 and 2014 were R\$1,972 and R\$2,052, respectively.
- (vi) The Company offered R\$51 to acquire the additional 50% interest. The transaction is expected to be completed in 2016.

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The information (100% basis) about relevant subsidiaries with noncontrolling interest (in which other investors have participation in the Group's activities), associates and joint-ventures are as follows:

	December 31, 2015						
	Assets		Liabilities		Stockholders equity	Dividends paid	Net income (loss)
	Current	Non-current	Current	Non-current			
Subsidiaries that have noncontrolling interest							
Minerações Brasileiras Reunidas S.A.	2,901	11,372	733	608	12,932	324	911
Associates and joint ventures							
Aliança Geração de Energia S.A. Companhia Siderúrgica do Pecém	255	3,572	138	277	3,412	209	314
Henan Longyu Energy Resources Co., Ltd.	1,036	11,937	2,060	9,156	1,757		(2,094)
MRS Logística S.A.	3,447	2,065	421	311	4,780	436	(51)
VLI S.A.	1,263	6,674	1,529	3,426	2,982	144	297
	1,963	11,597	1,994	3,486	8,080	72	414

	December 31, 2014						
	Assets		Liabilities		Stockholders equity	Dividends paid	Net income (loss)
	Current	Non-current	Current	Non-current			
Subsidiaries that have noncontrolling interest							
Minerações Brasileiras Reunidas S.A.	1,150	6,758	649	1,073	6,186		350
Associates and joint ventures							
Aliança Geração de Energia S.A.				1	(1)		(1)
Henan Longyu Energy Resources Co., Ltd.	3,053	1,285	173	392	3,773	300	305
MRS Logística S.A.	811	6,367	1,103	3,227	2,848	223	376
VLI S.A.	1,947	8,985	1,708	1,389	7,835		303

12. Noncontrolling interest

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	Stockholder's equity		Gain (loss) attributable to noncontrolling interest		
	Balance on		Year ended December 31		
	December 31, 2015	December 31, 2014	2015	2014	2013
Biopalma da Amazônia S.A.	24	91	(73)	(81)	(94)
Compañia Mineradora Miski Mayo S.A.C.	1,018	753	31	14	30
Minerações Brasileiras Reunidas S.A.	5,311	104	255	6	(1)
PT Vale Indonesia Tbk	2,894	1,955	19	156	39
Vale Nouvelle Calédonie S.A.S.	214	467	(1,054)	(845)	(147)
Vale Oman Pelletizing LLC	262	179	22	17	25
Outros	(1,464)	(362)	(984)	(2)	(225)
	8,259	3,187	(1,784)	(735)	(373)

Table of Contents**13. Intangibles**

Changes in intangibles are as follows:

	Consolidated				
	Indefinite useful life Goodwill (i)	Concessions	Finite useful life Right of use (ii)	Software	Total
Balance on December 31, 2013	9,698	4,466	594	1,338	16,096
Additions		2,005	259	579	2,843
Disposals		(17)			(17)
Amortization		(578)	(89)	(455)	(1,122)
Impairment (note 15)	(1,223)				(1,223)
Translation adjustment	208		25		233
Others	1,304				1,304
Total	9,987	5,876	789	1,462	18,114
Cost	9,987	9,086	1,375	3,603	24,051
Accumulated amortization		(3,210)	(586)	(2,141)	(5,937)
Balance on December 31, 2014	9,987	5,876	789	1,462	18,114
Additions		1,770		397	2,167
Disposals		(64)		(1)	(65)
Amortization		(498)	(141)	(508)	(1,147)
Impairment (note 15)	(314)				(314)
Translation adjustment	1,769		163		1,932
Acquisition of subsidiary (note 6(f))	102				102
Total	11,544	7,084	811	1,350	20,789
Cost	11,544	10,109	1,814	3,997	27,464
Accumulated amortization		(3,025)	(1,003)	(2,647)	(6,675)
Balance on December 31, 2015	11,544	7,084	811	1,350	20,789

(i) Goodwill is allocated mainly in iron ore and nickel segments in the amount of R\$4,060 e R\$7,276, respectively.

(ii) Refers to the usufruct contract between the Company and noncontrolling stockholders to use the shares of Empreendimentos Brasileiros de Mineração S.A. (owner of Minerações Brasileiras Reunidas S.A. shares) and intangible assets identified in the business combination of Vale Canada Limited (Vale Canada). The amortization of the right of use will expire in 2037 and Vale Canada s intangible assets will end in September of 2046. The concessions refer to the agreements with the Brazilian government for the exploration and the development of ports and railways, respectively.

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	Parent Company				
	Indefinite useful life Goodwill	Concessions	Finite useful life Right of use	Software	Total
Balance on December 31, 2013	9,698	4,466	134	1,338	15,636
Additions		2,005		579	2,584
Disposals		(17)			(17)
Amortization		(578)	(5)	(455)	(1,038)
Impairment (note 15)	(1,223)				(1,223)
Translation adjustment	208				208
Reclassification to investments (i)	(9,987)				(9,987)
Others	1,304				1,304
Total		5,876	129	1,462	7,467
Cost		9,086	223	3,603	12,912
Accumulated amortization		(3,210)	(94)	(2,141)	(5,445)
Balance on December 31, 2014		5,876	129	1,462	7,467
Additions		1,770		397	2,167
Disposals		(64)		(1)	(65)
Amortization		(498)	(6)	(508)	(1,012)
Total		7,084	123	1,350	8,557
Cost		10,109	224	3,997	14,330
Accumulated amortization		(3,025)	(101)	(2,647)	(5,773)
Balance on December 31, 2015		7,084	123	1,350	8,557

(i) The Parent Company reclassified the total amount of the goodwill from intangible assets to investments for a better presentation of its financial statements, according to the account practices implemented in Brazil. This reclassification in the non-current assets did not impact the stockholders' equity and the net income of the Parent Company as at December 31, 2014.

Table of Contents**14. Property, plant and equipment**

The net book value of consolidated property, plant and equipment pledged to secure judicial claims on December 31, 2015 and 2014 were R\$174 and R\$179, respectively. For the parent company at December 31, 2015 and 2014 corresponds to R\$173 and R\$179, respectively.

Changes in property, plant and equipment are as follows:

	Land	Building	Facilities	Equipment	Consolidated Mineral properties	Others	Constructions in progress	Total
Balance on December 31, 2013	2,215	18,236	25,622	19,689	38,129	24,642	62,775	191,308
Additions (i)							27,107	27,107
Disposals (ii)	(8)	(113)	(24)	(18)	(665)	(70)	(567)	(1,465)
Depreciation and amortization		(1,053)	(1,945)	(2,413)	(2,576)	(1,994)		(9,981)
Transfer to non-current assets held for sale			(27)	(129)	(225)	(6)	(7,344)	(7,731)
Impairment (note 15)		1,407	(124)	296	(2,978)	(43)	(48)	(1,490)
Translation adjustment	153	(413)	(536)	2,208	5,595	(972)	3,724	9,759
Transfers	479	12,891	5,755	5,036	2,374	7,538	(34,073)	
Total	2,839	30,955	28,721	24,669	39,654	29,095	51,574	207,507
Cost	2,839	37,569	41,831	38,200	55,687	39,543	51,574	267,243
Accumulated depreciation		(6,614)	(13,110)	(13,531)	(16,033)	(10,448)		(59,736)
Balance on December 31, 2014	2,839	30,955	28,721	24,669	39,654	29,095	51,574	207,507
Additions (i)							32,370	32,370
Disposals	(11)	(27)	(141)	(290)	(438)	(5,395)	(83)	(6,385)
Disposal of asset retirement obligation					(1,294)			(1,294)
Depreciation and amortization		(1,823)	(2,349)	(3,519)	(2,869)	(2,557)		(13,117)
Transfer to non-current assets held for sale					(504)			(504)
Impairment (note 15)	(49)	(7,028)	(3,221)	(4,228)	(3,775)	(7,872)	(6,684)	(32,857)
Translation adjustment	222	3,258	1,947	5,207	8,492	4,711	1,385	25,222
Transfers	(12)	10,203	7,421	6,692	968	9,837	(35,109)	
Acquisition of subsidiary (note 6(f))				1		316		317
Total	2,989	35,538	32,378	28,532	40,234	28,135	43,453	211,259
Cost	2,989	53,522	51,357	47,757	66,592	41,459	43,453	307,129
Accumulated depreciation		(17,984)	(18,979)	(19,225)	(26,358)	(13,324)		(95,870)
	2,989	35,538	32,378	28,532	40,234	28,135	43,453	211,259

**Balance on December 31,
2015**

(i) Includes capitalized borrowing costs and asset retirement obligations, see cash flow.

(ii) Includes the disposal of CoW Indonesia (note 29(a)).

	Land	Building	Facilities	Equipment	Parent Company Mineral properties	Others	Constructions in progress	Total
Balance on December 31, 2013	1,322	9,449	14,350	5,641	2,366	8,680	28,897	70,705
Additions (i)							15,841	15,841
Additions through internal development		52	5	69	70	32	72	300
Disposals		(23)	(2)	(21)		(10)	(297)	(353)
Depreciation and amortization		(350)	(904)	(785)	(322)	(1,106)		(3,467)
Impairment (note 15)		1,515	84	307	2,362	27		4,295
Transfers	130	2,721	3,804	1,886	(80)	2,197	(10,658)	
Total	1,452	13,364	17,337	7,097	4,396	9,820	33,855	87,321
Cost	1,452	15,631	22,367	11,368	5,278	16,016	33,855	105,967
Accumulated depreciation		(2,267)	(5,030)	(4,271)	(882)	(6,196)		(18,646)
Balance on December 31, 2014	1,452	13,364	17,337	7,097	4,396	9,820	33,855	87,321
Additions (i)							14,328	14,328
Disposals	(11)	(10)	(19)	(138)	(4)	(5)		(187)
Disposal of asset retirement obligation					(937)			(937)
Depreciation and amortization		(511)	(924)	(972)	(341)	(1,160)		(3,908)
Impairment (note 15)		480	23	90	370	(30)	(663)	270
Transfers	231	6,223	2,962	2,294	731	5,578	(18,019)	
Total	1,672	19,546	19,379	8,371	4,215	14,203	29,501	96,887
Cost	1,672	22,405	25,195	13,401	5,462	21,235	29,501	118,871
Accumulated depreciation		(2,859)	(5,816)	(5,030)	(1,247)	(7,032)		(21,984)
Balance on December 31, 2015	1,672	19,546	19,379	8,371	4,215	14,203	29,501	96,887

(i) Includes capitalized borrowing costs and Asset retirement obligations, see cash flow.

