

Vale S.A.  
Form 6-K  
October 27, 2016  
[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**

**September, 2016**

**Vale S.A.**

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

(Address of principal executive office)

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

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

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

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

(Check One) Yes  No

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

(Check One) Yes  No

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

(Check One) Yes  No

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

---

Table of Contents

**Interim Financial Statements**

**September 30, 2016**

BRGAAP in R\$ (English)

Table of Contents

**Vale S.A. Interim Financial Statements**

**Contents**

	<b>Page</b>
Report on the review of quarterly information ITR	3
<u>Condensed Consolidated and Parent Company Income Statement</u>	4
<u>Condensed Consolidated and Parent Company Statement of Comprehensive Income</u>	5
<u>Condensed Consolidated and Parent Company Cash Flow Statement</u>	6
<u>Condensed Consolidated and Parent Company Balance Sheet</u>	8
<u>Condensed Statement of Changes in Equity</u>	9
<u>Condensed Consolidated and Parent Company Value Added Statement</u>	10
<u>Selected Notes to the Interim Financial Statements</u>	11
<u>1. Corporate information</u>	11
<u>2. Basis for preparation of the interim financial statements</u>	11
<u>3. Information by business segment</u>	13
<u>4. Liabilities related to associates and joint ventures</u>	18
<u>5. Non-current assets and liabilities held for sale</u>	21
<u>6. Acquisitions and divestitures</u>	21
<u>7. Cash and cash equivalents</u>	22
<u>8. Accounts receivable</u>	22
<u>9. Inventories</u>	22
<u>10. Investments in associates and joint ventures</u>	23
<u>11. Intangibles</u>	25
<u>12. Property, plant and equipment</u>	26
<u>13. Loans and borrowings</u>	27
<u>14. Litigation</u>	29
<u>15. Income taxes</u>	31
<u>16. Employee postretirement obligations</u>	32
<u>17. Financial instruments classification</u>	32
<u>18. Fair value estimate</u>	33
<u>19. Derivative financial instruments</u>	33
<u>20. Stockholders' equity</u>	44
<u>21. Costs and expenses by nature</u>	45
<u>22. Financial results</u>	46
<u>23. Deferred revenue - Gold stream</u>	46
<u>24. Commitments</u>	47
<u>25. Related parties</u>	48
<u>26. Parent Company information (individual interim information)</u>	51
<u>Members of the Board of Directors, Fiscal Council, Advisory Committees and Executive Officers</u>	56

**KPMG Auditores Independentes**  
Av. Almirante Barroso, 52 - 4º  
20031-000 - Rio de Janeiro, RJ - Brasil  
Caixa Postal 2888  
20001-970 - Rio de Janeiro, RJ - Brasil

Central Tel 55 (21) 3515-9400  
Fax 55 (21) 3515-9000  
Internet www.kpmg.com.br

**Report on the review of quarterly information - ITR**

(A free translation of the original report in Portuguese, as filed with the Brazilian Securities and Exchange Commission (CVM), prepared in accordance with the accounting practices adopted in Brazil, rules of the CVM and of the International Financial Reporting Standards - IFRS)

To

The Board of Directors and Stockholders of

Vale S.A.

Rio de Janeiro - RJ

**Introduction**

1. We have reviewed the interim accounting information of Vale S.A. ( the Company ), included in the quarterly information form - ITR for the quarter ended September 30, 2016, which comprises the individual and consolidated balance sheets as of September 30, 2016 and the respective individual and consolidated statements of income and comprehensive income for the three and nine months periods ended on September 30, 2016, the individual and consolidated statements of changes in stockholders' equity for the nine-month period then ended and the individual statement of cash flows for the nine-month period and the consolidated statement of cash flows for the three and nine months periods then ended, including the explanatory notes.

2. The Company's Management is responsible for the preparation of these interim accounting information in accordance with the Accounting Pronouncement CPC 21(R1) *Demonstração Intermediária* and the international accounting rule IAS 34 - Interim Financial Reporting, issued by the *International Accounting Standards Board* - IASB, as well as the presentation of these information in accordance with the standards issued by the Brazilian Securities and Exchange Commission (CVM), applicable to the preparation of quarterly information - ITR. Our responsibility is to

express our conclusion on this interim accounting information based on our review.

**Scope of the review**

3. We conducted our review in accordance with Brazilian and International Interim Information Review Standards (*NBC TR 2410 - Revisão de Informações Intermediárias Executada pelo Auditor da Entidade* and ISRE 2410 - Review of Interim Financial Information Performed by the Independent Auditor of the Entity). A review of interim information consists of making inquiries primarily of the management responsible for financial and accounting matters and applying analytical procedures and other review procedures. The scope of a review is significantly less than an audit conducted in accordance with auditing standards and, accordingly, it did not enable us to obtain assurance that we were aware of all the material matters that would have been identified in an audit. Therefore, we do not express an audit opinion.

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.	<i>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.</i>
--	--

**Conclusion on the interim accounting information**

4. Based on our review, we are not aware of any fact that might lead us to believe that the individual and consolidated interim accounting information included in the aforementioned quarterly information was not prepared, in all material respects, in accordance with CPC 21(R1) and IAS 34, applicable to the preparation of the quarterly review - ITR, and presented in accordance with the standards issued by the Brazilian Securities and Exchange Commission.

**Other matters**

*Statements of added value*

5. We have also reviewed the individual and consolidated statements of added value for the nine-month period ended September 30, 2016, prepared under the responsibility of the Company's Management, for which presentation is required in the interim information in accordance with the standards issued by the CVM applicable to the preparation of quarterly information - ITR, and considered as supplementary information by IFRS, which does not require the presentation of the statements of added value. These statements were submitted to the same review procedures described previously and, based on our review, we are not aware of any fact that might lead us to believe that they were not prepared, in all material respects, in accordance with the individual and consolidated interim accounting information, taken as a whole.

Rio de Janeiro, October 26, 2016

KPMG Auditores Independentes

CRC SP-014428/O-6 F-RJ

*(Original report in Portuguese signed by)*

Manuel Fernandes Rodrigues de Sousa

Accountant CRC RJ-052428/O-2





Table of Contents**Condensed Income Statement**

In millions of Brazilian Reais, except as otherwise stated

	Notes	Consolidated		Nine months period ended	
		Three months period ended September 30	2015	2016	2015
Net operating revenue	3(c)	23,772	23,350	69,042	62,818
Cost of goods sold and services rendered	21(a)	(16,082)	(18,025)	(49,340)	(48,981)
<b>Gross profit</b>		<b>7,690</b>	<b>5,325</b>	<b>19,702</b>	<b>13,837</b>
<b>Operating (expenses) income</b>					
Selling and administrative expenses	21(b)	(495)	(458)	(1,453)	(1,501)
Research and evaluation expenses		(275)	(434)	(783)	(1,143)
Pre operating and operational stoppage		(395)	(936)	(1,197)	(2,491)
Other operating income (expenses), net	21(c)	176	(422)	(524)	(866)
		<b>(989)</b>	<b>(2,250)</b>	<b>(3,957)</b>	<b>(6,001)</b>
Results on measurement or sale of non-current assets	5 and 6	(110)	(189)	(338)	185
<b>Operating income</b>		<b>6,591</b>	<b>2,886</b>	<b>15,407</b>	<b>8,021</b>
Financial income	22	1,222	9,048	26,392	20,474
Financial expenses	22	(4,635)	(34,895)	(17,959)	(58,375)
Equity results in associates and joint ventures	10	149	(1,204)	1,396	(1,361)
Others results in associates and joint ventures	4 and 6	(106)		(4,105)	296
<b>Net income (loss) before income taxes</b>		<b>3,221</b>	<b>(24,165)</b>	<b>21,131</b>	<b>(30,945)</b>
<b>Income taxes</b>					
	15				
Current tax		(181)	(353)	(2,887)	(761)
Deferred tax		(1,174)	17,430	(6,411)	19,927
		<b>(1,355)</b>	<b>17,077</b>	<b>(9,298)</b>	<b>19,166</b>
<b>Net income (loss)</b>		<b>1,866</b>	<b>(7,088)</b>	<b>11,833</b>	<b>(11,779)</b>
Income (loss) attributable to noncontrolling interests		24	(425)	95	(721)
<b>Net income (loss) attributable to Vale's stockholders</b>		<b>1,842</b>	<b>(6,663)</b>	<b>11,738</b>	<b>(11,058)</b>
<b>Earnings per share attributable to Vale's stockholders:</b>					
<b>Basic and diluted earnings per share:</b>					
	20(b)				
Preferred share (R\$)		0.36	(1.29)	2.28	(2.15)
Common share (R\$)		0.36	(1.29)	2.28	(2.15)

Parent company

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

	Three months period ended September 30		Nine months period ended September 30	
	2016	2015	2016	2015
Net operating revenue	11,941	11,346	32,315	30,948
Cost of goods sold and services rendered	(7,552)	(6,846)	(21,599)	(20,037)
<b>Gross profit</b>	<b>4,389</b>	<b>4,500</b>	<b>10,716</b>	<b>10,911</b>
<b>Operating (expenses) income</b>				
Selling and administrative expenses	(265)	(266)	(754)	(845)
Research and evaluation expenses	(162)	(195)	(417)	(547)
Pre operating and operational stoppage	(167)	(129)	(506)	(353)
Equity results from subsidiaries	1,169	(1,759)	4,574	(3,359)
Other operating income (expenses), net	(312)	(155)	(830)	(504)
	<b>263</b>	<b>(2,504)</b>	<b>2,067</b>	<b>(5,608)</b>
Results on measurement or sale of non-current assets				546
<b>Operating income</b>	<b>4,652</b>	<b>1,996</b>	<b>12,783</b>	<b>5,849</b>
Financial income	1,296	9,190	25,006	19,652
Financial expenses	(4,464)	(31,518)	(17,122)	(52,858)
Equity results in associates and joint ventures	149	(1,204)	1,396	(1,361)
Others results in associates and joint ventures	(106)		(4,105)	55
<b>Net income (loss) before income taxes</b>	<b>1,527</b>	<b>(21,536)</b>	<b>17,958</b>	<b>(28,663)</b>
<b>Income taxes</b>				
Current tax	137	18	(2,161)	18
Deferred tax	178	14,855	(4,059)	17,587
	<b>315</b>	<b>14,873</b>	<b>(6,220)</b>	<b>17,605</b>
<b>Net income (loss)</b>	<b>1,842</b>	<b>(6,663)</b>	<b>11,738</b>	<b>(11,058)</b>

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

See Report on the review of quarterly information ITR.

Table of Contents**Condensed Statement of Comprehensive Income**

In millions of Brazilian Reais

	Consolidated			
	Three months period ended September 30		Nine months period ended September 30	
	2016	2015	2016	2015
<b>Net income (loss)</b>	<b>1,866</b>	<b>(7,088)</b>	<b>11,833</b>	<b>(11,779)</b>
<b>Other comprehensive income (loss):</b>				
<b>Items that will not be reclassified subsequently to the income statement</b>				
<b>Retirement benefit obligations</b>				
Gross balance for the period	(128)	(25)	(1,100)	(48)
Effect of taxes	43	6	340	80
	<b>(85)</b>	<b>(19)</b>	<b>(760)</b>	<b>32</b>
<b>Total items that will not be reclassified subsequently to the income statement</b>	<b>(85)</b>	<b>(19)</b>	<b>(760)</b>	<b>32</b>
<b>Items that may be reclassified subsequently to the income statement</b>				
<b>Cumulative translation adjustments</b>				
Gross balance for the period	787	24,733	(13,435)	36,846
Effect of taxes	55		(467)	
Transfer of realized results to net income, net of taxes			(266)	
	<b>842</b>	<b>24,733</b>	<b>(14,168)</b>	<b>36,846</b>
<b>Cash flow hedge</b>				
Gross balance for the period		254	23	1,812
Effect of taxes		(6)	(3)	(16)
Equity results in associates and joint ventures		(8)	16	(16)
Transfer of realized results to net income, net of taxes		(135)	(10)	(823)
		<b>105</b>	<b>26</b>	<b>957</b>
<b>Total of items that may be reclassified subsequently to the income statement</b>	<b>842</b>	<b>24,838</b>	<b>(14,142)</b>	<b>37,803</b>
<b>Total comprehensive income (loss)</b>	<b>2,623</b>	<b>17,731</b>	<b>(3,069)</b>	<b>26,056</b>
Comprehensive income (loss) attributable to noncontrolling interests	66	692	(835)	910
<b>Comprehensive income (loss) attributable to Vale's stockholders</b>	<b>2,557</b>	<b>17,039</b>	<b>(2,234)</b>	<b>25,146</b>

	Parent company			
	Three months period ended September 30		Nine months period ended September 30	
	2016	2015	2016	2015

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

<b>Net income (loss)</b>	<b>1,842</b>	<b>(6,663)</b>	<b>11,738</b>	<b>(11,058)</b>
<b>Other comprehensive income (loss):</b>				
<b>Items that will not be reclassified subsequently to the income statement</b>				
<b>Retirement benefit obligations</b>				
Gross balance for the period	(26)	(31)	(66)	(81)
Effect of taxes	10	11	23	27
Equity results in associates and joint ventures	(69)	1	(717)	86
	<b>(85)</b>	<b>(19)</b>	<b>(760)</b>	<b>32</b>
<b>Total items that will not be reclassified subsequently to the income statement</b>	<b>(85)</b>	<b>(19)</b>	<b>(760)</b>	<b>32</b>
<b>Items that may be reclassified subsequently to the income statement</b>				
<b>Cumulative translation adjustments</b>				
Gross balance for the period	800	23,616	(12,972)	35,215
Effect of taxes			(266)	
	<b>800</b>	<b>23,616</b>	<b>(13,238)</b>	<b>35,215</b>
<b>Cash flow hedge</b>				
Equity results in associates and joint ventures		105	26	957
		<b>105</b>	<b>26</b>	<b>957</b>
<b>Total of items that may be reclassified subsequently to the income statement</b>	<b>800</b>	<b>23,721</b>	<b>(13,212)</b>	<b>36,172</b>
<b>Total comprehensive income (loss)</b>	<b>2,557</b>	<b>17,039</b>	<b>(2,234)</b>	<b>25,146</b>

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

See Report on the review of quarterly information ITR.

Table of Contents**Condensed Cash Flow Statement**

In millions of Brazilian Reais

	Consolidated			
	Three months period ended September 30		Nine months period ended September 30	
	2016	2015	2016	2015
<b>Cash flow from operating activities:</b>				
Net income (loss) before income taxes	3,221	(24,165)	21,131	(30,945)
<b>Adjustments for:</b>				
Equity results from associates and joint ventures	(149)	1,204	(1,396)	1,361
Results on measurement or sale of non-current assets	(371)	189	(143)	(916)
Others results in associates and joint ventures			3,999	(296)
Depreciation, amortization and depletion	3,127	3,670	9,694	9,709
Financial results, net	3,413	25,847	(8,433)	37,901
<b>Changes in assets and liabilities:</b>				
Accounts receivable	(40)	1,210	(1,112)	1,898
Inventories	40	(1,171)	(91)	(690)
Suppliers and contractors	874	1,493	693	1,115
Payroll and related charges	(54)	188	88	(1,439)
Other taxes assets and liabilities, net	397	(318)	200	(1,429)
Deferred revenue - Gold stream (note 23) (ii)	1,683		1,683	1,670
Other assets and liabilities, net	(1,586)	386	(2,394)	1,169
<b>Cash provided from operations</b>	<b>10,555</b>	<b>8,533</b>	<b>23,919</b>	<b>19,108</b>
Interest on loans and borrowings paid	(1,381)	(1,445)	(4,520)	(3,760)
Derivatives received (paid), net (note 19)	(619)	(622)	(3,831)	(2,709)
Interest on participative stockholders debentures paid			(117)	
Income taxes	(384)	(166)	(1,259)	(1,069)
Income taxes - Settlement program	(362)	(325)	(1,056)	(950)
<b>Net cash provided by operating activities</b>	<b>7,809</b>	<b>5,975</b>	<b>13,136</b>	<b>10,620</b>
<b>Cash flow from investing activities:</b>				
Financial investments redeemed (invested)	227	180	221	917
Loans and advances granted	(231)	83	(430)	(87)
Additions to investments	(29)	(22)	(850)	(377)
Additions to property, plant and equipment and intangible (note 3(b))	(4,057)	(6,616)	(13,735)	(19,366)
Dividends and interest on capital received from associates and joint ventures	1	71	416	722
Proceeds from disposal of assets and investments	1,053	1,793	1,140	3,542
Proceeds from gold stream transaction	885		885	1,156
<b>Net cash used in investing activities</b>	<b>(2,151)</b>	<b>(4,511)</b>	<b>(12,353)</b>	<b>(13,493)</b>

<b>Cash flow from financing activities:</b>				
<b>Loans and borrowings (i)</b>				
Additions	5,091	3,772	23,046	12,196
Repayments	(6,458)	(3,287)	(17,409)	(5,930)
<b>Transactions with stockholders:</b>				
Dividends and interest on capital paid to Vale's stockholders				(3,101)
Dividends and interest on capital paid to noncontrolling interest	(433)		(702)	(35)
Transactions with noncontrolling stockholders		4,000	(69)	3,875
<b>Net cash provided by (used in) financing activities</b>	<b>(1,800)</b>	<b>4,485</b>	<b>4,866</b>	<b>7,005</b>
<b>Increase (decrease) in cash and cash equivalents</b>				
<b>Cash and cash equivalents in the beginning of the period</b>	<b>13,377</b>	<b>9,799</b>	<b>14,022</b>	<b>10,555</b>
Effect of exchange rate changes on cash and cash equivalents	193	1,722	(2,243)	2,783
<b>Cash and cash equivalents at end of the period</b>	<b>17,428</b>	<b>17,470</b>	<b>17,428</b>	<b>17,470</b>
<b>Non-cash transactions:</b>				
Additions to property, plant and equipment - capitalized loans and borrowing costs	556	689	1,995	1,789

(i) Includes transactions with related parties: Bradesco, Banco do Brasil and Banco Nacional do Desenvolvimento Econômico e Social - BNDES.

(ii) Net of warrants

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

See Report on the review of quarterly information ITR.

