

Vale S.A.
Form 6-K
July 25, 2018
[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 2018

Vale S.A.

**Avenida das Américas, No. 700 Bloco 8, Sala 218
22640-100 Rio de Janeiro, RJ, Brazil**

(Address of principal executive office)

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

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

(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, 2018**

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. Special events occurred during the period</u>	14
<u>5. Costs and expenses by nature</u>	15
<u>6. Financial results</u>	15
<u>7. Income taxes</u>	16
<u>8. Basic and diluted earnings (loss) per share</u>	17
<u>9. Accounts receivable</u>	17
<u>10. Inventories</u>	17
<u>11. Other financial assets and liabilities</u>	18
<u>12. Non-current assets and liabilities held for sale and discontinued operations</u>	18
<u>13. Investments in associates and joint ventures</u>	20
<u>14. Intangibles</u>	22
<u>15. Property, plant and equipment</u>	22
<u>16. Loans, borrowings, cash and cash equivalents and financial investments</u>	23
<u>17. Liabilities related to associates and joint ventures</u>	25
<u>18. Financial instruments classification</u>	26
<u>19. Fair value estimate</u>	26
<u>20. Derivative financial instruments</u>	27
<u>21. Provisions</u>	32
<u>22. Litigation</u>	32
<u>23. Employee postretirement obligations</u>	36
<u>24. Stockholders' equity</u>	36
<u>25. Related parties</u>	37
<u>26. Additional information about derivative financial instruments</u>	39

Table of Contents

KPMG Auditores Independentes

Rua do Passeio, 38 - Setor 2 - 17º andar - Centro

20021-290 - Rio de Janeiro/RJ - Brasil

Caixa Postal 2888 - CEP 20001-970 - Rio de Janeiro/RJ - Brasil

Telefone +55 (21) 2207-9400, Fax +55 (21) 2207-9000

www.kpmg.com.br

Report of independent registered public accounting firm

To the Stockholders and Board of Directors of

Vale S.A.

Rio de Janeiro - RJ

Results of review of interim financial information

We have reviewed the accompanying condensed consolidated statement of financial position of Vale S.A. and subsidiaries (the Company) as of June 30, 2018, the related condensed consolidated statements of income, comprehensive income (loss) and cash flows for the three and six-month periods ended June 30, 2018 and 2017, and the related condensed consolidated statement of changes in equity for the six-month periods ended on June 30, 2018 and 2017 and the related notes (collectively, the consolidated interim financial information). Based on our reviews, we are not aware of any material modifications that should be made to the condensed consolidated interim financial information for it to be in conformity with IAS 34 Interim Financial Reporting as issued by the International Accounting Standards Board (IASB).

We have previously audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated statement of financial position of the Company as of December 31, 2017, and the related consolidated statements of income and comprehensive income, changes in equity and cash flows for the year then ended (not presented herein); and in our report dated February 27, 2018, we expressed an unqualified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying condensed consolidated statement of financial position as of December 31, 2017, is fairly stated, in all material respects, in

relation to the consolidated statement of financial position from which it has been derived.

Basis for review results

This consolidated interim financial information is the responsibility of the Company's management. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our reviews in accordance with the standards of the PCAOB. A review of consolidated 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 PCAOB, 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 opinion.

KPMG Auditores Independentes

Rio de Janeiro, Brazil

July 25, 2018

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,	
		2018	2017	2018	2017
Continuing operations					
Net operating revenue	3(c)	8,616	7,235	17,219	15,750
Cost of goods sold and services rendered	5(a)	(5,377)	(5,102)	(10,601)	(9,836)
Gross profit		3,239	2,133	6,618	5,914
Operating expenses					
Selling and administrative expenses	5(b)	(122)	(132)	(246)	(256)
Research and evaluation expenses		(92)	(80)	(161)	(145)
Pre operating and operational stoppage		(67)	(90)	(145)	(205)
Other operating expenses, net	5(c)	(109)	(88)	(234)	(165)
		(390)	(390)	(786)	(771)
Impairment and other results on non-current assets	4	5	(220)	(13)	292
Operating income		2,854	1,523	5,819	5,435
Financial income	6	172	185	409	564
Financial expenses	6	(1,178)	(871)	(1,854)	(2,020)
Other financial items	6	(2,049)	(653)	(2,234)	(496)
Equity results in associates and joint ventures	13	41	(24)	126	49
Impairment and other results in associates and joint ventures	17	(411)	(34)	(425)	(95)
Income (loss) before income taxes		(571)	126	1,841	3,437
Income taxes					
	7				
Current tax		(127)	(69)	(220)	(570)
Deferred tax		791	118	163	(104)
		664	49	(57)	(674)
Net income from continuing operations		93	175	1,784	2,763
Net income attributable to noncontrolling interests		-----7	31	26	46
Net income from continuing operations attributable to Vale's stockholders		86	144	1,758	2,717
Discontinued operations					
	12				
Loss from discontinued operations		(10)	(125)	(92)	(207)
Net income attributable to noncontrolling interests			3		4
Loss from discontinued operations attributable to Vale's stockholders		(10)	(128)	(92)	(211)

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

Net income	83	50	1,692	2,556
Net income attributable to noncontrolling interests	7	34	26	50
Net income attributable to Vale s stockholders	76	16	1,666	2,506
Earnings per share attributable to Vale s stockholders:				
Basic and diluted earnings per share (restated):				
Common share (US\$)	8	0.01	0.32	0.48

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,	
	2018	2017	2018	2017
Net income	83	50	1,692	2,556
Other comprehensive income (loss):				
Items that will not be reclassified subsequently to the income statement				
Translation adjustments	(6,318)	(1,753)	(6,548)	(639)
Retirement benefit obligations	(55)	(195)	(2)	(218)
Fair value adjustment to investment in equity securities	77		42	
Transfer to retained earnings	4		(16)	
Total items that will not be reclassified subsequently to the income statement, net of tax	(6,292)	(1,948)	(6,524)	(857)
Items that may be reclassified subsequently to the income statement				
Translation adjustments	3,906	1,253	3,895	618
Net investments hedge	(538)	(259)	(565)	(84)
Transfer of realized results to net income			(78)	
Total of items that may be reclassified subsequently to the income statement, net of tax	3,368	994	3,252	534
Total comprehensive income (loss)	(2,841)	(904)	(1,580)	2,233
Comprehensive income (loss) attributable to noncontrolling interests	(87)	4	(70)	41
Comprehensive income (loss) attributable to Vale's stockholders	(2,754)	(908)	(1,510)	2,192
From continuing operations	(2,741)	(888)	(1,502)	2,221
From discontinued operations	(13)	(20)	(8)	(29)
	(2,754)	(908)	(1,510)	2,192

Items above are stated net of tax and the related taxes are disclosed in note 7.

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		Six-month period ended	
	2018	June 30, 2017	2018	June 30, 2017
Cash flow from operating activities:				
Income (loss) before income taxes from continuing operations	(571)	126	1,841	3,437
Continuing operations adjustments for:				
Equity results in associates and joint ventures	(41)	24	(126)	(49)
Impairment and other results on non-current assets and associates and joint ventures	406	254	438	(197)
Depreciation, amortization and depletion	861	904	1,734	1,812
Financial results, net	3,055	1,339	3,679	1,952
Changes in assets and liabilities:				
Accounts receivable	201	1,380	218	1,678
Inventories	(262)	(223)	(206)	(444)
Suppliers and contractors	(37)	244	(377)	326
Provision - Payroll, related charges and others remunerations	175	199	(366)	(43)
Proceeds from cobalt stream transaction	690		690	
Other assets and liabilities, net	(440)	(162)	(545)	(331)
	4,037	4,085	6,980	8,141
Interest on loans and borrowings paid	(274)	(412)	(655)	(927)
Derivatives paid, net	12	(3)	(13)	(110)
Interest on participative stockholders debentures paid	(72)	(70)	(72)	(70)
Income taxes	(46)	(37)	(286)	(405)
Income taxes - Settlement program	(113)	(120)	(238)	(241)
Net cash provided by operating activities from continuing operations	3,544	3,443	5,716	6,388
Cash flow from investing activities:				
Financial investments redeemed (invested)	(8)	34	(24)	(19)
Loans and advances - net receipts (payments) (note 25)	(99)	(100)	2,541	(244)
Additions to property, plant and equipment, intangibles and investments	(711)	(1,251)	(1,618)	(2,367)
Proceeds from disposal of assets and investments (note 12)	259	8	1,360	523
Dividends and interest on capital received from associates and joint ventures	136	82	146	82
Others investments activities	(17)	(19)	(2)	(21)
Net cash provided by (used in) investing activities from continuing operations	(440)	(1,246)	2,403	(2,046)
Cash flow from financing activities:				
Loans and borrowings				
Additions	765	300	765	1,450
Repayments	(2,599)	(1,852)	(4,876)	(2,970)

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

Transactions with stockholders:

Dividends and interest on capital paid to stockholders		(1,454)	(1,437)	(1,454)
Dividends and interest on capital paid to noncontrolling interest	(6)	(5)	(97)	(8)
Transactions with noncontrolling stockholders			(17)	255

Net cash used in financing activities from continuing

operations	(1,840)	(3,011)	(5,662)	(2,727)
-------------------	----------------	----------------	----------------	----------------

Net cash used in discontinued operations (note 12)

	(2)	(45)	(46)	(50)
--	------------	-------------	-------------	-------------

Increase (decrease) in cash and cash equivalents

	1,262	(859)	2,411	1,565
--	--------------	--------------	--------------	--------------

Cash and cash equivalents in the beginning of the period	5,368	6,716	4,328	4,262
--	-------	-------	-------	-------

Effect of exchange rate changes on cash and cash equivalents	(247)	(137)	(253)	(93)
--	-------	-------	-------	------

Effects of disposals of subsidiaries and merger, net on cash and cash equivalents	(14)		(117)	(14)
---	------	--	-------	------

Cash and cash equivalents at end of the period	6,369	5,720	6,369	5,720
---	--------------	--------------	--------------	--------------

Non-cash transactions:

Additions to property, plant and equipment - capitalized loans and borrowing costs	44	83	104	186
--	----	----	-----	-----

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, 2018	December 31, 2017
Assets			
Current assets			
Cash and cash equivalents	16	6,369	4,328
Accounts receivable	9	2,348	2,600
Other financial assets	11	482	2,022
Inventories	10	3,999	3,926
Prepaid income taxes		657	781
Recoverable taxes		1,023	1,172
Others		590	538
		15,468	15,367
Non-current assets held for sale	12		3,587
		15,468	18,954
Non-current assets			
Judicial deposits	22(c)	1,744	1,986
Other financial assets	11	3,042	3,232
Prepaid income taxes		505	530
Recoverable taxes		564	638
Deferred income taxes	7(a)	6,535	6,638
Others		304	267
		12,694	13,291
Investments in associates and joint ventures	13	3,226	3,568
Intangibles	14	7,989	8,493
Property, plant and equipment	15	48,710	54,878
		72,619	80,230
Total assets		88,087	99,184
Liabilities			
Current liabilities			
Suppliers and contractors		3,587	4,041
Loans and borrowings	16	1,822	1,703
Other financial liabilities	11	795	986
Taxes payable	7(c)	640	697
Provision for income taxes		255	355
Liabilities related to associates and joint ventures	17	273	326
Provisions	21	1,005	1,394
Dividends and interest on capital			1,441
Others		809	992
		9,186	11,935
Liabilities associated with non-current assets held for sale	12		1,179