Table of Contents**15. Impairment and onerous contracts**

According to the accounting policy described in note 31(l), the Company identified evidence of impairment in relation to certain investments in associates and joint ventures, intangible and property, plant and equipment. The following impairment charges and reversals were recorded:

Segments by class of assets	Assets or cash-generating unit	Recoverable amount	Impairment (reversals)		
			2015	2014	2013
Property, plant and equipment					
Iron ore	Midwest system		2,023		
Iron ore	Simandou project			2,794	
Iron ore	Others		133		
Pellets	North system (stopped operations)		213		
Pellets	Pelletizing asset				427
Pellets	Others		12		
Other ferrous products and services	Others		80		
Coal	Mozambique	6,751	9,302		
Coal	Australia	286	2,146	787	
Nickel	Newfoundland (VNL)	9,188	13,394		
Nickel	New Caledonia (VNC)	14,545	5,660	628	
Nickel	Onça Puma	9,102	(976)	(4,295)	
Nickel	Others		102		
Copper	Others		138		
Potash	Potássio Rio Colorado	78	2,123		4,963
Phosphates	Phosphate	15,002	(1,515)	1,576	
Others	Others		22		
			32,857	1,490	5,390
Intangible					
Coal	Australia		314		
Phosphates	Phosphate			1,223	
Impairment of non-current assets			33,171	2,713	5,390
Onerous contracts					
Iron ore	Midwest system		1,382		
Impairment of non-current assets and onerous contracts			34,553	2,713	5,390
Investments in associates and joint ventures					
Pellets	Samarco Mineração S.A.		510		
Copper	Teal Minerals Inc.		1,217		
Others	Vale Soluções em Energia S.A.			71	
Impairment of investments in associates and joint ventures			1,727	71	

a) **Impairment of non-current assets**

In accordance with the Company's accounting policy, each CGU is evaluated at each reporting period to determine whether there are any indicators of impairment. If any such indicators of impairment exist, an estimate of the recoverable amount is performed.

In assessing whether an impairment is required, the carrying value of the asset or CGU is compared with its recoverable amount. The recoverable amount is the higher of the CGU's fair value less costs to sell (FVLCS) and value in use (ViU). If an impairment was recognized in previous years and actual circumstances indicate that the impairment is no longer applicable, an impairment reversal is recognized.

The FVLCS is calculated in each CGU and is estimated based on discounted future estimated cash flows, considering market based commodity price, the CGU five-year plans and life of mine plans, mineral reserves and mineral resources, costs and investments based on the best estimate of past performance and sale prices consistent with the projections used in reports published by industry considering the market price when available and appropriate.

The determination of FVLCS for each CGU are considered to be Level 3 fair value measurements, as they are derived from valuation techniques that include inputs that are not based on observable market data. The most sensitive assumptions were the discount rate and prices. All assets were tested using FVLCS model, except for North system.

These cash flows were discounted using a post-tax discount rate ranging from 6% to 10%. The discount rate was based on the weighted average cost of capital (WACC) that reflected current market assessments of the time value of money and the risks specific to the CGU.

The price assumptions for calculating the FVLCS were a range of (in US\$ per ton) 48 to 65 for iron ore, 85 to 140 for coal, 13,000 to 20,000 for nickel and 105 to 125 for phosphate.

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Iron ore and pellets - The Midwest system is comprised of the Corumbá mines and Paraná and Paraguay Waterway Systems. In 2015, there was a significant restructuring of operations, which includes the reduction of production and the revision of the freight strategy. With this restructuring, the Midwest system is evaluated as an independent CGU from other iron ore operations. Until 2014, this CGU was part of the iron ore CGU. The reduction of iron ore prices and the logistics cost lead to an impairment of R\$2,023. The impairment in the amount of R\$213 relates to pelletizing plants that were stopped in North system.

For the Simandou project, Vale recognized an impairment of R\$2,794 in 2014 related to the revocation of Vale's former 51%-owned subsidiary VBG-Vale BSGR Limited (VBG) mining concessions in Guinea. During the first quarter of 2015, the investment was sold (note 6(e)).

For onerous contracts, provision is made for the present value of certain long term contracts where the unavoidable cost of meeting the Company's obligations is expected to exceed the benefits to be received. In 2015, the Company recognized provision for losses related to fluvial freight in the amount of R\$1,382 in other liabilities in the balance sheet.

Coal - The reduction in estimated future coal prices combined with the increase of logistics costs decreased the estimated net recoverable amount of Mozambique assets, causing an impairment of R\$9,302. The Coal assets in Australia were also impacted by the prices and the revision to the future mining plans in 2015, recording an impairment of R\$2,460. The impairment of R\$787 registered in 2014 relates to Integra and Isaac Plans which were sold during the fourth quarter of 2015.

Nickel - During the impairment test for 2015, the Company identified that the indicators which caused an impairment to be recognized in previous years for Onça Puma were no longer applicable. This was mainly due to the recovery of Onça Puma's production returning to normal operations for more than two years. Part of the impairment in the amount of R\$4,295 registered in 2012 was reversed in 2014. The amount of R\$976 was reversed in 2015.

In 2015, VNL was identified on a separate CGU (previously part of the Canada Nickel CGU) as there was a change in location of processed ore (feed of Nickel concentrate) from the VNL mine, that is now expected to be processed in Long Horbor instead of Ontario's Sudbury operations.

A reduction of long term nickel price projections, that significantly reduced the recoverable values of the VNC and VNL CGUs, combined with carrying values that reflect significant capital investments in new processing facilities in recent years, resulted in an impairment loss in the amount of US\$19,054 for these CGU.

Of the total goodwill (note 13), R\$7,276, is allocated to the Nickel CGUs which was tested based on FVLCS determined using cash flows based on approved budgets and market assumptions, considering mineral reserves and resources and additional value calculated by experts, costs and investments based on the best estimate of past performance and sales nickel prices using a range from 13,000 to 20,000 (US\$ per ton). Cash flows used are designed based on the life of each CGU and considering a discount rates range from 6% to 8%.

Fertilizers - The scenario of depreciation of the R\$ against the US\$ had a favorable impact on the phosphate business in Brazil in 2015, reverting the total amount of the impairment that was previously recognized during 2014 in the amount of R\$1,515.

The majority of the remaining balance of the assets in PRC were impaired in 2015 as the management does not expect to be able to recover the amounts invested in the project. An impairment charge of R\$2,123 and R\$4,963 was recognized in 2015 and 2013, respectively.

b) Impairment of investments in associates and joint ventures

In 2015, the Company recognized an impairment of R\$510 in its investment in Samarco (note 4) and R\$1,217 in Teal Minerals Inc. (Teal). Teal recognized an impairment of property, plant and equipment due to the revision of future mining plans and the decrease of the price of copper.

Table of Contents**16. Loans and borrowings****a) Total debt**

	Consolidated			
	Current liabilities		Non-current liabilities	
	December 31, 2015	December 31, 2014	December 31, 2015	December 31, 2014
Debt contracts in the international markets				
Floating rates in:				
US\$	943	950	20,203	13,531
Others currencies				7
Fixed rates in:				
US\$	4,651	183	50,463	35,166
EUR			6,376	4,841
Others currencies	56		659	
Accrued charges	1,274	887		
	6,924	2,020	77,701	53,545
Debt contracts in Brazil				
Floating rates in:				
R\$, indexed to TJLP, TR, IPCA, IGP-M and CDI	827	785	18,388	14,617
Basket of currencies and US\$ indexed to LIBOR	1,133	561	5,239	3,623
Fixed rates in:				
R\$	246	128	1,047	964
Accrued charges	658	274	503	
	2,864	1,748	25,177	19,204
	9,788	3,768	102,878	72,749

	Parent Company			
	Current liabilities		Non-current liabilities	
	December 31, 2015	December 31, 2014	December 31, 2015	December 31, 2014
Debt contracts in the international markets				
Floating rates in:				
US\$	567	670	16,829	11,721
Fixed rates in:				
US\$	937	159	9,020	3,984
EUR			6,376	4,841
Accrued charges	479	338		
	1,983	1,167	32,225	20,546
Debt contracts in Brazil				
Floating rates in:				

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R\$, indexed to TJLP, TR, IPCA, IGP-M and CDI	780	734	17,658	13,511
Basket of currencies and US\$ indexed to LIBOR	1,125	554	5,227	3,609
Fixed rates in:				
R\$	190	123	876	876
Accrued charges	658	275		
	2,753	1,686	23,761	17,996
	4,736	2,853	55,986	38,542

The future flows of debt payments (principal and interest) per nature of funding are as follows:

	Consolidated				Parent Company	
	Bank loans (i)	Capital market (i)	Development agencies (i)	Debt principal (i)	Estimated future payments of interest(ii)	Debt principal (i)
2016	1,023	3,713	3,119	7,855	5,765	3,599
2017	3,869	4,733	3,583	12,185	5,903	6,158
2018	6,710	3,188	4,133	14,031	6,063	13,326
2019	2,258	3,905	4,839	11,002	5,647	6,444
2020	6,063	5,005	3,153	14,221	4,773	8,692
2021	1,129	300	3,209	4,638	4,251	3,822
Between 2022 and 2025	3,800	12,790	3,561	20,151	10,936	11,066
2026 onwards	345	25,315	488	26,148	24,577	6,478
	25,197	58,949	26,085	110,231	67,915	59,585

(i) Does not include accrued charges.

(ii) Consists of estimated future payments of interest, calculated based on interest rate curves and foreign exchange rates applicable as at December 31, 2015 and considering that all amortization payments and payments at maturity on loans and borrowings will be made on their contracted payments dates. The amount includes the estimated values of future interest payments (not yet accrued), in addition to interest already recognized in the financial statements.

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At December 31, 2015, the average annual interest rates by currency are as follows:

Loans and borrowings in	Consolidated		Parent Company	
	Average interest rate (i)	Total debt	Average interest rate (i)	Total debt
US\$	4.63%	83,682	3.03%	33,961
R\$ (ii)	10.78%	21,638	10.85%	20,129
EUR (iii)	4.06%	6,632	4.06%	6,632
Others currencies	5.94%	714	0.00%	
		112,666		60,722

(i) In order to determine the average interest rate for debt contracts with floating rates, the Company used the last renegotiated rate at December 31, 2015.

(ii) R\$ denominated debt that bears interest at IPCA, CDI, TR or TJLP, plus spread. For a total of R\$14,730, the Company entered into derivative transactions to mitigate the exposure to the cash flow variations of the floating rate debt denominated in R\$, resulting in an average cost of 2.07% per year in US\$.

(iii) Eurobonds, for which the Company entered into derivatives to mitigate the exposure to the cash flow variations of the debt denominated in EUR, resulting in an average cost of 4.41% per year in US\$.

b) Credit and financing lines

Type	Contractual currency	Date of agreement	Period of the agreement	Total amount	Available amount December 31, 2015
Credit lines					
Revolving credit facility	US\$	May 2015	5 years	11,714	11,714
Revolving credit facility	US\$	July 2013	5 years	7,810	7,810
Financing lines					
BNDES (i)	R\$	April 2008	10 years	7,300	1,426
BNDES - CLN 150	R\$	September 2012	10 years	3,883	20
BNDES - S11D e S11D Logística	R\$	May 2014	10 years	6,163	1,500

(i) Memorandum of understanding signature date, however term is considered from the signature date of each contract amendment. This credit line supported or supports the Usina VIII, Onça Puma, Salobo I and II and capital expenditure of Itabira projects.