Table of Contents**Condensed Cash Flow Statement**

In millions of Brazilian Reais

	Parent company	
	Nine months period ended September 30	
	2016	2015
<b>Cash flow from operating activities:</b>		
Net income (loss) before income taxes	17,958	(28,663)
<b>Adjustments for:</b>		
Equity results in associates and joint ventures	(1,396)	1,361
Equity results from subsidiaries	(4,574)	3,359
Others results in associates and joint ventures	3,999	(601)
Results on disposal of property, plant and equipment and intangibles	51	160
Depreciation, amortization and depletion	3,717	3,330
Financial results, net	(7,884)	33,206
<b>Changes in assets and liabilities:</b>		
Accounts receivable	4,634	(5,068)
Inventories	87	(173)
Suppliers and contractors	333	452
Payroll and related charges	153	(1,075)
Other taxes assets and liabilities, net	(85)	(540)
Other assets and liabilities, net	460	14,373
<b>Cash provided from operations</b>	<b>17,453</b>	<b>20,121</b>
Dividends and interest on capital received from subsidiaries	186	717
Interest on loans with related parties received (paid), net	(1,824)	(1,256)
Interest on loans and borrowings paid	(2,361)	(1,839)
Derivatives received (paid), net (note 19)	(790)	(649)
Interest on participative stockholders debentures paid	(117)	
Income taxes	(60)	
Income taxes - Settlement program	(1,035)	(930)
<b>Net cash provided by operating activities</b>	<b>11,452</b>	<b>16,164</b>
<b>Cash flow from investing activities:</b>		
Financial investments redeemed	(34)	374
Loans and advances received	(341)	65
Additions to investments	(1,334)	(5,109)
Additions to property, plant and equipment and intangible	(9,070)	(11,847)
Dividends and interest on capital received from associates and joint ventures	403	718
Proceeds from disposal of assets and investments	115	4,316
<b>Net cash used in investing activities</b>	<b>(10,261)</b>	<b>(11,483)</b>
<b>Cash flow from financing activities:</b>		
<b>Loans and borrowings (i)</b>		
Additions	8,221	14,503
Repayments	(9,011)	(9,839)

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

Transactions with related parties	(423)	
<b>Transactions with stockholders:</b>		
Dividends and interest on capital paid to noncontrolling interest		(3,101)
<b>Net cash provided by (used in) financing activities</b>	<b>(1,213)</b>	<b>1,563</b>
Increase (decrease) in cash and cash equivalents	(22)	6,244
Cash and cash equivalents in the beginning of the period	518	685
<b>Cash and cash equivalents at end of the period</b>	<b>496</b>	<b>6,929</b>
<b>Non-cash transactions:</b>		
Additions to property, plant and equipment - capitalized loans and borrowing costs	827	892

---

(i) Includes transactions with related parties: Bradesco, Banco do Brasil and Banco Nacional do Desenvolvimento economico e Social - BNDES.

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

See Report on the review of quarterly information ITR.



Table of Contents**Condensed Balance Sheet**

In millions of Brazilian Reais

	Notes	Consolidated		Parent company	
		September 30, 2016	December 31, 2015	September 30, 2016	December 31, 2015
<b>Assets</b>					
<b>Current assets</b>					
Cash and cash equivalents	7	17,428	14,022	496	518
Financial investments		372	109	53	18
Derivative financial instruments	19	458	474	343	196
Accounts receivable	8	8,299	5,763	24,541	36,026
Inventories	9	12,659	13,775	3,924	3,830
Recoverable income taxes		1,029	3,513	645	3,176
Recoverable taxes		5,205	5,482	3,668	3,352
Related parties	25	215	273	739	834
Others		2,114	1,215	672	581
		<b>47,779</b>	<b>44,626</b>	<b>35,081</b>	<b>48,531</b>
Non-current assets held for sale	5	15,545	15,792		
		<b>63,324</b>	<b>60,418</b>	<b>35,081</b>	<b>48,531</b>
<b>Non-current assets</b>					
Derivative financial instruments	19	1,635	363	1,361	293
Loans		592	732	110	106
Recoverable income taxes		1,760	1,840		
Recoverable taxes		2,234	1,956	1,753	1,457
Deferred income taxes	15(a)	22,234	30,867	13,256	17,292
Judicial deposits	14(c)	3,485	3,445	2,803	2,707
Related parties	25	62	5	828	1,468
Others		2,144	2,392	554	765
		<b>34,146</b>	<b>41,600</b>	<b>20,665</b>	<b>24,088</b>
Investments	10	12,908	11,481	120,422	127,517
Intangibles	11	22,589	20,789	11,435	8,557
Property, plant and equipment	12	198,430	211,259	100,095	96,887
		<b>268,073</b>	<b>285,129</b>	<b>252,617</b>	<b>257,049</b>
<b>Total assets</b>		<b>331,397</b>	<b>345,547</b>	<b>287,698</b>	<b>305,580</b>
<b>Liabilities</b>					
<b>Current liabilities</b>					
Suppliers and contractors		12,177	13,140	6,897	7,084
Payroll and related charges		1,924	1,464	1,221	806
Derivative financial instruments	19	2,816	8,107	2,265	3,559
Loans and borrowings	13	7,080	9,788	5,291	4,736
Related parties	25	1,811	1,856	9,934	6,774

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

Income taxes - Settlement program	15(c)	1,458	1,348	1,428	1,320
Taxes payable		601	977	365	460
Provision for income taxes		500	943		
Employee postretirement obligations	16	235	266	65	72
Asset retirement obligations		227	346	73	83
Liabilities related to associates and joint ventures	4	1,069		1,069	
Others		4,824	2,531	830	825
		<b>34,722</b>	<b>40,766</b>	<b>29,438</b>	<b>25,719</b>
Liabilities associated with non-current assets held for sale	5	484	416		
		<b>35,206</b>	<b>41,182</b>	<b>29,438</b>	<b>25,719</b>
<b>Non-current liabilities</b>					
Derivative financial instruments	19	3,789	5,581	3,258	4,745
Loans and borrowings	13	95,010	102,878	47,579	55,986
Related parties	25	445	830	50,107	63,837
Employee postretirement obligations	16	6,861	6,831	493	483
Provisions for litigation	14(a)	2,984	3,210	1,967	2,190
Income taxes - Settlement program	15(c)	16,156	15,953	15,825	15,626
Deferred income taxes	15(a)	5,440	6,520		
Asset retirement obligations		10,289	9,313	1,627	1,291
Participative stockholders' debentures		2,137	1,336	2,137	1,336
Deferred revenue - Gold stream	23	7,004	6,830		
Liabilities related to associates and joint ventures	4	2,580		2,580	
Others		7,706	5,664	3,753	3,207
		<b>160,401</b>	<b>164,946</b>	<b>129,326</b>	<b>148,701</b>
<b>Total liabilities</b>		<b>195,607</b>	<b>206,128</b>	<b>158,764</b>	<b>174,420</b>
<b>Stockholders' equity</b>					
Equity attributable to Vale's stockholders	20	128,934	131,160	128,934	131,160
Equity attributable to noncontrolling interests		6,856	8,259		
<b>Total stockholders' equity</b>		<b>135,790</b>	<b>139,419</b>	<b>128,934</b>	<b>131,160</b>
<b>Total liabilities and stockholders' equity</b>		<b>331,397</b>	<b>345,547</b>	<b>287,698</b>	<b>305,580</b>

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

See Report on the review of quarterly information ITR.

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

In millions of Brazilian Reais

	Share capital	Results on conversion of shares	Results from operation with noncontrolling interest	Profit reserves	Treasury stocks	Unrealized fair value gain (losses)	Cumulative translation adjustments	Retained earnings	Equity attributable to Vale's stockholders	Equity attributable to noncontrolling interests	Total stockholders' equity
<b>Balance at December 31, 2015</b>	77,300	50	(1,881)	3,846	(2,746)	(3,873)	58,464		131,160	8,259	139,419
<b>Net income</b>								11,738	11,738	95	11,833
<b>Other comprehensive income:</b>											
Retirement benefit obligations						(760)			(760)		(760)
Cash flow hedge						26			26		26
Translation adjustments						420	(13,658)		(13,238)	(930)	(14,148)
<b>Transactions with stockholders:</b>											
Dividends of noncontrolling interest										(645)	(645)
Acquisitions and disposal of participation of noncontrolling interest			8						8	(1)	7
Capitalization of noncontrolling interest advances										78	78
<b>Balance at September 30, 2016</b>	77,300	50	(1,873)	3,846	(2,746)	(4,187)	44,806	11,738	128,934	6,856	135,790
<b>Balance at December 31,</b>	77,300	50	(970)	53,085	(2,746)	(4,553)	24,248		146,414	3,187	149,601

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

<b>2014</b>											
<b>Loss</b>								(11,058)	(11,058)	(721)	(11,058)
<b>Other comprehensive income:</b>											
Retirement benefit obligations				32					32		
Cash flow hedge				957					957		
Translation adjustments				(1,089)	36,304				35,215	1,631	36,304
<b>Transactions with stockholders:</b>											
Dividends of noncontrolling interest										(21)	
Acquisitions and disposal of participation of noncontrolling interest			663		(1,233)				(570)	4,746	4,746
Capitalization of noncontrolling interest advances										86	
Dividends and interest on capital of Vale's stockholders				(3,101)					(3,101)		(3,101)
<b>Balance at September 30, 2015</b>	<b>77,300</b>	<b>50</b>	<b>(307)</b>	<b>49,984</b>	<b>(2,746)</b>	<b>(4,653)</b>	<b>59,319</b>	<b>(11,058)</b>	<b>167,889</b>	<b>8,908</b>	<b>176,797</b>

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

See Report on the review of quarterly information ITR.

Table of Contents**Condensed Value Added Statement**

In millions of Brazilian Reais

	Consolidated		Parent company	
	Nine months period ended September 30			
	2016	2015	2016	2015
<b>Generation of value added from continuing operations</b>				
<b>Gross revenue</b>				
Revenue from products and services	70,031	63,889	32,841	31,621
Results on measurement or sale of non-current assets	(604)	481	(266)	601
Revenue from the construction of own assets	10,114	21,156	7,921	12,739
Allowance for doubtful accounts	(15)	44	(2)	(4)
Other revenues	1,269	1,781	315	399
<b>Less:</b>				
Acquisition of products	(1,267)	(1,931)	(572)	(515)
Material, service and maintenance	(24,898)	(32,770)	(14,576)	(18,588)
Oil and gas	(3,399)	(3,133)	(2,029)	(1,926)
Energy	(2,010)	(1,463)	(757)	(710)
Freight	(6,052)	(8,181)	(49)	
Other results in investments	(3,839)		(3,839)	
Other costs and expenses	(4,282)	(7,036)	(1,315)	(1,502)
<b>Gross value added</b>	<b>35,048</b>	<b>32,837</b>	<b>17,672</b>	<b>22,115</b>
Depreciation, amortization and depletion	(9,694)	(9,709)	(3,717)	(3,330)
<b>Net value added</b>	<b>25,354</b>	<b>23,128</b>	<b>13,955</b>	<b>18,785</b>
<b>Received from third parties</b>				
Equity results from entities	1,396	(1,361)	5,970	(4,720)
Financial income	469	541	241	259
Monetary and exchange variation of assets	(6,299)	13,172	(6,461)	14,255
<b>Total value added to be distributed</b>	<b>20,920</b>	<b>35,480</b>	<b>13,705</b>	<b>28,579</b>
Personnel	6,068	6,761	2,141	3,258
Taxes and contributions	6,192	6,136	4,911	4,756
Current income tax	2,887	761	2,161	(18)
Deferred income tax	6,411	(19,927)	4,059	(17,587)
Financial expense (excludes capitalized interest)	3,707	13,062	4,415	9,206
Monetary and exchange variation of liabilities	(17,343)	39,332	(18,020)	38,409
Other remunerations of third party funds	1,165	1,134	2,300	1,613
Reinvested net income (absorbed loss)	11,738	(11,058)	11,738	(11,058)
Net income (loss) attributable to noncontrolling interest	95	(721)		
<b>Distributed value added</b>	<b>20,920</b>	<b>35,480</b>	<b>13,705</b>	<b>28,579</b>

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

See Report on the review of quarterly information ITR.

Table of Contents

**Selected Notes to the Interim Financial Statements**

**Expressed in millions of Brazilian Reais, unless otherwise stated**

**1. Corporate information**

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

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

**2. Basis for preparation of the interim financial statements**

**a) Statement of compliance**

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

The consolidated financial statements present the accounts of the Group.

The individual financial statements present the accounts of the Parent Company and are presented in a summarized form in note 26.

**b) Basis of presentation**

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

The accounting practices, accounting estimates and judgments, risk management and measurement methods are the same as those adopted when preparing the financial statements for the year ended December 31, 2015. These interim financial statements were prepared to update users about relevant information presented in the period and should be read in conjunction with the financial statements for the year ended December 31, 2015.

The interim financial statements of the Group and its associates and joint ventures are measured using the currency of the primary economic environment in which each entity operates ( functional currency ). In the case of the Parent Company the functional currency is the Brazilian real ( BRL or R\$ ). For presentation purposes, these interim financial statements are presented in R\$.



Table of Contents

The exchange rates used by the Group for major currencies to translate its operations into R\$ are as follows:

	Closing rate		Average rate for the			
	September 30, 2016	December 31, 2015	Three months period ended September 30, 2016	Three months period ended September 30, 2015	Nine months period ended September 30, 2016	Nine months period ended September 30, 2015
US dollar ( US\$ )	3.2462	3.9048	3.2460	3.5379	3.5450	3.1684
Canadian dollar ( CAD )	2.4757	2.8171	2.4881	2.7024	2.6802	2.5090
Australian dollar ( AUD )	2.4895	2.8532	2.4616	2.5642	2.6273	2.4067
Euro ( EUR or )	3.6484	4.2504	3.6232	3.9365	3.9549	3.5285

Subsequent events were evaluated through October 26, 2016, which is the date the interim financial statements were approved by the Board of Directors.

**c) Accounting standards issued but not yet effective**

The standards and interpretations issued by IASB relevant to the Company but not yet effective are disclosed below:

- *IFRS 9 Financial instruments.*
- *IFRS 15 Revenue from contracts with customers.*
- *IFRS 16 Leases.*
- *Amendments to IAS 12 Recognition of deferred tax assets.*
- *Amendments to IAS 7 Disclosure Initiative.*
- *Amendments to IFRS 2 Classification and measurement of share-based payment transactions.*
- *Amendments to IFRS 4 Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts.*

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

The Company is currently analyzing potential impacts regarding these pronouncements on its financial statements.

Table of Contents**3. Information by business segment**

The information presented to the Executive Board on the performance of each segment is derived from the accounting records.

**a) Adjusted EBITDA**

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

	Consolidated							Adjusted EBITDA
	Three months period ended September 30, 2016							
	Net operating revenue	Cost of goods sold and services rendered	Sales, administrative and other operating expenses	Research and evaluation expenses	Pre operating and operational stoppage	Dividends received from associates and joint ventures		
<b>Ferrous minerals</b>								
Iron ore	12,275	(5,347)	(254)	(81)	(131)	1	6,463	
Pellets	3,217	(1,662)	(27)	(13)	(16)		1,499	
Ferroalloys and manganese	245	(205)	(18)		(10)		12	
Other ferrous products and services	358	(226)	(1)	(1)	(3)		127	
	<b>16,095</b>	<b>(7,440)</b>	<b>(300)</b>	<b>(95)</b>	<b>(160)</b>	<b>1</b>	<b>8,101</b>	
<b>Coal</b>	<b>530</b>	<b>(509)</b>	<b>20</b>	<b>(11)</b>	<b>(42)</b>		<b>(12)</b>	
<b>Base metals</b>								
Nickel and other products	3,763	(2,573)	(89)	(67)	(86)		948	
Copper	1,365	(825)	(8)	(6)			526	
Other base metals			481				481	

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

products							
	<b>5,128</b>	<b>(3,398)</b>	<b>384</b>	<b>(73)</b>	<b>(86)</b>		<b>1,955</b>
<b>Fertilizers</b>							
Potash	110	(112)	(5)	(2)	(14)		(23)
Phosphates	1,526	(1,344)	(76)	(13)	(1)		92
Nitrogen	225	(171)	(9)	(2)			43
Other fertilizers							
products	80						80
	<b>1,941</b>	<b>(1,627)</b>	<b>(90)</b>	<b>(17)</b>	<b>(15)</b>		<b>192</b>
<b>Others</b>	<b>78</b>	<b>(190)</b>	<b>(215)</b>	<b>(79)</b>	<b>(1)</b>		<b>(407)</b>
<b>Total</b>	<b>23,772</b>	<b>(13,164)</b>	<b>(201)</b>	<b>(275)</b>	<b>(304)</b>	<b>1</b>	<b>9,829</b>

Table of Contents

	Consolidated						
	Three months period ended September 30, 2015						
	Net operating revenue	Cost of goods sold and services rendered	Sales, administrative and other operating expenses	Research and evaluation expenses	Pre operating and operational stoppage	Dividends received from associates and joint ventures	Adjusted EBITDA
<b>Ferrous minerals</b>							
Iron ore	11,792	(6,574)	(591)	(92)	(77)	1	4,459
Pellets	3,150	(1,811)	49	(4)	(17)		1,367
Ferroalloys and manganese	99	(107)	(9)		(15)		(32)
Other ferrous products and services	446	(247)	13	(2)			210
	<b>15,487</b>	<b>(8,739)</b>	<b>(538)</b>	<b>(98)</b>	<b>(109)</b>	<b>1</b>	<b>6,004</b>
<b>Coal</b>	<b>453</b>	<b>(735)</b>	<b>(65)</b>	<b>(25)</b>	<b>(90)</b>		<b>(462)</b>
<b>Base metals</b>							
Nickel and other products	3,618	(2,953)	35	(83)	(340)		277
Copper	1,245	(796)	(4)	(11)			434
	<b>4,863</b>	<b>(3,749)</b>	<b>31</b>	<b>(94)</b>	<b>(340)</b>		<b>711</b>
<b>Fertilizers</b>							
Potash	146	(102)	(4)	(53)	(28)		(41)
Phosphates	1,990	(1,291)	(15)	(26)	(69)		589
Nitrogen	282	(180)	(2)	(2)	(5)		93
Other fertilizers products	61						61
	<b>2,479</b>	<b>(1,573)</b>	<b>(21)</b>	<b>(81)</b>	<b>(102)</b>		<b>702</b>
<b>Others</b>	<b>68</b>	<b>(152)</b>	<b>10</b>	<b>(135)</b>		<b>70</b>	<b>(139)</b>
<b>Total</b>	<b>23,350</b>	<b>(14,948)</b>	<b>(583)</b>	<b>(433)</b>	<b>(641)</b>	<b>71</b>	<b>6,816</b>