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

		9,186	13,114
Non-current liabilities			
Loans and borrowings	16	16,084	20,786
Other financial liabilities	11	2,994	2,894
Taxes payable	7(c)	4,071	4,890
Deferred income taxes	7(a)	1,678	1,719
Provisions	21	6,567	7,027
Liabilities related to associates and joint ventures	17	895	670
Deferred revenue - Gold stream		1,725	1,849
Others		1,999	1,463
		36,013	41,298
Total liabilities		45,199	54,412
Stockholders equity	24		
Equity attributable to Vale's stockholders		41,948	43,458
Equity attributable to noncontrolling interests		940	1,314
Total stockholders equity		42,888	44,772
Total liabilities and stockholders equity		88,087	99,184

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

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

In millions of United States dollars

	Share capital	Results on conversion of shares	Capital reserve	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 interest
Balance at December 31, 2017	61,614	(152)	1,139	(954)	7,419	(1,477)	(1,183)	(22,948)		43,458	
Net income									1,666	1,666	
Other comprehensive income:											
Retirement benefit obligations							(2)		(16)	(18)	
Net investments hedge (note 20c)								(565)		(565)	
Fair value adjustment to investment in equity securities							42			42	
Translation adjustments					(1,055)		47	(1,627)		(2,635)	
Transactions with stockholders:											
Dividends of noncontrolling interest											
Acquisitions and disposal of noncontrolling interest											
Capitalization of noncontrolling interest advances											
Balance at June 30, 2018	61,614	(152)	1,139	(954)	6,364	(1,477)	(1,096)	(25,140)	1,650	41,948	

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

Balance at December 31, 2016	61,614	(152)	(699)	4,203	(1,477)	(1,147)	(23,300)		39,042
Net income								2,506	2,506
Other comprehensive income:									
Retirement benefit obligations						(218)			(218)
Net investments hedge (note 20c)							(84)		(84)
Translation adjustments				(63)		5	149	(103)	(12)
Transactions with stockholders:									
Dividends and interest on capital of Vale's stockholders				(658)					(658)
Dividends of noncontrolling interest									
Acquisitions and disposal of noncontrolling interest				(105)					(105)
Capitalization of noncontrolling interest advances									
Balance at June 30, 2017	61,614	(152)	(804)	3,482	(1,477)	(1,360)	(23,235)	2,403	40,471

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 B3 S.A. (Vale3), New York - NYSE (VALE), Paris - NYSE Euronext (Vale3) and Madrid LATIBEX (XVALO).

Vale S.A. 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) have been prepared and are being presented 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 to update users about relevant events and transactions occurred in the period and should be read in conjunction with the financial statements for the year ended December 31, 2017. The accounting policies, accounting estimates and judgments, risk management and measurement methods are the same as those applied when preparing the last annual financial statements, except for new accounting policies related to the application of IFRS 9 Financial instrument and IFRS 15 Revenue from contracts with customers, which are adopted by the Company from January 1, 2018. The accounting policy for recognizing and measuring income taxes in the

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

interim period is described in note 7.

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 (R\$). For presentation purposes, these interim financial statements are presented in United States dollars (US\$) as the Company believes that this is the relevant currency used by international investors.

The exchange rates used by the Company to translate its foreign operations are as follows:

	Closing rate		Three-month period ended		Average rate		Six-month period ended	
	June 30, 2018	December 31, 2017	June 30, 2018	June 30, 2017	June 30, 2018	June 30, 2017	June 30, 2018	June 30, 2017
US Dollar (US\$)	3.8558	3.3080	3.6056	3.2174	3.4274	3.1807		
Canadian dollar (CAD)	2.9344	2.6344	2.7928	2.3937	2.6807	2.3847		
Australian dollar (AUD)	2.8529	2.5849	2.7280	2.4154	2.6407	2.3986		
Euro (EUR or)	4.5032	3.9693	4.2944	3.5480	4.1430	3.4479		

The issue of these interim financial statements was authorized by the Board of Directors on July 25, 2018.

c) 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 applicable when preparing the financial statements for the year ended December 31, 2017.

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 reclassifications between segments.

a) Adjusted EBITDA

Management uses adjusted EBITDA to assess each segment's contribution to the Company's performance and to support the decision making process. Adjusted EBITDA is calculated for each segment using operating income or loss plus dividends received and interest from associates and joint ventures, and adding back the amounts charged as (i) depreciation, depletion and amortization and (ii) special events (additional information can be found in note 4).

In 2018, the Company has allocated general and corporate expenses to Others as these expenses are not directly related to the performance of each business segment. Therefore, Others includes unallocated corporate expenses. The comparative period was restated in order to reflect this change in the criteria for allocation.

	Three-month period ended June 30, 2018						
	Net operating revenue	Cost of goods sold and services rendered	Sales, administrative and other operating expenses (i)	Research and evaluation	Pre operating and operational stoppage	Dividends received and interest from associates and joint ventures	Adjusted EBITDA
Ferrous minerals							
Iron ore	4,570	(2,144)	(26)	(25)	(27)	1	2,349
Iron ore Pellets	1,518	(808)	(6)	(6)	(6)	105	797
Ferrous alloys and manganese	115	(65)	(2)	(1)			47
Other ferrous products and services	118	(84)	1				35
	6,321	(3,101)	(33)	(32)	(33)	106	3,228
Coal	356	(327)	(7)	(6)		29	45
Base metals							
Nickel and other products	1,340	(810)	(18)	(8)	(7)		497
Copper	530	(245)		(4)			281

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

	1,870	(1,055)	(18)	(12)	(7)		778
Others	69	(67)	(133)	(42)	(6)	30	(149)
Total of continuing operations	8,616	(4,550)	(191)	(92)	(46)	165	3,902
Discontinued operations (Fertilizers)	32	(36)	(3)				(7)
Total	8,648	(4,586)	(194)	(92)	(46)	165	3,895

(i) Adjusted for the special events occurred in the period, which represents a loss of US\$27.

	Three-month period ended June 30, 2017						Adjusted EBITDA
	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 and interest from associates and joint ventures	
Ferrous minerals							
Iron ore	3,544	(1,885)	(26)	(23)	(40)		1,570
Iron ore Pellets	1,331	(712)	3	(5)	(1)	37	653
Ferroalloys and manganese	117	(81)	(1)		(1)		34
Other ferrous products and services	122	(77)	13				58
	5,114	(2,755)	(11)	(28)	(42)	37	2,315
Coal	481	(305)	(2)	(4)	(4)		166
Base metals							
Nickel and other products	1,009	(818)	(9)	(11)	(12)		159
Copper	503	(247)	(1)	(2)			253
	1,512	(1,065)	(10)	(13)	(12)		412
Others	128	(125)	(175)	(35)	(2)	45	(164)
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

Table of Contents

	Six-month period ended June 30, 2018						
	Net operating revenue	Cost of goods sold and services rendered	Sales, administrative and other operating expenses (i)	Research and evaluation	Pre operating and operational stoppage	Dividends received and interest from associates and joint ventures	Adjusted EBITDA
Ferrous minerals							
Iron ore	9,273	(4,222)	(39)	(45)	(62)	1	4,906
Iron ore Pellets	3,103	(1,621)	(7)	(11)	(9)	105	1,560
Ferrous alloys and manganese	239	(139)	(3)	(1)			96
Other ferrous products and services	233	(157)	(2)				74
	12,848	(6,139)	(51)	(57)	(71)	106	6,636
Coal	736	(662)	(5)	(9)		89	149
Base metals							
Nickel and other products	2,472	(1,515)	(33)	(17)	(15)		892
Copper	1,032	(493)	(1)	(8)			530
	3,504	(2,008)	(34)	(25)	(15)		1,422
Others	131	(137)	(286)	(70)	(12)	40	(334)
Total of continuing operations	17,219	(8,946)	(376)	(161)	(98)	235	7,873
Discontinued operations (Fertilizers)	121	(120)	(4)				(3)
Total	17,340	(9,066)	(380)	(161)	(98)	235	7,870

(i) Adjusted for the special events occurred in the period, which represents a loss of US\$72.

	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 and interest from associates and joint ventures	Adjusted EBITDA
Ferrous minerals							
Iron ore	8,370	(3,562)	43	(39)	(81)		4,731
Iron ore Pellets	2,790	(1,364)	3	(8)	(2)	37	1,456
Ferrous alloys and manganese	203	(125)	(2)		(4)		72
	248	(153)	10	(1)			104

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

Other ferrous products and services	11,611	(5,204)	54	(48)	(87)	37	6,363
Coal	805	(553)	(6)	(7)	(4)		235
Base metals							
Nickel and other products	2,141	(1,680)	(23)	(20)	(50)		368
Copper	968	(477)	(1)	(4)			486
	3,109	(2,157)	(24)	(24)	(50)		854
Others	225	(224)	(392)	(66)	(3)	45	(415)
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

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,	
	2018	2017	2018	2017
Adjusted EBITDA from continuing operations	3,902	2,729	7,873	7,037
Depreciation, depletion and amortization	(861)	(904)	(1,734)	(1,812)
Dividends received and interest from associates and joint ventures	(165)	(82)	(235)	(82)
Special events (note 4)	(22)	(220)	(85)	292
Operating income	2,854	1,523	5,819	5,435
Financial results, net	(3,055)	(1,339)	(3,679)	(1,952)
Equity results in associates and joint ventures	41	(24)	126	49
Impairment and other results in associates and joint ventures	(411)	(34)	(425)	(95)
Income taxes	664	49	(57)	(674)
Net income from continuing operations	93	175	1,784	2,763
Net income attributable to noncontrolling interests	7	31	26	46
Net income attributable to Vale's stockholders	86	144	1,758	2,717

Table of Contents**From discontinued operations**

	Three-month period ended June 30,		Six-month period ended June 30,	
	2018	2017	2018	2017
Adjusted EBITDA from discontinued operations	(7)	(4)	(3)	(1)
Impairment of non-current assets	(11)	(266)	(124)	(377)
Operating loss	(18)	(270)	(127)	(378)
Financial results, net	(1)	(6)	(5)	(10)
Income taxes	9	151	40	181
Loss from discontinued operations	(10)	(125)	(92)	(207)
Net income attributable to noncontrolling interests		3		4
Loss attributable to Vale's stockholders	(10)	(128)	(92)	(211)

b) Assets by segment

	June 30, 2018			December 31, 2017		
	Product inventory	Investments in associates and joint ventures	Property, plant and equipment and intangible (i)	Product inventory	Investments in associates and joint ventures	Property, plant and equipment and intangible (i)
Ferrous minerals	1,779	1,717	31,403	1,770	1,922	36,103
Coal	136	328	1,836	82	317	1,719
Base metals	1,139	14	21,928	1,009	13	23,603
Others	15	1,167	1,532	6	1,316	1,946
Total	3,069	3,226	56,699	2,867	3,568	63,371

	Three-month period ended			Six-month period ended		
	June 30, 2018			June 30, 2018		
	Additions to property, plant and equipment and intangible (ii)			Additions to property, plant and equipment and intangible (ii)		
	Sustaining investments	Capital expenditures	Depreciation, depletion and amortization (iii)	Sustaining investments	Capital expenditures	Depreciation, depletion and amortization (iii)
Ferrous minerals	291	171	425	613	504	857
Coal	19	15	56	43	24	121
Base metals	189	19	367	370	34	717
Others	1		13	2	5	39
Total	500	205	861	1,028	567	1,734

	Three-month period ended			Six-month period ended		
	June 30, 2017			June 30, 2017		
	Additions to property, plant and equipment and intangible (ii)			Additions to property, plant and equipment and intangible (ii)		

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

	Sustaining investments	Capital expenditures	Depreciation, depletion and amortization (iii)	Sustaining investments	Capital expenditures	Depreciation, depletion and amortization (iii)
Ferrous minerals	251	369	427	552	898	844
Coal	8	7	74	33	38	179
Base metals	246	5	397	447	15	778
Others	1	3	6	2	12	11
Total	506	384	904	1,034	963	1,812

(i) Goodwill is allocated mainly to ferrous minerals and base metals segments in the amount of US\$1,850 and US\$1,897 in June 30, 2018 and US\$2,157 and US\$1,953 in December 31, 2017, respectively.

