

Vale S.A.
Form 6-K
July 27, 2017
Table of Contents

**United States
Securities and Exchange Commission**

Washington, D.C. 20549

FORM 6-K

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

For the month of

July, 2017

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.

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

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

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

(Check One) Yes No

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

(Check One) Yes No

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

(Check One) Yes No

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

Table of Contents

Interim Financial Statements

June 30, 2017

IFRS in US\$

Table of Contents

Vale S.A. Interim Financial Statements

Contents

	Page
<u>Report of independent registered public accounting firm</u>	3
<u>Consolidated Income Statement</u>	4
<u>Consolidated Statement of Comprehensive Income</u>	5
<u>Consolidated Statement of Cash Flows</u>	6
<u>Consolidated Statement of Financial Position</u>	7
<u>Consolidated Statement of Changes in Equity</u>	8
<u>Selected Notes to the Interim Financial Statements</u>	9
<u>1. Corporate information</u>	9
<u>2. Basis for preparation of the interim financial statements</u>	9
<u>3. Information by business segment and by geographic area</u>	10
<u>4. Costs and expenses by nature</u>	14
<u>5. Financial result</u>	15
<u>6. Income taxes</u>	15
<u>7. Basic and diluted earnings per share</u>	16
<u>8. Accounts receivable</u>	17
<u>9. Inventories</u>	17
<u>10. Other financial assets and liabilities</u>	17
<u>11. Non-current assets and liabilities held for sale and discontinued operations</u>	17
<u>12. Acquisitions and divestitures</u>	19
<u>13. Investments in associates and joint ventures</u>	20
<u>14. Intangibles</u>	22
<u>15. Property, plant and equipment</u>	23
<u>16. Loans, borrowings, cash and cash equivalents and financial investments</u>	24
<u>17. Liabilities related to associates and joint ventures</u>	26
<u>18. Financial instruments classification</u>	30
<u>19. Fair value estimate</u>	30
<u>20. Derivative financial instruments</u>	31
<u>21. Provisions</u>	36
<u>22. Litigation</u>	36
<u>23. Employee postretirement obligations</u>	38
<u>24. Stockholders' equity</u>	39
<u>25. Related parties</u>	40
<u>26. Commitments</u>	42
<u>27. Additional information about derivatives financial instruments</u>	43
<u>Members of the Board of Directors, Fiscal Council, Advisory Committees and Executive Officers</u>	47

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

Table of Contents

KPMG Auditores Independentes	Central Tel	55 (21) 2207-9400
Rua do Passeio, 38 Setor 2 17º andar	Fax	55 (21) 2207-9000
20021-290 - Rio de Janeiro, RJ - Brasil	Internet	www.kpmg.com.br

Report of independent registered public accounting firm

To the Board of Directors and Stockholders of

Vale S.A.

Rio de Janeiro - RJ

We have reviewed the accompanying condensed consolidated balance sheet of Vale S.A. (the Company) and subsidiaries as of June 30, 2017, the related condensed consolidated statements of income, comprehensive income and cash flows for the three and six-month periods ended on June 30, 2017 and 2016, and the related condensed consolidated statement of changes in equity for the six-month periods ended on June 30, 2017 and 2016. These condensed consolidated financial statements are the responsibility of the Company s management.

We conducted our review in accordance with the standards of the Public Company Accounting Oversight Board (United States). A review of interim financial information consists principally of applying analytical procedures and making inquiries of persons responsible for financial and accounting matters. It is substantially less in scope than an audit conducted in accordance with the standards of the Public Company Accounting Oversight Board (United States), the objective of which is the expression of an opinion regarding the financial statements taken as a whole. Accordingly, we do not express such an audit opinion.

Based on our review, we are not aware of any material modification that should be made to the condensed consolidated financial statements referred to above for them to be in conformity with the International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

We have previously audited, in accordance with standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheet of Vale S.A. and subsidiaries as of December 31, 2016 and the related consolidated statements of income, comprehensive income, changes in equity and cash flows for the year then ended (not presented herein); and in our report dated February 22, 2017, we expressed an unqualified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying condensed consolidated balance sheet as of December 31, 2016, is fairly stated, in all material respects, in relation to the consolidated balance sheet from which it has been derived.

KPMG Auditores Independentes

Rio de Janeiro, Brazil

July 26, 2017

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.

KPMG Auditores Independentes, a Brazilian entity and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative (KPMG International), a Swiss entity.

Table of Contents**Consolidated Income Statement**

In millions of United States dollars, except earnings per share data

	Notes	Three month period ended June 30,		Six month period ended June 30,	
		2017	2016 (i)	2017	2016 (i)
Continuing operations					
Net operating revenue	3(c)	7,235	6,162	15,750	11,497
Cost of goods sold and services rendered	4(a)	(5,102)	(4,313)	(9,836)	(8,202)
Gross profit		2,133	1,849	5,914	3,295
Operating expenses					
Selling and administrative expenses	4(b)	(132)	(127)	(256)	(234)
Research and evaluation expenses		(80)	(72)	(145)	(127)
Pre operating and operational stoppage		(90)	(110)	(205)	(207)
Other operating expenses, net	4(c)	(88)	(142)	(165)	(178)
		(390)	(451)	(771)	(746)
Impairment and other results on non-current assets	12 and 15	(220)	(66)	292	(66)
Operating income		1,523	1,332	5,435	2,483
Financial income	5	458	3,889	1,398	7,139
Financial expenses	5	(1,797)	(1,814)	(3,350)	(3,653)
Equity results in associates and joint ventures	13	(24)	190	49	345
Impairment and other results in associates and joint ventures	17	(34)	(1,113)	(95)	(1,113)
Income before income taxes		126	2,484	3,437	5,201
Income taxes					
	6				
Current tax		(69)	(413)	(570)	(754)
Deferred tax		118	(929)	(104)	(1,536)
		49	(1,342)	(674)	(2,290)
Net income from continuing operations		175	1,142	2,763	2,911
Net income attributable to noncontrolling interests		31	15	46	14
Net income from continuing operations attributable to Vale's stockholders		144	1,127	2,717	2,897
Discontinued operations					
	11				
Loss from discontinued operations		(125)	(21)	(207)	(10)
Net income attributable to noncontrolling interests		3		4	5
Loss from discontinued operations attributable to Vale's stockholders		(128)	(21)	(211)	(15)
Net income		50	1,121	2,556	2,901

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

Net income attributable to noncontrolling interests	34	15	50	19
Net income attributable to Vale s stockholders	16	1,106	2,506	2,882
Earnings per share attributable to Vale s stockholders:				
Basic and diluted earnings per share:	7			
Preferred share (US\$)		0.21	0.49	0.56
Common share (US\$)		0.21	0.49	0.56

(i) Period restated according to Note 11.

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

Table of Contents**Consolidated Statement of Comprehensive Income**

In millions of United States dollars

	Three month period ended June 30,		Six month period ended June 30,	
	2017	2016	2017	2016
Net income	50	1,121	2,556	2,901
Other comprehensive income:				
Items that will not be reclassified subsequently to the income statement				
Cumulative translation adjustments	(1,753)	3,861	(639)	7,107
Retirement benefit obligations	(283)	(183)	(313)	(268)
Tax recognized within other comprehensive income	88	55	95	82
Total items that will not be reclassified subsequently to the income statement	(1,948)	3,733	(857)	6,921
Items that may be reclassified subsequently to the income statement				
Cumulative translation adjustments	1,308	(2,077)	691	(3,678)
Cash flow hedge				6
Net investments hedge	(392)		(128)	
Equity results in associates and joint ventures, net of taxes		5		5
Transfer of realized results to net income, net of taxes		(75)		(78)
Tax recognized within other comprehensive income	78	7	(29)	(142)
Total of items that may be reclassified subsequently to the income statement	994	(2,140)	534	(3,887)
Total comprehensive income (loss)	(904)	2,714	2,233	5,935
Comprehensive income attributable to noncontrolling interests	4	85	41	153
Comprehensive income (loss) attributable to Vale's stockholders	(908)	2,629	2,192	5,782

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

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

In millions of United States dollars

	Three month period ended June 30,		Six month period ended June 30,	
	2017	2016	2017	2016
		(i)		(i)
Cash flow from operating activities:				
Income before income taxes from continuing operations	126	2,484	3,437	5,201
Continuing operations adjustments for:				
Equity results in associates and joint ventures	24	(190)	(49)	(345)
Impairment and other results on non-current assets	220	66	(292)	66
Impairment and other results in associates and joint ventures	34	1,113	95	1,113
Depreciation, amortization and depletion	904	839	1,812	1,622
Financial results, net	1,339	(2,075)	1,952	(3,486)
Changes in assets and liabilities:				
Accounts receivable	1,380	78	1,678	(914)
Inventories	(223)	28	(444)	(15)
Suppliers and contractors	244	342	326	26
Payroll and related charges	199	39	(43)	43
Other assets and liabilities, net	(162)	311	(331)	403
	4,085	3,035	8,141	3,714
Interest on loans and borrowings paid	(412)	(362)	(927)	(821)
Derivatives paid, net (note 20)	(3)	(353)	(110)	(863)
Interest on participative stockholders' debentures paid	(70)	(37)	(70)	(37)
Income taxes	(37)	(114)	(405)	(254)
Income taxes - Settlement program	(120)	(100)	(241)	(188)
Net cash provided by operating activities from continuing operations	3,443	2,069	6,388	1,551
Net cash provided by operating activities from discontinued operations	2	50	94	54
Net cash provided by operating activities	3,445	2,119	6,482	1,605
Cash flow from investing activities:				
Financial investments redeemed (invested)	34	(112)	(19)	(23)
Loans and advances - Net receipts (payments)	(100)		(244)	(3)
Additions to investments	(361)	(136)	(370)	(226)
Additions to property, plant and equipment and intangible (note 3(b))	(890)	(1,164)	(1,997)	(2,491)
Proceeds from disposal of assets and investments (note 12)	8	12	523	24
Dividends and interest on capital received from associates and joint ventures	82	114	82	115
Others investments activities	(19)	(21)	(21)	(46)