Table of Contents

	Consolidated						Adjusted EBITDA
	Nine months period ended September 30, 2016						
Net operating revenue	Cost of goods sold and services rendered	Sales, administrative and other operating expenses	Research and evaluation expenses	Pre operating and operational stoppage	Dividends received from associates and joint ventures		
<b>Ferrous minerals</b>							
Iron ore	35,726	(16,151)	(1,379)	(180)	(376)	1	17,641
Pellets	9,184	(4,971)	(153)	(27)	(61)	213	4,185
Ferroalloys and manganese	641	(566)	(9)		(31)		35
Other ferrous products and services	1,061	(680)	9	(4)	(9)		377
	<b>46,612</b>	<b>(22,368)</b>	<b>(1,532)</b>	<b>(211)</b>	<b>(477)</b>	<b>214</b>	<b>22,238</b>
<b>Coal</b>	<b>1,640</b>	<b>(2,476)</b>	<b>184</b>	<b>(29)</b>	<b>(80)</b>		<b>(761)</b>
<b>Base metals</b>							
Nickel and other products	11,328	(8,267)	(194)	(200)	(299)	1	2,369
Copper	4,129	(2,404)	(33)	(12)			1,680
Other base metals products			481				481
	<b>15,457</b>	<b>(10,671)</b>	<b>254</b>	<b>(212)</b>	<b>(299)</b>	<b>1</b>	<b>4,530</b>
<b>Fertilizers</b>							
Potash	276	(261)	9	(13)	(42)		(31)
Phosphates	3,926	(3,406)	(214)	(36)	(4)		266
Nitrogen	661	(489)	(29)	(6)			137
Other fertilizers products	198					10	208
	<b>5,061</b>	<b>(4,156)</b>	<b>(234)</b>	<b>(55)</b>	<b>(46)</b>	<b>10</b>	<b>580</b>
<b>Others</b>	<b>272</b>	<b>(555)</b>	<b>(362)</b>	<b>(276)</b>	<b>(2)</b>	<b>191</b>	<b>(732)</b>
<b>Total</b>	<b>69,042</b>	<b>(40,226)</b>	<b>(1,690)</b>	<b>(783)</b>	<b>(904)</b>	<b>416</b>	<b>25,855</b>

Table of Contents

	Consolidated						
	Nine months period ended September 30, 2015						
	Net operating revenue	Cost of goods sold and services rendered	Sales, administrative and other operating expenses	Research and evaluation expenses	Pre operating and operational stoppage	Dividends received from associates and joint ventures	Adjusted EBITDA
<b>Ferrous minerals</b>							
Iron ore	30,102	(18,111)	(1,665)	(295)	(225)	1	9,807
Pellets	8,916	(5,265)	60	(11)	(60)	624	4,264
Ferroalloys and manganese	471	(409)	(9)	(1)	(43)		9
Other ferrous products and services	1,199	(825)	37	(8)	(3)	25	425
	<b>40,688</b>	<b>(24,610)</b>	<b>(1,577)</b>	<b>(315)</b>	<b>(331)</b>	<b>650</b>	<b>14,505</b>
<b>Coal</b>	<b>1,322</b>	<b>(1,855)</b>	<b>(397)</b>	<b>(59)</b>	<b>(161)</b>		<b>(1,150)</b>
<b>Base metals</b>							
Nickel and other products	11,285	(7,953)	(233)	(233)	(1,015)		1,851
Copper	3,602	(2,127)	(35)	(20)	(3)		1,417
Other base metals products			722				722
	<b>14,887</b>	<b>(10,080)</b>	<b>454</b>	<b>(253)</b>	<b>(1,018)</b>		<b>3,990</b>
<b>Fertilizers</b>							
Potash	326	(221)	14	(123)	(52)		(56)
Phosphates	4,380	(2,949)	(75)	(65)	(134)		1,157
Nitrogen	747	(496)	(9)	(6)	(12)		224
Other fertilizers products	137						137
	<b>5,590</b>	<b>(3,666)</b>	<b>(70)</b>	<b>(194)</b>	<b>(198)</b>		<b>1,462</b>
<b>Others</b>	<b>331</b>	<b>(326)</b>	<b>(294)</b>	<b>(322)</b>	<b>(1)</b>	<b>72</b>	<b>(540)</b>
<b>Total</b>	<b>62,818</b>	<b>(40,537)</b>	<b>(1,884)</b>	<b>(1,143)</b>	<b>(1,709)</b>	<b>722</b>	<b>18,267</b>

Table of Contents

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

	Three months period ended September 30		Nine months period ended September 30	
	2016	2015	2016	2015
<b>Adjusted EBITDA</b>	<b>9,829</b>	<b>6,816</b>	<b>25,855</b>	<b>18,267</b>
Depreciation, depletion and amortization	(3,127)	(3,670)	(9,694)	(9,709)
Dividends received from associates and joint ventures	(1)	(71)	(416)	(722)
Results on measurement or sale of non-current assets	(110)	(189)	(338)	185
<b>Operating income</b>	<b>6,591</b>	<b>2,886</b>	<b>15,407</b>	<b>8,021</b>
Financial results, net	(3,413)	(25,847)	8,433	(37,901)
Equity results in associates and joint ventures	149	(1,204)	1,396	(1,361)
Others results in associates and joint ventures	(106)		(4,105)	296
Income taxes	(1,355)	17,077	(9,298)	19,166
Income (loss) attributable to noncontrolling interests	(24)	425	(95)	721
<b>Income (loss) attributable to Vale s stockholders</b>	<b>1,842</b>	<b>(6,663)</b>	<b>11,738</b>	<b>(11,058)</b>

## b) Assets by segment

	September 30, 2016		Consolidated	Three months period ended September 30, 2016	Nine months period ended September 30, 2016
	Product inventory	Investments in associates and joint ventures	Property, plant and equipment and intangible assets	Additions to property, plant and equipment and intangible (i)	Additions to property, plant and equipment and intangible (i)
Ferrous minerals	4,176	5,944	111,487	2,586	8,855
Coal	307	944	6,340	494	1,574
Base metals	3,706	52	81,101	595	2,465
Fertilizers	805	293	14,785	338	737
Others	8	5,675	7,306	44	104
<b>Total</b>	<b>9,002</b>	<b>12,908</b>	<b>221,019</b>	<b>4,057</b>	<b>13,735</b>

(i) Includes only cash effect .



	December 31, 2015		Consolidated	Three months period ended September 30, 2015	Nine months period ended September 30, 2015
	Product inventory	Investments in associates and joint ventures	Property, plant and equipment and intangible assets	Additions to property, plant and equipment and intangible (i)	Additions to property, plant and equipment and intangible (i)
Ferrous minerals	4,044	5,775	110,123	3,888	12,087
Coal	206	1,195	7,075	1,168	3,371
Base metals	4,552	66	91,849	1,302	3,199
Fertilizers	1,156	292	15,096	195	504
Others	10	4,153	7,905	63	205
<b>Total</b>	<b>9,968</b>	<b>11,481</b>	<b>232,048</b>	<b>6,616</b>	<b>19,366</b>

---

(i) Includes only cash effect.

Table of Contents

## c) Revenues by geographic area

	Consolidated					Total
	Three months period ended September 30, 2016					
	Ferrous minerals	Coal	Base metals	Fertilizers	Others	
Americas, except United States and Brazil	260		986	37		1,283
United States of America	177		597			774
Europe	2,028	180	1,448	69		3,725
Middle East/Africa/Oceania	1,083	43	14			1,140
Japan	1,207	56	302			1,565
China	8,827	53	557			9,437
Asia, except Japan and China	930	198	1,083	31		2,242
Brazil	1,583		141	1,804	78	3,606
<b>Net operating revenue</b>	<b>16,095</b>	<b>530</b>	<b>5,128</b>	<b>1,941</b>	<b>78</b>	<b>23,772</b>

	Consolidated					Total
	Three months period ended September 30, 2015					
	Ferrous minerals	Coal	Base metals	Fertilizers	Others	
Americas, except United States and Brazil	293	44	741	68		1,146
United States of America	33		635		11	679
Europe	2,196	88	1,566	135		3,985
Middle East/Africa/Oceania	819	56	28	10		913
Japan	1,396	73	308			1,777
China	8,545	80	627			9,252
Asia, except Japan and China	808	107	799	43		1,757
Brazil	1,397	5	159	2,223	57	3,841
<b>Net operating revenue</b>	<b>15,487</b>	<b>453</b>	<b>4,863</b>	<b>2,479</b>	<b>68</b>	<b>23,350</b>

	Consolidated					Total
	Nine months period ended September 30, 2016					
	Ferrous minerals	Coal	Base metals	Fertilizers	Others	
Americas, except United States and Brazil	875	50	3,054	99		4,078
United States of America	493		1,887		14	2,394
Europe	5,996	283	4,818	246		11,343
Middle East/Africa/Oceania	2,720	195	62	10		2,987

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

Japan	3,260	303	762			4,325
China	26,514	172	1,566			28,252
Asia, except Japan and China	2,334	637	2,947	178		6,096
Brazil	4,420		361	4,528	258	9,567
<b>Net operating revenue</b>	<b>46,612</b>	<b>1,640</b>	<b>15,457</b>	<b>5,061</b>	<b>272</b>	<b>69,042</b>

**Consolidated**  
**Nine months period ended September 30, 2015**

	<b>Ferrous minerals</b>	<b>Coal</b>	<b>Base metals</b>	<b>Fertilizers</b>	<b>Others</b>	<b>Total</b>
Americas, except United States and Brazil	872	57	2,628	166		3,723
United States of America	76		2,027		57	2,160
Europe	5,992	239	4,582	322		11,135
Middle East/Africa/Oceania	2,552	255	195	19		3,021
Japan	3,668	188	872			4,728
China	20,719	118	1,599			22,436
Asia, except Japan and China	2,700	409	2,288	151		5,548
Brazil	4,109	56	696	4,932	274	10,067
<b>Net operating revenue</b>	<b>40,688</b>	<b>1,322</b>	<b>14,887</b>	<b>5,590</b>	<b>331</b>	<b>62,818</b>

**4. Liabilities related to associates and joint ventures**

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

**a) Reparation agreement**

Samarco and its shareholders, Vale S.A. and BHPB, entered into an Agreement in connection with the R\$20.2 billion lawsuit ( Agreement ) on March 2, 2016 with the Brazilian federal government, the two Brazilian states affected by the failure (Espírito Santo and Minas Gerais) and other governmental authorities in order to implement the programs for remediation and compensation of the areas and communities affected by Samarco's dam failure.

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

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

Table of Contents

been performed.

Under the Agreement, Samarco, Vale S.A. and BHPB have agreed to establish a foundation to develop and implement social and economic remediation and compensation, to be funded by Samarco as follows: R\$2.0 billion in 2016, R\$1.2 billion in 2017 and R\$1.2 billion in 2018. From 2019 to 2021, Samarco agreed to provide funding based on the amounts needed to implement the projects approved for the relevant year, subject to an annual minimum of R\$800 and an annual maximum of R\$1.6 billion. From 2022 onwards, Samarco will provide the necessary funding in order to complete remaining programs approved for each relevant year. The foundation will allocate an annual amount of R\$240 over 15 years to the implementation of compensation programs, and these annual amounts are included in the annual contributions described above for the first six years. Through the end of 2018, R\$500 will be provided for sewage collection and treatment and solid waste disposal under the terms of the Agreement.

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

On June 24, 2016, the Renova Foundation ( Foundation ) was constituted, under the Agreement, to develop and implement the socioeconomic and environmental's restoration and compensation programs. The Foundation began its operations in August of 2016.

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

**b) Estimates used for the provision**

The Samarco initially expected to resume its operations in the last quarter of 2016. Based on this assumption, Samarco's cash flow projections indicated that Samarco would be able to generate all or a substantial part of the funding required under the Agreement. This assumption was supported by studies of technical solutions available, combined with the progress of the repair works on the remaining dam structures after the dam failure and the definition of the contractual scope of the remediation measures and compensation to the communities impacted by the dam failure. Consequently, no provision was recognized in the Company's financial statements as of March 31, 2016.

However, in view of the current stage of the necessary procedures to resume operations and the uncertainties related to the licensing approval by the governmental authorities during the current year, Samarco reviewed its assumption and concluded that was unable to make a reliable estimate of how and when its operations will resume.

Therefore, the Company recognized a provision on its interim financial statements as of June 30, 2016, in the amount of R\$5,560 which was discounted at a free-risk rate, resulting in R\$3,733 liability, which represents its best estimate of the obligation to comply with the reparation and compensation programs under the Agreement, equivalent to the percentage of 50% entered into under the Agreement by Vale.

On August, 2016, Samarco issued non-convertible private debentures which were subscribed equally by the Company and BHPB, and the resources contributed by Vale S.A. were allocated as follows: (i) R\$146 was used by Samarco in the reparation programs in accordance with the agreement, and therefore, discounted from the provision of R\$3,733 mentioned above; and (ii) R\$106 applied by Samarco's to fund its working capital, and recognized in the income statement as Others results in associates and joint ventures in the third quarter of 2016. Funds to working capital requirements will be released on an as-needed basis by the shareholders and will be subject to achieving certain milestones, without undertaking an obligation to Samarco.

For the period ended in September 2016, the movements of the provision are as follows:

<b>Balance at June 30, 2016</b>	<b>3,733</b>
Payments	(146)
Interests	62
<b>Balances at September 30, 2016</b>	<b>3,649</b>
<b>Current liabilities</b>	<b>1,069</b>
<b>Non-current liabilities</b>	<b>2,580</b>

Table of Contents

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

**c) Relevant information of Samarco**

Samarco disbursed R\$285 and R\$1,016 in the accident reparation during the three and nine months period ended September 30, 2016, respectively. Since the initial date of the accident, R\$1,141 has been disbursed to comply with the obligations under the agreement.

**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, which the estimated value indicated by the plaintiffs in R\$20.2 billion.

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

On August 17, 2016, the TRF of the 1st Region has rejected the appeal presented by Samarco, Vale S.A. e BHPB against the interim order and overruled the judicial decision that ratified the Agreement. The decision granted by the TRF of the 1st Region, among other measures, confirmed a prior injunction that prohibited the defendants from transferring or conveying any of their interest in its Brazilian iron ore concessions, without, however, limiting their production and commercial activities.

Only the judicial decision that ratified the Agreement was suspended and, therefore, the Agreement between the parties remains valid, and the parties will continue fulfilling their obligations under the Agreement.

*(ii) U.S. Securities class action suits*

Vale S.A. and certain of its officers have been named as defendants in securities class action suits in 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 omitted to 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 in these actions. Vale S.A. intends to vigorously mount a full defense against the allegations. The litigation is at a very early stage. On March 7, 2016, the judge overseeing the securities class actions issued an order consolidating these actions and designating lead plaintiffs and counsel. On April 29, 2016, lead plaintiffs filed a Consolidated Amended Complaint that will serve as the operative complaint in the litigation. In July 2016, Vale S.A. and the individual defendants filed a motion to dismiss the Amended Complaint. In August 2016, the plaintiffs submitted their opposition to the motion to dismiss, which was replied by the defendants in September 2016. The decision on the motion to dismiss remains pending.

*(iii) 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 demands, including: (i) the adoption of measures for mitigating the social, economic and environmental impacts resulting from the Fundão dam failure and other emergency measures; (ii) the payment of compensation to the community; and (iii) payments for the collective moral damage. The initial action value claimed by the Federal Prosecution Office (MPF) is R\$155 billion. The first conciliatory hearing was held on September 13th and a second hearing might be scheduled by the judge.

*(iv) Criminal lawsuit*

On October 20, 2016, the Federal Prosecutors Office (MPF) offered a criminal lawsuit to the Brazilian Federal Justice Court against Vale, 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. The MPF also requested that, if found guilty at the end of the criminal procedure, and the accused, the Judge imposes the minimum amount needed to repair the damage caused by the dam failure. So far, Vale was not serviced to present its defense.

*(v) Other lawsuits*

In addition, Samarco and its shareholders were named as a defendant in several other lawsuits brought by individuals, corporations and governmental entities seeking damages for material or personnel damages.

These lawsuits and petitions are at very early stages, thus it is not possible to determine a range of outcomes and/or reliable estimates of the potential exposure at this time. No contingent liability has been quantified and no provision was recognized for these other lawsuits.

Table of Contents**5. Non-current assets and liabilities held for sale**

	September 30, 2016		December 31, 2015	
	Shipping assets	Nacala	Total	Nacala
<b>Non-current assets held for sale</b>				
Accounts receivable		37	37	13
Other current assets		312	312	522
Property, plant and equipment and Intangible, net	1,613	13,583	15,196	15,257
<b>Total assets</b>	<b>1,613</b>	<b>13,932</b>	<b>15,545</b>	<b>15,792</b>
<b>Liabilities associated with non-current assets held for sale</b>				
Suppliers and contractors		449	449	365
Other current liabilities		35	35	51
<b>Total liabilities</b>		<b>484</b>	<b>484</b>	<b>416</b>
<b>Net non-current assets held for sale</b>	<b>1,613</b>	<b>13,448</b>	<b>15,061</b>	<b>15,376</b>

**a) Shipping assets**

In June 2016, Vale approved a plan to dispose its fleet of ships. As a consequence, the referenced assets were reclassified to non-current assets held for sale and a loss of R\$202 was recorded in the income statement as Results on measurement or sale of non-current assets .

**b) Coal - Nacala logistic corridor ( Nacala )**

See note 6.

