
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 20-F

(Mark One)

- Registration statement pursuant to Section 12(b) or 12(g) of the Securities Exchange Act of 1934
or
- Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
for the fiscal year ended December 31, 2018
or
- Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
or
- Shell company report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Commission file number: 001-31518

TENARIS S.A.

(Exact name of Registrant as specified in its charter)

N/A

(Translation of Registrant's name into English)

Grand Duchy of Luxembourg
(Jurisdiction of incorporation or organization)

29, Avenue de la Porte-Neuve – 3rd Floor
L-2227 Luxembourg
(Address of principal executive offices)

Gonzalo Domínguez
29, Avenue de la Porte-Neuve – 3rd Floor
L-2227 Luxembourg
Tel. + (352) 26 47 89 78, Fax. + (352) 26 47 89 79, e-mail: investors@tenaris.com
(Name, Telephone, E-Mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange On Which Registered
American Depositary Shares Ordinary Shares, par value \$1.00 per share	New York Stock Exchange New York Stock Exchange*

* Ordinary shares of Tenaris S.A. are not listed for trading but only in connection with the registration of American Depositary Shares which are evidenced by American Depositary Receipts.

Securities registered or to be registered pursuant to Section 12(g) of the Act:
None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:
None

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

1,180,536,830 ordinary shares, par value \$1.00 per share

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes No

Note – checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See definition of "large accelerated filer," "accelerated filer," and "emerging growth company" in Rule 12b-2 of the Exchange Act (Check one):

Large accelerated filer Accelerated Filer Non-accelerated filer
Emerging growth company

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards† provided pursuant to Section 13(a) of the Exchange Act.

† The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP

International Financial Reporting Standards as issued by the International Accounting Standards Board

Other

If "Other" has been checked in response to the previous question indicate by check mark which financial statement item the registrant has elected to follow. Item 17 Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

Please send copies of notices and communications from the Securities and Exchange Commission to:

Cristian J. P. Mitrani
Mitrani, Caballero & Ruiz Moreno Abogados
Bouchar 680, 13th Floor
(C1106ABJ) Buenos Aires, Argentina
(54 11) 4590-8600

Robert S. Risoleo, Esq.
Sullivan & Cromwell LLP
1700 New York Avenue N.W., Suite 700
Washington, DC 20006-5215
(202) 956-7500

TABLE OF CONTENTS

<u>PART I</u>		<u>7</u>
<u>Item 1.</u>	<u>Identity of Directors, Senior Management and Advisers</u>	<u>7</u>
<u>Item 2.</u>	<u>Offer Statistics and Expected Timetable</u>	<u>7</u>
<u>Item 3.</u>	<u>Key Information</u>	<u>8</u>
<u>Item 4.</u>	<u>Information on the Company</u>	<u>17</u>
<u>Item 4A.</u>	<u>Unresolved Staff Comments</u>	<u>44</u>
<u>Item 5.</u>	<u>Operating and Financial Review and Prospects</u>	<u>44</u>
<u>Item 6.</u>	<u>Directors, Senior Management and Employees</u>	<u>63</u>
<u>Item 7.</u>	<u>Major Shareholders and Related Party Transactions</u>	<u>72</u>
<u>Item 8.</u>	<u>Financial Information</u>	<u>74</u>
<u>Item 9.</u>	<u>The Offer and Listing</u>	<u>78</u>
<u>Item 10.</u>	<u>Additional Information</u>	<u>78</u>
<u>Item 11.</u>	<u>Quantitative and Qualitative Disclosure About Market Risk</u>	<u>89</u>
<u>Item 12.</u>	<u>Description of Securities Other Than Equity Securities</u>	<u>92</u>
<u>PART II</u>		<u>93</u>
<u>Item 13.</u>	<u>Defaults, Dividend Arrearages and Delinquencies</u>	<u>93</u>
<u>Item 14.</u>	<u>Material Modifications to the Rights of Security Holders and Use of Proceeds</u>	<u>93</u>
<u>Item 15.</u>	<u>Controls and Procedures</u>	<u>93</u>
<u>Item 16A.</u>	<u>Audit Committee Financial Expert</u>	<u>94</u>
<u>Item 16B.</u>	<u>Code of Ethics</u>	<u>94</u>
<u>Item 16C.</u>	<u>Principal Accountant Fees and Services</u>	<u>94</u>
<u>Item 16D.</u>	<u>Exemptions from the Listing Standards for Audit Committees</u>	<u>95</u>
<u>Item 16E.</u>	<u>Purchases of Equity Securities by the Issuer and Affiliated Purchasers</u>	<u>95</u>
<u>Item 16F.</u>	<u>Change in Registrant's Certifying Accountant</u>	<u>97</u>
<u>Item 16G.</u>	<u>Corporate Governance</u>	<u>97</u>
<u>Item 16H.</u>	<u>Mine Safety Disclosure</u>	<u>99</u>
<u>PART III</u>		<u>99</u>
<u>Item 17.</u>	<u>Financial Statements</u>	<u>99</u>
<u>Item 18.</u>	<u>Financial Statements</u>	<u>99</u>
<u>Item 19.</u>	<u>Exhibits</u>	<u>100</u>

CERTAIN DEFINED TERMS

Unless otherwise specified or if the context so requires:

- References in this annual report to “the Company” are exclusively to Tenaris S.A., a Luxembourg *société anonyme*.
- References in this annual report to “Tenaris”, “we”, “us” or “our” are to Tenaris S.A. and its consolidated subsidiaries. See “II. Accounting Policies A. Basis of presentation” and “II. Accounting Policies B. Group accounting” to our audited consolidated financial statements included in this annual report.
- References in this annual report to “San Faustin” are to San Faustin S.A., a Luxembourg *société anonyme* and the Company’s controlling shareholder.
- “shares” refers to ordinary shares, par value \$1.00, of the Company.
- “ADSs” refers to the American Depositary Shares, which are evidenced by American Depositary Receipts, and represent two shares each.
- “OCTG” refers to oil country tubular goods. See Item 4.B. “Information on the Company – Business Overview – Our Products”.
- “tons” refers to metric tons; one metric ton is equal to 1,000 kilograms, 2,204.62 pounds, or 1.102 U.S. (short) tons.
- “billion” refers to one thousand million, or 1,000,000,000.
- “U.S. dollars”, “US\$”, “USD” or “\$” each refers to the United States dollar.
- “EUR” refers to the Euro.
- “SAR” refers to the Saudi Arabian riyal.
- “BRL” refers to the Brazilian real.
- “MXN” refers to the Mexican peso.
- “ARS” refers to the Argentine peso.
- “AED” refers to the United Arab Emirates dirham..

PRESENTATION OF CERTAIN FINANCIAL AND OTHER INFORMATION

Accounting Principles

We prepare our consolidated financial statements in accordance with International Financial Reporting Standards (“IFRS”), as issued by the International Accounting Standards Board (“IASB”), and in accordance with IFRS, as adopted by the European Union. IFRS differs in certain significant respects from generally accepted accounting principles in the United States, commonly referred to as U.S. GAAP. Additionally, this annual report includes non-IFRS alternative performance measures such as EBITDA, Net cash/debt position and Free Cash Flow. See Exhibit 7.2 for more details on these alternative performance measures.

Following the sale in January 2017 of our steel electric conduit business in North America, known as Republic Conduit, the results of Republic Conduit are presented as discontinued operations in accordance with IFRS 5, “Non-current Assets Held for Sale and Discontinued Operations”. Consequently, all amounts related to discontinued operations within each line item of the consolidated income statement are reclassified into discontinued operations. The consolidated statement of cash flows includes the cash flows for continuing and discontinued operations; cash flows and earnings per share from discontinued operations are disclosed separately in note 27 “Discontinued Operations” to our audited consolidated financial statements included in this annual report, as well as additional information detailing net assets of disposal group classified as held for sale and discontinued operations.

We publish consolidated financial statements presented in increments of a thousand U.S. dollars. This annual report includes our audited consolidated financial statements for the years ended December 31, 2018, 2017 and 2016.

Rounding

Certain monetary amounts, percentages and other figures included in this annual report have been subject to rounding adjustments. Accordingly, figures shown as totals in certain tables may not be the arithmetic aggregation of the figures that precede them, and figures expressed as percentages in the text may not total 100% or, as applicable, when aggregated may not be the arithmetic aggregation of the percentages that precede them.

Our Internet Website is Not Part of this Annual Report

We maintain an Internet website at www.tenaris.com. Information contained in or otherwise accessible through our Internet website is not a part of this annual report. All references in this annual report to this Internet site are inactive textual references to these URLs, or “uniform resource locators” and are for informational reference only. We assume no responsibility for the information contained on our Internet website.

Industry Data

Unless otherwise indicated, industry data and statistics (including historical information, estimates or forecasts) in this annual report are contained in or derived from internal or industry sources believed by Tenaris to be reliable. Industry data and statistics are inherently predictive and are not necessarily reflective of actual industry conditions. Such statistics are based on market research, which itself is based on sampling and subjective judgments by both the researchers and the respondents, including judgments about what types of products and transactions should be included in the relevant market. In addition, the value of comparisons of statistics for different markets is limited by many factors, including that (i) the markets are defined differently, (ii) the underlying information was gathered by different methods and (iii) different assumptions were applied in compiling the data. Such data and statistics have not been independently verified, and the Company makes no representation as to the accuracy or completeness of such data or any assumptions relied upon therein.

CAUTIONARY STATEMENT CONCERNING FORWARD-LOOKING STATEMENTS

This annual report and any other oral or written statements made by us to the public may contain “forward-looking statements” within the meaning of and subject to the “safe harbor” provisions of the Private Securities Litigation Reform Act of 1995. This annual report contains forward-looking statements, including with respect to certain of our plans and current goals and expectations relating to Tenaris’s future financial condition and performance.

Sections of this annual report that by their nature contain forward-looking statements include, but are not limited to, Item 3. “Key Information”, Item 4. “Information on the Company”, Item 5. “Operating and Financial Review and Prospects”, Item 8. “Financial Information” and Item 11. “Quantitative and Qualitative Disclosure About Market Risk”.

We use words and terms such as “aim”, “will likely result”, “will continue”, “contemplate”, “seek to”, “future”, “objective”, “goal”, “should”, “will pursue”, “anticipate”, “estimate”, “expect”, “project”, “intend”, “plan”, “believe” and words and terms of similar substance to identify forward-looking statements, but they are not the only way we identify such statements. All forward-looking statements are management’s present expectations of future events and are subject to a number of factors and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements. These factors include the risks related to our business discussed under Item 3.D. “Key Information – Risk Factors”, among them, the following:

- our ability to implement our business strategy or to grow through acquisitions, joint ventures and other investments;
- the competitive environment in our business and our industry;
- our ability to price our products and services in accordance with our strategy;
- our ability to absorb cost increases and to secure supplies of essential raw materials and energy;
- our ability to adjust fixed and semi-fixed costs to fluctuations in product demand;
- trends in the levels of investment in oil and gas exploration and drilling worldwide;
- general macroeconomic and political conditions and developments in the countries in which we operate or distribute pipes; *and*
- changes to applicable laws and regulations, including the imposition of tariffs or quotas or other trade barriers.

By their nature, certain disclosures relating to these and other risks are only estimates and could be materially different from what actually occurs in the future. As a result, actual future gains or losses that may affect our financial condition and results of operations could differ materially from those that have been estimated. You should not place undue reliance on the forward-looking statements, which speak only as of the date of this annual report. Except as required by law, we are not under any obligation, and expressly disclaim any obligation to, update or alter any forward-looking statements, whether as a result of new information, future events or otherwise.

PART I

Item 1. Identity of Directors, Senior Management and Advisers

Not applicable.

Item 2. Offer Statistics and Expected Timetable

Not applicable.

Item 3. Key Information

A. Selected Financial Data

The selected consolidated financial data set forth below have been derived from our audited consolidated financial statements for each of the years and at the dates indicated therein⁽¹⁾. Our consolidated financial statements were prepared in accordance with IFRS, and were audited by PricewaterhouseCoopers, Société coopérative, Cabinet de révision agréé (“PwC Luxembourg”), an independent registered public accounting firm. PwC Luxembourg is a member firm of PwC International Limited (“PwC”). IFRS differs in certain significant respects from U.S. GAAP.

For a discussion of the accounting principles affecting the financial information contained in this annual report, please see “Presentation of Certain Financial and Other Information – Accounting Principles”.

Thousands of U.S. dollars (except number of shares and per share amounts)

	For the year ended December 31,				
	2018	2017	2016	2015	2014
Selected consolidated income statement data ⁽¹⁾					
Continuing operations					
Net sales	7,658,588	5,288,504	4,293,592	6,903,123	10,141,459
Cost of sales	(5,279,300)	(3,685,057)	(3,165,684)	(4,747,760)	(6,140,415)
Gross profit	2,379,288	1,603,447	1,127,908	2,155,363	4,001,044
Selling, general and administrative expenses	(1,509,976)	(1,270,016)	(1,196,929)	(1,593,597)	(1,932,778)
Other operating income (expenses), net ⁽²⁾	2,501	1,157	9,964	(395,971)	(187,734)
Operating income (loss)	871,813	334,588	(59,057)	165,795	1,880,532
Finance income	39,856	47,605	66,204	34,574	38,211
Finance cost	(36,942)	(27,072)	(22,329)	(23,058)	(44,388)
Other financial results	34,386	(43,550)	(21,921)	3,076	39,575
Income (loss) before equity in earnings (losses) of non-consolidated companies and income tax	909,113	311,571	(37,103)	180,387	1,913,930
Equity in earnings (losses) of non-consolidated companies ⁽³⁾	193,994	116,140	71,533	(39,558)	(164,616)
Income before income tax	1,103,107	427,711	34,430	140,829	1,749,314
Income tax	(229,207)	17,136	(17,102)	(234,384)	(580,431)
Income (loss) for the year for continuing operations	873,900	444,847	17,328	(93,555)	1,168,883
Discontinued operations					
Result for discontinued operations	-	91,542	41,411	19,130	12,293
Income (loss) for the year ⁽⁴⁾	873,900	536,389	58,739	(74,425)	1,181,176
Income (loss) attributable to ⁽⁴⁾ :					
Owners of the parent	876,063	544,737	55,298	(80,162)	1,158,517
Non-controlling interests	(2,163)	(8,348)	3,441	5,737	22,659
Income (loss) for the year ⁽⁴⁾	873,900	536,389	58,739	(74,425)	1,181,176
Depreciation and amortization for continuing operations	(664,357)	(608,640)	(657,109)	(653,313)	(609,647)
Weighted average number of shares outstanding	1,180,536,830	1,180,536,830	1,180,536,830	1,180,536,830	1,180,536,830
Basic and diluted earnings (losses) per share for continuing operations	0.74	0.38	0.01	(0.08)	0.97
Basic and diluted earnings (losses) per share	0.74	0.46	0.05	(0.07)	0.98
Dividends per share ⁽⁵⁾	0.41	0.41	0.41	0.45	0.45

(1) Following the sale in January 2017 of our steel electric conduit business in North America, known as Republic Conduit, the results of that business are presented as discontinued operations in accordance with IFRS 5, “Non-current Assets Held for Sale and Discontinued Operations”. Consequently, all amounts related to discontinued operations within each line item of the consolidated income statement are reclassified into discontinued operations.

(2) Other operating income (expenses), net in 2015 includes an impairment charge of \$400 million on our North American welded pipe operations and in 2014 includes an impairment charge of \$206 million on our welded pipe operations in Colombia and Canada.

(3) Equity in earnings (losses) of non-consolidated companies includes impairment charges on the investment in Usiminas (as such term is defined below) investment of \$29 million in 2015 and \$161 million in 2014.

(4) International Accounting Standard No. 1 (“IAS 1”) (revised) requires that income for the year as shown on the income statement does not exclude non-controlling interests. Earnings per share, however, continue to be calculated on the basis of income attributable solely to the owners of the parent (i.e., the Company).

(5) Dividends per share correspond to the dividends proposed or paid in respect of the year.

Thousands of U.S. dollars (except number of shares)

	At December 31,				
	2018	2017	2016	2015	2014
Selected consolidated financial position data					
Current assets	5,464,192	5,381,154	4,817,154	5,743,031	7,396,322
Property, plant and equipment, net	6,063,908	6,229,143	6,001,939	5,672,258	5,159,557
Other non-current assets	2,723,199	2,787,921	3,032,765	3,471,685	3,954,799
Assets of disposal group classified as held for sale	-	-	151,417	-	-
Total assets	14,251,299	14,398,218	14,003,275	14,886,974	16,510,678
Current liabilities	1,718,363	2,070,899	1,713,036	1,754,775	2,602,829
Non-current borrowings	29,187	34,645	31,542	223,221	30,833
Deferred tax liabilities	379,039	457,970	550,657	750,325	714,123
Other non-current liabilities	249,218	253,734	276,874	292,597	356,579
Liabilities of disposal group classified as held for sale	-	-	18,094	-	-
Total liabilities	2,375,807	2,817,248	2,590,203	3,020,918	3,704,364
Capital and reserves attributable to the owners of the parent	11,782,882	11,482,185	11,287,417	11,713,344	12,654,114
Non-controlling interests	92,610	98,785	125,655	152,712	152,200
Total equity	11,875,492	11,580,970	11,413,072	11,866,056	12,806,314
Total liabilities and equity	14,251,299	14,398,218	14,003,275	14,886,974	16,510,678
Share capital	1,180,537	1,180,537	1,180,537	1,180,537	1,180,537
Number of shares outstanding	1,180,536,830	1,180,536,830	1,180,536,830	1,180,536,830	1,180,536,830

B. Capitalization and Indebtedness

Not applicable.

C. Reasons for the Offer and Use of Proceeds

Not applicable.

D. Risk Factors

You should carefully consider the risks and uncertainties described below, together with all other information contained in this annual report, before making any investment decision. Any of these risks and uncertainties could have a material adverse effect on our business, revenues, financial condition and results of operations, which could in turn affect the price of shares and ADSs.

Risks Relating to Our Industry

Sales and profitability may fall as a result of downturns in the international price of oil and gas and other circumstances affecting the oil and gas industry.

We are a global steel pipe manufacturer with a strong focus on manufacturing products and related services for the oil and gas industry. The oil and gas industry is a major consumer of steel pipe products worldwide, particularly for products manufactured under high quality standards and demanding specifications. Demand for steel pipe products from the oil and gas industry has historically been volatile and depends primarily upon the number of oil and natural gas wells being drilled, completed and reworked, and the depth and drilling conditions of these wells. The level of exploration, development and production activities of, and the corresponding capital spending by, oil and gas companies, including national oil companies, depends primarily on current and expected future prices of oil and natural gas and is sensitive to the industry's view of future economic growth and the resulting impact on demand for oil and natural gas. Several factors, such as the supply and demand for oil and gas, and political and global economic conditions, affect these prices. When the price of oil and gas falls, oil and gas companies generally reduce spending on production and exploration activities and, accordingly, make fewer purchases of steel pipe products. Major oil-and gas-producing nations and companies have frequently collaborated to balance the supply (and thus the price) of oil in the international markets. A major vehicle for this collaboration has been the Organization of Petroleum Exporting Countries ("OPEC"). Many of our customers are state-owned companies in member countries of OPEC. A more recent factor affecting oil and gas prices has been the ability of producers in the United States and Canada to rapidly increase production from their reserves of tight oil and shale gas in response to changes in market conditions. Other circumstances – such as geopolitical events and hostilities in the Middle East and elsewhere – may also affect drilling activity and, as a result, cause steel pipe consumption to decline, and thus have a material impact on our revenues, profitability and financial condition. Several factors, such as the supply and demand for oil and gas, and political and global economic conditions, affect, and may continue to affect, these prices; accordingly, oil and gas companies may cut their investment plans and consequently, demand for our products could decline.

Climate change legislation or regulations could curtail demand for fossil fuels and therefore demand for our products and services could be reduced.

There is an increased attention on greenhouse gas emissions and climate change from different sectors of society. Existing or future legislation and regulations related to greenhouse gas emissions and climate change, as well as government initiatives to promote the use of alternative energy sources (with many jurisdictions implementing tax advantages and other subsidies to promote the development of renewable energy sources, or even requiring minimum thresholds for power generation from renewable sources), may significantly curtail demand for and production of fossil fuels such as oil and natural gas. These initiatives, together with the growing social awareness regarding climate change and other environmental matters, have resulted in increased investor and consumer demand for renewable energy and additional compliance requirements for fossil energy projects, which are likely to become more stringent over time and to result in substantial increases in costs for the oil and natural gas industry. Furthermore, ongoing technological developments in the renewable energy industry are making renewable energy increasingly competitive against fossil-fuels. If this trend continues, energy demand could shift increasingly towards “cleaner” sources such as hydroelectrical, solar, wind and other renewable energies, which would, in turn, reduce demand for oil and natural gas, thus negatively affecting demand for our products and services and, ultimately, our future results of operations.

Competition in the global market for steel pipe products may cause us to lose market share and hurt our sales and profitability.

The global market for steel pipe products is highly competitive, with the primary competitive factors being price, quality, service and technology. In recent years, substantial investments have been made, especially but not only in China, to increase production capacity of seamless steel pipe products. New production capacity continues to be installed and there is significant excess production capacity, particularly for “commodity” or standard product grades. Capacity for the production of more specialized product grades has also increased. At the same time, the high cost and long lead times required to develop the most complex projects, particularly deepwater and oil sands projects, has led to a slowdown in the sanctioning of new developments in a context of low and more volatile oil prices. Despite our efforts to develop products and services that differentiate us from our competitors, reduced demand for steel pipe products from these complex projects means that the competitive environment is expected to remain intense in the coming years and effective competitive differentiation will be a key success factor for Tenaris. In addition, there is a risk of unfairly traded steel pipe imports in markets in which Tenaris produces and sells its products and, despite the application of antidumping duties and tariffs, we can give no assurance with respect to the effectiveness of these actions. Therefore, we may not continue to compete effectively against existing or potential producers and preserve our current shares of geographic or product markets, and increased competition may have a material impact on the pricing of our products and services, which could in turn adversely affect our revenues, profitability and financial condition.

Increases in the cost of raw materials, energy and other costs, limitations or disruptions to the supply of raw materials and energy, and price mismatches between raw materials and our products may hurt our profitability.

The manufacture of seamless steel pipe products requires substantial amounts of steelmaking raw materials and energy; welded steel pipe products, in turn, are processed from steel coils and plates. The availability and pricing of a significant portion of the raw materials and energy we require are subject to supply and demand conditions, which can be volatile, and to tariffs and other government regulations, which can affect continuity of supply and prices. In addition, disruptions, restrictions or limited availability of energy resources in markets where we have significant operations could lead to higher costs of production and eventually to production cutbacks at our facilities in such markets. For example, in Mexico, the decrease in the national production of natural gas and constraints in natural gas transportation capacity have led to increased imports of natural gas which have resulted in increased natural gas transportation costs and, thus, higher steel pipe production costs. See “Risks Relating to Our Business – Adverse economic or political conditions in the countries where we operate or sell our products and services may decrease our sales or disrupt our manufacturing operations, thereby adversely affecting our revenues, profitability and financial condition”. At any given time, we may be unable to obtain an adequate supply of critical raw materials with price and other terms acceptable to us. The availability and prices of raw materials may also be negatively affected by new laws and regulations, including import controls, allocation by suppliers, interruptions in production, accidents or natural disasters, changes in exchange rates, worldwide price fluctuations, and the availability and cost of transportation.

We may not be able to recover, partially or fully, increased costs of raw materials and energy through increased selling prices on our products, or it may take an extended period of time to do so, and limited availability could force us to curtail production, which could adversely affect our sales and profitability.

Our results of operations and financial conditions could be adversely affected by low levels of capacity utilization.

Like other manufacturers of steel-related products, we have fixed and semi-fixed costs (e.g., labor and other operating and maintenance costs) that cannot adjust rapidly to fluctuations in product demand. If demand for our products falls significantly, these costs may adversely affect our profitability and financial condition. In response to a downturn of the oil and gas industry, we may be required to implement temporary suspensions of our operations. Temporary suspensions of operations generally lead to layoffs of employees which may in turn give rise to labor conflicts and impact operations. Moreover, temporary suspensions may also affect profitability and result in charges for asset impairments.

Risks Relating to Our Business

Adverse economic or political conditions in the countries where we operate or sell our products and services may decrease our sales or disrupt our manufacturing operations, thereby adversely affecting our revenues, profitability and financial condition.

We have significant operations in various countries, including Argentina, Brazil, Canada, Colombia, Indonesia, Italy, Japan, Mexico, Nigeria, Romania, Saudi Arabia and the United States, and we sell our products and services throughout the world. Additionally, we recently announced plans to form a joint venture with PAO Severstal, or Severstal, to build a welded pipe plant in Russia. Therefore, like other companies with worldwide operations, our business and operations have been, and could in the future be, affected from time to time to varying degrees by political, economic and social developments and changes in laws and regulations. These developments and changes may include, among others, nationalization, expropriation or forced divestiture of assets; restrictions on production, imports and exports; interruptions in the supply of essential energy inputs; exchange and/or transfer restrictions, inability or increasing difficulties to repatriate income or capital or to make contract payments; inflation; devaluation; war or other international conflicts; civil unrest and local security concerns, including high incidences of crime and violence involving drug trafficking organizations that threaten the safe operation of our facilities and operations; direct and indirect price controls; tax increases and changes in the interpretation, application or enforcement of tax laws and other retroactive tax claims or challenges; cancellation of contract rights; and delays or denials of governmental approvals. Both the likelihood of such occurrences and their overall impact upon us vary greatly from country to country and are not predictable. Realization of these risks could have an adverse impact on the results of operations and financial condition of our subsidiaries located in the affected country.

For example, our business and operations in Argentina may be materially and adversely affected by economic, political, social, fiscal and regulatory developments. Argentina is subject to high inflation rates and our business and operations in Argentina may be adversely affected by increases in services and labor costs inflation or by the measures that may be adopted by the government to address inflation. In addition, an increased level of labor demands prompted by a growing inflation rate could trigger higher levels of labor conflicts, and eventually result in strikes or work stoppages. Any such disruption of operations could have an adverse effect on our operations and financial results. Other developments that may have an adverse effect on our operations and financial results include increased taxes, exchange controls, restrictions on capital flows, and export and import taxes or restrictions. In addition, in recent years, our operations in Argentina experienced constraints in their electricity and natural gas supply requirements on many occasions. Shortages of energy and natural gas in Argentina have led in the past (and could lead in the future) to production cutbacks negatively affecting our revenues and profitability; we could also face increased costs when using alternative sources of energy.

In Mexico, our business could be materially and adversely affected by economic, political, social, fiscal and regulatory developments. The Mexican government exercises significant influence over the Mexican economy and, therefore, governmental actions concerning the economy and state-owned enterprises could have a significant impact on Mexico's private sector and on our Mexican-related operations. In addition, changes of the United States-Mexico-Canada Agreement, commonly referred to as USMCA, which has been signed but is pending to be ratified by each country's legislature, could adversely affect the investment climate and economic activity in Mexico, Canada and/or in the United States and impact our results of operations and net results. Similarly, our Mexican operations could be affected by criminal violence, primarily due to the activities of drug cartels and related organized crime that Mexico has experienced and may continue to experience. The city of Veracruz, where our facility is located, has experienced several incidents of violence. Although the Mexican government has implemented various security measures and has strengthened its military and police forces, drug-related crime continues to exist in Mexico. Our business may be materially and adversely affected by these activities, their possible escalation and the violence associated with them.

In the Middle East and Africa, our business could be adversely affected by political and other events in the region, such as armed conflicts, terrorist attacks and social unrest, which could materially impact the operations of companies active in the region's oil and gas industry.

If we do not successfully implement our business strategy, our ability to grow, our competitive position and our sales and profitability may suffer.

We plan to continue implementing our business strategy of developing integrated product and service solutions designed to differentiate our offering from those of our competitors and meet the needs of our customers for lower operational costs and reliable performance even in the most demanding environments, as well as continuing to pursue strategic investment opportunities. Any of the components of our overall business strategy could cost more than anticipated, may not be successfully implemented or could be delayed or abandoned. For example, we may fail to create sufficient differentiation in our Rig Direct® services to compensate the added costs of providing such services, or fail to find suitable investment opportunities, including acquisition targets that enable us to continue to grow and improve our competitive position. Even if we successfully implement our business strategy, it may not yield the expected results.

We could be subject to regulatory risks associated with our international operations.

The shipment of goods and services across international borders subjects us to extensive trade laws and regulations. Our import and export activities are governed by customs laws and regulations in each of the countries where we operate. Moreover, the European Union, the United States and other countries control the import and export of certain goods and services and impose related import and export recordkeeping and reporting obligations. Those governments have also imposed economic sanctions against certain countries, persons and other entities, such as sanctions involving sales to Iran and Venezuela, that restrict or prohibit transactions involving such countries, persons and entities. Similarly, we are subject to the U.S. anti-boycott laws. These laws and regulations are complex and frequently changing, and they may be enacted, amended, enforced or interpreted in a manner that could materially impact our operations. For example, on March 8, 2018, under Section 232 of the Trade Expansion Act of 1962, the U.S. imposed a 25% tariff on steel articles imported from all countries. However, imports of steel tubes from Australia, Argentina, Brazil and South Korea were exempted from the 25% tariff; the latter three with specific quotas per product. During March 2019, the U.S. government granted the exemption for imports of specific types of cast steel billets requested from Romania, Mexico, and Italy, for an aggregate amount of 410,000 tons that are used in our Bay City mill, to be consumed until March 2020.

Finally, failure to comply with applicable legal and regulatory obligations could also result in criminal and civil penalties and sanctions.

Changes in applicable tax regulations and resolutions of tax disputes could negatively affect our financial results.

We are subject to tax laws in numerous foreign jurisdictions where we operate. However, the integrated nature of our worldwide operations can produce conflicting claims from revenue authorities in different countries as to the profits to be taxed in the individual countries, including disputes relating to transfer pricing. The majority of the jurisdictions in which we operate have double tax treaties with other foreign jurisdictions, which provide a framework for mitigating the impact of double taxation on our results. However, mechanisms developed to resolve such conflicting claims are largely untried, and can be expected to be very lengthy.

In recent years, tax authorities around the world have increased their scrutiny of company tax filings and have become more rigid in exercising any discretion they may have. As part of this, the Organization for Economic Co-operation and Development (OECD) has proposed a number of tax law changes under its Base Erosion and Profit Shifting (BEPS) Action Plans to address issues of transparency, coherence and substance. At the EU level, the European Commission has adopted its Anti Tax Avoidance Directive, which seeks to prevent tax avoidance by companies and to ensure that companies pay appropriate taxes in the markets where profits are effectively made and business is effectively performed.

Changes to tax laws and regulations in the countries where we operate require us to continually assess our organizational structure and could lead to increased risk of international tax disputes. Our interpretations and application of the tax laws could differ from that of the relevant governmental taxing authority, which could result in the payment of additional taxes, penalties or interest, negatively affecting our profitability and financial condition.

Future acquisitions, strategic partnerships and capital investments may not perform in accordance with expectations or may disrupt our operations and hurt our profits.

One element of our business strategy is to identify and pursue growth-enhancing strategic opportunities. As part of that strategy, we regularly make significant capital investments and acquire interests in, or businesses of, various companies. For example, on January 21, 2019 we completed the acquisition of 47.79% of the shares of Saudi Steel Pipe Company (“SSP”), a welded steel pipes producer listed on the Saudi Stock Exchange, for a total purchase price of approximately \$141 million. Additionally, on February 5, 2019 we entered into an agreement with Public Joint Stock Company “Severstal” (“PAO Severstal”) to build during the coming two years, a welded pipe plant to produce OCTG products in the Surgut area, West Siberia, Russian Federation, with an estimated cost of \$240 million, in which Tenaris will hold a 49% interest. Furthermore, on March 22, 2019, we entered into a definitive agreement to acquire 100% of the shares of IPSCO Tubulars, Inc. (“IPSCO”), a wholly-owned subsidiary of PAO TMK (“TMK”) and a U.S. producer of seamless and welded OCTG and line pipe products, for \$1,209 million. The transaction is subject to regulatory approvals, including approval by the U.S. antitrust authorities, and other customary conditions. We will continue to consider strategic acquisitions, investments and partnerships from time to time. We must necessarily base any assessment of potential acquisitions, joint ventures and capital investments on assumptions with respect to operations, profitability and other matters that may subsequently prove to be incorrect. Our past or future acquisitions, significant investments and alliances may not perform in accordance with our expectations and could adversely affect our operations and profitability. In addition, new demands on our existing organization and personnel resulting from the integration of new acquisitions could disrupt our operations and adversely affect our operations and profitability. Moreover, as part of future acquisitions, we may acquire assets that are unrelated to our business, and we may not be able to integrate these assets or sell them under favorable terms and conditions.

Disruptions to our manufacturing processes could adversely affect our operations, customer service levels and financial results.

Our steel pipe manufacturing processes depend on the operation of critical steelmaking equipment, such as electric arc furnaces, continuous casters, rolling mills, heat treatment and various operations that support them, such as our power generation facilities. Despite the investments we make to maintain critical production equipment, such equipment may incur downtime as a result of unanticipated failures or other events, such as fires, explosions, floods, accidents and severe weather conditions.

Similarly, natural disasters or severe weather conditions could significantly damage our production facilities and general infrastructure or affect the normal course of business. For example, our Mexican production facility located in Veracruz is located in or close to regions prone to earthquakes, and our Bay City facility in Texas, United States is located in an area prone to strong winds and hurricanes, and occasional floods. More generally, changing weather patterns and climatic conditions in recent years have added to the unpredictability and frequency of natural disasters.

Our operations may also be adversely affected as a result of stoppages or other labor conflicts. In 2017 and 2018, our operations in Mexico experienced a few days of union-led stoppages due to an internal dispute within the local union; such internal dispute is ongoing and we cannot assure it will not cause further disruptions in Mexico. In addition, in some of the countries in which we have significant production facilities (e.g., Argentina and Brazil), significant fluctuations in exchange rates, together with inflationary pressures, affect our costs, increase labor demands and could eventually generate higher levels of labor conflicts.

Some of the previously described events could result in death or injury to persons. They could also result in damage to property, delays in production and liability for Tenaris. To the extent that lost production as a result of such events cannot be compensated for by unaffected facilities, such events could have an adverse effect on our profitability and financial condition. Additionally, the insurance we maintain for property damage and general liability may not be adequate or available to protect us under such events, its coverage may be limited, or the amount of our insurance may be less than the related loss. For more information on our insurance coverage see Item 4.B. “Information on the Company – B. Business overview – Insurance”.

We may be required to record a significant charge to earnings if we must reassess our goodwill or other assets as a result of changes in assumptions underlying the carrying value of certain assets, particularly as a consequence of deteriorating market conditions.

Assets that are subject to amortization are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Intangible assets with indefinite useful life, including goodwill, are subject to at least an annual impairment test. At December 31, 2018 we had \$1,288 million in goodwill corresponding mainly to the acquisition of Hydril Company (“Hydril”) in 2007 (\$920 million) and Maverick Tube Corporation (“Maverick”) in 2006 (\$229 million). If our management was to determine in the future that the goodwill or other assets were impaired, particularly as a consequence of deteriorating market conditions, we would be required to recognize a non-cash charge to reduce the value of these assets, which would adversely affect our results of operations.