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In January 2016 (subsequent event), the Company drew down on US\$3,000 of its revolving credit facilities. The amount of US\$1,800 was drawn down on by Vale International S.A. and US\$1,200 (R\$4,686) by the Parent Company.

c) **Funding**

In 2015, Vale issued infrastructure debentures in the amount of R\$1,350 and export credit notes in the amount of R\$1,500.

d) **Guarantees**

As at December 31, 2015 and 2014, loans and borrowings are secured by property, plant and equipment and receivables in the amount of R\$1,937 and R\$3,485, respectively.

The securities issued through Vale's 100%-owned finance subsidiary Vale Overseas Limited are fully and unconditionally guaranteed by Vale.

e) **Covenants**

Some of the Company's debt agreements with lenders contain financial covenants. The main covenants in those agreements require maintaining certain ratios, such as debt to EBITDA (Earnings before Interest Taxes, Depreciation and Amortization) and interest coverage. The Company has not identified any instances of noncompliance as at December 31, 2015 and 2014.

Table of Contents**17. Asset retirement obligations**

The Company applies judgment and assumptions when measuring its asset retirement obligation. The accrued amounts of these obligations are not deducted from the potential costs covered by insurance or indemnities.

The long term interest rates (per annum, used to discount these obligations to present value and to update the provisions) and the changes in the provision of asset retirement obligations are as follows:

	Consolidated		Parent Company	
	December 31, 2015	December 31, 2014	December 31, 2015	December 31, 2014
Balance at beginning of the year	8,949	6,194	3,195	1,946
Interest expense	214	465	135	201
Settlements	(298)	(100)	(12)	(23)
Revisions on cash flows estimates (i)	(524)	2,217	(1,944)	973
Translation adjustment	1,318	173		
Incorporation of subsidiary				98
Balance at end of the year	9,659	8,949	1,374	3,195
Current	346	361	83	89
Non-current	9,313	8,588	1,291	3,106
	9,659	8,949	1,374	3,195
Brazil	7.28%	5.51%	7.28%	5.51%
Canada	0.59%	2.05%		
Other regions	1.12% - 5.91%	1.61% - 8.81%		

(i) Includes only the impacts in operating expenses and property, plant and equipment.

18. Litigation**a) Provision for litigation**

Vale is party to labor, civil, tax and other ongoing lawsuits, at administrative and court levels. Provisions for losses resulting from lawsuits are estimated and updated by the Company, based on analysis from the Company's legal consultants.

Changes in provision for litigation are as follows:

	Consolidated				
	Tax litigation	Civil litigation	Labor litigation	Environmental litigation	Total of litigation provision
Balance on December 31, 2013	771	498	1,653	67	2,989
Additions	237	98	558	77	970
Reversals	44	(247)	(318)	(32)	(553)
Payments	(94)	(46)	(111)		(251)
Indexation and interest	97	1	98	12	208
Translation adjustment	33	7	(4)	6	42
Balance on December 31, 2014	1,088	311	1,876	130	3,405
Additions	527	276	567	2	1,372
Reversals	(593)	(190)	(463)	(15)	(1,261)
Payments	(151)	(129)	(225)	(215)	(720)
Indexation and interest	54	40	16	126	236
Translation adjustment	127	1		50	178
Balance on December 31, 2015	1,052	309	1,771	78	3,210

	Parent Company				
	Tax litigation	Civil litigation	Labor litigation	Environmental litigation	Total of litigation provision
Balance on December 31, 2013	280	221	1,472	35	2,008
Additions	217	183	578	72	1,050
Reversals	(23)	(207)	(304)	(32)	(566)
Payments	(79)	(42)	(100)	7	(214)
Indexation and interest	41	31	86	12	170
Balance on December 31, 2014	436	186	1,732	94	2,448
Additions	370	173	508	2	1,053
Reversals	(535)	(139)	(418)	(14)	(1,106)
Payments	(156)	(7)	(211)	(34)	(408)
Indexation and interest	217	28	(49)	7	203
Balance on December 31, 2015	332	241	1,562	55	2,190

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i. **Provisions for labor litigation** - Consist of lawsuits filed by employees and service suppliers, related to employment relationships. The most recurring claims are related to payment of overtime, hours in itinerary, and health and safety. The social security (INSS) contingencies are related to legal and administrative disputes between INSS and Vale due to applicability of compulsory social security charges.

b) **Contingent liabilities** - Contingent liabilities consist of administrative and judicial claims, which expectation of loss is classified as possible, and for which the recognition of a provision is not considered necessary by the Company, based on legal support.

	Consolidated		Parent Company	
	December 31, 2015	December 31, 2014	December 31, 2015	December 31, 2014
Tax litigation	20,796	16,187	15,839	13,084
Civil litigation	5,214	3,734	4,351	2,962
Labor litigation	7,288	5,194	6,383	4,491
Environmental litigation	5,393	2,981	5,224	2,881
Total	38,691	28,096	31,797	23,418

i. **Tax litigation** - The most significant claims relate to pending challenges by the Brazilian federal tax authority concerning the deductibility of Brazilian social contribution payments for income tax purposes and demands by Brazilian state tax authorities for additional payments of the value-added tax on services and circulation of goods (ICMS) in relation to the use of ICMS credits from sales and energy transmission.

ii. **Civil litigation** - Most of these claim have been filed by suppliers for indemnification under construction contracts, primarily relating to certain alleged damages, payments and contractual penalties. A number of other claims involve disputed contractual terms for inflation indexation.

iii. **Labor litigation** - These claims represent a very large number of individual claims by (i) employees and service providers, primarily involving demands for additional compensation for overtime work, time spent commuting or health and safety conditions; and (ii) the Brazilian federal social security administration (INSS) regarding contributions on compensation programs based on profits.

iv. Environmental litigation - The most significant claims concern alleged procedural deficiencies in licensing processes, non-compliance with existing environmental licenses or damage to the environment.

c) Judicial deposits - In addition to the provisions and contingent liabilities, the Company is required by law to make judicial deposits to secure a potential adverse outcome of certain lawsuits. These court-ordered deposits are monetarily adjusted and reported as non-current assets until a judicial decision to draw the deposit occurs.

	Consolidated		Parent Company	
	December 31, 2015	December 31, 2014	December 31, 2015	December 31, 2014
Tax litigation	822	940	531	664
Civil litigation	399	333	135	115
Labor litigation	2,163	2,096	1,984	1,942
Environmental litigation	61	1	57	
Total	3,445	3,370	2,707	2,721

d) Others

In the third quarter of 2015, the Company filed an enforceable action in the amount of R\$524 referring to the final court decision in favor of the Company of the accrued interest of compulsory deposits from 1987 to 1993. Currently it is not possible to estimate the economic benefit inflow as the counterparty can appeal on the calculation. Consequently, the asset was not recognized in the financial statements.

On April 30, 2014, Rio Tinto plc (Rio Tinto) filed a lawsuit against Vale, BSGR, and other defendants in the United States District Court for the Southern District of New York (Court), alleging violations of the U.S. Racketeer Influenced and Corrupt Organizations Act (RICO) in relation to Rio Tinto's loss of certain Simandou mining rights, the Government of Guinea's assignment of those rights to BSGR, and Vale's subsequent investment in VBG. In November, 2015 Vale received the decision of the Court, which was for the dismissal of the lawsuit.

Table of Contents**19. Income taxes - Settlement program (REFIS)**

In November 2013, the Company elected to participate in the REFIS, a federal tax settlement program, to settle most of the claims related to the collection of income tax and social contribution on equity gains of foreign subsidiaries and affiliates from 2003 to 2012.

In December 31, 2015, the balance of R\$17,301 (R\$1,348 in current and R\$15,953 as non-current) is due in 154 remaining monthly installments, bearing interest at the SELIC rate.

20. Income taxes**a) Deferred income tax**

	Consolidated		Parent Company	
	December 31, 2015	December 31, 2014	December 31, 2015	December 31, 2014
Taxes losses carryforward	25,181	4,348	12,294	375
Temporary differences:				
Pension plan	2,114	1,783	365	311
Provision for litigation	892	970	745	832
Provision for losses of assets	2,807	2,489	1,479	1,513
Fair value of financial instruments	3,215	3,563	3,215	3,059
Allocated goodwill	(10,067)	(12,831)		
Others	205	1,364	(806)	340
	(834)	(2,662)	4,998	6,055
Total	24,347	1,686	17,292	6,430
Assets	30,867	10,560	17,292	6,430
Liabilities	(6,520)	(8,874)		
	24,347	1,686	17,292	6,430

Changes in deferred tax are as follows:

Consolidated

Parent Company

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	Assets	Liabilities	Total	Assets
Balance on December 31, 2013	10,596	7,562	3,034	7,418
Effect in income statement	(52)	196	(248)	(1,089)
Transfers (including between assets and liabilities)	(220)	930	(1,150)	
Translation adjustment	147	295	(148)	
Subsidiary incorporation				12
Other comprehensive income	89	(109)	198	89
Balance on December 31, 2014	10,560	8,874	1,686	6,430
Effect in income statement (i)	15,226	(5,000)	20,226	10,816
Transfers (including between assets and liabilities)	548	548		
Translation adjustment	1,042	2,049	(1,007)	
Subsidiary acquisition	(31)		(31)	
Other comprehensive income	3,522	49	3,473	46
Balance on December 31, 2015	30,867	6,520	24,347	17,292

(i) From the total effect in the income statement R\$16,830 refers to tax losses carryforward.

Brazilian corporate tax law was amended at the end of 2014 by the Law 12,973 and became effective for the fiscal year 2015. The change was to provide that profits from foreign subsidiaries will be taxed in Brazil, on an accrual basis, applying the differential between the nominal local tax rate and the Brazilian tax rates (34%). Accordingly, from January 1st, 2015 the results from foreign subsidiaries are recognized in this systematic.

In accordance with paragraph 77 of the referred law, the accumulated losses of those subsidiaries, as at December 31, 2014, will be available to offset their future profits. On September 30, 2015, the Company filed the tax return and completed the review of the income tax loss carry-forwards available in each foreign subsidiary as at December 31, 2014. Accordingly, a deferred tax asset related to accumulated losses in certain of those foreign subsidiaries of R\$11,729 was recognized as deferred income tax in the income statement.