Net cash used in investing activities from continuing operations	(1,246)	(1,307)	(2,046)	(2,650)
Net cash used in investing activities from discontinued operations	(81)	(58)	(144)	(105)
Net cash used in investing activities	(1,327)	(1,365)	(2,190)	(2,755)
Cash flow from financing activities:				
Loans and borrowings				
Additions	300	1,433	1,450	4,633
Repayments	(1,852)	(1,808)	(2,970)	(2,962)
Transactions with stockholders:				
Dividends attributed to stockholders	(1,454)		(1,454)	
Dividends and interest on capital paid to noncontrolling interest	(5)	(71)	(8)	(75)
Transactions with noncontrolling stockholders (note 12)			255	(17)
Net cash provided by (used in) financing activities from continuing operations	(3,011)	(446)	(2,727)	1,579
Net cash provided by (used in) financing activities from discontinued operations	34	(4)		(5)
Net cash provided by (used in) financing activities	(2,977)	(450)	(2,727)	1,574
Increase (decrease) in cash and cash equivalents	(859)	304	1,565	424
Cash and cash equivalents in the beginning of the period	6,716	3,779	4,262	3,591
Effect of exchange rate changes on cash and cash equivalents	(137)	47	(93)	115
Cash and cash equivalents from disposals subsidiaries			(14)	
Cash and cash equivalents at end of the period	5,720	4,130	5,720	4,130
Non-cash transactions:				
Additions to property, plant and equipment - capitalized loans and borrowing costs	83	213	186	390

(i) Period restated according to Note 11.

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

Table of Contents**Consolidated Statement of Financial Position**

In millions of United States dollars

	Notes	June 30, 2017	December 31, 2016
Assets			
Current assets			
Cash and cash equivalents	16	5,720	4,262
Accounts receivable	8	1,709	3,663
Other financial assets	10	2,193	363
Inventories	9	3,864	3,349
Prepaid income taxes		217	159
Recoverable taxes		1,302	1,625
Others		427	557
		15,432	13,978
Non-current assets held for sale	11	4,430	8,589
		19,862	22,567
Non-current assets			
Judicial deposits	22(c)	939	962
Other financial assets	10	3,334	628
Prepaid income taxes		548	527
Recoverable taxes		733	727
Deferred income taxes	6(a)	7,095	7,343
Others		319	274
		12,968	10,461
Investments in associates and joint ventures	13	3,605	3,696
Intangibles	14	7,211	6,871
Property, plant and equipment	15	54,659	55,419
		78,443	76,447
Total assets		98,305	99,014
Liabilities			
Current liabilities			
Suppliers and contractors		3,746	3,630
Loans and borrowings	16	2,063	1,660
Other financial liabilities	10	876	1,086
Taxes payable		641	657
Provision for income taxes		257	171
Liabilities related to associates and joint ventures	17	295	292
Provisions	21	834	952
Dividends and interest on capital			798
Others		781	896
		9,493	10,142
Liabilities associated with non-current assets held for sale	11	1,089	1,090

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

		10,582	11,232
Non-current liabilities			
Loans and borrowings	16	25,789	27,662
Other financial liabilities	10	3,144	2,127
Taxes payable		4,862	4,961
Deferred income taxes	6(a)	1,565	1,700
Provisions	21	6,053	5,748
Liabilities related to associates and joint ventures	17	724	785
Deferred revenue - Gold stream		1,984	2,090
Others		1,701	1,685
		45,822	46,758
Total liabilities		56,404	57,990
Stockholders equity	24		
Equity attributable to Vale's stockholders		40,471	39,042
Equity attributable to noncontrolling interests		1,430	1,982
Total stockholders equity		41,901	41,024
Total liabilities and stockholders equity		98,305	99,014

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

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

In millions of United States dollars

	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, 2016	61,614	(152)	(699)	4,203	(1,477)	(1,147)	(23,300)		39,042	1,982	41,024
Net income								2,506	2,506	50	2,556
Other comprehensive income:											
Retirement benefit obligations						(218)			(218)		(218)
Net investments hedge							(84)		(84)		(84)
Translation adjustments				(63)		5	149	(103)	(12)	(9)	(21)
Transactions with stockholders:											
Dividends and interest on capital of Vale s stockholders				(658)					(658)		(658)
Dividends of noncontrolling interest										(107)	(107)
Acquisitions and disposal of participation of noncontrolling interest (note 12)			(105)						(105)	(512)	(617)
Capitalization of noncontrolling interest advances										26	26
Balance at June 30, 2017	61,614	(152)	(804)	3,482	(1,477)	(1,360)	(23,235)	2,403	40,471	1,430	41,901

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

	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, 2015	61,614	(152)	(702)	985	(1,477)	(992)	(25,687)		33,589	2,115	35,704
Net income								2,882	2,882	19	2,901
Other comprehensive income:											
Retirement benefit obligations						(186)			(186)		(186)
Cash flow hedge						7			7		7
Translation adjustments				213		(97)	2,762	201	3,079	134	3,213
Transactions with stockholders:											
Dividends of noncontrolling interest										(172)	(172)
Capitalization of noncontrolling interest advances										16	16
Balance at June 30, 2016	61,614	(152)	(702)	1,198	(1,477)	(1,268)	(22,925)	3,083	39,371	2,112	41,483

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

Table of Contents

Selected Notes to the Interim Financial Statements

Expressed in millions of United States dollar, unless otherwise stated

1. Corporate information

Vale S.A. (the Parent Company) is a public company headquartered in the city of 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 Madrid - LATIBEX (XVALO and XVALP).

Vale and its direct and indirect subsidiaries (Vale or Company) are global 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 Company also produces copper, metallurgical and thermal coal, manganese ore, ferroalloys, platinum group metals, gold, silver and cobalt. The information by segment is presented in note 3.

2. Basis for preparation of the interim financial statements

a) Statement of compliance

The condensed consolidated interim financial statements of the Company (interim financial statements) present the accounts of the Company and have been prepared in accordance with IAS 34 Interim Financial Reporting of the International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

b) Basis of presentation

The interim 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 the income statement or available-for-sale financial instruments measured at fair value through the statement of comprehensive income; and (ii) impairment of assets.

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

The accounting practices, accounting estimates and judgments, risk management and measurement methods are the same as those adopted when preparing the financial statements for the year ended December 31, 2016. The accounting policy for recognizing and measuring income taxes in the interim period is described in note 6. These interim financial statements were prepared to update users about relevant information presented in the period and should be read in conjunction with the financial statements for the year ended December 31, 2016.

The comparative information for the period ended June 30, 2016 was restated for the purposes of applying IFRS 5 Non-current assets held for sale and discontinued operations after approval by the Board of Directors of the sale of the fertilizers assets, as presented in Note 11.

The interim financial statements of the Company and its associates and joint ventures are measured using the currency of the primary economic environment in which the entity operates (functional currency), which in the case of the Parent Company is the Brazilian real (BRL or R\$). For presentation purposes, these interim financial statements are presented in United States dollar (USD or US\$) as the Company believes that this is how international investors analyze the interim financial statements.

The exchange rates used by the Company for major currencies to translate its operations are as follows:

	Closing rate		Average rate for the			
	December 31,		Three month period ended		Six month period ended	
	June 30, 2017	2016	June 30, 2017	June 30, 2016	June 30, 2017	June 30, 2016
US Dollar (US\$)	3.3082	3.2591	3.2174	3.5076	3.1807	3.7017
Canadian dollar (CAD)	2.5485	2.4258	2.3937	2.7217	2.3847	2.7809
Australian dollar (AUD)	2.5394	2.3560	2.4154	2.6153	2.3986	2.7142
Euro (EUR or)	3.7750	3.4384	3.5480	3.9624	3.4479	4.1288

Subsequent events were evaluated through July 26, 2017, which is the date the interim financial statements were approved by the Board of Directors.

Table of Contentsc) **Accounting standards issued but not yet effective**

The standards and interpretations issued by IASB relevant to the Company but not yet effective are the same as those adopted when preparing the financial statements for the year ended December 31, 2016.

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) **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 excluding (i) the depreciation, depletion and amortization, (ii) results on measurement or sales of non-current assets, (iii) impairment, (iv) onerous contracts and plus (v) dividends received from associates and joint ventures.