Our results of operations and financial condition could be adversely affected by movements in exchange rates.

As a global company we manufacture and sell products in a number of countries throughout the world and a portion of our business is carried out in currencies other than the U.S. dollar, which is the Company's functional and presentation currency. As a result, we are exposed to foreign exchange rate risk. Changes in currency values and foreign exchange regulations could adversely affect our financial condition and results of operations. For information on our foreign exchange rate risk, please see Item 11. "Quantitative and Qualitative Disclosure About Market Risk – Foreign Exchange Rate Risk".

If we do not comply with laws and regulations designed to combat corruption in countries in which we sell our products, we could become subject to governmental investigations, fines, penalties or other sanctions and to private lawsuits and our sales and profitability could suffer.

We operate globally and conduct business in certain countries known to experience corruption. Although we are committed to conducting business in a legal and ethical manner in compliance with local and international statutory requirements and standards applicable to our business, there is a risk that our employees, representatives, affiliates, or other persons may take actions that violate applicable laws and regulations that generally prohibit the making of improper payments, including to foreign government officials, for the purpose of obtaining or keeping business, including laws relating to the 1997 OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions such as the U.S. Foreign Corrupt Practices Act ("FCPA"). Investigations by government authorities may occupy considerable management time and attention and result in significant expenditures, fines, penalties or other sanctions, as well as private lawsuits.

For more information, including with respect to matters related to corruption investigations in Brazil and Argentina, please refer to Item 8. A. "Consolidated and Other Financial Information – Legal Proceedings".

The cost of complying with environmental regulations and potential environmental and product liabilities may increase our operating costs and negatively impact our business, financial condition, results of operations and prospects.

We are subject to a wide range of local, provincial and national laws, regulations, permit requirements and decrees relating to the protection of human health and the environment, including laws and regulations relating to hazardous materials and radioactive materials and environmental protection governing air emissions, water discharges and waste management. Laws and regulations protecting the environment have become increasingly complex and more stringent and expensive to implement in recent years. Additionally, international environmental requirements vary. While standards in the European Union, Canada, and Japan are generally comparable to U.S. standards, other nations, particularly developing nations, including China, have substantially lesser requirements that may give competitors in such nations a competitive advantage. It is possible that any international agreement to regulate emissions may provide exemptions and lesser standards for developing nations. In such case, we may be at a competitive disadvantage relative to competitors having more or all of their production in such developing nations.

Environmental laws and regulations may, in some cases, impose strict liability rendering a person liable for damages to natural resources or threats to public health and safety without regard to negligence or fault. Some environmental laws provide for joint and several strict liability for remediation of spills and releases of hazardous substances. These laws and regulations may expose us to liability for the conduct of or conditions caused by others or for acts that were in compliance with all applicable laws at the time they were performed.

Compliance with applicable requirements and the adoption of new requirements could have a material adverse effect on our consolidated financial condition, results of operations or cash flows. The costs and ultimate impact of complying with environmental laws and regulations are not always clearly known or determinable since regulations under some of these laws have not yet been promulgated or are undergoing revision. The expenditures necessary to remain in compliance with these laws and regulations, including site or other remediation costs, or costs incurred as a result of potential violations of environmental laws could have a material adverse effect on our financial condition and profitability. While we incur and will continue to incur expenditures to comply with applicable laws and regulations, there always remains a risk that environmental incidents or accidents may occur that may negatively affect our reputation or our operations.

Our oil and gas casing, tubing and line pipe products are sold primarily for use in oil and gas drilling, gathering, transportation, processing and power generation facilities, which are subject to inherent risks, including well failures, line pipe leaks, blowouts, bursts and fires, that could result in death, personal injury, property damage, environmental pollution or loss of production. Any of these hazards and risks can result in environmental liabilities, personal injury claims and property damage from the release of hydrocarbons.

Defects in specialty tubing products could result in death, personal injury, property damage, environmental pollution, damage to equipment and facilities or loss of production.

We normally warrant the oilfield products and specialty tubing products we sell or distribute in accordance with customer specifications, but as we pursue our business strategy of providing customers with additional services, such as Rig Direct®, we may be required to warrant that the goods we sell and services we provide are fit for their intended purpose. Actual or claimed defects in our products may give rise to claims against us for losses suffered by our customers and expose us to claims for damages. The insurance we maintain will not be available in cases of gross negligence or willful misconduct, in other cases may not be adequate or available to protect us in the event of a claim, its coverage may be limited, canceled or otherwise terminated, or the amount of our insurance may be less than the related impact on enterprise value after a loss. Similarly, our sales of tubes and components for the automotive industry subject us to potential product liability risks that could extend to being held liable for the costs of the recall of automobiles sold by car manufacturers and their distributors.

Limitations on our ability to protect our intellectual property rights, including our trade secrets, could cause a loss in revenue and any competitive advantage we hold.

Some of our products or services, and the processes we use to produce or provide them, have been granted patent protection, have patent applications pending, or are trade secrets. Our business may be adversely affected if our patents are unenforceable, the claims allowed under our patents are not sufficient to protect our technology, our patent applications are denied or our trade secrets are not adequately protected. Our competitors may be able to develop technology independently that is similar to ours without infringing on our patents or gaining access to our trade secrets, which could adversely affect our financial condition, results of operations and cash flows.

Cyberattacks could have a material adverse impact on our business and results of operation.

We rely heavily on information systems to conduct our business. Although we devote significant resources to protect our systems and data, we have experienced and will continue to experience varying degrees of cyber incidents in the normal conduct of our business, which may occasionally include sophisticated cybersecurity threats such as unauthorized access to data and systems, loss or destruction of data, computer viruses or other malicious code, phishing and/or cyberattacks. These threats often arise from numerous sources, not all of which are within our control, such as fraud or malice from third parties, failures of computer servers or other accidental technological failures, electrical or telecommunication outages or other damage to our property or assets. Given the rapidly evolving nature of cyber threats, there can be no assurance that the systems we have designed to prevent or limit the effects of cyber incidents or attacks will be sufficient to prevent or detect such incidents or attacks, or to avoid a material adverse impact on our systems when such incidents or attacks do occur. While we attempt to mitigate these risks, we remain vulnerable to additional known or unknown threats, including theft, misplacement or loss of data, programming errors, employee errors and/or dishonest behavior that could potentially lead to the compromising of sensitive information, improper use of our systems or networks, as well as unauthorized access, use, disclosure, modification or destruction of such information, systems and/or networks. If our systems for protecting against cybersecurity risks are circumvented or breached, this could also result in disruptions to our business operations (including but not limited to, defective products or production downtimes), access to our financial reporting systems, the loss of access to critical data or systems, misuse or corruption of critical data and proprietary information (including our intellectual property and customer data), as well as damage to our reputation with our customers and the market, failure to meet customer requirements, customer dissatisfaction and/or other financial costs and losses. In addition, given that cybersecurity threats continue to evolve, we may be required to devote additional resources in the future to enhance our protective measures or to investigate and/or remediate any cybersecurity vulnerabilities. Moreover, any investigation of a cyberattack would take time before completion, during which we would not necessarily know the extent of the actual or potential harm or how best to remediate it, and certain errors or actions could be repeated or compounded before duly discovered and remediated (all or any of which could further increase the costs and consequences arising out of such cyberattack). Tenaris does not maintain any specific insurance coverage to protect against cybersecurity risks.

Risks Relating to the Structure of the Company

As a holding company, the Company's ability to pay cash dividends depends on the results of operations and financial condition of its subsidiaries and could be restricted by legal, contractual or other limitations.

The Company conducts its operations through subsidiaries. Dividends or other intercompany transfers of funds from those subsidiaries are the Company's primary source of funds to pay its expenses, debt service and dividends and to repurchase shares or ADSs.

The ability of the Company's subsidiaries to pay dividends and make other payments to us will depend on the results of operations and financial condition and could be restricted by applicable corporate and other laws and regulations, including those imposing foreign exchange controls or restrictions on the repatriation of capital or the making of dividend payments and agreements and commitments of such subsidiaries. If earnings and cash flows of the Company's operating subsidiaries are substantially reduced, the Company may not be in a position to meet its operational needs or to pay dividends. For information concerning limitations on payments of dividends, see "Risks Relating to Our Business – Adverse economic or political conditions in the countries where we operate or sell our products and services may decrease our sales or disrupt our manufacturing operations, thereby adversely affecting our revenues, profitability and financial condition".

In addition, the Company's ability to pay dividends to shareholders is subject to legal and other requirements and restrictions in effect at the holding company level. For example, the Company may only pay dividends out of net profits, retained earnings and distributable reserves and premiums, each as defined and calculated in accordance with Luxembourg law and regulations.

The Company's controlling shareholder may be able to take actions that do not reflect the will or best interests of other shareholders.

As of the date of this annual report, San Faustin beneficially owned 60.45% of our shares. Rocca & Partners Stichting Administratiekantoor Aandelen San Faustin ("RP STAK"), controls a significant portion of the voting power of San Faustin. As a result, RP STAK is indirectly able to elect a substantial majority of the members of the Company's board of directors and has the power to determine the outcome of most actions requiring shareholder approval, including, subject to the requirements of Luxembourg law, the payment of dividends. The decisions of the controlling shareholder may not reflect the will of other shareholders. In addition, the Company's articles of association permit the Company's board of directors to waive, limit or suppress preemptive rights in certain cases. Accordingly, the Company's controlling shareholder may cause its board of directors to approve in certain cases an issuance of shares for consideration without preemptive rights, thereby diluting the minority interest in the Company. See "Risks Relating to shares and ADSs – Holders of shares and ADSs in the United States may not be able to exercise preemptive rights in certain cases".

Risks Relating to shares and ADSs

Holders of shares or ADSs may not have access to as much information about us as they would in the case of a domestic issuer.

There may be less publicly available information about us than is regularly published by or about domestic issuers. Also, corporate and securities regulations governing Luxembourg companies may not be as extensive as those in effect in other jurisdictions and U.S. securities regulations applicable to foreign private issuers, such as the Company, differ in certain respects from those applicable to U.S. domestic issuers. Furthermore, IFRS, the accounting standards in accordance with which we prepare our consolidated financial statements, differ in certain significant aspects from local GAAP, including U.S. GAAP.

Holders of ADSs may not be able to exercise, or may encounter difficulties in the exercise of, certain rights afforded to shareholders.

Certain shareholders' rights under Luxembourg law, including the rights to participate and vote at general meetings of shareholders, to include items on the agenda for the general meetings of shareholders, to receive dividends and distributions, to bring actions, to examine our books and records and to exercise appraisal rights may not be available to holders of ADSs, or may be subject to restrictions and special procedures for their exercise, as holders of ADSs only have those rights that are expressly granted to them in the deposit agreement. Deutsche Bank Trust Company Americas, as depositary under the ADS deposit agreement, or the Depositary, through its custodian agent, is the registered shareholder of the deposited shares underlying the ADSs, and therefore only the Depositary can exercise the shareholders' rights in connection with the deposited shares. For example, if we make a distribution in the form of securities, the Depositary is allowed, at its discretion, to sell that right to acquire those securities on your behalf and instead distribute the net proceeds to you. Also, under certain circumstances, such as our failure to provide the Depositary with properly completed voting instructions on a timely basis, you may not be able to vote at general meetings of shareholders by giving instructions to the Depositary. If the Depositary does not receive voting instructions from the holder of ADS by the prescribed deadline, or the instructions are not in proper form, then the Depositary shall deem such holder of ADS to have instructed the Depositary to vote the underlying shares represented by ADSs in favor of any proposals or recommendations of the Company (including any recommendation by the Company to vote such underlying shares on any given issue in accordance with the majority shareholder vote on that issue), for which purposes the Depositary shall issue a proxy to a person appointed by the Company to vote such underlying shares represented by ADSs in favor of any proposals or recommendations of the Company. Under the ADS deposit agreement, no instruction shall be deemed given and no proxy shall be given with respect to any matter as to which the Company informs the Depositary that (i) it does not wish such proxy given, (ii) it has knowledge that substantial opposition exists with respect to the action to be taken at the meeting, or (iii) the matter materially and adversely affects the rights of the holders of ADSs.

Holders of shares and ADSs in the United States may not be able to exercise preemptive rights in certain cases.

Pursuant to Luxembourg corporate law, existing shareholders of the Company are generally entitled to preferential subscription rights (preemptive rights) in the event of capital increases and issues of shares against cash contributions. Under the Company's articles of association, the board of directors has been authorized to waive, limit or suppress such preemptive subscription rights. The validity period of such authorization will expire (unless renewed) on June 5, 2020. The Company may, however, issue shares without preemptive subscription rights only if (i) shares (including without limitation, the direct issuance of shares or upon the exercise of options, rights convertible into shares, or similar instruments convertible or exchangeable into shares) are issued against a contribution other than in cash; (ii) shares (including by way of free shares or at discount), up to an amount of 1.5% of the issued share capital of the Company, are issued to directors, officers, agents, employees of the Company, its direct or indirect subsidiaries or its affiliates (or, collectively, the Beneficiaries), for the purpose of compensation or incentive of the Beneficiaries or in relation thereto (which the board of directors shall be authorized to issue upon such terms and conditions as it deems fit), including without limitation, the direct issuance of shares or upon the exercise of options, rights convertible into shares or similar instruments convertible or exchangeable into shares.

Holders of ADSs in the United States may, in any event, not be able to exercise any preemptive rights, if granted, for shares underlying their ADSs unless additional shares and ADSs are registered under the U.S. Securities Act of 1933, as amended ("Securities Act"), with respect to those rights, or an exemption from the registration requirements of the Securities Act is available. We intend to evaluate, at the time of any rights offering, the costs and potential liabilities associated with the exercise by holders of shares and ADSs of the preemptive rights for shares, and any other factors we consider appropriate at the time, and then to make a decision as to whether to register additional shares. We may decide not to register any additional shares, requiring a sale by the Depositary of the holders' rights and a distribution of the proceeds thereof. Should the Depositary not be permitted or otherwise be unable to sell preemptive rights, the rights may be allowed to lapse with no consideration to be received by the holders of the ADSs.

It may be difficult to enforce judgments against us outside Luxembourg.

The Company is a *société anonyme* organized under the laws of Luxembourg, and most of its assets are located in other jurisdictions. Furthermore, most of the Company's directors and officers named in this annual report reside in different jurisdictions. As a result, investors may not be able to effect service of process upon us or our directors or officers. Investors may also not be able to enforce against us or our directors or officers in the investors' domestic courts, judgments predicated upon the civil liability provisions of the domestic laws of the investors' home countries. Likewise, it may be difficult for investors not domiciled in Luxembourg to bring an original action in a Luxembourg court predicated upon the civil liability provisions of other securities laws, including U.S. federal securities laws, against the Company, its directors and officers. There is also uncertainty with regard to the enforceability of original actions of civil liabilities predicated upon the civil liability provisions of securities laws, including U.S. federal securities laws, outside the jurisdiction where such judgments have been rendered; and enforceability will be subject to compliance with procedural requirements under applicable local law, including the condition that the judgment does not violate the public policy of the applicable jurisdiction.

Item 4. Information on the Company

Overview

We are a leading global manufacturer and supplier of steel pipe products and related services for the world's energy industry and for other industrial applications. Our customers include most of the world's leading oil and gas companies as well as engineering companies engaged in constructing oil and gas gathering, transportation, processing and power generation facilities. Our principal products include casing, tubing, line pipe, and mechanical and structural pipes.

We operate an integrated worldwide network of steel pipe manufacturing, research, finishing and service facilities with industrial operations in the Americas, Europe, Asia and Africa and a direct presence in most major oil and gas markets.

Our mission is to deliver value to our customers through product development, manufacturing excellence, and supply chain management. We seek to minimize risk for our customers and help them reduce costs, increase flexibility and improve time-to-market. Our employees around the world are committed to continuous improvement by sharing knowledge across a single global organization.

A. History and Development of the Company

The Company

Our holding company's legal and commercial name is Tenaris S.A. The Company was established as a *société anonyme* organized under the laws of the Grand Duchy of Luxembourg on December 17, 2001. The Company's registered office is located at 29 Avenue de la Porte-Neuve, 3rd Floor, L-2227, Luxembourg, telephone (352) 2647-8978. Its agent for U.S. federal securities law purposes is Tenaris Global Services (U.S.A.) Corporation, located at 2200 West Loop South, Suite 800, Houston, TX 77027.

Tenaris

Tenaris began with the formation of Siderca S.A.I.C. ("Siderca"), the sole Argentine producer of seamless steel pipe products, by San Faustin's predecessor in Argentina in 1948. We acquired Siat S.A., an Argentine welded steel pipe manufacturer, in 1986. We grew organically in Argentina and then, in the early 1990s, began to evolve beyond this initial base into a global business through a series of strategic investments. As of the date of this annual report, our investments include controlling or strategic interests in:

- Tubos de Acero de México S.A. ("Tamsa"), the sole Mexican producer of seamless steel pipe products;
- Dalmine S.p.A. ("Dalmine"), a leading Italian producer of seamless steel pipe products;
- Confab Industrial S.A. ("Confab"), the leading Brazilian producer of welded steel pipe products;
- NKK Tubes K.K. ("NKK Tubes"), a leading Japanese producer of seamless steel pipe products;
- Algoma Tubes Inc. ("Algoma Tubes"), the sole Canadian producer of seamless steel pipe products;
- S.C. Silcotub S.A. ("Silcotub"), a leading Romanian producer of seamless steel pipe products;
- Maverick, a U.S. producer of welded steel pipe products;
- Prudential Steel Ltd. ("Prudential"), a welded pipe mill producing OCTG, and line pipe products in Canada;
- Tenaris Tubocaribe Ltda. ("Tubocaribe"), a welded mill producing OCTG products including finishing of welded and seamless pipes, line pipe products and a couplings facility in Colombia;
- Hydril, a North American manufacturer of premium connection products for oil and gas drilling production;
- PT Seamless Pipe Indonesia Jaya ("SPIJ"), an Indonesian OCTG processing business with heat treatment and premium connection threading facilities;
- Tenaris Qingdao Steel Pipes Ltd. ("Tenaris Qingdao"), a Chinese producer of premium joints and couplings;
- Pipe Coaters Nigeria Ltd. ("Pipe Coaters") the leading company in the Nigerian coating industry;
- Ternium S.A. ("Ternium"), one of the leading flat steel producers of the Americas with operating facilities in Mexico, Brazil, Argentina, Colombia, the southern United States and Central America;
- Usinas Siderúrgicas de Minas Gerais S.A. ("Usiminas"), a Brazilian producer of high quality flat steel products used in the energy, automotive and other industries;
- Techgen S.A. de C.V. ("Techgen"), an electric power plant in Mexico;
- sucker rod businesses, in various countries; *and*
- Tenaris Bay City Inc. ("Tenaris Bay City"), a state-of-the-art seamless pipe mill in Bay City, Texas.

In addition, we have established a global network of pipe finishing, distribution and service facilities with a direct presence in most major oil and gas markets and a global network of research and development centers.

For information on Tenaris's principal capital expenditures and divestitures, see Item 4.B. "Information on the Company – Business Overview – Capital Expenditure Program".

B. Business Overview

Our business strategy is to consolidate our position as a leading global supplier of integrated product and service solutions to the energy and other industries by:

- pursuing strategic investment opportunities in order to further strengthen our presence in local and global markets;
- expanding our comprehensive range of products and developing new products designed to meet the needs of customers operating in challenging environments;
- enhancing our Rig Direct® offer of technical and pipe management services designed to enable customers to optimize their selection and use of our products and reduce their overall operating costs; and
- securing an adequate supply of production inputs and reducing the manufacturing costs of our core products.

Pursuing strategic investment opportunities and alliances

We have a solid record of growth through strategic investments and acquisitions. We pursue selective strategic investments and acquisitions as a means to expand our operations and presence in select markets, enhance our global competitive position and capitalize on potential operational synergies. Our track record on companies' acquisitions is described above (see "History and Development of the Company – Tenaris"). In addition:

- On January 21, 2019 we acquired 47.79% of the shares of SSP, a welded steel pipes producer located in the Eastern Province of the Kingdom of Saudi Arabia that has a manufacturing capacity of 360,000 tons per year. The investment amounted to \$141 million. Through this acquisition, we have significantly expanded our industrial presence in the Kingdom of Saudi Arabia and the range of products we supply to the Saudi Arabian Oil Company ("Saudi Aramco").
- On February 5, 2019 we entered into an agreement with Public Joint Stock Company PAO Severstal to build during the coming two years, a welded pipe plant to produce OCTG products in the Surgut area, West Siberia, Russian Federation. The estimated annual production capacity of the plant will be 300,000 tons, with an estimated cost of approximately \$240 million, in which we will hold a 49% interest. Through this agreement, together with PAO Severstal we aim to serve the growing market for welded OCTG pipe products in Russia and neighboring countries, combining our know-how in OCTG pipe manufacturing and sales with PAO Severstal's expertise in producing high quality steel products.
- On March 22, 2019, we entered into a definitive agreement to acquire 100% of the shares of IPSCO, a wholly-owned subsidiary of TMK and a U.S. producer of seamless and welded OCTG and line pipe products, for \$1,209 million. The transaction is subject to regulatory approvals, including approval by the U.S. antitrust authorities, and other customary conditions. IPSCO has an annual production capacity of 450,000 metric tons of steel bars, 400,000 metric tons of seamless pipes and 1,000,000 metric tons of welded pipes, and production facilities spread throughout the country.

Expanding our range of products

We have developed an extensive range of high-value products suitable for most of our customers' operations using our network of specialized research and testing facilities and by investing in our manufacturing facilities. As our customers expand their operations, we seek to supply high-value products that reduce costs and enable them to operate safely in challenging environments, including for complex offshore and unconventional operations.

Enhancing our offer of technical and pipe management services - Rig Direct® - and extending their global deployment

We continue to enhance our offer of technical and pipe management services, Rig Direct® services, and extend their deployment worldwide. For many years, we have provided these services, providing technical advice and assistance on the selection of materials and their use in the field, managing customer inventories and directly supplying pipes to their rigs on a just-in-time basis in markets like Mexico and Argentina. In response to changes in market conditions and the increased focus of customers on reducing costs and improving the efficiency of their operations, the deployment of our Rig Direct® services was extended throughout North America and in other markets around the world (e.g. North Sea, Romania and Thailand). Through the provision of Rig Direct® services, we seek to enable our customers, to optimize their operations, reduce costs and to concentrate on their core businesses, providing an integrated product and service value proposition, increasing supply chain efficiency. They are also intended to differentiate us from our competitors and further strengthen our relationships with our customers worldwide through long-term agreements.

Securing inputs for our manufacturing operations

We seek to secure our existing sources of raw material and energy inputs, and to gain access to new sources of low-cost inputs which can help us maintain or reduce the cost of manufacturing our core products over the long term. We aim to achieve a vertically integrated value chain for our production. To this end, we purchase most of our supplies through Exiros, a specialized procurement company whose ownership we share with Ternium. Exiros offers us integral procurement solutions, supplier sourcing activities; category organized purchasing; suppliers' performance administration; and inventory management. Moreover, in February 2014, we entered into an agreement with our affiliates Ternium and Tecpetrol International S.A. ("Tecpetrol") (a wholly-owned subsidiary of San Faustin, the controlling shareholder of both Tenaris and Ternium) to build a natural gas-fired combined cycle electric power plant in Mexico for the supply of Tenaris's and Ternium's respective Mexican industrial facilities. For more information on the power plant, see note 11 c) "Investments in non-consolidated companies – Techgen S.A. de C.V." to our audited consolidated financial statements included in this annual report. For more information on the Company's commitments under the power plant, see item 5.E. "Operating and Financial Review and Prospects - Off-Balance Sheet Arrangements".

Our Competitive Strengths

We believe our main competitive strengths include:

- our global production, commercial and distribution capabilities, offering a full product range with flexible supply options backed up by local service capabilities in important oil and gas producing and industrial regions around the world;
- our ability to develop, design and manufacture technologically advanced products;
- our solid and diversified customer base and historic relationships with major international oil and gas companies around the world, and our strong and stable market shares in most of the countries in which we have manufacturing operations;
- our proximity to our customers;
- our human resources around the world with their diverse knowledge and skills;
- our low-cost operations, primarily at state-of-the-art, strategically located production facilities with favorable access to raw materials, energy and labor, and more than 60 years of operating experience; *and*
- our strong financial condition.

Business Segments

Tenaris has one major business segment, "Tubes", which is also the reportable operating segment.

The Tubes segment includes the production and sale of both seamless and welded steel tubular products and related services mainly for the oil and gas industry, particularly OCTG used in drilling operations, and for other industrial applications with production processes that consist in the transformation of steel into tubular products. Business activities included in this segment are mainly dependent on the oil and gas industry worldwide, as this industry is a major consumer of steel pipe products, particularly OCTG used in drilling activities. Demand for steel pipe products from the oil and gas industry has historically been volatile and depends primarily upon the number of oil and natural gas wells being drilled, completed and reworked, and the depth and drilling conditions of these wells. Sales are generally made to end users, with exports being done through a centrally managed global distribution network and domestic sales made through local subsidiaries. Corporate general and administrative expenses have been allocated to the Tubes segment.

The "Others" segment include all other business activities and operating segments that are not required to be separately reported, including the production and selling of sucker rods, industrial equipment, coiled tubing, utility conduits for buildings, and the sale of energy and raw materials that exceed internal requirements.

For more information on our business segments, see “II C. Accounting Policies – Segment information” to our audited consolidated financial statements included in this annual report.

Our Products

Our principal finished products are seamless and welded steel casing and tubing, line pipe and various other mechanical and structural steel pipes for different uses. Casing and tubing are also known as oil country tubular goods (“OCTG”). We manufacture our steel pipe products in a wide range of specifications, which vary in diameter, length, thickness, finishing, steel grades, coating, threading and coupling. For more complex applications, including high pressure and high temperature applications, seamless steel pipes are usually specified and, for some standard applications, welded steel pipes can also be used.

Casing. Steel casing is used to sustain the walls of oil and gas wells during and after drilling.

Tubing. Steel tubing is used to conduct crude oil and natural gas to the surface after drilling has been completed.

Line pipe. Steel line pipe is used to transport crude oil and natural gas from wells to refineries, storage tanks and loading and distribution centers.

Mechanical and structural pipes. Mechanical and structural pipes are used by general industry for various applications, including the transportation of other forms of gas and liquids under high pressure.

Cold-drawn pipe. The cold-drawing process permits the production of pipes with the diameter and wall thickness required for use in boilers, superheaters, condensers, heat exchangers, automobile production and several other industrial applications.

Premium joints and couplings. Premium joints and couplings are specially designed connections used to join lengths of steel casing and tubing for use in high temperature or high pressure environments. A significant portion of our steel casing and tubing products are supplied with premium joints and couplings. We own an extensive range of premium connections, and following the integration of the premium connections business of Hydril, we have marketed our premium connection products under the “TenarisHydril” brand name. In addition, we hold licensing rights to manufacture and sell the Atlas Bradford range of premium connections outside the United States.

Coiled tubing. Coiled tubing is used for oil and gas drilling and well workovers and for subsea pipelines.

Other products. We also manufacture sucker rods used in oil extraction activities and industrial equipment of various specifications and diverse applications, including liquid and gas storage equipment. In addition, we sell energy and raw materials that exceed our internal requirements.

Production Process and Facilities

We operate relatively low-cost production facilities, which we believe is the result of:

- state-of-the-art, strategically located plants;
- favorable access to high quality raw materials, energy and labor at competitive costs;
- operating history of more than 60 years, which translates into solid industrial know-how;
- constant benchmarking and best-practices sharing among the different facilities;
- increasing specialization of each of our facilities in specific product ranges; *and*
- extensive use of information technology in our production processes.

Our seamless pipes production facilities are located in North and South America, Europe and Asia and our welded pipes production facilities are located in North and South America and from January 2019 in Saudi Arabia. In addition, we have tubular accessories facilities, such as sucker rods, in Argentina, Brazil, Mexico, Romania, and the United States. We produce couplings in Argentina, China, Colombia, Indonesia, Mexico and Romania, and pipe fittings in Mexico. In addition to our pipe threading and finishing facilities at our integrated pipe production facilities, we also have pipe threading facilities for steel pipes manufactured in accordance with the specifications of the American Petroleum Institute (“API”), and premium joints in the United States, Canada, China, Denmark, Ecuador, Kazakhstan, Indonesia, Nigeria, the United Kingdom and Saudi Arabia.

The following table shows our aggregate installed production capacity of seamless and welded steel pipes and steel bars at the dates indicated as well as the aggregate actual production volumes for the periods indicated. The figures for effective annual capacity are based on our estimates of effective annual production capacity under present conditions.

Capacity of seamless tubes in 2018 increased in respect to 2017 due to the completion of Tenaris Bay City, our state-of-the-art pipe mill in Bay City, Texas.

	At or for the year ended December 31,		
	2018	2017	2016
Thousands of tons			
Steel Bars			
Effective Capacity (annual) (1)	3,935	3,835	3,835
Actual Production	3,167	2,793	2,010
Tubes – Seamless			
Effective Capacity (annual) (1)	4,300	3,680	3,680
Actual Production	2,798	2,347	1,735
Tubes – Welded			
Effective Capacity (annual) (1)	2,620	2,620	2,620
Actual Production	799	544	305

(1) Effective annual production capacity is calculated based on standard productivity of production lines, theoretical product mix allocations, the maximum number of possible working shifts and a continued flow of supplies to the production process.

Production Facilities – Tubes

North America

In North America, we have a fully integrated seamless pipe manufacturing facility, a threading plant and a pipe fittings facility in Mexico, a seamless pipe rolling mill, three welded pipe manufacturing facilities and three threading plants in the United States, and a seamless pipe rolling mill, a welded pipe manufacturing facility and one threading plant in Canada.

Mexico

In Mexico, our fully integrated seamless pipe manufacturing facility is located near the major exploration and drilling operations of Petróleos Mexicanos S.A. de C.V. (“Pemex”), about 13 kilometers from the port of Veracruz on the Gulf of Mexico. Situated on an area of 650 hectares, the plant includes two state-of-the-art seamless pipe mills and has an installed annual production capacity of approximately 1,230,000 tons of seamless steel pipes (with an outside diameter range of 2 to 20 inches) and 1,150,000 tons of steel bars. The plant is served by two highways and a railroad and is close to the port of Veracruz, which reduces transportation costs and facilitates product shipments to export markets.

The Veracruz facility comprises:

- a steel shop, including an electric arc furnace, refining equipment, vacuum degassing, five-strand continuous caster and a cooling bed;
- a multi-stand pipe mill, including a rotary furnace, direct piercing equipment, mandrel mill with retained mandrel, sizing mill and a cooling bed;
- a premium quality finishing (“PQF”), technology mill (2 3/8 to 7 inches), including a rotary furnace, direct piercing equipment, mandrel mill with retained mandrel, sizing mill and a cooling bed;
- a pilger pipe mill, including a rotary furnace, direct piercing equipment, a reheating furnace, sizing mill and a cooling bed;
- six finishing lines, including heat treatment lines, upsetting machines and threading and inspection equipment;
- a cold-drawing mill; *and*

an automotive components production center.

The major operational units at the Veracruz facility and the corresponding effective annual production capacity (in thousands of tons per year, except for the auto components facility, which is in millions of parts) as of December 31, 2018, are as follows:

	Effective Annual Production Capacity (thousands of tons) ⁽¹⁾
Steel Shop	1,150
Pipe Production	
Multi-Stand Pipe Mill	700
PQF Mill	450
Pilger Mill	80
Cold-Drawing Mill	35
Auto Components Facility	30

(1) Effective annual production capacity is calculated based on standard productivity of production lines, theoretical product mix allocations, the maximum number of possible working shifts and a continued flow of supplies to the production process.

In Veracruz, located near our fully integrated seamless pipe manufacturing facility, we have a threading plant, which produces premium connections and accessories.

In addition to the Veracruz facilities, we operate a manufacturing facility near Monterrey in the state of Nuevo León, Mexico, for the production of weldable pipe fittings. This facility has an annual production capacity of approximately 15,000 tons.

United States

In the United States we have the following production facilities:

Bay City, Texas: Our 1.2 million square foot greenfield seamless mill was inaugurated in December 2017. The facility is the result of an investment of \$1.8 billion and includes a state-of-the-art rolling mill with a capacity of approximately 600,000 tons per year (with an outside diameter range of 4 ½ to 9 ¾ inches), as well as finishing and heat treatment lines and logistics center.

The Bay City facility comprises:

- a retained mandrel mill premium quality finishing (“PQF”);
- a fully automated intermediate warehouse;
- a heat treatment line; and
- a finishing line.

Hickman, Arkansas: This facility, which is our main U.S. welded production facility and covers an area of 78 hectares, processes steel coils to produce electric resistance welded (“ERW”), OCTG and line pipe with an outside diameter range from 2 ¾ to 16 inches and has an annual production capacity of approximately 900,000 tons. It includes:

- a plant comprising two mills producing 2 ¾ through 5 ½ inches API products with two finishing lines and two heat treatment lines;
- a plant comprising two mills producing 4 ½ through 16 inches API products with two finishing lines; and
- a coating facility coating sizes up to 16 inches.

Conroe, Texas: A plant located on an area of 47 hectares which processes steel coils to produce ERW OCTG, with an outside diameter range of 4 1/2 to 8 5/8 inches and has an annual production capacity of approximately 250,000 tons. The facility includes one mill, one heat treatment line and one finishing line. In October 2018, Tenaris restarted operations at this mill and is currently heat treating and finishing seamless pipes coming mostly from Tenaris Bay City, after a temporary suspension, that occurred in 2015 due to the record levels of unfairly traded imports of OCTG from South Korea and the sharp decline in the price of oil and consequential reduction in drilling activity.

Counce, Tennessee: A plant located on an area of 54 hectares which processes steel coils to produce line pipe with an outside diameter range of 4 1/2 to 8 5/8 inches and has an annual production capacity of approximately 90,000 tons. The plant has one mill and a finishing line capable of producing line pipe products. Currently, for efficiency reasons, the plant is not operational and these products are being produced by our Hickman plant.

Additionally, we have the following threading facilities, which are mainly dedicated to the finishing of tubes with premium connections:

- *McCarty:* a threading facility in Houston, Texas, which comprises two main production buildings in an area of approximately 20 hectares;
- *Westwego:* a threading facility located in Louisiana. In June 2015, we suspended operations at the Westwego facility, mainly due to the decline in drilling activity driven by the low price of oil; *and*
- *Bakersfield:* a threading facility in California, mainly used as a repair shop.

Canada

In Canada, we have a seamless steel pipe manufacturing facility located in Sault Ste. Marie, near the mouth of Lake Superior in the province of Ontario. The facility includes a retained mandrel mill, a stretch reducing mill and heat treatment and finishing facilities producing seamless pipe products with an outside diameter range of 3 1/2 to 9 7/8 inches. The effective annual production capacity of the facility is approximately 300,000 tons. We use steel bars produced by Rio Tinto Fer et Titane, Inc., a Canadian producer of titanium dioxide and high purity iron, and by our integrated facilities in Romania, Italy, Mexico and Argentina.