**6. Acquisitions and divestitures**

2016



**Coal assets** - In December 2014, the Company signed an agreement with Mitsui & Co., Ltd. ( Mitsui ) to sell 50% of its stake in the Nacala corridor and 15% of Vale's stake in Vale Moçambique. After completion of the transaction, Vale will indirectly own 81% of the Moatize mine and approximately 50% of Nacala Assets, sharing control with Mitsui and therefore will not consolidate the assets, liabilities and results of Nacala Corridor. On that date, the assets and liabilities related to Nacala were classified as non-current assets held for sale with no impact in the income statement.

In September 2016, the Company reviewed the terms related to this transaction, in which Mitsui agreed to contribute up to US\$450 (R\$1,450), being: (i) US\$255 (R\$822) for a 15% of Vale's stake in the Moatize coal mine; and (ii) an additional contribution of up to US\$195 (R\$629) based on meeting certain conditions, including mine performance. Mitsui will also contribute US\$348 (R\$1,122) for a 50% stake in the equity and quasi-equity instruments of the Nacala and extend a long-term facility of US\$165 (R\$532).

As at September 2016, completion of the transaction remains subject to successful completion of the Project Finance and certain government approvals.

**Shipping assets** In June 2016, the Company concluded the sale of three vessels VLOC s of 400,000 tons for the consortium led by ICBC *International* (ICBC) and recognized a loss of R\$26 in the income statement as Results on measurement or sales of non-current assets . For this transaction, Vale received cash proceeds of R\$863 in the third quarter of 2016.

**Thyssenkrupp Companhia Siderúrgica do Atlântico Ltd ( CSA )** In April 2016, the Company sold 100% of its interest at CSA (26.87%) for a non-significant amount. The transaction resulted in R\$266 loss on recycling the Cumulative translation adjustments recognized in the income statement as Others results in associates and joint ventures .

**Minas da Serra Geral S.A. ( MSG )** In March 2016, the Company completed the purchase option on additional 50% participation at MSG which was owned by JFE Steel Corporation ( JFE ) in the amount of R\$65. Vale now holds 100% of MSG's total stockholder's equity.

## 2015

**Energy generation assets** In December 2013, the Company signed agreements with CEMIG Geração e Transmissão S.A. ( CEMIG GT ) to incorporate two joint ventures, Aliança Norte Participações S.A. and Aliança Geração de Energia S.A. and exchange of assets and shares. The transaction was completed in the first quarter of 2015, in which Vale received cash proceeds of R\$306 and recognized a gain of R\$55 as Others results in associates and joint ventures and a gain of R\$546 as Results on measurement or sales of non-current assets .

Table of Contents**7. Cash and cash equivalents**

	September 30, 2016	Consolidated December 31, 2015
Cash and bank deposits	9,482	7,881
Short-term investments	7,946	6,141
	<b>17,428</b>	<b>14,022</b>

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

**8. Accounts receivable**

	September 30, 2016	Consolidated December 31, 2015
Trade receivables	8,509	5,988
Provision for doubtful debts	(210)	(225)
	<b>8,299</b>	<b>5,763</b>
Trade receivables related to the steel sector - %	74.66%	75.32%

	Consolidated			
	Three months period ended September 30		Nine months period ended September 30	
	2016	2015	2016	2015
Provision for doubtful debts recorded in the income statement	(1)	(39)	1	(44)
Trade receivables write-offs recorded in the income statement	(7)	4	(16)	(16)

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

**9. Inventories**

	September 30, 2016	Consolidated December 31, 2015
Product inventory	9,978	11,991
Impairment of product inventory	(976)	(2,023)
	<b>9,002</b>	<b>9,968</b>
Consumable inventory	3,657	3,807
<b>Total</b>	<b>12,659</b>	<b>13,775</b>

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

Table of Contents**10. Investments in associates and joint ventures**

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

	2016	Consolidated	2015
<b>Balance at June 30,</b>	<b>12,721</b>		<b>13,057</b>
Additions	31		22
Disposals	(14)		
Translation adjustment	7		482
Equity results in income statement	149		(1,204)
Dividends declared	0		(30)
Others	14		(7)
<b>Balance at September 30,</b>	<b>12,908</b>		<b>12,320</b>

	2016	Consolidated	2015
<b>Balance at January 1st</b>	<b>11,481</b>		<b>10,978</b>
Acquisitions			1,819
Additions	856		76
Disposals	(14)		241
Translation adjustment	(360)		732
Equity results in income statement	1,396		(1,361)
Dividends declared	(419)		(253)
Transfer to held for sale			(15)
Others	(32)		103
<b>Balance at September 30,</b>	<b>12,908</b>		<b>12,320</b>

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

	% ownership	% voting capital	Investments in associates and joint ventures		Consolidated Equity results in Income statement				Dividends received					
			September 30, 2016	December 31, 2015	Three months period ended		Nine months period ended		Twelve months period ended		Nine months period ended			
					2016	2015	2016	2015	2016	2015	2016	2015		
<b>Joint ventures</b>														
Aliança Geração de Energia S.A. (i)	55.00	55.00	1,910	1,876	34	24	112	83			56	79	56	
Aliança Norte Energia Participações S.A. (i)	51.00	51.00	463	316	7	(2)	(5)	3						
California Steel Industries, Inc.	50.00	50.00	576	613	54	(27)	67	(68)						
Companhia Coreano-Brasileira de Pelotização	50.00	50.00	216	242	8	28	41	59				45	33	
Companhia Hispano-Brasileira de Pelotização (i)	50.89	51.00	206	222	13	19	35	37				65	44	
Companhia Ítalo-Brasileira de Pelotização (i)	50.90	51.00	232	194	16	24	38	51				33	36	
Companhia Nipo-Brasileira de Pelotização (i)	51.00	51.11	362	406	30	40	62	112				71	51	
Companhia Siderúrgica do Pecém	50.00	50.00	2,227	879	(171)	(865)	646	(1,060)						
MRS Logística S.A. Samarco Mineração S.A. (ii)	48.16	46.75	1,612	1,436	55	28	174	98						
Others	50.00	50.00	99	142	29	18	26	16			1	1	1	2
			<b>7,903</b>	<b>6,326</b>	<b>75</b>	<b>(1,108)</b>	<b>1,196</b>	<b>(1,201)</b>			<b>1</b>	<b>57</b>	<b>294</b>	<b>681</b>
<b>Associates</b>														
Henan Longyu Energy Resources Co., Ltd.	25.00	25.00	944	1,194	3	(36)	(32)	(28)						
Mineração Rio Grande do Norte S.A.	40.00	40.00	427	364	27	38	152	66			12	111	12	
Teal Minerals Inc.	50.00	50.00			(11)	(32)	(11)	(96)						
Thyssenkrupp Companhia Siderúrgica do Atlântico Ltd. (iii)						(104)		(199)						
VLI S.A.	37.60	37.60	3,145	3,038	51	45	106	104					25	
Zhuhai YPM Pellet Co.	25.00	25.00	73	92							1			

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

Others	416	467	4	(7)	(15)	(8)	2	11	4	
	<b>5,005</b>	<b>5,155</b>	<b>74</b>	<b>(96)</b>	<b>200</b>	<b>(160)</b>	<b>14</b>	<b>122</b>	<b>41</b>	
<b>Total of joint ventures and associates</b>	<b>12,908</b>	<b>11,481</b>	<b>149</b>	<b>(1,204)</b>	<b>1,396</b>	<b>(1,361)</b>	<b>1</b>	<b>71</b>	<b>416</b>	<b>722</b>

---

(i) Although the Company held majority of the voting capital, the entities are accounted under equity method due to shareholders agreements.

(ii) Note 4.

(iii) Note 6

Table of Contents**11. Intangibles**

Changes in intangibles are as follows:

	Goodwill	Concessions	Consolidated Right of use	Software	Total
<b>Balance at June 30, 2016</b>	<b>10,333</b>	<b>10,026</b>	<b>448</b>	<b>1,383</b>	<b>22,190</b>
Additions		670		18	688
Disposals		(11)			(11)
Amortization		(335)	(2)	(127)	(464)
Translation adjustment	26	155	2	3	186
<b>Balance at September 30, 2016</b>	<b>10,359</b>	<b>10,505</b>	<b>448</b>	<b>1,277</b>	<b>22,589</b>
Cost	10,359	14,205	708	5,100	30,372
Accumulated amortization		(3,700)	(260)	(3,823)	(7,783)
	<b>10,359</b>	<b>10,505</b>	<b>448</b>	<b>1,277</b>	<b>22,589</b>

	Goodwill	Concessions	Consolidated Right of use	Software	Total
<b>Balance at June 30, 2015</b>	<b>10,746</b>	<b>6,659</b>	<b>789</b>	<b>1,475</b>	<b>19,669</b>
Additions		499		99	598
Amortization		(120)	(37)	(127)	(284)
Translation adjustment	1,785		133		1,918
<b>Balance at September 30, 2015</b>	<b>12,531</b>	<b>7,038</b>	<b>885</b>	<b>1,447</b>	<b>21,901</b>
Cost	12,531	10,581	1,890	3,967	28,969
Accumulated amortization		(3,543)	(1,005)	(2,520)	(7,068)
	<b>12,531</b>	<b>7,038</b>	<b>885</b>	<b>1,447</b>	<b>21,901</b>

	Goodwill	Concessions	Consolidated Right of use	Software	Total
<b>Balance at December 31, 2015</b>	<b>11,544</b>	<b>7,084</b>	<b>811</b>	<b>1,350</b>	<b>20,789</b>
Additions		3,646	3	38	3,687
Disposals		(29)		(1)	(30)
Amortization		(606)	(7)	(413)	(1,026)
Translation adjustment	(1,185)	140	(96)	15	(1,126)
Transfers		270	(263)	288	295
<b>Balance at September 30, 2016</b>	<b>10,359</b>	<b>10,505</b>	<b>448</b>	<b>1,277</b>	<b>22,589</b>
Cost	10,359	14,205	708	5,100	30,372
Accumulated amortization		(3,700)	(260)	(3,823)	(7,783)
	<b>10,359</b>	<b>10,505</b>	<b>448</b>	<b>1,277</b>	<b>22,589</b>

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

	Goodwill	Concessions	Consolidated Right of use	Software	Total
<b>Balance at December 31, 2014</b>	<b>9,987</b>	<b>5,876</b>	<b>789</b>	<b>1,462</b>	<b>18,114</b>
Additions		1,572		365	1,937
Disposals		(49)			(49)
Amortization		(361)	(100)	(380)	(841)
Translation adjustment	2,442		196		2,638
Acquisition of subsidiary	102				102
<b>Balance at September 30, 2015</b>	<b>12,531</b>	<b>7,038</b>	<b>885</b>	<b>1,447</b>	<b>21,901</b>
Cost	12,531	10,581	1,890	3,967	28,969
Accumulated amortization		(3,543)	(1,005)	(2,520)	(7,068)
	<b>12,531</b>	<b>7,038</b>	<b>885</b>	<b>1,447</b>	<b>21,901</b>



Table of Contents**12. Property, plant and equipment**

Changes in property, plant and equipment are as follows:

	Land	Building	Facilities	Equipment	Consolidated Mineral properties	Others	Constructions in progress	Total
<b>Balance at June 30, 2016</b>	<b>2,860</b>	<b>33,126</b>	<b>29,630</b>	<b>25,623</b>	<b>35,843</b>	<b>21,978</b>	<b>46,605</b>	<b>195,665</b>
Additions (i)							4,079	4,079
Disposals	(1)	(3)	(8)	(49)	(397)	(6)	(1)	(465)
Depreciation and amortization		(463)	(591)	(692)	(603)	(467)		(2,816)
Translation adjustment	7	82	85	100	100	43	63	480
Assets retirement obligations					1,487			1,487
Transfers	75	2,288	1,140	893	90	531	(5,017)	
<b>Balance at September 30, 2016</b>	<b>2,941</b>	<b>35,030</b>	<b>30,256</b>	<b>25,875</b>	<b>36,520</b>	<b>22,079</b>	<b>45,729</b>	<b>198,430</b>
Cost	2,941	53,845	49,370	46,013	62,030	34,227	45,729	294,155
Accumulated depreciation		(18,815)	(19,114)	(20,138)	(25,510)	(12,148)		(95,725)
	<b>2,941</b>	<b>35,030</b>	<b>30,256</b>	<b>25,875</b>	<b>36,520</b>	<b>22,079</b>	<b>45,729</b>	<b>198,430</b>

	Land	Building	Facilities	Equipment	Consolidated Mineral properties	Others	Constructions in progress	Total
<b>Balance at June 30, 2015</b>	<b>3,098</b>	<b>37,430</b>	<b>31,296</b>	<b>29,100</b>	<b>40,777</b>	<b>32,046</b>	<b>47,397</b>	<b>221,144</b>
Additions (i)							9,170	9,170
Disposals			(104)	(45)		(2,061)	(21)	(2,231)
Depreciation and amortization		(444)	(546)	(849)	(621)	(622)		(3,082)
Translation adjustment	179	3,528	1,881	3,589	4,611	4,413	3,039	21,240
Transfers	(194)	1,608	3,302	453	702	1,992	(7,863)	
Transfers to non-current assets held for sale					(505)			(505)
<b>Balance at September 30, 2015</b>	<b>3,083</b>	<b>42,122</b>	<b>35,829</b>	<b>32,248</b>	<b>44,964</b>	<b>35,768</b>	<b>51,722</b>	<b>245,736</b>
Cost	3,083	53,171	52,494	50,360	67,213	49,831	51,722	327,874
Accumulated depreciation		(11,049)	(16,665)	(18,112)	(22,249)	(14,063)		(82,138)

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

	3,083	42,122	35,829	32,248	44,964	35,768	51,722	245,736
	Consolidated							Total
	Land	Building	Facilities	Equipment	Mineral properties	Others	Constructions in progress	Total
<b>Balance at December 31, 2015</b>	<b>2,989</b>	<b>35,538</b>	<b>32,378</b>	<b>28,532</b>	<b>40,234</b>	<b>28,135</b>	<b>43,453</b>	<b>211,259</b>
Additions (i)							11,043	11,043
Disposals	(1)	(5)	(11)	(97)	(409)	(1,214)	(74)	(1,811)
Depreciation and amortization		(1,311)	(1,660)	(2,355)	(2,091)	(1,609)		(9,026)
Translation adjustment	(130)	(3,558)	(2,125)	(2,682)	(3,778)	(1,376)	809	(12,840)
Assets retirement obligations					1,694			1,694
Transfers	83	4,365	1,674	2,477	870	(262)	(9,502)	(295)
Transfers to non-current assets held for sale						(1,595)		(1,595)
Acquisition of subsidiary		1						1
<b>Balance at September 30, 2016</b>	<b>2,941</b>	<b>35,030</b>	<b>30,256</b>	<b>25,875</b>	<b>36,520</b>	<b>22,079</b>	<b>45,729</b>	<b>198,430</b>
Cost	2,941	53,845	49,370	46,013	62,030	34,227	45,729	294,155
Accumulated depreciation		(18,815)	(19,114)	(20,138)	(25,510)	(12,148)		(95,725)
	<b>2,941</b>	<b>35,030</b>	<b>30,256</b>	<b>25,875</b>	<b>36,520</b>	<b>22,079</b>	<b>45,729</b>	<b>198,430</b>

	Consolidated							Total
	Land	Building	Facilities	Equipment	Mineral properties	Others	Constructions in progress	Total
<b>Balance at December 31, 2014</b>	<b>2,839</b>	<b>30,955</b>	<b>28,721</b>	<b>24,669</b>	<b>39,654</b>	<b>29,095</b>	<b>51,574</b>	<b>207,507</b>
Additions (i)							20,445	20,445
Disposals		(14)	(126)	(105)	(434)	(3,653)	(26)	(4,358)
Depreciation and amortization		(1,267)	(1,713)	(2,556)	(1,992)	(1,747)		(9,275)
Translation adjustment	252	4,307	2,620	5,191	7,489	5,930	5,816	31,605
Transfers	(8)	8,141	6,327	5,048	752	5,827	(26,087)	
Transfers to non-current assets held for sale					(505)			(505)
Acquisition of subsidiary				1		316		317
<b>Balance at September 30, 2015</b>	<b>3,083</b>	<b>42,122</b>	<b>35,829</b>	<b>32,248</b>	<b>44,964</b>	<b>35,768</b>	<b>51,722</b>	<b>245,736</b>
Cost	3,083	53,171	52,494	50,360	67,213	49,831	51,722	327,874
Accumulated depreciation		(11,049)	(16,665)	(18,112)	(22,249)	(14,063)		(82,138)
	<b>3,083</b>	<b>42,122</b>	<b>35,829</b>	<b>32,248</b>	<b>44,964</b>	<b>35,768</b>	<b>51,722</b>	<b>245,736</b>

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

There are no material changes to the net book value of consolidated property, plant and equipment pledged to secure judicial claims and loans and borrowings (note 13(d)) compared to those disclosed in the financial statements as at December 31, 2015.



Table of Contents**13. Loans and borrowings****a) Total debt**

	Consolidated			
	Current liabilities		Non-current liabilities	
	September 30, 2016	December 31, 2015	September 30, 2016	December 31, 2015
<b>Debt contracts in the international markets</b>				
<b>Floating rates in:</b>				
US\$	1,247	943	22,965	20,203
<b>Fixed rates in:</b>				
US\$	1,331	4,651	42,494	50,463
EUR			5,473	6,376
Other currencies	50	56	698	659
<b>Accrued charges</b>	907	1,274		
	<b>3,535</b>	<b>6,924</b>	<b>71,630</b>	<b>77,701</b>
<b>Debt contracts in Brazil</b>				
<b>Floating rates in:</b>				
R\$, indexed to TJLP, TR, IPCA, IGP-M and CDI	1,198	827	18,375	18,388
Basket of currencies and US\$ indexed to LIBOR	1,079	1,133	4,056	5,239
<b>Fixed rates in:</b>				
R\$	246	246	858	1,047
<b>Accrued charges</b>	<b>1,022</b>	<b>658</b>	<b>91</b>	<b>503</b>
	<b>3,545</b>	<b>2,864</b>	<b>23,380</b>	<b>25,177</b>
	<b>7,080</b>	<b>9,788</b>	<b>95,010</b>	<b>102,878</b>

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

	Consolidated				Estimated future payments of interest(ii)
	Bank loans (i)	Capital markets (i)	Development agencies (i)	Debt principal (i)	
2016	16		682	698	5,366
2017	2,039		3,275	5,314	5,545
2018	6,661	2,737	3,795	13,193	5,191
2019	3,220	3,246	4,353	10,819	4,483
2020	11,018	4,347	2,944	18,309	3,944
2021	1,188	4,356	2,863	8,407	3,253
Between 2022 and 2025	3,977	10,859	3,405	18,241	8,469

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

2026 onwards	286	24,310	493	25,089	19,058
	<b>28,405</b>	<b>49,855</b>	<b>21,810</b>	<b>100,070</b>	<b>55,309</b>

(i) Does not include accrued charges.