	Three month period ended June 30, 2017						
	Net operating revenue	Cost of goods sold and services rendered	Sales, administrative and other operating expenses	Research and evaluation	Pre operating and operational stoppage	Dividends received from associates and joint ventures	Adjusted EBITDA
Ferrous minerals							
Iron ore	3,544	(1,885)	(94)	(23)	(40)		1,502
Iron ore Pellets	1,331	(712)	(10)	(5)	(1)	37	640
Ferroalloys and manganese	117	(81)	(2)		(1)		33
Other ferrous products and services	122	(77)	12				57
	5,114	(2,755)	(94)	(28)	(42)	37	2,232
Coal	481	(305)	(11)	(4)	(4)		157

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

Base metals							
Nickel and other products	1,009	(818)	(32)	(11)	(12)		136
Copper	503	(247)	(4)	(2)			250
	1,512	(1,065)	(36)	(13)	(12)		386
Others	128	(125)	(57)	(35)	(2)	45	(46)
Total of continuing operations	7,235	(4,250)	(198)	(80)	(60)	82	2,729
Discontinued operations (Fertilizers)							
	401	(372)	(20)	(3)	(10)		(4)
Total	7,636	(4,622)	(218)	(83)	(70)	82	2,725

Three month period ended June 30, 2016

	Net operating revenue	Cost of goods sold and services rendered	Sales, administrative and other operating expenses	Research and evaluation	Pre operating and operational stoppage	Dividends received from associates and joint ventures	Adjusted EBITDA
Ferrous minerals							
Iron ore	3,508	(1,652)	(150)	(16)	(34)		1,656
Iron ore Pellets	868	(459)	(19)	(4)	(9)	60	437
Ferroalloys and manganese	61	(53)	1		(3)		6
Other ferrous products and services	104	(63)	(3)		(1)		37
	4,541	(2,227)	(171)	(20)	(47)	60	2,136
Coal	145	(236)	(6)	(3)	(10)		(110)
Base metals							
Nickel and other products	1,050	(775)	(2)	(21)	(26)		226
Copper	397	(237)	(9)	(1)			150
	1,447	(1,012)	(11)	(22)	(26)		376
Others	29	(58)	(47)	(27)	(2)	54	(51)
Total of continuing operations	6,162	(3,533)	(235)	(72)	(85)	114	2,351
Discontinued operations (Fertilizers)							
	464	(394)	(29)	(6)	(6)	3	32
Total	6,626	(3,927)	(264)	(78)	(91)	117	2,383

Table of Contents

Six month period ended June 30, 2017

	Net operating revenue	Cost of goods sold and services rendered	Sales, administrative and other operating expenses	Research and evaluation	Pre operating and operational stoppage	Dividends received from associates and joint ventures	Adjusted EBITDA
Ferrous minerals							
Iron ore	8,370	(3,562)	(92)	(39)	(81)		4,596
Iron ore Pellets	2,790	(1,364)	(22)	(8)	(2)	37	1,431
Ferrous alloys and manganese	203	(125)	(4)		(4)		70
Other ferrous products and services	248	(153)	8	(1)			102
	11,611	(5,204)	(110)	(48)	(87)	37	6,199
Coal	805	(553)	(23)	(7)	(4)		218
Base metals							
Nickel and other products	2,141	(1,680)	(75)	(20)	(50)		316
Copper	968	(477)	(7)	(4)			480
	3,109	(2,157)	(82)	(24)	(50)		796
Others	225	(224)	(153)	(66)	(3)	45	(176)
Total of continuing operations	15,750	(8,138)	(368)	(145)	(144)	82	7,037
Discontinued operations (Fertilizers)	771	(711)	(35)	(5)	(21)		(1)
Total	16,521	(8,849)	(403)	(150)	(165)	82	7,036

Six month period ended June 30, 2016

	Net operating revenue	Cost of goods sold and services rendered	Sales, administrative and other operating expenses	Research and evaluation	Pre operating and operational stoppage	Dividends received from associates and joint ventures	Adjusted EBITDA
Ferrous minerals							
Iron ore	6,425	(2,961)	(306)	(27)	(66)		3,065
Iron ore Pellets	1,621	(896)	(35)	(4)	(13)	60	733
Ferrous alloys and manganese	108	(99)	3		(5)		7
Other ferrous products and services	191	(122)	2		(2)		69
	8,345	(4,078)	(336)	(31)	(86)	60	3,874

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

Coal	299	(529)	43	(5)	(11)		(203)
Base metals							
Nickel and other products	2,050	(1,539)	(26)	(35)	(58)		392
Copper	750	(429)	(6)	(2)			313
	2,800	(1,968)	(32)	(37)	(58)		705
Others	53	(103)	(39)	(54)	(2)	55	(90)
Total of continuing operations	11,497	(6,678)	(364)	(127)	(157)	115	4,286
Discontinued operations (Fertilizers)	848	(690)	(40)	(11)	(8)	3	102
Total	12,345	(7,368)	(404)	(138)	(165)	118	4,388

Adjusted EBITDA is reconciled to net income (loss) as follows:

From Continuing operations

	Three month period ended June 30,		Six month period ended June 30,	
	2017	2016	2017	2016
Adjusted EBITDA from continuing operations	2,729	2,351	7,037	4,286
Depreciation, depletion and amortization	(904)	(839)	(1,812)	(1,622)
Dividends received from associates and joint ventures	(82)	(114)	(82)	(115)
Impairment and other results on non-current assets	(220)	(66)	292	(66)
Operating income	1,523	1,332	5,435	2,483
Financial results, net	(1,339)	2,075	(1,952)	3,486
Equity results in associates and joint ventures	(24)	190	49	345
Impairment and other results in associates and joint ventures	(34)	(1,113)	(95)	(1,113)
Income taxes	49	(1,342)	(674)	(2,290)
Net income from continuing operations	175	1,142	2,763	2,911
Net income attributable to noncontrolling interests	31	15	46	14
Net income attributable to Vale's stockholders	144	1,127	2,717	2,897

Table of Contents**From Discontinued operations**

	Three month period ended June 30,		Six month period ended June 30,	
	2017	2016	2017	2016
Adjusted EBITDA from discontinued operations	(4)	32	(1)	102
Depreciation, depletion and amortization		(88)		(155)
Dividends received from associates and joint ventures		(3)		(3)
Impairment of non-current assets (note 11a)	(266)		(377)	
Operating loss	(270)	(59)	(378)	(56)
Financial results, net	(6)	16	(10)	30
Equity results in associates and joint ventures				1
Income taxes	151	22	181	15
Loss from discontinued operations	(125)	(21)	(207)	(10)
Net income attributable to noncontrolling interests	3		4	5
Loss attributable to Vale's stockholders	(128)	(21)	(211)	(15)

b) Assets by segment

	June 30, 2017		Three month period ended June 30, 2017			Six month period ended June 30, 2017	
	Product inventory	Investments in associates and joint ventures	Property, plant and equipment and intangible (i)	Additions to property, plant and equipment and intangible (ii)	Depreciation, depletion and amortization (iii)	Additions to property, plant and equipment and intangible (ii)	Depreciation, depletion and amortization (iii)
Ferrous minerals	1,641	1,869	34,742	620	427	1,450	844
Coal	94	301	1,793	15	74	71	179
Base metals	1,109	13	23,189	251	397	462	778
Others	26	1,422	2,146	4	6	14	11
Total	2,870	3,605	61,870	890	904	1,997	1,812

	December 31, 2016		Three month period ended June 30, 2016			Six month period ended June 30, 2016	
	Product inventory	Investments in associates and joint ventures	Property, plant and equipment and intangible (i)	Additions to property, plant and equipment and intangible (ii)	Depreciation, depletion and amortization (iii)	Additions to property, plant and equipment and intangible (ii)	Depreciation, depletion and amortization (iii)
Ferrous minerals	1,134	1,808	34,834	766	381	1,683	728

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

Coal	126	285	1,907	157	15	290	38
Base metals	1,110	12	23,372	233	438	502	845
Others	3	1,591	2,177	8	5	16	11
Total	2,373	3,696	62,290	1,164	839	2,491	1,622

(i) Goodwill is allocated mainly in iron ore and nickel segments in the amount of US\$1,227 and US\$1,893 in June 30, 2017 and US\$1,246 and US\$1,835 in December 31, 2016, respectively.

(ii) Includes only cash effect.

(iii) Refers to amounts recognized in the income statement.

Table of Contentsc) **Net operating revenue by geographic area**

Three month period ended June 30, 2017					
	Ferrous minerals	Coal	Base metals	Others	Total
Americas, except United States and Brazil	138		190	55	383
United States of America	121		189	13	323
Europe	689	111	519	14	1,333
Middle East/Africa/Oceania	354	37	3		394
Japan	440	46	90		576
China	2,469		85		2,554
Asia, except Japan and China	300	246	391		937
Brazil	603	41	45	46	735
Net operating revenue	5,114	481	1,512	128	7,235

Three month period ended June 30, 2016					
	Ferrous minerals	Coal	Base metals	Others	Total
Americas, except United States and Brazil	74	11	280		365
United States of America	53		177		230
Europe	593	22	495		1,110
Middle East/Africa/Oceania	287	22	4		313
Japan	300	31	74		405
China	2,581	6	113		2,700
Asia, except Japan and China	229	53	262		544
Brazil	424		42	29	495
Net operating revenue	4,541	145	1,447	29	6,162

Six month period ended June 30, 2017					
	Ferrous minerals	Coal	Base metals	Others	Total
Americas, except United States and Brazil	280		494	55	829
United States of America	174		375	58	607
Europe	1,579	200	1,024	30	2,833
Middle East/Africa/Oceania	781	88	6		875
Japan	830	79	178		1,087
China	6,127		245		6,372
Asia, except Japan and China	555	347	702		1,604
Brazil	1,285	91	85	82	1,543
Net operating revenue	11,611	805	3,109	225	15,750

Six month period ended June 30, 2016					
	Ferrous minerals	Coal	Base metals	Others	Total
Americas, except United States and Brazil	165	14	558		737

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

United States of America	87		348	4	439
Europe	1,078	29	918		2,025
Middle East/Africa/Oceania	451	41	13		505
Japan	554	65	126		745
China	4,853	31	270		5,154
Asia, except Japan and China	385	119	507		1,011
Brazil	772		60	49	881
Net operating revenue	8,345	299	2,800	53	11,497

Table of Contents**4. Costs and expenses by nature****a) Cost of goods sold and services rendered**

	Three month period ended June 30,		Six month period ended June 30,	
	2017	2016	2017	2016
Personnel	556	526	1,103	983
Materials and services	899	931	1,681	1,551
Fuel oil and gas	309	292	618	581
Maintenance	753	633	1,476	1,239
Energy	232	166	447	309
Acquisition of products	159	146	323	229
Depreciation and depletion	852	780	1,698	1,524
Freight	771	611	1,430	1,111
Others	571	228	1,060	675
Total	5,102	4,313	9,836	8,202
Cost of goods sold	4,946	4,198	9,541	7,980
Cost of services rendered	156	115	295	222
Total	5,102	4,313	9,836	8,202

b) Selling and administrative expenses

	Three month period ended June 30,		Six month period ended June 30,	
	2017	2016	2017	2016
Personnel	62	54	116	101
Services	17	16	29	27
Depreciation and amortization	22	32	51	54
Taxes and rents	4	3	11	10
Selling expenses	19	9	32	15
Others	8	13	17	27
Total	132	127	256	234

c) Others operational expenses (incomes), net

	Three month period ended June 30,		Six month period ended June 30,	
	2017	2016	2017	2016