We also own a welded steel pipe manufacturing facility located in Calgary, Alberta, which processes steel coils into ERW OCTG and line pipe with an outside diameter range of 2 3/8 to 12 3/4 inches. The facility includes a slitter, three welding lines and four threading lines. The effective annual production capacity of this plant is approximately 400,000 tons.

In addition, we have a threading facility in Nisku, Alberta, near the center of Western Canadian drilling area. The facility has ten computer numerical control (“CNC”), lathes dedicated to premium connections and accessories including related repairs.

South America

In South America, we have a fully integrated seamless pipe facility in Argentina. In addition, we have welded pipe manufacturing facilities in Argentina, Brazil and Colombia.

Argentina

Our principal manufacturing facility in South America is a fully integrated plant on the banks of the Paraná river near the town of Campana, approximately 80 kilometers from the City of Buenos Aires, Argentina. Situated on over 300 hectares, the plant includes a state-of-the-art seamless pipe facility and has an effective annual production capacity of approximately 900,000 tons of seamless steel pipe (with an outside diameter range of 1 1/4 to 10 3/4 inches) and 1,300,000 tons of steel bars.

The Campana facility comprises:

- a direct reduced iron (“DRI”), production plant;
- a steel shop with two production lines, each including an electric arc furnace, refining equipment, four-strand continuous caster and a cooling bed;
- two continuous mandrel mills, each including a rotary furnace, direct piercing equipment and a cooling bed and, one of them, also including a stretch reducing mill;
- seven finishing lines, including heat treatment lines, upsetting machines, threading and inspection equipment and make-up facilities;

a cold-drawing mill; and

a port on the Paraná river for the supply of raw materials and the shipment of finished products.

In Argentina, up to the end of January 2019 we had a 160 megawatt power generation plant located at San Nicolás that reached the end of its useful life, which together with a smaller thermo-electric power generating plant located within the Campana facility, was sufficient to supply the requirements of our steelmaking facility at Campana. Currently, our energy requirements in Argentina are mainly satisfied from the local market.

The major operational units at the Campana facility and corresponding effective annual production capacity (in thousands of tons per year) as of December 31, 2018, are as follows:

	Effective Annual Production Capacity (thousands of tons) ⁽¹⁾
DRI	960
Steel Shop	
Continuous Casting I	530
Continuous Casting II	770
Pipe Production	
Mandrel Mill I	330
Mandrel Mill II	570
Cold-Drawing Mill	20

(1) Effective annual production capacity is calculated based on standard productivity of production lines, theoretical product mix allocations, the maximum number of possible working shifts and a continued flow of supplies to the production process.

In addition to our main integrated seamless pipe facility, we also have two welded pipe manufacturing facilities in Argentina. One is located at Valentín Alsina just south of the city of Buenos Aires. The facility includes ERW and submerged arc welding (“SAW”), rolling mills with one spiral line. The facility was originally opened in 1948 and processes steel coils and plates to produce welded steel pipes with an outside diameter range of 4 ½ to 80 inches, which are used for the conveying of fluids at low, medium and high pressure and for mechanical and structural purposes. The facility has an annual production capacity of approximately 350,000 tons. The other welded facility is located at Villa Constitución in the province of Santa Fe. The facility has an annual production capacity of approximately 80,000 tons of welded pipes with an outside diameter range of 1 to 8 inches.

Brazil

In Brazil, we have the Confab welded pipe manufacturing facility, located at Pindamonhangaba, 160 kilometers from the city of São Paulo. The facility includes an ERW rolling mill and a SAW rolling mill with one spiral line and one longitudinal line. The facility, which was originally opened in 1974, processes steel coils and plates to produce welded steel pipes with an outside diameter range from 5 ½ to 100 inches for various applications, including OCTG and line pipe for oil, petrochemical and gas applications. The facility also supplies anticorrosion pipe coating made of extruded polyethylene or polypropylene, external and internal fusion bonded epoxy and paint for internal pipe coating. The facility has an annual production capacity of approximately 500,000 tons.

Colombia and Ecuador

In Colombia we have Tubocaribe, a pipe manufacturing facility in Cartagena, on an area of 60 hectares, including a state-of-the-art finishing plant for seamless pipes. The total estimated annual finishing capacity is approximately 250,000 tons, with an estimated annual ERW production capacity of approximately 140,000 tons. The plant produces OCTG and line pipe products with an outside diameter range of 2 ¾ to 9 ⅝ inches, having two ERW mills, one heat treatment line, one slotting line and three threading lines, including premium connections capacity. Inspection lines and materials testing laboratories complete the production facility. A 2 to 42 inches diameter multilayer coating facility complements our line pipe production facilities.

In addition, we have a coupling shop with fifty-four lathes, ten cutting machines, and two phosphatizing lines. Inspection and finishing lines complete this facility. The shop has an estimated annual production capacity of 2.3 million pieces, including API and premium threads.

In Ecuador we have a small threading and finishing service center in Machachi.

Europe

In Europe, we have several seamless pipe manufacturing facilities in Italy and one in Romania and premium connection threading facilities in Denmark and the United Kingdom.

Italy

Our principal manufacturing facility in Europe is an integrated plant located in the town of Dalmine in the industrial area of Bergamo, about 40 kilometers from Milan in northern Italy. Situated on an area of 150 hectares, the plant includes a state-of-the-art seamless pipe mill and has an annual production capacity of approximately 650,000 tons of seamless steel pipes and 935,000 tons of steel bars.

The Dalmine facility comprises:

- a steel shop, including an electric arc furnace, two ladle furnaces, two vacuum degassing and two continuous casters with their own cooling beds;
- a continuous floating mandrel mill whose operations have been suspended;
- a retained mandrel mill with two in-line-high-productivity finishing lines including one heat treatment;
- a rotary expander with a finishing line including a heat treatment (recently expanded); *and*
- two premium connection threading lines.

The major operational units at the Dalmine facility and corresponding effective annual production capacity (in thousands of tons per year) as of December 31, 2018, are as follows:

	Effective Annual Production Capacity (thousands of tons) ⁽¹⁾
Steel Shop	935
Pipe Production	
Retained Mandrel Mill Medium Diameter (plus Rotary Expander for Large Diameter)	650

(1) Effective annual production capacity is calculated based on standard productivity of production lines, theoretical product mix allocations, the maximum number of possible working shifts and a continued flow of supplies to the production process.

The Dalmine facility manufactures seamless steel pipes with an outside diameter range of 146 to 711 mm (5.70 to 28.00 inches), mainly from carbon, low alloy and high alloy steels for diverse applications. The Dalmine facility also manufactures steel bars for processing at our facilities in Italy and elsewhere.

Our production facilities located in Italy have a collective annual production capacity of approximately 800,000 tons of seamless steel pipes. Aside from the main facility mentioned above, they include:

- the Costa Volpino facility, which covers an area of approximately 31 hectares and comprises a cold-drawing mill and an auto components facility producing cold-drawn carbon, low alloy and high alloy steel pipes with an outside diameter range of 12 to 380 mm (0.47 to 15 inches), mainly for automotive, mechanical and machinery companies in Europe. The Costa Volpino facility has an annual production capacity of approximately 80,000 tons; *and*
- the Arcore facility, which covers an area of approximately 26 hectares and comprises a Diescher mill with associated finishing lines. Production is concentrated in heavy-wall mechanical pipes with an outside diameter range of 48 to 219 mm (1.89 to 8.62 inches). The Arcore facility has an annual production capacity of approximately 150,000 tons.

In addition to these facilities, we operate a manufacturing facility at Sabbio, which manufactures gas cylinders with an annual production capacity of approximately 14,000 tons or 270,000 pieces, and a large vessels plant inside the Dalmine facility, recently revamped, with a production capacity of around 5,000 pieces per year.

In order to reduce the cost of electrical energy at our operations in Dalmine, we constructed a gas-fired, combined heat and power station with a capacity of 120 megawatts at Dalmine. Our operations in Dalmine consume most of the power generated at the power station which is designed to have sufficient capacity to meet the electric power requirements of these operations at peak load. Excess power is sold to third-party consumers and heat is sold for district heating.

Romania

We have a seamless steel pipe manufacturing facility in Romania, located in the city of Zalau, near the Hungarian border, approximately 500 kilometers from Bucharest. The Silcotub facility includes a hot rolling mill and has an annual production capacity of approximately 210,000 tons of seamless steel tubes, of which 25,000 tons are cold drawn. The plant produces carbon and alloy steel tubes with an outside diameter range of 8 to 146 mm (0.314 to 5.74 inches). We also have a steelmaking facility in southern Romania, with an annual steelmaking capacity of 550,000 tons supplying steel bars for our European operations as well as to other rolling mills in our industrial system elsewhere. The combined Romanian facilities comprise:

- a steel shop including an electric arc furnace, a ladle furnace and a continuous caster;
- a floating mandrel mill;
- four finishing lines, including heat treatment lines, upsetting machine, line pipe, threading, make-up and inspection equipment facilities;
- a coupling shop;
- a cold-drawing plant with finishing area; and
- automotive and hydraulic cylinders components' production machinery.

United Kingdom

In Aberdeen, the United Kingdom, we have a premium connection threading, manufacturing and repair facility, which works as a hub to service our customers working in the North Sea region. The facility has an annual production capacity of approximately 20,000 pieces, with a production range of 2 ³/₈" to 18 ⁵/₈" (20" by the first quarter of 2019).

Denmark

We have a facility in Esbjerg, Denmark for the manufacturing of casing and tubing accessories and the provision of casing and tubing repairs, with a production range of 2 ³/₈" to 18 ⁵/₈" and production capacity of 4,200 ends per year.

Middle East and Africa

We have a threading facility for the production of premium joints and accessories in Saudi Arabia. The facility has an annual production capacity of 120,000 tons.

Additionally, we have a premium threading facility in Kazakhstan. The state-of-the-art facility has the capacity to produce 45,000 tons of OCTG annually for threading seamless pipes and gas-tight premium connections.

In Nigeria we have a facility dedicated to the production of premium joints and couplings located in Onne. This plant comprises a threading facility for both API and premium connections with an annual production capacity of approximately 40,000 tons, inspection facilities and a stockyard. In addition, in October 2011, we acquired 40% of the shares of Pipe Coaters, a leading company in the Nigerian pipe coating industry. Also, located in Onne, Pipe Coaters supplies a wide variety of products and services for the oil and gas industry, such as internal, anticorrosion, concrete and thermal insulation coatings for deepwater applications.

Asia Pacific

Our seamless pipe manufacturing facility in Asia, operated by NKK Tubes, is located in Kawasaki, Japan, in the Keihin steel complex owned by JFE Holdings Inc. ("JFE"), the successor company of NKK Tubes that resulted from the business combination of NKK Tubes with Kawasaki Steel Corporation. The facility includes a floating mandrel mill, a plug mill and heat treatment and upsetting and threading facilities producing seamless steel pipe products with an outside diameter range of 1 to 17 inches. The effective annual production capacity of the facility is approximately 260,000 tons. The plant was operated by Nippon Kokan K. until its acquisition by NKK Tubes in 2000. Steel bars and other essential inputs and services are supplied by JFE, which retains a 49% interest in NKK Tubes through its subsidiary JFE Steel Corporation. The NKK Tubes facility produces a wide range of carbon, alloy and stainless steel pipes for the local market and high value-added products for export markets.

We own a facility for the production of premium joints and couplings in Qingdao, on the east coast of China. The facility has an annual production capacity of approximately 40,000 tons of premium joints. Additionally, in 2016 we opened a components facility for processing pipes for use in airbags for automobiles.

In addition, in Indonesia, we hold 89.17% of SPIJ, an Indonesian OCTG processing business with heat treatment, premium connection threading facilities, coupling shop and a quality-testing laboratory, including an ultrasonic testing machine, which has an annual processing capacity of approximately 120,000 tons. We also have a premium joints threading facility in the state of Batam, which we integrated to our operations following the acquisition of Hydril.

Production Facilities – Others

We have facilities for the manufacture of sucker rods in Villa Mercedes, San Luis, Argentina, in Moreira Cesar, São Paulo, Brazil, in Veracruz, Mexico, in Campina, Romania and in Conroe, Texas, the United States. Our total annual manufacturing capacity of sucker rods is approximately 3.8 million units.

In Moreira Cesar, São Paulo, Brazil, we also have facilities for the manufacture of industrial equipment. In many cases, we also provide the assembly service of this equipment at the client's site.

In Italy, we have the Piombino facility, which covers an area of approximately 67 hectares and comprises a hot dip galvanizing line and associated finishing facilities. Production is focused on finishing of small diameter seamless pipes for plumbing applications in the domestic market, such as residential water, gas transport and firefighting. The Piombino facility has an annual production capacity of approximately 100,000 tons.

In addition, we have specialized facilities in the Houston area producing coiled tubing and umbilical tubing:

- A coiled tubing facility of approximately 150,000 square feet of manufacturing space on 4 hectares. The plant consists of two mills and coating operations capable of producing coiled tubing products in various grades, sizes and wall thicknesses. A new continuous heat treatment line has been recently installed.
- An umbilical tubing facility of approximately 85,000 square feet of manufacturing space on 6 hectares. The facility is capable of producing stainless or carbon steel tubing in various grades, sizes and wall thickness.

Sales and Marketing

Net Sales

Our total net sales amounted to \$7,659 million in 2018, compared to \$5,289 million in 2017 and \$4,294 million in 2016. For further information on our net sales see Item 5.A. "Operating and Financial Review and Prospects – Results of Operations".

The following table shows our net sales by business segment for the periods indicated therein:

<i>Millions of U.S. dollars</i>	For the year ended December 31,					
	2018		2017		2016	
Tubes	7,233	94%	4,966	94%	4,015	94%
Others	426	6%	323	6%	278	6%
Total	7,659	100%	5,289	100%	4,294	100%

Tubes

The following table indicates, for our Tubes business segment, net sales by geographic region:

Millions of U.S. dollars	For the year ended December 31,					
	2018		2017		2016	
Tubes						
- North America	3,488	48%	2,362	48%	1,265	31%
- South America	1,284	18%	982	20%	1,032	26%
- Europe	628	9%	497	10%	542	14%
- Middle East & Africa	1,541	21%	921	19%	1,041	26%
- Asia Pacific	292	4%	204	4%	136	3%
Total Tubes	7,233	100%	4,966	100%	4,015	100%

North America

Sales to customers in North America accounted for 48% of our sales of tubular products and services in 2018, compared to 48% in 2017 and 31% in 2016.

We have significant sales and production facilities in each of the United States, Canada and Mexico, where we provide customers with an integrated product and service offering based on local production capabilities supported by our global industrial system. In the past three years, we have extended our integrated product and service model, which we call Rig Direct®, throughout North America, and in late 2017, we started operations at our seamless pipe mill at Bay City, Texas, which is strategically located to serve the Eagle Ford and Permian regions. Under Rig Direct®, we manage the whole supply chain from the mill to the rig for customers under long-term agreements, integrating mill production with customer drilling programs, reducing overall inventory levels and simplifying operational processes. We first introduced the Rig Direct® model to Pemex in Mexico in 1994, and since then we have supplied them with pipes on a just-in-time basis. At the end of 2018, we supplied the majority of our U.S. and Canadian customers for OCTG products with Rig Direct® services.

Sales to our oil and gas customers in the United States and Canada are highly sensitive to oil prices and natural gas prices in that region. In the past few years, the drilling of productive shale gas and tight oil reserves, made possible by new drilling technology, has transformed drilling activity and oil and gas production in the United States and Canada. Following 25 years of declining production, U.S. crude oil production began to increase in 2009 and has risen significantly, from 5.6 million b/d in 2011 to 11.7 million b/d at the end of 2018. Production of natural gas liquids (“NGLs”) has also increased significantly in the past few years in North America. This rapid increase in production, however, contributed to an excess of supply in the global oil market in 2014 and a consequent collapse in the price of oil, as other producers, notably Saudi Arabia, were for a time unwilling to adjust their production levels to balance the market. More recently, a further rapid increase in production in 2018 led to a 40% fall in oil prices in the final quarter of the year, which have since partially recovered. Natural gas production has also increased in the United States in four of the last five years, and in 2017 the United States became a net exporter of natural gas for the first time. In Canada, there has been a similar shift towards drilling of shale gas and tight oil reserves. The drop in oil prices since the second half of 2014, however, led to a drastic reduction in drilling activity throughout North America until the second half of 2016 when activity began to recover in the United States and Canada based on sharply lower production costs and an improvement in the outlook for oil prices following the decision by OPEC and other producers to cut production levels to facilitate market supply and demand rebalancing and reduce accumulated excess inventories. In 2017 and 2018, drilling activity recovered and oil and gas production increased in the United States and Canada.

Demand for, and our sales of, OCTG products in the United States and Canada plummeted in 2015 and 2016, to less than a quarter of the high level reached in 2014, affected by high inventory levels as well as collapsing drilling activity. In 2017 and 2018, however, demand and sales recovered strongly as drilling activity increased and inventory levels returned to more normal levels.

During 2018, the U.S. government introduced Section 232 tariffs and quotas on the imports of steel products, including steel pipes, with the objective of strengthening domestic production capacity utilization and investment.

Our sales in the United States are also affected by the level of investment of oil and gas companies in exploration and production in offshore projects. The blow-out at the Macondo well in the Gulf of Mexico and the subsequent spillage of substantial quantities of oil resulted in a moratorium that halted drilling activity. The drilling moratorium was lifted in October 2010, when new regulations affecting offshore exploration and development activities were announced. Since then, drilling activity recovered but, with the 2014 fall in oil prices, drilling activity declined and remains at a low level.

Oil and gas drilling in Canada is subject to strong seasonality, with the peak drilling season in Western Canada being during the winter months when the ground is frozen. During the spring, as the ice melts, drilling activity is severely restricted by the difficulty of moving equipment in muddy terrain.

In Mexico, we have enjoyed a long and mutually beneficial relationship with Pemex, the Mexican state-owned oil company, and one of the world's largest crude oil and condensates producers. In 1994, we began supplying Pemex with Rig Direct® services. In early 2018, we renewed our just in time agreement with Pemex for a further five-year period.

At the end of 2013, Mexico reformed its constitution to permit increased private and foreign investment in the energy industry. Under the reforms, foreign and private investors are allowed to participate in profit and production sharing contracts and licenses and Pemex has been transformed into a state-owned production company without its previous monopoly on production. A new regulatory framework has been developed and contracts with foreign and private investors are gradually being awarded.

Following the 2014 decline in oil prices, drilling activity in Mexico and demand for our OCTG products has plummeted as the financial condition of Pemex has deteriorated and the impact of investments from the energy reform process in Mexico has yet to take effect. Recently, drilling activity at Pemex has started to recover as the new Mexican government has increased funding available for the company as part of a policy of arresting and reversing production decline.

South America

Sales to customers in South America accounted for 18% of our sales of tubular products and services in 2018, compared to 20% in 2017 and 26% in 2016.

Our largest market in South America is Argentina. We also have significant sales in Brazil and Colombia.

We have manufacturing subsidiaries in Argentina, Brazil and Colombia. Our seamless pipe manufacturing facility in Venezuela was nationalized in 2009.

Our sales in South America are sensitive to the international price of oil and its impact on the drilling activity of participants in the oil and gas sectors, as well as to general economic conditions in these countries. In addition, sales in Argentina, as well as export sales from our manufacturing facilities in Argentina, are affected by governmental actions and policies, such as the taxation of oil and gas exports, measures affecting gas prices in the domestic market and other matters affecting the investment climate. Sales in Brazil are also affected by governmental actions and policies and their consequences, such as measures relating to the taxation and ownership of oil and gas production activities and the operations of *Petróleo Brasileiro S.A. ("Petrobras")*.

A principal component of our marketing strategy in South American markets is the establishment of long-term supply agreements and Rig Direct® services with national and international oil and gas companies operating in those markets.

In Argentina, we have a significant share of the market for OCTG products. We have longstanding business relationships with YPF S.A. ("YPF"), the Argentine state-controlled company, and with other operators in the oil and gas sector. We strengthened our relationship with YPF in 2013 through a long-term business alliance, which we renewed for an additional five years at the beginning of 2018, under which we provide Rig Direct® services with the objective of reducing YPF's operational costs as it aims to increase production through investments in Argentina's shale oil and gas reserves. In spite of the 2014 drop in international oil prices, drilling activity was sustained for most of 2015 and 2016 before falling significantly at the end of the year, when drilling in the southern part of the country came to a halt. The change in the Argentine government that occurred in December 2015 is resulting in significant changes in domestic energy policies, including the gradual normalization of domestic gas and energy prices. The new policies are encouraging investment in the Vaca Muerta shale play, which is considered to be one of the world's most promising unconventional reserves. In 2018, there was a significant increase in investments in Vaca Muerta, led by *Tecpetrol's* investment in the Fortin de Piedra gas resource.

In Brazil, we have a longstanding business relationship with *Petrobras*. We supply *Petrobras* with casing (including premium connections) and line pipe products, most of which are produced in our Brazilian welded pipe facility, for both offshore and onshore applications. With the development of Brazil's deepwater pre-salt complex, our mix of products sold in Brazil has evolved from one including mainly line pipe for onshore pipeline projects to one which includes large diameter conductor and surface casing and line pipe for use in deepwater applications. Consumption of OCTG products in Brazil stabilized in 2017 and 2018, after falling in the period 2014-2016 as *Petrobras* had reduced its investments in response to budgetary constraints, concentrating on developing its most productive reserves in the pre-salt fields and halting other investments. Demand for line pipe for pipeline projects has declined to very low levels with only one major project implemented in the past four years. In response to market-opening measures and the attractiveness of the deepwater reserves, major oil companies have increased their investments in Brazil and this could lead to increased activity in future years. Our sales in the local market are currently mostly concentrated on large diameter conductors and surface casing with connectors for the pre-salt and other offshore developments, as well as smaller diameter casing for use in offshore and in the remaining onshore exploration and production activity.

In Colombia, we have established a leading position in the market for OCTG products since 2006, following our acquisition of Tubocaribe, a welded pipe manufacturing facility located in Cartagena. Although the market grew rapidly when oil prices were high as the country encouraged investment in its hydrocarbon industry and opened its national oil company to private investment, drilling activity in Colombia was deeply affected by the 2014 collapse in oil prices and fell to a very low level in 2016. However, activity recovered in 2017 and 2018 in response to the increase in oil prices. Our principal customer in Colombia is Ecopetrol S.A., which we supply with Rig Direct® services and with whom we renewed a long-term agreement in the beginning of 2018. We have recently strengthened our industrial position in Colombia through investing in the installation of modern heat treatment, pipe threading and processing facilities which enables us to serve this market with more local industrial content and our customers with more efficient Rig Direct® services.

In Guyana, the new Lisa deepwater offshore play is being developed and, in 2018, we began providing casing for the development wells in this play under Rig Direct® conditions.

We have been present in the Venezuelan OCTG market for many years and we maintain ongoing business relationships with Petróleos de Venezuela S.A. (“PDVSA”) and the joint venture operators in the oil and gas sector. Our sales in Venezuela may be negatively affected following the recent imposition of U.S. sanctions against PDVSA and its subsidiaries. Our activities in connection with Venezuela do not violate any U.S. or foreign law, and Tenaris has procedures in place designed to ensure that such activities comply with all applicable U.S. and other international export control and economic sanctions laws and regulations. See Item 3.D. “Key Information – Risk Factors – Risks Relating to Our Business – We could be subject to regulatory risks associated with our international operations”; Item 5.D. “Operating and Financial Review and Prospects – Trend Information”; and note 30 “Nationalization of Venezuelan Subsidiaries” to our audited consolidated financial statements included in this annual report.

Europe

Sales to customers in Europe accounted for 9% of our sales of tubular products and services in 2018, compared to 10% in 2017 and 14% in 2016.

Our single largest country market in Europe is Italy. The market for steel pipes in Italy (as in much of the European Union) is affected by general industrial production trends, especially in the mechanical and automotive industry, and by investment in power generation, petrochemical and oil refining facilities. Sales to the mechanical and automotive industries and for HPI and power generation projects in Italy and the rest of Europe over the past three years have been affected by lower prices reflecting increased competitive pressures, but volumes have been relatively stable.

In Europe, we also have significant sales to the oil and gas sector, which have grown in recent years, with exploration activity taking place in new areas such as unconventional shale plays in Eastern Europe and offshore drilling in the Black Sea, the Eastern Mediterranean and the Barents Sea, together with ongoing investment in the more traditional areas of the North Sea, Romania, Turkey and Russia. Demand from these markets is affected by oil and gas prices in the international markets and their consequent impact on oil and gas drilling activities in these areas. In addition, U.S. and European sanctions are affecting demand for our premium pipe products in Russia and limited exploration success in unconventional shale plays in Eastern Europe has led international operators to cut back on their investments in this area.

In February 2019, we announced the formation of a joint venture with PAO Severstal, a leading Russian flat steel producer, to build and operate a welded pipe mill to manufacture OCTG products in Surgut, Western Siberia, which is expected to begin production in late 2021. Our share in the joint venture is 49%.

Middle East and Africa

Sales to customers in the Middle East and Africa accounted for 21% of our sales of tubular products and services in 2018, compared to 19% in 2017 and 26% in 2016.

Our sales in the region remain sensitive to international prices of oil and gas and their impact on drilling activities as well as to the production policies pursued by OPEC, many of whose members are located in this region. In the past few years, oil and gas producing countries in the Middle East, led by Saudi Arabia, have increased investments to develop gas reserves to fuel regional gas-based industrial development, which have positively affected their consumption of premium OCTG products. Saudi Arabia, in particular, has shown strong growth in sour and high pressure gas field drilling activity. They have also maintained and, in some cases, increased investments to offset decline and add oil production capacity. Additionally, in the eastern Mediterranean, vast reserves of natural gas have been discovered, some of which have been targeted for fast track development. In Africa, international oil companies increased investments in exploration and production in offshore projects in 2012 and 2013 but began to postpone or reduce their investment commitments in 2014 due to the high cost of offshore project developments and a lower success rate in exploration activity. Since 2015, following the oil price collapse, exploration activity has been sharply cut back and major project commitments have been postponed. The effect on demand was compounded by the high inventory levels held in the region.

In the past few years, uprisings affected drilling activity in countries such as Syria, Libya and Yemen and, in the case of Libya, the oil and gas industry was effectively shut down in 2011. In addition, in recent years, U.S. and E.U. sanctions have affected production and exports in Iran.

Our sales in the Middle East and Africa could be adversely affected by political and other events in the region, such as armed conflicts, terrorist attacks and social unrest, that could materially impact the operations of companies active in the region's oil and gas industry. Our sales in the region can also be affected by the levels of inventories held by the principal national oil companies in the region and their effect on purchasing requirements. For example, Saudi Aramco, after purchasing pipes in excess of its consumption requirements in 2013 and the first half of 2014, subsequently substantially reduced purchases during the second half of 2014 and throughout 2015, notwithstanding increased drilling activity, as it reduced inventory levels. In the past three years, purchasing has been more in line with consumption patterns.

Over the past three years, our sales in the Middle East have been relatively stable but sales in sub-Saharan Africa have been affected by the slowdown in drilling activity and investments in deepwater projects. On the other hand, our sales in the second half of 2017 and throughout 2018 were boosted by sales of line pipe for offshore gas projects in the Eastern Mediterranean. In 2018, these sales came to a peak amounting to 8% of total sales, which is unlikely to be repeated in the near future.

In January 2019, we completed the acquisition of 47.79% of Saudi Steel Pipe Ltd, a listed welded steel pipe producer in Saudi Arabia. SSP produces OCTG, line pipe and commercial pipe products mainly for the local market. It is qualified to supply Saudi Aramco for certain products. Through this investment, Tenaris will increase its local industrial presence in an important oil and gas market where policies are being implemented to diversify the economy and increase local manufacturing.

Asia Pacific

Sales to customers in the Asia Pacific accounted for 4% of our sales of tubular products and services in 2018, compared to 4% in 2017 and 3% in 2016.

We have a significant presence in the region with local production facilities in Indonesia, China and Japan and, in recent years, we have established service centers in Australia and Thailand.

Sales to Indonesia and other markets in South East Asia and Oceania are mainly affected by the level of oil and gas drilling activity, particularly offshore drilling activity. The collapse in the price of oil has deeply affected drilling activity and our sales throughout the region, where drilling is mainly onshore. In 2016, however, we won a significant long-term agreement to provide pipes with Rig Direct® services in Thailand which has made Thailand our largest market in the region. Our future sales in Thailand, however, may be affected by recent changes in the ownership of oil and gas development concessions.

Our sales in China are concentrated on premium OCTG products used in oil and gas drilling activities. Over the past years, China has significantly reduced its imports of OCTG products as local producers compete ferociously in an oversupplied market. We continue, however, to seek new markets in niche applications and in 2016 we opened a components facility for processing pipes for use in airbags for automobiles. More recently, we have begun to supply pipes under a Rig Direct® contract for a shale gas operation.

In Japan, our subsidiary, NKK Tubes, competes against other domestic producers. The market for steel pipe products in Japan is mostly industrial and depends on general factors affecting domestic investment, including production activity.

Others

Our other products and services include sucker rods used in oil extraction activities, coiled tubes used in oil and gas extraction activities, industrial equipment of various specifications and for diverse applications, sales of pipe for construction activities from our Italian Piombino mill and sales of raw materials and energy that exceed our internal requirements. In January 2017, we sold our electrical conduit pipes business in the United States. Net sales of other products and services amounted to 6% of total net sales in 2018, compared to 6% of total net sales in 2017, as sales of sucker rods and coiled tubes increased.

Competition

The global market for steel pipe products is highly competitive. Seamless steel pipe products, which are used extensively in the oil and gas industry particularly for offshore, high pressure, high stress and other complex applications, are produced in specialized mills using round steel billets and specially produced ingots. Welded steel pipe products are produced in mills which process steel coils and plates into steel pipes. Steel companies that manufacture steel coils and other steel products but do not operate specialized seamless steel mills are generally not competitors in the market for seamless steel pipe products, although they often produce welded steel pipes or sell steel coils and plates used to produce welded steel pipes.

The production of steel pipe products following the stringent requirements of major oil and gas companies operating in offshore and other complex operations requires the development of specific skills and significant investments in manufacturing facilities. By contrast, steel pipe products for standard applications can be produced in most seamless pipe mills worldwide and sometimes compete with welded pipe products for such applications including OCTG applications. Welded pipe, however, is not generally considered a satisfactory substitute for seamless steel pipe in high-pressure or high-stress applications.

Over the past decade, substantial investments have been made, especially in China but also in other regions around the world, to increase production capacity of seamless steel pipe products. Production capacity for more specialized product grades has also increased. With the downturn between 2014 and 2016 in the price of oil and demand for tubes for oil and gas drilling, the overcapacity in steel pipe and seamless steel pipe production worldwide has become acute, and now extends beyond commodity grades. The competitive environment has, as a result, become more intense, and we expect that this will continue for some time. Effective competitive differentiation will be a key factor for Tenaris.

Our principal competitors in steel pipe markets worldwide are described below.

Vallourec S.A. (“Vallourec”), a French company, has mills in Brazil, China, Germany and the United States. Vallourec has a strong presence in the European market for seamless pipes for industrial use and a significant market share in the international market with customers primarily in Europe, the United States, Brazil, China, the Middle East and Africa. Vallourec is an important competitor in the international OCTG market, particularly for high-value premium joint products, where it operates a technology partnership for VAM[®] premium connections with Nippon Steel & Sumitomo Metal Corporation (“NSSMC”). Prior to the collapse in oil prices in 2014 to 2016, Vallourec increased its production capacity by building a new mill in Brazil jointly with NSSMC, which is aimed primarily at export markets and was commissioned in 2011, and a second seamless pipe rolling mill at its existing facility in Youngstown, Ohio, which began commercial production at the end of 2012. In addition to the construction of the new Youngstown mill, Vallourec reinforced its positioning in the United States through the acquisition of three tubular businesses from Grant Prideco Inc.: Atlas Bradford[®] Premium Threading & Services, TCA[®] and Tube-Alloy. Vallourec also strengthened its position in the Middle East through the acquisition of heat treatment and threading facilities in Saudi Arabia in 2011 and, in 2010, it concluded an agreement with a Chinese seamless steel producer, Tianda Oil Pipe Company (“Tianda”), under which it began to distribute products from Tianda in markets outside China. In early 2016, in response to accumulating losses, Vallourec announced a \$1 billion capital increase, more than half of which was provided by a French government fund and NSSMC, who each agreed to increase their equity participation to 15%. At the same time, an industrial restructuring program was announced under which Vallourec reduced capacity in Europe, closing its rolling mills in France, combined its operations in Brazil with that of the new mill held with NSSMC, acquired a majority position in Tianda and bought out the remaining minority interest, and strengthened its cooperation with NSSMC for the development and testing of premium connection products and technology. Despite this restructuring program, Vallourec’s losses have continued through 2018.

Japanese players NSSMC and JFE together enjoy a significant share of the international market, having established strong positions in markets in the Far East and the Middle East. They are internationally recognized for their supply of high-alloy grade pipe products. In recent years, NSSMC has increased its capacity to serve international markets through the construction with Vallourec of a new seamless pipe mill in Brazil, and has further strengthened its ties with Vallourec through participating in Vallourec’s capital increase and combining their respective Brazilian operations.

In recent years, TMK, a Russian company, has led consolidation of the Russian steel pipe industry, invested to modernize and expand its production capacity in Russia and expanded internationally through acquisitions into Eastern Europe and the United States where it acquired a significant position in the U.S. market through its acquisition of IPSCO tubular operations comprising both seamless and welded pipe mills and the Ultra family of connections. In 2012, TMK opened a research and development center in Houston and has been expanding its capacity to produce premium connection products. TMK also expanded in the Middle East through the acquisition of a controlling interest in Gulf International Pipe Industry LLC (“Gulf International Pipe”), a welded pipe producer in Oman. More recently, TMK adopted a strategy of monetizing its international assets by reducing its participation in Gulf International Pipe and agreeing to sell its U.S. IPSCO Tubulars subsidiary to Tenaris.

Over the past two decades, Chinese producers increased production capacity substantially and strongly increased their exports of steel pipe products around the world. Due to unfair trading practices, many countries, including the United States, the European Union, Canada, Mexico and Colombia, have imposed anti-dumping restrictions on Chinese imports to those regions. The largest Chinese producer of seamless steel pipes, Tianjin Pipe (Group) Corporation Limited (“TPCO”), announced a plan in 2009 to build a new seamless pipe facility in the United States; heat treatment and pipe finishing facilities have been constructed and steelmaking and hot rolling facilities are currently under construction in Corpus Christi, Texas. Although producers from China compete primarily in the “commodity” sector of the market, some of these producers, including TPCO, have been upgrading their facilities and processes with the intention of entering into the market for more specialized products.