(ii) Consists of estimated future payments of interest, calculated based on interest rate curves and foreign exchange rates applicable as at September 30, 2016 and considering that all amortization payments and payments at maturity on loans and borrowings will be made on their contracted payments dates. The amount includes the estimated values of future interest payments (not yet accrued), in addition to interest already recognized in the financial statements.

At September 30, 2016, the average annual interest rates by currency are as follows:

Loans and borrowings in	Average interest rate (i)	Consolidated Total debt
US\$	4.55%	73,952
R\$ (ii)	11.15%	21,759
EUR (iii)	4.06%	5,629
Other currencies	3.50%	750
		<b>102,090</b>

(i) In order to determine the average interest rate for debt contracts with floating rates, the Company used the last renegotiated rate at September 30, 2016.

(ii) R\$ denominated debt that bears interest at IPCA, CDI, TR or TJLP, plus spread. For a total of R\$14,877, 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 2.19% per year in US\$.

(iii) Eurobonds, for which the Company entered into derivatives to mitigate the exposure to the cash flow variations of the debt denominated in EUR, resulting in an average cost of 4.29% per year in US\$.

Table of Contents**b) Credit and financing lines**

Type	Contractual currency	Date of agreement	Period of the agreement	Total amount	Available amount September 30, 2016
<b>Credit lines</b>					
Revolving credit facilities	US\$	May 2015	5 years	9,739	3,895
Revolving credit facilities	US\$	July 2013	5 years	6,492	5,843
<b>Financing lines</b>					
BNDES (i)	R\$	April 2008	10 years	7,300	897
BNDES - CLN 150	R\$	September 2012	10 years	3,883	20
BNDES - S11D e S11D Logística	R\$	May 2014	10 years	6,163	2,247

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

**c) Funding**

During 2016, the Company drew down part of its revolving credit facilities of which R\$6,493 is outstanding at September 30, 2016.

In June and August 2016, the Company issued through its wholly owned subsidiary Vale Overseas Limited the guaranteed notes due 2021 and 2026 totaling US\$2,250 (R\$7,304). These notes bear a coupon of 5.875% and 6.250% per year, respectively, payable semi-annually, and were sold at a price of 100.000% of the principal amount.

**d) Guarantees**

As at September 30, 2016 and December 31, 2015, loans and borrowings are secured by property, plant and equipment and receivables in the amount of R\$1,522 and R\$1,937, respectively.

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

**e) Covenants**

Some of the Company's debt agreements with lenders contain financial covenants. The main covenants in those agreements require maintaining certain ratios, such as debt to EBITDA (Earnings before Interest Taxes, Depreciation and Amortization) and interest coverage. The Company has not identified any instances of noncompliance as at September 30, 2016 and December 31, 2015.

Table of Contents**14. Litigation****a) Provision for litigation**

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

	Consolidated				Total of litigation provision
	Tax litigation	Civil litigation	Labor litigation	Environmental litigation	
<b>Balance at June 30, 2016</b>	<b>740</b>	<b>359</b>	<b>1,784</b>	<b>84</b>	<b>2,967</b>
Additions	24	95	238		357
Reversals	(5)	(106)	(129)	(15)	(255)
Payments	(7)	(9)	(76)		(92)
Indexation and interest	(5)	(21)	48	(3)	19
Translation adjustment	(12)				(12)
<b>Balance at September 30, 2016</b>	<b>735</b>	<b>318</b>	<b>1,865</b>	<b>66</b>	<b>2,984</b>

	Consolidated				Total of litigation provision
	Tax litigation	Civil litigation	Labor litigation	Environmental litigation	
<b>Balance at June 30, 2015</b>	<b>1,003</b>	<b>405</b>	<b>1,939</b>	<b>212</b>	<b>3,559</b>
Additions	46	30	204	1	281
Reversals	(4)	(36)	(246)	(1)	(287)
Payments	(28)	(126)	(16)	(30)	(200)
Indexation and interest	27	17	(85)	24	(17)
Translation adjustment	39	1		34	74
<b>Balance at September 30, 2015</b>	<b>1,083</b>	<b>291</b>	<b>1,796</b>	<b>240</b>	<b>3,410</b>

	Consolidated				Total of litigation provision
	Tax litigation	Civil litigation	Labor litigation	Environmental litigation	
<b>Balance at December 31, 2015</b>	<b>1,052</b>	<b>309</b>	<b>1,771</b>	<b>78</b>	<b>3,210</b>
Additions	75	299	638	18	1,030
Reversals	(67)	(187)	(300)	(29)	(583)
Payments	(363)	(171)	(320)		(854)
Indexation and interest	28	68	76	(2)	168
Translation adjustment	10			1	13



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

<b>Balance at September 30, 2016</b>	<b>735</b>	<b>318</b>	<b>1,865</b>	<b>66</b>	<b>2,984</b>
--------------------------------------	------------	------------	--------------	-----------	--------------

	<b>Consolidated</b>				<b>Total of litigation provision</b>
	<b>Tax litigation</b>	<b>Civil litigation</b>	<b>Labor litigation</b>	<b>Environmental litigation</b>	
<b>Balance at December 31, 2014</b>	<b>972</b>	<b>311</b>	<b>1,876</b>	<b>246</b>	<b>3,405</b>
Additions	490	172	419	1	1,082
Reversals	(520)	(126)	(367)	(2)	(1,015)
Payments	(22)	(123)	(64)	(66)	(275)
Indexation and interest	79	56	(68)	8	75
Translation adjustment	84	1		53	138
<b>Balance at September 30, 2015</b>	<b>1,083</b>	<b>291</b>	<b>1,796</b>	<b>240</b>	<b>3,410</b>

Table of Contents**b) Contingent liabilities**

Contingent liabilities of 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 are as follows:

	September 30, 2016	Consolidated	December 31, 2015
Tax litigation	25,648		20,796
Civil litigation	5,196		5,214
Labor litigation	8,749		7,288
Environmental litigation	5,992		5,393
<b>Total</b>	<b>45,585</b>		<b>38,691</b>

**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 in connection with the transfer of iron ore between different Brazilian states, ICMS charges on our own transportation costs and challenges to other tax credits we claimed. The changes reported in the period resulted from interest and inflation adjustments in the amounts in dispute.

**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.

**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.

	September 30, 2016	Consolidated December 31, 2015
Tax litigation	869	822
Civil litigation	225	399
Labor litigation	2,322	2,163
Environmental litigation	69	61
<b>Total</b>	<b>3,485</b>	<b>3,445</b>

**d) Others**

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

For contingencies related to Samarco Mineração S.A., see note 4.

Table of Contents**15. Income taxes****a) Deferred income tax**

Changes in deferred tax are as follows:

	Assets	Consolidated Liabilities	Total
<b>Balance at June 30, 2016</b>	<b>23,396</b>	<b>5,581</b>	<b>17,815</b>
Effect in income statement	(861)	313	(1,174)
Translation adjustment	215	160	55
Transfers between asset and liabilities	(589)	(589)	
Other comprehensive income	73	(25)	98
<b>Balance at September 30, 2016</b>	<b>22,234</b>	<b>5,440</b>	<b>16,794</b>

	Assets	Consolidated Liabilities	Total
<b>Balance at June 30, 2015</b>	<b>13,341</b>	<b>9,585</b>	<b>3,756</b>
Effect in income statement	17,461	31	17,430
Translation adjustment	868	1,849	(981)
Other comprehensive income	40	40	
<b>Balance at September 30, 2015</b>	<b>31,710</b>	<b>11,505</b>	<b>20,205</b>

	Assets	Consolidated Liabilities	Total
<b>Balance at December 31, 2015</b>	<b>30,867</b>	<b>6,520</b>	<b>24,347</b>
Effect in income statement	(6,312)	99	(6,411)
Translation adjustment	(1,898)	(886)	(1,012)
Transfers between asset and liabilities	(14)	(14)	
Other comprehensive income	(409)	(279)	(130)
<b>Balance at September 30, 2016</b>	<b>22,234</b>	<b>5,440</b>	<b>16,794</b>

	Assets	Consolidated Liabilities	Total
<b>Balance at December 31, 2014</b>	<b>10,560</b>	<b>8,874</b>	<b>1,686</b>
Effect in income statement	19,796	(131)	19,927
Translation adjustment	1,292	2,733	(1,441)
Acquisition of subsidiary	(31)		(31)

Other comprehensive income	93	29	64
<b>Balance at September 30, 2015</b>	<b>31,710</b>	<b>11,505</b>	<b>20,205</b>

#### b) Income tax reconciliation

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

	Consolidated			
	Three months period ended September 30		Nine months period ended September 30	
	2016	2015	2016	2015
<b>Net income (loss) before income taxes</b>	<b>3,221</b>	<b>(24,165)</b>	<b>21,131</b>	<b>(30,945)</b>
<b>Income taxes at statutory rates - 34%</b>	<b>(1,095)</b>	<b>8,216</b>	<b>(7,185)</b>	<b>10,521</b>
<b>Adjustments that affect the basis of taxes:</b>				
Income tax benefit from interest on stockholders' equity				1,054
Tax incentives	269	42	616	117
Equity results	24	(410)	455	(463)
Additions(reversals) of tax loss carry forward	221	11,174	(346)	11,174
Unrecognized tax losses of the period	(551)	(1,302)	(1,842)	(1,807)
Others results in associates and joint ventures	(36)		(1,305)	
Others	(187)	(643)	309	(1,430)
<b>Income taxes</b>	<b>(1,355)</b>	<b>17,077</b>	<b>(9,298)</b>	<b>19,166</b>

#### c) Income taxes - Settlement program ( REFIS )

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

At September 30, 2016, the balance of R\$17,614 (R\$1,458 as current and R\$16,156 as non-current) is due in 145 remaining monthly installments, bearing interest at the SELIC rate.

Table of Contents**16. Employee postretirement obligations****Reconciliation of assets and liabilities recognized in the balance sheet**

	Consolidated					
	Overfunded pension plans	September 30, 2016 Underfunded pension plans	Others benefits	Overfunded pension plans	December 31, 2015 Underfunded pension plans	Others benefits
<b>Balance at beginning of the period</b>	<b>3,754</b>			<b>3,455</b>		
Interest income	404			427		
Changes in asset ceiling and onerous liability	1,906			(128)		
<b>Balance at end of the period</b>	<b>6,064</b>			<b>3,754</b>		
<b>Amount recognized in the balance sheet</b>						
Present value of actuarial liabilities	(9,962)	(13,958)	(4,491)	(9,659)	(14,407)	(4,773)
Fair value of assets	16,026	11,353		13,413	12,083	
Effect of the asset ceiling	(6,064)			(3,754)		
<b>Liabilities</b>		<b>(2,605)</b>	<b>(4,491)</b>		<b>(2,324)</b>	<b>(4,773)</b>
Current liabilities		(64)	(171)		(67)	(199)
Non-current liabilities		(2,541)	(4,320)		(2,257)	(4,574)
<b>Liabilities</b>		<b>(2,605)</b>	<b>(4,491)</b>		<b>(2,324)</b>	<b>(4,773)</b>

**17. Financial instruments classification**

	September 30, 2016			Consolidated			December 31, 2015	
	Loans and receivables or amortized cost	At fair value through net income	Total	Loans and receivables or amortized cost	At fair value through net income	Derivatives designated as hedge accounting	Total	
<b>Financial assets</b>								
<b>Current</b>								
Cash and cash equivalents	17,428		17,428	14,022			14,022	
Financial investments	372		372	109			109	
		458	458		474		474	

Derivative financial instruments							
Accounts receivable	8,299		8,299	5,763			5,763
Related parties	215		215	273			273
	<b>26,314</b>	<b>458</b>	<b>26,772</b>	<b>20,167</b>	<b>474</b>		<b>20,641</b>
<b>Non-current</b>							
Derivative financial instruments							
		1,635	1,635		363		363
Loans	592		592	732			732
Related parties	62		62	5			5
	<b>654</b>	<b>1,635</b>	<b>2,289</b>	<b>737</b>	<b>363</b>		<b>1,100</b>
<b>Total of financial assets</b>							
	<b>26,968</b>	<b>2,093</b>	<b>29,061</b>	<b>20,904</b>	<b>837</b>		<b>21,741</b>
<b>Financial liabilities</b>							
<b>Current</b>							
Suppliers and contractors							
	12,177		12,177	13,140			13,140
Derivative financial instruments							
		2,816	2,816		7,909	198	8,107
Loans and borrowings	7,080		7,080	9,788			9,788
Related parties	1,811		1,811	1,856			1,856
	<b>21,068</b>	<b>2,816</b>	<b>23,884</b>	<b>24,784</b>	<b>7,909</b>	<b>198</b>	<b>32,891</b>
<b>Non-current</b>							
Derivative financial instruments							
		3,789	3,789		5,581		5,581
Loans and borrowings	95,010		95,010	102,878			102,878
Related parties	445		445	830			830
Participative stockholders debentures							
		2,137	2,137		1,336		1,336
Others (i)		817	817		551		551
	<b>95,455</b>	<b>6,743</b>	<b>102,198</b>	<b>103,708</b>	<b>7,468</b>		<b>111,176</b>
<b>Total of financial liabilities</b>							
	<b>116,523</b>	<b>9,559</b>	<b>126,082</b>	<b>128,492</b>	<b>15,377</b>	<b>198</b>	<b>144,067</b>

---

(i) See note 18(a).

Table of Contents**18. Fair value estimate****a) Assets and liabilities measured and recognized at fair value:**

	September 30, 2016		Consolidated		December 31, 2015	
	Level 2	Level 3	Total	Level 2	Level 3	Total
<b>Financial assets</b>						
Derivative financial instruments	1,025	1,068	2,093	837		837
<b>Total</b>	<b>1,025</b>	<b>1,068</b>	<b>2,093</b>	<b>837</b>		<b>837</b>
<b>Financial liabilities</b>						
Derivative financial instruments	5,803	802	6,605	13,688		13,688
Participative stockholders debentures	2,137		2,137	1,336		1,336
Others (minimum return instrument)		817	817		551	551
<b>Total</b>	<b>7,940</b>	<b>1,619</b>	<b>9,559</b>	<b>15,024</b>	<b>551</b>	<b>15,575</b>

There are no changes in the methods and techniques of evaluation of instruments above compared to disclosed in the financial statements as at December 31, 2015.

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

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

Financial liabilities	Balance	Fair value	Consolidated	
			Level 1	Level 2
<b>September 30, 2016</b>				
Debt principal	100,070	96,702	46,384	50,318
<b>December 31, 2015</b>				
Debt principal	110,231	102,434	48,017	54,417



## 19. Derivative financial instruments

## a) Derivatives effects on balance sheet

	September 30, 2016		December 31, 2015	
	Current	Non-current	Current	Non-current
<b>Consolidated Assets</b>				
<b>Derivatives not designated as hedge accounting</b>				
<b>Foreign exchange and interest rate risk</b>				
CDI & TJLP vs. US\$ fixed and floating rate swap	426		269	
IPCA swap	23	241	7	64
Pré-dolar swap	6	52		
	<b>455</b>	<b>293</b>	<b>276</b>	<b>64</b>
<b>Commodities price risk</b>				
Nickel	3	17	198	41
	<b>3</b>	<b>17</b>	<b>198</b>	<b>41</b>
<b>Others</b>		1,325		258
		<b>1,325</b>		<b>258</b>
<b>Total</b>	<b>458</b>	<b>1,635</b>	<b>474</b>	<b>363</b>

Table of Contents

	September 30, 2016		December 31, 2015	
	Current	Non-current	Current	Non-current
<b>Consolidated Liabilities</b>				
<b>Derivatives not designated as hedge accounting</b>				
<b>Foreign exchange and interest rate risk</b>				
CDI & TJLP vs. US\$ fixed and floating rate swap	2,138	2,532	3,119	4,419
IPCA swap	62	245	82	393
Eurobonds swap	19	79	572	111
Euro forward	24			
Pre dollar swap	65	115	364	280
	<b>2,308</b>	<b>2,971</b>	<b>4,137</b>	<b>5,203</b>
<b>Commodities price risk</b>				
Nickel	7	11	153	42
Bunker oil	501		3,609	
	<b>508</b>	<b>11</b>	<b>3,762</b>	<b>42</b>
<b>Others</b>		807		336
		<b>807</b>		<b>336</b>
<b>Derivatives designated as cash flow hedge accounting</b>				
Bunker oil			198	
Foreign exchange			10	
			<b>208</b>	
<b>Total</b>	<b>2,816</b>	<b>3,789</b>	<b>8,107</b>	<b>5,581</b>

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

	Gain (loss) recognized in the income statement		Consolidated Financial settlement inflows(outflows) Three months period ended September 30		Gain(loss) recognized in other comprehensive income	
	2016	2015	2016	2015	2016	2015
<b>Derivatives not designated as hedge accounting</b>						
<b>Foreign exchange and interest rate risk</b>						
CDI & TJLP vs. US\$ fixed and floating rate swap	(182)	(3,174)	16	(5)		
IPCA swap	3	(396)	(83)			
Eurobonds swap	28	(46)				
Euro forward	15					
Pre dollar swap	(26)	(690)	(3)	(11)		
	<b>(162)</b>	<b>(4,306)</b>	<b>(70)</b>	<b>(16)</b>		

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

<b>Commodities price risk</b>					
Nickel	(8)	(69)	(9)	(77)	
Bunker oil	(25)	(1,821)	(540)	(117)	
	<b>(33)</b>	<b>(1,890)</b>	<b>(549)</b>	<b>(194)</b>	
<b>Others</b>					
	62	(169)			
	<b>62</b>	<b>(169)</b>			
<b>Derivatives designated as cash flow hedge accounting</b>					
Bunker oil		(459)		(375)	96
Foreign exchange		(37)		(37)	17
		<b>(496)</b>		<b>(412)</b>	<b>113</b>
<b>Total</b>	<b>(133)</b>	<b>(6,861)</b>	<b>(619)</b>	<b>(622)</b>	<b>113</b>

Table of Contents

	Gain (loss) recognized in the income statement		Consolidated Nine months period ended September 30 Financial settlement inflows(outflows)		Gain(loss) recognized in other comprehensive income	
	2016	2015	2016	2015	2016	2015
<b>Derivatives not designated as hedge accounting</b>						
<b>Foreign exchange and interest rate risk</b>						
CDI & TJLP vs. US\$ fixed and floating rate swap						
	2,621	(5,533)	(322)	(883)		
IPCA swap	244	(546)	(78)	19		
Eurobonds swap	(2)	(386)	(524)	(38)		
Euro forward	(27)					
Pre dollar swap	218	(925)	(304)	(21)		
	<b>3,054</b>	<b>(7,390)</b>	<b>(1,228)</b>	<b>(923)</b>		
<b>Commodities price risk</b>						
Nickel	(151)	(125)	(113)	(157)		
Bunker oil	441	(1,737)	(2,277)	(499)		
	<b>290</b>	<b>(1,862)</b>	<b>(2,390)</b>	<b>(656)</b>		
<b>Others</b>						
	532	(390)				
	<b>532</b>	<b>(390)</b>				
<b>Derivatives designated as cash flow hedge accounting</b>						
Bunker oil		(950)	(203)	(1,021)		928
Foreign exchange	(10)	(109)	(10)	(109)	10	45
	<b>(10)</b>	<b>(1,059)</b>	<b>(213)</b>	<b>(1,130)</b>	<b>10</b>	<b>973</b>
<b>Total</b>	<b>3,866</b>	<b>(10,701)</b>	<b>(3,831)</b>	<b>(2,709)</b>	<b>10</b>	<b>973</b>

During 2015, the Company implemented bunker oil purchase cash flows protection program and recognized as cost of goods sold and services rendered and financial expense the amounts of R\$459 and R\$6,402 for the three months period ended on September 30, 2015, respectively, and the amounts of R\$950 and R\$9,751 for the nine months period ended on September 30, 2015, respectively. In 2016, all derivatives impacts were charged to financial results.