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

Provision for litigation	17	57	29	106
Profit sharing program	30		69	
Disposals (reversals) of materials and inventories	4	(1)	7	(9)
Others	37	86	60	81
Total	88	142	165	178

Table of Contents**5. Financial result**

	Three month period ended June 30,		Six month period ended June 30,	
	2017	2016	2017	2016
Financial expenses				
Loans and borrowings gross interest	(450)	(451)	(953)	(862)
Capitalized loans and borrowing costs	83	213	186	390
Derivative financial instruments	(160)	(166)	(266)	(224)
Indexation and exchange rate variation (a)	(864)	(1,051)	(1,196)	(2,218)
Participative stockholders debentures	(87)	(86)	(499)	(202)
Expenses of REFIS	(108)	(129)	(234)	(243)
Others	(211)	(144)	(388)	(294)
	(1,797)	(1,814)	(3,350)	(3,653)
Financial income				
Short-term investments	52	23	88	62
Derivative financial instruments	69	925	384	1,423
Indexation and exchange rate variation (b)	273	2,934	834	5,629
Others	64	7	92	25
	458	3,889	1,398	7,139
Financial results, net	(1,339)	2,075	(1,952)	3,486
Summary of indexation and exchange rate variation				
Loans and borrowings	(740)	2,781	(241)	5,419
Others	149	(898)	(121)	(2,008)
Net (a) + (b)	(591)	1,883	(362)	3,411

As from January 1, 2017, the Company started to apply net investment hedge accounting in foreign operation, for more information see note 16.

6. Income taxes**a) Deferred income tax assets and liabilities**

Changes in deferred tax are as follows:

Assets	Liabilities	Total
--------	-------------	-------

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

Balance at March 31, 2017	7,127	1,677	5,450
Effect in income statement	65	(53)	118
Translation adjustment	(178)	26	(204)
Other comprehensive income	81	(85)	166
Balance at June 30, 2017	7,095	1,565	5,530

	Assets	Liabilities	Total
Balance at March 31, 2016	7,675	1,817	5,858
Effect in income statement	(940)	(11)	(929)
Transfers between asset and liabilities	59	59	
Translation adjustment	484	(75)	559
Other comprehensive income	11	(51)	62
Balance at June 30, 2016	7,289	1,739	5,550

	Assets	Liabilities	Total
Balance at December 31, 2016	7,343	1,700	5,643
Effect in income statement	(186)	(82)	(104)
Translation adjustment	(39)	36	(75)
Other comprehensive income	(23)	(89)	66
Balance at June 30, 2017	7,095	1,565	5,530

	Assets	Liabilities	Total
Balance at December 31, 2015	7,904	1,670	6,234
Effect in income statement	(1,591)	(55)	(1,536)
Transfers between asset and liabilities	144	144	
Translation adjustment	961	49	912
Other comprehensive income	(129)	(69)	(60)
Balance at June 30, 2016	7,289	1,739	5,550

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

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

	Three month period ended June 30,		Six month period ended June 30,	
	2017	2016	2017	2016
Income before income taxes	126	2,484	3,437	5,201
Income taxes at statutory rates - 34%	(43)	(845)	(1,169)	(1,768)
Adjustments that affect the basis of taxes:				
Income tax benefit from interest on stockholders equity	126		252	
Tax incentives	1	95	179	98
Equity results	(8)	63	17	120
Unrecognized tax losses of the period	(92)	(164)	(269)	(349)
Gain on sale of subsidiaries (note 12)			175	
Other results in associates and joint ventures		(353)		(353)
Others	65	(138)	141	(38)
Income taxes	49	(1,342)	(674)	(2,290)

Income tax expense is recognized at an amount determined by the estimated tax rate, adjusted for the tax effect of certain items recognized in full in the interim period. Therefore, the effective tax rate in the interim financial statement may differ from management's estimate of the effective tax rate for the annual financial statement.

c) Income taxes - Settlement program (REFIS)

In 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 associates from 2003 to 2012.

At June 30, 2017, the balance of US\$5,332 (US\$470 as current and US\$4,862 as non-current) is due in 136 remaining monthly installments, bearing interest at the SELIC rate of 10.25% per year.

7. Basic and diluted earnings per share

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

The values of basic and diluted earnings per share are as follows:

	Three month period ended June 30,		Six month period ended June 30,	
	2017	2016	2017	2016
Basic and diluted earnings per share from continuing operations:				
Income available to preferred stockholders	55	430	1,037	1,106
Income available to common stockholders	89	697	1,680	1,791
Total	144	1,127	2,717	2,897
Basic and diluted loss per share from discontinued operations:				
Loss available to preferred stockholders	(49)	(8)	(81)	(6)
Loss available to common stockholders	(79)	(13)	(130)	(9)
Total	(128)	(21)	(211)	(15)
Basic and diluted earnings per share:				
Income available to preferred stockholders	6	422	956	1,100
Income available to common stockholders	10	684	1,550	1,782
Total	16	1,106	2,506	2,882
Thousands of shares				
Weighted average number of shares outstanding preferred shares	1,967,722	1,967,722	1,967,722	1,967,722
Weighted average number of shares outstanding common shares	3,185,653	3,185,653	3,185,653	3,185,653
Total	5,153,375	5,153,375	5,153,375	5,153,375
Basic and diluted earnings per share from continuing operations:				
Preferred share (US\$)	0.02	0.21	0.53	0.56
Common share (US\$)	0.02	0.21	0.53	0.56
Basic and diluted loss per share from discontinued operations:				
Preferred share (US\$)	(0.02)		(0.04)	
Common share (US\$)	(0.02)		(0.04)	
Basic and diluted earnings per share:				
Preferred share (US\$)		0.21	0.49	0.56
Common share (US\$)		0.21	0.49	0.56

The Company does not hold dilutive potential ordinary shares outstanding that could result in dilution of earnings (loss) per share.

Table of Contents**8. Accounts receivable**

	June 30, 2017	December 31, 2016
Trade receivables	1,770	3,723
Impairment of trade receivables	(61)	(60)
	1,709	3,663
Trade receivables related to the steel sector - %	77.17%	83.44%

	Three month period ended June 30, 2017	June 30, 2016	Six month period ended June 30, 2017	June 30, 2016
Impairment of trade receivables recorded in the income statement	(4)	(2)	(4)	(3)

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

9. Inventories

	June 30, 2017	December 31, 2016
Product inventory	2,870	2,373
Consumable inventory	994	976
Total	3,864	3,349

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

10. Other financial assets and liabilities

	Current		Non-Current	
	June 30, 2017	December 31, 2016	June 30, 2017	December 31, 2016
Other financial assets				
Financial investments	10	18		
Loans			180	180
Derivative financial instruments (note 20)	159	274	495	446
Related parties (note 25)	2,024	71	2,659	2

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

	2,193	363	3,334	628
Other financial liabilities				
Derivative financial instruments (note 20)	362	414	975	1,225
Related parties (note 25)	514	672	994	127
Participative stockholders' debentures			1,175	775
	876	1,086	3,144	2,127

11. Non-current assets and liabilities held for sale and discontinued operations

	June 30, 2017			December 31, 2016		
	Fertilizers assets	Shipping assets	Total	Fertilizers assets	Nacala Shipping assets	Total
Assets						
Accounts receivable	84		84	86	6	92
Inventories	453		453	387	2	389
Other current assets	102		102	107	114	221
Investments in associates and joint ventures	89		89	90		90
Property, plant and equipment and Intangible	2,467	357	2,824	2,694	4,064	7,115
Other non-current assets	878		878	679	3	682
Total assets	4,073	357	4,430	4,043	4,189	8,589
Liabilities						
Suppliers and contractors	239		239	280	41	321
Other current liabilities	229		229	192	13	205
Other non-current liabilities	621		621	559	5	564
Total liabilities	1,089		1,089	1,031	59	1,090
Net non-current assets held for sale	2,984	357	3,341	3,012	4,130	7,499

Table of Contents**a) Discontinued operations (Fertilizers assets)**

In December 2016, the Company entered into an agreement with The Mosaic Company (Mosaic) to sell (i) the phosphate assets located in Brazil, except those mainly related to nitrogen assets located in Cubatão (Brazil); (ii) the control of Compañia Minera Miski Mayo S.A.C., in Peru; (iii) the potassium assets located in Brazil; and (iv) the potash projects in Canada.

In December 2016, the agreed transaction price was US\$2.5 billion, of which US\$1.25 billion will be paid in cash and US\$1.25 billion with 42.3 million common shares to be issued by Mosaic, which at the agreement signature date represented around 11% of Mosaic's total outstanding common shares.

The spin-off of the nitrogen assets located in Cubatão from the remaining Vale Fertilizantes S.A.'s assets was concluded in July 2017 (subsequent event). The completion of this milestone was one of the requirements for the conclusion of the transaction, which is expected to be completed until the end of 2017 and, still, is subject to the fulfillment of usual precedent conditions, including the approval of the Administrative Council of Economic Defense (CADE) and other antitrust authorities; and other operational and regulatory matters.

The fertilizer segment, including Cubatão, is presented as a discontinued operation and the related assets and liabilities were classified as assets and liabilities held for sale.

On June 30, 2017, the net assets of the fertilizers segment were adjusted to reflect the fair value less cost to sell and a loss of US\$377 was recognized in the income statement as Impairment of non-current assets from discontinued operations for the six-month period ended June 30, 2017. The loss derived basically from the variation of the market value of Mosaic shares that will be received on the closing.