The tubes and pipes business in the United States and Canada experienced a significant consolidation process several years ago. Following the acquisitions of Maverick and Hydril by Tenaris and the earlier acquisition of North Star Steel by Vallourec, U.S. Steel Corporation acquired Lone Star Steel Technologies. In 2008, Evraz Group S.A. (“Evraz”) and TMK, two Russian companies, acquired IPSCO’s Tubular division which has both seamless and welded mills in the United States and Canada. Evraz retained IPSCO’s operations in Canada while TMK acquired IPSCO’s operations in the United States, as mentioned above. More recently, however, many new players have built, or announced plans to build, pipe mills in the United States. These include, in addition to TPCO, Boomerang LLC, a company formed by a former Maverick executive that opened a welded pipe mill in Liberty, Texas, in 2010; Benteler International A.G. (“Benteler”), a European seamless pipe producer that built a new seamless pipe mill in Louisiana, which opened in September 2015; and OCT Pipe, LLC, a company building a seamless pipe mill with heat treatment and OCTG threading facilities in Norfolk, Nebraska. North American pipe producers are largely focused on supplying the U.S. and Canadian markets, where they have their production facilities. In March 2019, TMK announced that it had agreed to sell its U.S. IPSCO subsidiary to Tenaris, a transaction which remains subject to anti-trust clearance from the U.S. authorities and other customary closing conditions.

Korean welded pipe producers, who have a limited domestic market, have expanded capacity in recent years and targeted the U.S. market for standard applications. They have gained a relevant market position, despite the application of anti-dumping duties for unfair trading practices.

Tubos Reunidos S.A. (“Tubos Reunidos”) of Spain, Benteler International A.G. of Germany and Voest Alpine A.G. of Austria each have a significant presence in the European market for seamless steel pipes for industrial applications, while the latter also has a relevant presence in the U.S. and international OCTG markets, and in 2016, Tubos Reunidos opened an OCTG threading facility targeting international markets. In 2006, ArcelorMittal S.A. (“ArcelorMittal”) created a tubes division through several acquisitions and has mills in North America, Eastern Europe, Venezuela, Algeria and South Africa and has built a seamless pipe mill in Saudi Arabia.

In the Middle East, particularly in Saudi Arabia, which has implemented policies to encourage local production for its oil and gas industry, a number of pipe mills have been established including a seamless pipe mill built by Jubail Energy Services Company (“JESCO”), a company established with majority participation from a state-backed industrial development company, and the seamless pipe mill built by ArcelorMittal. These local players have been strengthening their capabilities and are taking an increasing share of the pipes supplied to Saudi Aramco as well as exporting to other countries in the Middle East and the rest of the world. In January 2019, Tenaris acquired a controlling 47.79% participation in SSP, a local welded pipe producer.

Producers of steel pipe products can maintain strong competitive positions in markets where they have their pipe manufacturing facilities due to logistical and other advantages that permit them to offer value-added services and maintain strong relationships with domestic customers, particularly in the oil and gas sectors. Our subsidiaries have established strong ties with major consumers of steel pipe products in their home markets, reinforced by Rig Direct® services, as discussed above.

Capital Expenditure Program

During 2018, our capital expenditures, including investments at our plants and investments in information systems, amounted to \$349 million, compared to \$558 million in 2017 and \$787 million in 2016. Of these capital expenditures, investment at our plants amounted to \$318 million in 2018, compared to \$525 million in 2017 and \$757 million in 2016.

In 2018, we have fully consolidated the Rig Direct® service in the United States and Canadian markets and are working to increase differentiation through improving service quality and extending integration with customer operations. In addition, we focused on enhancing automation at our industrial process, product differentiation and competitiveness, increasing local finishing capabilities, as well as enhancing safety and minimizing environmental impact of our plants.

The major highlights of our capital spending program during 2018 included: investments in automation at our industrial system worldwide, increase in the capacity of automotive components, investments at the steel shop and laboratory in Mexico, completion of the expansion of heat treatment capacity at our mill in Italy, completion of construction and start-up investments at Bay City, USA, and installation of a new waste water treatment plant in our mill in Campana, Argentina.

Capital expenditures in 2019 are expected to remain in line with the level of 2018, including the completion of some of the projects started in 2018 and maintenance interventions mainly at our facilities in Argentina, Mexico and Romania.

In addition to capital expenditures at our plants, we have invested in information systems for the integration of our production, commercial and managerial activities, together with investments in cybersecurity for the protection of our information technology and our industrial systems. These investments are intended to promote the further integration of our operating facilities and enhance our ability to provide value-added services to customers worldwide. Investments in information systems totaled \$32 million in 2018, compared to \$28 million in 2017 and \$29 million in 2016.

Raw Materials and Energy

The majority of our seamless steel pipe products are manufactured in integrated steelmaking operations using the electric arc furnace route, with the principal raw materials being steel scrap, DRI, hot briquetted iron (“HBI”), pig iron and ferroalloys. In Argentina, we produce our own DRI from iron ore using natural gas as a reductant. Our integrated steelmaking operations consume significant quantities of electric energy, purchased from the local market. Our welded steel pipe products are processed from purchased steel coils and plates. Although the weight of the different steelmaking raw materials and steel, vary among the different production facilities in our industrial system, depending on the specifications of the final products and other factors, on average steel scrap, pig iron, HBI and DRI represent approximately 20% of our steel pipe products’ costs, while steel in the form of billets or coils represents approximately 20%, with direct energy accounting for approximately 5%.

The aforementioned inputs of raw material are subject to price volatility caused by supply, political and economic situations, financial variables and other unpredictable factors. For further information on price volatility, see Item 3.D. “Key Information – Risk Factors – Risks Relating to Our Industry – Increases in the cost of raw materials, energy and other costs, limitations or disruptions to the supply of raw materials and energy, and price mismatches between raw materials and our products may hurt our profitability”. The costs of steelmaking raw materials and of steel coils and plates increased during 2018 with high levels of volatility.

Steel scrap, pig iron and HBI

Steel scrap, pig iron and HBI for our steelmaking operations are sourced from local, regional and international sources. In Argentina, we produce our own DRI and source ferrous scrap domestically through a wholly owned scrap collecting and processing subsidiary. In Italy, we purchase pig iron and ferrous scrap from local and regional markets. In Mexico, we import our pig iron and HBI requirements and purchase scrap from domestic and international markets. In Romania, we source ferrous scrap mainly from the domestic market and we import pig iron.

International prices for steel scrap, pig iron and HBI can vary substantially in accordance with supply and demand conditions in the international steel industry. Overall costs for these materials increased in 2018, following steady increases in world steel prices. As a reference, prices for Scrap Shredded U.S. East Coast, published by CRU, averaged \$284 per ton in 2017 and \$338 per ton in 2018, descending to levels around \$300 per ton at the beginning of 2019.

Iron ore

We consume Iron ore in the form of pellets, for the production of DRI in Argentina. Siderca’s annual consumption of iron ore during 2018 was approximately 840,000 tons, supplied mainly from Brazil by Vale International S.A.

Iron Ore IODEX 62% Fe (CFR North China) prices, published by Platts, were stable in 2018 with an annual average of \$69 per ton, fluctuating between \$63 per ton and \$80 per ton. The Iron Ore DR grade Pellets market has been particularly tight since Samarco shut down operations in 2015 and global demand continues to grow. This has impacted Iron Ore Direct Reduction Pellet Premium that have increased, according to market references (Platts), from \$42 per ton in 2016 to approximately \$54 in 2017 and approximately \$63 per ton in 2018. Worldwide iron ore pellets supply could be affected, and consequently prices could increase in the future, following the accident that occurred in January 2019 in Vale International S.A.'s Feijão Mine in Brumadinho (Minas Gerais - Brazil).

Round steel bars

We mainly satisfy our steel bars and ingots requirements with materials produced in our steelmaking facilities in Romania, Italy, Mexico and Argentina. We complement this internal supply with purchases of steel bars and ingots from third parties as required, and particularly for use in our seamless steel pipe facilities in Japan, Canada, Mexico and the USA.

In Japan, we purchase these materials from JFE, our partner in NKK Tubes. These purchases are made under a supply arrangement pursuant to which the purchase price varies in relation to changes in the cost of production. As a result of their location within a larger production complex operated by the supplier, our operations in Japan are substantially dependent on these contracts for the supply of raw materials and energy. JFE uses imported iron ore, coal and ferroalloys as principal raw materials for producing steel bars at Keihin.

In Canada we mainly source our steel bars requirements from our facilities mentioned above. Occasionally, we purchase some of these materials from Rio Tinto Fer et Titane, Inc., a Canadian producer of titanium dioxide and high purity iron.

In Mexico, we have been sourcing steel bars from Ternium's Mexican facilities since 2011, under a long term contract that grants us, during an eight-year period, preferential right to purchase up to 250,000 tons of round steel bars per year.

In the United States, we currently use steel bars produced in our integrated facilities in Romania, Italy and Mexico and have recently been granted an exclusion from Section 232 tariffs for the imports of these steel bars.

Steel coils and plates

For the production of welded steel pipe products, we purchase steel coils and steel plates principally from domestic producers for processing into welded steel pipes. We have welded pipe operations in Argentina, Brazil, Canada, Colombia and the United States.

Steel coil market prices increased in 2018. As a reference, prices for hot rolled coils, HRC Midwest USA Mill, published by CRU, averaged \$680 per ton in 2017 and \$915 per ton in 2018, but have shown a recent downward trend reaching \$746 per ton in February 2019.

For our welded pipe operations in the United States, a significant part of our requirements for steel coils are supplied by Nucor Steel which is our principal supplier in the United States. Nucor Steel has a steel coil manufacturing facility in Hickman, Arkansas, near to our principal welded pipe facility in the United States. To secure a supply of steel coils for our U.S. facilities, in January 2018 we renewed a long-term purchase agreement with Nucor Steel which is due to expire at the end of 2020.

In Canada, we have long-term agreements with our main steel suppliers for our welded pipe operations with prices referenced to market levels in U.S. dollars (i.e., CRU HRC index). Among the suppliers is ArcelorMittal Dofasco, which has steel coil manufacturing facilities in Hamilton, Ontario. Additionally, we purchase steel on a spot basis from Essar Steel Algoma, which has steel coil manufacturing facilities in Sault Ste. Marie, Ontario.

We also purchase steel coils and plates for our welded pipe operations in South America (Colombia, Brazil and Argentina) principally from Usiminas and Gerdau S.A. ("Gerdau") in Brazil, from Ternium Argentina S.A. ("Ternium Argentina"), a subsidiary of Ternium in Argentina, and from Ternium's facilities in Mexico. In addition, in Brazil we also source plates and coils from international suppliers when not produced domestically, for example, we purchased carbon steel to the supplier Voestalpine Grobblech GmbH to manufacture line pipes and buckle arrestors for Belayim Petroleum Co. (Petrobel)'s Zohr gas field project in Egypt.

Energy

We consume substantial quantities of electric energy at our electric steel shops in Argentina, Italy, Mexico and Romania. In Argentina, up to the end of January 2019 we had a 160 megawatt power generation plant located at San Nicolás that reached the end of its useful life, which together with a smaller thermo-electric power generating plant located within the Campana facility, was sufficient to supply the requirements of our steelmaking facility at Campana. Currently, our energy requirements in Argentina are mainly satisfied from the local market. In Dalmine, Italy, we have a 120 megawatt power generation facility, which is designed to have sufficient capacity to meet most of the electric power requirements of the operations at peak load, excess power is sold to third-party consumers while heat is sold for district heating. In Mexico, our electric power requirements are mainly satisfied by Techgen, a natural gas-fired combined cycle electric power plant in the Pesquería area of the State of Nuevo León, while a small portion of our power requirements are furnished by the Mexican government-owned Comisión Federal de Electricidad, or the Federal Electric Power Commission. In Romania, we source power from the local market.

We consume substantial volumes of natural gas in Argentina, particularly in the generation of DRI and to operate our power generation facilities. Tecpetrol is our only natural gas supplier in Argentina. Tecpetrol is a subsidiary of San Faustin, which supplies us under market conditions and according to local regulations.

We have transportation capacity agreements with Transportadora de Gas del Norte S.A. (“TGN”), a company in which San Faustin holds a significant but non-controlling interest, corresponding to capacity of 1,000,000 cubic meters per day until April 2027. In order to meet our transportation requirements for natural gas above volumes contracted with TGN, we also have agreements with Naturgy S.A. (formerly Gas Natural Ban S.A.), for a maximum interruptible transportation capacity corresponding to approximately 970,000 cubic meters per day. For the final transportation phase, we have a supply contract with Naturgy S.A. that will be in force until April 2020.

In addition to the normal amount of gas consumed at our Italian plants, we also consume substantial quantities of natural gas in connection with the operation of our power generation facility in Italy. Our natural gas requirements in Italy are currently supplied by Eni S.p.A.

Our costs for electric energy and natural gas vary from country to country. In the last few years energy costs have remained generally flat thanks to the increasing availability of natural gas from shale plays and additional renewable energy generation at more competitive prices. However, energy costs in Argentina did not decline substantially. The cost of natural gas for industrial use in Argentina began to decrease with the increase in production of natural gas from Vaca Muerta. The demand for natural gas in winter continues to outpace supply, which is why Argentina must import natural gas from Bolivia, Chile and Liquefied natural gas (“LNG”) from the international market, in addition to using liquid fuel to generate electricity. Also, energy supply to industrial users can be restricted during the Argentine winter and summer, although due to a higher offer of gas and electrical energy and a more organized framework these interruptions became less frequent. See Item 3.D. “Key Information – Risk Factors – Risks Relating to Our Industry – Increases in the cost of raw materials, energy and other costs, limitations or disruptions to the supply of raw materials and energy; and price mismatches between raw materials and our products may hurt our profitability” and Item 3.D. “Key Information – Risk Factors – Risks Relating to Our Business – Adverse economic or political conditions in the countries where we operate or sell our products and services may decrease our sales or disrupt our manufacturing operations, thereby adversely affecting our revenues, profitability and financial condition”.

Ferrous Alloys

For each of our steel shops we coordinate our purchases of ferrous alloys worldwide. The international costs of ferrous alloys can vary substantially, within a short period. Prices for the main ferrous alloys consumed by Tenaris increased sharply during 2017 and 2018. Although some materials have corrected downwards by end of 2018, current prices remain well above 2016 averages.

Product Quality Standards

Our steel products (tubular products, accessories and sucker rods) are manufactured in accordance with the specifications of the American Petroleum Institute (API), the American Society for Testing and Materials (ASTM), the International Standardization Organization (ISO), the Japan Industrial Standards (JIS), and European Standards (EN), among other standards. The products must also satisfy our proprietary standards as well as our customers’ requirements. We maintain an extensive quality assurance and control program to ensure that our products continue to satisfy proprietary and industry standards and are competitive from a product quality standpoint with products offered by our competitors.

We currently maintain, for all our manufacturing facilities and services centers, a Quality Management System Certified to ISO 9001:2015 by Lloyd’s Register Quality Assurance, and API product licenses granted by API, which are requirements for selling to the major oil and gas companies, which have rigorous quality standards. Our Quality Management System (QMS), based on the ISO 9001 and API Q1 specifications assures that products and services comply with customer requirements from the acquisition of raw materials to the delivery of the final product and services. The QMS is designed to ensure the reliability and improvement of the product and the manufacturing operations processes as well as the associated services.

All of our mills involved in the manufacturing of material for the automotive market are certified according to the standard IATF 16949 by Lloyd's Register Quality Assurance.

Research and Development

Research and development, or R&D, of new products and processes to meet the increasingly stringent requirements of our customers is an important aspect of our business.

R&D activities are carried out primarily at our global R&D network with main office at Amsterdam in the Netherlands and specialized research and testing facilities located at Campana in Argentina, at Veracruz in Mexico, at Dalmine in Italy, and at the product testing facilities of NKK Tubes in Japan. Additionally we have a Wedge Technology Center in Houston, Texas, USA. We strive to engage some of the world's leading industrial research institutions to solve the problems posed by the complexities of oil and gas projects with innovative applications. In addition, our global technical sales team is made up of experienced engineers who work with our customers to identify solutions for each particular oil and gas drilling environment.

Product R&D currently being undertaken are focused on the increasingly challenging energy markets and include:

- proprietary premium joint products including Dopeless® technology;
- heavy-wall deepwater line pipe, risers and welding technology;
- proprietary steels;
- tubes and components for the car industry and mechanical applications;
- tubes for boilers;
- welded pipes for oil and gas and other applications;
- sucker rods;
- coiled tubing; *and*
- coatings.

In addition to R&D aimed at new or improved products, we continuously study opportunities to optimize our manufacturing processes. Recent projects in this area include modeling of rolling and finishing process and the development of different process controls, with the goal of improving product quality and productivity at our facilities.

We seek to protect our innovation, through the use of patents, trade secrets, trademarks and other intellectual property tools that allow us to differentiate ourselves from our competitors.

We spent \$63 million in R&D in 2018, compared to \$64 million in 2017 and \$69 million in 2016.

Environmental Regulation

We are subject to a wide range of local, provincial and national laws, regulations, permit requirements and decrees relating to the protection of human health and the environment, including laws and regulations relating to hazardous materials and radioactive materials and environmental protection governing air emissions, water discharges and waste management. Laws and regulations protecting the environment have become increasingly complex and more stringent and expensive to implement in recent years. International environmental requirements vary from one jurisdiction to another.

The ultimate impact of complying with existing laws and regulations is not always clearly known or determinable since regulations under some of these laws are not yet effective or are undergoing revision. The expenditures necessary to remain in compliance with these laws and regulations, including site or other remediation costs, or costs incurred from potential environmental liabilities, could have a material adverse effect on our financial condition and profitability. While we incur and will continue to incur, in expenditures to comply with applicable laws and regulations, there always remains a risk that environmental incidents or accidents may occur that may negatively affect our reputation or our operations.

Compliance with applicable environmental laws and regulations is a significant factor in our business. We have not been subject to any material penalty for any material environmental violation in the last five years, and we are not aware of any current material legal or administrative proceedings pending against us with respect to environmental matters which could have an adverse material impact on our financial condition or results of operations.

Insurance

We carry property damage, general liability and certain other insurance coverage in line with industry practice. Our current general liability coverage includes third party, employers, sudden and accidental seepage and pollution and product liability, up to a limit of \$300 million. Our current property insurance has indemnification caps up to \$250 million for direct damage, depending on the different plants; and a deductible of \$100 million.

Disclosure Pursuant to Section 13(r) of the Exchange Act

Tenaris

The Iran Threat Reduction and Syria Human Rights Act of 2012 (“ITRA”), created a new subsection (r) in Section 13 of the U.S. Securities Exchange Act of 1934, as amended (the “Exchange Act”), which requires a reporting issuer to provide disclosure if the issuer or any of its affiliates knowingly engaged in certain enumerated activities relating to Iran, including activities involving the Government of Iran. Tenaris is providing the following disclosure pursuant to Section 13(r).

In July 2015, the Islamic Republic of Iran entered into the Joint Comprehensive Plan of Action (“JCPOA”) with China, France, Germany, Russia, the United Kingdom and the U.S., which resulted in the partial lifting in January 2016 of certain sanctions and restrictions against Iran, including most U.S. secondary sanctions against such country. On May 8, 2018, the U.S. announced that it would cease participation in the JCPOA and would begin reimposing nuclear-related sanctions against Iran after a wind-down period. Following the U.S. withdrawal, the European Union updated Council Regulation (EC) No. 2271/96 of 22 November 1996 (the “EU Blocking Statute”), to expand its scope to cover the reimposed U.S. nuclear-related sanctions. The EU Blocking Statute aims to counteract the effects of the U.S. secondary sanctions.

Tenaris believes that its activities concerning Iran, described below, do not violate any U.S. or foreign law. In the cases described below, all deliveries of products and services and any other relevant activities by Tenaris ceased by the end of October 2018, that is, during the wind-down period and before the reimposing of the U.S. secondary sanctions. In addition, in all cases, Tenaris collected amounts owed for sales of goods or performance of services in accordance with OFAC regulations. Tenaris has procedures in place designed to ensure that such activities comply with all applicable U.S. and other international export control and economic sanctions laws and regulations.

Currently, Tenaris does not intend to continue exploring commercial opportunities with potential Iranian business partners nor does it intend to participate in tender offers by, or issue offers to provide products or services to, Iranian companies or their subsidiaries.

Previous pending payments:

- In January 2010, Tenaris Global Services S.A. (“TGS”), a Tenaris subsidiary, entered into an agreement with the National Iranian Drilling Company (“NIDC”), a company controlled by the Government of Iran, for a total value of EUR9.4 million (approximately \$10.1 million). TGS made all deliveries and collected most of its account receivables under the NIDC agreement by 2012. As of December 31, 2018, TGS was owed EUR0.2 million (approximately \$0.2 million) under this agreement, although such amount has been written off for accounting purposes.
- TGS is also a party to an April 2011 agreement with Global Procurement General Trading FZE (“Global FZE”), a company incorporated in United Arab Emirates, for the provision of OCTG for an amount of AED16.5 million (approximately \$4.5 million). TGS has been informed by Global FZE that the end users of the products delivered under this agreement are Oil Industries Engineering and Construction Group and Pars Oil and Gas Company, which are controlled by the Government of Iran. All sales of goods and services to Iran under the agreement with Global FZE were fully performed by 2012. Tenaris collected the outstanding amount of AED0.9 million (approximately \$0.2 million) owed under this agreement during 2018. No delivery obligations under this agreement remained outstanding as of December 31, 2018.

2018 transactions and related activities:

Between January and May 2018, TGS participated in several tenders issued by the National Iranian Oil Company (“NIOC”), and its subsidiaries for the supply of OCTG casing, tubing, line pipe and accessories for oil and gas projects in Iran. Moreover, between January and May 2018, TGS and other non-U.S. subsidiaries of Tenaris issued offers to NIOC and other Iranian companies for the provision of goods and/or services. Except as otherwise specified below, none of such tenders or offers were accepted by NIOC or resulted in agreements with NIOC. As of May 2018, Tenaris ceased to participate in tenders and issuing offers to NIOC, its subsidiaries or other Iranian companies through TGS or other non-U.S. subsidiaries of Tenaris.

In October 2016, TGS entered into an agreement for the provision of technical field service assistance to Petropars Ltd. (“Petropars”), a subsidiary of NIOC, for its project located in the Salman gas field in Iran, for a total value of EUR0.04 million (approximately \$0.04 million). TGS has been informed that Petropars operates the Salman project pursuant to a service contract with Iranian Offshore Oil Company, another subsidiary of NIOC. All services required to be performed by TGS for the benefit of Petropars were fully completed by 2016. On February 18, 2018, TGS collected the outstanding amount of EUR 0.004 million (approximately \$0.005 million) owed by Petropars under this agreement. No delivery obligations under this agreement remained outstanding as of December 31, 2018.

In May 2016, TGS was awarded by Toos Payvand Co., a Tehran-based company, a spot purchase order for carbon steel pipes for the Esfahan Oil Refinery Project (end user NIOC), for a total value of EUR3.5 million (approximately \$4.0 million). TGS delivered most of the items requested under such purchase order, for which the customer made advance payments, during 2017. By October 2018, during the wind-down period associated with the reimposition of U.S. secondary sanctions, TGS had delivered additional pending items for a total value of EUR0.1 million (approximately \$0.1 million), except for 8 tons of carbon steel pipes valued EUR26 thousand (approximately \$30 thousand). Shipments under this purchase order were suspended as of October 2018. Accordingly, as of December 31, 2018, TGS owes to Toos Payvand Co. an outstanding amount of EUR0.04 million (approximately \$0.04 million) for undelivered goods.

In November 2017, Dalmine booked a purchase order with Buhlmann RFS GmbH (a distributor located in Germany) for the provision of line pipes, which were originally intended for use in downstream activities in Iran for the Esfahan Oil Refinery Project (end user NIOC), for a total value of EUR0.6 million (approximately \$0.7 million). During 2018, this order was cancelled and, therefore, no material was delivered for such project. Accordingly, no revenues were recorded for such order as of December 31, 2018.

During 2017, Dalmine booked four orders with Commerciale Tubi Acciaio (a distributor located in Italy) for the provision of line pipes for use in downstream activities in Iran, Kangan Project, for a total value of EUR0.9 million (approximately \$1.1 million). During 2018, Dalmine received additional new orders for products to be used in that project in Iran for EUR0.5 million (approximately \$0.5 million). By October 2018, Dalmine had delivered the material under the four orders procured in 2017. During 2018 Dalmine collected EUR1.4 million (approximately \$1.6 million) and delivered all items under the new orders received in 2018. No delivery obligations under such purchase orders remained outstanding as of December 31, 2018.

In July 2017, TGS was awarded a spot order from Azar Ab Industries Co., for seamless tubes for manufacturing of industrial boilers for Esfahan Oil Refinery in Iran, for a total value of approximately EUR1.2 million (approximately \$1.4 million), of which EUR0.2 million (approximately \$0.2 million) were collected as of December 31, 2017. By October 2018, TGS had delivered all outstanding items under such purchase order and during 2018 TGS collected EUR 1.0 million (approximately \$1.1 million), representing the full outstanding amount thereunder. No delivery obligations under such purchase order remained outstanding as of December 31, 2018.

During 2017, Dalmine was awarded some spot orders from Mapna International FZE, for carbon steel and low alloyed pipes and tubes delivered to Mapna Boiler and Equipment Engineering and Manufacturing Co., for the manufacturing of boilers for conventional power plants in Iran for a total value of approximately EUR2 million (approximately \$2.4 million). By October 2018, Dalmine had delivered all outstanding items under such purchase order, of which EUR0.4 million (approximately \$0.5 million) were shipped during 2018. Moreover, during 2018 Dalmine collected EUR1.6 million (approximately \$1.8 million), representing the full outstanding amount thereunder. No delivery obligations under such purchase order remained outstanding as of December 31, 2018.

During 2018, Dalmine was awarded new spot orders from Mapna International FZE for a total value of EUR4.1 million (approximately \$4.7 million). By October 2018, Dalmine had delivered all items thereunder. During 2018, Dalmine collected EUR4.0 million (approximately \$4.5 million) under the spot orders; an outstanding balance of EUR0.1 million (approximately \$0.1 million) was due as of December 31, 2018. Dalmine expects to collect such outstanding amounts during 2019 to the extent permitted under OFAC regulations. No other obligations are due under these purchase orders.

In December 2016, TGS entered into a distribution agreement with Fanavaran Energy Part Co. (Part Technologist of Energy Company) (“PTEC”), a private Iranian company, for pipes used in downstream activities, such as refineries, petrochemical and gas processing. In August 2017, PTEC placed a purchase order for a total value of EUR1.5 million (approximately \$1.7 million). By October 2018, TGS had delivered all outstanding items under such purchase order. During 2018 TGS collected EUR1.5 million (approximately \$1.7 million), representing the full amount thereunder. No delivery obligations under such purchase order remained outstanding as of December 31, 2018.

During 2018 TGS entered into several confidentiality agreements for the purpose of sharing information with potential Iranian business partners, some of which were companies controlled by the Government of Iran, with the aim of exploring commercial opportunities relating to the supply of goods and services to NIOC or its subsidiaries. No revenues were attributable to these activities.

In June 2017, TGS renewed its Agency Agreement (initially entered into in June 2016) with Industrials SGC Ltd., a U.K.-based agent, which expired on June 12, 2018. The purpose of such agreement was to promote and market certain products manufactured by non-U.S. subsidiaries of Tenaris in the territory of Iran. Revenues attributable to this Agency Agreement for the year ended December 31, 2018, amounted to EUR8.2 million (approximately \$9.7 million).

On February 26, 2018, TGS was awarded by Industrial SGC Ltd., as customer, a spot purchase order for corrosion resistant alloy pipes for the Phase 12 South Pars Gas Field Project by Petropars, a subsidiary of NIOC, for end use by Pars Oil and Gas Company, another subsidiary of NIOC, for a total value of EUR1 million (approximately \$1.1 million). An export license required for this transaction was timely obtained in May 2018. All material was delivered by October 2018 and payment of the full amount thereunder was collected during 2018.

During 2018 Dalmine received an order from UK-based company BP Exploration Operating Co. Ltd. for EUR0.2 million (approximately \$0.2 million) for the provision of casing and coupling to be used in the Rhum Gas Oilfield (located in the U.K.). The partners in the Rhum Gas Oilfield are BP Exploration Operating Co. Ltd. (50%) and Iranian Oil Co. UK Ltd. (50%), a subsidiary of NIOC. All items were delivered by October 2018. An outstanding balance of EUR0.2 million (approximately \$0.2 million) was due by BP Exploration Operating Co. Ltd. as of December 31, 2018. Dalmine expects to collect such outstanding amounts during 2019 to the extent permitted under OFAC regulations. No other obligations are outstanding under these purchase orders.

Tenaris's total sales revenue for 2018 derived from the foregoing transactions amounted to approximately \$11.2 million. The estimated net profits from such transactions, after internal cost allocation, were in the range of \$3.7 million.

Tenaris's Affiliates

Pursuant to Section 13(r) of the Exchange Act, Tenaris is also required to disclose whether any of its affiliates have engaged in certain Iran-related activities and transactions. Tenova S.p.A. ("Tenova"), an Italian supplier of equipment for the mining and the steelmaking industry, as well as Techint – Compagnia Tecnica Internazionale S.p.A. ("Techint CTI"), an Italian provider of engineering, procurement, construction, operation and management services mainly in the oil & gas, refining, petrochemical, power, industrial and infrastructure sectors, are indirectly controlled by San Faustin and, accordingly, are deemed "affiliates" of Tenaris, as that term is defined in Exchange Act Rule 12b-2.

In response to our inquiry, Tenova informed us that:

- During 2018, Tenova or its subsidiaries supplied equipment and performed engineering services for the steel-making and raw material handling industries to companies believed by Tenova to be subsidiaries of development agencies of the Government of Iran. Moreover, certain employees of Tenova visited Iran during 2018 in order to perform the existing contracts and to discuss prospective commercial opportunities with potential Iranian business partners. All discussions of prospective commercial opportunities were made on a promotional basis without making or receiving any payment, fee or revenue, other than routine amounts such as travel-related costs and taxes. Tenova informed us that the start of any commercial discussion is subject to a preliminary validation by Tenova's internal committee to verify whether a customer is subject to any sanction or embargo or not.
- None of the activities performed is connected to the activities described in Sections 5(a) or (b) of the Iran Sanctions Act of 1996, or Sections 104(c)(2) or (d)(1) or 105A(b)(2) of the Comprehensive Iran Sanctions, Accountability, and Divestment Act of 2010, nor, at the time of their performance, were any such activities performed in favor of persons whose property and interests in property are blocked pursuant to Executive Order 13224 (terrorists and terrorist supporters) or 13382 (weapons of mass destruction proliferators and supporters).
- All Tenova's Iran-related contracts were entered into prior to May 8, 2018. As a result of the reimposition of U.S. secondary sanctions described above, as October 16, 2018, Tenova has suspended all its activities related to contracts involving sanctioned and/or listed Iranian entities.

Tenova informed us that its total sales revenue for 2018 with regard to the foregoing transactions amounted to \$15.5 million. Tenova also estimated that its net profits from such transactions, after internal cost allocation and taxes, were in the range of \$6 million.

In response to our inquiry, Techint CTI informed us that:

- On December 18, 2017, Techint CTI entered into an agreement for the provision of technical assistance services (e.g. feasibility studies, technology selection) with Ardabil Petrochemical Co., effective as of February 20, 2018. As of December 31, 2018, Techint CTI collected an aggregate amount of approximately EUR38 thousand (or approximately \$44 thousand) for services under this agreement. The agreement was terminated on November 6, 2018, and no obligations are outstanding under this agreement.

- During 2018 Techint CTI entered into additional ancillary documents (such as confidentiality agreements, expression of interest, memorandums of understanding and letters of intent) for the purpose of sharing information, among others, with the above-referred Iranian customer and others, mostly private entities. No revenues were attributable to these specific activities, other than the ones described in the above item.
- Moreover, during 2018 certain non-U.S. employees of Techint CTI visited Iran in connection with the above-referred agreements and in order to discuss potential commercial opportunities with other Iranian public and private entities. No fees were paid in connection with such activities, other than routine amounts such as travel-related taxes and fees. No revenues were attributable to the above-referred activities. Techint CTI informed us that Techint CTI has procedures in place to ensure that any engagement with companies in Iran is done in compliance with applicable export control and economic sanctions laws and regulations.

C. Organizational Structure and Subsidiaries

We conduct all our operations through subsidiaries. The following table shows the principal subsidiaries of the Company and its direct and indirect ownership in each subsidiary as of December 31, 2018, 2017 and 2016.

Company	Country of Incorporation	Main activity	Percentage of ownership at December 31, (*)		
			2018	2017	2016
ALGOMA TUBES INC.	Canada	Manufacturing of seamless steel pipes	100%	100%	100%
CONFAB INDUSTRIAL S.A. and subsidiaries	Brazil	Manufacturing of welded steel pipes and capital goods	100%	100%	100%
KAZAKHSTAN PIPE THREADERS LIMITED LIABILITY PARTNERSHIP	Kazakhstan	Threading of premium products	100%	100%	100%
HYDRIL COMPANY and subsidiaries (except detailed) (a)	USA	Manufacture and marketing of premium connections	100%	100%	100%
DALMINE S.p.A.	Italy	Manufacturing of seamless steel pipes	100%	100%	100%
MAVERICK TUBE CORPORATION and subsidiaries	USA	Manufacturing of welded steel pipes	100%	100%	100%
S.C. SILCOTUB S.A.	Romania	Manufacturing of seamless steel pipes	100%	100%	100%
NKKTUBES	Japan	Manufacturing of seamless steel pipes	51%	51%	51%
SIAT SOCIEDAD ANONIMA	Argentina	Manufacturing of welded and seamless steel pipes	100%	100%	100%
PRUDENTIAL STEEL LTD.	Canada	Manufacturing of welded steel pipes	100%	100%	100%
SIDERCA SOCIEDAD ANONIMA INDUSTRIAL Y COMERCIAL and subsidiaries	Argentina	Manufacturing of seamless steel pipes	100%	100%	100%
P.T. SEAMLESS PIPE INDONESIA JAYA	Indonesia	Manufacturing of seamless steel products	89%	89%	77%
TUBOS DE ACERO DE MEXICO, S.A.	Mexico	Manufacturing of seamless steel pipes	100%	100%	100%
TENARIS GLOBAL SERVICES (U.S.A.) CORPORATION	USA	Marketing of steel products	100%	100%	100%
TENARIS BAY CITY, INC.	USA	Manufacturing of seamless steel pipes	100%	100%	100%
TENARIS GLOBAL SERVICES (UK) LTD	United Kingdom	Holding company and marketing of steel products	100%	100%	100%
TENARIS INVESTMENTS SWITZERLAND AG and subsidiaries	Switzerland	Holding company	100%	100%	100%
TENARIS FINANCIAL SERVICES S.A.	Uruguay	Financial company	100%	100%	100%
TENARIS GLOBAL SERVICES (CANADA) INC.	Canada	Marketing of steel products	100%	100%	100%
TENARIS INVESTMENTS S.à.r.l.	Luxembourg	Holding company	100%	100%	100%
TENARIS CONNECTIONS BV	Netherlands	Development, management and licensing of intellectual property	100%	100%	100%
TENARIS GLOBAL SERVICES S.A. and subsidiaries (except detailed) (b)	Uruguay	Holding company and marketing of steel products	100%	100%	100%
TALTA - TRADING E MARKETING SOCIEDADE UNIPESSOAL LDA.	Portugal	Holding Company	100%	100%	100%

(*) All percentages rounded.