Table of Contents**b) Income tax reconciliation**

The total amount presented as income taxes in the income statement is reconciled to the rate established by law, as follows:

	Consolidated			Parent Company	
	2015	2014	2013	2015	2014
Net income (loss) before income taxes	(64,876)	2,819	14,995	(55,047)	3,387
Income taxes at statutory rates - 34%	22,058	(958)	(5,098)	18,716	(1,152)
Adjustments that affect the basis of taxes:					
Income tax benefit from interest on stockholders equity	1,054	2,634	2,688	1,033	2,634
Tax incentives	204	209			206
Results of overseas companies taxed by different rates which differs from the parent company rate		(2,867)	408		
Equity results in income statement	(512)	388	373	(12,713)	(4,429)
Income taxes statement program - REFIS			(11,345)		
Additions (reversals) of tax loss carry forward	5,911	(410)	387	4,651	
Unrecognized tax losses of the year	(3,116)				
Nondeductible effect of impairment	(7,190)	(1,119)	(1,687)		
Others	470	(477)	(975)	(853)	308
Income taxes	18,879	(2,600)	(15,249)	10,834	(2,433)

c) Tax incentives

In Brazil, Vale has a tax incentive for the partial reduction of income tax due, in the amount equivalent to the portion allocated by tax law to transactions in the North and Northeast regions with iron ore, manganese, copper, and nickel. The incentive is calculated based on the tax profit of the activity (called operating income) and takes into consideration the allocation of operating net income by incentive production levels during the periods specified for each product, generally 10 years, and in the case of the Company, they are expected to expire in 2024. An amount equal to that obtained with the tax saving must be appropriated in a retained earnings reserve account in Stockholders equity, and may not be distributed as dividends to stockholders.

In addition to those incentives, 30% of the income tax due based on the regional profit needs to be reinvested on the purchase of machinery and equipment, subject to subsequent approval by the regulatory agency responsible, Superintendência do Desenvolvimento da Amazonia (SUDAM) and the Superintendência do Desenvolvimento do Nordeste (SUDENE). When the reinvestment is approved, it is retained in an earnings reserve account, which restricts the distribution as dividends to stockholders.

Vale also has tax incentives related to the production of nickel and cobalt from Vale Nouvelle Calédonie SAS (VNC). These incentives include the exemption of income tax during the construction phase of the project, and also for a period of 15 years beginning in the first year of commercial production, as defined by applicable law, followed by a 5-year 50% exemption of income tax. VNC is subject to a branch profit tax on its profits (after deducting available tax losses) starting in the first year that commercial production is reached. To date, there has been no net taxable income realized in VNC.

In Mozambique, the tax incentives applicable to Vale Moçambique S.A. for the Moatize Coal Mine Project include a 25% reduction of rate for five years counting from the first year the company has taxable profits. Vale also received tax incentives for projects in Oman, Malaysia, Malawi and a logistic project in Mozambique.

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

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21. Employee benefits obligations

a) Employee postretirements obligations

In Brazil, the management of the pension plans of the Company is the responsibility of Fundação Vale do Rio Doce de Seguridade Social (Valia) a nonprofit entity with administrative and financial autonomy. The Brazilian plans are as follows:

Benefit plan Vale Mais (Vale Mais) and benefit plan Valiaprev (Valiaprev) - Certain of the Company's employees are participants in a plan (Vale Mais e Valiaprev) with components of defined benefit (specific coverage for death, pensions and disability allowances) and components of defined contributions (for programmable benefits). The defined benefits plan is subject to actuarial evaluations. The defined contribution plan represents a fixed amount held on behalf of the participants. Both Vale Mais and Valiaprev were overfunded as at December 31, 2015 and 2014.

Defined benefit plan (Plano BD) - The Plano BD has been closed to new entrants since the year 2000, when the Vale Mais plan was implemented. It is a plan that has defined benefit characteristics, covering almost exclusively retirees and their beneficiaries. It was overfunded as at December 31, 2015 and 2014 and the contributions made by the Company are not relevant.

Abono complementação benefit plan - The Company sponsors a specific group of former employees entitled to receive additional benefits from Valia normal payments plus post-retirement benefit that covers medical, dental and pharmaceutical assistance. The contributions made by the Company finished in 2014. The abono complementação benefit was overfunded as at December 31, 2015 and 2014.

Other benefits - The Company sponsors medical plans for employees that meet specific criteria and for employees who use the abono complementação benefit. Although those benefits are not specific retirement plans, actuarial calculations are used to calculate future commitments. As those benefits are related to health care plans they have the nature of underfunded benefits, and are presented as underfunded plans as at December 31, 2015 and 2014.

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The Foreign plans are managed in accordance with their region. They are divided between plans in Canada, United States of America, United Kingdom, Indonesia, New Caledonia, Japan and Taiwan. Pension plans in Canada are composed of a defined benefit and defined contribution component. Currently the defined benefit plans do not allow new entrants. The foreign defined benefit plans underfunded as at December 31, 2015 and 2014.

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

i. **Change in benefit obligation**

	Overfunded pension plans	Consolidated Underfunded pension plans	Others benefits	Parent Company Overfunded pension plans	Others benefits
Benefit obligation as at December 31, 2013	9,557	10,320	3,966	9,557	516
Service costs	68	225	55	68	
Interest costs	1,116	549	194	1,116	59
Benefits paid	(769)	(755)	(174)	(769)	(59)
Participant contributions	3	1		3	
Effects of change in financial assumptions	(73)	1,070	(189)	(73)	16
Translation adjustment		599	129		
Benefit obligation as at December 31, 2014	9,902	12,009	3,981	9,902	532
Service costs	65	308	92	62	
Interest costs	1,181	591	219	1,177	63
Benefits paid	(814)	(874)	(216)	(814)	(70)
Participant contributions	4	1		4	
Transfers	31	(31)			
Effect of changes in the actuarial assumptions	(710)	(267)	(119)	(691)	30
Translation adjustment		2,670	815		
Benefit obligation as at December 31, 2015	9,659	14,407	4,772	9,640	555

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ii. Evolution of assets fair value

	Overfunded pension plans	Consolidated Underfunded pension plans	Others benefits	Parent Company Overfunded pension plans	Others benefits
Fair value of plan assets as at December 31, 2013	12,347	8,911		12,347	
Interest income	1,471	474		1,471	
Employer contributions	310	387	174	310	59
Participant contributions	3	1		3	
Benefits paid	(769)	(755)	(174)	(769)	(59)
Return on plan assets (excluding interest income)	(5)	398		(5)	
Translation adjustment		456			
Fair value of plan assets as at December 31, 2014	13,357	9,872		13,357	
Interest income	1,616	498		1,615	
Employer contributions	208	446	216	201	70
Participant contributions	4	1		4	
Benefits paid	(814)	(874)	(216)	(814)	(70)
Actual return on plan assets	(977)	(36)		(980)	
Transfers	19	(19)			
Translation adjustment		2,195			
Fair value of plan assets as at December 31, 2015	13,413	12,083		13,383	

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

	Overfunded pension plans	December 31, 2015 Underfunded pension plans	Plans in Brazil Consolidated Others benefits	Overfunded pension plans	December 31, 2014 Underfunded pension plans	Others benefits
Balance at beginning of the year	3,455			2,790		
Interest income	427			335		
Changes on asset ceiling and onerous liability	(128)			330		
Balance at end of the year	3,754			3,455		
Amount recognized in the balance sheet						
Present value of actuarial liabilities	(9,659)	(970)	(624)	(9,902)	(1,028)	(654)

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Fair value of assets	13,413	837		13,357	928
Effect of the asset ceiling	(3,754)			(3,455)	
Liabilities provisioned		(133)	(624)		(100)
					(654)
Current liabilities			(72)		(66)
Non-current liabilities		(133)	(552)		(100)
Liabilities provisioned		(133)	(624)		(100)
					(654)

	Foreign plan Consolidated					
	Overfunded pension plans	December 31, 2015 Underfunded pension plans	Others benefits	Overfunded pension plans	December 31, 2014 Underfunded pension plans	Others benefits
Amount recognized in the balance sheet						
Present value of actuarial liabilities		(13,437)	(4,149)		(10,981)	(3,327)
Fair value of assets		11,246			8,944	
Liabilities provisioned		(2,191)	(4,149)		(2,037)	(3,327)
Current liabilities		(67)	(127)		(42)	(69)
Non-current liabilities		(2,124)	(4,022)		(1,995)	(3,258)
Liabilities provisioned		(2,191)	(4,149)		(2,037)	(3,327)

	Total Consolidated					
	Overfunded pension plans	December 31, 2015 Underfunded pension plans	Others benefits	Overfunded pension plans	December 31, 2014 Underfunded pension plans	Others benefits
Balance at beginning of the year	3,455			2,790		
Interest income	427			335		
Changes on asset ceiling and onerous liability	(128)			330		
Balance at end of the year	3,754			3,455		

Amount recognized in the balance sheet						
Present value of actuarial liabilities	(9,659)	(14,407)	(4,773)	(9,902)	(12,009)	(3,981)
Fair value of assets	13,413	12,083		13,357	9,872	
Effect of the asset ceiling	(3,754)			(3,455)		
Liabilities provisioned		(2,324)	(4,773)		(2,137)	(3,981)
Current liabilities		(67)	(199)		(42)	(135)
Non-current liabilities		(2,257)	(4,574)		(2,095)	(3,846)
Liabilities provisioned		(2,324)	(4,773)		(2,137)	(3,981)

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	Plans in Brazil Parent Company					
	December 31, 2015			December 31, 2014		
	Overfunded pension plans	Underfunded pension plans	Others benefits	Overfunded pension plans	Underfunded pension plans	Others benefits
Balance at beginning of the year	3,455			2,790		
Interest income	427			335		
Changes on asset ceiling and onerous liability	(139)			330		
Balance at end of the year	3,743			3,455		
Amount recognized in the balance sheet						
Present value of actuarial liabilities	(9,640)		(555)	(9,902)		(532)
Fair value of assets	13,383			13,357		
Effect of the asset ceiling	(3,743)			(3,455)		
Liabilities provisioned			(555)			(532)
Current liabilities			(72)			(66)
Non-current liabilities			(483)			(466)
Liabilities provisioned			(555)			(532)

iv. **Costs recognized in the income statements**

	Consolidated Year ended December 31								
	2015			2014			2013		
	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
Current service cost	65	308	92	68	225	55	106	210	91
Interest on expense on liabilities	1,181	591	219	1,116	549	194	995	475	282
Interest income on plan assets	(1,616)	(498)		(1,471)	(474)		(1,131)	(363)	
Interest expense on effect of (asset ceiling)/ onerous liability	437			335			154		