The results for the period and the cash flows of discontinued operations of the Fertilizer segment for the period ended June 30, 2017 are presented as follows, and includes the corresponding restated period ended June 30, 2016, as described in note 2(b).

	Three month period ended June 30,		Six month period ended June 30,	
	2017	2016	2017	2016
Discontinued operations				
Net operating revenue	401	464	771	848
Cost of goods sold and services rendered	(371)	(482)	(710)	(842)
Operating expenses	(34)	(41)	(62)	(62)
Impairment of non-current assets	(266)		(377)	
Operating loss	(270)	(59)	(378)	(56)

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

Financial Results, net	(6)	16	(10)	30
Equity results in associates and joint ventures				1
Loss before income taxes	(276)	(43)	(388)	(25)
Income taxes	151	22	181	15
Loss from discontinued operations	(125)	(21)	(207)	(10)
Net income attributable to noncontrolling interests	3		4	5
Loss attributable to Vale's stockholders	(128)	(21)	(211)	(15)

	Three month period ended June 30,		Six month period ended June 30,	
	2017	2016	2017	2016
Discontinued operations				
Cash flow from operating activities				
Loss before income taxes	(276)	(43)	(388)	(25)
Adjustments:				
Equity results in associates and joint ventures				(1)
Depreciation, amortization and depletion		88		155
Impairment of non-current assets	266		377	
Increase (decrease) in assets and liabilities	12	5	105	(75)
Net cash provided by operating activities	2	50	94	54
Cash flow from investing activities				
Additions to property, plant and equipment	(81)	(68)	(144)	(107)
Others		10		2
Net cash used in investing activities	(81)	(58)	(144)	(105)
Cash flow from financing activities				
Loans and borrowings				
Additions (Repayments)	34	(4)		(5)
Net cash provided by (used in) financing activities	34	(4)		(5)
Net cash used in discontinued operations	(45)	(12)	(50)	(56)

Table of Contents

12. Acquisitions and divestitures

a) Coal - Nacala Logistic Corridor

In December 2014 and as amended in November 2016, the Company signed an agreement with Mitsui & Co., Ltd. (Mitsui) to transfer 50% of its stake of 66.7% in Nacala Logistic Corridor, which comprises entities that holds railroads and port concessions located in Mozambique and Malawi. Also, Mitsui committed to acquire 15% participation in the entity that owns Vale Moçambique, which hold the Moatize Coal Project.

In March 2017, the transaction was concluded, and consideration of US\$690 was received by Vale. After the completion of the transaction, the Company (i) holds 81% of Vale Moçambique and retains the control of the Moatize Coal Project and (ii) shares control of the Nacala Logistic Corridor structure (Nacala BV), with Mitsui.

Nacala Logistic Corridor is in negotiations for a project finance, which the completion is expected to occur during the course of 2017. Upon the completion an additional amount of US\$57 will be paid by Mitsui. Mitsui has certain rights, based on the execution of the project finance, to sell their participation in the Moatize Coal Project and Nacala BV, back to Vale, based on the original amounts and the same number of shares. The fair value of these put options is non-significant.

As a consequence of sharing control of Nacala BV, the Company:

(i) derecognized the assets and liabilities classified as held for sale in the total amount of US\$4,144, from which US\$4,063 refers to property, plant and equipment and intangibles;

(ii) derecognized US\$14 related to cash and cash equivalents;

(iii) recognized a gain of US\$504 in the income statement related to the sale and the re-measurement at fair value, of its remaining interest at Nacala BV based on the consideration received;

(iv) reclassified the gain related to cumulative translation adjustments to income statements in the amount of US\$11;

The result of the transaction regarding the assets from Nacala's corridor was recognized in the income statement as Impairment and other results on non-current assets .

The results of the transaction with the Moatize Coal Project was recognized in Results from operation with noncontrolling interest in the amount of US\$105, directly in Stockholders' Equity.

The consideration received was recognized in the statement of cash flows in Proceeds from disposal of assets and investments in the amount of US\$435 and Transactions with noncontrolling stockholders in the amount of US\$255.

Due to deconsolidation of Nacala Logistic Corridor, Vale has after the transaction, outstanding loan balances with Nacala BV and Pangea Emirates Ltd stated as Related parties, as described in note 25. The use of proceeds of the project finance is expected to settle part of this debt.

b) Floating Transfer Stations (FTS)

In June 2017, the Company completed the sale of one of its Floating Transfer Stations in Philippines in the amount of US\$15. In this transaction, Vale recognized a loss of US\$55 as Impairment and other results on non-current assets .

Table of Contents**13. Investments in associates and joint ventures****a) Changes during the period**

Changes in investments in associates and joint ventures are as follows:

	2017			2016		
	Associates	Joint ventures	Total	Associates	Joint ventures	Total
Balance at March 31,	1,457	2,426	3,883	1,399	1,998	3,397
Additions		2	2		136	136
Translation adjustment	(49)	(90)	(139)	108	219	327
Equity results in income statement	26	(50)	(24)	36	154	190
Dividends declared	(34)	(83)	(117)	(4)	(83)	(87)
Others				(2)	2	
Balance at June 30,	1,400	2,205	3,605	1,537	2,426	3,963

	2017			2016		
	Associates	Joint ventures	Total	Associates	Joint ventures	Total
Balance at January 1st,	1,437	2,259	3,696	1,323	1,617	2,940
Additions		33	33		219	219
Translation adjustment	(16)	(32)	(48)	207	379	586
Equity results in income statement	21	28	49	33	312	345
Equity results from discontinued operations				1		1
Dividends declared	(42)	(83)	(125)	(25)	(91)	(116)
Others				(2)	(10)	(12)
Balance at June 30,	1,400	2,205	3,605	1,537	2,426	3,963

The investments by segments are presented in note 3(b).

Table of Contents**Investments in associates and joint ventures (continued)**

Associates and joint ventures	% ownership	% voting capital	Investments in associates and joint ventures		Equity results in the income statement				Dividends received			
			June 30, 2017	December 31, 2016	Three month period ended June 30, 2017	Three month period ended June 30, 2016	Six month period ended June 30, 2017	Six month period ended June 30, 2016	Three month period ended June 30, 2017	Three month period ended June 30, 2016	Six month period ended June 30, 2017	Six month period ended June 30, 2016
Ferrous minerals												
Baovale Mineração S.A. Companhia	50.00	50.00	30	26	2	4	(1)					
Coreano-Brasileira de Pelotização Companhia	50.00	50.00	76	68	13	4	25	9		13		13
Hispano-Brasileira de Pelotização (i) Companhia	50.89	51.00	73	59	11	2	21	6	5	18	5	18
Companhia Ítalo-Brasileira de Pelotização (i) Companhia	50.90	51.00	78	69	13	2	20	6	17	9	17	9
Companhia Nipo-Brasileira de Pelotização (i) Companhia	51.00	51.11	136	108	24	(4)	46	7	15	20	15	20
MRS Logística S.A.	48.16	46.75	503	488	22	12	37	32				
VLI S.A.	37.60	37.60	953	969	19	21	6	16				
Zhuhai YPM Pellet Co.	25.00	25.00	20	21								
			1,869	1,808	104	37	159	75	37	60	37	60
Coal												
Henan Longyu Energy Resources Co., Ltd.	25.00	25.00	301	285	6	16	(9)					
			301	285	6	16	(9)					
Base metals												
Korea Nickel Corp.	25.00	25.00	13	12			(1)					
			13	12			(1)					
Others												
Aliança Geração de Energia S.A. (i)	55.00	55.00	576	582	8	19	15	22	11	22	11	22
Aliança Norte Energia Participações S.A. (i)	51.00	51.00	160	148		(2)	3	(3)				
California Steel Industries, Inc. Companhia	50.00	50.00	197	185	16	5	25	4	13		13	
Siderúrgica do Pecém Companhia	50.00	50.00	381	527	(131)	116	(142)	230				
Mineração Rio Grande do Norte S.A.	40.00	40.00	95	129	1	15	1	34	21	32	21	32
Others			13	20	(28)		(28)	(7)				1
			1,422	1,591	(134)	153	(126)	280	45	54	45	55
Total			3,605	3,696	(24)	190	49	345	82	114	82	115

(i) Although the Company held majority of the voting capital, the entities are accounted under equity method due to the stockholders' agreement where relevant decisions are shared with other parties.

Table of Contents**14. Intangibles**

Changes in intangibles are as follows:

	Goodwill	Concessions	Right of use	Software	Total
Balance at March 31, 2017	3,131	3,702	149	324	7,306
Additions		145		10	155
Disposals		(1)			(1)
Amortization		(40)		(36)	(76)
Translation adjustment	(9)	(153)		(11)	(173)
Balance at June 30, 2017	3,122	3,653	149	287	7,211
Cost	3,122	4,870	230	1,548	9,770
Accumulated amortization		(1,217)	(81)	(1,261)	(2,559)
Balance at June 30, 2017	3,122	3,653	149	287	7,211

	Goodwill	Concessions	Right of use	Software	Total
Balance at March 31, 2016	3,095	2,354	149	420	6,018
Additions		444		4	448
Disposals		(5)			(5)
Amortization		(42)		(40)	(82)
Translation adjustment	124	295	(9)	47	457
Transfers		77			77
Balance at June 30, 2016	3,219	3,123	140	431	6,913
Cost	3,219	4,230	222	1,580	9,251
Accumulated amortization		(1,107)	(82)	(1,149)	(2,338)
Balance at June 30, 2016	3,219	3,123	140	431	6,913

	Goodwill	Concessions	Right of use	Software	Total
Balance at December 31, 2016	3,081	3,301	147	342	6,871
Additions		510		18	528
Disposals		(2)			(2)
Amortization		(89)	(1)	(73)	(163)
Translation adjustment	41	(67)	3		(23)
Balance at June 30, 2017	3,122	3,653	149	287	7,211
Cost	3,122	4,870	230	1,548	9,770
Accumulated amortization		(1,217)	(81)	(1,261)	(2,559)
Balance at June 30, 2017	3,122	3,653	149	287	7,211