(ii) Includes only cash outflows.

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

Table of Contents

Base metals

(i) Onça Puma

In September 2017, the Federal Court granted an injunction suspending certain of nickel mining operations at Onça Puma. The Company has appealed this decision to seek a suspension of this injunction, but it is not possible to anticipate when Onça Puma activities will resume. In December 31, 2017, the Company has calculated the recoverable amount and no losses were identified. The Company has assessed the impairment risk related to this specific cash-generating unit and concluded that no significant changes occurred that could lead to a loss that should be recognized in the income statement for the period ended June 30, 2018.

(ii) Cobalt streaming transaction

In June 2018, the Company entered into two different agreements, one with Wheaton Precious Metals Corp (Wheaton) and other with Cobalt 27 Capital Corp. (Cobalt 27), to sell a stream equivalent to 75% of the cobalt extracted as a by-product from the Voisey s Bay mine, in Canada, starting on January 1, 2021. Furthermore, the Company restarted the Voisey s Bay underground mine expansion project, which is going to increase the expected useful life of Voisey s Bay mine from 2023 to 2034. The first year of underground production is expected to be 2021, when the current operations on the open pit mine begins to ramp down.

Upon completion of the transaction, the Company received an upfront payment of US\$690 in cash, US\$390 from Wheaton and US\$300 from Cobalt 27, has been recorded as others non-current liabilities. Vale will receive additional payments of 20%, on average, of the market reference price for cobalt, for each pound of finished cobalt delivered.

Thus, from January 1, 2021 onwards, Wheaton and Cobalt 27 will be entitled to receive 42.4% and 32.6%, respectively, of cobalt equivalent to the production from the Voisey s Bay mine, while Vale remains exposed to approximately 40% of the cobalt economic exposure, as Vale retains the rights to 25% of the future cobalt production and will receive 20% additional payments for the cobalt stream. The result of the sale of the mineral rights will be accounted for once certain production thresholds have been met at Voisey s Bay mine and is not expected to be significant.

c) Net operating revenue by geographic area

Three-month period ended June 30, 2018

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

	Ferrous minerals	Coal	Base metals	Others	Total
Americas, except United States and Brazil	195		184		379
United States of America	89		265		354
Germany	286		141		427
Europe, except Germany	575	87	460		1,122
Middle East/Africa/Oceania	500	33	6		539
Japan	614		145		759
China	3,056		208		3,264
Asia, except Japan and China	423	222	392		1,037
Brazil	583	14	69	69	735
Net operating revenue	6,321	356	1,870	69	8,616

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
Germany	199		87		286
Europe, except Germany	490	111	432	14	1,047
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

Table of Contents

Six-month period ended June 30, 2018

	Ferrous minerals	Coal	Base metals	Others	Total
Americas, except United States and Brazil	414		341		755
United States of America	171		509	8	688
Germany	611		212		823
Europe, except Germany	1,046	189	959		2,194
Middle East/Africa/Oceania	1,093	76	10		1,179
Japan	1,071	33	260		1,364
China	6,442		416		6,858
Asia, except Japan and China	769	372	641		1,782
Brazil	1,231	66	156	123	1,576
Net operating revenue	12,848	736	3,504	131	17,219

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
Germany	508		139	16	663
Europe, except Germany	1,071	200	885	14	2,170
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

Provisionally priced commodities sales - As at June 30, 2018, there were 21 million metric tons of iron ore (2017: 26 million metric tons) and 71 thousand metric tons of copper (2017: 106 thousand metric tons) provisionally priced based on forward prices. The final price of these sales will be determined during the third quarter of 2018. A 10% change in the realized prices compared to the provisionally priced sales, all other factors held constant, would increase or reduce iron ore net income by US\$141 and copper net income by US\$53.

4. Special events occurred during the period

The special events occurred during the period are those that, in the Company's judgment, have non-operational effect on the performance of the period due to their size and nature. To determine whether an event or transaction should be disclosed as special events, the Company considers quantitative and qualitative factors, such as frequency and magnitude.

The special events identified by the Company are as follows:

	Three-month period ended June 30,		Six-month period ended June 30,	
	2018	2017	2018	2017
Gain (loss) with disposals of assets	5	(87)	(13)	(90)
Provision for litigation	(27)		(72)	
Nacala Logistic Corridor				515
Impairment of non-current assets		(133)		(133)
Total	(22)	(220)	(85)	292

Result in disposals of assets - The Company recognized a gain of US\$5 and a loss of US\$13 in the income statement during the three and six-month periods ended June 30, 2018, respectively as Impairment and other results on noncurrent assets due to non-viable projects and operating assets written off through sale or obsolescence.

Provision for litigation During the three and six month-periods ended June 30, 2018, the Company's assessment of the likelihood of loss for various litigations have been updated and a net impact of US\$27 and US\$72, respectively, was charged to the income statement.

Nacala Logistic Corridor In March 2017, the Company concluded the transaction with Mitsui to sell 15% of its stake in Vale Moçambique and 50% of its stake in the Nacala Logistics Corridor and recognized a gain in the income statement of US\$515.

Impairment of non-current assets In the second quarter of 2017, the Company placed an underground mine in Sudbury in care and maintenance and an impairment of US\$133 was recognized in the income statement.

Table of Contents**5. 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,	
	2018	2017	2018	2017
Personnel	573	556	1,126	1,103
Materials and services	964	899	1,848	1,681
Fuel oil and gas	378	309	731	618
Maintenance	676	753	1,413	1,476
Energy	240	232	478	447
Acquisition of products	100	159	223	323
Depreciation and depletion	827	852	1,655	1,698
Freight	940	771	1,841	1,430
Others	679	571	1,286	1,060
Total	5,377	5,102	10,601	9,836
Cost of goods sold	5,215	4,946	10,292	9,541
Cost of services rendered	162	156	309	295
Total	5,377	5,102	10,601	9,836

b) Selling and administrative expenses

	Three-month period ended June 30,		Six-month period ended June 30,	
	2018	2017	2018	2017
Personnel	41	62	103	116
Services	18	17	37	29
Depreciation and amortization	13	22	32	51
Others	50	31	74	60
Total	122	132	246	256

c) Other operating expenses, net

	Three-month period ended June 30,		Six-month period ended June 30,	
	2018	2017	2018	2017
Provision for litigation	27	17	72	29
Profit sharing program	61	30	108	69

Others	21	41	54	67
Total	109	88	234	165

6. Financial result

	Three-month period ended June 30,		Six-month period ended June 30,	
	2018	2017	2018	2017
Financial income				
Short-term investments	50	52	75	88
Derivative financial instruments	91	69	210	384
Others	31	64	124	92
	172	185	409	564
Financial expenses				
Loans and borrowings gross interest	(294)	(450)	(630)	(902)
Capitalized loans and borrowing costs	44	83	104	186
Derivative financial instruments	(397)	(160)	(426)	(266)
Participative stockholders debentures	(304)	(87)	(487)	(499)
Expenses of REFIS	(51)	(108)	(109)	(234)
Others	(176)	(149)	(306)	(305)
	(1,178)	(871)	(1,854)	(2,020)
Other financial items				
Net foreign exchange losses on loans and borrowings	(2,376)	(742)	(2,493)	(243)
Other net foreign exchange gains (losses)	430	132	483	(127)
Net indexation losses	(103)	(43)	(224)	(126)
	(2,049)	(653)	(2,234)	(496)
Financial results, net	(3,055)	(1,339)	(3,679)	(1,952)

Table of Contents**7. Income taxes****a) Deferred income tax assets and liabilities**

Changes in deferred tax are as follows:

	Assets	Liabilities	Deferred taxes, net
Balance at March 31, 2018	6,107	1,704	4,403
Effect in income statement	809	18	791
Transfers between asset and liabilities	1	1	
Translation adjustment	(673)	(33)	(640)
Other comprehensive income	289	(12)	301
Effect of discontinued operations			
Effect in income statement	8		8
Transfer to net assets held for sale	(6)		(6)
Balance at June 30, 2018	6,535	1,678	4,857

	Assets	Liabilities	Deferred taxes, net
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
Effect of discontinued operations			
Effect in income statement	151		151
Transfer to net assets held for sale	(151)		(151)
Balance at June 30, 2017	7,095	1,565	5,530

	Assets	Liabilities	Deferred taxes, net
Balance at December 31, 2017	6,638	1,719	4,919
Effect in income statement	180	17	163
Transfers between asset and liabilities	9	9	
Translation adjustment	(696)	(63)	(633)
Other comprehensive income	376	(4)	380
Effect of discontinued operations			
Effect in income statement	40		40
Transfer to net assets held for sale	(12)		(12)
Balance at June 30, 2018	6,535	1,678	4,857

Assets	Liabilities	Deferred taxes, net
--------	-------------	---------------------

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
Effect of discontinued operations			
Effect in income statement	181		181
Transfer to net assets held for sale	(181)		(181)
Balance at June 30, 2017	7,095	1,565	5,530

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,	
	2018	2017	2018	2017
Income (loss) before income taxes	(571)	126	1,841	3,437
Income taxes at statutory rates - 34%	194	(43)	(626)	(1,169)
Adjustments that affect the basis of taxes:				
Income tax benefit from interest on stockholders equity	397	126	464	252
Tax incentives	162	1	189	179
Equity results	15	(8)	44	17
Unrecognized tax losses of the period	(109)	(92)	(256)	(269)
Gain on sale of subsidiaries (note 4)				175
Others	4	65	127	141
Income taxes	663	49	(58)	(674)

Income tax expense is recognized based on the estimate of the weighted average effective tax rate expected for the full year, 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.

Table of Contentsc) **Income taxes - Settlement program (REFIS)**

The balance mainly relates to REFIS 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. As at June 30, 2018, the balance of US\$4,496 (US\$425 as current and US\$4,071 as non-current) is due in 124 remaining monthly installments, bearing interest at the SELIC rate (Special System for Settlement and Custody).

8. **Basic and diluted earnings (loss) per share**

The basic and diluted earnings (loss) per share are presented below:

	Three-month period ended June 30,		Six-month period ended June 30,	
	2018	2017 (i)	2018	2017 (i)
Net income (loss) attributable to Vale's stockholders:				
Net income from continuing operations	86	144	1,758	2,717
Loss from discontinued operations	(10)	(128)	(92)	(211)
Net income	76	16	1,666	2,506
Thousands of shares				
Weighted average number of shares outstanding - common shares	5,197,432	5,197,432	5,197,432	5,197,432
Basic and diluted earnings per share from continuing operations :				
Common share (US\$)	0.02	0.03	0.34	0.52
Basic and diluted loss per share from discontinued operations :				
Common share (US\$)	(0.01)	(0.03)	(0.02)	(0.04)
Basic and diluted earnings per share:				
Common share (US\$)	0.01		0.32	0.48

(i) Restated to reflect the conversion of the class A preferred shares into common shares.

The Company does not have potential outstanding shares or other instruments with dilutive effect on the earnings per share.