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Total of cost, net	67	401	311	48	300	249	124	322	373
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	Parent Company Year ended December 31					
	2015			2014		
	Overfunded pension plans	Underfunded pension plans	Others underfunded pension plans	Overfunded pension plans	Underfunded pension plans	Others underfunded pension plans
Current service cost	62			68		
Interest on expense on liabilities	1,177		63	1,116		59
Interest income on plan assets	(1,615)			(1,471)		
Interest expense on effect of (asset ceiling)/ onerous liability	428			335		
Total of cost, net	52		63	48		59

v. Costs recognized in the statement of comprehensive income

	Consolidated Year ended December 31								
	2015			2014			2013		
	Overfunded pension plans	Underfunded pension plans	Others benefits	Overfunded pension plans	Underfunded pension plans	Others benefits	Overfunded pension plans	Underfunded pension plans	Others benefits
Balance at beginning of the year	(380)	(1,515)	(350)	(219)	(926)	(460)	(7)	(1,970)	(778)
Effect of changes actuarial assumptions	710	267	119	73	(1,070)	189	2,290	574	537
Return on plan assets (excluding interest income)	(977)	(36)		(5)	398		(1,245)	731	
Change of asset ceiling / costly liabilities (excluding interest income)	170			(312)			(911)		
Others		8			66				
	(97)	239	119	(244)	(606)	189	134	1,305	537
Deferred income tax	33	(4)	(33)	83	159	(38)	(42)	(410)	(162)
Others comprehensive income	(64)	235	86	(161)	(447)	151	92	895	375
Translation adjustments		(650)	(105)		(174)	(13)		(163)	(55)
Transfers/ disposal	4	(4)			32	(28)	(304)	312	(2)
Accumulated other comprehensive income	(440)	(1,934)	(369)	(380)	(1,515)	(350)	(219)	(926)	(460)

	Parent Company Year ended December 31					
	2015			2014		
	Overfunded pension plans	Underfunded pension plans	Others benefits	Overfunded pension plans	Underfunded pension plans	Others benefits
Balance at beginning of the year	(381)	7	(120)	(219)	7	(110)
Effect of changes actuarial assumptions	691		(30)	73		(16)
Return on plan assets (excluding interest income)	(980)			(5)		
	182			(313)		

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Change of asset ceiling / costly liabilities (excluding interest income)

	(107)	(30)	(245)	(16)
Deferred income tax	37	10	83	6
Others comprehensive income	(70)	(20)	(162)	(10)
Transfers/ disposal	7	(7)		
Accumulated other comprehensive income	(444)	(140)	(381)	7

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vi. Risks related to plans

The Administrators of the plans have committed to strategic planning to strengthen internal controls and risk management. This commitment is achieved by conducting audits of internal controls, which aim to mitigate operational risks in routine management of market risk and credit activities. Risks are presented as follows:

Legal - lawsuits: issuing periodic reports to internal audit and directors contemplating the analysis of lawyers about the possibility of loss (remote, probable or possible), aiming to support the administrative decision regarding provisioning. Contracts, tax and decision-making process: previous legal analysis through technical advice. Analysis and ongoing monitoring of developments in the legal scenario and its dissemination within the institution in order to subsidize the administrative plans, considered the impact of regulatory changes.

Actuarial - the annual actuarial valuation of the benefit plans comprises the assessment of costs, revenues and adequacy of plan funding. It also considers the monitoring of biometric, economic and financial assumptions (asset volatility, changes in interest rates, inflation, life expectancy, salaries and other).

Market - profitability projections are performed for the various plans and profiles of investments for 10 years in the management study of assets and liabilities. These projections include the risks of investments in various market segments. Furthermore, the risks for short-term market of the plans are monitored monthly through metrics of VaR (Value at Risk) and stress testing. For exclusive investment funds of Valia, the market risk is measured daily by the custodian asset bank.

Credit - assessment of the credit quality of issuers by hiring expert consultants to evaluate financial institutions and internal assessment of payment ability of non-financial companies. For assets of non-financial companies is conducted a monitoring of the company until the maturity of the security.

vii. Actuarial and economic assumptions and sensitivity analysis

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All calculations involve future actuarial projections about some parameters, such as: salaries, interest, inflation, the behavior of INSS benefits, mortality and disability.

The economic actuarial assumptions adopted have been formulated considering the long-term period for maturity and should therefore be examined accordingly. In the short term they may not necessarily be realized.

In the evaluations were adopted the following assumptions:

	Brazil					
	Overfunded pension plans	December 31, 2015 Underfunded pension plans	Others benefits	Overfunded pension plans	December 31, 2014 Underfunded pension plans	Others benefits
Discount rate to determine benefit obligation	13.63%	13.71%	13.63%	12.70%	12.54%	12.39%
Nominal average rate to determine expense/ (income)	12.36%	13.71%	N/A	12.37%	12.46%	N/A
Nominal average rate of salary increase	8.12%	8.12%	N/A	6.94%	8.12%	N/A
Nominal average rate of benefit increase	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Immediate health care cost trend rate	N/A	N/A	9.18%	N/A	N/A	9.18%
Ultimate health care cost trend rate	N/A	N/A	9.18%	N/A	N/A	9.18%
Nominal average rate of price inflation	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%

	Foreign			
	December 31, 2015		December 31, 2014	
	Underfunded pension plans	Others benefits	Underfunded pension plans	Others benefits
Discount rate to determine benefit obligation	4.00%	3.90%	3.89%	4.10%
Nominal average rate to determine expense/ (income)	4.80%	N/A	4.80%	N/A
Nominal average rate of salary increase	3.90%	N/A	3.90%	N/A
Nominal average rate of benefit increase	3.90%	3.00%	3.90%	3.00%
Immediate health care cost trend rate	N/A	6.30%	N/A	7.22%
Ultimate health care cost trend rate	N/A	4.50%	N/A	4.49%
Nominal average rate of price inflation	2.00%	2.00%	2.00%	2.00%

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For the sensitivity analysis, the Company considers the effect of 1% in nominal discount rate to determine the actuarial liability. The effects of this change in actuarial liabilities in premise and adopted the average duration of the plan are as follows:

	Overfunded pension plans	Consolidated December 31, 2015 Underfunded pension plans	Others benefits	Overfunded pension plans	Parent Company December 31, 2015 Underfunded pension plans	Others benefits
Nominal discount rate - 1% increase						
Actuarial liability balance	8,836	11,807	4,160	8,836		520
Assumptions made	8.33%	5.01%	5.35%	8.33%	0.00%	6.36%
Average duration of the obligation - (years)	8.70	11.76	15.29	8.70		6.57
Nominal discount rate - 1% reduction						
Actuarial liability balance	10,602	15,264	4,071	10,602		596
Assumptions made	10.01%	3.01%	3.90%	10.01%	0.00%	7.34%
Average duration of the obligation - (years)	9.53	11.76	15.22	9.53		7.08

viii. Assets of pension plans

Brazilian plan assets as at December 31, 2015 and 2014 includes respectively (i) investments in a portfolio of Vale's stock in the amount of R\$15 and R\$250; (ii) equity investments from related parties in the amount of R\$0 and R\$3; and (iii) Brazilian Federal Government securities in the amount of R\$11,622 and R\$9,512.

Foreign plan assets as at December 31, 2015 and 2014 includes Canadian Government securities in the amount of R\$2,636 and R\$2,263, respectively.

ix. Overfunded pension plans

Assets by category are as follows:

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	Consolidated				December 31, 2014			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Cash and cash equivalents	2	1		3				
Accounts Receivable	1			1	14			14
Equity securities	1			1	1,261			1,261
Debt securities - Corporate bonds		367		367		418		418
Debt securities - Government bonds	6,478			6,478	5,595			5,595
Investments funds - Fixed Income	7,023			7,023	6,035			6,035
Investments funds - Equity	170			170	885			885
International investments	112			112				
Structured investments - Private Equity funds	540		532	1,072			671	671
Structured investments - Real estate funds			25	25			19	19
Real estate			1,246	1,246			1,322	1,322
Loans to participants			968	968			1,070	1,070
Total	14,327	368	2,771	17,466	13,790	418	3,082	17,290
Funds not related to risk plans				(4,053)				(3,933)
Fair value of plan assets at end of year				13,413				13,357

	Parent Company				December 31, 2014			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Cash and cash equivalents	2	1		3				
Accounts Receivable	1			1	14			14
Equity securities					1,261			1,261
Debt securities - Corporate bonds		367		367		418		418
Debt securities - Government bonds	6,478			6,478	5,595			5,595
Investments funds - Fixed Income	7,018			7,018	6,035			6,035
Investments funds - Equity	170			170	885			885
International investments	112			112				
Structured investments - Private Equity funds	540		511	1,051			671	671
Structured investments - Real estate funds			25	25			19	19
Real estate			1,245	1,245			1,322	1,322
Loans to participants			966	966			1,070	1,070
Total	14,321	368	2,747	17,436	13,790	418	3,082	17,290
Funds not related to risk plans				(4,053)				(3,933)
Fair value of plan assets at end of year				13,383				13,357

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Measurement of overfunded plan assets at fair value with no observable market variables (level 3) are as follows:

	Consolidated				Total
	Private equity funds	Real state funds	Real state	Loans to participants	
Balance as at December 31, 2013	532	19	1,282	1,009	2,842
Return on plan assets	(28)		131	122	225
Assets purchases, sales and settlements	208		8	437	653
Assets sold during the year	(41)		(99)	(498)	(638)
Balance as at December 31, 2014	671	19	1,322	1,070	3,082
Return on plan assets	(281)	3	15	157	(106)
Assets purchases, sales and settlements	162	3	4	133	302
Assets sold during the year	(25)		(95)	(393)	(513)
Transfers in and/ out of Level 3	5			1	6
Balance as at December 31, 2015	532	25	1,246	968	2,771

	Parent Company				Total
	Private equity funds	Real state funds	Real state	Loans to participants	
Balance as at December 31, 2013	532	19	1,282	1,009	2,842
Return on plan assets	(28)		131	122	225
Assets purchases, sales and settlements	208		8	437	653
Assets sold during the year	(41)		(99)	(498)	(638)
Translation adjustment					
Transfers in and/ out of Level 3					
Balance as at December 31, 2014	671	19	1,322	1,070	3,082
Return on plan assets	(281)	3	14	156	(108)
Assets purchases, sales and settlements	146	3	4	133	286
Assets sold during the year	(25)		(95)	(393)	(513)
Balance as at December 31, 2015	511	25	1,245	966	2,747

x. **Underfunded pension plans**

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Assets by category are as follows:

	Consolidated							
	December 31, 2015				December 31, 2014			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Cash and cash equivalents		191		191	3	78		81
Equity securities	4,320			4,320	4,292	25		4,317
Debt securities - Corporate bonds		47		47		1,069		1,069
Debt securities - Government bonds	219	2,671		2,890	205	2,263		2,468
Investments funds - Fixed Income	584	1,097		1,681	502			502
Investments funds - Equity	335	1,394		1,729	251	1,055		1,306
International investments	8	117		125				
Structured investments - Private								
Equity funds			384	384			48	48
Structured investments - Real estate								
funds			1	1			1	1
Real estate			77	77			65	65
Loans to participants			17	17			15	15
Others			621	621				
Total	5,466	5,517	1,100	12,083	5,253	4,490	129	9,872
Funds not related to risk plans								
Fair value of plan assets at end of year				12,083				9,872