(a) Tenaris Investments S.a.r.l. holds 100% of Hydril's subsidiaries shares except for Technical Drilling & Production Services Nigeria. Ltd where it holds 80%.

(b) Tenaris holds 97,5% of Tenaris Supply Chain S.A., 60% of Gepnaris S.A. and 40% of Tubular Technical Services and Pipe Coaters, and 49% of Amaja Tubular Services Limited and Tubular Services Angola Ltd.

Other Investments

Ternium

We have a significant investment in Ternium, a Luxembourg company controlled by San Faustin, whose securities are listed on the NYSE. As of December 31, 2018, the Company held 11.46% of Ternium's share capital (including treasury shares).

The Company is a party to a shareholders' agreement with Techint Holdings S.à.r.l. ("Techint Holdings"), a wholly owned subsidiary of San Faustin and Ternium's main shareholder, dated January 9, 2006, pursuant to which Techint Holdings is required to take actions within its power to cause one of the members of Ternium's board of directors to be nominated by the Company and any directors nominated by the Company only to be removed pursuant to previous written instructions by the Company. The Company and Techint Holdings also agreed to cause any vacancies on Ternium's board of directors to be filled with new directors nominated by either the Company or Techint Holdings, as applicable. The shareholders' agreement will remain in effect so long as each of the parties holds at least 5% of the shares of Ternium or until it is terminated by either the Company or Techint Holdings pursuant to its terms. Carlos Condorelli was nominated by the Company as a director of Ternium pursuant to this shareholders' agreement.

Usiminas

On January 16, 2012, Confab, acquired 5.0% of the shares with voting rights and 2.5% of the total share capital in Usiminas, a leading Brazilian producer of high quality flat steel products used in the energy, automotive and other industries. The acquisition was part of a larger transaction pursuant to which Confab and Ternium's subsidiaries Ternium Investments S.à.r.l., Ternium Argentina and Prosid Investments S.A. (jointly, the "Ternium Entities") formed the so-called T/T Group and joined Usiminas' existing control group through the acquisition of ordinary shares representing 27.7% of Usiminas' total voting capital and 13.8% of Usiminas' total share capital. In addition, the T/T Group entered into a shareholders' agreement with the NSSMC Group (formed by NSSMC, Mitsubishi Corporation do Brasil S.A. and Metal One Corporation) and Previdência Usiminas, an Usiminas employee fund, governing the parties' rights within the Usiminas control group.

Following the subscription in 2016 of 1.3 million Usiminas preferred shares and 11.5 million Usiminas ordinary shares by Confab, as of December 31, 2018, Confab owned 36.5 million ordinary shares and 1.3 million preferred shares of Usiminas, representing 5.2% of Usiminas' total voting capital and 3.1% of Usiminas' total share capital.

In 2014, a conflict arose within the T/T Group and NSSMC with respect to the governance of Usiminas, including with respect to the rules applicable to the appointment of senior managers, the application of the shareholders' agreement in matters involving fiduciary duties, and generally with respect to Usiminas' business strategy.

On February 8, 2018, the dispute with NSSMC was resolved, and on April 10, 2018, the T/T Group entities (including Confab), the NSSMC Group entities and Previdência Usiminas entered into a new shareholders' agreement for Usiminas, amending and restating the previously existing shareholders' agreement ("the New SHA"). Usiminas' control group now holds, in the aggregate, 483.6 million ordinary shares bound to the New SHA, representing approximately 68.6% of Usiminas' voting capital, with the T/T Group holding approximately 47.1% of the total shares held by the control group (39.5% corresponding to the Ternium Entities and the other 7.6% corresponding to Confab); the NSSMC Group holding approximately 45.9% of the total shares held by the control group; and Previdência Usiminas holding the remaining 7% of the total shares held by the control group.

The New SHA reflects the agreed-upon corporate governance rules for Usiminas, including, among others, an alternation mechanism for the nomination of each of the chief executive officer and the chairman of the board of directors, as well as a mechanism for the nomination of other members of Usiminas' executive board. The New SHA also incorporates an exit mechanism consisting of a buy-and-sell procedure, exercisable at any time during the term of the New SHA after the fourth-and-a-half-year anniversary from the coming election of Usiminas' executive board in May 2018. Such exit mechanism shall apply with respect to shares held by the NSSMC Group and the T/T Group, and would allow either Ternium (on behalf of the T/T Group) or NSSMC to purchase all or a majority of the Usiminas shares held by the other shareholder group.

In connection with the execution of the New SHA, the Ternium Entities and Confab amended and restated their separate shareholders' agreement governing their respective rights and obligations as members of the T/T Group to include provisions relating to the exit mechanism and generally to conform such separate shareholders' agreement to the other provisions of the New SHA.

Techgen

Techgen is a Mexican joint venture company owned 48% by Ternium, 30% by Tecpetrol and 22% by Tenaris. Techgen operates a natural gas-fired combined cycle electric power plant in the Pesquería area of the State of Nuevo León, Mexico. Tenaris, Ternium and Tecpetrol are parties to a shareholder's agreement relating to the governance of Techgen.

D. Property, Plants and Equipment

For a description of our property, plants and equipment, please see B. "– Business Overview – Production Process and Facilities" and "– Business Overview – Capital Expenditure Program".

Item 4A. Unresolved Staff Comments

None.

Item 5. Operating and Financial Review and Prospects

The following discussion and analysis of our financial condition and results of operations are based on, and should be read in conjunction with, our audited consolidated financial statements and the related notes included elsewhere in this annual report. This discussion and analysis presents our financial condition and results of operations on a consolidated basis. We prepare our consolidated financial statements in conformity with IFRS. IFRS differ in certain significant respects from U.S. GAAP.

Certain information contained in this discussion and analysis and presented elsewhere in this annual report, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties. See "Cautionary Statement Concerning Forward-Looking Statements". In evaluating this discussion and analysis, you should specifically consider the various risk factors identified in Item 3.D. "Key Information – Risk Factors", other risk factors identified elsewhere in this annual report and other factors that could cause results to differ materially from those expressed in such forward-looking statements.

Overview

We are a leading global manufacturer and supplier of steel pipe products and related services for the energy industry and other industries.

We are a leading global manufacturer and supplier of steel pipe products and related services for the world's energy industry as well as for other industrial applications. Our customers include most of the world's leading oil and gas companies as well as engineering companies engaged in constructing oil and gas gathering and processing and power facilities. We operate an integrated worldwide network of steel pipe manufacturing, research, finishing and service facilities with industrial operations in the Americas, Europe, Asia and Africa and a direct presence in most major oil and gas markets.

Our main source of revenue is the sale of products and services to the oil and gas industry, and the level of such sales is sensitive to international oil and gas prices and their impact on drilling activities.

Demand for our products and services from the global oil and gas industry, particularly for tubular products and services used in drilling operations, represents a substantial majority of our total sales. Our sales, therefore, depend on the condition of the oil and gas industry and our customers' willingness to invest capital in oil and gas exploration and development as well as in associated downstream processing activities. The level of these expenditures is sensitive to oil and gas prices as well as the oil and gas industry's view of such prices in the future. Crude oil prices fell from over \$100 per barrel in June 2014 to less than \$30 per barrel in February 2016, before recovering to around \$80 per barrel in the third quarter of 2018, but subsequently fell 40% in the fourth quarter before partially recovering in the beginning of 2019. North American natural gas prices (Henry Hub), which were around \$4 per million BTU in 2014, also briefly fell below \$2 per million BTU at the beginning of 2016, before recovering to average levels of \$3 per million BTU during 2017 and 2018.

In 2018, worldwide drilling activity, as represented in the number of active drilling rigs published by Baker Hughes, a GE company, increased 9% compared to the level of 2017, with the increase concentrated in the U.S. shale plays, and a gradual increase in international rigs starting in the second half of 2018. In the United States the rig count in 2018 increased by 18%, with an average of 1,032 active rigs. Drilling activity in the United States rose steadily through the year but has subsequently declined slightly in the beginning of 2019. In Canada, the rig count in 2018 declined by 7% compared with 2017, with the decline concentrated in the final quarter, while in the rest of the world, it rose 4%.

Prior to the most recent downturn in oil prices, a growing proportion of exploration and production spending by oil and gas companies had been directed at offshore, deep drilling and non-conventional drilling operations in which high-value tubular products, including special steel grades and premium connections, are usually specified. The success, however, of shale drilling operators, with their inherently short investment cycles, in adapting to lower oil and gas costs and increasing production, has led to a slowdown in new developments of complex offshore projects with long investment lead times in a context of low and more volatile oil prices, consequently affecting the level of product differentiation.

Our business is highly competitive.

The global market for steel pipes is highly competitive, with the primary competitive factors being price, quality, service and technology. We sell our products in a large number of countries worldwide and compete primarily against European and Japanese producers in most markets outside North America. In the United States and Canada, we compete against a wide range of local and foreign producers. Over the past decade, substantial investments have been made, especially in China but also in other regions around the world, to increase production capacity of seamless steel pipe products. Production capacity for more specialized product grades has also increased. With the downturn between 2014 and 2016 in the price of oil and demand for tubes for oil and gas drilling, the overcapacity in steel pipe and seamless steel pipe production worldwide has become acute, and now extends beyond commodity grades. The competitive environment has, as a result, become more intense, and we expect that this will continue for some time. Effective competitive differentiation will be a key factor for Tenaris.

In addition, there is an increased risk of unfairly traded steel pipe imports in markets in which we produce and sell our products. In September 2014, the United States imposed anti-dumping duties on OCTG imports from various countries, including South Korea. Despite the duties imposed, imports from South Korea continued at a very high level. As a result, U.S. domestic producers have requested successive reviews of South Korea's exports, which are ongoing. At the same time South Korean producers have appealed the duties imposed. Similarly, in Canada, the Canada Border Services Agency introduced anti-dumping duties on OCTG imports from South Korea and other countries in April 2015.

During 2018, in addition to anti-dumping duties, the U.S. administration introduced tariffs and quotas under Section 232 of the Trade Expansion Act of 1962 on the imports of steel products, including steel pipes, with the objective of strengthening domestic production capacity utilization and investment. Quotas were imposed on the imports of steel products from South Korea, Brazil and Argentina, while 25% tariffs were imposed on imports from most other countries, except Australia. As a result of the fixed quota imposed on the imports of steel pipes from South Korea, their imports halved during 2018 compared to 2017.

Our production costs are sensitive to prices of steelmaking raw materials and other steel products.

We purchase substantial quantities of steelmaking raw materials, including ferrous steel scrap, direct reduced iron (DRI), pig iron, iron ore and ferroalloys, for use in the production of our seamless pipe products. In addition, we purchase substantial quantities of steel coils and plates for use in the production of our welded pipe products. Our production costs, therefore, are sensitive to prices of steelmaking raw materials and certain steel products, which reflect supply and demand factors in the global steel industry and in the countries where we have our manufacturing facilities.

The costs of steelmaking raw materials and of steel coils and plates increased during 2018. As a reference, prices for hot rolled coils, HRC Midwest USA Mill, published by CRU, averaged \$915 per ton in 2018 compared to \$680 per ton in 2017. The prices for 2018 showed downward trend in the last 5 months of the year reaching \$835 per ton in December 2018.

Summary of results

In 2018, our financial results recovered strongly at all levels. Our sales rose 45% year on year, increasing in all regions and also in our non-Tubes profit centers. Highlights of the year include the consolidation of our positioning and Rig Direct® service in the U.S. and Canada, the fast track delivery of the pipes for three East Mediterranean offshore gas pipelines, and our successful positioning for major gas developments in Argentina, Qatar, Indonesia, Mozambique and Australia. EBITDA rose 63% year on year to \$1.5 billion, with margins recovering to the level of 20%. Shareholders net income rose strongly to \$876 million, benefitting from substantially higher operating income, and an excellent contribution from our investment in Ternium.

Despite a buildup in working capital to support our growth in sales, we were able to generate free cash flow of \$261 million. After payment of dividends, our net cash position declined during the year to \$485 million at December 31, 2018, compared to \$647 million at December 31, 2017.

Outlook

Drilling activity in the U.S. shales continued to grow in 2018, following the previous year's strong recovery, while drilling activity in Canada was affected at the end of the year by the drop in regional oil prices. For 2019, following the recent reset of oil prices, drilling activity in the USA is expected to be stable while, in Canada, it is expected to be lower than last year.

In Latin America, a recovery in drilling activity in Mexico is expected as the new government makes more funds available for Pemex and private operators begin implementing their energy reform commitments. In the rest of the regions drilling activity is expected to be relatively stable, with shale drilling activity in Argentina likely to switch from gas to oil.

In the Eastern Hemisphere, drilling activity is expected to continue a gradual recovery with a focus on gas developments.

After our strong performance in 2018, we expect to consolidate our sales and margins through 2019, in line with those of the second half of 2018. We should benefit from growing sales of premium connection products for offshore projects around the world, and the inclusion of consolidated revenues from our new operation in Saudi Arabia, but we will not repeat the exceptional level of offshore line pipe shipments to the Eastern Mediterranean and will have lower sales in Canada. With a stable level of sales, and limited capital investment requirements, we should be able to reduce working capital and generate a stronger free cash flow during the year.

Functional and presentation currency

The functional and presentation currency of the Company is the U.S. dollar. The U.S. dollar is the currency that best reflects the economic substance of the underlying events and circumstances relevant to Tenaris's global operations.

Except for the Brazilian and Italian subsidiaries whose functional currencies are their local currencies, Tenaris determined that the functional currency of its other subsidiaries is the U.S. dollar, based on the following principal considerations:

- Sales are mainly negotiated, denominated and settled in U.S. dollars. If priced in a currency other than the U.S. dollar, the sales price may consider exposure to fluctuation in the exchange rate versus the U.S. dollar;
- Prices of their critical raw materials and inputs are priced and settled in U.S. dollars;
- Transaction and operational environment and the cash flow of these operations have the U.S. dollars as reference currency;
- Significant level of integration of local operations within Tenaris's international global distribution network;
- Net financial assets and liabilities are mainly received and maintained in U.S. dollars; *and*
- The exchange rate of certain legal currencies has long been affected by recurring and severe economic crises.

Critical Accounting Estimates

This discussion and analysis of our financial condition and results of operations are based on our audited consolidated financial statements, which have been prepared in accordance with IFRS. IFRS differs in certain significant respects from U.S. GAAP.

The preparation of our audited consolidated financial statements and related disclosures in conformity with IFRS requires us to make estimates and assumptions that might affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities and the reported amounts of revenue and expenses. Management evaluates its accounting estimates and assumptions, including those related to: impairment of long-lived tangible and intangible assets; assets useful lives; deferred income tax; obsolescence of inventory; doubtful accounts and loss contingencies, and revises them when appropriate. Management bases its estimates on historical experience and on various other assumptions it believes to be reasonable under the circumstances. These estimates form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Although management believes that these estimates and assumptions are reasonable, they are based upon information available at the time they are made. Actual results may differ significantly from these estimates under different assumptions or conditions.

Our most critical accounting estimates are those that are most important to the portrayal of our financial condition and results of operations, and which require us to make our most difficult and subjective judgments, often as a result of the need to make estimates of matters that are inherently uncertain. Our most critical accounting estimates and judgments are the following:

Accounting for business combinations

To account for our business combinations we use the acquisition method, which requires the acquired assets and assumed liabilities to be recorded at their respective fair value as of the acquisition date. The determination of fair values of assets acquired, liabilities and contingent liabilities assumed and determination of useful lives, requires us to make estimates and use valuation techniques, including the use of independent valuers, when market value is not readily available. The excess of the aggregate of the consideration transferred and the amount of any non-controlling interest in the acquiree over the fair value of the identifiable net assets acquired is recorded as goodwill. If this is less than the fair value of the net assets of the subsidiary acquired, the difference is recognized directly in the income statement.

Impairment and recoverability of goodwill and other assets

Long-lived assets including identifiable intangible assets are reviewed for impairment at the lowest level for which there are separately identifiable cash flows (cash generating units, or “CGU”). Most of Tenaris’s principal subsidiaries that constitute a CGU have a single main production facility and, accordingly, each of such subsidiary represents the lowest level of asset aggregation that generates largely independent cash inflows.

Assets that are subject to amortization are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Intangible assets with indefinite useful life, including goodwill, are subject to at least an annual impairment test.

In assessing whether there is any indication that a CGU may be impaired, external and internal sources of information are analyzed. Material facts and circumstances specifically considered in the analysis usually include the discount rate used in Tenaris’s cash flow projections and the business condition in terms of competitive and economic factors, such as the cost of raw materials, oil and gas prices, capital expenditure programs for Tenaris’s customers and the evolution of the rig count.

An impairment loss is recognized for the amount by which the asset’s carrying amount exceeds its recoverable amount. The recoverable amount is the higher between the asset’s value in use and fair value less costs of disposal. Any impairment loss is allocated to reduce the carrying amount of the assets of the CGU in the following order:

- a) first, to reduce the carrying amount of any goodwill allocated to the CGU; and
- b) then, to the other assets of the unit (group of units) pro rata on the basis of the carrying amount of each asset in the unit (group of units), considering not to reduce the carrying amount of the asset below the highest of its fair value less cost of disposal, its value in use or zero.

The value in use of each CGU is determined on the basis of the present value of net future cash flows which would be generated by such CGU. Tenaris uses cash flow projections for a five-year period with a terminal value calculated based on perpetuity and appropriate discount rates.

For purposes of calculating the fair value less costs of disposal Tenaris uses the estimated value of future cash flows that a market participant could generate from the corresponding CGU.

Management judgment is required to estimate discounted future cash flows. Actual cash flows and values could vary significantly from the forecasted future cash flows and related values derived using discounting techniques.

Non-financial assets other than goodwill that suffered an impairment are reviewed for possible reversal at each reporting date.

No impairment charge was recorded in 2018, 2017, or 2016. For more information on Impairment and recoverability of goodwill and other assets, see “II. Accounting Policies G. Impairment of non-financial assets” to our audited consolidated financial statements included in this annual report.

Reassessment of Property, Plant and Equipment Assets Useful Lives

Property, plant and equipment are stated at directly attributable historical acquisition or construction cost less accumulated depreciation and impairment losses, if any. Property, plant and equipment acquired through acquisitions accounted for as business combinations are valued initially at fair market value of the assets acquired. Depreciation of the cost of the asset (apart from land, which is not depreciated) to its residual value over its estimated useful life, is done using the straight line method. The depreciation method is reviewed at each year end. Estimating useful lives for depreciation is particularly difficult as the service lives of assets are also impacted by maintenance and changes in technology, and our ability to adapt technological innovation to the existing asset base. In accordance with IAS 16, "Property, Plant and Equipment", the depreciation method, the residual value and the useful life of an asset must be reviewed at least at each financial year-end, and, if expectations differ from previous estimates, the change must be treated as a change in an accounting estimate. Management's re-estimation of asset useful lives performed in accordance with IAS 16 did not materially affect depreciation expense for 2018. However, if management's estimates prove incorrect, the carrying value of plant and equipment and its useful lives may be required to be reduced from amounts currently recorded. Any such reductions may materially affect asset values and results of operations.

Reassessment of Useful Lives of Customer Relationships

In accordance with IFRS 3, "Business Combinations" and IAS 38, "Intangible Assets", Tenaris has recognized the value of customer relationships separately from goodwill attributable to the acquisition of Maverick and Hydril groups.

Customer relationships acquired in a business combination are recognized at fair value at the acquisition date, have a finite useful life and are carried at cost less accumulated amortization. Amortization is calculated using the straight line method over the initial expected useful life of approximately 14 years for Maverick and 10 years for Hydril.

Maverick's Tubes business has experienced a significant change in its customers portfolio. While initially Maverick was selling OCTG products mostly to distributors, today it is selling mostly through Rig Direct® to end users. By the end of 2018, Maverick supplied the majority of its customers of OCTG products with Rig Direct® services. Additionally, line pipe products while still being sold largely to distributors due to the different nature of this market, are now focused on large pipeline projects through a completely different set of distributors. Based on these circumstances, the Company has reviewed the useful life of Maverick's Tubes customer relationships and decided to reduce the remaining useful life from two years to zero, consequently a higher amortization charge of approximately \$109 million was recorded in the consolidated income statement under selling, general and administrative expenses for the year ended December 31, 2018.

As of December 31, 2018 the residual value of Maverick's coiled tubing customer relationships amounts to \$19.9 million and the residual useful life is 2 years, while Hydril's customer relationships is fully amortized.

Allowance for Obsolescence of Supplies and Spare Parts and Slow-Moving Inventory

Inventories are stated at the lower between cost and net realizable value. The cost of finished goods and goods in process is comprised of raw materials, direct labor, utilities, freights and other direct costs and related production overhead costs, and it excludes borrowing costs. The allocation of fixed production costs is based on the normal level of production capacity. Supplies and raw material cost is mainly based on the FIFO method while goods in progress and finished goods cost are mainly based on specific historical production costs for each production order. Tenaris estimates net realizable value of inventories by grouping, where applicable, similar or related items. Net realizable value is the estimated selling price in the ordinary course of business, less any estimated costs of completion and selling expenses. Goods in transit as of year-end are valued based on the supplier's invoice cost.

Tenaris establishes an allowance for obsolete or slow-moving inventories related to finished goods, goods in process, supplies and spare parts. For slow moving or obsolete finished products, an allowance is established based on management's analysis of product aging. An allowance for obsolete and slow-moving inventory of supplies and spare parts is established based on management's analysis of such items to be used as intended and the consideration of potential obsolescence due to technological changes, aging and consumption patterns.

Allowances for Doubtful Accounts

Trade and other receivables are recognized initially at fair value that corresponds to the amount of consideration that is unconditional unless they contain significant financing components. The Company holds trade receivables with the objective of collecting the contractual cash flows and therefore measures them subsequently at amortized cost using the effective interest method. Due to the short-term nature, their carrying amount is considered to be the same as their fair value.

Tenaris applies the IFRS 9 simplified approach to measure expected credit losses, which uses a lifetime expected loss allowance for all trade receivables. To measure the expected credit losses, trade receivables have been grouped based on shared credit risk characteristics and the days past due. The expected loss rates are based on the payment profiles of sales over a period of three years and the corresponding historical credit losses experienced within this period. The historical loss rates are adjusted to reflect current and forward-looking information on macroeconomic factors affecting the ability of the customers to settle the receivables.

Deferred income tax

Deferred income tax is recognized applying the liability method on temporary differences arising between the tax basis of assets and liabilities and their carrying amounts in the financial statements. The principal temporary differences arise from fair value adjustments of assets acquired in business combinations, the effect of currency translation on depreciable fixed assets and inventories, depreciation on property, plant and equipment, valuation of inventories and provisions for pension plans. Deferred tax assets are also recognized for net operating loss carry-forwards. Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the time period when the asset is realized or the liability is settled, based on tax laws that have been enacted or substantively enacted at the reporting date.

Deferred tax assets are recognized to the extent that it is probable that future taxable income will be available against which the temporary differences can be utilized. At the end of each reporting period, Tenaris reassesses unrecognized deferred tax assets. Tenaris recognizes a previously unrecognized deferred tax asset to the extent that it has become probable that future taxable income will allow the deferred tax asset to be recovered.

Deferred tax liabilities and assets are not recognized for temporary differences between the carrying amount and tax basis of investments in foreign operations where the company is able to control the timing of the reversal of the temporary differences and it is probable that the differences will not reverse in the foreseeable future.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same taxation authority. Current tax assets and tax liabilities are offset where the entity has a legally enforceable right to offset and intends either to settle on a net basis, or to realize the asset and settle the liability simultaneously.

Deferred tax assets and liabilities are re-measured if tax rates change. These amounts are charged or credited to the Consolidated Income Statement or to the item other comprehensive income for the year in the Consolidated Statement of Comprehensive Income, depending on the account to which the original amount was charged or credited.

Contingencies

We are from time to time subject to various claims, lawsuits and other legal proceedings, including customer employee, tax and environmental-related claims, in which third parties are seeking payment for alleged damages, reimbursement for losses, or indemnity. Management with the assistance of legal counsel periodically reviews the status of each significant matter and assesses potential financial exposure. Our potential liability with respect to such claims, lawsuits and other legal proceedings cannot be estimated with certainty.

Some of these claims, lawsuits and other legal proceedings involve highly complex issues, and often these issues are subject to substantial uncertainties and, therefore, the probability of loss and an estimation of damages are difficult to ascertain. Accordingly, with respect to a large portion of such claims, lawsuits and other legal proceedings Tenaris is unable to make a reliable estimate of the expected financial effect that will result from ultimate resolution of the proceeding. In those cases, Tenaris has not accrued a provision for the potential outcome of these cases. If a potential loss from a claim, lawsuit or other proceeding is considered probable and the amount can be reasonably estimated, a provision is recorded. Accruals for loss contingencies reflect a reasonable estimate of the losses to be incurred based on information available to management as of the date of preparation of the financial statements, and take into consideration litigation and settlement strategies. In a limited number of ongoing cases, Tenaris was able to make a reliable estimate of the expected loss or range of probable loss and has accrued a provision for such loss, but believes that publication of this information on a case-by-case basis would seriously prejudice Tenaris's position in the ongoing legal proceedings or in any related settlement discussions. Accordingly, in these cases, the Company has disclosed information with respect to the nature of the contingency, but has not disclosed its estimate of the range of potential loss.

These estimates are primarily constructed with the assistance of legal counsel, and management believes that the aggregate provisions recorded for potential losses in the consolidated financial statements are adequate based upon currently available information. However, if management's estimates prove incorrect, current reserves could be inadequate and we could incur a charge to earnings which could have a material adverse effect on our results of operations, financial condition, net worth and cash flows. As the scope of liabilities becomes better defined, there may be changes in the estimates of future costs which could have a material adverse effect on our results of operations, financial condition, net worth and cash flows.

A. Results of Operations

The following discussion and analysis of our financial condition and results of operations are based on our audited consolidated financial statements included elsewhere in this annual report. Accordingly, this discussion and analysis present our financial condition and results of operations on a consolidated basis. See “Presentation of Certain Financial and Other Information - Accounting Principles” and “II. Accounting Policies A. Basis of presentation” and “B. Group accounting” to our audited consolidated financial statements included in this annual report. The following discussion should be read in conjunction with our audited consolidated financial statements and the related notes included in this annual report.

Thousands of U.S. dollars (except number of shares and per share amounts)

	For the year ended December 31,		
	2018	2017	2016
Selected consolidated income statement data			
Continuing operations			
Net sales	7,658,588	5,288,504	4,293,592
Cost of sales	(5,279,300)	(3,685,057)	(3,165,684)
Gross profit	2,379,288	1,603,447	1,127,908
Selling, general and administrative expenses	(1,509,976)	(1,270,016)	(1,196,929)
Other operating income (expenses), net	2,501	1,157	9,964
Operating income (loss)	871,813	334,588	(59,057)
Finance income	39,856	47,605	66,204
Finance cost	(36,942)	(27,072)	(22,329)
Other financial results	34,386	(43,550)	(21,921)
Income (loss) before equity in earnings of non-consolidated companies and income tax	909,113	311,571	(37,103)
Equity in earnings of non-consolidated companies	193,994	116,140	71,533
Income before income tax	1,103,107	427,711	34,430
Income tax	(229,207)	17,136	(17,102)
Income for the year for continuing operations	873,900	444,847	17,328
Discontinued operations			
Result for discontinued operations	-	91,542	41,411
Income for the year ⁽¹⁾	873,900	536,389	58,739
Income (loss) attributable to ⁽¹⁾:			
Owners of the parent	876,063	544,737	55,298
Non-controlling interests	(2,163)	(8,348)	3,441
Income for the year ⁽²⁾	873,900	536,389	58,739
Depreciation and amortization for continuing operations	(664,357)	(608,640)	(657,109)
Weighted average number of shares outstanding	1,180,536,830	1,180,536,830	1,180,536,830
Basic and diluted earnings per share for continuing operations	0.74	0.38	0.01
Basic and diluted earnings per share	0.74	0.46	0.05
Dividends per share ⁽²⁾	0.41	0.41	0.41

(1) IAS 1 (revised), requires that income for the year as shown on the income statement does not exclude non-controlling interests. Earnings per share, however, continue to be calculated on the basis of income attributable solely to the owners of the parent.

(2) Dividends per share correspond to the dividends proposed or paid in respect of the year.

Thousands of U.S. dollars (except number of shares)

	At December 31,		
	2018	2017	2016
Selected consolidated financial position data			
Current assets	5,464,192	5,381,154	4,817,154
Property, plant and equipment, net	6,063,908	6,229,143	6,001,939
Other non-current assets	2,723,199	2,787,921	3,032,765
Assets of disposal group classified as held for sale	-	-	151,417
Total assets	14,251,299	14,398,218	14,003,275
Current liabilities	1,718,363	2,070,899	1,713,036
Non-current borrowings	29,187	34,645	31,542
Deferred tax liabilities	379,039	457,970	550,657
Other non-current liabilities	249,218	253,734	276,874
Liabilities of disposal group classified as held for sale	-	-	18,094
Total liabilities	2,375,807	2,817,248	2,590,203
Capital and reserves attributable to the owners of the parent	11,782,882	11,482,185	11,287,417
Non-controlling interests	92,610	98,785	125,655
Total equity	11,875,492	11,580,970	11,413,072
Total liabilities and equity	14,251,299	14,398,218	14,003,275
Share capital	1,180,537	1,180,537	1,180,537
Number of shares outstanding	1,180,536,830	1,180,536,830	1,180,536,830

The following table sets forth our operating and other costs and expenses as a percentage of net sales for the periods indicated.

	For the year ended December 31,		
	2018	2017	2016
<i>Percentage of net sales</i>			
Continuing Operations			
Net sales	100.0	100.0	100.0
Cost of sales	(68.9)	(69.7)	(73.7)
Gross profit	31.1	30.3	26.3
Selling, general and administrative expenses	(19.7)	(24.0)	(27.9)
Other operating income (expenses), net	0.0	0.0	0.2
Operating income (loss)	11.4	6.3	(1.4)
Finance income	0.5	0.9	1.5
Finance cost	(0.5)	(0.5)	(0.5)
Other financial results	0.4	(0.8)	(0.5)
Income (loss) before equity in earnings of non-consolidated companies and income tax	11.9	5.9	(0.9)
Equity in earnings of non-consolidated companies	2.5	2.2	1.7
Income before income tax	14.4	8.1	0.8
Income tax	(3.0)	0.3	(0.4)
Income for the year for continuing operations	11.4	8.4	0.4
Discontinued operations			
Result for discontinued operations	-	1.7	1.0
Income for the year	11.4	10.1	1.4
Income (loss) attributable to:			
Owners of the parent	11.4	10.3	1.3
Non-controlling interests	(0.0)	(0.2)	0.1

Fiscal Year Ended December 31, 2018, Compared to Fiscal Year Ended December 31, 2017

The following table shows our net sales by business segment for the periods indicated below:

Millions of U.S. dollars	For the year ended December 31,				Increase / (Decrease)
	2018		2017		
Tubes	7,233	94%	4,966	94%	46%
Others	426	6%	323	6%	32%
Total	7,659	100%	5,289	100%	45%

Tubes

The following table indicates, for our Tubes business segment, sales volumes of seamless and welded pipes for the periods indicated below:

Thousands of tons	For the year ended December 31,		Increase / (Decrease)
	2018	2017	
Seamless	2,694	2,157	25%
Welded	877	461	90%
Total	3,571	2,618	36%

The following table indicates, for our Tubes business segment, net sales by geographic region, operating income and operating income as a percentage of net sales for the periods indicated below:

Millions of U.S. dollars	For the year ended December 31,		Increase / (Decrease)
	2018	2017	
Net sales			
- North America	3,488	2,362	48%
- South America	1,284	982	31%
- Europe	628	497	26%
- Middle East & Africa	1,541	921	67%
- Asia Pacific	292	204	43%
Total net sales	7,233	4,966	46%
Operating income	777	292	166%
Operating income (% of sales)	10.7%	5.9%	

Net sales of tubular products and services increased 46% to \$7,233 million in 2018, compared to \$4,966 million in 2017, reflecting a 36% increase in volumes and a 7% increase in average selling prices. Sales increased mainly due to a strong increase in demand in the United States and Canada and higher sales of line pipe for complex projects, including shipments for the second Zohr offshore welded pipeline in Egypt. In North America sales increased mainly due to higher demand of OCTG and line pipe and the consolidation of our market position throughout the region. In South America, sales increased mainly due to higher demand of OCTG and line pipe in Argentina, associated with increased investments in Vaca Muerta shale and higher demand for OCTG in the Andean region, including sales to the Liza development in Guyana, partially offset by lower sales of OCTG in Brazil, reflecting transition to new contracts with Petrobras. In Europe, sales increased reflecting higher demand for industrial products and for OCTG products in the North Sea and continental Europe. In the Middle East and Africa sales increased significantly, thanks to an exceptional level of sales for offshore line pipe for East Mediterranean gas development projects and higher sales of OCTG in the Middle East and Caspian areas. In Asia Pacific sales increased following a recovery in Indonesia and China from very low levels in 2017.

Operating income from tubular products and services, amounted to \$777 million in 2018, compared to \$292 million in 2017. Operating income during 2018 was negatively affected by a higher customer relationships amortization charge of \$109 million, after the full amortization of the residual value of Maverick's Tubes segment customer relationships. Excluding this one off effect operating income would amount to \$886 million, 12% of sales. The significant improvement in Tubes operating income reflects a better operating environment, where a 46% increase in sales improved the utilization of production capacity and therefore the absorption of fixed costs.

Others

The following table indicates, for our Others business segment, net sales, operating income and operating income as a percentage of net sales for the periods indicated below:

Millions of U.S. dollars	For the year ended December 31,		Increase / (Decrease)
	2018	2017	
Net sales	426	323	32%
Operating income	95	43	122%
Operating income (% of sales)	22.2%	13.2%	

Net sales of other products and services increased 32% to \$426 million in 2018, compared to \$323 million in 2017, mainly due to higher sales of energy related products e.g., sucker rods and coiled tubing

Operating income from other products and services, increased from \$43 million in 2017 to \$95 million in 2018, while all the profit centers improved their results, the main contributors were the energy related businesses, mainly sucker rods and coiled tubing.

Selling, general and administrative expenses or SG&A, increased by \$240 million (19%) in 2018 from \$1,270 million in 2017 to \$1,510 million in 2018. SG&A during 2018 includes a higher amortization charge of \$109 million, after the full amortization of the residual value of Maverick's Tubes segment customer relationships. Excluding this one off effect, SG&A amounted to \$1,401 million (18% of sales), compared to \$1,270 million (24%) in 2017. The decline of SG&A as a percentage of net sales reflects the containment of fixed and semi-fixed expenses in a higher volumes environment.

Financial results amounted to a gain of \$37 million in 2018, compared to a loss of \$23 million in 2017. The 2018 gain corresponds mainly to an FX gain of \$29 million; \$24 million related to the Argentine Peso devaluation on Peso denominated financial, trade, social and fiscal payables at Argentine subsidiaries which functional currency is the U.S. dollar, \$17 million related to the Euro depreciation on Euro denominated intercompany liabilities (offset in the currency translation reserve in equity), partially offset by a loss of \$8 million due to the devaluation of the Canadian dollar. Additionally, we gained \$7 million on derivatives, mainly covering net receivables in Canadian dollar and \$3 million net interest on our net cash position.