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

	Last maturity dates
Currencies and interest rates	July 2023
Bunker oil	December 2016
Nickel	September 2018
Others	December 2027

**Additional information about derivatives financial instruments**

The risk of the derivatives portfolio is measured using the delta-Normal parametric approach, and considers that the future distribution of the risk factors and its correlations tends to present the same statistic properties verified in the historical data. The value at risk estimate considers a 95% confidence level for a one-business day time horizon.

There was no cash amount deposited as margin call regarding derivative positions on September 30, 2016. The derivative positions described in this document did not have initial costs associated.

The following tables detail the derivatives positions for Vale and its controlled companies as of September 30, 2016, 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.

Table of Contents

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.

Flow	Notional		Index	Average rate	Fair value		Financial settlement	Value at Risk	Fair value by year			
	September 30, 2016	December 31, 2015			September 30, 2016	September 30, 2016	2016	2017	2018	2019		
<b>CDI vs. US\$ fixed rate swap</b>												
Receivable	R\$ 6,289	R\$ 5,239	CDI	106.78%	(1,884)	(3,059)	368	167	(1,362)	81	(603)	
Payable	US\$ 2,563	US\$ 2,288	Fix	3.46%								
<b>TJLP vs. US\$ fixed rate swap</b>												
Receivable			TJLP		(2,178)	(3,965)	(664)	225	(44)	(714)	(354)	(1,064)
Payable	R\$ 4,559	R\$ 5,484	+	1.33%								
	US\$ 2,126	US\$ 2,611	Fix	1.72%								
<b>TJLP vs. US\$ floating rate swap</b>												
Receivable			TJLP		(182)	(245)	(5)	16	(2)	(11)	(14)	(15)
Payable	R\$ 253	R\$ 267	+	0.92%								
	US\$ 147	US\$ 156	Libor	-1.21%								
<b>R\$ fixed rate vs. US\$ fixed rate swap</b>												
Receivable	R\$ 1,107	R\$ 1,356	Fix	7.43%	(122)	(644)	(266)	74	(50)	(14)	38	(9)
Payable	US\$ 383	US\$ 528	Fix	-0.79%								
<b>IPCA vs. US\$ fixed rate swap</b>												
					(191)	(411)	4	37		21	17	(22)

Receivable				IPCA																	
	R\$	1,000	R\$	1,000	+					6.55%											
Payable	US\$	434	US\$	434	Fix					3.98%											
<b>IPCA vs. CDI swap</b>											<b>148</b>	<b>6</b>	<b>(93)</b>	<b>1</b>	<b>(60)</b>	<b>(30)</b>	<b>23</b>				
Receivable				IPCA																	
	R\$	1,350	R\$	1,350	+					6.62%											
Payable	US\$	1,350	US\$	1,350	CDI					98.58%											

**(ii) Protection program for EUR denominated debt instruments**

In order to reduce the cash flow volatility, swap and forward 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\$. And in those forwards only the principal amount of the debt is converted from EUR to US\$.

The swap and forward 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				Fair value		Financial settlement	Value at Risk	Fair value by year										
	September 30, 2016	December 31, 2016	Index	Average rate	September 30, 2016	December 31, 2015	September 30, 2016	September 30, 2016	2016	2017	2018	2019+							
<b>EUR fixed rate vs. US\$ fixed rate swap</b>													<b>(98)</b>	<b>(683)</b>	<b>(494)</b>	<b>38</b>	<b>(18)</b>	<b>(16)</b>	<b>(63)</b>
Receivable	500	1,000	Fix	3.75%															
Payable	US\$ 613	US\$ 1,302	Fix	4.29%															

Flow	Notional		Bought / Sold	Average rate (USD/EUR)	Fair value		Financial settlement	Value at Risk	Fair value by year	
	September 30, 2016	October 31, 2015			September 30, 2016	December 31, 2015	September 30, 2016	September 30, 2016	2016	2017
Forward	500		B	1.143	(24)			19.9		(24)

**(iii) Foreign exchange hedging program for disbursements in CAD**

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

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

Table of Contents

Flow	Notional		Bought / Average rate		Fair value		Financial settlement	Value at Risk	Fair value
	September 30, 2016	December 31, 2015	Sold	(CAD / USD)	September 30, 2016	December 31, 2015	September 30, 2016	September 30, 2016	by year
Forward	CAD 10	B		1.028			(10)		2016

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

In order to partially reduce the impact of bunker oil price fluctuation on maritime freight hiring/supply and, consequently, reducing the company's cash flow volatility, bunker oil derivatives were implemented. These transactions are usually executed through forward purchases and zero cost-collars.

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

Flow	Notional (ton)		Bought / Average strike		Fair value		Financial Settlement	Value at Risk	
	September 30, 2016	December 31, 2015	Sold	(US\$/ton)	September 30, 2016	December 31, 2015	September 30, 2016	September 30, 2016	
<b>Bunker Oil protection</b>									
Forwards	352,500	1,867,500	B	511	(286)		(2,252)	(1,604)	15
Call options	540,000	2,041,500	B	380	0.6		0.1		0.4
Put options	540,000	2,041,500	S	300	(87)		(1,158)	(607)	17
<b>Total</b>					<b>(373)</b>		<b>(3,410)</b>		

As at September 30, 2016 and December 31, 2015, excludes R\$128 and R\$397, respectively, of transactions in which the financial settlement occurs subsequently of the closing month.

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



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

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 Inflows (Outflows)		Value at Risk September 30, 2016	Fair value September 30, 2016
	September 30, 2016	December 31, 2015			September 30, 2016	December 31, 2015	September 30, 2016	September 30, 2016		
<b>Fixed prices sales protection</b>										
Nickel forwards	12,923	16,917	B	10,272	13	(180)	(105)		14	
<b>Raw materials purchase protection</b>										
Nickel forwards	153	118	S	9,890	(0.3)	0.4	(0.4)		0.2	
Copper forwards	1,262	385	S	4,873	(0.0)	0.4	0.3		0.2	
<b>Total</b>					<b>(0.4)</b>	<b>0.7</b>				

Table of Contentsc) **Silver Wheaton Corp. warrants**

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

Flow	Notional (quantity)		Bought / Sold	Average strike (US\$/share)	Fair value		Financial Settlement	Value at Risk	Fair value by y
	September 30, 2016	December 31, 2015			Inflows (Outflows)	September 30, 2016	September 30, 2016		
Call options	10,000,000	10,000,000	B	44	258	28		25	

d) **Call options from debentures**

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

Flow	Notional (quantity)		Bought / Sold	Average strike (R\$/share)	Fair value		Financial Settlement	Value at Risk	Fair value by y
	September 30, 2016	December 31, 2015			Inflows (Outflows)	September 30, 2016	September 30, 2016		
Call options	140,239	140,239	S	8,570	(121)	(152)		7	

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

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

Financial Settlement

Fair

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

Flow	Notional (quantity, in millions)		Bought / Sold	Average strike (R\$/ação)	Fair value		Inflows (Outflows) September 30, 2016	Value at Risk September 30, 2016	by y 2016
	September 30, 2016	December 31, 2015			September 30, 2016	December 31, 2015			
Options	2,139	2,139	B/S	1.9	388		57		39

f) **Embedded derivatives in commercial contracts**

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

Flow	Notional (ton)		Bought / Sold	Average strike (US\$/ton)	Fair value		Financial Settlement Inflows (Outflows) September 30, 2016	Value at Risk September 30, 2016	Fair by 2016
	September 30, 2016	December 31, 2015			September 30, 2016	December 31, 2015			
Nickel Forward	5,538	3,877	S	10,236	0.9		11.7		
Copper Forward	4,527	5,939	S	4,768	0.9		7.7		
<b>Total</b>					<b>1.8</b>		<b>19.4</b>		<b>7.3</b>

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)		Bought / Sold	Average strike (US\$/ton)	Fair value		Financial Settlement Inflows (Outflows) September 30, 2016	Value at Risk September 30, 2016	Fair 2016
	September 30, 2016	December 31, 2015			September 30, 2016	December 31, 2015			
Call options	746,667	746,667	S	179	(5.6)				3.6 (0.0)

Table of Contents**g) Sensitivity analysis of derivative financial instruments**

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

- *Scenario I*: fair value calculation considering market prices as of September 30, 2016
- *Scenario II*: fair value estimated considering a 25% deterioration in the associated risk variables
- *Scenario III*: fair value estimated considering a 50% deterioration in the associated risk variables

Instrument	Instrument's main risk events	Scenario I	Scenario II	Scenario III
<b>CDI vs. US\$ fixed rate swap</b>	R\$ depreciation	(1,885)	(4,009)	(6,134)
	US\$ interest rate inside Brazil decrease	(1,885)	(1,910)	(1,935)
	Brazilian interest rate increase	(1,885)	(1,890)	(1,895)
	Protected item: R\$ denominated debt	R\$ depreciation	n.a.	
<b>TJLP vs. US\$ fixed rate swap</b>	R\$ depreciation	(2,178)	(3,873)	(5,567)
	US\$ interest rate inside Brazil decrease	(2,178)	(2,258)	(2,341)
	Brazilian interest rate increase	(2,178)	(2,377)	(2,559)
	TJLP interest rate decrease	(2,178)	(2,318)	(2,461)
Protected item: R\$ denominated debt	R\$ depreciation	n.a.		
<b>TJLP vs. US\$ floating rate swap</b>	R\$ depreciation	(182)	(293)	(403)
	US\$ interest rate inside Brazil decrease	(182)	(190)	(198)
	Brazilian interest rate increase	(182)	(196)	(209)
	TJLP interest rate decrease	(182)	(192)	(202)
Protected item: R\$ denominated debt	R\$ depreciation	n.a.		
<b>R\$ fixed rate vs. US\$ fixed rate swap</b>	R\$ depreciation	(122)	(448)	(774)
	US\$ interest rate inside Brazil decrease	(122)	(159)	(199)
	Brazilian interest rate increase	(122)	(219)	(303)
Protected item: R\$ denominated debt	R\$ depreciation	n.a.		
<b>IPCA vs. US\$ fixed rate swap</b>	R\$ depreciation	(190)	(573)	(956)

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

	US\$ interest rate inside Brazil decrease	(190)	(213)	(236)
	Brazilian interest rate increase	(190)	(286)	(371)
	IPCA index decrease	(190)	(238)	(285)
Protected item: R\$ denominated debt	R\$ depreciation	n.a.		
<b>IPCA vs. CDI swap</b>	Brazilian interest rate increase	148	(4)	(136)
	IPCA index decrease	148	70	(4)
Protected item: R\$ denominated debt linked to IPCA	IPCA index decrease	n.a.	(70)	4
<b>EUR fixed rate vs. US\$ fixed rate swap</b>	EUR depreciation	(97)	(673)	(1,250)
	Euribor increase	(97)	(107)	(116)
	US\$ Libor decrease	(97)	(139)	(182)
Protected item: EUR denominated debt	EUR depreciation	n.a.	673	1,250
<b>EUR Forward</b>	EUR depreciation	(24)	(480)	(936)
	Euribor increase	(24)	(25)	(26)
	US\$ Libor decrease	(24)	(26)	(28)
Protected item: EUR denominated debt	EUR depreciation	n.a.	480	936

Table of Contents

Instrument	Instrument's main risk events	Scenario I	Scenario II	Scenario III
<b>Bunker Oil protection</b>				
Forwards and options	Bunker Oil price decrease	(373)	(550)	(735)
Protected item: Part of costs linked to bunker oil prices	Bunker Oil price decrease	n.a.	550	735
<b>Nickel sales fixed price protection</b>				
Forwards	Nickel price decrease	13	(98)	(208)
Protected item: Part of nickel revenues with fixed prices	Nickel price fluctuation	n.a.	98	208
<b>Purchase protection program</b>				
Nickel forwards	Nickel price increase	(0.3)	(1.7)	(3.0)
Protected item: Part of costs linked to nickel prices	Nickel price increase	n.a.	1.7	3.0
Copper forwards	Copper price increase	(0.0)	(2.0)	(4.0)
Protected item: Part of costs linked to copper prices	Copper price increase	n.a.	2.0	4.0
<b>SLW warrants</b>	SLW stock price decrease	258	142	49
<b>VLI call options</b>	VLI stock value increase	(121)	(183)	(257)
<b>Options regarding non-controlling interest in subsidiary</b>	Subsidiary stock value decrease	388	66	(161)
Instrument	Main risks	Scenario I	Scenario II	Scenario III
Embedded derivatives - Raw material purchase (nickel)	Nickel price increase	1	(45)	(91)
Embedded derivatives - Raw material purchase (copper)	Copper price increase	1	(16)	(34)
Embedded derivatives - Gas purchase	Pellet price increase	(2)	(7)	(16)

**h) Financial counterparties ratings**

The transactions of derivative instruments, cash and cash equivalents as well as investments 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 in foreign currency published by agencies Moody's and S&P regarding the main financial institutions that we had outstanding positions as of September 30, 2016.

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

Long term ratings by counterparty	Moody s	S&P
ANZ Australia and New Zealand Banking	Aa2	AA-
Banco Bradesco	Ba3	BB
Banco de Credito del Peru	Baa1	BBB
Banco do Brasil	Ba3	BB
Banco do Nordeste	Ba3	BB
Banco Safra	Ba3	BB
Banco Santander	Ba3	BB
Banco Votorantim	Ba3	BB
Bank of America	Baa1	BBB+
Bank of Nova Scotia	Aa3	A+
Bank of Tokyo Mitsubishi UFJ	A1	A
Banpara	Ba3	BB-
Barclays	Baa3	BBB
BBVA	A3	BBB+
BNP Paribas	A1	A
BTG Pactual	Ba3	BB-
Caixa Economica Federal	Ba3	BB
Citigroup	Baa1	BBB+
Credit Agricole	A1	A
Deutsche Bank	A3	BBB+
Goldman Sachs	A3	BBB+
HSBC	A1	A
Intesa Sanpaolo Spa	A3	BBB-
Itau Unibanco	Ba3	BB
JP Morgan Chase & Co	A3	A-
Macquarie Group Ltd	A3	BBB
Morgan Stanley	A3	BBB+
National Australia Bank NAB	Aa2	AA-
Royal Bank of Canada	Aa3	AA-
Societe Generale	A2	A
Standard Bank Group	Baa3	
Standard Chartered	A1	BBB+

Table of Contents**i) Market curves**

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

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

<b>Maturity</b>	<b>Price (US\$/ton)</b>	<b>Maturity</b>	<b>Price (US\$/ton)</b>	<b>Maturity</b>	<b>Price (US\$/ton)</b>
SPOT	10,460	MAR17	10,617	SEP17	10,683
OCT16	10,544	APR17	10,627	SEP18	10,798
NOV16	10,560	MAY17	10,640	SEP19	10,882
DEC16	10,578	JUN17	10,650	SEP20	10,964
JAN17	10,593	JUL17	10,662		
FEB17	10,605	AUG17	10,673		

**Copper**

<b>Maturity</b>	<b>Price (US\$/lb)</b>	<b>Maturity</b>	<b>Price (US\$/lb)</b>	<b>Maturity</b>	<b>Price (US\$/lb)</b>
SPOT	2.21	MAR17	2.21	SEP17	2.22
OCT16	2.20	APR17	2.22	SEP18	2.23
NOV16	2.21	MAY17	2.22	SEP19	2.25
DEC16	2.21	JUN17	2.22	SEP20	2.26
JAN17	2.21	JUL17	2.22		
FEB17	2.21	AUG17	2.22		

**Bunker Oil**

<b>Maturity</b>	<b>Price (US\$/ton)</b>	<b>Maturity</b>	<b>Price (US\$/ton)</b>	<b>Maturity</b>	<b>Price (US\$/ton)</b>
SPOT	256	MAR17	262	SEP17	267



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

OCT16	259	APR17	263	SEP18	280
NOV16	262	MAY17	264	SEP19	293
DEC16	262	JUN17	264	SEP20	308
JAN17	262	JUL17	265		
FEB17	261	AUG17	266		