9. Accounts receivable

	June 30, 2018	December 31, 2017
Accounts receivable	2,407	2,660
Impairment of accounts receivable	(59)	(60)
	2,348	2,600
Accounts receivable related to the steel sector - %	75.20%	82.90%

	Three-month period ended June 30, 2018	Three-month period ended June 30, 2017	Six-month period ended June 30, 2018	Six-month period ended June 30, 2017
Impairment of trade receivables recorded in the income statement	(4)	(4)	(4)	(4)

There is no customer that individually represents over 10% of accounts receivable or revenues.

10. Inventories

	June 30, 2018	December 31, 2017
Finished products	2,416	2,219
Work in progress	653	648
Consumable inventory	930	1,059
Total	3,999	3,926

	Three-month period ended June 30, 2018	Three-month period ended June 30, 2017	Six-month period ended June 30, 2018	Six-month period ended June 30, 2017
Reversal (provision) for net realizable value	(16)	22	(17)	59

Finished and work in progress product inventory by segments is presented in note 3(b).

Table of Contents**11. Other financial assets and liabilities**

	Current		Non-Current	
	June 30, 2018	December 31, 2017	June 30, 2018	December 31, 2017
Other financial assets				
Financial investments	18	18		
Loans			155	151
Derivative financial instruments (note 20)	127	106	354	453
Investments in equity securities (note 12)			957	
Related parties - Loans (note 25)	337	1,898	1,576	2,628
	482	2,022	3,042	3,232
Other financial liabilities				
Derivative financial instruments (note 20)	250	104	619	686
Related parties - Loans (note 25)	545	882	963	975
Participative stockholders debentures			1,412	1,233
	795	986	2,994	2,894

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

	December 31, 2017
	Fertilizers
Assets	
Accounts receivable	90
Inventories	460
Other current assets	110
Investments in associates and joint ventures	83
Property, plant and equipment and Intangible	2,149
Other non-current assets	695
Total assets	3,587
Liabilities	
Suppliers and contractors	324
Other current liabilities	215
Other non-current liabilities	640
Total liabilities	1,179
Net non-current assets held for sale	2,408

a) Fertilizers (discontinued operations)

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

In December 2016, the Company entered into an agreement with The Mosaic Company (Mosaic) to sell (i) the phosphate assets located in Brazil, except for the 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 January 2018, the Company and Mosaic concluded the transaction and the Company received US\$1,080 in cash and 34.2 million common shares, corresponding to 8.9% of Mosaic s equity after the issuance of these shares (US\$899, based on the Mosaic s quotation at closing date of the transaction) and a loss of US\$55 was recognized in the income statement from discontinued operations.

Mosaic shares received was accounted for an equity investment measured at fair value through other comprehensive income. For the three and six-month period ended June 30, 2018, the Company recognized a gain of US\$77 and US\$42 in other comprehensive income as Fair value adjustment to investment in equity securities .

b) Cubatão (part of the fertilizer segment)

In November 2017, the Company entered into an agreement with Yara International ASA (Yara) to sell its assets located in Cubatão, Brazil. In May 2018, the transaction was concluded and the Company received US\$255 in cash and a loss of US\$69 was recognized for the six-month period ended June 30, 2018, in the income statement from discontinued operations.

The results and cash flows of discontinued operations of the Fertilizer segment for the three and six-month periods ended June 30, 2018 and 2017 are presented as follows:

Table of Contents**Income statement**

	Three-month period ended June 30,		Six-month period ended June 30,	
	2018	2017	2018	2017
Discontinued operations				
Net operating revenue	32	401	121	771
Cost of goods sold and services rendered	(36)	(371)	(120)	(710)
Operating expenses	(3)	(34)	(4)	(62)
Impairment of non-current assets	(11)	(266)	(124)	(377)
Operating loss	(18)	(270)	(127)	(378)
Financial Results, net	(1)	(6)	(5)	(10)
Loss before income taxes	(19)	(276)	(132)	(388)
Income taxes	9	151	40	181
Loss from discontinued operations	(10)	(125)	(92)	(207)
Net income attributable to noncontrolling interests		3		4
Loss attributable to Vale's stockholders	(10)	(128)	(92)	(211)

Statement of cash flow

	Three-month period ended June 30,		Six-month period ended June 30,	
	2018	2017	2018	2017
Discontinued operations				
Cash flow from operating activities				
Loss before income taxes	(19)	(276)	(132)	(388)
Adjustments:				
Impairment of non-current assets	11	266	124	377
Others	5		5	
Increase (decrease) in assets and liabilities	1	12	(34)	105
Net cash provided by (used in) operating activities	(2)	2	(37)	94
Cash flow from investing activities				
Additions to property, plant and equipment		(81)	(9)	(144)
Net cash used in investing activities		(81)	(9)	(144)
Cash flow from financing activities				
Loans and borrowings				
Additions		34		
Net cash provided by financing activities		34		
Net cash used in discontinued operations	(2)	(45)	(46)	(50)

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

Changes in investments in associates and joint ventures as follows:

	Associates	Joint ventures	Total
Balance at December 31, 2017	1,441	2,127	3,568
Additions		23	23
Translation adjustment	(165)	(264)	(429)
Equity results in income statement	3	123	126
Dividends declared		(153)	(153)
Transfer from non-current assets held for sale (i)	87		87
Others	6	(2)	4
Balance at June 30, 2018	1,372	1,854	3,226

(i) Refers to 18% interest held by Vale Fertilizantes at Ultrafertil which was transferred to Vale as part of the final settlement in January 2018 (note 12)

	Associates	Joint ventures	Total
Balance at December 31, 2016	1,437	2,259	3,696
Additions		33	33
Translation adjustment	(16)	(32)	(48)
Equity results in income statement	21	28	49
Dividends declared	(42)	(83)	(125)
Balance at June 30, 2017	1,400	2,205	3,605

b) Guarantees provided

As of June 30, 2018, corporate guarantees provided by Vale (within the limit of its direct or indirect interest) for the companies Norte Energia S.A. and Companhia Siderúrgica do Pecém S.A. were US\$330 and US\$1,453, respectively.

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, 2018	December 31, 2017	Three-month period ended June 30, 2018	Three-month period ended June 30, 2017	Three-month period ended June 30, 2018	Three-month period ended June 30, 2017	Three-month period ended June 30, 2018	Three-month period ended June 30, 2017		
Ferrous minerals												
Baovale Mineração S.A. Companhia	50.00	50.00	25	26	1	2	3	4	1	1		
Coreano-Brasileira de Pelotização Companhia	50.00	50.00	87	89	18	13	33	25	15		15	
Hispano-Brasileira de Pelotização (i) Companhia	50.89	51.00	68	82	8	11	23	21	23	5	23	5
Companhia Ítalo-Brasileira de Pelotização (i) Companhia	50.90	51.00	80	80	15	13	31	20	33	17	33	17
Companhia Nipo-Brasileira de Pelotização (i) Companhia	51.00	51.11	144	137	31	24	61	46	34	15	34	15
MRS Logística S.A.	48.16	46.75	458	517	18	22	30	37				
VLI S.A.	37.60	37.60	832	968	14	19	1	6				
Zhuhai YPM Pellet Co.	25.00	25.00	23	23								
			1,717	1,922	105	104	182	159	106	37	106	37
Coal												
Henan Longyu Energy Resources Co., Ltd.	25.00	25.00	328	317	8	6	12	16				
			328	317	8	6	12	16				
Base metals												
Korea Nickel Corp.	25.00	25.00	14	13			1					
			14	13			1					
Others												
Aliança Geração de Energia S.A. (i)	55.00	55.00	488	571	6	8	25	15	15	11	25	11
Aliança Norte Energia Participações S.A. (i)	51.00	51.00	157	160	3		10	3				
California Steel Industries, Inc.	50.00	50.00	225	200	19	16	40	25	15	13	15	13
Companhia Siderúrgica do Pecém	50.00	50.00	119	262	(82)	(131)	(124)	(142)				
Mineração Rio do Norte S.A.	40.00	40.00	86	101	(9)	1	(6)	1		21		21
Others			92	22	(9)	(28)	(14)	(28)				
			1,167	1,316	(72)	(134)	(69)	(126)	30	45	40	45
Total			3,226	3,568	41	(24)	126	49	136	82	146	82

(i) Although the Company held a 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 December 31, 2017	4,110	4,002	152	229	8,493
Additions		627		5	632
Disposals		(10)			(10)
Amortization		(66)	(3)	(60)	(129)
Translation adjustment	(363)	(605)	(8)	(21)	(997)
Balance at June 30, 2018	3,747	3,948	141	153	7,989
Cost	3,747	4,907	215	1,363	10,232
Accumulated amortization		(959)	(74)	(1,210)	(2,243)
Balance at June 30, 2018	3,747	3,948	141	153	7,989

	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

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 December 31, 2017	718	12,100	11,786	6,893	9,069	8,193	6,119	54,878
Additions (i)							1,007	1,007
Disposals		(37)	(36)	(15)	(5)	(52)	(7)	(152)
Assets retirement obligation					(12)			(12)

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

Depreciation, amortization and depletion	(303)	(354)	(437)	(290)	(346)		(1,730)
Translation adjustment	(80)	(1,260)	(1,381)	(516)	(602)	(922)	(520)
Transfers	7	380	1,101	573	273	625	(2,959)
Balance at June 30, 2018	645	10,880	11,116	6,498	8,433	7,498	3,640
Cost	645	17,816	17,365	12,365	15,866	10,961	3,640
Accumulated depreciation		(6,936)	(6,249)	(5,867)	(7,433)	(3,463)	
Balance at June 30, 2018	645	10,880	11,116	6,498	8,433	7,498	3,640

	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
Depreciation, amortization and depletion		(266)	(345)	(396)	(311)	(347)		(1,665)
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

(i) Includes capitalized borrowing costs.

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, 2017.

Table of Contents**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.

	June 30, 2018	December 31, 2017
Debt contracts in the international markets	13,852	17,288
Debt contracts in Brazil	4,054	5,201
Total of loans and borrowings	17,906	22,489
(-) Cash and cash equivalents	6,369	4,328
(-) Financial investments (note 11)	18	18
Net debt	11,519	18,143

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, 2018	December 31, 2017	June 30, 2018	December 31, 2017
Debt contracts in the international markets				
Floating rates in:				

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

US\$	610	310	2,386	2,764
EUR			234	240
Fixed rates in:				
US\$	6		9,339	12,588
EUR			876	900
Other currencies	34	17	166	206
Accrued charges	201	263		
	851	590	13,001	16,698
Debt contracts in Brazil				
Floating rates in:				
R\$, indexed to TJLP, TR, IPCA, IGP-M and CDI	381	447	2,383	3,195
Basket of currencies and US\$ indexed to LIBOR	308	339	570	708
Fixed rates in:				
R\$	57	68	120	173
Accrued charges	225	259	10	12
	971	1,113	3,083	4,088
	1,822	1,703	16,084	20,786

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		
2018	93		392	485	1,165
2019	593		706	1,299	963
2020	577	285	733	1,595	921
2021	381	359	738	1,478	833
Between 2022 and					
2026	1,371	4,572	1,023	6,966	2,950
2027 onwards	79	5,489	79	5,647	4,198
	3,094	10,705	3,671	17,470	11,030

(i) Estimated future payments of interest, calculated based on interest rate curves and foreign exchange rates applicable as at June 30, 2018 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.

Table of Contents

At June 30, 2018, the average annual interest rates by currency are as follows:

Loans and borrowings	Average interest rate (i)	Total debt
US\$	5.58%	13,408
R\$ (ii)	8.12%	3,169
EUR (iii)	3.34%	1,127
Other currencies	2.93%	202
		17,906

(i) In order to determine the average interest rate for debt contracts with floating rates, the Company used the rate applicable at June 30, 2018.