Equity in earnings of non-consolidated companies generated a gain of \$194 million in 2018, compared to \$116 million in 2017. These results were mainly derived from our equity investment in Ternium (NYSE:TX).

Income tax charge amounted to \$229 million in 2018 (25% over income before tax), compared to a gain of \$17 million in 2017. In 2017 we recorded a gain of \$63 million due to the reduction in income tax rates in Argentina, the United States and Colombia over deferred tax liabilities. Additionally, during 2017 we recorded an income tax charge of \$29 million corresponding to a settlement agreement between Dalmine, our Italian subsidiary, and the Italian tax authorities in connection with all withholding tax claims on 2007 and 2008 dividend payments. Under such settlement agreement, Dalmine paid to the Italian tax administration an aggregate amount of EUR42.9 million (approximately \$51 million), net of EUR3.2 million (approximately \$4 million) corresponding to the amount previously paid during the litigation proceeding.

Net income for continuing operations amounted to \$874 million in 2018, compared with \$536 million in 2017. The improvement in results reflects a better operating environment, where a 45% increase in sales improved the utilization of production capacity and therefore the absorption of fixed costs, better financial results and better results from our investment in Ternium.

Fiscal Year Ended December 31, 2017, Compared to Fiscal Year Ended December 31, 2016

The following table shows our net sales by business segment for the periods indicated below:

Millions of U.S. dollars	For the year ended December 31,				Increase / (Decrease)
	2017		2016		
Tubes	4,966	94%	4,015	94%	24%
Others	323	6%	278	6%	16%
Total	5,289	100%	4,294	100%	23%

Tubes

The following table indicates, for our Tubes business segment, sales volumes of seamless and welded pipes for the periods indicated below:

Thousands of tons	For the year ended December 31,		Increase / (Decrease)
	2017	2016	
Seamless	2,157	1,635	32%
Welded	461	355	30%
Total	2,618	1,990	32%

The following table indicates, for our Tubes business segment, net sales by geographic region, operating income and operating income as a percentage of net sales for the periods indicated below:

Millions of U.S. dollars	For the year ended December 31,		Increase / (Decrease)
	2017	2016	
Net sales			
- North America	2,362	1,265	87%
- South America	982	1,032	(5%)
- Europe	497	542	(8%)
- Middle East & Africa	921	1,041	(11%)
- Asia Pacific	204	136	50%
Total net sales	4,966	4,015	24%
Operating income (loss) ⁽¹⁾	292	(71)	510%
Operating income (loss) (% of sales)	5.9%	(1.8%)	

(1) Tubes operating income includes severance charges of \$67 million in 2016.

Net sales of tubular products and services increased 24% to \$4,966 million in 2017, compared to \$4,015 million in 2016, reflecting a 32% increase in volumes and a 6% decrease in average selling prices. Sales increased mainly due to a strong increase in demand in the United States and Canada, partially offset by lower sales in the rest of the world, apart from Asia Pacific. In North America, our sales increased 87%, due to the recovery in shale drilling in the United States and Canada. In the rest of the world, recovery remained more elusive, apart from Asia Pacific due to higher Rig Direct® sales in Thailand.

Operating income (loss) from tubular products and services, amounted to a gain of \$292 million in 2017, compared to a loss of \$71 million in 2016. The recovery in Tubes operating income reflects a better operating environment, where a 32% increase in shipments improved the utilization of production capacity and therefore the absorption of fixed costs and a reduction in severance costs (\$67 million in 2016 vs. \$32 million in 2017). Additionally, our selling, general and administrative expenses, or SG&A, as a percentage of sales declined from 29.0% in 2016 to 24.8% in 2017.

Others

The following table indicates, for our Others business segment, net sales, operating income and operating income as a percentage of net sales for the periods indicated below:

Millions of U.S. dollars	For the year ended December 31,		Increase / (Decrease)
	2017	2016	
Net sales	323	278	16%
Operating income	43	12	254%
Operating income (% of sales)	13.2%	4.3%	

Net sales of other products and services increased 16% to \$323 million in 2017, compared to \$278 million in 2016, mainly due to higher sales of energy related products e.g., sucker rods and coiled tubing and excess raw materials and energy.

Operating income from other products and services, increased from \$12 million in 2016 to \$43 million in 2017, mainly due to improved profitability from our coiled tubing business together with higher results from sales of excess raw materials and energy.

Selling, general and administrative expenses, or SG&A, increased by \$73 million (6%) in 2017 from \$1,197 million in 2016 to \$1,270 million in 2017. However, SG&A expenses decreased as a percentage of net sales to 24.0% in 2017 compared to 27.9% in 2016, mainly due to the effect of fixed and semi fixed expenses on higher sales (e.g., depreciation and amortization and labor costs).

Financial results amounted to a loss of \$23 million in 2017, compared to a gain of \$22 million in 2016. The 2017 loss is mostly related to a \$49 million foreign exchange charge corresponding to the Euro appreciation on Euro denominated intercompany liabilities (fully offset in the currency translation reserve in equity), compensated by a net finance income of \$21 million.

Equity in earnings of non-consolidated companies generated a gain of \$116 million in 2017, compared to \$72 million in 2016. These results were mainly derived from our equity investment in Ternium (NYSE:TX).

Income tax for the year was positive amounting to \$17 million. In 2017 we recorded a gain of \$63 million due to the reduction in income tax rates in Argentina (gain of \$46 million), the United States (gain of \$15 million) and Colombia over net deferred tax liabilities. Additionally, during 2017 we recorded an income tax charge of \$29 million corresponding to a settlement agreement between Dalmine, our Italian subsidiary, and the Italian tax authorities in connection with all withholding tax claims on 2007 and 2008 dividend payments. Under such settlement agreement, Dalmine paid to the Italian tax administration an aggregate amount of EUR42.9 million (approximately \$51 million), net of EUR3.2 million (approximately \$4 million) corresponding to the amount previously paid during the litigation proceeding.

Net income for the year amounted to \$536 million in 2017, including a gain from discontinued operations of \$92 million, compared with a gain in 2016 of \$59 million, including a gain from discontinued operations of \$41 million. The improvement in results reflects a better operating environment, where a 32% increase in shipments improved the utilization of production capacity and therefore the absorption of fixed costs, a reduction in severance costs (\$74 million in 2016 vs. \$34 million in 2017), a positive income tax of \$17 million reflecting primarily the effect of the changes in income tax rates in Argentina and the United States on deferred tax positions, better results from our investment in associated companies (mainly Ternium) and a gain of \$92 million from discontinued operations. Net income from continuing operations amounted to a gain of \$445 million in 2017, which compares with a gain of \$17 million in 2016.

B. Liquidity and Capital Resources

The following table provides certain information related to our cash generation and changes in our cash and cash equivalents position for each of the last three years:

Millions of U.S. dollars

	For the year ended December 31,		
	2018	2017	2016
Net cash provided by (used in) operating activities	611	(22)	864
Net cash provided by (used in) investing activities	399	349	(98)
Net cash used in financing activities	(900)	(401)	(653)
Increase (decrease) in cash and cash equivalents	109	(74)	113
Cash and cash equivalents at the beginning of year (excluding overdrafts)	330	399	286
Effect of exchange rate changes	(13)	6	(0)
Increase (decrease) in cash and cash equivalents	109	(74)	113
Cash and cash equivalents at the end of year (excluding overdrafts)	427	330	399
Cash and cash equivalents at the end of year (excluding overdrafts)	427	330	399
Bank overdrafts	2	0	1
Other current investments	488	1,192	1,633
Non-current investments	114	123	248
Derivatives hedging borrowings and investments	(6)	(33)	(35)
Current and non current borrowings	(539)	(966)	(840)
Net cash at the end of the year	485	647	1,406

Our financing strategy aims to maintain adequate financial resources and access to additional liquidity. During 2018 cash flow provided by operating activities amounted to \$611 million (including an increase in working capital of \$738 million), our capital expenditures amounted to \$349 million and we paid dividends amounting to \$484 million. At the end of the year we had a net cash position of \$485 million, compared to \$647 million at the beginning of the year (including the \$328 million we collected from the sale of Republic Conduit during 2017).

We believe that funds from operations, the availability of liquid financial assets and our access to external borrowing through the financial markets will be sufficient to satisfy our working capital needs, to finance our planned capital spending program, to service our debt in the foreseeable future and to address short-term changes in business conditions.

We have a conservative approach to the management of our liquidity, which consists of (i) cash and cash equivalents (cash in banks, liquidity funds and investments with a maturity of less than three months at the date of purchase), and (ii) Other Investments (fixed income securities, time deposits, and fund investments).

At December 31, 2018, liquid financial assets as a whole (comprising cash and cash equivalents and other investments) were 7% of total assets compared to 11% at the end of 2017.

We hold investments primarily in liquidity funds and variable or fixed-rate securities from investment grade issuers. We hold our cash and cash equivalents primarily in U.S. dollars and in major financial centers. As of December 31, 2018, U.S. dollar denominated liquid assets represented 95% of total liquid financial assets compared to 93% at the end of 2017.

Fiscal Year Ended December 31, 2018, Compared to Fiscal Year Ended December 31, 2017

Operating activities

Net cash provided by operations during 2018 was \$611 million, compared to \$22 million of net cash used in operations during 2017. This increase was mainly attributable to an increase in results and a smaller increase in working capital. In 2018 and 2017 the increase in working capital amounted to \$738 million and \$853 million respectively. The main yearly variation was related to an increase of \$518 million in trade receivables, compared with an increase of \$259 million in 2017, while trade payables decreased \$57 million in 2018 and increased \$194 million in 2017. Additionally, during 2018 inventories increased \$176 million which compares with an increase in inventory of \$804 million in 2017. For more information on cash flow disclosures and changes to working capital, see note 26 “Cash flow disclosures” to our audited consolidated financial statements included in this annual report.

Investing activities

Net cash provided by investing activities was \$399 million in 2018, compared to \$349 million in 2017 (including the \$328 million we collected from the sale of Republic Conduit). Capital expenditures decreased to \$349 million from \$558 million in 2017 declining following the start up of our greenfield seamless facility in Bay City, Texas at the end of 2017. Additionally, we reduced our financial investments by \$717 million in 2018 compared to a reduction of \$565 million in 2017.

Financing activities

Net cash used in financing activities, including dividends paid, proceeds and repayments of borrowings and acquisitions of non-controlling interests, was \$900 million in 2018, compared to \$401 million in 2017.

During 2018 we had net repayments from borrowings of \$413 million, while in 2017 we had net proceeds of borrowings of \$107 million.

Dividends paid during 2018 and 2017 amounted to \$484 million in each year.

Our total liabilities to total assets ratio was 0.17:1 as of December 31, 2018 and 0.20:1 as of December 31, 2017.

Fiscal Year Ended December 31, 2017, Compared to Fiscal Year Ended December 31, 2016

Operating activities

Net cash used in operations during 2017 was \$22 million, compared to \$864 million of net cash provided by operations during 2016. This 103% decrease was mainly attributable to an increase in working capital. During 2017 the increase in working capital amounted to \$853 million, while during 2016 the reduction in working capital amounted to \$331 million. The main yearly variation was related to an increase of \$804 million in inventories during 2017, which compares with a reduction in inventory of \$245 million in 2016. Additionally, during 2017 trade receivables increased \$259 million and trade payables increased \$194 million. For more information on cash flow disclosures and changes to working capital, see note 26 “Cash flow disclosures” to our audited consolidated financial statements included in this annual report.

Investing activities

Net cash provided by investing activities was \$349 million in 2017 (including the \$328 million we collected from the sale of Republic Conduit) compared to \$98 million used in 2016. Capital expenditures decreased to \$558 million from \$787 million in 2016, mainly related to the construction of the greenfield seamless mill in Bay City, Texas. Additionally, we reduced our financial investments by \$565 million in 2017 compared to a reduction of \$653 million in 2016.

Financing activities

Net cash used in financing activities, including dividends paid, proceeds and repayments of borrowings and acquisitions of non-controlling interests, was \$401 million in 2017, compared to \$653 million in 2016.

Dividends paid during 2017 amounted to \$484 million, while \$508 million were paid in 2016.

During 2017 we had net proceeds from borrowings of \$107 million, while in 2016 we had net repayments of borrowings of \$115 million.

Our total liabilities to total assets ratio was 0.20:1 as of December 31, 2017 and 0.18:1 as of December 31, 2016.

Principal Sources of Funding

During 2018, we funded our operations with operating cash flows, bank financing, proceeds from sales of assets and available liquid financial assets. Short-term bank borrowings were used as needed throughout the year.

Financial liabilities

During 2018, borrowings decreased by \$427 million, to \$539 million at December 31, 2018, from \$966 million at December 31, 2017.

Borrowings consist mainly of bank loans. As of December 31, 2018, U.S. dollar-denominated borrowings plus borrowings denominated in other currencies swapped to the U.S. dollar represented 97% of total borrowings.

For further information about our financial debt, please see note 18 "Borrowings" to our audited consolidated financial statements included in this annual report.

The following table shows the composition of our financial debt at December 31, 2018, 2017 and 2016:

<i>Millions of U.S. dollars</i>	<u>2018</u>	<u>2017</u>	<u>2016</u>
Bank borrowings	537	966	839
Bank overdrafts	2	0	1
Finance lease liabilities	0	0	0
Total borrowings	539	966	840

Our weighted average interest rates before tax (considering hedge accounting), amounted to 3.98% at December 31, 2018 and to 3.73% at December 31, 2017.

The maturity of our financial debt is as follows:

<i>Millions of U.S. dollars</i> At December 31, 2018	<u>1 year or less</u>	<u>1 - 2 years</u>	<u>2 - 3 years</u>	<u>3 - 4 years</u>	<u>4 - 5 years</u>	<u>Over 5 years</u>	<u>Total</u>
Borrowings	510	4	5	20	-	-	539
Interests to be accrued (*)	8	1	1	0	-	-	11
Total	518	5	6	20	-	-	550

(*) Includes the effect of hedge accounting.

Our current borrowings to total borrowings ratio amounted to 0.95:1 as of December 31, 2018, compared with 0.96:1 as of December 31, 2017. Our liquid financial assets exceeded our total borrowings, we had a net cash position (cash and cash equivalents, other current and non-current investments, derivatives hedging borrowings and investments, less total borrowings) of \$485 million at December 31, 2018, compared to \$647 million at December 31, 2017.

For information on our derivative financial instruments, please see Item 11. “Quantitative and Qualitative Disclosure about Market Risk – Accounting for Derivative Financial Instruments and Hedging Activities” and note 23 “Derivative financial instruments” to our audited consolidated financial statements included in this annual report.

For information regarding the extent to which borrowings are at fixed rates, please see Item 11. “Quantitative and Qualitative Disclosure About Market Risk”.

Significant Borrowings

Our most significant borrowings as of December 31, 2018 were as follows:

<i>Millions of U.S. dollars</i> Disbursement date	Borrower	Type	Original & Outstanding	Final maturity
2018	Tamsa	Bank loans	347	2019
2018	Siderca	Bank loans	66	2019
2018	TubeCaribe	Bank loan	50	May 2019

As of December 31, 2018, Tenaris was in compliance with all of its covenants under its significant borrowings, including financial covenants on leverage ratio.

C. Research and Development, Patents and Licenses, Etc.

See Item 4.B. “Information on the Company – Business Overview – Research and Development”.

D. Trend Information

Principal Factors Affecting Oil and Gas Prices and Demand for Steel Pipes from the Global Oil and Gas Industry.

Sales to the oil and gas industry worldwide represent a high percentage of our total sales, and demand for steel pipes from the global oil and gas industry is a significant factor affecting the general level of volumes and prices for our products. Downward pressures on oil and gas prices usually result in lower oil and gas drilling activity and investment throughout the oil and gas industry with consequently lower demand for our steel pipe products and, in some circumstances, upward pressures can result in higher demand from our oil and gas customers.

Whereas oil prices are similar in most parts of the world because oil is a fully tradable commodity, gas prices are influenced by regional factors. In North America, where gas production is extensively developed and there is an extensive regional pipeline system, these factors include available gas storage capacity and seasonal weather patterns, particularly winter temperatures in the United States. LNG prices have traditionally been established in relation to international oil prices, particularly in the largest LNG markets in Asia. However, as the market for LNG becomes more global and the USA becomes a relevant source of LNG, LNG prices are now being set increasingly in relation to prices prevailing at regional gas hubs.

International oil prices depend on diverse factors. On the supply side, major oil- and gas-producing nations and companies have frequently collaborated to balance the supply (and thus the price) of oil in the international markets. A major vehicle for this collaboration has been OPEC. Many of our customers are state-owned companies in member countries of OPEC. Another factor that has affected the international price level of oil is the political and socioeconomic conditions of oil-producing countries, such as Libya, Nigeria and Venezuela and the persistence of geo-political and armed conflicts affecting the Middle East region, which is home to a substantial proportion of the world’s known oil reserves. On the demand side, economic conditions and the level of oil inventories in the leading industrial nations of the world, and more recently China, which constitute the largest oil consuming nations, also play a significant role in oil prices.

A more recent factor affecting oil and gas prices has been the ability of producers in the United States and Canada to rapidly increase production from their reserves of tight oil and shale gas in response to changes in market conditions. Production from U.S. tight oil reserves has grown in recent years to represent around 10% of global liquids production, and production from shale gas plays is converting the United States into a net exporter of natural gas and a significant player in the LNG market.

Following three years of relatively stable oil prices of around \$100 per barrel, prices started to decline in the middle of 2014 as the rate of U.S. production increase began to exceed the increase in global demand and OPEC confirmed at its November 2014 meeting that it would not cut production to balance demand. Prices reached levels below \$30 per barrel in January 2016. They then recovered to around \$80 per barrel during 2018 once OPEC and other producers agreed to cut production levels to accelerate the market rebalancing process. By this time, OPEC and other producers had lifted their production cuts and U.S. oil production was increasing at a rate greater than the increase in global demand. Oil prices declined 40% in the fourth quarter of 2018 before partially recovering in the first two months of 2019.

The 2014 collapse in oil prices led oil and gas operators to substantially reduce their exploration and production investments to a level which is currently around 60% of the average of the 2012-14 period and this, in turn, resulted in a severe contraction in demand and pressure on pricing for steel pipes used in oil and gas drilling and associated operations. During 2017, however, oil and gas operators in North America, who have been very successful in reducing production costs in their shale plays, increased investments in response to more favorable market conditions, and U.S. operators continued to do so in 2018.

Since the development of the prolific Marcellus shale gas play, North American gas prices have remained at low levels compared to previous decades. For the past three years, prices have fluctuated in the range of \$2.00-3.50 per million BTU, significantly below prices in many other major gas-consuming regions. For several years, production increases, primarily from productive shale gas deposits, have exceeded demand increases, reducing the need for imports, to the extent that, in 2017, the U.S. became a net exporter of natural gas. Low prices have encouraged investment in gas consuming industrial facilities and LNG export facilities as well as switching from coal to gas for electric power production, particularly with the adoption of new regulations which could force the retirement of older coal-based generating units. With continuing investments in LNG export facilities, the U.S. has become a major global LNG exporter.

Drilling activity in the United States and Canada, following several years of high activity, fell sharply through 2015 and the first half of 2016 before beginning a strong recovery which eased during the second half of 2017. Rig counts plunged to less than a quarter of their former level as operators cut back on investments for two consecutive years as their cash flows declined with low oil and gas prices. At the same time, they reduced drilling costs through increased efficiencies, concentrating drilling on the most productive plays, and negotiated lower supply and service costs. Despite lower prices, production levels are now higher than before the collapse in oil prices but rig counts are at 60% of the levels they reached in 2014, reflecting the strong productivity gains made by the U.S. oil and gas drilling industry. In the rest of the world, drilling activity began to decline in the second half of 2014 and has continued to decline during 2015, 2016 and 2017 before beginning a gradual recovery in the second half of 2018. Although drilling activity in the Middle East has been relatively stable, drilling in Latin America and offshore drilling has declined significantly.

Prior to the most recent downturn in oil prices, a growing proportion of exploration and production spending by oil and gas companies had been directed at offshore, deep drilling and non-conventional drilling operations in which high-value tubular products, including special steel grades and premium connections, are usually specified. The success, however, of shale drilling operators, with their inherently short investment cycles, in adapting to lower oil and gas costs and increasing production, has led to a slowdown in new developments of complex offshore projects with long investment lead times in a context of low and more volatile oil prices, consequently affecting the level of product differentiation.

In addition, the increasing cost competitiveness and use of alternative renewable sources of energy could limit growth in demand for oil and gas and put downward pressure on oil and gas prices in the longer term. This trend could accelerate if carbon taxes or carbon pricing instruments resulting in high prices for carbon emissions are implemented around the world.

The tables below show the annual average number of active oil and gas drilling rigs, or rig count, in the United States, Canada, International (worldwide other than the United States and Canada and excluding Iran, Sudan, onshore China, Russia and Syria) and Worldwide, as published by Baker Hughes (“BHGE”), a General Electric company, for the years indicated and the percentage increase or decrease over the previous year. BHGE, a leading oil service company, has published its rig counts on a monthly basis since 1975 as a general indicator of activity in the oil and gas sector.

Rig count

	2018	2017	2016	2015	2014
International (*)	988	948	955	1,167	1,337
Canada	191	207	128	193	380
United States	1,032	875	510	977	1,862
Worldwide	2,211	2,029	1,593	2,337	3,578

(*) International rig count excludes Iran, Sudan, onshore China, Russia and Syria (discontinued in February 2013).

Percentage increase (decrease) over the previous year

	2018	2017	2016	2015
International (*)	4%	(1%)	(18%)	(13%)
Canada	(7%)	62%	(34%)	(49%)
United States	18%	72%	(48%)	(48%)
Worldwide	9%	27%	(32%)	(35%)

(*) International rig count excludes Iran, Sudan, onshore China, Russia and Syria (discontinued in February 2013).

E. Off-Balance Sheet Arrangements

As of December 31, 2018, the Company reported the following financial commitments, consisting of guarantees in connection to its participation in the non-consolidated company Techgen:

- Tenaris issued a corporate guarantee covering 22% of the obligations of Techgen under a syndicated loan agreement between Techgen and several banks, which was used in the construction of the facility. The main covenants under the corporate guarantee are Tenaris's commitment to maintain its participation in Techgen or the right to purchase at least 22% of Techgen's firm energy, and compliance with a maximum permitted leverage ratio. As of December 31, 2018, the amount outstanding under the loan agreement was \$600 million and, as a result, the amount guaranteed by Tenaris was approximately \$132 million. For a description of the refinancing of the syndicated loan agreement, the release of Tenaris's corporate guarantee and the stand-by letters of credit supporting certain covenants under the new facility, see Item 5. G. "Recent Developments – Techgen refinancing" below.
- Tenaris issued a corporate guarantee covering 22% of the outstanding value of natural gas transportation capacity agreements entered into by Techgen with Kinder Morgan Gas Natural de Mexico S. de R.L. de C.V., and Kinder Morgan Texas Pipeline LLC for a natural gas purchasing capacity of 150,000 million BTU per day starting on August 1, 2016 and ending on July 31, 2036. As of December 31, 2018, our exposure under the guarantee in connection with these agreements amounted to \$55.1 million.

In addition, we have various off-balance sheet commitments, as described in note 24 "Contingencies, commitments and restrictions on the distribution of profits – (ii) Commitments and other purchase orders" to our audited consolidated financial statements included in this annual report.

F. Contractual Obligations

The following table summarizes our contractual obligations at December 31, 2018, and the effect such obligations are expected to have on our liquidity and cash flow in future periods:

Millions of U.S. dollars

At December 31, 2018	1 year or less	1 - 2 years	2 - 3 years	3 - 4 years	4 - 5 years	Over 5 years	Total
Borrowings	510	4	5	20	-	-	539
Interests to be accrued (*)	8	1	1	0	-	-	11
Purchase commitments (**)	119	117	11	11	11	64	333
Total contractual obligations and commitments	637	123	17	31	11	64	883

(*) Includes the effect of hedge accounting.

(**) Only includes material commitments

Purchase commitments as of December 31, 2018, disclosed in the table above, consist of a commitment to purchase iron ore in Argentina amounting to \$137 million; a contract for the service of natural gas transportation in Argentina for an aggregate amount of \$40 million; a contract for the service of oxygen and nitrogen supply amounting to \$58 million, contracts for the supply of graphite electrodes amounting to \$55 million, a rail transportation contract in Canada amounting to \$23 million, and a contract for the supply of argon gas in Mexico amounting to \$21 million.

In addition, a Tenaris company entered into a 25-year contract (effective as of December 1, 2016, through December 1, 2041) with Techgen for the supply of 197 MW (which represents 22% of Techgen's capacity). Monthly payments are determined on the basis of capacity charges, operation costs, back-up power charges, and transmission charges. As of the seventh contract year (as long as Techgen's existing or replacing bank facility has been repaid in full), the Tenaris company has the right to suspend or early terminate the contract if the rate payable under the agreement is higher than the rate charged by the Comisión Federal de Electricidad ("CFE") or its successors. The Tenaris company may instruct Techgen to sell to any affiliate, to CFE, or to any other third party all or any part of unused contracted energy under the agreement and the Tenaris company will benefit from the proceeds of such sale.

For more information on our purchase commitments as of December 31, 2018, see note 24 "Contingencies, commitments and restrictions on the distribution of profits – (ii) Commitments and other purchase orders" to our audited consolidated financial statements included in this annual report.

G. Recent Developments

Acquisition of Saudi Steel Pipe Company

a) Acquisition

On January 21, 2019, Tenaris acquired 47.79% of the shares of SSP, a welded steel pipes producer listed on the Saudi Stock Exchange, for a total amount of SAR529.8 million (approximately \$141 million). The amount was paid with Tenaris cash in hand. SSP's facilities are located in the Eastern Province of the Kingdom of Saudi Arabia and have a manufacturing capacity of 360,000 tons per year. SSP started its operations in 1980 and serves energy industrial and commercial segments, is qualified to supply products to major national oil companies in the region. Upon closing of the acquisition, four Tenaris's nominees were appointed as new members of the SSP's board of directors and a senior executive with Tenaris was appointed as managing director and Chief Executive Officer of SSP.

The Company has begun consolidating SSP's balances and results of operations since January 21, 2019.

b) Fair value of net assets acquired

The application of the purchase method requires certain estimates and assumptions especially concerning the determination of the fair values of the acquired intangible assets and property, plant and equipment as well as the liabilities assumed at the date of the acquisition. The fair values determined at the acquisition date are based mainly on discounted cash flows and other valuation techniques.

The preliminary allocation of the fair values determined for the assets and liabilities arising from the acquisition is as follows:

Fair value of acquired assets and liabilities:	SAR million	\$ million
Property, Plant and Equipment	675	180
Intangible assets	278	74
Investment in associated	77	21
Working capital	168	45
Cash and Cash Equivalents	32	8
Other Receivables	11	3
Borrowings	(304)	(81)
Employees end of service benefits	(59)	(16)
Net assets acquired	878	234

Tenaris acquired 47.79% of the total assets and liabilities shown above, approximately \$112 million of net assets.

The preliminary purchase price allocation disclosed above is currently under analysis with the assistance of a third party expert. Following IFRS 3, the Company will continue reviewing the allocation and make any necessary adjustments (mainly over Property, Plant and Equipment, Intangible Assets and Provisions) during the twelve months following the acquisition date.

Agreement to build welded pipe plant in West Siberia

On February 5, 2019 Tenaris entered into an agreement with PAO Severstal to build a welded pipe plant to produce OCTG products in the Surgut area, West Siberia, Russian Federation. Tenaris will hold a 49% interest in the company, while PAO Severstal will own the remaining 51%. The commencement of the project is subject to regulatory approvals and other customary conditions. The plant, which is estimated to require an investment of \$240 million and a two-year construction period, is planned to have an annual production capacity of 300,000 tons.

Techgen refinancing

On February 13, 2019, Techgen entered into a \$640 million loan agreement with several banks to refinance its obligations under the 2014 syndicated loan. Techgen's obligations under the new facility, which is "non-recourse" on the sponsors, will be guaranteed by a Mexican security trust covering Techgen's shares, assets and accounts as well as Techgen's affiliates rights under certain contracts. In addition, Techgen's collection and payment accounts not subject to the trust have been pledged in favor of the lenders under the new loan agreement, and certain direct agreements –customary for these type of transactions– have been entered into with third parties and affiliates, including in connection with the agreements for the sale of energy produced by the project and the agreements for the provision of gas and long-term maintenance services to Techgen. The commercial terms and conditions governing the purchase, by the Company's Mexican subsidiary Tamsa, of 22% of the energy generated by the project remain unchanged.

Under the loan agreement, Techgen is committed to maintain a debt service reserve account covering debt service becoming due during two consecutive quarters; such account is funded by stand-by letters of credit issued for the account of Techgen's sponsors in proportion to their respective participations in Techgen. Accordingly, the Company and its Swiss subsidiary Tenaris Investments Switzerland AG applied for stand-by letters of credit covering 22% of the debt service coverage ratio, which as of the date hereof amounts to \$9.8 million.

The proceeds of the new loan, drawn on February 26, 2019, have been used to repay all loans outstanding under the 2014 syndicated facility. Following repayment of such loans, Tenaris's corporate guarantee thereunder has been automatically released.

Annual Dividend Proposal

On February 20, 2019 the Company's board of directors proposed, for the approval of the Annual General Shareholders' meeting to be held on May 6, 2019, the payment of an annual dividend of \$0.41 per share (\$0.82 per ADS), or approximately \$484 million, which includes the interim dividend of \$0.13 per share (\$0.26 per ADS) or approximately \$153 million, paid on November 21, 2018. If the annual dividend is approved by the shareholders, a dividend of \$0.28 per share (\$0.56 per ADS), or approximately \$331 million will be paid on May 22, 2019, with an ex-dividend date of May 20, 2019. The consolidated financial statements included in this annual report do not reflect this dividend payable.

Tenaris to Acquire IPSCO Tubulars from TMK

On March 22, 2019, we entered into a definitive agreement to acquire from TMK, a Russian company and manufacturer of steel pipes, 100% of the shares of its wholly owned U.S. subsidiary IPSCO, for \$1,209 million. The transaction is subject to regulatory approvals, including approval by the U.S. antitrust authorities, and other customary conditions. IPSCO is a U.S. domestic producer of seamless and welded OCTG and line pipe products, with an annual production capacity of 450,000 metric tons of steel bars, 400,000 metric tons of seamless pipes and 1,000,000 metric tons of welded pipes, and production facilities spread throughout the country.

Item 6. Directors, Senior Management and Employees

A. Directors and Senior Management

Board of Directors

Management of the Company is vested in a board of directors with the broadest power to act on behalf of the Company and accomplish or authorize all acts and transactions of management and disposal that are within its corporate purpose and not specifically reserved in the articles of association or by applicable law to the general shareholders' meeting. The Company's articles of association provide for a board of directors consisting of a minimum of three and a maximum of fifteen directors; however, for as long as the Company's shares are listed on at least one regulated market, the minimum number of directors must be five. The Company's current board of directors is composed of eleven directors.

The board of directors is required to meet as often as required by the interests of the Company and at least four times per year. A majority of the members of the board of directors in office present or represented at the board of directors' meeting constitutes a quorum, and resolutions may be adopted by the vote of a majority of the directors present or represented. In the case of a tie, the Chairman is entitled to cast the deciding vote.

Directors are elected at the annual ordinary general shareholders' meeting to serve one-year renewable terms, as determined by the general shareholders' meeting. The general shareholders' meeting also determines the number of directors that will constitute the board and their compensation. The general shareholders' meeting may dismiss all or any one member of the board of directors at any time, with or without cause, by resolution passed by a simple majority vote, irrespective of the number of shares represented at the meeting.

Under the Company's articles of association the board of directors is authorized until 2020 to increase the issued share capital in whole or in part from time to time, through issues of shares within the limits of the authorized share capital against compensation in cash, compensation in kind at a price or if shares are issued by way of incorporation of reserves, at an amount, which shall not be less than the par value and may include such issue premium as the board of directors shall decide. Under the Company's articles of association, however, the Company's existing shareholders shall have a preferential right to subscribe for any new shares issued pursuant to the authorization granted to its board of directors, except in the following cases (in which cases no preferential subscription rights shall apply):

- any issuance of shares (including, without limitation, the direct issuance of shares or upon the exercise of options, rights convertible into shares, or similar instruments convertible or exchangeable into shares) against a contribution other than in cash;
- any issuance of shares (including by way of free shares or at discount), up to an amount of 1.5% of the issued share capital of the Company, to directors, officers, agents, employees of the Company, its direct or indirect subsidiaries, or its affiliates (collectively "the Beneficiaries"), including, without limitation, the direct issuance of shares or upon the exercise of options, rights convertible into shares, or similar instruments convertible or exchangeable into shares, issued for the purpose of compensation or incentive of the Beneficiaries or in relation thereto (which the board of directors shall be authorized to issue upon such terms and conditions as it deems fit).

The following table sets forth the name of the Company's current directors, their respective positions on the board, their principal occupation, their years of service as board members and their age.

Name	Position	Principal Occupation	Years as Director	Age at December 31, 2018
Mr. Roberto Bonatti ⁽¹⁾	Director	President of San Faustin	16	69
Mr. Carlos Condorelli	Director	Director of Tenaris and Ternium	12	67
Mr. Germán Curá	Director	Director and Vice Chairman of the Board of Tenaris	1	56
Mr. Roberto Monti	Director	Member of the board of directors of YPF S.A	14	79
Mr. Gianfelice Mario Rocca ⁽¹⁾	Director	Chairman of the board of directors of San Faustin	16	70
Mr. Paolo Rocca ⁽¹⁾	Director	Chairman and Chief Executive Officer of Tenaris	17	66
Mr. Jaime Serra Puche	Director	Chairman of SAI Consultores	16	67
Mr. Yves Speeckaert	Director	Director of Tenaris	2	58
Ms. Mónica Tiuba	Director	Director of Tenaris	1	40
Mr. Amadeo Vázquez y Vázquez	Director	Director of Tenaris	16	76
Mr. Guillermo Vogel	Director	Director and Vice Chairman of the Board of Tenaris	16	68

(1) Paolo Rocca and Gianfelice Rocca are brothers, and Roberto Bonatti is Paolo and Gianfelice Rocca's first cousin.

Roberto Bonatti. Mr. Bonatti is a member of the Company's board of directors. He is a grandson of Agostino Rocca, founder of the Techint Group, a group of companies controlled by San Faustin. Throughout his career in the Techint Group he has been involved specifically in the engineering and construction and corporate sectors. He was first employed by the Techint Group in 1976, as deputy resident engineer in Venezuela. In 1984, he became a director of San Faustin, and since 2001 he has served as its president. In addition, Mr. Bonatti currently serves as president of Techint Financial Corporation N.V. He is also a member of the board of directors of Ternium. Mr. Bonatti is an Italian citizen.