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Measurement of underfunded plan assets at fair value with no observable market variables (level 3) are as follows:

	Private equity funds	Real state funds	Real state	Loans to participants	Others	Total
Balance as at December 31, 2013			56			56
Return on plan assets			9			9
Assets purchases, sales and settlements	48	1		15		64
Balance as at December 31, 2014	48	1	65	15		129
Return on plan assets			16	3		19
Assets purchases, sales and settlements	340	(1)			621	960
Assets sold during the year	(3)					(3)
Transfers in and/ out of Level 3	(1)	1	(4)	(1)		(5)
Balance as at December 31, 2015	384	1	77	17	621	1,100

xi. Disbursement of future cash flow

Vale expects to disburse R\$716 in 2016 in relation to pension plans and other benefits.

xii. Expected benefit payments

The expected benefit payments, which reflect future services, are as follows:

	Overfunded pension plans	December 31, 2015 Underfunded pension plans	Others benefits
2016	890	800	224
2017	941	789	234
2018	994	781	243
2019	1,050	773	253
2020	1,106	765	263
2021 and thereafter	6,343	4,319	1,269

b) Profit sharing program (PLR)

The Company recorded as cost of goods sold and services rendered and other operating expenses related to the PLR R\$194 and R\$1.164 for the year ended on December 31, 2015 and 2014, respectively. For the Parent Company, R\$107 and R\$937 for the year ended on December 31, 2015 and 2014, respectively.

c) Long-term compensation plan

Vale has long-term incentive programs such as Matching and Virtual Shares Programs (PAV) for some executives of the Company, covering 3 to 4 year cycles, respectively.

For the Matching program, the participants may acquire preferred share of Vale to participate on the plan, through a prescribed financial institution under market conditions and without any benefit being provided by Vale. Since 2014, the participation on the program has been mandatory for the executive officers.

Except for the executive officers, the shares purchased by executive have no restrictions and can be sold at any time. If the shares are held for a period of three years, and the participants maintains it employment relationship with Vale during this period, the participant is entitled to receive from Vale a payment in cash equivalent to the market value of their stock holdings under this program.

For PAV program, certain eligible executives have the right to receive, during a four year cycle, a monetary value equivalent to market value of a determined number of stocks based on an the Company 's performance measured as an indicator of total return to the Stockholders.

Liabilities of the plans are measured at fair value on the date of each issuance of the report, based on market rates. Compensation costs incurred are recognized by the defined vesting period of three years. At December 31, 2015, 2014 and 2013 the Company recognized in the income statement the amounts of R\$113, R\$163 and R\$198, respectively, related to long term compensation plan.

Table of Contents**22. Financial instruments classification**

	Consolidated							
	December 31, 2015			December 31, 2014				
	Loans and receivables or amortized cost	At fair value through net income	Derivatives designated as hedge accounting	Total	Loans and receivables or amortized cost	At fair value through net income	Derivatives designated as hedge accounting	Total
Financial assets								
Current								
Cash and cash equivalents	14,022			14,022	10,555			10,555
Financial investments	109			109	392			392
Derivative financial instruments		474		474		441		441
Accounts receivable	5,763			5,763	8,700			8,700
Related parties	273			273	1,537			1,537
	20,167	474		20,641	21,184	441		21,625
Non-current								
Derivative financial instruments		363		363		231		231
Loans	732			732	609			609
Related parties	5			5	93			93
	737	363		1,100	702	231		933
Total of financial assets	20,904	837		21,741	21,886	672		22,558
Financial liabilities								
Current								
Suppliers and contractors	13,140			13,140	11,566			11,566
Derivative financial instruments		7,909	198	8,107		2,539	1,221	3,760
Loans and borrowings	9,788			9,788	3,768			3,768
Related parties	1,856			1,856	813			813
	24,784	7,909	198	32,891	16,147	2,539	1,221	19,907
Non-current								
Derivative financial instruments		5,581		5,581		4,273	3	4,276

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Loans and borrowings	102,878			102,878	72,749			72,749
Related parties	830			830	288			288
Participative stockholders debentures		1,336		1,336		4,584		4,584
Others (i)		551		551		303		303
	103,708	7,468		111,176	73,037	9,160	3	82,200
Total of financial liabilities	128,492	15,377	198	144,067	89,184	11,699	1,224	102,107

(i) See note 23(a).

	December 31, 2015		Parent Company		December 31, 2014	
	Loans and receivables or amortized cost	At fair value through net income	Total	Loans and receivables or amortized cost	At fair value through net income	Total
Financial assets						
Current						
Cash and cash equivalents	518		518	685		685
Financial investments	18		18	392		392
Derivative financial instruments		196	196		370	370
Accounts receivable	36,026		36,026	30,599		30,599
Related parties	834		834	2,227		2,227
	37,396	196	37,592	33,903	370	34,273
Non-current						
Derivative financial instruments		293	293		29	29
Loans	106		106	104		104
Related parties	1,468		1,468	902		902
	1,574	293	1,867	1,006	29	1,035
Total of financial assets	38,970	489	39,459	34,909	399	35,308
Financial liabilities						
Current						
Suppliers and contractors	7,084		7,084	6,818		6,818
Derivative financial instruments		3,559	3,559		948	948
Loans and borrowings	4,736		4,736	2,853		2,853
Related parties	6,774		6,774	5,622		5,622
	18,594	3,559	22,153	15,293	948	16,241
Non-current						
Derivative financial instruments		4,745	4,745		3,866	3,866
Loans and borrowings	55,986		55,986	38,542		38,542
Related parties	63,837		63,837	43,606		43,606
Participative stockholders debentures		1,336	1,336		4,584	4,584
Others (i)		551	551		303	303
	119,823	6,632	126,455	82,148	8,753	90,901
Total of financial liabilities	138,417	10,191	148,608	97,441	9,701	107,142

(i) See note 23(a).

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The classification of financial assets and liabilities by currencies are as follows:

	Consolidated December 31, 2015						Total
	R\$	US\$	CAD	AUD	EUR	Others currencies	Total
Financial assets							
Current							
Cash and cash equivalents	3,186	9,871	47	211	43	664	14,022
Financial investments		109					109
Derivative financial instruments	196	278					474
Accounts receivable	980	4,232	488	39	16	8	5,763
Related parties	273						273
	4,635	14,490	535	250	59	672	20,641
Non-current							
Derivative financial instruments	293	70					363
Loans	105	401	226				732
Related parties	5						5
	403	471	226				1,100
Total of assets	5,038	14,961	761	250	59	672	21,741
Financial liabilities							
Current							
Suppliers and contractors	5,853	5,424	1,308	35	449	71	13,140
Derivative financial instruments	3,557	4,550					8,107
Loans and borrowings	1,696	7,779	55		258		9,788
Related parties	997		859				1,856
	12,103	17,753	2,222	35	707	71	32,891
Non-current							
Derivative financial instruments	4,745	836					5,581
Loans and borrowings	19,942	75,903	644	15	6,374		102,878
Related parties	284	19					303
Participative stockholders debentures	1,336						1,336
Others	551						551
	26,858	76,758	644	15	6,374		110,649
Total of liabilities	38,961	94,511	2,866	50	7,081	71	143,540

	Consolidated December 31, 2014						Total
	R\$	US\$	CAD	AUD	EUR	Others currencies	Total
Financial assets							
Current							
Cash and cash equivalents	2,595	7,379	58	101	162	260	10,555
Financial investments	392						392
Derivative financial instruments	369	72					441

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Accounts receivable	1,966	6,678	32		21	3	8,700
Related parties	1,054	483					1,537
	6,376	14,612	90	101	183	263	21,625
Non-current							
Related parties	11	82					93
Loans	104	505					609
Derivative financial instruments	29	202					231
	144	789					933
Total of assets	6,520	15,401	90	101	183	263	22,558
Financial liabilities							
Current							
Suppliers and contractors	5,798	5,690	3	3	72		11,566
Derivative financial instruments	948	2,812					3,760
Loans and borrowings	1,169	2,355	50		194		3,768
Related parties	810	3					813
	8,725	10,860	53	3	266		19,907
Non-current							
Derivative financial instruments	3,867	409					4,276
Loans and borrowings	15,582	51,764	558	5	4,840		72,749
Related parties	288						288
Participative stockholders debentures	4,584						4,584
Others	303						303
	24,624	52,173	558	5	4,840		82,200
Total of liabilities	33,349	63,033	611	8	5,106		102,107

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	Parent Company December 31, 2015						
	R\$	US\$	CAD	AUD	EUR	Others currencies	Total
Financial assets							
Current							
Cash and cash equivalents	493	25					518
Financial investments	18						18
Derivative financial instruments	196						196
Accounts receivable	(609)	36,628			7		36,026
Related parties	606	228					834
	704	36,881			7		37,592
Non-current							
Derivative financial instruments	293						293
Loans	106						106
Related parties	337	1,131					1,468
	736	1,131					1,867
Total of assets	1,440	38,012			7		39,459
Financial liabilities							
Current							
Suppliers and contractors	6,148	806		6	124		7,084
Derivative financial instruments	3,559						3,559
Loans and borrowings	1,595	3,141					4,736
Related parties	1,168	5,601		4	1		6,774
	12,470	9,548		10	125		22,153
Non-current							
Derivative financial instruments	4,745						4,745
Loans and borrowings	18,534	30,820			6,632		55,986
Related parties	3,912	59,925					63,837
Participative stockholders debentures	1,336						1,336
Others	551						551
	29,078	90,745			6,632		126,455
Total of liabilities	41,548	100,293		10	6,757		148,608

	Parent Company December 31, 2014						
	R\$	US\$	CAD	AUD	EUR	Others currencies	Total
Financial assets							
Current							
Cash and cash equivalents	667	18					685
Financial investments	392						392
Derivative financial instruments	370						370
Accounts receivable	4,795	25,787			17		30,599
Related parties	1,951	276					2,227
	8,175	26,081			17		34,273
Non-current							
Derivative financial instruments	29						29

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Loans	90	14					104
Related parties	902						902
	1,021	14					1,035
Total of assets	9,196	26,095			17		35,308
Financial liabilities							
Current							
Suppliers and contractors	5,764	985	2	1	65	1	6,818
Derivative financial instruments	948						948
Loans and borrowings	1,111	1,548			194		2,853
Related parties	261	4,679	3	12	586	81	5,622
	8,084	7,212	5	13	845	82	16,241
Non-current							
Derivative financial instruments	3,866						3,866
Loans and borrowings	14,387	19,314			4,841		38,542
Related parties	434	43,172					43,606
Participative stockholders debentures	4,584						4,584
Others	303						303
	23,574	62,486			4,841		90,901
Total of liabilities	31,658	69,698	5	13	5,686	82	107,142