Table of Contents**(ii) Foreign exchange and interest rates****US\$-Brazil Interest Rate**

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
11/01/16	1.61	09/01/17	2.00	01/02/20	2.86
12/01/16	1.74	10/02/17	2.05	04/01/20	2.98
01/02/17	1.78	01/02/18	2.17	07/01/20	3.07
02/01/17	1.81	04/02/18	2.25	10/01/20	3.18
03/01/17	1.82	07/02/18	2.36	01/04/21	3.28
04/03/17	1.83	10/01/18	2.42	04/01/21	3.34
05/02/17	1.86	01/02/19	2.54	07/01/21	3.43
06/01/17	1.92	04/01/19	2.62	10/01/21	3.52
07/03/17	1.93	07/01/19	2.68	01/03/22	3.57
08/01/17	1.99	10/01/19	2.72	01/02/23	3.87

**US\$ Interest Rate**

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
1M	0.53	6M	0.91	11M	0.94
2M	0.65	7M	0.92	12M	0.94
3M	0.85	8M	0.93	2Y	1.02
4M	0.88	9M	0.93	3Y	1.08
5M	0.90	10M	0.94	4Y	1.15

**TJLP**

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
11/01/16	7.50	09/01/17	7.50	01/02/20	7.50
12/01/16	7.50	10/02/17	7.50	04/01/20	7.50
01/02/17	7.50	01/02/18	7.50	07/01/20	7.50
02/01/17	7.50	04/02/18	7.50	10/01/20	7.50
03/01/17	7.50	07/02/18	7.50	01/04/21	7.50
04/03/17	7.50	10/01/18	7.50	04/01/21	7.50
05/02/17	7.50	01/02/19	7.50	07/01/21	7.50
06/01/17	7.50	04/01/19	7.50	10/01/21	7.50

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

07/03/17	7.50	07/01/19	7.50	01/03/22	7.50	
08/01/17	7.50	10/01/19	7.50	01/02/23	7.50	

Table of Contents**BRL Interest Rate**

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
11/01/16	14.03	09/01/17	12.58	01/02/20	11.58
12/01/16	13.93	10/02/17	12.48	04/01/20	11.60
01/02/17	13.77	01/02/18	12.19	07/01/20	11.61
02/01/17	13.60	04/02/18	12.01	10/01/20	11.59
03/01/17	13.48	07/02/18	11.85	01/04/21	11.58
04/03/17	13.32	10/01/18	11.73	04/01/21	11.59
05/02/17	13.16	01/02/19	11.63	07/01/21	11.59
06/01/17	13.00	04/01/19	11.59	10/01/21	11.60
07/03/17	12.88	07/01/19	11.57	01/03/22	11.60
08/01/17	12.72	10/01/19	11.58	01/02/23	11.68

**Implicit Inflation (IPCA)**

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
11/01/16	7.40	09/01/17	6.04	01/02/20	5.27
12/01/16	7.32	10/02/17	5.95	04/01/20	5.29
01/02/17	7.16	01/02/18	5.75	07/01/20	5.30
02/01/17	7.00	04/02/18	5.63	10/01/20	5.29
03/01/17	6.89	07/02/18	5.50	01/04/21	5.28
04/03/17	6.74	10/01/18	5.41	04/01/21	5.29
05/02/17	6.59	01/02/19	5.32	07/01/21	5.30
06/01/17	6.43	04/01/19	5.28	10/01/21	5.31
07/03/17	6.32	07/01/19	5.26	01/03/22	5.32
08/01/17	6.17	10/01/19	5.27	01/02/23	5.43

**EUR Interest Rate**

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
1M	-0.38	6M	-0.11	11M	-0.01
2M	-0.35	7M	-0.08	12M	0.00
3M	-0.32	8M	-0.05	2Y	-0.22
4M	-0.21	9M	-0.04	3Y	-0.21
5M	-0.15	10M	-0.02	4Y	-0.19

**CAD Interest Rate**

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
1M	0.88	6M	1.01	11M	0.10
2M	0.89	7M	0.74	12M	0.01
3M	0.90	8M	0.51	2Y	0.88
4M	0.96	9M	0.34	3Y	0.91
5M	1.00	10M	0.21	4Y	0.95

**Currencies - Ending rates**

CAD/US\$	0.7623	US\$/BRL	3.2462	EUR/US\$	1.1222
----------	--------	----------	--------	----------	--------

Table of Contents**20. Stockholders equity****a) Share capital**

At September 30, 2016 and December 31, 2015, the share capital was R\$77,300 corresponding to 5,244,316,120 shares issued and fully paid without par value.

	ON	September 30, 2016 PNA	Total
<b>Stockholders</b>			
Valepar S.A.	1,716,435,045	20,340,000	1,736,775,045
Brazilian Government (Golden Share)		12	12
Foreign investors - ADRs	792,920,634	640,657,142	1,433,577,776
FMP - FGTS	75,083,246		75,083,246
PIBB - BNDES	742,578	993,751	1,736,329
BNDESPar	206,378,882	66,185,272	272,564,154
Foreign institutional investors in local market	273,953,175	746,942,370	1,020,895,545
Institutional investors	76,600,716	128,382,435	204,983,151
Retail investors in Brazil	43,538,724	364,220,944	407,759,668
<b>Shares outstanding</b>	<b>3,185,653,000</b>	<b>1,967,721,926</b>	<b>5,153,374,926</b>
Shares in treasury	31,535,402	59,405,792	90,941,194
<b>Total issued shares</b>	<b>3,217,188,402</b>	<b>2,027,127,718</b>	<b>5,244,316,120</b>
<b>Amounts per class of shares (in millions)</b>	<b>47,421</b>	<b>29,879</b>	<b>77,300</b>
<b>Total authorized shares</b>	<b>3,600,000,000</b>	<b>7,200,000,000</b>	<b>10,800,000,000</b>

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

Basic and diluted earnings per share are as follows:

Three months period ended September 30		Nine months period ended September 30	
2016	2015	2016	2015

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

<b>Net income (loss) attributable to Vale's stockholders</b>	<b>1,842</b>	<b>(6,663)</b>	<b>11,738</b>	<b>(11,058)</b>
<b>Basic and diluted earnings per share:</b>				
Income (loss) available to preferred stockholders	703	(2,544)	4,482	(4,222)
Income (loss) available to common stockholders	1,139	(4,119)	7,256	(6,836)
<b>Total</b>	<b>1,842</b>	<b>(6,663)</b>	<b>11,738</b>	<b>(11,058)</b>
<b>Thousands of shares</b>				
Weighted average number of shares outstanding - preferred shares	1,967,722	1,967,722	1,967,722	1,967,722
Weighted average number of shares outstanding - common shares	3,185,653	3,185,653	3,185,653	3,185,653
<b>Total</b>	<b>5,153,375</b>	<b>5,153,375</b>	<b>5,153,375</b>	<b>5,153,375</b>
<b>Basic and diluted earnings (loss) per share</b>				
Preferred share	0.36	(1.29)	2.28	(2.15)
Common share	0.36	(1.29)	2.28	(2.15)

Table of Contents**21. Costs and expenses by nature****a) Cost of goods sold and services rendered**

	Consolidated			
	Three months period ended September 30		Nine months period ended September 30	
	2016	2015	2016	2015
Personnel	1,887	2,043	5,924	5,505
Materials and services	3,301	3,426	10,424	9,248
Fuel oil and gas	1,097	1,113	3,396	3,085
Maintenance	2,394	2,213	7,079	6,252
Energy	699	500	2,004	1,443
Acquisition of products	430	464	1,267	1,931
Depreciation and depletion	2,918	3,077	9,114	8,444
Freight	2,000	3,275	6,052	8,181
Others	1,356	1,914	4,080	4,892
<b>Total</b>	<b>16,082</b>	<b>18,025</b>	<b>49,340</b>	<b>48,981</b>
Cost of goods sold	15,643	17,617	48,074	47,727
Cost of services rendered	439	408	1,266	1,254
<b>Total</b>	<b>16,082</b>	<b>18,025</b>	<b>49,340</b>	<b>48,981</b>

**b) Selling and administrative expenses**

	Consolidated			
	Three months period ended September 30		Nine months period ended September 30	
	2016	2015	2016	2015
Personnel	199	196	601	658
Services (consulting, infrastructure and others)	62	94	186	252
Advertising and publicity	7	14	17	30
Depreciation and amortization	118	112	323	297
Travel expenses	7	9	21	26
Taxes and rents	12	11	37	40
Others	90	22	268	198
<b>Total</b>	<b>495</b>	<b>458</b>	<b>1,453</b>	<b>1,501</b>

**c) Others operational expenses (incomes), net**



	Consolidated			
	Three months period ended September 30		Nine months period ended September 30	
	2016	2015	2016	2015
Provision for litigation	102	(6)	447	67
Provision for loss with VAT credits (ICMS)	89	188	135	458
Provision for profit sharing program	64	5	92	59
Provision (reversals) for disposal of materials and inventories	13	61	(339)	343
Gold stream transaction	(481)		(481)	(722)
Others	37	174	670	661
<b>Total</b>	<b>(176)</b>	<b>422</b>	<b>524</b>	<b>866</b>

Table of Contents**22. Financial result**

	Consolidated			
	Three months period ended September 30 2016	2015	Nine months period ended September 30 2016	2015
<b>Financial expenses</b>				
Loans and borrowings gross interest	(1,514)	(1,526)	(4,711)	(3,891)
Capitalized loans and borrowing costs	556	688	1,995	1,789
Labor, tax and civil lawsuits	(13)	26	(95)	(122)
Derivative financial instruments	(329)	(6,402)	(1,132)	(10,718)
Indexation and exchange rate variation (a)	(1,977)	(27,233)	(9,881)	(45,067)
Participative stockholders debentures	(155)	245	(918)	2,073
Expenses of REFIS	(466)	(486)	(1,368)	(1,333)
Others	(737)	(207)	(1,849)	(1,106)
	<b>(4,635)</b>	<b>(34,895)</b>	<b>(17,959)</b>	<b>(58,375)</b>
<b>Financial income</b>				
Short-term investments	20	188	279	326
Derivative financial instruments	196		4,998	967
Indexation and exchange rate variation (b)	911	8,710	20,925	18,907
Others	95	150	190	274
	<b>1,222</b>	<b>9,048</b>	<b>26,392</b>	<b>20,474</b>
<b>Financial results, net</b>	<b>(3,413)</b>	<b>(25,847)</b>	<b>8,433</b>	<b>(37,901)</b>
<b>Summary of indexation and exchange rate variation</b>				
Loans and borrowings	(1,034)	(24,473)	18,067	(36,828)
Others	(32)	5,950	(7,023)	10,668
<b>Net (a) + (b)</b>	<b>(1,066)</b>	<b>(18,523)</b>	<b>11,044</b>	<b>(26,160)</b>

**23. Deferred revenue - Gold stream**

In August 2016, the Company entered into an amendment to the original agreement with Silver Wheaton Corp. ( SLW ) to sell an additional 25% premium of the payable gold stream in copper concentrate from the Salobo copper mine for the life of the mine. In this transaction, the Company received: (i) an initial cash payment of R\$2.568 (US\$800); (ii) an option value with a reduction of the exercise price, from R\$211.00 (US\$65.00) to R\$142.00 (US\$43.75), of the 10 million warrants of SLW held by Vale since 2013 and maturing in 2023; and (iii) future cash payments for each ounce of gold delivered to SLW under the agreement, equal to the lesser of US\$400 per oz (plus a 1% annual adjustment from 2019 onwards) and the prevailing market price.

Vale may also receive an additional cash payment contingent on its decision to expand its capacity to process Salobo copper ores to more than 28 Mtpy before 2036. Salobo I and Salobo II, which are ramping up, will have a total capacity to process 24 Mtpy of run-of-mine (ROM). The

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

contingent additional cash payment could range from US\$113 to US\$953 depending on ore grade, timing and size of the expansion.

This transaction was bifurcated into two identifiable components (i) the sale of the mineral rights which resulted in R\$481 (US\$150) gain in the income statement under Other operating income (expenses), net and, (ii) R\$1.762 (US\$549) recorded as deferred revenue (liability) related to the services for gold extraction on the portion in which Vale operates as an agent for SLW gold extraction.

After the completion of this transaction SLW holds 75% of the payable gold stream in copper concentrated from the Salobo mine and 70% of the gold extracted during the next 20 years as a by-product of the Sudbury nickel mines. During the three months period ended September 30, 2016 and 2015, the Company recognized R\$187 and R\$79, respectively, and during the nine months period ended September 30, 2016 and 2015, R\$493 and R\$225, respectively, in income statement related to rendered services of the original and amended transactions.

Defining the gain on sale of mineral interest and the deferred revenue portion of the transaction required the use of critical accounting estimates as follow:

- Discount rates used to measure the present value of future inflows and outflows;
- Allocation of costs between copper and gold based on relative prices;
- Expected margin for the independent elements (sale of mineral rights and service for gold extraction) based on Company's best estimate.

Table of Contents

**24. Commitments**

**a) Base metals operations**

In December 2015, the put option related to the dilution of Sumic Nickel Netherland B.V. ( Sumic ) interest in Vale Nouvelle-Calédonie S.A.S. ( VNC ) was automatically triggered.

In March 2016, Vale Canada Limited purchased the equity interest held by Sumic in VNC for R\$ 480 (US\$135).

**b) Participative stockholders debentures**

At October 3rd, 2016 (subsequently event), the company has paid the semiannual remuneration to stockholders debentures the amount of R\$164.

**c) Operating lease and purchase obligations**

The future payment commitments for operating lease and purchase obligations are as follows:

2016	130
2017	197
2018	206
2019	177
2020 and thereafter	186
<b>Total minimum payments required</b>	<b>896</b>

**d) Guarantees provided**

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

As of September 30, 2016, 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. totaled R\$1,149 and R\$4,385 respectively.

Table of Contents**25. Related parties**

Transactions with related parties are made by the Company at arm's-length, observing the price and usual market conditions and therefore do not generate any undue benefit to their counterparties or loss to the Company.

In the normal course of operations, Vale enters into contracts with related parties (associates, joint ventures and stockholders), related to the sale and purchase of products and services, loans, derivatives, leasing of assets, sale of raw material and railway transportation services.

The balances of these related party transactions and their effects on the financial statements are as follows:

	Assets Consolidated							
	September 30, 2016			December 31, 2015				
	Cash and cash equivalents	Derivative financial instruments	Accounts receivable	Related parties	Cash and cash equivalents	Derivative financial instruments	Accounts receivable	Related parties
Banco Bradesco S.A.	1,740	711			144	258		
Banco do Brasil S.A.	503	101			1,544	62		
Baovale Mineração S.A. Companhia								4
Coreano-Brasileira de Pelotização Companhia				45				22
Hispano-Brasileira de Pelotização Companhia			7				3	14
Companhia Ítalo-Brasileira de Pelotização								33
Companhia Nipo-Brasileira de Pelotização				71				35
Companhia Siderúrgica do Atlântico				52				
Companhia Siderúrgica do Pecem			187					
Consórcio de Rebocadores da Baía de São Marcos			32				60	
Ferrovia Norte Sul S.A.			5				12	
Mitsui & Co., Ltd.			10				5	
MRS Logística S.A.				61				65
VLI Multimodal S.A.			15				36	

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

VLI Operações Portuárias S.A.			6				99	
VLI S.A.			6	38				39
Others			77	10			91	66
<b>Total</b>	<b>2,243</b>	<b>812</b>	<b>345</b>	<b>277</b>	<b>1,688</b>	<b>320</b>	<b>306</b>	<b>278</b>

48

Table of Contents

	<b>Liabilities Consolidated</b>							
	September 30, 2016			December 31, 2015				
	Others liabilities	Derivative financial instruments	Related parties	Loans and borrowings	Others liabilities	Derivative financial instruments	Related parties	Loans and borrowings
Aliança Geração de Energia S.A.	38		155		43			
Banco Bradesco S.A.		1,526		19	212	800		1,445
Banco do Brasil S.A.		678		9,365		976		10,250
Baovale Mineração S.A.	70				29			
BNDES		123		14,520		152		15,877
BNDES Participações S.A. Companhia				1,428				1,449
Coreano-Brasileira de Pelotização	149		97		15		273	
Companhia Hispano-Brasileira de Pelotização	82		100		143		26	
Companhia Ítalo-Brasileira de Pelotização	106		162		12		252	
Companhia Nipo-Brasileira de Pelotização	300		197		34		436	
Consórcio de Rebocadores Baía da São Marcos					30			
Ferrovias Centro Atlântica S.A.			268				266	
Mitsui & Co., Ltd.	42				41			
MRS Logística S.A.	43				91			
Sumic Nickel Netherland B.V.			1,144				1,374	
VLI S.A.	2		109					
Others	95		24		93		59	
<b>Total</b>	<b>927</b>	<b>2,327</b>	<b>2,256</b>	<b>25,332</b>	<b>743</b>	<b>1,928</b>	<b>2,686</b>	<b>29,021</b>

	<b>Consolidated</b>					
	<b>Three months period ended September 30</b>					
	Net operating revenue	2016 Costs and expenses	Financial result	Net operating revenue	2015 Costs and expenses	Financial result
Aliança Geração de Energia S.A.		(105)		22		
Banco Bradesco S.A. (i)			(807)			(294)
Banco do Brasil S.A. (i)			(793)			(460)
Baovale Mineração S.A.		(13)			(2)	
BNDES (i)			(529)			(381)
BNDES Participações S.A. (i)			(73)			(30)



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

Companhia Coreano-Brasileira de Pelotização		(21)	(17)		(84)	
Companhia Hispano-Brasileira de Pelotização		(37)	(11)		(58)	
Companhia Ítalo-Brasileira de Pelotização		(42)	(19)		(73)	
Companhia Nipo-Brasileira de Pelotização		(88)	(29)		(86)	
Companhia Siderúrgica do Pecem	192					
Ferrovias Centro Atlântica S.A.	35	(31)	(4)	47	(32)	(2)
Ferrovias Norte Sul S.A.	11					
Mitsui & Co., Ltd.	133			146		
MRS Logística S.A.		(433)			(386)	
Samarco Mineração S.A.				70		
VLI Multimodal S.A.	30					
VLI Operações Portuárias S.A.	100	(24)		112		
VLI S.A.	109			141		
Others	7	(27)	7	39	(22)	13
<b>Total</b>	<b>617</b>	<b>(821)</b>	<b>(2,275)</b>	<b>577</b>	<b>(743)</b>	<b>(1,154)</b>