Carlos Condorelli. Mr. Condorelli is a member of the Company's board of directors. He served as the Company's Chief Financial Officer from October 2002 until September 2007. He is also a board member of Ternium. He has held several positions within Tenaris, including also the Chief Financial Officer position in some of the principal Tenaris Group companies and member of the Company's audit committee between November 1, 2017 and May 2, 2018. He also served as president of the board of directors of Empresa Distribuidora La Plata S.A. ("Edelap"), an Argentine utilities company. Mr. Condorelli is an Argentine citizen.

Germán Curá. Mr. Curá is a member of the Company's board of directors and also holds the position of Vice Chairman of the Board. He served as president of our operations in North America until May 2, 2018, a position held since 2006. He was first employed by Siderca in 1988. Previously, he served as Siderca's exports director, Tamsa's exports director and commercial director, sales and marketing manager of our Middle East subsidiary, president of Algoma Tubes, president and Chief Executive Officer of Maverick Tubulars and president and Chief Executive Officer of Hydril, director of our Oilfield Services global business unit and Tenaris commercial director. He was also a member of the board of directors of API and currently serves as a member of the board of directors of the American Iron and Steel Institute (AISI) and of Deep Ocean AS. He is a marine engineer from the Instituto Tecnológico de Buenos Aires and an MBA graduated from the Massachusetts Institute of Technology. Mr. Curá is an U.S. citizen.

Roberto Monti. Mr. Monti is a member of the Company's board of directors and of its audit committee. He is a member of the board of directors of YPF. He has served as vice president of exploration and production of Repsol YPF and as chairman and Chief Executive Officer of YPF. He was also the president of Dowell, a subsidiary of Schlumberger and the president of Schlumberger wire & testing division for East Hemisphere Latin America. Mr. Monti is an Argentine citizen.

Gianfelice Mario Rocca. Mr. Rocca is a member of the Company's board of directors. He is a grandson of Agostino Rocca. He is Chairman of the board of directors of San Faustin, member of the board of directors of Ternium, president of the Humanitas Group and president of the board of directors of Tenova S.p.A. Moreover, in Italy, he is member of the board of Bocconi University, of the advisory board of Politecnico di Milano. At international level, he is member of the Harvard Business School Advisory Board. Mr. Rocca is an Italian citizen.

Paolo Rocca. Mr. Rocca is the Chairman of the Company's board of directors and our Chief Executive Officer. He is a grandson of Agostino Rocca. He is also the chairman of the board of directors of Ternium, a director and vice president of San Faustin, and a director of Techint Financial Corporation. He is a member of the executive committee of the World Steel Association. Mr. Rocca is an Italian citizen.

Jaime Serra Puche. Mr. Serra Puche is a member of the Company's board of directors and of its audit committee. He is the chairman of SAI Consultores, a Mexican consulting firm, and a member of the board of directors of the Mexico Fund, Grupo Vitro, and chairman of the board of BBVA Bancomer. Mr. Serra Puche served as Mexico's Undersecretary of Revenue, Secretary of Trade and Industry, and Secretary of Finance. He led the negotiation and implementation of NAFTA. Mr. Serra Puche is a Mexican citizen.

Yves Speeckaert. Mr. Speeckaert is a member of the Company's board of directors. He served as director of KPMG Consulting in London, United Kingdom and Sao Paulo, Brazil, where he led various high-profile engagements in the telecom, energy and agri-business industries. He was also director of structured finance of Banca Intesa-Sanpaolo (London). Since 2010 he is a Luxembourg-based independent director of regulated investment funds (mostly private equity, RE, and UCITS funds, as well as impact funds) and he is a member of the board of directors of several industrial holdings. He is also active in carbon offsetting and climate change mitigation strategies with funds, governments and corporations particularly as related to Corporate Environmental and Social Responsibility (ESR). He is a member of the Luxembourg Institute of Administrators (ILA). He holds an MBA from the University of California at Berkeley. Mr. Speeckaert is a Belgian citizen.

Mónica Tiuba. Ms. Tiuba is a member of the Company's board of directors and of the audit committee. She is a Brazilian qualified lawyer and accountant with over 17 years of professional experience in Brazil and Luxembourg. She started her career at Barbosa, Mussnich & Aragão law firm in Rio de Janeiro, Brazil, where she practiced corporate law, M&A and tax litigation. She worked in EY and PwC, in the Brazil and Luxembourg offices, advising multinational clients, private equity houses and family offices. She gained banking experience working as international senior wealth planner at Banque Edmond de Rothschild, in Luxembourg. She holds a specialization in EU tax law from Leiden University and a Master of Laws in international taxation from Vienna University of Economics. Ms. Tiuba is a Brazilian citizen.

Amadeo Vázquez y Vázquez. Mr. Vázquez y Vázquez is a member of the Company's board of directors and the chairman of its audit committee. He is an independent alternate director of Gas Natural BAN, S.A, of Grupo Gas Natural Fenosa. He is a member of the advisory board of the Fundación de Investigaciones Económicas Latinoamericanas and member of the Asociación Empresaria Argentina. He is a business consultant and previously served as Chief Executive Officer of Banco Río de la Plata S.A. until August 1997, independent director and chairman of the audit committee of BBVA Banco Francés S.A. until 2003, and Chairman of the board of directors of Telecom Argentina S.A. until April 2007. Mr. Vázquez y Vázquez is a Spanish and Argentine citizen.

Guillermo Vogel. Mr. Vogel is a member of the Company's board of directors and also holds the position of Vice Chairman of the Board. He is the chairman of Grupo Collado and Exportaciones IM Promoción, and served as president of Canacero until April 16, 2018. Mr. Vogel is also a member of the board of directors of each of Techint, S.A. de C.V., Corporación Alfa, Banco Santander (México) S.A, the Universidad Panamericana – IPADE, Rassini, Corporación Mexicana de Inversiones de Capital, Innovare, Grupo Assa and the American Iron and Steel Institute. In addition, he is a member of The Trilateral Commission and member of the International Board of The Manhattan School of Music. Mr. Vogel is a Mexican citizen.

Board members Monti, Serra Puche, Speeckaert, Tiuba, Vázquez y Vázquez qualify as independent directors for purposes of the U.S. Securities Exchange Act Rule 10A-3(b)(1), and board members Messrs. Monti, Serra Puche, Speeckaert and Vázquez y Vázquez also qualify as independent directors under the Company's articles of association.

Director Liability

Each director must act in the interest of the Company, and in accordance with applicable laws, regulations, and the Company's articles of association. Directors are also bound by a general duty of care owed to the Company.

Under the Luxembourg law of August 10, 1915 on commercial companies, as amended, (the "Luxembourg Company Law"), a director may be liable to the Company for any damage caused by management errors, such as wrongful acts committed during the execution of his or her mandate, and to the Company, its shareholders and third parties in the event that the Company, its shareholders or third parties suffer a loss due to an infringement of either the Luxembourg Company Law or the Company's articles of association.

Under Luxembourg law, unless the decision of the board of directors relates to ordinary business entered into under normal conditions, any director having a direct or indirect financial interest conflicting with that of the Company in a transaction which has to be considered by the board of directors, must advise the board thereof and cause a record of his statement to be included in the minutes of the meeting and may not take part in these deliberations. At the next following general meeting, before any other resolution is put to vote, a special report must be made on any transactions in which any of the directors may have had an interest conflicting with that of the Company.

Causes of action against directors for damages may be initiated by the Company upon a resolution of the general shareholders' meeting passed by a simple majority vote, irrespective of the number of shares represented at the meeting. Causes of action against directors who misappropriate corporate assets or commit a breach of trust may be brought by any shareholder for personal losses different from those of the Company.

An action may also be brought against the directors on behalf of the Company by shareholders who, at the general meeting which decided upon discharge of such directors or members, owned securities with the right to vote at such meeting representing at least ten per cent of the votes attaching to all such securities.

It is customary in Luxembourg that the shareholders expressly discharge the members of the board of directors from any liability arising out of or in connection with the exercise of their mandate when approving the annual accounts of the Company at the annual general shareholders meeting. However, any such discharge will not release the directors from liability for any damage caused by unrevealed acts of mismanagement or unrevealed breaches of the Luxembourg Company Law or the Company's articles of association, nor will it release the directors from liability for any personal loss of the shareholders independent and separate from the losses suffered by the Company due to a breach either revealed and unrevealed of either the Luxembourg Company Law or the Company's articles of association.

Auditors

The Company's articles of association require the appointment of an independent audit firm in accordance with applicable law. The primary responsibility of the auditor is to audit the Company's annual accounts and consolidated financial statements and to submit a report on the accounts to shareholders at the annual shareholders' meeting. In accordance with applicable law, auditors are chosen from among the members of the Luxembourg Institute of Independent Auditors (*Institut des réviseurs d'entreprises*).

Auditors are appointed by the general shareholders' meeting upon recommendation from the Company's audit committee through a resolution passed by a simple majority vote, irrespective of the number of shares represented at the meeting, to serve one-year renewable terms. Auditors may be dismissed by the general shareholders' meeting at any time, with or without cause. Luxembourg law does not allow directors to serve concurrently as external auditors. As part of their duties, the auditors report directly to the audit committee.

Pursuant to its charter, the Company's audit committee is responsible for, among other things, the oversight of the independence and performance of the Company's external auditors. The audit committee is also responsible to consider and make recommendations to the board of directors, to be put to shareholders for approval at the annual general meeting of shareholders, regarding the appointment, re-appointment or removal of the Company's external auditors. In addition, the audit committee is responsible to review the appropriateness and provision of permitted non-audit fees and to review and approve any fees (whether for audit, audit-related and non-audit services) payable to the Company's external auditors. On a yearly basis, in the performance of its functions, the audit committee considers the appointment of the Company's external auditors and reviews, together with management and the external auditor, the audit plan, audit related services and other non-audit services. The audit committee requests the board of directors to submit the audit committee's recommendation for the appointment of the Company's external auditor for each fiscal year and the payment of applicable fees, for final approval by the general shareholders' meeting. The general shareholders' meeting regularly approves such audit fees and authorizes the audit committee to approve any increase or reallocation of such audit fees as may be necessary, appropriate or desirable under the circumstances. No services outside the scope of the audit committee's approval can be undertaken by the external auditor.

Our independent approved statutory auditor for the fiscal year ended December 31, 2018, appointed by the shareholders' meeting held on May 2, 2018, was PwC Luxembourg, in connection with all of the Company's annual accounts and our consolidated financial statements. At the next annual general shareholders' meeting, it will be proposed that PwC Luxembourg be re-appointed as the Company's independent approved statutory auditors for the fiscal year ending December 31, 2019, to be engaged until the next annual general meeting of shareholders that will be convened to decide on the Company's 2019 annual accounts.

Senior Management

Our current senior management as of the date of this annual report consists of:

Name	Position	Age at December 31, 2018
Mr. Paolo Rocca	Chairman and Chief Executive Officer	66
Mr. Edgardo Carlos	Chief Financial Officer	52
Mr. Antonio Caprera	Chief Industrial Officer	58
Mr. Gabriel Casanova	Chief Supply Chain Officer	60
Mr. Alejandro Lammertyn	Chief Digital and Planning Officer	53
Ms. Paola Mazzoleni	Chief Human Resources Officer	42
Mr. Marcelo Ramos	Chief Technology Officer	55
Mr. Guillermo Gabriel Moreno ⁽¹⁾	President, Canada	54
Mr. Luca Zanotti ⁽¹⁾	President, United States	51
Mr. Sergio de la Maza ⁽¹⁾	President, Mexico	62
Mr. Ricardo Prospero ⁽¹⁾	President, Andean	56
Mr. Renato Catallini	President, Brazil	52
Mr. Javier Martínez Alvarez	President, Southern Cone	52
Mr. Gabriel Podskubka	President, Eastern Hemisphere	45
Mr. Michele Della Briotta	President, Europe	46

⁽¹⁾ Effective as of May 2, 2018, Germán Curá ceased to act as president of our North American operations and was appointed as member of the board of directors. His position was dissolved and Luca Zanotti continued to act as the president of our U.S. operations and Guillermo Gabriel Moreno continued to act as the president of our Canadian operations. Effective October 1, 2018, the position President, Central America, under Sergio de la Maza was dissolved, replaced by President, Mexico, under Sergio de la Maza, and President, Andean, under Ricardo Prospero.

Paolo Rocca. Mr. Rocca is the chairman of the Company's board of directors and our Chief Executive Officer. He is a grandson of Agostino Rocca. He is also the chairman of the board of directors of Ternium, a director and vice president of San Faustin, and a director of Techint Financial Corporation. He is a member of the Executive Committee of the World Steel Association. Mr. Rocca is an Italian citizen.

Edgardo Carlos. Mr. Carlos currently serves as our Chief Financial Officer, a position he has held since 2013. He joined the Techint Group in 1987 in the accounting department of Siderar. After serving as financial manager for Sidor, in Venezuela, in 2001 he joined Tenaris as our financial director. In 2005 he was appointed administration and financial manager for North America and in 2007 he became administration and financial director for Central America. In 2009 he was appointed economic and financial planning director, until he assumed his current position. Mr. Carlos is an Argentine citizen.

Antonio Caprera. Mr. Caprera currently serves as our Chief Industrial Officer, a position he assumed in April 2017. He joined the company in 1990. From 2000 to 2006 he served as quality director at Dalmine in Italy, where he later assumed responsibilities as production director until 2012. From that year and until 2015 he served as production director at Siderca in Argentina, after which he assumed responsibilities as global industrial coordinator based in Mexico until March 2017. Mr. Caprera is an Italian citizen.

Gabriel Casanova. Mr. Casanova currently serves as our Chief Supply Chain Officer, with responsibility for the execution of all contractual deliveries to customers. After graduating as a marine and mechanical engineer, he joined Siderca's export department in 1987. In 1995 he became Siderca's Chief Representative in China and from 1997 to 2009 he held several positions in the commercial area in Dalmine. In 2009 he became the head of our supply chain network and in October 2012 he assumed his current position. Mr. Casanova is an Argentine citizen.

Alejandro Lammertyn. Mr. Lammertyn currently serves as our Chief Digital and Planning Officer. He has served as our Chief Planning and Commercial Coordination Officer since 2013 and assumed additional responsibility for digital strategy and implementation in January 2019. Mr. Lammertyn began his career with Tenaris in 1990. Previously, he served as assistant to the chief executive officer for marketing, organization and mill allocation, supply chain director, commercial director and Eastern Hemisphere area manager. Mr. Lammertyn is an Argentine citizen.

Paola Mazzoleni. Ms. Mazzoleni currently serves as our Chief Human Resources Officer, a position she assumed on January 1, 2016. After receiving a degree in Philosophy, she started her career in Dalmine in 2001 in the human resources department, working in recruitment and selection. She next coordinated the company's Global Trainee Program and then served as the regional head in Italy of Tenaris University. Ms. Mazzoleni was appointed as human resources director in Romania in 2008, in Italy in 2012 and in the United States in 2014. Ms. Mazzoleni is an Italian citizen.

Marcelo Ramos. Mr. Ramos currently serves as our Chief Technology Officer, with responsibility over technology and quality. Previously he served as corporate quality director and managing director of NKKTubes. He joined the Techint Group in 1987 and has held various positions within Tenaris. He assumed his current position in April 2010, when the quality and technology departments were combined. Mr. Ramos is an Argentine citizen.

Guillermo Gabriel Moreno. Mr. Moreno currently serves as our president of our operations in Canada. He first joined Siderca in 1987 and gained progressive responsibilities in finance and marketing positions until 1993. From 1993 to 1996, he became responsible for sales in Latin America. In 1996 he became Tamsa's exports sales director. In 1999 he became the director of the Pipeline Services business unit and eventually took over the position of director of Oilfield Services business unit in 2004. He served as planning director from 2010 to 2012, when he assumed his current position. Mr. Moreno is an Argentine citizen.

Luca Zanotti. Mr. Zanotti currently serves as president of our operations in the United States. In 2002, he joined Exiros, the procurement company for the Techint Group, as planning and administration director. He was later promoted to raw materials director and in July 2007 became managing director of Exiros, a position he held until 2010. He served as regional manager Europe, and managing director of Dalmine from 2011 to 2015, when he assumed his current position. Before joining the Techint Group, he was a senior manager at A.T. Kearney in Milan, where he worked from 1998 to 2002, and prior to that he held various business development positions in the Far East for Lovato Electric. Mr. Zanotti is an Italian citizen.

Sergio de la Maza. Mr. de la Maza currently serves as our president, Mexico and also serves as managing director and executive vice-president of Tamsa. He first joined Tamsa in 1980. From 1983 to 1988, Mr. de la Maza worked in several positions in Tamsa. He then became manager of Tamsa's new pipe factory and later served as manufacturing manager and quality director of Tamsa. Subsequently, he was named manufacturing director of Siderca. He assumed his current position in 2003. Mr. de la Maza is a Mexican citizen.

Ricardo Prospero. Mr. Prospero currently serves as president of our operations in the Andean Region, Central America and the Caribbean, based in Colombia. He joined the Techint Group in 1985, working in the Siderar planning department. From 1985 to 1998, Mr. Prospero worked in several positions in Siderar before becoming the exports general manager of Sidor. He later went on to be the commercial director in Siderar. After a period as president of Ternium Sidor in Venezuela and then International Area Manager for Ternium, he joined Tenaris in 2010, assuming his current position. Mr. Prospero is an Argentine citizen.

Renato Catallini. Mr. Catallini currently serves as president of our operations in Brazil, a position that he assumed in October 2012, after having served as our supply chain director since August 2007. He joined Tenaris in 2001 in the supply management area, as a general manager of Exiros Argentina. In July 2002, he was appointed operations director and subsequently, in January 2005, became managing director of Exiros. Before joining Tenaris, he worked for ten years in the energy sector, working for TGN, Nova Gas Internacional, TransCanada Pipelines and TotalFinaElf, among others. Mr. Catallini is an Argentine and Italian citizen.

Javier Martínez Álvarez. Mr. Martínez Álvarez currently serves as president of our operations in the Southern Cone, a position he assumed in June 2010, having previously served as our Andean area manager. He began his career in the Techint Group in 1990, holding several positions including planning manager of Siderar and commercial director of Ternium-Sidor. In 2006, he joined Tenaris as our Venezuela area manager. Mr. Martínez Álvarez is an Argentine citizen.

Gabriel Podskubka. Mr. Podskubka currently serves as president of our operations in the Eastern Hemisphere, based in Dubai. He assumed his current position in April 2013 after serving as the head of our operations in Eastern Europe for four years. After graduating as an industrial engineer Mr. Podskubka joined the Techint Group in 1995 in the marketing department of Siderca. He held various positions in the marketing, commercial, and industrial areas until he was appointed as oil & gas sales director in the United States in 2006. Mr. Podskubka is an Argentine citizen.

Michele Della Briotta. Mr. Della Briotta currently serves as president of our operations in Europe, a position he assumed in July 2016. He first joined Tenaris in 1997 and has worked in areas such as industrial planning, operations, supply chain and commercial in Italy, Mexico, Argentina and the United States. Most recently he served as Tenaris's area manager for Romania. Mr. Della Briotta is an Italian citizen.

B. Compensation

The compensation of the members of the Company's board of directors is determined at the annual ordinary general shareholders' meeting. Each member of the board of directors received as compensation for their services for the year 2018 a fee of \$115,000. The chairman of the audit committee received as additional compensation a fee of \$65,000, while the other members of the audit committee received an additional fee of \$55,000. Under the Company's articles of association, the members of the audit committee are not eligible to participate in any incentive compensation plan for employees of the Company or any of its subsidiaries.

During the years ended December 31, 2018, 2017 and 2016, the cash compensation of directors and senior managers amounted to \$33.7 million, \$45.8 million and \$38.6 million, respectively. These amounts include cash benefits paid to certain senior managers in connection with pre-existing retirement plans. In addition, directors and senior managers received 558, 484 and 500 thousand units for a total amount of \$5.6 million, \$4.7 million and \$4.8 million, respectively, in connection with the Employee retention and long-term incentive program described in note O (3) "Employee benefits - Other long term benefits" to our audited consolidated financial statements included in this annual report.

There are no service contracts between any director and Tenaris that provide for material benefits upon termination of employment.

C. Board Practices

See A. "– Directors and Senior Management – Board of Directors".

Audit Committee

Pursuant to the Company's articles of association, as supplemented by the audit committee's charter, for as long as our shares are listed on at least one regulated market, the Company must have an audit committee composed of at least three members, the majority of whom must qualify as independent directors, provided, however, that the composition and membership of the audit committee shall satisfy such requirements as are applicable to, and mandatory for, audit committees of issuers such as the Company under any law, rule or regulation applicable to the Company (including, without limitation, the applicable laws, rules and regulations of such regulated market or markets).

Under the Company's articles of association, an independent director is a director who:

- is not and has not been employed by us or our subsidiaries in an executive capacity for the preceding five years;
- is not a person that controls us, directly or indirectly, and is not a member of the board of directors of a company controlling us, directly or indirectly;
- does not have (and is not affiliated with a company or a firm that has) a significant business relationship with us, our subsidiaries or our controlling shareholder;

· is not and has not been affiliated with or employed by a present or former auditor of us, our subsidiaries or our controlling shareholder for the preceding five years; *and*

· is not a spouse, parent, sibling or relative up to the third degree of any of the above persons.

The audit committee of the Company's board of directors currently consists of four members: Roberto Monti, Jaime Serra Puche, Mónica Tiuba and Amadeo Vázquez y Vázquez, who were appointed to the audit committee on May 2, 2018. All of them qualify as independent directors for purposes of the U.S. Securities Exchange Act Rule 10A-3(b)(1), and Messrs. Monti, Serra Puche and Vázquez y Vázquez also qualify as independent directors under the Company's articles of association. The board of directors of the Company has determined that Ms. Tiuba is competent in accounting or auditing matters. In addition, the membership of the audit committee as a whole has sufficient relevant knowledge of the business and financial experience to properly discharge its functions.

The audit committee operates under a charter which has been amended and restated by the board of directors on October 31, 2018, to implement adequate procedures to discharge the audit committee's duties and responsibilities under applicable law, including the Luxembourg law of July 23, 2016, concerning the audit profession ("Audit Reform Law"). The audit committee assists the board of directors in its oversight responsibilities relating to (i) the integrity of the Company's financial statements; (ii) the effectiveness of the Company's systems of internal control, risk management and internal audit over financial reporting; and (iii) the independence and performance of the Company's external auditors. The audit committee also performs other duties entrusted to it by the Company's board of directors or required to be performed by it under applicable laws and regulations.

In addition, the audit committee is required by the Company's articles of association to review "material transactions", as such term is defined under the Company's articles of association, to be entered into by the Company or its subsidiaries with "related parties", as such term is defined in the Company's articles of association, in order to determine whether their terms are consistent with market conditions or are otherwise fair to the Company and/or its subsidiaries. In the case of material transactions entered into by the Company's subsidiaries with related parties, the Company's audit committee will review those transactions entered into by those subsidiaries whose boards of directors do not have independent members.

Under the Company's articles of association, as supplemented by the audit committee's charter, a material transaction is:

- any transaction between the Company or its subsidiaries with related parties (i) with an individual value equal to or greater than \$10 million, or (ii) with an individual value lower than \$10 million, when the aggregate sum – as reflected in the financial statements of the four fiscal quarters of the Company preceding the date of determination- of any series of transactions for such lower value that can be deemed to be parts of a unique or single transaction (but excluding any transactions that were reviewed and approved by Company's audit committee or board of directors, as applicable, or the independent members of the board of directors of any of its subsidiaries) exceeds 1.5% of the Company's consolidated net sales made in the fiscal year preceding the year on which the determination is made;
- any corporate reorganization transaction (including a merger, spin-off or bulk transfer of a business) affecting the Company for the benefit of, or involving, a related party; *and*
- any corporate reorganization transaction (including a merger, spin-off or bulk transfer of a business) not reviewed and approved by the independent members of the board of directors of any of the Company's direct or indirect subsidiaries, affecting any of the Company's direct or indirect subsidiaries for the benefit of, or involving, a related party.

The audit committee has the power (to the maximum extent permitted by applicable laws) to request that the Company or relevant subsidiary promptly provide all information necessary for the audit committee to assess the material transactions with related parties that it is required to review. A material related party transaction shall not be entered into without prior review by the Company's audit committee and subsequent approval by the board of directors unless (i) the circumstances underlying the proposed transaction justify that it be entered into before the time it can actually be reviewed by the Company's audit committee or approved by the board of directors and (ii) the related party agrees to unwind the transaction if the Company's board of directors does not approve it.

The audit committee has the authority to conduct any investigation appropriate to the fulfillment of its responsibilities and has direct access to the Company's external auditors as well as anyone in the Company and, subject to applicable laws and regulations, its subsidiaries. In addition, the audit committee may engage, at the Company's expense, independent counsel and other internal or external advisors to review, investigate or otherwise advise on, any matter as the committee may determine to be necessary to carry out its purposes and responsibilities.

In addition, the Company has established at management-level a critical risk committee that assists the Company's board of directors, the audit committee and the Chief Executive Officer with the oversight of risks to which Tenaris is exposed and in the monitoring and review of the risk management framework and processes, with a focus on those risks deemed to be critical. In the performance of its functions, the critical risk committee facilitates the identification and assessment of critical risks (including cybersecurity, environmental, health and safety, product liability, intellectual property, financial reporting and regulatory risks), the development of mitigating actions, and the monitoring of action plans. The critical risk committee periodically reports to the board of directors, the audit committee and the Chief Executive Officer on its activities.

D. Employees

The following table shows the number of persons employed by Tenaris as of December 31:

	2018	2017	2016
Mexico	5,728	5,139	4,968
Argentina	5,569	5,221	4,755
USA	2,410	1,953	1,636
Italy	2,173	2,088	1,979
Romania	1,877	1,870	1,631
Brazil	1,374	1,382	1,166
Colombia	1,106	1,003	750
Canada	1,034	919	473
Indonesia	554	506	509
Japan	399	410	458
Other Countries	1,248	1,114	1,074
	23,472	21,605	19,399
Employees in discontinued operations	-	-	(323)
Total employees in continuing operations	23,472	21,605	19,076

The number of our employees increased 9% during 2018 as we continued to adjust our operations to face the increase in drilling activity and demand of pipes. Our labor costs worldwide related to continuing operations also increased 9%.

The acquisition of SSP in January 2019 resulted in the incorporation of approximately 850 new employees.

Approximately 63% of our employees are unionized. In all the countries we have presence, we operate in the fully respect of the institutional rules and local norms, generating recognized agreements among all the parties involved. Nevertheless, as forging the relationship with the unions imply negotiations, the complexity of the conversations is high. Concerning the punctual situation in Mexico that developed during 2017 and that goes beyond our company, the leader was confirmed in the position and although the Union is facing internal differences, our activities in the plant remain normal.

E. Share Ownership

To our knowledge, the total number of shares (in the form of ordinary shares or ADSs) beneficially owned by our directors and senior management as of the date of this annual report was 933,817, which represents 0.08% of our outstanding shares.

The following table provides information regarding share ownership by our directors and senior management:

Director or Officer	Number of Shares Held
Guillermo Vogel	850,446
Carlos Condorelli	67,211
Guillermo G. Moreno	8,214
Edgardo Carlos	4,000
Gabriel Podskubka	3,946
Total	933,817

Item 7. Major Shareholders and Related Party Transactions.**A. Major Shareholders**

The following table shows the beneficial ownership of the shares by (1) the Company's major shareholders (persons or entities that have notified the Company of holdings in excess of 5% of the Company's share capital), non-affiliated public shareholders, and (2) the Company's directors and senior management as a group. The information below is based on the most recent information provided to the Company.

Identity of Person or Group	Number	Percent
San Faustin ⁽¹⁾	713,605,187	60.45%
Directors and senior management as a group	933,817	0.08%
Public	465,997,826	39.47%
Total	1,180,536,830	100.00%

(1) San Faustin owns all of its shares in the Company through its wholly-owned subsidiary Techint Holdings S.à r.l. The Dutch private foundation RP STAK holds voting rights in San Faustin sufficient to control San Faustin. No person or group of persons controls RP STAK.

The voting rights of the Company's major shareholders do not differ from the voting rights of other shareholders. None of its outstanding shares have any special control rights. There are no restrictions on voting rights, nor are there, to the Company's knowledge, any agreements among shareholders of the Company that might result in restrictions on the transfer of securities or the exercise of voting rights.

The Company does not know of any significant agreements or other arrangements to which the Company is a party and which take effect, alter or terminate in the event of a change of control of the Company. The Company does not know of any arrangements, the operation of which may at a subsequent date result in a change of control of the Company.

B. Related Party Transactions

Tenaris is a party to several related party transactions as described below. Material related party transactions are subject to the review of the audit committee of the Company's board of directors and the requirements of Luxembourg law. For further details on the approval process for related party transactions, see Item 6.C. "Directors, Senior Management and Employees – Board Practices – Audit Committee".

Purchases of Steel Products and Raw Materials

In the ordinary course of business, we purchase round steel bars, flat steel products and other raw materials from Ternium or its subsidiaries. These purchases are made on similar terms and conditions as sales made by these companies to unrelated third parties. These transactions include:

- Purchases of round steel bars made under a long-term agreement, for use in our seamless steel pipe operations in Mexico, which amounted to \$102 million in 2018, \$120 million in 2017 and \$9 million in 2016.
- Purchases of flat steel products for use in the production of welded pipes and accessories, which amounted to \$38 million in 2018, \$43 million in 2017 and \$18 million in 2016.
- Purchases of scrap and other raw materials for use in the production of seamless pipes, which amounted to \$2 million in 2018.

In the ordinary course of business, we purchase flat steel products for use in our welded steel pipe operations, from Usiminas. These purchases, which are made on similar terms and conditions as sales made by this company to unrelated third parties, amounted to \$68 million in 2018, \$43 million in 2017 and \$34 million in 2016.

Sales of Raw Materials

In the ordinary course of business, we sell raw materials and other production inputs to Ternium or its subsidiaries. These sales are made on similar terms and conditions as purchases made by these companies from unrelated third parties. These transactions include:

- Sales of ferrous scrap, and other raw materials, which amounted to \$11 million in 2018, \$26 million in 2017 and \$14 million in 2016.
- Sales of steam and operational services from our Argentine electric power generating facility in San Nicolás. These sales amounted to \$13 million in 2018, \$11 million in 2017 and \$12 million in 2016. On January 29th 2019, the electric power generation facility was shut down.

Purchase Agency Services and Sales of Materials

Exiros B.V. (“Exiros”), in which we have 50% share ownership and Ternium has the remaining 50% share ownership, provides to Tecpetrol and other companies controlled by San Faustin with purchase agency services and sales of raw materials and other products. Under the Exiros shareholder arrangements, Tenaris recognizes Exiros’ assets, liabilities, revenue and expenses in relation to its interest in the joint operation. Exiros’ sales to companies controlled by San Faustin totaled \$16 million in 2018.

Supply of Electric Energy

Techgen is an electric power plant in Mexico, which is currently owned 48% by Ternium, 30% by Tecpetrol and 22% by Tenaris. Techgen became fully operational on December 1, 2016. Ternium and Tenaris currently contract 78% and 22%, respectively, of Techgen’s power capacity. Sales to Tenaris amounted to \$36 million in 2018, \$29 million in 2017 and \$4 million in 2016.

Supply of Natural Gas

We are party to contracts with Tecpetrol, TGN, Litoral Gas and Energy Consulting Services relating to the supply of natural gas to our operations in Argentina. Tecpetrol, a company controlled by San Faustin, is engaged in oil and gas exploration and production and has rights to various oil and gas fields in Argentina and elsewhere in America. TGN operates two major pipelines in Argentina connecting the major gas basins of Neuquén and Noroeste-Bolivia to the major consumption centers in Argentina, while Litoral Gas distributes gas in the Province of Santa Fe and in the northeastern section of the Province of Buenos Aires. Energy Consulting Services is a company engaged in energy and management consulting, representing one of the major natural gas traders in Argentina. San Faustin holds significant but non-controlling interests in TGN, Litoral Gas and Energy Consulting Services.

Tecpetrol supplies Siderca with natural gas requirements under market conditions and according to local regulations. Tecpetrol’s sales to Tenaris amounted to \$95 million in 2018 and \$7 million in 2017.

TGN charges Siderca a price to transport its natural gas supplies that is equivalent on a comparable basis to prices paid by other industrial users. The Argentine government regulates the general framework under which TGN operates and prices its services. TGN’s sales to Tenaris amounted to \$8 million in 2018, \$3 million in 2017 and \$2 million in 2016.

Litoral Gas’s sales to Tenaris totaled \$3 million in 2018, \$5 million in 2017 and \$3 million in 2016.

Energy Consulting Services’s sales to Tenaris totaled \$2 million in 2018, \$7 million in 2017 and \$5 million in 2016.

Provision of Engineering and Labor Services

We contract with certain companies controlled by San Faustin engineering and non-specialist manual labor services, such as industrial cleaning, general maintenance, handling of by-products and construction services. Fees accrued for these services in the aggregate amounted to \$33 million in 2018, \$40 million in 2017 and \$45 million in 2016.

Sales of Steel Pipes and Sucker Rods

In the ordinary course of business, we sell steel pipes, sucker rods and related services to other companies controlled or under the significant influence of San Faustin. These sales, which are made principally to companies involved in the construction of gas pipelines and to Tecpetrol and joint ventures in which Tecpetrol participates, for its oil and gas drilling operations, are made on similar terms and conditions as sales to unrelated third parties. Our sales of steel pipes and sucker rods as well as logistical and certain other services to other companies controlled or under significant influence of San Faustin amounted to \$129 million in 2018, \$95 million in 2017 and \$34 million in 2016.

Sales of Other Products and Services

We provide information technology services to companies controlled by San Faustin. Sales of these services amounted to \$2 million in 2018, \$2 million in 2017 and \$2 million in 2016.

Administrative, Legal and Other Support Services

Finma S.A., Arhsa S.A (merged with Finma on January 1, 2018) and Techinst S.A. a group of companies controlled by San Faustin in which we have a 33% share ownership and other affiliates of San Faustin have the remaining share ownership, provide administrative, legal and other support services to San Faustin's affiliates in Argentina, including Tenaris. Fees accrued for these services amounted to \$10 million in 2018, \$12 million in 2017 and \$11 million in 2016.

Loans to Related Parties

We financed Techgen's Pesquería project primarily in the form of subordinated loans to Techgen. Outstanding loans to Techgen as of December 31, 2018, amounted to \$99 million, as of December 31, 2017 to \$93 million, and as of December 31, 2016 to \$86 million. These loans generated interest gains in favor of Tenaris in an amount of \$5 million in 2018, \$4 million in 2017 and \$2 million in 2016.

Other Transactions

We entered into various contracts with Tenova (and subsidiaries), a company controlled by San Faustin, for the provision of furnaces, spare parts, accessories and related services for our facilities. Supplies received amounted to \$9 million in 2018, \$3 million in 2017 and \$11 million in 2016.

We purchased industrial cleaning equipment from companies controlled by San Faustin for an amount of \$3 million in 2016.

In addition, in the ordinary course of business, from time to time, we carry out other transactions and enter into other arrangements with other related parties, none of which are believed to be material.

C. Interest of Experts and Counsel

Not applicable.

Item 8. Financial Information

A. Consolidated Statements and Other Financial Information

See Item 18 and pages F-1 through F-57 for our audited consolidated financial statements.