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Due to the short-term cycle, it is assumed that the fair value of cash and cash equivalents balances, financial investments, accounts receivable and accounts payable approximate 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 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 at the measurement date;

Level 2 - quoted prices (adjusted or unadjusted) for identical or similar assets or liabilities on 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.

a) Assets and liabilities measured and recognized at fair value:

	Consolidated			Consolidated		
	Level 2	December 31, 2015 Level 3	Total	Level 2	December 31, 2014 Level 3	Total
Financial assets						
Derivative financial instruments	837		837	672		672
Total	837		837	672		672
Financial liabilities						
Derivative financial instruments	13,688		13,688	8,036		8,036
Participative stockholders' debentures	1,336		1,336	4,584		4,584
Others (minimum return instrument)		551	551		303	303
Total	15,024	551	15,575	12,620	303	12,923

	Parent Company			Parent Company		
	Level 2	December 31, 2015 Level 3	Total	Level 2	December 31, 2014 Level 3	Total
Financial assets						

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Derivative financial instruments	489		489	399		399
Total	489		489	399		399

Financial liabilities

Derivative financial instruments	8,304		8,304	4,814		4,814
Participative stockholders' debentures	1,336		1,336	4,584		4,584
Others (minimum return instrument)		551	551		303	303
Total	9,640	551	10,191	9,398	303	9,701

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Methods and techniques of evaluation

i) Derivative financial instruments

Financial instruments are evaluated by calculating their present value through the use of instrument yield curves at the closing dates. The curves and prices used in the calculation for each group of instruments are detailed in the market 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 which income is a function of the average price of the underlying asset over the period of the option, the Company uses Turnbull & Wakeman model. In this model, in addition to 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 flow by the interest rate of the currency in which the swap is denominated. The difference between the present value of assets and liability of the swap generates its fair value.

For to the TJLP swaps, the calculation of the fair value assumes that TJLP is constant, that is the projections of future cash flow in Brazilian Reais 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.

ii) Participative stockholders debentures - Consist of the debentures issued during the privatization process (note 29(b)), whose fair values are measured based on the market approach. Reference prices are available on the secondary market.

iii) **Minimum return instrument** - Refers to a minimum return instrument held by Brookfield which under certain conditions can generate a disbursement obligation to Vale at the end of the sixth year of the completion of the acquisition of interest in VLI (note 6(i)). The Company used internal assumptions in a probability model to calculate the fair value of this instrument.

b) **Fair value of financial instruments not measured at fair value**

The fair value estimate for level 1 is based on market approach considering the secondary market contracts. For loans allocated to level 2, the income approach is adopted and the fair value for both fixed-indexed rate debt and floating rate debt is determined on a discounted cash flows basis using LIBOR future values and Vale's bonds curve.

The fair values and carrying amounts of non-current loans (net of interest) are as follows:

Financial liabilities	Balance	Consolidated			Balance	Parent Company		
		Fair value	Level 1	Level 2		Fair value	Level 1	Level 2
December 31, 2015								
Debt principal	110,231	102,434	48,017	54,417	59,585	58,227	11,783	46,444
December 31, 2014								
Debt principal	75,356	78,302	42,077	36,225	40,782	46,886	9,953	36,933

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24. Derivative financial instruments

a) Derivatives effects on balance sheet

	December 31, 2015		December 31, 2014	
	Current	Non-current	Current	Non-current
Consolidated Assets				
Derivatives designated as economic hedge				
Foreign exchange and interest rate risk				
CDI & TJLP vs. US\$ fixed and floating rate swap	269		364	29
IPCA swap	7	64	18	
Eurobonds swap				109
Pre dollar swap			5	
	276	64	387	138
Commodities price risk				
Nickel	198	41	54	7
	198	41	54	7
Others		258		86
		258		86
Total	474	363	441	231

	December 31, 2015		December 31, 2014	
	Current	Non-current	Current	Non-current
Consolidated Liabilities				
Derivatives designated as economic hedge				
Foreign exchange and interest rate risk				
CDI & TJLP vs. US\$ fixed and floating rate swap	3,119	4,419	1,173	3,599
IPCA swap	82	393		167
Eurobonds swap	572	111	24	238
Pre dollar swap	364	280	81	262
	4,137	5,203	1,278	4,266
Commodities price risk				
Nickel	153	42	60	7
Bunker oil (i)	3,609		1,201	
	3,762	42	1,261	7
Others		336		
		336		
Derivatives designated as cash flow hedge accounting				
Bunker oil (i)	198		1,152	

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Foreign exchange	10		69	3
	208		1,221	3
Total	8,107	5,581	3,760	4,276

(i) As at December 31, 2015 and 2014, includes R\$397 and R\$402, respectively, of transactions in which the financial settlement occurs subsequently of the closing month.

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	Parent Company Assets			
	December 31, 2015		December 31, 2014	
	Current	Non-current	Current	Non-current
Derivatives designated as economic hedge				
Foreign exchange and interest rate risk				
CDI & TJLP vs. US\$ fixed and floating rate swap	193		354	29
IPCA swap	3	64	11	
Pre dollar swap			5	
	196	64	370	29
Others		229		
Total	196	293	370	29

	Parent Company Liabilities			
	December 31, 2015		December 31, 2014	
	Current	Non-current	Current	Non-current
Derivatives designated as economic hedge				
Foreign exchange and interest rate risk				
CDI & TJLP vs. US\$ fixed and floating rate swap	3,112	3,943	867	3,535
IPCA swap	82	186		70
Pre dollar swap	365	280	81	261
	3,559	4,409	948	3,866
Others		336		
Total	3,559	4,745	948	3,866

b) **Effects of derivatives on the income statement, cash flow and other comprehensive income**

	Gain (loss) recognized in the income statement			Consolidated Year ended December 31 Financial settlement inflows(outflows)			Gain(loss) recognized in other comprehensive income		
	2015	2014	2013	2015	2014	2013	2015	2014	2013
	Derivatives designated as economic hedge								
Foreign exchange and interest rate risk									
CDI & TJLP vs. US\$ fixed and floating rate swap	(3,644)	(1,160)	(1,961)	(867)	(51)	(385)			
IPCA swap	(167)	(142)		20					
Eurobonds swap	(353)	(385)	209	(39)	24	(10)			
Pre dollar swap	(462)	(73)	(120)	(158)	16	33			
	(4,626)	(1,760)	(1,872)	(1,044)	(11)	(362)			

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Commodities price risk

Nickel	(166)	21	(4)	(212)	29	(9)		
Bunker oil	(2,662)	(1,372)	(129)	(866)	(236)	(141)		
	(2,828)	(1,351)	(133)	(1,078)	(207)	(150)		

Others	(494)	(10)	(123)			1		
	(494)	(10)	(123)			1		

Derivatives designated as cash flow hedge accounting

Bunker oil	(1,483)	(203)	(92)	(1,513)	(203)	(92)	1,409	(1,067)	(14)
Nickel			27			26			(26)
Foreign exchange	(136)	(100)	(28)	(136)	(100)	(28)	66	27	(54)
	(1,619)	(303)	(93)	(1,649)	(303)	(94)	1,475	(1,040)	(94)
Total	(9,567)	(3,424)	(2,221)	(3,771)	(521)	(605)	1,475	(1,040)	(94)

Related to the effects of derivatives in the income statement, the Company recognized as cost of goods sold and services rendered and financial expense the amounts of R\$1,483 and R\$8,084, respectively, for the year ended December 2015.

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	Gain (loss) recognized in the income statement		Parent company Year ended December 31 Financial settlement inflows(outflows)		Gain(loss) recognized in other comprehensive income	
	2015	2014	2015	2014	2015	2014
	Derivatives designated as economic hedge					
Foreign exchange and interest rate risk						
CDI & TJLP vs. US\$ fixed and floating rate swap	(3,467)	(1,119)	(622)	(96)		
IPCA swap	(132)	(59)	11			
Pre dollar swap	(465)	(72)	(158)	15		
	(4,064)	(1,250)	(769)	(81)		
Others	(413)					
	(413)					
Cash flow hedge accounting from entities						
Bunker oil					1,409	(1,067)
Foreign exchange					66	27
					1,475	(1,040)
Total	(4,477)	(1,250)	(769)	(81)	1,475	(1,040)

The maturities dates of the derivative financial instruments are as follows:

	Maturity dates
Currencies and interest rates	July 2023
Bunker oil	December 2016
Nickel	February 2018
Others	December 2027

Additional information about derivatives financial instruments

The risk of the derivatives portfolio is measured using the delta-Normal parametric approach, and 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 estimate considers a 95% confidence level for a one-business day time horizon.

There was no cash amount deposited as margin call regarding derivative positions on December 31, 2015. The derivative positions described in this document did not have initial costs associated.

The following tables detail the derivatives positions for Vale and its controlled companies as of December 31, 2015, with the following information: notional amount, fair value (including credit risk), gains or losses in the period, value at risk and the fair value breakdown by year of maturity.

a) **Foreign exchange and interest rates derivative positions**

(i) **Protection programs for the R\$ denominated debt instruments**

In order to reduce cash flow volatility, swap transactions were implemented to convert into US\$ the cash flows from certain debt instruments denominated in R\$ with interest rates linked mainly to CDI, TJLP and IPCA. In those swaps, Vale pays fixed or floating rates in US\$ and receives payments in R\$ linked to the interest rates of the protected debt instruments.

The swap transactions were negotiated over-the-counter and the protected items are the cash flows from debt instruments linked to R\$. These programs transform into US\$ the obligations linked to R\$ to achieve a currency offset in the Company's cash flows, by matching its receivables - mainly linked to US\$ - with its payables.