	Goodwill	Concessions	Right of use	Software	Total
Balance at December 31, 2015	2,956	1,814	207	347	5,324
Additions		808	1	5	814

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

Disposals		(5)			(5)
Amortization		(73)	(1)	(77)	(151)
Translation adjustment	263	502		82	847
Transfers		77	(67)	74	84
Balance at June 30, 2016	3,219	3,123	140	431	6,913
Cost	3,219	4,230	222	1,580	9,251
Accumulated amortization		(1,107)	(82)	(1,149)	(2,338)
Balance at June 30, 2016	3,219	3,123	140	431	6,913

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

Changes in property, plant and equipment are as follows:

	Land	Building	Facilities	Equipment	Mineral properties	Others	Constructions in progress	Total
Balance at March 31, 2017	755	11,587	10,924	6,968	9,011	8,306	8,722	56,273
Additions (i)							782	782
Disposals			(29)	(3)	(122)	(75)	(10)	(239)
Assets retirement obligation					(34)			(34)
Depreciation, amortization and depletion		(119)	(178)	(203)	(158)	(173)		(831)
Translation adjustment	(25)	(320)	(317)	(137)	27	(215)	(305)	(1,292)
Transfers	3	365	238	435	21	306	(1,368)	
Balance at June 30, 2017	733	11,513	10,638	7,060	8,745	8,149	7,821	54,659
Cost	733	17,968	16,949	12,605	16,729	12,139	7,821	84,944
Accumulated depreciation		(6,455)	(6,311)	(5,545)	(7,984)	(3,990)		(30,285)
Balance at June 30, 2017	733	11,513	10,638	7,060	8,745	8,149	7,821	54,659

	Land	Building	Facilities	Equipment	Mineral properties	Others	Constructions in progress	Total
Balance at March 31, 2016	821	9,841	8,712	7,684	10,938	7,645	12,284	57,925
Additions (i)							1,096	1,096
Disposals				(2)		(335)	(20)	(357)
Assets retirement obligation					17			17
Depreciation, amortization and depletion		(115)	(149)	(236)	(228)	(169)		(897)
Translation adjustment	64	255	570	341	321	465	1,733	3,749
Transfers	6	339	99	196	118	(261)	(574)	(77)
Transfers to non-current assets held for sale						(497)		(497)
Balance at June 30, 2016	891	10,320	9,232	7,983	11,166	6,848	14,519	60,959
Cost	891	16,082	15,013	14,050	18,876	10,450	14,519	89,881
Accumulated depreciation		(5,762)	(5,781)	(6,067)	(7,710)	(3,602)		(28,922)
Balance at June 30, 2016	891	10,320	9,232	7,983	11,166	6,848	14,519	60,959

	Land	Building	Facilities	Equipment	Mineral properties	Others	Constructions in progress	Total
Balance at December 31, 2016	724	10,674	9,471	6,794	8,380	7,515	11,861	55,419
Additions (i)							1,285	1,285
Disposals			(35)	(6)	(122)	(77)	(16)	(256)
Assets retirement obligation					2			2
		(266)	(345)	(396)	(311)	(347)		(1,665)

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

Depreciation, amortization and depletion								
Translation adjustment	(8)	(91)	(123)	(40)	137	(19)	18	(126)
Transfers	17	1,196	1,670	708	659	1,077	(5,327)	
Balance at June 30, 2017	733	11,513	10,638	7,060	8,745	8,149	7,821	54,659
Cost	733	17,968	16,949	12,605	16,729	12,139	7,821	84,944
Accumulated depreciation		(6,455)	(6,311)	(5,545)	(7,984)	(3,990)		(30,285)
Balance at June 30, 2017	733	11,513	10,638	7,060	8,745	8,149	7,821	54,659

	Land	Building	Facilities	Equipment	Mineral properties	Others	Constructions in progress	Total
Balance at December 31, 2015	766	9,101	8,292	7,307	10,304	7,206	11,126	54,102
Additions (i)							1,895	1,895
Disposals		(1)	(1)	(13)	(3)	(343)	(21)	(382)
Assets retirement obligation					55			55
Depreciation, amortization and depletion		(229)	(289)	(450)	(405)	(310)		(1,683)
Translation adjustment	122	882	1,083	713	1,003	1,024	2,726	7,553
Transfers	3	567	147	426	212	(232)	(1,207)	(84)
Transfers to non-current assets held for sale						(497)		(497)
Balance at June 30, 2016	891	10,320	9,232	7,983	11,166	6,848	14,519	60,959
Cost	891	16,082	15,013	14,050	18,876	10,450	14,519	89,881
Accumulated depreciation		(5,762)	(5,781)	(6,067)	(7,710)	(3,602)		(28,922)
Balance at June 30, 2016	891	10,320	9,232	7,983	11,166	6,848	14,519	60,959

(i) Includes capitalized borrowing costs, see cash flow.

There are no material changes to the net book value of consolidated property, plant and equipment pledged to secure judicial claims and loans and borrowings (note 16(c)) compared to those disclosed in the financial statements as at December 31, 2016.

Table of Contents**a) Impairment of non-financial assets**

During the quarter Vale, placed an underground mine, which is part of Sudbury operations, on care and maintenance. Parts of the mine, affected by seismic activity, for which repairs would be uneconomical, are not expected to resume operations in the future, was derecognized from property, plant and equipment. As a result, the Company recognized a loss of US\$133 in the income statement as Impairment and other results on non-current assets. As other parts of the mine are subject to resume operation in the future, a net book value in the amount of US\$232 remains as part of the cost of the mine.

16. Loans, borrowings, cash and cash equivalents and financial investments**a) Net debt**

The Company evaluates the net debt with the objective of ensuring the continuity of its business in the long term, being able to generate value to its stockholders, through the payment of dividends and capital gain.

	June 30, 2017	December 31, 2016
Debt contracts in the international markets	20,475	21,130
Debt contracts in Brazil	7,377	8,192
Total of loans and borrowings	27,852	29,322
(-) Cash and cash equivalents	5,720	4,262
(-) Financial investments	10	18
Net debt	22,122	25,042

b) Cash and cash equivalents

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.

c) Loans and borrowings

i) **Total debt**

	Current liabilities		Non-current liabilities	
	June 30, 2017	December 31, 2016	June 30, 2017	December 31, 2016
Debt contracts in the international markets				
Floating rates in:				
US\$	295	234	4,495	5,489
EUR			228	211
Fixed rates in:				
US\$			14,084	13,083
EUR			856	1,583
Other currencies	16	17	205	209
Accrued charges	296	304		
	607	555	19,868	20,575
Debt contracts in Brazil				
Floating rates in:				
R\$, indexed to TJLP, TR, IPCA, IGP-M and CDI	747	402	4,677	5,621
Basket of currencies and US\$ indexed to LIBOR	360	343	1,034	1,217
Fixed rates in:				
R\$	69	66	207	216
Accrued charges	280	294	3	33
	1,456	1,105	5,921	7,087
	2,063	1,660	25,789	27,662

Table of Contents

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

	Principal			Total	Estimated future interest payments (i)
	Bank loans	Capital markets	Development agencies		
2017	36		501	537	1,656
2018	527		1,086	1,613	1,528
2019	1,526	1,000	930	3,456	1,408
2020	1,860	1,333	795	3,988	1,258
2021	929	1,341	742	3,012	1,058
Between 2022 and 2025	1,300	3,353	1,182	5,835	2,834
2026 onwards	102	8,489	241	8,832	5,929
	6,280	15,516	5,477	27,273	15,671

(i) Estimated future payments of interest, calculated based on interest rate curves and foreign exchange rates applicable as at June 30, 2017 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.

At June 30, 2017, the average annual interest rates by currency are as follows:

Loans and borrowings	Average interest rate (i)	Total debt
US\$	5.20%	20,554
R\$ (ii)	8.81%	5,974
EUR (iii)	3.35%	1,101
Other currencies	3.12%	223
		27,852

(i) In order to determine the average interest rate for debt contracts with floating rates, the Company used the rate applicable at June 30, 2017.

(ii) R\$ denominated debt that bears interest at IPCA, CDI, TR or TJLP, plus spread. For a total of US\$4,094 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 2.44% 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 4.29% per year in US\$.

ii) Credit and financing lines

Type	Contractual currency	Date of agreement	Period of the agreement	Total amount	Available amount June 30, 2017
Credit lines					
Revolving credit facilities	US\$	May 2015	5 years	3,000	3,000
Revolving credit facilities	US\$	June 2017	5 years	2,000	2,000
Financing lines					
BNDES (i)	R\$	April 2008	10 years	2,249	89
BNDES - CLN 150	R\$	September 2012	10 years	1,196	6
BNDES - S11D e S11D Logística	R\$	May 2014	10 years	1,899	647

(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 pelletizing plant VIII, Onça Puma, Salobo I and II and capital expenditure of Itabira projects.

In June 2017, the Company signed a US\$2,000 revolving credit facility, which will be available for five years, to replace the US\$2,000 line that was signed in 2013, which was cancelled. In June 2017, the total available amount in revolving credit facilities remains at US\$5,000.

iii) Funding

In February 2017, the Company issued through Vale Overseas Limited guaranteed notes due August 2026 totaling US\$1,000. The notes bears 6.250% coupon per year, payable semi-annually, and were sold at a price of 107.793% of the principal amount. The notes were consolidated with, and formed a single series with, Vale Overseas' s US\$1,000 6.250% notes due 2026 issued on August, 2016.

iv) Guarantees

As at June 30, 2017 and December 31, 2016, loans and borrowings are secured by property, plant and equipment and receivables in the amount of US\$369 and US\$472, respectively.