(ii) R\$ denominated debt that bears interest at IPCA, CDI, TR or TJLP, plus spread. For a total of US\$1,503 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 2.548% 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 4.291% per year in US\$.

ii) Reconciliation of debt to cash flows arising from financing activities

	December 31, 2017	Additions	Cash flow Repayments	Interest paid	Transferences	Non-cash changes Effect of exchange rate	Interest accretion	June 30, 2018
Loans and borrowings								
Current	1,703		(4,876)	(655)	4,984	(69)	735	1,822
Non-current	20,786	765			(4,984)	(486)	3	16,084
Total	22,489	765	(4,876)	(655)		(555)	738	17,906

iii) Credit and financing lines

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

Type	Contractual currency	Date of agreement	Period of the agreement	Total amount	Available amount June 30, 2018
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 - CLN 150	R\$	September 2012	10 years	1,007	
BNDES - S11D e S11D Logística	R\$	May 2014	10 years	1,598	261

iv) Repayments

During the first half of 2018, the Company conducted a cash tender offer for Vale Overseas 5.875% guaranteed notes due 2021, 4.375% guaranteed notes due 2022 and a cash tender offer for Vale S.A. 5.625% guaranteed notes due 2042 and repurchased a total of US\$2,730. The Company also redeemed all of Vale Overseas 4.625% guaranteed notes due 2020 totaling US\$499.

v) Guarantees

As at June 30, 2018 and December 31, 2017, loans and borrowings are secured by property, plant and equipment in the amount of US\$225 and US\$275, respectively.

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

vi) 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, 2018.

Table of Contents**17. Liabilities related to associates and joint ventures**

The movements of 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), in the six-month periods ended June 30, 2018 and 2017 are as follows:

	2018	2017
Balance at January 01,	996	1,077
Payments	(126)	(139)
Present value valuation	51	90
Provision increase	391	
Translation adjustment	(144)	(9)
Balance at June 30,	1,168	1,019
Current liabilities	273	295
Non-current liabilities	895	724
Liabilities	1,168	1,019

During the second quarter of 2018, the Fundação Renova reviewed the estimates for the expenditures required to mitigate and compensate for the impacts of the disruption from Samarco's tailing dam. As a result of this revision, Vale S.A. recognized an additional provision of US\$391 (R\$1,476 million), which amounts to the present value of Vale's new estimated secondary responsibility to support the Renova Foundation works and is equivalent to 50% of Samarco's additional obligations over the next 12 years.

In addition to the provision above, Vale S.A. made available in the three and six-month period ended June 30, 2018 the amount of US\$20 and US\$34, respectively, which was fully used to fund Samarco's working capital and was recognized in Vale's income statement as Impairment and other results in associates and joint ventures. Vale S.A. intends to make available until December 31, 2018 up to US\$53 to support Samarco's working capital requirements, without any binding obligation to Samarco in this regard. Such amounts will be released by the shareholders, simultaneously and pursuant to the same terms and conditions, subject to the fulfillment of certain milestones.

Under Brazilian legislation and the terms of the joint venture agreement, Vale does not have an obligation to provide funding to Samarco. Therefore, Vale's investment in Samarco was impaired in full and no provision was recognized in relation to the Samarco's negative reserves.

The contingencies related to the Samarco dam failure are disclosed in note 22.

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

	June 30, 2018			December 31, 2017			
	Amortized cost	At fair value through OCI	At fair value through profit or loss	Total	Amortized cost	At fair value through profit or loss	Total
Financial assets							
Current							
Cash and cash equivalents	6,369			6,369	4,328		4,328
Financial investments	18			18	18		18
Derivative financial instruments			127	127		106	106
Accounts receivable	2,511		(163)	2,348	2,418	182	2,600
Related parties	337			337	1,898		1,898
	9,235		(36)	9,199	8,662	288	8,950
Non-current							
Derivative financial instruments			354	354		453	453
Investments in equity securities		957		957			
Loans	155			155	151		151
Related parties	1,576			1,576	2,628		2,628
	1,731	957	354	3,042	2,779	453	3,232
Total of financial assets	10,966	957	318	12,241	11,441	741	12,182
Financial liabilities							
Current							
Suppliers and contractors	3,587			3,587	4,041		4,041
Derivative financial instruments			250	250		104	104
Loans and borrowings	1,822			1,822	1,703		1,703
Related parties	545			545	882		882
	5,954		250	6,204	6,626	104	6,730
Non-current							
Derivative financial instruments			619	619		686	686
Loans and borrowings	16,084			16,084	20,786		20,786
Related parties	963			963	975		975
Participative stockholders debentures			1,412	1,412		1,233	1,233
	17,047		2,031	19,078	21,761	1,919	23,680
Total of financial liabilities	23,001		2,281	25,282	28,387	2,023	30,410

19. Fair value estimate

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

	June 30, 2018			Total	December 31, 2017		
	Level 1	Level 2	Level 3		Level 2	Level 3	Total
Financial assets							
Derivative financial instruments		246	235	481	289	270	559
Investments in equity securities	957			957			
Total	957	246	235	1,438	289	270	559
Financial liabilities							
Derivative financial instruments		694	175	869	581	209	790
Participative stockholders' debentures		1,412		1,412	1,233		1,233
Total		2,106	175	2,281	1,814	209	2,023

The Company changed its accounting estimate on the calculation of the participative stockholders' debentures from January 1, 2018. The Company has replaced on the calculation the assumption of spot price at the reporting date used to the weighted average price traded on the market within the last month of the quarter.

There were no transfers between Level 1 and Level 2, or between Level 2 and Level 3 for the six-month period ended in June 30, 2018.

The following table presents the changes in Level 3 assets and liabilities for the six-month period ended in June 30, 2018:

	Derivative financial instruments	
	Financial assets	Financial liabilities
Balance at December 31, 2017	270	209
Gain and losses recognized in income statement	(35)	(34)
Balance at June 30, 2018	235	175

Table of Contents

Methods and techniques of evaluation

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 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.

The fair value for derivatives are within level 3 are measured using discounted cash flows and option model valuation techniques with main unobservable inputs discount rates, stock prices and commodities prices.

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

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

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, 2018				
Debt principal	17,470	17,677	11,006	6,671
December 31, 2017				
Debt principal	21,955	23,088	14,935	8,153

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, 2018		December 31, 2017	
	Current	Non-current	Current	Non-current
Assets				
Derivatives not designated as hedge accounting				
Foreign exchange and interest rate risk				
CDI & TJLP vs. US\$ fixed and floating rate swap	11		38	
IPCA swap	5	69	9	82
Eurobonds swap		24		27
Pré-dolar swap	18	2	22	32
	34	95	69	141
Commodities price risk				
Nickel	19		22	3
Bunker oil	74		15	
	93		37	3
Others		259		309
		259		309
Total	127	354	106	453

Table of Contents

	June 30, 2018		December 31, 2017	
	Current	Non-current	Current	Non-current
Liabilities				
Derivatives not designated as hedge accounting				
Foreign exchange and interest rate risk				
CDI & TJLP vs. US\$ fixed and floating rate swap	192	357	95	410
IPCA swap	37	49		41
Eurobonds swap	5		4	
Pré-dólar swap	9	36	5	24
	243	442	104	475
Commodities price risk				
Nickel	6			
Bunker oil	1			
	7			
Others		177		211
		177		211
Total	250	619	104	686

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

	Gain (loss) recognized in the income statement			
	Three-month period ended June 30,		Six-month period ended June 30,	
	2018	2017	2018	2017
Derivatives not designated as hedge accounting				
Foreign exchange and interest rate risk				
CDI & TJLP vs. US\$ fixed and floating rate swap	(232)	(94)	(197)	87
IPCA swap	(64)	(18)	(45)	6
Eurobonds swap	(39)	29	(8)	2
Euro forward				46
Pré-dólar swap	(52)	(13)	(33)	10
	(387)	(96)	(283)	151
Commodities price risk				
Nickel	6	(4)	10	(4)
Bunker oil	66	(18)	66	(90)
	72	(22)	76	(94)
Others	9	27	(9)	61
Total	(306)	(91)	(216)	118

Financial settlement inflows (outflows)
Three-month period ended June 30, **Six-month period ended June 30,**

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

	2018	2017	2018	2017
Derivatives not designated as hedge accounting				
Foreign exchange and interest rate risk				
CDI & TJLP vs. US\$ fixed and floating rate swap	(16)	3	(62)	(41)
IPCA swap	7		7	
Eurobonds swap	(4)		(4)	(39)
Pré-dolar swap	16	(1)	16	(1)
	3	2	(43)	(81)
Commodities price risk				
Nickel	10	(5)	22	(6)
Bunker oil	(1)		8	(23)
	9	(5)	30	(29)
Others				
Total	12	(3)	(13)	(110)

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

	Last maturity dates
Currencies and interest rates	January 2024
Bunker oil	September 2018
Nickel	December 2019
Others	December 2027

Table of Contents

c) Hedge in foreign operations

As at June 30, 2018 the carrying value of the debts designated as instrument hedge of the Company's investment in foreign operations (Vale International S.A. and Vale International Holding GmbH; hedging objects) are US\$4,124 and EUR750, respectively. The foreign exchange loss of US\$856 (US\$565, net of taxes), was recognized in the Cumulative translation adjustments in stockholders' equity for the six-month period ended June 30, 2018. This hedge was highly effective throughout the period ended June 30, 2018.

Additional information about derivatives financial instruments

In millions of United States dollars, except as otherwise stated

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.

The following tables detail the derivatives positions for Vale and its controlled companies as of June 30, 2018, 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.

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

Flow	Notional				Index	Average rate	Fair value June 30, 2018 December 31, 2017	Financial Settlement Inflows (Outflows) June 30, 2018	Value at Risk June 30, 2018	Fair value by year			
	June 30, 2018	December 31, 2017	June 30, 2018	2018						2019	2020+		
CDI vs. US\$ fixed rate swap													
Receivable	R\$ 1,690	R\$ 3,540	CDI	101.33%		(54)	(33)	(18)	7	(13)	(9)	(32)	
Payable	US\$ 509	US\$ 1,104	Fix	3.35%									
TJLP vs. US\$ fixed rate swap													
Receivable			TJLP	+	1.23%	(426)	(380)	(42)	26	(59)	(304)	(63)	
Payable	US\$ 1,154	US\$ 1,323	Fix	1.51%									
TJLP vs. US\$ floating rate swap													
Receivable			TJLP	+	0.86%	(58)	(54)	(2)	2	(3)	(55)		
Payable	US\$ 115	US\$ 123	Libor	+	-1.23%								
R\$ fixed rate vs. US\$ fixed rate swap													
Receivable	R\$ 1,118	R\$ 1,158	Fix	7.31%		(25)	25	16	19	(4)	(1)	(20)	
Payable	US\$ 368	US\$ 385	Fix	-0.72%									
IPCA vs. US\$ fixed rate swap													
Receivable			IPCA	+	6.55%	(84)	(35)	7	7	(34)	(50)		
Payable	US\$ 434	US\$ 434	Fix	3.98%									
IPCA vs. CDI swap													
Receivable			IPCA	+	6.62%	72	85		0.2	2	0	70	
Payable	R\$ 1,350	R\$ 1,350	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 December 31, 2017	Financial Settlement Inflows (Outflows) June 30, 2018	Value at Risk June 30, 2018	Fair value by year			
	December 31, 2017	December 31, 2017	June 30, 2018	2018						2019	2020+		

	June 30, 2018				June 30, 2018					
EUR fixed rate vs. US\$ fixed rate swap					19	23	(4)	8	(5)	24
Receivable	500	500	Fix	3.75%						
Payable	US\$ 613	US\$ 613	Fix	4.29%						

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 hedging transactions were implemented, through options contracts.