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Flow	Notional				Index	Average rate	Fair value		Financial settlement Inflows (Outflows) December 31, 2015	Value at Risk December 31, 2015	Fair value by year									
	December 31, 2015	December 31, 2014	December 31, 2015	December 31, 2014			2016	2017			2018	2019								
CDI vs. US\$ fixed rate swap													(3,059)	(1,453)	(374)	158	(1,920)	(199)	(940)	
Receivable	R\$ 5,239	R\$ 4,511	CDI		108.33%															
Payable	US\$ 2,288	US\$ 2,284	Fix		3.39%															
CDI vs. US\$ floating rate swap													(220)	(203)						
Receivable	R\$ 428	CDI			0.00%															
Payable			Libor																	
	US\$ 250	+			0.00%															
TJLP vs. US\$ fixed rate swap													(3,965)	(2,531)	(339)	263	(913)	(1,112)	(552)	(1,331)
Receivable			TJLP																	
	R\$ 5,484	R\$ 6,247	+		1.32%															
Payable	US\$ 2,611	US\$ 3,051	Fix		1.69%															
TJLP vs. US\$ floating rate swap													(245)	(175)	(4)	16	(17)	(23)	(26)	(1)
Receivable			TJLP																	
	R\$ 267	R\$ 295	+		0.93%															
Payable			Libor																	
	US\$ 156	US\$ 173	+		-1.21%															
R\$ fixed rate vs. US\$ fixed rate swap													(644)	(337)	(155)	73	(364)	(36)	10	(2)
Receivable	R\$ 1,356	R\$ 735	Fix		6.82%															
Payable	US\$ 528	US\$ 395	Fix		-0.74%															
IPCA vs. US\$ fixed rate swap													(411)	(150)	19	41	6	4	1	(4)
Receivable			IPCA																	
	R\$ 1,000	R\$ 1,000	+		6.55%															
Payable	US\$ 434	US\$ 434	Fix		3.98%															
IPCA vs. CDI swap													6			1	(81)	(82)	(60)	2
Receivable			IPCA																	
	R\$ 1,350	R\$ 0	+		6.62%															
Payable	R\$ 1,350	R\$ 0	CDI		98.58%															

(ii) Protection program for EUR denominated debt instruments

In order to reduce the cash flow volatility, swap transactions were implemented to convert into US\$ the cash flows from certain debt instruments issued in Euros by Vale. In those swaps, Vale receives fixed rates in EUR and pays fixed rates in US\$.

The swap transactions were negotiated over-the-counter and the protected items are the cash flows from debt instruments linked to EUR. The financial settlement inflows/outflows are offset by the protected items' losses/gains due to EUR/US\$ exchange rate.

Flow	Notional		Index	Average rate	Fair value		Financial settlement	Value at Risk	Fair value by year			
	December 31, 2015	December 31, 2014			Inflows (Outflows)	December 31, 2015	December 31, 2014	December 31, 2015	December 31, 2015	2016	2017	2018
EUR fixed rate vs. US\$ fixed rate swap												
Receivable	1,000	1,000	Fix	4.06%	(683)	(154)	(38)	56	(572)	(20)	(17)	(74)
Payable	US\$ 1,302	US\$ 1,302	Fix	4.51%								

(iii) Foreign exchange hedging program for disbursements in CAD

In order to reduce the cash flow volatility, forward transactions were implemented to mitigate the foreign exchange exposure that arises from the currency mismatch between revenues denominated in US\$ and disbursements denominated in CAD.

The forward transactions were negotiated over-the-counter and the protected item is part of the CAD denominated disbursements. The financial settlement inflows/outflows are offset by the protected items losses/gains due to CAD/US\$ exchange rate. This program is classified under the hedge accounting requirements.

Flow	December 31, 2015	Notional	December 31, 2014	Bought / Sold	Average rate (CAD / USD)	Fair value		Financial settlement	Value at Risk	Fair value
						December 31, 2015	December 31, 2014	Inflows (Outflows)	December 31, 2015	by year 2016
Forward	CAD 10	CAD 230		B	1.028	(10)	(73)		0.3	(10)

Table of Contents**b) Commodities derivative positions****(i) Bunker Oil purchase cash flows protection program**

In order to reduce the impact of bunker oil price fluctuation on maritime 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 and zero cost-collars.

The derivative transactions were negotiated over-the-counter and the protected item is part of the Vale's costs linked to bunker oil prices. The financial settlement inflows/outflows are offset by the protected items' losses/gains due to bunker oil prices changes. Part of this program is classified under the hedge accounting requirements.

Flow	Notional (ton)		Bought / Sold	Average strike (US\$/ton)	Fair value		Financial Settlement Inflows (Outflows) December 31, 2015	Value at Risk December 31, 2015	Fair by
	December 31, 2015	December 31, 2014			December 31, 2015	December 31, 2014			
Bunker Oil protection									
Forwards	1,867,500	2,205,000	B	508	(2,252)	(964)	(586)		42
Call options	2,041,500		B	385	0.1				0.03
Put options	2,041,500		S	314	(1,158)		(228)		40
Total					(3,410)	(964)			
Bunker Oil hedge									
Forwards	0	1,950,000	B	0		(987)	(1,491)		

(ii) Protection programs for base metals raw materials and products

In the operational protection program for nickel sales at fixed prices, derivatives transactions were implemented to convert into floating prices the contracts with clients that required a fixed price, in order to keep nickel revenues exposed to nickel price fluctuations. Those operations are usually implemented through the purchase of nickel forwards, which are unwind before the original maturity in order to match the settlement dates of the commercial contracts in which the prices were fixed.

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In the operational protection program for the purchase of raw materials and products, derivatives transactions were implemented, usually through the sale of nickel and copper forward or futures, in order to reduce the mismatch between the pricing period of purchases (concentrate, cathode, sinter, scrap and others) and the pricing period of the final product sales to the clients.

The derivative transactions are negotiated at London Metal Exchange or over-the-counter and the protected item is part of Vale's revenues and costs linked to nickel and copper prices. The financial settlement inflows/outflows are offset by the protected items' losses/gains due to nickel and copper prices changes.

Flow	Notional (ton)		Bought / Average strike		Fair value		Financial Settlement	Value at Risk	Fair value by year	
	December 31, 2015	December 31, 2014	Sold	(US\$/ton)	December 31, 2015	December 31, 2014	December 31, 2015	December 31, 2015	2016	2017
Fixed prices sales protection										
Nickel forwards	16,917	11,264	B	11,821	(180)	(65)	(215)	19	(144)	(37)
Raw materials purchase protection										
Nickel forwards	118	140	S	9,603	0.4	0.4	2.9	0.1	0.4	
Copper forwards	385	360	S	4,938	0.4	0.3	2.2	0.1	0.4	
Total					0.7	0.7			0.7	

c) Silver Wheaton Corp. warrants

The company owns warrants of Silver Wheaton Corp. (SLW), a Canadian company with stocks negotiated in Toronto Stock Exchange and New York Stock Exchange. Such warrants configure American call options and were received as part of the payment regarding the sale of 25% of gold payable flows produced as a sub product from Salobo copper mine during its life and 70% of gold payable flows produced as a sub product from some nickel mines in Sudbury during 20 years.

Flow	Notional (quantity)		Bought / Average strike		Fair value		Financial Settlement	Value at Risk	Fair value by year
	December 31, 2015	December 31, 2014	Sold	(US\$/share)	December 31, 2015	December 31, 2014	December 31, 2015	December 31, 2015	2023
Call options	10,000,000	10,000,000	B	65	28	86			3

Table of Contents**d) Call options from debentures**

The company has debentures in which lenders have call options of a specified quantity of Ferrovia Norte Sul ordinary shares, later changed to VLI SA shares. The call option's strike price is given by the debentures' remaining notional in each exercise date.

Flow	Notional (quantity)		Bought / Sold	Average strike (R\$/share)	Fair value		Financial Settlement Inflows (Outflows) December 31, 2015	Value at Risk December 31, 2015	Fair value by year 2016
	December 31, 2015	December 31, 2014			December 31, 2015	December 31, 2014			
Call options	140,239		S	8,570	(152)			9	(

e) Options related to Minerações Brasileiras Reunidas S.A. (MBR) shares

The Company entered into a contract that has options related to MBR shares. Under certain restrict and contingent conditions, which are beyond the buyer's control, such as illegality due to changes in the law, the contract has a clause that gives the buyer the right to sell back its stake to the Company. In this case, the Company could settle through cash or shares. On the other hand, the Company has the right to buy back this non-controlling interest in the subsidiary.

Flow	Notional (quantity, in millions)		Bought / Sold	Average strike (R\$/ação)	Fair value		Financial Settlement Inflows (Outflows) December 31, 2015	Value at Risk December 31, 2015	Fair value by year 2016
	December 31, 2015	December 31, 2014			December 31, 2015	December 31, 2014			
Options	2,139		B/S	1.8	57			23	

f) Embedded derivatives in commercial contracts

The Company has some 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)	Bought / Sold	Average strike	Fair value	Financial Settlement Inflows (Outflows)	Value at Risk	Fair value by year 2016
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Flow	December 31, 2015	December 31, 2014	Sold	(US\$/ton)	December 31, 2015	December 31, 2014	December 31, 2015	December 31, 2015	2014
Nickel Forward	3,877	4,491	S	9,468	11.7	(1.5)			
Copper Forward	5,939	6,310	S	4,961	7.7	3.0			
Total					19.4	1.5			6.5

The Company has also a natural gas purchase agreement in which there's a clause that defines that a premium can be charged if the Company's pellet sales prices trade above a pre-defined level. This clause is considered an embedded derivative and both its fair value and value at risk were not material as of December 31, 2015.

g) Sensitivity analysis of derivative financial instruments

The following tables present the potential value of the instruments given hypothetical stress scenarios for the main market risk factors that impact the derivatives positions. The scenarios were defined as follows:

- *Scenario I:* fair value calculation considering market prices as of December 31, 2015
- *Scenario II:* fair value estimated considering a 25% deterioration in the associated risk variables
- *Scenario III:* fair value estimated considering a 50% deterioration in the associated risk variables

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Instrument	Instrument's main risk events	Scenario I	Scenario II	Scenario III
CDI vs. US\$ fixed rate swap	R\$ depreciation	(3,059)	(5,345)	(7,632)
	US\$ interest rate inside Brazil decrease	(3,059)	(3,116)	(3,174)
	Brazilian interest rate increase	(3,059)	(3,075)	(3,091)
Protected item: R\$ denominated debt	R\$ depreciation	n.a.		
TJLP vs. US\$ fixed rate swap	R\$ depreciation	(3,965)	(6,431)	(8,898)
	US\$ interest rate inside Brazil decrease	(3,965)	(4,125)	(4,296)
	Brazilian interest rate increase	(3,965)	(4,273)	(4,543)
	TJLP interest rate decrease	(3,965)	(4,126)	(4,298)
Protected item: R\$ denominated debt	R\$ depreciation	n.a.		
TJLP vs. US\$ floating rate swap	R\$ depreciation	(245)	(383)	(521)
	US\$ interest rate inside Brazil decrease	(245)	(259)	(275)
	Brazilian interest rate increase	(245)	(264)	(281)
	TJLP interest rate decrease	(245)	(255)	(266)
Protected item: R\$ denominated debt	R\$ depreciation	n.a.		
R\$ fixed rate vs. US\$ fixed rate swap	R\$ depreciation	(644)	(1,165)	(1,686)
	US\$ interest rate inside Brazil decrease	(644)	(702)	(766)
	Brazilian interest rate increase	(644)	(760)	(855)
Protected item: R\$ denominated debt	R\$ depreciation	n.a.		
IPCA vs. US\$ fixed rate swap	R\$ depreciation	(411)	(871)	(1,331)
	US\$ interest rate inside Brazil decrease	(411)	(448)	(489)
	Brazilian interest rate increase	(411)	(519)	(613)