(i) Does not include exchange rate variation

Table of Contents

	Consolidated Nine months period ended September 30					
	Net operating revenue	2016 Costs and expenses	Financial result	Net operating revenue	2015 Costs and expenses	Financial result
Aliança Geração de Energia S.A.		(334)		22		
Banco Bradesco S.A. (i)			(380)			(462)
Banco do Brasil S.A. (i)			(1,091)			(828)
Baovale Mineração S.A.		(43)			(62)	
BNDES (i)			(1,057)			(489)
BNDES Participações S.A. (i)			(146)			(62)
Companhia Coreano-Brasileira de Pelotização		(152)	(17)		(187)	
Companhia Hispano-Brasileira de Pelotização		(108)	(11)		(121)	
Companhia Ítalo-Brasileira de Pelotização		(123)	(19)		(156)	
Companhia Nipo-Brasileira de Pelotização		(285)	(29)		(236)	
Companhia Siderúrgica do Atlântico		(21)				
Companhia Siderúrgica do Pecem	308					
Ferrovias Centro Atlântica S.A.	104	(75)	(5)	120	(94)	(4)
Ferrovias Norte Sul S.A.	50					
Mitsui & Co., Ltd.	359			471		
MRS Logística S.A.		(1,161)			(1,161)	
Samarco Mineração S.A.				336		
VLI Multimodal S.A.	30					
VLI Operações Portuárias S.A.	348	(35)		112		
VLI S.A.	327			528		
Others	48	(94)	1	139	(92)	19
<b>Total</b>	<b>1,574</b>	<b>(2,431)</b>	<b>(2,754)</b>	<b>1,728</b>	<b>(2,109)</b>	<b>(1,826)</b>

---

(i) Does not include exchange rate variation

Table of Contents

## 26. Select notes to Parent Company information (individual interim information)

## (a) Investments

	Parent company	
	2016	2015
<b>Balance at January 1st</b>	<b>127,517</b>	<b>128,615</b>
Acquisitions		1,818
Additions	1,638	5,109
Disposals		(4,000)
Translation adjustment	(13,504)	35,215
Equity results in income statement	5,970	(4,720)
Equity results in statement of comprehensive income	(683)	177
Dividends declared	(524)	(355)
Transfer to held for sale		(30)
Others	8	132
<b>Balance at September 30,</b>	<b>120,422</b>	<b>161,961</b>

## (b) Intangible

	Parent company			Total
	Concessions	Right of use	Software	
<b>Balance at December 31, 2015</b>	<b>7,084</b>	<b>123</b>	<b>1,350</b>	<b>8,557</b>
Additions (i)	3,643		36	3,679
Disposals	(29)			(29)
Amortization	(405)	(5)	(362)	(772)
<b>Balance at September 30, 2016</b>	<b>10,293</b>	<b>118</b>	<b>1,024</b>	<b>11,435</b>
Cost	13,773	223	4,033	18,029
Accumulated amortization	(3,480)	(105)	(3,009)	(6,594)
	<b>10,293</b>	<b>118</b>	<b>1,024</b>	<b>11,435</b>

	Parent company			Total
	Concessions	Right of use	Software	
<b>Balance at December 31, 2014</b>	<b>5,876</b>	<b>129</b>	<b>1,462</b>	<b>7,467</b>
Additions	1,572		365	1,937
Disposals	(49)			(49)
Amortization	(361)	(6)	(380)	(747)
<b>Balance at September 30, 2015</b>	<b>7,038</b>	<b>123</b>	<b>1,447</b>	<b>8,608</b>
Cost	10,581	223	3,967	14,771

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

Accumulated amortization	(3,543)	(100)	(2,520)	(6,163)
	<b>7,038</b>	<b>123</b>	<b>1,447</b>	<b>8,608</b>

---

(i) Refers mainly duplication the Carajás Railroad.

Table of Contents**(c) Property, plant and equipment**

	Land	Building	Facilities	Equipment	Parent company Mineral properties	Others	Constructions in progress	Total
<b>Balance at December 31, 2015</b>	<b>1,672</b>	<b>19,546</b>	<b>19,379</b>	<b>8,371</b>	<b>4,215</b>	<b>14,203</b>	<b>29,501</b>	<b>96,887</b>
Additions (i)							6,288	6,288
Disposals		(1)	(9)	(64)		(37)	(30)	(141)
Depreciation and amortization		(467)	(723)	(817)	(152)	(934)		(3,093)
Assets retirement obligations					159			159
Transfers	9	1,808	759	960	(46)	226	(3,721)	(5)
<b>Balance at September 30, 2016</b>	<b>1,681</b>	<b>20,886</b>	<b>19,406</b>	<b>8,450</b>	<b>4,176</b>	<b>13,458</b>	<b>32,038</b>	<b>100,095</b>
Cost	1,681	24,044	25,796	14,103	5,575	21,049	32,038	124,286
Accumulated depreciation		(3,158)	(6,390)	(5,653)	(1,399)	(7,591)		(24,191)
	<b>1,681</b>	<b>20,886</b>	<b>19,406</b>	<b>8,450</b>	<b>4,176</b>	<b>13,458</b>	<b>32,038</b>	<b>100,095</b>

	Land	Building	Facilities	Equipment	Parent company Mineral properties	Others	Constructions in progress	Total
<b>Balance at December 31, 2014</b>	<b>1,452</b>	<b>13,364</b>	<b>17,337</b>	<b>7,097</b>	<b>4,396</b>	<b>9,820</b>	<b>33,855</b>	<b>87,321</b>
Additions (i)							9,614	9,614
Disposals		(10)	(8)	(92)		(36)		(146)
Depreciation and amortization		(371)	(656)	(722)	(259)	(856)		(2,864)
Transfers	236	4,530	2,452	1,682	543	4,053	(13,496)	
<b>Balance at September 30, 2015</b>	<b>1,688</b>	<b>17,513</b>	<b>19,125</b>	<b>7,965</b>	<b>4,680</b>	<b>12,981</b>	<b>29,973</b>	<b>93,925</b>
Cost	1,688	20,085	24,712	12,690	5,794	19,852	29,973	114,794
Accumulated depreciation		(2,572)	(5,587)	(4,725)	(1,114)	(6,871)		(20,869)
	<b>1,688</b>	<b>17,513</b>	<b>19,125</b>	<b>7,965</b>	<b>4,680</b>	<b>12,981</b>	<b>29,973</b>	<b>93,925</b>

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

**(d) Loans and borrowings**

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

	Current liabilities		Parent company	
	September 30, 2016	December 31, 2015	September 30, 2016	December 31, 2015
<b>Debt contracts in the international markets</b>				
<b>Floating rates in:</b>				
US\$	447	567	15,060	16,829
<b>Fixed rates in:</b>				
US\$	1,331	937	4,869	9,020
EUR			5,473	6,376
<b>Accrued charges</b>	329	479		
	<b>2,107</b>	<b>1,983</b>	<b>25,402</b>	<b>32,225</b>
<b>Debt contracts in Brazil</b>				
<b>Floating rates in:</b>				
R\$, indexed to TJLP, TR, IPCA, IGP-M and CDI	921	780	17,395	17,658
Basket of currencies and US\$ indexed to LIBOR	1,074	1,125	4,049	5,227
<b>Fixed rates in:</b>				
R\$	190	190	733	876
<b>Accrued charges</b>	999	658		
	<b>3,184</b>	<b>2,753</b>	<b>22,177</b>	<b>23,761</b>
	<b>5,291</b>	<b>4,736</b>	<b>47,579</b>	<b>55,986</b>

Table of Contents

The future flows of debt payments (principal) are as follows:

	Parent company Debt principal
2016	604
2017	4,099
2018	12,546
2019	6,872
2020	7,690
2021	3,553
Between 2022 and 2025	10,683
2026 onwards	5,495
	<b>51,542</b>

**(e) Provisions for litigation**

	Tax litigation	Civil litigation	Parent company Labor litigation	Environmental litigation	Total of litigation provision
<b>Balance at December 31, 2015</b>	<b>332</b>	<b>241</b>	<b>1,562</b>	<b>55</b>	<b>2,190</b>
Additions	38	296	575	7	916
Reversals	(44)	(171)	(278)	(16)	(509)
Payments	(277)	(167)	(306)		(750)
Indexation and interest	2	66	56	(4)	120
<b>Balance at September 30, 2016</b>	<b>51</b>	<b>265</b>	<b>1,609</b>	<b>42</b>	<b>1,967</b>

	Tax litigation	Civil litigation	Parent company Labor litigation	Environmental litigation	Total of litigation provision
<b>Balance at December 31, 2014</b>	<b>436</b>	<b>186</b>	<b>1,732</b>	<b>94</b>	<b>2,448</b>
Additions	369	89	379	1	838
Reversals	(500)	(82)	(330)	(1)	(913)
Payments	(44)	(4)	(56)	(34)	(138)
Indexation and interest	97	50	(127)	6	26
<b>Balance at September 30, 2015</b>	<b>358</b>	<b>239</b>	<b>1,598</b>	<b>66</b>	<b>2,261</b>

**(f) Income taxes**

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

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

	Parent company	
	Nine months period ended September 30	
	2016	2015
<b>Net income (loss) before income taxes</b>	<b>17,958</b>	<b>(28,663)</b>
<b>Income taxes at statutory rates - 34%</b>	<b>(6,106)</b>	<b>9,745</b>
<b>Adjustments that affect the basis of taxes:</b>		
Income tax benefit from interest on stockholders' equity		1,054
Tax incentives	559	
Equity results	2,030	(1,605)
Addition (Reversals) of tax loss carry forward	(1,250)	8,818
Others results in associates and joint ventures	(1,305)	
Others	(148)	(407)
<b>Income taxes</b>	<b>(6,220)</b>	<b>17,605</b>



Table of Contents**(g) Related parties**

	Parent company Assets							
	September 30, 2016			December 31, 2015				
	Cash and cash equivalents	Accounts receivable	Derivative financial instruments	Related parties	Cash and cash equivalents	Accounts receivable	Derivative financial instruments	Related parties
Banco Bradesco S.A.	88		711		44		258	
Banco do Brasil S.A.	39		101		217		62	
Biopalma da Amazônia S.A.				973				1,360
Companhia Coreano-Brasileira de Pelotização				45				22
Companhia Hispano-Brasileira de Pelotização		7						14
Companhia Ítalo-Brasileira de Pelotização								33
Companhia Nipo-Brasileira de Pelotização				71				35
Companhia Portuária Baía de Sepetiba				119				119
Companhia Siderúrgica do Atlântico				52				
Companhia Siderúrgica do Pecem		173						
Empreendimentos Brasileiros de Mineração S.A.				121				
Mineração Brasileiras Reunidas S.A.								161
Mineração Corumbaense Reunidas S.A.		46				51		
MRS Logística S.A.				26				27
Salobo Metais S.A.				119				155
Vale International S.A.		26,092				36,518		331
VLI Multimodal S.A.		15				36		
VLI Operações Portuárias S.A.		6				99		
VLI S.A.		6		38				39
Others		126		3		230		6
<b>Total</b>	<b>127</b>	<b>26,485</b>	<b>812</b>	<b>1,567</b>	<b>261</b>	<b>36,956</b>	<b>320</b>	<b>2,302</b>

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

Parent company  
Liabilities

	September 30, 2016				December 31, 2015			
	Othes liabilities	Derivative financial instruments	Related parties	Loans and borrowings	Othes liabilities	Derivative financial instruments	Related parties	Loans and borrowings
Aliança Geração de Energia S.A.	38		155		43			
Banco Bradesco S.A.		1,526		19		800		1,445
Banco do Brasil S.A.		678		9,365		976		10,250
Baovale Mineração S.A.	70				29			
BNDES		123		13,004		152		14,405
BNDES Participações S.A.				1,428				1,449
Companhia Coreano-Brasileira de Pelotização	149				15			
Companhia Hispano-Brasileira de Pelotização	82				143			
Companhia Ítalo-Brasileira de Pelotização	105				12			
Companhia Nipo-Brasileira de Pelotização	300				34			
Companhia Portuária Baía de Sepetiba	677				484			
Ferrovia Centro Atlântica S.A.			268				266	
Mineração Brasileiras Reunidas S.A.	521		3,032		510		3,172	
MRS Logística S.A.	43				91			
Vale International S.A.	4		56,126		5		66,814	
VLI S.A.	2		109		2			
Others	146		351		255		359	
<b>Total</b>	<b>2,137</b>	<b>2,327</b>	<b>60,041</b>	<b>23,816</b>	<b>1,623</b>	<b>1,928</b>	<b>70,611</b>	<b>27,549</b>

Table of Contents

	Parent company Nine months period ended September 30					
	Net operating revenue	2016 Costs and expenses	Financial result	Net operating revenue	2015 Costs and expenses	Financial result
Aliança Geração de Energia S.A.		(334)				
Banco Bradesco S.A. (i)			(389)			(461)
Banco do Brasil S.A. (i)			(1,094)			(828)
Baovale Mineração S.A.		(43)				
Biopalma da Amazônia S.A.			(178)	1		526
BNDES (i)			(1,033)			(480)
BNDES Participações S.A. (i)			(146)			(62)
Companhia Coreano-Brasileira de Pelotização		(151)			(62)	
Companhia Hispano-Brasileira de Pelotização		(108)			(187)	
Companhia Ítalo-Brasileira de Pelotização		(123)			(121)	
Companhia Nipo-Brasileira de Pelotização		(285)			(156)	
Companhia Portuária Baía de Sepetiba		(536)			(602)	
Companhia Siderúrgica do Atlântico		(21)				
Companhia Siderúrgica do Pecem	294					
Ferrovia Centro Atlântica S.A.	104	(75)	(5)	120	(94)	(4)
Mineração Brasileiras Reunidas S.A.		(1,172)	(305)		(675)	(53)
MRS Logística S.A.		(1,161)			(1,161)	
Salobo Metais S.A.	30			24	(7)	
Samarco Mineração S.A.				336		
Vale Energia S.A.		(8)			(185)	7
Vale International S.A.	28,206		3,344	26,945		(13,425)
VLI Multimodal S.A.	30					
VLI Operações Portuárias S.A.	348	(35)		112		
VLI S.A.	327			528		
Others	89	(3)	(276)	95	(247)	55
<b>Total</b>	<b>29,428</b>	<b>(4,055)</b>	<b>(82)</b>	<b>28,161</b>	<b>(3,497)</b>	<b>(14,725)</b>

---

(i) Does not include exchange rate variation



Table of Contents

**Members of the Board of Directors, Fiscal Council, Advisory Committees and Executive Officers**

**Board of Directors**

Gueitiro Matsuo Genso

**Chairman**

Sérgio Alexandre Figueiredo Clemente

**Vice-President**

Dan Antonio Marinho Conrado

Marcel Juviniانو Barros

Eduardo Refinetti Guardia

Fernando Jorge Buso Gomes

Motomu Takahashi

Oscar Augusto de Camargo Filho

Eduardo de Salles Bartolomeo

Lucio Azevedo

Alberto Guth

**Alternate**

Gilberto Antonio Vieira

Moacir Nachbar Junior

Arthur Prado Silva

Francisco Ferreira Alexandre

Robson Rocha

Luiz Mauricio Leuzinger

Yoshitomo Nishimitsu

Eduardo de Oliveira Rodrigues Filho

Marcelo Marcolino

Carlos Roberto de Assis Ferreira

Marcelo Gasparino

**Advisory Committees of the Board of Directors**

**Controlling Committee**

Eduardo Cesar Pasa

Moacir Nachbar Junior

Oswaldo Mário Pego de Amorim Azevedo

**Executive Development Committee**

Oscar Augusto de Camargo Filho

**Governance and Sustainability Committee**

Fernando Jorge Buso Gomes

Fernando Santos do Nascimento

Eduardo de Oliveira Rodrigues Filho

Priscila Valle Costa de Oliveira

Ricardo Simonsen

**Fiscal Council**

Marcelo Amaral Moraes

**Chairman**

Paulo José dos Reis Souza

Sandro Kohler Marcondes

Aníbal Moreira dos Santos

Raphael Manhães Martins

**Alternate**

Paula Bicudo de Castro Magalhães

Sergio Mamede Rosa do Nascimento

Oswaldo Mário Pego de Amorim Azevedo

Julio Sergio de Souza Cardozo

**Executive Officers**

Murilo Pinto de Oliveira Ferreira

**Chief Executive Officer**

Clovis Torres Junior

**Executive Officer (Human Resources, Health & Safety, Sustainability, Energy, Mergers and Acquisitions, Governance, Corporate Integrity, Legal and Tax)**

Luciano Siani Pires

**Executive Officer (Finance and Investors Relations)**

Roger Allan Downey

**Executive Officer (Fertilizers, Coal and Strategy)**

Gerd Peter Poppinga

**Executive Officer (Ferrous)**

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

Marcel Juviniانو Barros  
Fernando Jorge Buso Gomes  
Tatiana Boavista Barros Heil

**Strategic Committee**

Murilo Pinto de Oliveira Ferreira  
Gueitiro Matsuo Genso  
Luiz Carlos Trabuco Cappi  
Oscar Augusto de Camargo Filho  
Eduardo de Salles Bartolomeo

**Finance Committee**

Gilmar Dalilo Cezar Wanderley  
Fernando Jorge Buso Gomes  
Eduardo de Oliveira Rodrigues Filho  
Marcelo Marcolino

Humberto Ramos de Freitas  
**Executive Officer (Logistics and Mineral Research)**

Jennifer Anne Maki  
**Executive Officer (Base Metals)**

Rogério Nogueira  
**Global Controller Director**

Murilo Muller  
**Controllership Director**

Dioni Brasil  
**Accounting Manager**  
**TC-CRC-RJ 083305/O-8**

Table of Contents

**Signatures**

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

		Vale S.A. (Registrant)
Date: October 27, 2016	By:	/s/ Andre Figueiredo Andre Figueiredo Director of Investor Relations

---