Table of Contents

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.

Flow	Notional (ton)		Bought / Sold	Average strike (US\$/ton)	Fair value		Financial settlement	Value at Risk	Fair value
	June 30, 2018	December 31, 2017			June 30, 2018	December 31, 2017	Inflows (Outflows) June 30, 2018	June 30, 2018	by year 2018
Call options	2,025,000		B	442	66		1	14	66
Put options	2,025,000		S	321	(1)			0	(1)
Total					65		1	14	65

As at June 30, 2018 and December 31, 2017, includes US\$8 and US\$15, respectively, of transactions in which the financial settlement occurs subsequently of the closing month.

(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.

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 / Sold	Average strike (US\$/ton)	Fair value		Financial settlement	Value at Risk	Fair value by year	
	June 30, 2018	December 31, 2017			June 30, 2018	December 31, 2017	Inflows (Outflows) June 30, 2018	June 30, 2018	2018	2019

Fixed price sales protection										
Nickel forwards	11,374	9,621	B	13,385	17	24	22	5	11	6
Raw material purchase protection										
Nickel forwards	155	292	S	14,182	(0.1)	(0.3)	(0.7)	0.1	(0.1)	
Copper forwards	54	79	S	6,894	0.0	(0.0)	(0.0)	0.0	0.0	
Total					(0.1)	(0.4)	(0.7)	0.1	(0.1)	

c) Freight derivative positions

In order to reduce the impact of maritime freight price volatility on the company's cash flow, freight hedging transactions were implemented, through Forward Freight Agreements (FFAs). The protected item is part of Vale's costs linked to maritime freight spot prices. The financial settlement inflows/outflows of the FFAs are offset by the protected items' losses/gains due to freight prices changes.

The Forward Freight Agreements (FFAs) are contracts traded over the counter and can be cleared through a Clearing House, in this case subject to margin requirements.

Flow	Notional (days)		Bought / Sold	Average strike (US\$/day)	June 30, 2018	Fair value December 31, 2017	Financial Settlement Inflows (Outflows) June 30, 2018	Fair value Value at Risk June 30, 2018	Fair value by year 2018
	June 30, 2018	December 31, 2017							
Freight forwards	75	0	B	20,170	0.1		0	0.1	0.1

d) Wheaton Precious Metals Corp. warrants

The company owns warrants of Wheaton Precious Metals Corp. (WPM), 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 part of gold payable flows produced as a sub product from Salobo copper mine and some nickel mines in Sudbury.

Table of Contents

Flow	Notional (quantity)		Bought / Sold	Average strike (US\$/share)	June 30, 2018	Fair value December 31, 2017	Financial settlement Inflows (Outflows) June 30, 2018	Value at Risk June 30, 2018	Fair value by year 2023
	June 30, 2018	December 31, 2017							
Call options	10,000,000	10,000,000	B	44	24	39		3	24

e) **Debentures convertible into shares of Valor da Logística Integrada (VLI)**

The company has debentures in which lenders have the option to convert the outstanding debt into a specified quantity of shares of VLI owned by the company.

Flow	Notional (quantity)		Bought / Sold	Average strike (R\$/share)	June 30, 2018	Fair value December 31, 2017	Financial settlement Inflows (Outflows) June 30, 2018	Value at Risk June 30, 2018	Fair value by year 2027
	June 30, 2018	December 31, 2017							
Conversion options	140,239	140,239	S	8,549	(56)	(57)		3	(56)

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

The Company entered into a stock sale and purchase agreement that has options related to MBR shares. Mainly, the Company has the right to buy back this non-controlling interest in the subsidiary. Moreover, 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.

Flow	Notional (quantity, in millions)		Bought / Sold	Average strike (R\$/share)	June 30, 2018	Fair value December 31, 2017	Financial settlement Inflows (Outflows) June 30, 2018	Value at Risk June 30, 2018	Fair value by year 2018+
	June 30, 2018	December 31, 2017							
Options	2,139	2,139	B/S	1.6	219	251		13	219

g) **Embedded derivatives in 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)				June 30, 2018	Fair value December 31, 2017	Financial settlement Inflows (Outflows) June 30, 2018	Value at Risk June 30, 2018	Fair value by year	
	June 30, 2018	December 31, 2017	Bought / Sold	Average strike (US\$/ton)					2018	2018
Nickel forwards	4,584	2,627	S	14,281	(4)	1		2		(4)
Copper forwards	2,043	2,718	S	6,866	(0)	0		0		(0)
Total					(4)	1		2		(4)

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.

Flow	Notional (volume/month)				June 30, 2018	Fair value December 31, 2017	Financial settlement Inflows (Outflows) June 30, 2018	Value at Risk June 30, 2018	Fair value by year	
	June 30, 2018	December 31, 2017	Bought / Sold	Average strike (US\$/ton)					2018	2018
Call options	746,667	746,667	S	233	(2)	(2)		1	(0)	(2)

In August 2014 the Company sold part of its stake in Valor da Logística Integrada (VLI) to an investment fund managed by Brookfield Asset Management (Brookfield). The sales contract includes a clause that establishes, under certain conditions, a minimum return guarantee on Brookfield's investment. This clause is considered an embedded derivative, with payoff equivalent to that of a put option.

Flow	Notional (quantity)				June 30, 2018	Fair value December 31, 2017	Financial Settlement Inflows (Outflows) June 30, 2018	Value at Risk June 30, 2018	Fair value by year	
	June 30, 2018	December 31, 2017	Bought / Sold	Average strike (US\$/Share)					2018	2027
Put option	1,105,070,863	1,105,070,863	S	3.86	(103)	(133)		9		(103)

For sensitivity analysis of derivative financial instruments, financial counter parties ratings and market curves please see note 26.

Table of Contents**21. Provisions**

	Current liabilities		Non-current liabilities	
	June 30, 2018	December 31, 2017	June 30, 2018	December 31, 2017
Payroll, related charges and other remunerations (i)	694	1,101		
Onerous contracts	115	102	302	364
Environment Restoration	23	30	84	79
Asset retirement obligations	72	87	2,924	3,081
Provisions for litigation (note 22)			1,334	1,473
Employee postretirement obligations (note 23)	101	74	1,923	2,030
Provisions	1,005	1,394	6,567	7,027

(i) Change mainly due to payment of profit sharing program.

22. 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:

	Tax litigation	Civil litigation	Labor litigation	Environmental litigation	Total of litigation provision
Balance at December 31, 2017	750	131	582	10	1,473
Additions (reversals)	5	17	53	(3)	72
Payments		(16)	(38)	(1)	(55)
Additions - discontinued operations	21	1	16		38
Indexation and interest	14	13	(3)		24
Translation adjustment	(108)	(24)	(85)	(1)	(218)

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

Balance at June 30, 2018	682	122	525	5	1,334
	Tax litigation	Civil litigation	Labor litigation	Environmental litigation	Total of litigation provision
Balance at December 31, 2016	214	84	534	7	839
Additions (reversals)	(11)	(8)	45	3	29
Payments	(89)	(7)	(47)		(143)
Indexation and interest	(1)	10	13	(1)	21
Translation adjustment	6		(8)	(1)	(3)
Balance at June 30, 2017	119	79	537	8	743

Table of Contents**b) Contingent liabilities**

Contingent liabilities are administrative and judicial claims, with expectation of loss classified as possible, and for which the recognition of a provision is not considered necessary by the Company, based on legal advice. The contingent liabilities are as follows:

	June 30, 2018	December 31, 2017
Tax litigation	8,609	8,840
Civil litigation	1,716	1,623
Labor litigation	1,743	1,952
Environmental litigation	1,976	2,190
Total	14,044	14,605

i - Tax litigation - Our most significant tax-related contingent liabilities result from disputes related to (i) the deductibility of our payments of social security contributions on the net income (CSLL) from our taxable income, (ii) challenges of certain tax credits we deducted from our PIS and COFINS payments, (iii) assessments of CFEM (royalties), and (iv) charges of value-added tax on services and circulation of goods (ICMS), especially relating to certain tax credits we claimed from the sale and transmission of energy, ICMS charges to anticipate the payment in the entrance of goods to Pará State and ICMS/penalty charges on our own transportation. The changes reported in the period resulted, mainly, from new proceedings related to PIS, COFINS, CFEM, ICMS e ISS and the application interest and inflation adjustments to the disputed amounts.

ii - Civil litigation - Most of those claims 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 related to contractual disputes regarding inflation index. The changes reported in the period resulted, mainly from review the process related to commercial divergences of supply contracts.

iii - Labor litigation - Represents individual claims by employees and service providers, primarily involving demands for additional compensation for overtime work, time spent commuting or health and safety conditions; and 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.

	June 30, 2018	December 31, 2017
Tax litigation	1,057	1,201
Civil litigation	40	60
Labor litigation	635	712
Environmental litigation	12	13
Total	1,744	1,986

d) Contingencies related to Samarco accident

(i) Public civil claim 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\$5.2 billion (R\$20.2 billion).

The Framework Agreement signed in March 2016, was ratified by the Regional Federal Court (TRF) in May 2016. This ratification was suspended by the Superior Court of Justice (STJ) in June 2016 and resulted in the restoration of the public civil action, and maintained other measures, such as: (a) the prohibition of 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; (b) the order of the deposit with the court of US\$311 (R\$1.2 billion) by January 2017, which was provisionally replaced by the guarantees provided for under the agreements with Federal Prosecution Office (MPF), as detailed in the item (ii) below. This public civil action is currently suspended by the abovementioned agreement with the MPF.

Table of Contents

On June 2018, the parties in the action jointly with the Minas Gerais State, Espírito Santo State and Federal Public Prosecution Offices along with the Federal and Minas Gerais and Espírito Santo States Public Defenders Offices, entered into a new agreement to settle the case, which was submitted to the 12th Federal Lower Court and if and when homologated by the judge, it will terminate the action.

(ii) Public civil action filed by Federal Prosecution Office

On May 3, 2016, the Federal Prosecution Office (MPF) filed a public civil action against Samarco and its shareholders and presented several claims, including: (i) the adoption of measures for mitigating the social, economic and environmental impacts resulting from the dam failure and other emergency measures; (ii) the payment of compensation to the community; and (iii) payments for the collective moral damage. The action value indicated by the MPF is US\$40 billion (R\$155 billion).

In January 2017 Samarco, Vale S.A. and BHPB entered into two preliminary agreements with the 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 30, 2017, which was, nevertheless, extended by the parties to late June 2018.

This First Agreement establishes a timeline and actions to set the ground for conciliation of two public civil actions in the amounts of US\$5.2 billion (R\$20.2 billion) and US\$40 billion (R\$155 billion), mentioned above, which are currently suspended.

In addition, the First Agreement provides for: (a) the appointment of experts to give support to the Federal Prosecutors and paid for by the companies to conduct a diagnosis and monitor the progress of the programs under the Framework Agreement, and (b) holding at public hearings and the engagement of technical assistance to the affected people, in order to allow the communities to take part in the definition of the content of the Final Agreement.