Table of Contents

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

v) Covenants

Some of the Company's debt agreements with lenders contain financial covenants. The primary financial covenants in those agreements require maintaining certain ratios, such as debt to EBITDA and interest coverage. The Company has not identified any instances of noncompliance as at June 30, 2017 and December 31, 2016.

vi) Hedge in foreign operations

Implementation of net investment hedge

As at January 1, 2017, Vale S.A., the functional currency of which is Reais, designated its debts in US\$ and Euro, as an instrument in a hedge of its investment in foreign operations (Vale International S.A. and Vale International Holding GmbH; hedging objects) for mitigating the foreign exchange risk on financial statements.

At June 30, 2017 the carrying value of the designated debts are US\$6,668 and EUR750. The foreign exchange losses of US\$392 and US\$128 (US\$258 and US\$84, net taxes), was recognized in the Cumulative translation adjustments in stockholders' equity for the three and six month periods ended June 30, 2017, respectively. This hedge was highly effective throughout the period ended on June 30, 2017.

Accounting policy

Foreign currency differences arising on the translation of a financial liability designated as a hedge of a net investment in a foreign operation are recognized in other comprehensive income to the extent that the hedge is effective and regardless of whether the net investment is held directly or through an intermediate parent.

The hedging instrument is accounted for in the same way as a cash flow hedge, i.e. translated at the closing rate with the gain or loss on the effective hedge being recognized in equity. Gains or losses in the reserves will only be realized when the foreign operation is disposed of.

17. Liabilities related to associates and joint ventures

Refers to the provision to comply with the obligations under the agreement related to the dam failure of Samarco Mineração S.A. (Samarco), which is a Brazilian joint venture between Vale S.A. and BHP Billiton Brasil Ltda. (BHPB), as follows:

a) Framework agreement

On November 5, 2015, Samarco experienced the failure of an iron ore tailings dam (Fundão) in the state of Minas Gerais.

Samarco and its shareholders, Vale S.A. and BHPB, entered into an Agreement (Framework Agreement) on March 2, 2016 with the Brazilian federal government, the two Brazilian states affected by the failure (Espírito Santo and Minas Gerais) and other governmental authorities in order to implement the programs for remediation and compensation of the areas and communities affected by Samarco s dam failure.

The Framework Agreement does not contemplate admission of civil, criminal or administrative liability for the Fundão dam failure.

The Framework Agreement has a 15-year term, renewable for successive one-year periods until all the obligations under the Framework Agreement have been performed.

On June 24, 2016, the Renova Foundation (Foundation) was established, under the Framework Agreement, to develop and implement the socio-economic restoration and compensation programs. The Foundation began its operations in August of 2016.

To the extent that Samarco does not meet its funding obligations to the foundation, each of Vale S.A. and BHPB will provide, under the terms of the Framework Agreement, funds to the Foundation in proportion to its 50% equity interest in Samarco.

As the consequence of the dam failure, governmental authorities ordered the suspension of Samarco s operations.

Table of Contents

b) Estimates used for the provision

In light of the uncertainties related to the Samarco's future cash flow, Vale S.A. recognized a provision on its interim financial statements as of June 30, 2016, for estimated costs in the amount of US\$1,163 (R\$3,733) provision, which represents Vale S.A.'s best estimate of the obligation to comply with the reparation and compensation programs under the Framework Agreement, equivalent to its 50% equity interest in Samarco.

In August 2016 and January 2017, Samarco issued non-convertible private debentures, which were subscribed equally by Vale S.A., and BHPB, being the resources contributed by Vale S.A., in the first semester of 2017, allocated as follows:

(i) US\$71 (R\$224), being US\$11 (R\$37) in the second quarter of 2017, used in the reparation programs in accordance with the Framework Agreement, and therefore, applied against the provision mentioned above;

(ii) US\$92 (R\$292), being US\$31 (R\$101) in the second quarter of 2017, applied by Samarco to fund its working capital, and recognized in Vale's income statement as Impairment and other results in associates and joint ventures .

Vale S.A intends to provide short term credit line of up to US\$76 (R\$251) to support Samarco operations in the second half of 2017, without undertaking an obligation to Samarco. Funds for working capital requirements will be released as needed by the shareholders subject to achieving certain milestone, on the same basis.

As a result of the establishment of the Foundation, most of the reparation and compensation programs were transferred from Samarco. Therefore, Vale S.A. made contributions to the Foundation totaling US\$68 (R\$217) in 2017, being US\$45 (R\$142) in the second quarter of 2017, to be used in the programs in accordance with the Framework Agreement.

As a result of the above mentioned, the movements of the provision in the three and six month periods ended in June 30, 2017 are as follows:

	2017
Balance at March 31,	1,071
Payments	(56)
Interests	43
Translation adjustment	(39)

Balance at June 30,	1,019
	2017
Balance at January 1st,	1,077
Payments	(139)
Interests	90
Translation adjustment	(9)
Balance at June 30,	1,019
Current liabilities	295
Non-current liabilities	724
Liabilities	1,019

At each reporting period, Vale S.A. will reassess the key assumptions used by Samarco in the preparation of the projected future cash flows and will adjust the provision, if required.

c) Contingencies related to Samarco accident

(i) Public civil lawsuit filed by the Federal Government and others

The federal government, the two Brazilian states affected by the failure (Espírito Santo and Minas Gerais) and other governmental authorities have initiated a public civil lawsuit against Samarco and its shareholders, Vale S.A. and BHPB, with an estimated value indicated by the plaintiffs of US\$6.1 billion (R\$20.2 billion).

On May 5, 2016, the Framework Agreement, which was signed on March 2, 2016, was ratified by the Federal Regional Court (TRF), 1st Region. In June 2016 the Superior Court of Justice (STJ) in Brazil issued an interim order, suspending the decision of TRF, which ratified the Framework Agreement until the final judgments of the claim.

Table of Contents

On August 17, 2016, the TRF of the 1st Region rejected the appeal presented by Samarco, Vale S.A. and BHPB against the interim order, and overruled the judicial decision that ratified the Framework Agreement. This decision of the TRF of the 1st Region, among other measures, confirmed a prior injunction that prohibited the defendants from transferring or conveying any of their interest in its Brazilian iron ore concessions, without, however, limiting their production and commercial activities and ordered a deposit with the court of US\$363 (R\$1.2 billion) by January 2017. This US\$363 (R\$1.2 billion) cash deposit was provisionally replaced by the guarantees provided for under the agreements with MPF, as detailed in the item (ii) below.

(ii) Public civil lawsuit filed by Federal Prosecution Office

On May 3, 2016, the Federal Prosecution Office (MPF) filed a public civil lawsuit against Samarco and its shareholders and presented several demands, including: (i) the adoption of measures for mitigating the social, economic and environmental impacts resulting from the Fundão dam failure and other emergency measures; (ii) the payment of compensation to the community; and (iii) payments for the collective moral damage. The estimated action value indicated by the Federal Prosecution Office (MPF) is US\$47 billion (R\$155 billion). The first conciliatory hearing was held on September 13, 2016. On November 21, 2016, the court ordered that the defendants be served, and the defendants submitted their defense.

In January 2017 Samarco, Vale S.A. and BHPB entered into two preliminary agreements with the Federal Prosecutor's Office in Brazil (MPF).

The first agreement (First Agreement) aims to outline the process and timeline for negotiations of a Final Agreement (Final Agreement), initially expected to occur by June 30th, 2017 and now expected to occur by October 30, 2017. This First Agreement establishes a timeline and actions to set the ground for conciliation of two public civil lawsuits which aim to establish socio-economic and socio-environmental remediation and compensation programs for the impacts of the Fundão dam failure, respectively: claim n° 023863-07.2016.4.01.3800, filed by the Federal Prosecutors, as mentioned in this item, and claim n° 0069758-61.2015.4.01.3400, filed by the Federal Government, the states of Minas Gerais and Espírito Santo and other governmental authorities, as mentioned in the item (i) above. Both claims were filed with the 12th Judicial Federal Court of Belo Horizonte and are suspended as requested by the parties.

In addition, the First Agreement provides for: (i) the appointment of experts to give support the Federal Prosecutors and paid for by the companies to conduct a diagnosis and monitor the progress of the 41 programs under the Framework Agreement signed on March 2nd, 2016 by the companies and the Federal Government and the states of Minas Gerais and Espírito Santo and other governmental authorities and (ii) holding at least eleven public hearings, five of which are to be held in Minas Gerais, three in Espírito Santo and the remainder in the indigenous territories of the Krenak, Comboios and Caieiras Velhas, in order to allow these communities to take part in the definition of the content of the Final Agreement.

Samarco, Vale S.A. and BHPB has agreed to provide the 12th Judicial Federal Court of Belo Horizonte with a guarantee for fulfillment of the obligations regarding the financing and payment of the socio-environmental and socio-economic remediation programs resulting from the

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

Fundão dam failure, pursuant to the two public civil actions, until the signing of the Final Agreement, amounting to US\$665 (R\$2.2 billion), of which (i) US\$30 (R\$100) in financial investments; (ii) US\$393 (R\$1.3 billion) in insurance bonds; and (iii) US\$242 (R\$800) in assets of Samarco. In order to implement the First Agreement, it has been requested that the 12th Judicial Federal Court of Belo Horizonte accept such guarantees until the completion of the negotiations and the signing of the Final Agreement, or until October 30, 2017, whichever comes first; or until the parties reach a new agreement regarding the guarantees. If, by October 30th, the negotiations have not been completed, the Federal Prosecutor's Office may require that the 12th Judicial Federal Court of Belo Horizonte re-institute the order for the deposit of US\$363 (R\$1.2 billion) in relation to the US\$6.1 billion (R\$20.2 billion) public civil action, which is currently suspended. The parties requested the partial ratification of the First Agreement, excluding only the engagement of the socio-economic expert condition.