Samarco, Vale S.A. and BHPB has agreed to provide a guarantee for fulfillment of the obligations regarding the financing and payment of the socio-environmental and socio-economic remediation programs resulting from the Fundão dam failure, pursuant to the two public civil actions, until the signing of the Final Agreement, amounting to US\$571 (R\$2.2 billion), of which (i) US\$26 (R\$100 million) in financial investments; (ii) US\$337 (R\$1.3 billion) in insurance bonds; and (iii) US\$208 (R\$800 million) in assets of Samarco. If, by the deadline negotiated by the parties, the negotiations have not been completed, the Federal Prosecutor's Office may require that the Court re-institute the order for the deposit of US\$311 (R\$1.2 billion) in relation to the US\$5.2 billion (R\$20.2 billion) public civil action and US\$2.0 billion (R\$7.7 billion) related US\$40 billion (R\$155 billion), mentioned above, which are currently suspended.

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

On March 16, 2017, the 12th Judicial Federal Court of Belo Horizonte partially ratified the First Agreement, which decision includes: (i) ratification of the engagement of experts to perform a socio-environmental impact assessment and assessment of programs under the Framework Agreement 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.

In addition, the Second Agreement (Second Agreement) was signed on January 19, 2017, 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\$52 (R\$200 million). The 12th Judicial Federal Court of Belo Horizonte ratified this Second Agreement.

Parties are still negotiating an agreement regarding the choice of the expert to perform the socio-economic impact assessment. In this regard, on November 16, 2017, they signed an addendum to the First Agreement, in which the parties defined matters related to the socio-economic impact assessment, its institutional structure and the respective experts, which, in the period of 90 days from the signing of the addendum, shall present their technical and commercial proposals. As the deadline already expired the proposals are being negotiated for service agreements.

As mentioned before, on June 2018, the agreement on the Public civil action in the amount of US\$5.2 billion (R\$20.2 billion) was ratified, in which was submitted to the 12th Federal Lower Court for confirmation. The claims of this public civil action which are contained in this new Agreement shall be dismissed with prejudice by the settlement, while the remaining claims will be suspended until the result of the technical analysis by the experts appointed out by the Prosecutors testing the satisfaction of the Programs or the proposal of the potential renegotiation of these programs.

Table of Contents

(iii) U.S. Securities class action suits

Related to the Vale's American Depositary Receipts

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.

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.

This lawsuit is currently ongoing under discovery with the gathering of documents to be provided to the plaintiffs. In addition, depositions of some custodians indicated by the parties should take place in the next few months.

Vale S.A. continues to contest the outstanding points related to this lawsuit.

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.

In June 2017 the defendants presented a joint motion to dismiss the claims requested by the plaintiffs. In March 2018, the Judge issued an order dismissing defendant's motion to dismiss without prejudice and ordering leading plaintiff to submit a final amended complaint, which was

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

presented by the plaintiffs on March 21, 2018. As a result, a second joint motion to dismiss the claims was filed by the defendants. A new decision regarding the merits of the motion to dismiss is expected to be issued by the Judge on the following months.

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.

In November 2016, the Federal Court of Ponte Nova received the complaint and began the criminal action, with the first of several witnesses filed in June, 2018.

(v) Other lawsuits

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

After the ratification by the judge of the 12th Federal Lower Court of the new Agreement with public authorities and public prosecutors, some public civil actions shall be extinguished.

Given the status of these lawsuits, it is not possible at this time to provide a range of possible outcomes or a reliable estimates of potential exposures for Vale S.A. Consequently, no contingent liability has been quantified and no provision was recognized for lawsuits related to Samarco's dam failure.

Table of Contents

e) Other

In 2015, the Company filed an enforceable action in the amount of US\$136 (R\$524 million) 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.

23. Employee postretirement obligations

Reconciliation of net liabilities recognized in the statement of financial position

	June 30, 2018				December 31, 2017			
	Overfunded pension plans	Underfunded pension plans	Other benefits	Total	Overfunded pension plans	Underfunded pension plans	Other benefits	Total
Amount recognized in the statement of financial position								
Present value of actuarial liabilities	(2,900)	(4,237)	(1,337)	(8,474)	(3,397)	(4,470)	(1,410)	(9,277)
Fair value of assets	4,082	3,550		7,632	4,828	3,776		8,604
Effect of the asset ceiling	(1,182)			(1,182)	(1,431)			(1,431)
Liabilities		(687)	(1,337)	(2,024)		(694)	(1,410)	(2,104)
Current liabilities		(53)	(48)	(101)		(16)	(58)	(74)
Non-current liabilities		(634)	(1,289)	(1,923)		(678)	(1,352)	(2,030)
Liabilities		(687)	(1,337)	(2,024)		(694)	(1,410)	(2,104)

24. Stockholders equity

a) Share capital

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

As at June 30, 2018, the share capital was US\$61,614 corresponding to 5,284,474,782 shares issued and fully paid without par value.

	ON	June 30, 2018 PNE	Total
Stockholders			
Litel Participações S.A. and Litela Participações S.A.	1,108,483,410		1,108,483,410
BNDES Participações S.A.	401,457,757		401,457,757
Bradespar S.A.	332,965,266		332,965,266
Mitsui & Co., Ltd	286,347,055		286,347,055
Foreign investors - ADRs	1,272,455,795		1,272,455,795
Foreign institutional investors in local market	1,177,545,592		1,177,545,592
FMP - FGTS	57,463,205		57,463,205
PIBB - Fund	2,762,968		2,762,968
Institutional investors	271,253,464		271,253,464
Retail investors in Brazil	286,697,569		286,697,569
Brazilian Government (Golden Share)		12	12
Outstanding shares	5,197,432,081	12	5,197,432,093
Shares in treasury	87,042,689		87,042,689
Total issued shares	5,284,474,770	12	5,284,474,782
Share capital per class of shares (in millions)	61,614		61,614
Total authorized shares	7,000,000,000		7,000,000,000

Table of Contents

b) Share buyback program

On July 25, 2018 (subsequent event), the Board of Directors approved a share buyback program for Vale's common share which will be limited to a maximum of 80,000,000 common shares, and their respective ADSs, and up to US\$1 billion. The program will be carried out over a period of up to 12-month period and the repurchased shares will be cancelled after the expiration of the program and/or alienated through the executive compensation programs. The shares will be acquired in the stock market based on regular trading conditions.

c) Remuneration to the Company's stockholders

On July 25, 2018 (subsequent event), the Board of Directors approved the payment of the stockholders' remuneration in the amount of US\$2,054 (R\$7,694 million) (US\$0.395195159 per share), US\$1,816 (R\$6,801 million) based on the interest on capital and US\$238 (R\$893 million) based on dividends. This payment is due to the new policy of stockholders' remuneration of the Company, approved in March 2018, which provides for a semi-annual payment of 30% of Adjusted EBITDA from continuing operations less sustaining investments. This amount will be reduced from the minimum mandatory remuneration for the year ended 2018 and deducted from the profit reserve, if necessary.

25. Related parties

The Company's related parties are subsidiaries, joint ventures, associates, shareholders and its related entities and key management personnel of the Company. Transactions between the parent company and its subsidiaries are eliminated on consolidation and are not disclosed in this note.

Related party transactions were made by the Company on terms equivalent to those that prevail in arm's-length transactions, with respect to price and market conditions that are no less favorable to the Company than those arranged with third parties.

Purchases, accounts receivable and other assets, and accounts payable and other liabilities relates largely to amounts charged by joint ventures and associates related to the pelletizing plants operational lease and railway transportation services.

Information about related party transactions and effects on the interim financial statements is set out below:

a) **Transactions with related parties**

	Three-month period ended June 30,								
	2018				2017				
	Joint Ventures	Associates	Major stockholders	Total	Joint Ventures	Associates	Major stockholders	Others	Total
Net operating revenue	72	77	53	202	60	80	35	8	183
Cost and operating expenses	(504)	(4)		(508)	(496)	(7)	(6)	(1)	(510)
Financial result	62		(96)	(34)	26		(228)	(2)	(204)

	Six-month period ended June 30,								
	2018				2017				
	Joint Ventures	Associates	Major stockholders	Total	Joint Ventures	Associates	Major stockholders	Others	Total
Net operating revenue	176	155	101	432	189	163	65	13	430
Cost and operating expenses	(1,008)	(25)		(1,033)	(826)	(15)	(12)	(2)	(855)
Financial result	102		(149)	(47)	13		(313)	(9)	(309)

Net operating revenue relates to sale of iron ore to the steelmakers and right to use capacity on railroads. Cost and operating expenses mostly relates to the operational leases of the pelletizing plants.

Table of Contents**b) Outstanding balances with related parties**

	June 30, 2018					December 31, 2017				
	Joint Ventures	Associates	Major stockholders	Others	Total	Joint Ventures	Associates	Major stockholders	Others	Total
Assets										
Cash and cash equivalents			1,349		1,349			817		817
Accounts receivable	66	56	5	16	143	73	38	3	17	131
Dividends receivable	92	7			99	112	14			126
Loans	1,913				1,913	4,526				4,526
Derivatives financial instruments			240		240			284		284
Other assets	16				16	17				17
Liabilities										
Supplier and contractors	450	21		13	484	192	20	201	15	428
Loans	241	1,267	3,030		4,538	612	1,245	4,508		6,365
Derivatives financial instruments			107		107			109		109
Other liabilities		60			60			16		16

Major stockholders

Refers to regular financial instruments with large financial institutions of which the stockholders are part of the controlling shareholders agreement .

Coal segment transactions

In March 2018, Nacala BV, a joint venture between Vale and Mitsui on the Nacala s logistic corridor, closed the project financing and repaid a portion of the shareholders loans from Vale, in the amount of US\$2,572. The outstanding receivable of US\$1,913 carries interest at 7.44% p.a. The Company has issued a financial guarantee in connection with the Project Finance of Nacala, in the proportion equivalent to its share in the Concessionaires (50%), and the fair value of this instrument is US\$20 as at June 30, 2018.

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

The loan from related parties mainly relates to the loan from Pangea Emirates Ltd, part of the group of shareholders which owns 15% interest on Vale Moçambique, in the amount of US\$1,200 (US\$1,166 as at December 31, 2017), which carries interest at 6.54% p.a.