On March 16, 2017, the 12th Judicial Federal Court of Belo Horizonte partially ratified the First Agreement, being that this decision includes: (i) ratification of the engagement of experts to perform a socio-environmental impact assessment and assessment of programs under the Framework Agreement signed on March 2nd, 2016 and a period for the companies to engage an expert to perform the socio-economic impact assessment; (ii) the consolidation and suspension of related claims aiming to avoid contradictory or conflicting decisions and to establish a unified judicial procedure in order for the parties to be able to reach a final agreement; (iii) accepted the guarantees proposed by Samarco and its shareholders under the Preliminary Agreement on a temporary basis. Parties are still negotiating an agreement regarding the choice of the expert to perform the socio-economic impact assessment.

In addition, the Second Agreement (Second Agreement) was signed, which establishes a timetable to make funds available to remediate the social, economic and environmental damages caused by the Fundão dam failure in the municipalities of Barra Longa, Rio Doce, Santa Cruz do Escalvado and Ponte Nova, amounting to US\$60 (R\$200). The 12th Judicial Federal Court of Belo Horizonte ratified this Second Agreement.

Table of Contents

(iii) U.S. Securities class action suits

Related to the Vale's American Depositary Receipts

On May 2, 2016, Vale S.A. and certain of its officers were named as defendants in securities class action suits in the Federal Court in New York brought by holders of Vale's American Depositary Receipts under U.S. federal securities laws. The lawsuits allege that Vale S.A. made false and misleading statements or did not make disclosures concerning the risks and dangers of the operations of Samarco's Fundão dam and the adequacy of related programs and procedures. The plaintiffs have not specified an amount of alleged damages or indemnities in these actions.

In July 2016, Vale S.A. and the individual defendants filed a motion to dismiss the Amended Complaint.

On March 23, 2017 the judge issued a decision rejecting a significant portion of the claims against Vale S.A. and the individual defendants, and determining the prosecution of the action with respect to more limited claims. The portion of plaintiffs' case that remains is related to certain statements about procedures, policies and risk mitigation plans contained in Vale S.A.'s sustainability reports in 2013 and 2014, and certain statements regarding the responsibility of Vale S.A. for the Fundão dam failure made in a conference call in November 2015.

Vale S.A. continues to contest the lawsuit and the outstanding points.

Related to the Samarco bonds

In March 2017, holders of bonds issued by Samarco, filed a class action suit in the Federal Court in New York against Samarco, Vale S.A. and BHPB under U.S. federal securities laws demanding for indemnification for alleged violation of U.S. federal securities laws. The plaintiffs allege that false and misleading statements were made or disclosures omitted concerning the risks and dangers of the operations of Samarco's Fundão dam and the adequacy of related programs and procedures.

It is alleged that with the Fundão dam collapse, the securities have dramatically decreased, in order that the investors who have purchased such securities in a misleading way should be compensated, without, however, specifying an amount for the alleged damages or indemnities in this action.

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

In June 2017, Vale S.A. and the other defendants have jointly filed a Motion to Dismiss the Complaint.

Vale S.A. continues to contest this lawsuit.

(iv) Criminal lawsuit

On October 20, 2016, the MPF brought a criminal lawsuit in the Brazilian Federal Justice Court against Vale S.A., BHPB, Samarco, VogBr Recursos Hídricos e Geotecnia Ltda. and 22 individuals for alleged crimes against the environment, urban planning and cultural heritage, flooding, landslide, as well as for alleged crimes against the victims of the Fundão dam failure.

On November 16, 2016, the judge received the Federal Prosecutors Office criminal lawsuit and determined the summons of all defendants, granting 30 days each to file their defenses, to count from the day they receive the summon. Vale has already been served and its defense was presented in March 3, 2017.

On May 8th, 2017, Vale presented its manifestation against the Federal Prosecutors Office dismemberment requests and on June 6th, 2017, the Federal Prosecutors Office presented its reply to the defenses, where it requested for the action to be regularly processed.

Currently, the case awaits the judge's decision.

(v) Other lawsuits

In addition, Samarco and its shareholders were named as a defendant in several other lawsuits brought by individuals, corporations, governmental entities or public prosecutor seeking personal and property damages.

These lawsuits and petitions are at early stages, so it is not possible to determine a range of outcomes or reliable estimates of the potential exposure at this time. No contingent liability has been quantified and no provision was recognized for lawsuits related to Samarco's dam failure.

Table of Contents**18. Financial instruments classification**

		June 30, 2017			December 31, 2016	
Financial assets	Loans and receivables or amortized cost	At fair value through profit or loss	Total	Loans and receivables or amortized cost	At fair value through profit or loss	Total
Current						
Cash and cash equivalents	5,720		5,720	4,262		4,262
Financial investments	10		10	18		18
Derivative financial instruments		159	159		274	274
Accounts receivable	1,709		1,709	3,663		3,663
Related parties	2,024		2,024	71		71
	9,463	159	9,622	8,014	274	8,288
Non-current						
Derivative financial instruments		495	495		446	446
Loans	180		180	180		180
Related parties	2,659		2,659	2		2
	2,839	495	3,334	182	446	628
Total of financial assets	12,302	654	12,956	8,196	720	8,916
Financial liabilities						
Current						
Suppliers and contractors	3,746		3,746	3,630		3,630
Derivative financial instruments		362	362		414	414
Loans and borrowings	2,063		2,063	1,660		1,660
Related parties	514		514	672		672
	6,323	362	6,685	5,962	414	6,376
Non-current						
Derivative financial instruments		975	975		1,225	1,225
Loans and borrowings	25,789		25,789	27,662		27,662
Related parties	994		994	127		127
Participative stockholders debentures		1,175	1,175		775	775
	26,783	2,150	28,933	27,789	2,000	29,789
Total of financial liabilities	33,106	2,512	35,618	33,751	2,414	36,165

19. Fair value estimate**a) Assets and liabilities measured and recognized at fair value:**

June 30, 2017

December 31, 2016

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

	Level 2	Level 3	Total	Level 2	Level 3	Total
Financial assets						
Derivative financial instruments	282	372	654	405	315	720
Total	282	372	654	405	315	720
Financial liabilities						
Derivative financial instruments	894	443	1,337	1,190	449	1,639
Participative stockholders debentures	1,175		1,175	775		775
Total	2,069	443	2,512	1,965	449	2,414

In June 2017, the Company recognized in the financial results, the amount of US\$63 and US\$(3) related to the measurement of the fair value and US\$(6) and US\$9 related to cumulative translation adjustment of derivative financial instruments assets and liabilities classified as level 3, respectively.

There were no transfers between Level 1 and Level 2, or between Level 2 and Level 3 in the period ended June 30, 2017.

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 .

Table of Contents

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 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.

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

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

Financial liabilities	Balance	Fair value	Level 1	Level 2
June 30, 2017				
Debt principal	27,273	27,299	15,298	12,001
December 31, 2016				
Debt principal	28,691	27,375	13,874	13,501

Due to the short-term cycle, the fair value of cash and cash equivalents balances, financial investments, accounts receivable and accounts payable approximate their book values.

20. Derivative financial instruments

a) Derivatives effects on statement of financial position

	June 30, 2017		December 31, 2016	
	Current	Non-current	Current	Non-current
Derivatives not designated as hedge accounting				
Foreign exchange and interest rate risk				
CDI & TJLP vs. US\$ fixed and floating rate swap	96	1	132	1
IPCA swap	6	66	7	61
Pré-dolar swap	22	10	1	23
	124	77	140	85
Commodities price risk				
Nickel	1		4	2
Bunker oil	34		130	
	35		134	2
Others		418		359
		418		359
Total	159	495	274	446

Table of Contents

	June 30, 2017		December 31, 2016	
	Current	Non-current	Current	Non-current
Derivatives not designated as hedge accounting				
Foreign exchange and interest rate risk				
CDI & TJLP vs. US\$ fixed and floating rate swap	325	435	293	638
IPCA swap	19	58	20	57
Eurobonds swap	5	6	7	45
Euro Forward			46	
Pré-dolar swap	4	30	5	32
	353	529	371	772
Commodities price risk				
Nickel			5	2
Bunker oil	9		38	
	9		43	2
Others		446		451
		446		451
Total	362	975	414	1,225

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

	Gain (loss) recognized in the income statement		Three month period ended June 30, Financial settlement inflows (outflows)		Gain (loss) recognized in other comprehensive income	
	2017	2016	2017	2016	2017	2016
Derivatives not designated as hedge accounting						
Foreign exchange and interest rate risk						
CDI & TJLP vs. US\$ fixed and floating rate swap	(94)	444	3	(49)		
IPCA swap	(18)	31				
Eurobonds swap	29	(20)				
Euro forward		(14)				
Pré-dolar swap	(13)	42	(1)	(1)		
	(96)	483	2	(50)		
Commodities price risk						
Nickel	(4)	(13)	(5)	(9)		
Bunker oil	(18)	148		(294)		
	(22)	135	(5)	(303)		
Others	27	141				
Total	(91)	759	(3)	(353)		

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

	Gain (loss) recognized in the income statement		Six month period ended June 30, Financial settlement inflows (outflows)		Gain (loss) recognized in other comprehensive income	
	2017	2016	2017	2016	2017	2016
Derivatives not designated as hedge accounting						
Foreign exchange and interest rate risk						
CDI & TJLP vs. US\$ fixed and floating rate swap						
	87	838	(41)	(92)		
IPCA swap	6	73		1		
Eurobonds swap	2	(6)	(39)	(142)		
Euro forward	46	(12)				
Pré-dolar swap	10	76	(1)	(74)		
	151	969	(81)	(307)		
Commodities price risk						
Nickel	(4)	(37)	(6)	(26)		
Bunker oil	(90)	134	(23)	(476)		
	(94)	97	(29)	(502)		
Others						
	61	136				
Derivatives designated as cash flow hedge accounting						
Bunker oil				(51)		
Foreign exchange		(3)		(3)		2
		(3)		(54)		2