Table of Contents**26. Additional information about derivatives financial instruments****a) 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:

- *Probable*: the probable scenario was based on the estimated risk variables that were used on pricing the derivative instruments as at June 30, 2018
- *Scenario I*: fair value estimated considering a 25% deterioration in the associated risk variables
- *Scenario II*: fair value estimated considering a 50% deterioration in the associated risk variables

Instrument	Instrument's main risk events	Probable	Scenario I	Scenario II
CDI vs. US\$ fixed rate swap	R\$depreciation	(54)	(184)	(312)
	US\$interest rate inside Brazil decrease	(54)	(60)	(66)
	Brazilian interest rate increase	(54)	(55)	(55)
Protected item: R\$ denominated debt	R\$depreciation	n.a.		
TJLP vs. US\$ fixed rate swap	R\$depreciation	(426)	(705)	(983)
	US\$interest rate inside Brazil decrease	(426)	(440)	(455)
	Brazilian interest rate increase	(426)	(441)	(455)
	TJLP interest rate decrease	(426)	(438)	(451)
Protected item: R\$ denominated debt	R\$depreciation	n.a.		
TJLP vs. US\$ floating rate swap	R\$depreciation	(58)	(85)	(113)
	US\$interest rate inside Brazil decrease	(58)	(59)	(61)
	Brazilian interest rate increase	(58)	(59)	(60)
	TJLP interest rate decrease	(58)	(59)	(60)
Protected item: R\$ denominated debt	R\$depreciation	n.a.		
R\$ fixed rate vs. US\$ fixed rate swap	R\$depreciation	(25)	(100)	(176)
		(25)	(38)	(51)

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

	US\$interest rate inside Brazil decrease			
	Brazilian interest rate increase	(25)	(45)	(63)
Protected item: R\$ denominated debt	R\$depreciation	n.a.		
IPCA vs. US\$ fixed rate swap	R\$depreciation	(84)	(195)	(306)
	US\$interest rate inside Brazil decrease	(84)	(90)	(96)
	Brazilian interest rate increase	(84)	(95)	(106)
	IPCA index decrease	(84)	(90)	(96)
Protected item: R\$ denominated debt	R\$depreciation	n.a.		
IPCA vs. CDI swap	Brazilian interest rate increase	72	47	25
	IPCA index decrease	72	59	46
Protected item: R\$ denominated debt linked to IPCA	IPCA index decrease	n.a.	(59)	(46)
EUR fixed rate vs. US\$ fixed rate swap	EUR depreciation	19	(151)	(322)
	Euribor increase	19	13	6
	US\$Libor decrease	19	0	(20)
Protected item: EUR denominated debt	EUR depreciation	n.a.	151	322

Table of Contents

Instrument	Instrument's main risk events	Probable	Scenario I	Scenario II
Bunker Oil protection				
Options	Bunker Oil price decrease	65	(26)	(187)
Protected item: Part of costs linked to bunker oil prices	Bunker Oil price decrease	n.a.	26	187
Maritime Freight protection				
Forwards	Freight price decrease	0.1	(0.3)	(0.7)
Protected item: Part of costs linked to maritime freight prices	Freight price decrease	n.a.	0.3	0.7
Nickel sales fixed price protection				
Forwards	Nickel price decrease	17	(24)	(65)
Protected item: Part of nickel revenues with fixed prices	Nickel price fluctuation	n.a.	24	65
Purchase protection program				
Nickel forwards	Nickel price increase	(0)	(1)	(1)
Protected item: Part of costs linked to nickel prices	Nickel price increase	n.a.	1	1
Copper forwards	Copper price increase	0.0	(0.1)	(0.2)
Protected item: Part of costs linked to copper prices	Copper price increase	n.a.	0.1	0.2
WPM warrants	WPM stock price decrease	24	10	2
Conversion options - VLI	VLI stock value increase	(56)	(89)	(134)
Options - MBR	MBR stock value decrease	219	144	81

Instrument	Main risks	Probable	Scenario I	Scenario II
Embedded derivatives - Raw material purchase (nickel)	Nickel price increase	(4)	(21)	(38)
Embedded derivatives - Raw material purchase (copper)	Copper price increase	(0)	(4)	(7)
Embedded derivatives - Gas purchase	Pellet price increase	(2)	(4)	(7)
Embedded derivatives - Guaranteed minimum return (VLI)	VLI stock value decrease	(103)	(222)	(420)

Table of Contents**b) Financial counterparties rating**

The transactions of derivative instruments, cash and cash equivalents as well as investment are held with financial institutions whose exposure limits are periodically reviewed and approved by the delegated authority. The financial institutions credit risk is performed through a methodology that considers, among other information, ratings provided by international rating agencies.

The table below presents the ratings published by agencies Moody's and S&P regarding the main financial institutions that we had outstanding positions as of June 30, 2018.

Long term ratings by counterparty	Moody's	S&P
ANZ Australia and New Zealand Banking	Aa3	AA-
Banco ABC	Ba3	BB-
Banco Bradesco	Ba3	BB-
Banco do Brasil	Ba3	BB-
Banco de Credito del Peru	Baa1	BBB+
Banco do Nordeste	Ba3	BB-
Banco Safra	Ba3	BB-
Banco Santander	A2	A
Banco Votorantim	Ba3	BB-
Bank of America	A3	A-
Bank of China	A1	A
Bank of Mandiri	Baa2	BB+
Bank of Nova Scotia	A1	A+
Bank Rakyat	Baa2	BB+
Bank of Tokyo Mitsubishi UFJ	A1	A-
Banpará		BB-
Barclays	Baa3	BBB
BBVA	A3	A-
BNP Paribas	Aa3	A
BTG Pactual	Ba3	BB-
Caixa Economica Federal	Ba3	BB-
Canadian Imperial Bank	A1	A+
China Construction Bank	A1	A
CIMB Bank	A3	A-
Citigroup	Baa1	BBB+
Credit Agricole	A1	A
Credit Suisse	Baa2	BBB+
Deutsche Bank	Baa2	BBB+
Goldman Sachs	A3	BBB+
HSBC	A2	A
Intesa Sanpaolo Spa	Baa1	BBB
Itaú Unibanco	Ba3	BB

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

JP Morgan Chase & Co	A3	A-
Macquarie Group Ltd	A3	BBB
Mega Int. Commercial Bank	A1	A
Mizuho Financial	A1	A-
Morgan Stanley	A3	BBB+
National Australia Bank NAB	Aa3	AA-
National Bank of Oman	Baa3	
Natixis	A1	A
Rabobank	Aa3	A+
Royal Bank of Canada	A1	AA-
Societe Generale	A1	A
Standard Bank Group	Ba1	
Standard Chartered	A2	BBB+
Sumitomo Mitsui Financial	A1	A-
UBS	Aa3	A-
Unicredit	Baa1	BBB

Table of Contentsc) **Market curves**

The curves used on the pricing of derivatives instruments were developed based on data from B3, Central Bank of Brazil, London Metals Exchange and Bloomberg.

(i) **Products****Nickel**

Maturity	Price (US\$/ton)	Maturity	Price (US\$/ton)	Maturity	Price (US\$/ton)
SPOT	14,910	DEC18	14,970	JUN19	15,064
JUL18	14,851	JAN19	14,988	JUN20	15,217
AUG18	14,879	FEB19	15,005	JUN21	15,339
SEP18	14,903	MAR19	15,023	JUN22	15,444
OCT18	14,928	APR19	15,039		
NOV18	14,949	MAY19	15,053		

Copper

Maturity	Price (US\$/lb)	Maturity	Price (US\$/lb)	Maturity	Price (US\$/lb)
SPOT	2.95	DEC18	3.01	JUN19	3.03
JUL18	3.01	JAN19	3.02	JUN20	3.04
AUG18	3.01	FEB19	3.02	JUN21	3.05
SEP18	3.01	MAR19	3.02	JUN22	3.05
OCT18	3.01	APR19	3.02		
NOV18	3.01	MAY19	3.03		

Bunker Oil

Maturity	Price (US\$/ton)	Maturity	Price (US\$/ton)	Maturity	Price (US\$/ton)
SPOT	461	DEC18	444	JUN19	422
JUL18	466	JAN19	441	JUN20	315

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

AUG18	466	FEB19	438	JUN21	289
SEP18	458	MAR19	434	JUN22	248
OCT18	452	APR19	431		
NOV18	448	MAY19	427		

Maritime Freight (Capesize 5TC)

Maturity	Price (US\$/day)	Maturity	Price (US\$/day)	Maturity	Price (US\$/day)
SPOT	18,110	DEC18	23,050	JUN19	16,130
JUL18	18,110	JAN19	14,570	Cal 2019	19,375
AUG18	18,710	FEB19	14,570	Cal 2020	19,120
SEP18	21,410	MAR19	14,570	Cal 2021	16,610
OCT18	23,190	APR19	16,130	Cal 2022	15,620
NOV18	24,290	MAY19	16,130		

(ii) **Foreign exchange and interest rates**

US\$-Brazil Interest Rate

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
08/01/18	4.25	06/03/19	4.33	10/01/21	4.88
09/03/18	3.66	07/01/19	4.38	01/03/22	4.90
10/01/18	3.63	10/01/19	4.57	04/01/22	4.95
11/01/18	3.70	01/02/20	4.67	07/01/22	4.97
12/03/18	3.66	04/01/20	4.70	10/03/22	5.03
01/02/19	3.81	07/01/20	4.73	01/02/23	5.03
02/01/19	3.92	10/01/20	4.76	04/03/23	5.08
03/01/19	4.08	01/04/21	4.80	07/03/23	5.12
04/01/19	4.08	04/01/21	4.84	01/02/24	5.22
05/02/19	4.20	07/01/21	4.87	07/01/24	5.33

Table of Contents**US\$ Interest Rate**

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
1M	2.10	6M	2.52	11M	2.60
2M	2.18	7M	2.54	12M	2.61
3M	2.33	8M	2.56	2Y	2.85
4M	2.42	9M	2.58	3Y	2.97
5M	2.48	10M	2.59	4Y	3.04

TJLP

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
08/01/18	6.60	06/03/19	6.60	10/01/21	6.60
09/03/18	6.60	07/01/19	6.60	01/03/22	6.60
10/01/18	6.60	10/01/19	6.60	04/01/22	6.60
11/01/18	6.60	01/02/20	6.60	07/01/22	6.60
12/03/18	6.60	04/01/20	6.60	10/03/22	6.60
01/02/19	6.60	07/01/20	6.60	01/02/23	6.60
02/01/19	6.60	10/01/20	6.60	04/03/23	6.60
03/01/19	6.60	01/04/21	6.60	07/03/23	6.60
04/01/19	6.60	04/01/21	6.60	01/02/24	6.60
05/02/19	6.60	07/01/21	6.60	07/01/24	6.60

BRL Interest Rate

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
08/01/18	6.40	06/03/19	7.50	10/01/21	10.00
09/03/18	6.53	07/01/19	7.60	01/03/22	10.18
10/01/18	6.51	10/01/19	7.99	04/01/22	10.35
11/01/18	6.58	01/02/20	8.32	07/01/22	10.53
12/03/18	6.70	04/01/20	8.58	10/03/22	10.68
01/02/19	6.83	07/01/20	8.82	01/02/23	10.80
02/01/19	6.92	10/01/20	9.10	04/03/23	10.92
03/01/19	7.07	01/04/21	9.31	07/03/23	11.00
04/01/19	7.23	04/01/21	9.52	01/02/24	11.21
05/02/19	7.37	07/01/21	9.77	07/01/24	11.39

Implicit Inflation (IPCA)

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

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
08/01/18	3.65	06/03/19	4.72	10/01/21	4.66
09/03/18	3.77	07/01/19	4.82	01/03/22	4.73
10/01/18	3.75	10/01/19	4.61	04/01/22	4.81
11/01/18	3.83	01/02/20	4.54	07/01/22	4.91
12/03/18	3.94	04/01/20	4.43	10/03/22	4.99
01/02/19	4.07	07/01/20	4.40	01/02/23	5.05
02/01/19	4.15	10/01/20	4.41	04/03/23	5.12
03/01/19	4.30	01/04/21	4.42	07/03/23	5.16
04/01/19	4.45	04/01/21	4.46	01/02/24	5.29
05/02/19	4.60	07/01/21	4.56	07/01/24	5.41

EUR Interest Rate

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
1M	-0.39	6M	-0.29	11M	-0.25
2M	-0.37	7M	-0.28	12M	-0.25
3M	-0.36	8M	-0.27	2Y	-0.17
4M	-0.32	9M	-0.26	3Y	-0.04
5M	-0.30	10M	-0.26	4Y	0.13

CAD Interest Rate

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
1M	1.67	6M	1.94	11M	1.10
2M	1.71	7M	1.67	12M	1.02
3M	1.77	8M	1.49	2Y	2.30
4M	1.86	9M	1.34	3Y	2.44
5M	1.91	10M	1.21	4Y	2.54

Currencies - Ending rates

CAD/US\$	0.7610	US\$/BRL	3.8558	EUR/US\$	1.1583
----------	--------	----------	--------	----------	--------

Table of Contents

Signatures

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

Vale S.A.
(Registrant)

By:

/s/ André Figueiredo
Director of Investor Relations

Date: July 25, 2018