Legal Proceedings

Tenaris is from time to time subject to various claims, lawsuits and other legal proceedings, including customer, employee, tax and environmental-related claims, in which third parties are seeking payment for alleged damages, reimbursement for losses, or indemnity. Management with the assistance of legal counsel periodically reviews the status of each significant matter and assesses potential financial exposure.

Some of these claims, lawsuits and other legal proceedings involve highly complex issues, and often these issues are subject to substantial uncertainties and, therefore, the probability of loss and an estimation of damages are difficult to ascertain. Accordingly, with respect to a large portion of such claims, lawsuits and other legal proceedings, Tenaris is unable to make a reliable estimate of the expected financial effect that will result from ultimate resolution of the proceeding. In those cases, Tenaris has not accrued a provision for the potential outcome of these cases.

If a potential loss from a claim, lawsuit or other proceeding is considered probable and the amount can be reasonably estimated, a provision is recorded. Accruals for loss contingencies reflect a reasonable estimate of the losses to be incurred based on information available to management as of the date of preparation of the financial statements and take into consideration litigation and settlement strategies. In a limited number of ongoing cases, Tenaris was able to make a reliable estimate of the expected loss or range of probable loss and has accrued a provision for such loss but believes that publication of this information on a case-by-case basis would seriously prejudice Tenaris's position in the ongoing legal proceedings or in any related settlement discussions. Accordingly, in these cases, the Company has disclosed information with respect to the nature of the contingency but has not disclosed its estimate of the range of potential loss.

The Company believes that the aggregate provisions recorded for potential losses in its consolidated financial statements (see notes 21 “Non-current allowances and provisions” and 22 “Current allowances and provisions” to our audited consolidated financial statements included in this annual report) are adequate based upon currently available information. However, if management’s estimates prove incorrect, current reserves could be inadequate and Tenaris could incur a charge to earnings which could have a material adverse effect on Tenaris’s results of operations, financial condition, net worth and cash flows.

Material Legal Proceedings

Below is a summary description of Tenaris’s material legal proceedings for the year ended December 31, 2018. In addition, Tenaris is subject to other legal proceedings, none of which is believed to be material.

CSN claims relating to the January 2012 acquisition of Usiminas’ shares

Confab, a Brazilian subsidiary of the Company, is one of the defendants in a lawsuit filed in Brazil by Companhia Siderúrgica Nacional (“CSN”) and various entities affiliated with CSN against Confab and several Ternium subsidiaries that acquired a participation in Usiminas’ control group in January 2012.

The CSN lawsuit alleges that, under applicable Brazilian laws and rules, the acquirers were required to launch a tag-along tender offer to all non-controlling holders of Usiminas’ ordinary shares for a price per share equal to 80% of the price per share paid in such acquisition, or BRL28.8, and seeks an order to compel the acquirers to launch an offer at that price plus interest. If so ordered, the offer would need to be made to 182,609,851 ordinary shares of Usiminas not belonging to Usiminas’ control group, and Confab would have a 17.9% share in that offer.

On September 23, 2013, the first instance court dismissed the CSN lawsuit, and on February 8, 2017, the court of appeals maintained the understanding of the first instance court. On March 6, 2017, CSN filed a motion for clarification against the decision of the Court of Appeals of São Paulo, which was rejected on July 19, 2017. On August 18, 2017, CSN filed an appeal to the Superior Court of Justice seeking the review and reversal of the decision issued by the Court of Appeals. On March 5, 2018, the court of appeals ruled that CSN’s appeal did not meet the requirements for submission to the Superior Court of Justice and rejected the appeal. On May 8, 2018, CSN appealed against such ruling and on January 22, 2019, the court of appeals rejected it and ordered that the case be submitted to the Superior Court of Justice. The Superior Court of Justice will review admissibility of CSN’s appeal, and, if declares it admissible, will then render a decision on the merits. The Superior Court of Justice is restricted to the analysis of alleged violations to federal laws and cannot assess matters of fact.

Tenaris continues to believe that all of CSN’s claims and allegations are groundless and without merit, as confirmed by several opinions of Brazilian legal counsel, two decisions issued by the Brazilian securities regulator (CVM) in February 2012 and December 2016, and the first and second instance court decisions referred to above.

Veracel Celulose Accident Litigation

On September 21, 2007, an accident occurred in the premises of Veracel Celulose S.A. (“Veracel”) in connection with a rupture in one of the tanks used in an evaporation system manufactured by Confab. The Veracel accident allegedly resulted in material damages to Veracel. Itaú Seguros S.A. (“Itaú”), Veracel’s insurer at the time of the Veracel accident and then replaced by Chubb Seguros Brasil S/A (“Chubb”), initiated a lawsuit against Confab seeking reimbursement of damages paid to Veracel in connection with the Veracel accident. Veracel initiated a second lawsuit against Confab seeking reimbursement of the amount paid as insurance deductible with respect to the Veracel accident and other amounts not covered by insurance. Itaú and Veracel claimed that the Veracel accident was caused by failures and defects attributable to the evaporation system manufactured by Confab. Confab believes that the Veracel accident was caused by the improper handling by Veracel’s personnel of the equipment supplied by Confab in violation of Confab’s instructions. The two lawsuits were consolidated and are considered by the 6th Civil Court of São Caetano do Sul; however, each lawsuit will be adjudicated separately.

On September 28, 2018, Confab and Chubb entered into a settlement agreement pursuant to which on October 9, 2018, Confab paid an amount of approximately \$3.5 million to Chubb, without assuming any liability for the accident or the claim.

On October 10, 2018, Confab was notified that the court had issued rulings for both lawsuits. Both decisions were unfavorable to Confab:

- § With respect to Chubb's claim, Confab was ordered to pay an amount of approximately BRL89.8 million (approximately \$23.2 million, including interest, fees and expenses). On October 15, 2018, Confab filed a request for homologation of the settlement agreement mentioned above, as such settlement agreement remains valid and binding between the parties. On November 8, 2018, the settlement agreement was homologated by the court.
- § With respect to Veracel's claim, Confab was ordered to pay the insurance deductible and other concepts not covered by insurance, currently estimated to amount to BRL58.8 million (approximately \$ 15.2 million, including direct damages, lost profits, interest, fees and expenses). Both parties filed motions for clarification against the court's decision, which were partially granted. Although the contract between Confab and Veracel expressly provided that Confab would not be liable for damages arising from lost profits, the court award would appear to include an amount currently estimated in BRL50.5 million (approximately \$13 million) for damages arising therefrom; Confab has additional defense arguments in respect of a claim for lost profits. On December 18, 2018, Confab filed an appeal against the first instance court decision. At this stage the Company cannot predict the outcome of the claim or the amount or range of loss in case of an unfavorable outcome.

Ongoing investigation

The Company has learned that Italian and Swiss authorities are investigating whether certain payments were made from accounts of entities presumably associated with affiliates of the Company to accounts controlled by an individual allegedly related with officers of Petrobras and whether any such payments were intended to benefit Confab. Any such payments could violate certain applicable laws, including the U.S. Foreign Corrupt Practices Act. The Company had previously reviewed certain of these matters in connection with an investigation by the Brazilian authorities related to "Operation Lava Jato" and the audit committee of the Company's board of directors has engaged external counsel in connection with a review of the alleged payments and related matters. In addition, the Company has voluntarily notified the U.S. Securities and Exchange Commission and the U.S. Department of Justice. The Company continues to review these matters and to respond to requests from and otherwise cooperate with the appropriate authorities. At this time, the Company cannot predict the outcome of these matters or estimate the range of potential loss or extent of risk, if any, to the Company's business that may result from resolution of these matters.

Petroamazonas Penalties

On January 22, 2016, Petroamazonas ("PAM"), an Ecuadorian state-owned oil company, imposed penalties to the Company's Uruguayan subsidiary, TGS, for its alleged failure to comply with delivery terms under a pipe supply agreement. The penalties amount to approximately \$22.5 million plus interest thereon which as of the date hereof amount to approximately \$2.4 million. On June 27, 2018, TGS initiated arbitration proceedings against PAM before the Quito Chamber of Commerce Arbitration Center, seeking the annulment of the penalties. In September 2018, PAM filed its response to the arbitration claim. The claim is currently in evidentiary stage before the arbitration panel. Tenaris believes, based on the advice of counsel, that PAM had no legal basis to impose the penalties and that TGS has meritorious defenses against PAM. However, the Company cannot predict the outcome of a claim against a state-owned company.

Contractor's claim for additional costs

Tenaris Bay City, a U.S. subsidiary of the Company, received claims from a contractor for alleged additional costs in the construction of a project located in the Bay City area for an amount initially stated to be in excess of \$90 million; however, subsequently the contractor amended the amount of the claim to \$48 million plus attorneys' fees and arbitration costs. On June 30, 2017, the contractor filed a demand for arbitration of these claims. An arbitral panel was selected and a scheduling order issued. The parties have already submitted statements of claim and responses to the other party's claim. The final trial hearings on this matter have begun in February 2019 and an award is expected to be issued by June 2019. At this stage the Company cannot predict the outcome of the claim or the amount or range of loss in case of an unfavorable outcome.

Tax assessment in Mexico regarding tax deductions on purchases of scrap

In 2017, Tamsa and Servicios Generales Tenaris Tamsa S.A ("Segeta"), two Mexican subsidiaries of the Company, were informed that the Mexican tax authorities had determined that the tax deductions associated with certain purchases of scrap made by the companies during 2013 failed to comply with applicable requirements and, accordingly, should be rejected. Tamsa and Segeta filed their respective responses and complaints against the determination and provided additional information evidencing compliance with applicable requirements for the challenged tax deductions. On August 30, 2018 and January 24, 2019, administrative decisions were issued in the proceedings against Segeta and Tamsa, respectively, determining a tax obligation in the amount of MXN1,540 million (approximately \$78 million) for Segeta and MXN3,749 million (approximately \$190 million) for Tamsa. On October 15, 2018 and March 8, 2019, Segeta and Tamsa filed revocation requests (recursos de revocación exclusivos) against the August 2018 decision as to Segeta and the January 2019 decision as to Tamsa. On March 27, 2019, Segeta was notified that the Mexican tax authorities had reversed and left without effects their former tax determination. Tenaris believes, based on the advice of counsel and on the recent favorable resolution regarding Segeta, that it is unlikely that the ultimate resolution of either tax assessment will result in a material obligation.

Putative class actions

The Company is aware that, following its November 27, 2018 announcement that its Chairman and CEO Paolo Rocca was included in an Argentine court investigation known as the Notebooks Case, two putative class action complaints were filed in the U.S. District Court for the Eastern District of New York purportedly on behalf of purchasers of Tenaris securities from May 1, 2014 through November 27, 2018. The individual defendants named in the complaint are Tenaris's Chairman and CEO and Tenaris's CFO. Each complaint alleges that during the class period (May 2014-November 2018), the Company and the individual defendants inflated the Tenaris share price by failing to disclose that sale proceeds received by Ternium (in which Tenaris held an 11.46% stake) when Sidor was expropriated by Venezuela were received or expedited as a result of alleged improper payments made to Argentine officials. The complaint does not specify the damages that plaintiff is seeking. Management believes the Company has meritorious defenses to these claims, however, at this stage the Company cannot predict the outcome of the claim or the amount or range of loss in case of an unfavorable outcome.

Investigation concerning alleged price overcharges in Brazil

In 2018, two Brazilian subsidiaries of the Company were notified of formal charges arising from a review by the Tribunal de Contas da Uniao (TCU) for alleged price overcharges on goods supplied to Petrobras under a supply contract. Both companies have already filed their defenses. The estimated amount of this claim is BRL27 million (approximately \$7 million). Tenaris believes, based on the advice of counsel and external consultants, that the prices charged under the Petrobras contract do not result in overprices and that it is unlikely that the ultimate resolution of this matter will result in a material obligation.

Dividend Policy

The Company does not have, and has no current plans to establish, a formal dividend policy governing the amount and payment of dividends or other distributions. For a description of the shareholders' and holders of ADS' rights to receive dividends and the conditions to declare and pay dividends, please refer to Item 10. "Additional Information – B. Memorandum and Articles of Association – Dividends".

The following table shows the dividends approved by the Company's shareholders in the last five years:

Shareholders' meeting date	Approved dividend			Dividend payment date	
	Amount (USD million)	Per share (USD)	Per ADS (USD)	Interim Dividend	Dividend Balance
May 7, 2014	508	0.43	0.86	November 2013	May 2014
May 6, 2015	531	0.45	0.90	November 2014	May 2015
May 4, 2016	531	0.45	0.90	November 2015	May 2016
May 3, 2017	484	0.41	0.82	November 2016	May 2017
May 2, 2018	484	0.41	0.82	November 2017	May 2018

On February 20, 2019 the Company's board of directors proposed, for the approval of the annual general shareholders' meeting to be held on May 6, 2019, the payment of an annual dividend of \$0.41 per share (\$0.82 per ADS), or approximately \$484 million, which includes the interim dividend of \$0.13 per share (\$0.26 per ADS) or approximately \$153 million, paid on November 21, 2018. If the annual dividend is approved by the shareholders, a dividend of \$0.28 per share (\$0.56 per ADS), or approximately \$331 million will be paid on May 22, 2019, with an ex-dividend date of May 20, 2019.

B. Significant Changes

Except as otherwise disclosed in this annual report, there has been no undisclosed significant change since the date of the annual consolidated financial statements.

Item 9. The Offer and Listing

A. Offer and Listing Details

The shares are listed on the Buenos Aires Stock Exchange and on the Mexican Stock Exchange and its ADSs are listed on the NYSE under the symbol “TS”. The shares are also listed on the Italian Stock Exchange under the symbol “TEN” Trading on the NYSE, the Buenos Aires Stock Exchange and the Mexican Stock Exchange began on December 16, 2002, and trading on the Italian Stock Exchange began on December 17, 2002.

As of February 28, 2019, a total of 1,180,536,830 shares were registered in the Company’s shareholder register. As of February 28, 2019, a total of 153,653,732 shares were registered in the name of the depositary for the Company’s ADR program.

B. Plan of Distribution

Not applicable.

C. Markets

See A. “– The Offer and Listing – Offer and Listing Details”.

D. Selling Shareholders

Not applicable.

E. Dilution

Not applicable.

F. Expenses of the Issue

Not applicable.

Item 10. Additional Information

A. Share Capital

Not applicable.

B. Memorandum and Articles of Association

General

The following is a summary of certain rights of holders of the Company’s shares. These rights are set out in the Company’s articles of association or are provided by applicable Luxembourg law, and may differ from those typically provided to shareholders of U.S. companies under the corporation laws of some states of the United States. This summary is not exhaustive and does not contain all information that may be important to you. For more complete information, you should read the Company’s articles of association, which are attached as an exhibit to this annual report.

The Company is a public limited liability company (*société anonyme*) organized under the laws of Luxembourg. Its object and purpose, as set forth in Article 2 of its articles of association, is the taking of interests, in any form, in corporations or other business entities, and the administration, management, control and development thereof. The Company is registered under the number B85 203 in the Luxembourg *Registre de Commerce et des Sociétés*.

The Company’s authorized share capital is fixed by the Company’s articles of association as amended from time to time with the approval of shareholders at an extraordinary general shareholders’ meeting. The Company has an authorized share capital of a single class of 2,500,000,000 shares having a nominal value of USD1.00 per share. There were 1,180,536,830 shares issued as of December 31, 2018. All issued shares are fully paid.

The Company's articles of association authorize the board of directors, or any delegate(s) duly appointed by the board of directors, to issue shares within the limits of the authorized share capital against contributions in cash, contributions in kind or by way of incorporation of reserves, at such time and on such terms and conditions, including the issue price, as the board of directors, or its delegate(s), may in its or their discretion resolve. The validity period of such authorization will expire (unless renewed) on June 5, 2020.

The Company's shareholders have authorized the board of directors to waive, suppress or limit any pre-emptive subscription rights of shareholders provided for by law to the extent it deems such waiver, suppression or limitation advisable for any issue or issues of shares within the authorized share capital; and have waived any pre-emptive subscription rights provided for by law and related procedures. The validity period of such authorization will expire (unless renewed) on June 5, 2020. However, under the Company's articles of association, the Company's existing shareholders shall have a preferential right to subscribe for any new shares issued pursuant to the authorization granted to its board of directors, except in the following cases (in which cases no preferential subscription rights shall apply):

- any issuance of shares (including, without limitation, the direct issuance of shares or upon the exercise of options, rights convertible into shares, or similar instruments convertible or exchangeable into shares) against a contribution other than in cash; and
- any issuance of shares (including by way of free shares or at discount), up to an amount equal to 1.5% of the issued share capital of the Company, to directors, officers, agents or employees of the Company, its direct or indirect subsidiaries, or its affiliates, including, without limitation, the direct issuance of shares or upon the exercise of options, rights convertible into shares, or similar instruments convertible or exchangeable into shares, issued for the purpose of compensation or incentive for any such persons or in relation thereto (which the board of directors shall be authorized to issue upon such terms and conditions as it deems fit).

Amendment of the Company's articles of association requires the approval of shareholders at an extraordinary shareholders' meeting with a two-thirds majority vote of the shares represented at the meeting.

Dividends

Subject to applicable law, all shares (including shares underlying ADSs) are entitled to participate equally in dividends when, as and if declared by the shareholders at the annual general shareholders' meeting, out of funds legally available for such purposes.

Dividends may be lawfully declared and paid if the Company's profits and distributable reserves are sufficient under Luxembourg law. The amount and payment of dividends must be approved by a majority vote at a general shareholders' meeting, generally, but not necessarily, based on the recommendation of the Company's board of directors. Under Article 21 of the Company's articles of association, the board of directors has the power to distribute interim dividends out of profits, share premium or any other available reserves, in accordance with applicable law, but payment of such dividends must be finally approved by the Company's general shareholders' meeting.

As provided by Article 21 of the Company's articles of association, dividends or other distributions declared by the general meeting as well as interim dividends or other distributions declared by the board of directors will be distributed at the times and places determined by the board of directors. The Company will make any and all dividend payments and any other distributions in respect of shares registered in the name of any securities settlement system or operator of such a system or in the name of any financial institution or other professional depository of securities or any other depository, whether in cash, shares or other assets, only to such registered holder, or otherwise in accordance with such registered holder's instructions, and, as provided by Article 21 of the Company's articles of association, that payment shall release the Company from any and all obligations for such payment.

The Company conducts and will continue to conduct its operations through subsidiaries and, accordingly, its main source of cash to pay dividends, among other possible sources, will be the dividends received from its subsidiaries. See Item 3.D. "Key Information – Risk Factors – Risks Relating to the Structure of the Company – As a holding company, the Company's ability to pay cash dividends depends on the results of operations and financial condition of its subsidiaries and could be restricted by legal, contractual or other limitations".

Under Luxembourg law, claims for dividends will lapse in favor of the Company five years after the date such dividends are declared. However, the Company may elect to pay a declared dividend after such period. Declared and unpaid dividends held by the Company for the account of its shareholders do not bear interest.

Pursuant to Luxembourg law, at least 5% of our net profits per year must be allocated to the creation of a legal reserve until such reserve has reached an amount equal to 10% of our issued share capital. If the legal reserve later falls below the 10% threshold, at least 5% (or such lower amount required to reach the 10% threshold) of net profits again must be allocated toward the reserve. As of December 31, 2018, the Company's legal reserve represented 10% of its share capital. The legal reserve is not available for distribution.

Voting Rights; Shareholders' Meetings; Election of Directors

Each share entitles the holder thereof to one vote at the Company's general shareholders' meetings. Shareholder action by written consent is not permitted, but proxy voting is permitted. Notices of general shareholders' meetings are governed by the provisions of Luxembourg law. Pursuant to applicable Luxembourg law, the Company must give notice of the calling of any general shareholders' meeting at least 30 days prior to the date for which the meeting is being called, by publishing the relevant convening notice in the *Recueil Electronique des Sociétés et Associations* (Luxembourg's electronic official gazette) and in a leading newspaper having general circulation in Luxembourg and by issuing a press release informing of the calling of such meeting. In case shares are listed on a foreign regulated market, notices of general shareholders' meetings shall also comply with the requirements (including as to content and publicity) and follow the customary practices of such regulated market.

Pursuant to the Company's articles of association, for as long as the shares or other securities of the Company are listed on a regulated market within the European Union (as they currently are), and unless otherwise provided by applicable law, only shareholders holding shares as of midnight, central European time, on the day that is fourteen days prior to the day of any given general shareholders' meeting can attend and vote at such meeting. The board of directors may determine other conditions that must be satisfied by shareholders in order to participate in a general shareholders' meeting in person or by proxy, including with respect to deadlines for submitting supporting documentation to or for the Company.

No attendance quorum is required at ordinary general shareholders' meetings, and resolutions may be adopted by a simple majority vote of the shares validly cast at the meeting. Unless otherwise provided by applicable law, an extraordinary general shareholders' meeting may not validly deliberate on proposed amendments to the Company's articles of association unless a quorum of at least half of the shares is represented at the meeting. If a quorum is not reached at the first extraordinary shareholders' meeting, a second extraordinary shareholders' meeting may be convened in accordance with the Company's articles of association and applicable law and such second extraordinary general shareholders' meeting shall validly deliberate regardless of the number of shares represented. In both cases, the Luxembourg Company Law and the Company's articles of association require that any resolution of an extraordinary general shareholders' meeting as to amendments to the Company's articles of association be adopted by a two-thirds majority of the votes validly cast at the meeting. If a proposed resolution consists of changing the Company's nationality or of increasing the shareholders' commitments, the unanimous consent of all shareholders is required. Directors are elected at ordinary general shareholders' meetings.

Cumulative voting is not permitted. The Company's articles of association do not provide for staggered terms and directors are elected for a maximum of one year but may be reappointed or removed at any time, with or without cause, by the general shareholders' meeting, by resolution passed by a simple majority vote of the shares validly cast at the meeting. In the case of a vacancy occurring in the board of directors, the remaining directors may temporarily fill such vacancy with a temporary director appointed by resolution adopted with the affirmative vote of a majority of the remaining directors; provided that the next general shareholder's meeting shall be called upon to ratify such appointment. The term of any such temporary director shall expire at the end of the term of office of the replaced director.

The next Company's annual general shareholders' meeting, that will consider, among other things our Consolidated Financial Statements and Annual Accounts included in this report, will take place in the Company's registered office in Luxembourg, on Monday, May 6, 2019, at 9:30 A.M., Luxembourg time. The current articles of association provide that annual ordinary general shareholders' meetings must take place in Luxembourg within six months from the end of the previous financial year at the date, place and hour indicated in the convening notice. The rights of the shareholders attending the meetings are governed by the Luxembourg law of 24 May 2011 on the exercise of certain rights of shareholders in general meetings of listed companies.

Holders of shares deposited in fungible securities accounts have the same rights and obligations as holders of shares recorded in the Company's share register. However, in order to be able to participate in and vote at shareholders' meetings of the Company, the former must submit, prior to the relevant meeting, reasonably satisfactory evidence to the Company as to the number of shares held on the applicable record date for such meeting.

Holders of ADSs only have those rights that are expressly granted to them in the deposit agreement. See Item 3.D. "Key Information – Risk Factors – Risks Relating to shares and ADSs – Holders of ADSs may not be able to exercise, or may encounter difficulties in the exercise of, certain rights afforded to shareholders". Holders of record of our ADRs as of the relevant ADR holders' record date set for any given general shareholders' meeting are entitled to instruct the Depositary as to the exercise of the voting rights in respect of the shares underlying such holder's ADRs at such meeting. Holders of ADRs maintaining non-certificated positions must follow voting instructions given by their broker or custodian bank.

The notice to the annual general shareholders meeting to be held on May 6, 2019, and the Shareholder Meeting Brochure and Proxy Statement for meeting, describing the procedures for voting at the meeting applicable to holders of ADRs is available on the Company's website at www.tenaris.com/investors, and will be timely filed by the Company in a report of foreign issuer on Form 6-K.

Access to Corporate Records

Luxembourg law and the Company's articles of association do not generally provide for shareholder access to corporate records. Shareholders may inspect the annual accounts and auditors' reports at our registered office during the fifteen-day period prior to a general shareholders' meeting.

Appraisal Rights

In the event the Company's shareholders approve:

- the delisting of the shares from all stock exchanges where the shares are listed at that time,
- a merger in which the Company is not the surviving entity (unless the shares or other equity securities of such entity are listed on the New York or London stock exchanges),
- a sale, lease, exchange or other disposition of all or substantially all of the Company's assets,
- an amendment of our articles of association that has the effect of materially changing the Company's corporate purpose,
- the relocation of the Company's domicile outside of the Grand Duchy of Luxembourg, *or*
- amendments to the Company's articles of association that restrict the rights of the Company's shareholders;

Dissenting or absent shareholders have the right to have their shares repurchased by the Company at (i) the average market value of the shares over the 90 calendar days preceding the applicable shareholders' meeting or (ii) in the event that the shares are not traded on a regulated market, the amount that results from applying the proportion of the Company's equity that the shares being sold represent over the Company's net worth as of the date of the applicable shareholders' meeting.

Dissenting or absent shareholders must present their claim within one month following the date of the shareholders' meeting and supply the Company with evidence of their shareholding at the time of such meeting. The Company must (to the extent permitted by applicable laws and regulations and in compliance therewith) repurchase its shares within six months following the date of the shareholders' meeting.

If delisting from one or more, but not all, of the stock exchanges where the shares are listed is approved in the shareholders' meeting, only dissenting or absent shareholders with shares held through participants in the local clearing system for that market or markets can exercise this appraisal right if:

- they held the shares as of the date of the announcement by the Company of its intention to delist or as of the date of publication of the first convening notice for the general shareholders' meeting that approved the delisting; and
- they present their claim within one month following the date of the general shareholders' meeting and supply evidence of their shareholding as of the date of the Company's announcement or the publication of the first convening notice to the meeting.

In the event a shareholder exercises its appraisal rights, applicable Luxembourg law provisions shall apply.

Holders of ADSs may not be able to exercise, or may encounter difficulties in the exercise of, certain rights afforded to shareholders, including appraisal rights. See Item 3.D. "Key Information – Risk Factors – Risks Relating to shares and ADSs – Holders of ADSs may not be able to exercise, or may encounter difficulties in the exercise of, certain rights afforded to shareholders".

Distribution of Assets on Winding-Up

In the event of the Company's liquidation, dissolution or winding-up, the net assets remaining after allowing for the payment of all debts and expenses will be paid out to the holders of the shares in proportion to their respective holdings.

Transferability and Form

The Company's articles of association do not contain any redemption or sinking fund provisions, nor do they impose any restrictions on the transfer of shares. The shares are issuable in registered form only.

The ownership of registered shares is evidenced by the inscription of the name of the shareholder, the number of shares held by him and the amount paid on each share in the Company's share register. In addition, the Company's shares may be held through fungible securities accounts with financial institutions or other professional depositaries.

Shares held through fungible securities accounts may be transferred in accordance with customary procedures for the transfer of securities in book-entry form. Shares that are not held through fungible securities accounts may be transferred by a written statement of transfer signed by both the transferor and the transferee or their respective duly appointed attorney-in-fact and recorded in the Company's share register. The transfer of shares may also be made in accordance with the provisions of Article 1690 of the Luxembourg Civil Code. As evidence of the transfer of registered shares, the Company may accept any correspondence or other documents evidencing the agreement between transferor and transferee as to the transfer of registered shares.

Repurchase of Company shares

The Company may repurchase its own shares in the cases and subject to the conditions set by the Luxembourg Company Law and, in the case of acquisitions of shares or ADSs made through a stock exchange in which shares or ADSs are traded, with any applicable laws and regulations of such market. Please see Item 16.E. "Purchase of Equity Securities by the Issuer and Affiliated Purchasers" for more information on the authorization granted on May 6, 2015, by the annual general meeting of shareholders to the Company or its subsidiaries to repurchase shares of the Company, including shares represented by ADSs.

Limitation on Securities Ownership

There are no limitations currently imposed by Luxembourg law or the articles of association on the rights of the Company's non-resident or foreign shareholders to hold or vote their shares.

Change in Control

None of our outstanding securities has any special control rights. The Company's articles of association do not contain any provision that would have the effect of delaying, deferring or preventing a change in control of the Company and that would operate only with respect to a merger, acquisition or corporate restructuring involving the Company or any of its subsidiaries. In addition, the Company does not know of any significant agreements or other arrangements to which the Company is a party which take effect, alter or terminate in the event of a change of control of the Company. There are no agreements between the Company and members of its board of directors or employees providing for compensation if they resign or are made redundant without reason, or if their employment ceases following a change in control of the Company.

There are no rights associated with the shares other than those described above.

Ownership Disclosure

The Company's articles of association do not contain any provision requiring disclosure of share ownership. However, under the Luxembourg Transparency Law investors in the Company's securities should notify the Company and the Luxembourg securities commission on an ongoing basis whenever the proportion of voting rights held or controlled by any such investor reaches, exceeds or falls below any of the following thresholds: 5%, 10%, 15%, 20%, 25%, 33.33%, 50% and 66.66%. Failure to notify the Company and the Luxembourg securities commission of the reaching or crossing of any such thresholds may result in the suspension of the voting rights attaching to the shares exceeding the threshold which would have had to be notified.

C. Material Contracts

For a summary of any material contract entered into by us outside the ordinary course of business during the last two years, see Item 4.B. “Information on the Company – Business Overview”.

D. Exchange Controls

Many of the countries which are important markets for us or in which we have substantial assets have histories of substantial government intervention in currency markets, volatile exchange rates and government-imposed currency controls. These include Argentina, Brazil, Indonesia, Mexico, Nigeria and Romania.

For additional information regarding factors affecting our business, see Item 3.D. “Adverse economic or political conditions in the countries where we operate or sell our products and services may decrease our sales or disrupt our manufacturing operations, thereby adversely affecting our revenues, profitability and financial condition”.

E. Taxation

The following discussion of the material Luxembourg and U.S. federal income tax consequences of an investment in our ADSs is based upon laws and relevant interpretations thereof in effect as of the date of this annual report, all of which are subject to change. This discussion does not address all possible tax consequences relating to an investment in our ADSs, such as the tax consequences under U.S. state and local tax laws.

Grand Duchy of Luxembourg

This section describes the material Luxembourg tax consequences of owning or disposing of shares or ADSs.

It is not intended to be, nor should it be construed to be, legal or tax advice. You should, therefore, consult your own tax advisor regarding local or foreign tax consequences, including Luxembourg tax consequences of owning and disposing of shares or ADSs in your particular circumstances.

As used herein, a “Luxembourg individual” means an individual resident in Luxembourg who is subject to personal income tax (impôt sur le revenu) on his or her worldwide income from Luxembourg or foreign sources, and a “Luxembourg corporate holder” means a company (that is, a fully taxable collectivité within the meaning of Article 159 of the Luxembourg Income Tax Law) resident in Luxembourg subject to Luxembourg corporate income tax (impôt sur le revenu des collectivités) and Luxembourg municipal business tax (impôt commercial communal) on its worldwide income from Luxembourg or foreign sources. For the purposes of this summary, Luxembourg individuals and Luxembourg corporate holders are collectively referred to as “Luxembourg Holders”. A “non-Luxembourg Holder” means any investor in shares or ADSs of the Company other than a Luxembourg Holder.

Corporate Reorganization

Tenaris S.A. was established as a Luxembourg *société anonyme* holding under Luxembourg’s 1929 holding company regime. Until termination of such regime on December 31, 2010, holding companies incorporated under the 1929 regime (including the Company) were exempt from Luxembourg corporate income tax, Luxembourg municipal business tax, Luxembourg net wealth tax and Luxembourg withholding tax over dividends distributed to shareholders.

On January 1, 2011, the Company became an ordinary public limited liability company (*société anonyme*) and, effective as from that date, the Company is subject to all applicable Luxembourg taxes, (including, among others, Luxembourg corporate income tax on its worldwide income), and its dividend distributions will generally be subject to Luxembourg withholding tax. However, dividends received by the Company from subsidiaries, including among others, subsidiaries that are (i) subject to article 2 of the European Union Council Directive date November 30, 2011 concerning the common fiscal regime applicable to parent and subsidiary companies of different member states (2011/96/UE), as amended, or (ii) non-resident capital companies subject in their country of residence to a profit tax comparable with the Luxembourg corporate income tax will continue to be exempt from Luxembourg corporate income tax and Luxembourg municipal business tax under the Luxembourg domestic participation exemption pursuant to article 166 of the Luxembourg Income Tax Law.

In light of the impending termination of Luxembourg’s 1929 holding company regime, in the fourth quarter of 2010, the Company carried out a multi-step corporate reorganization, which included, among other transactions, the contribution of most of the Company’s assets and liabilities to a wholly-owned, newly-incorporated Luxembourg subsidiary and the restructuring of indirect holdings in certain subsidiaries. The first phase of the corporate reorganization was completed in December 2010, and resulted in a non-taxable revaluation of the accounting value (under Luxembourg GAAP) of the Company’s assets, in accordance with the applicable legal provisions. The second phase of the reorganization was completed in 2011.

Following the completion of the first phase of the corporate reorganization, and upon its conversion into an ordinary Luxembourg holding company, the Company, according to applicable law, recorded a special reserve in its tax balance sheet. Dividend distributions for the foreseeable future will be imputed to the special reserve and therefore should not be subject to Luxembourg withholding tax under current Luxembourg tax law.

Tax regime applicable to realized capital gains

Luxembourg Holders

Luxembourg resident individual holders

Capital gains realized by Luxembourg resident individuals who do not hold their shares or ADSs as part of a trade or business (i.e. capital gains on private assets) and who hold (together, directly or indirectly, with his or her spouse or civil partner and underage children) no more than 10% of the share capital of the Company, at any time during the five-year period preceding the disposition will only be taxable (at a progressive rate) if they are realized on a sale of shares or ADSs that takes place before their acquisition or within the first six months following their acquisition (i.e. speculative gain). After the six-months period, capital gains are not taxed unless the resident individual holds (together, directly or indirectly, with his or her spouse or civil partner and underage children) more than 10% of the share capital of the Company at any time during the five-year period preceding the disposition.

If such shares or ADSs are held as part of a commercial or industrial business, capital gains would be taxable in the same manner as income from such business.

Capital gains realized by Luxembourg resident individuals holding (alone or together with the resident's spouse or civil partner and underage children) directly or indirectly more than 10% of the capital of the Company at any time during the five years prior to the sale, (or if the Luxembourg resident individuals have received the shares for no consideration within the last five years and the former holder held at least 10% in the capital of the company at any moment during said five years) will be taxable at half of the individual's applicable global tax rate (as determined progressively), if a holding period of six months following their acquisition elapsed (21% for 2018). Within the six month period, progressive income tax rates apply (ranging from 0 to 42%¹ in 2018).

Luxembourg resident corporate holders

Capital gains, including currency exchange gains, realized upon the disposal of shares or ADSs by a fully taxable resident corporate holder will in principle be subject to Luxembourg corporate income tax and Luxembourg municipal business tax. The combined applicable rate (including an unemployment fund contribution) for a corporate holder established in Luxembourg-City is 26.01% for the fiscal year ending 2018. An exemption from such taxes may be available to the Luxembourg resident corporate holder pursuant to Article 1 of the Grand Ducal Decree dated December 21, 2001 as amended, in combination with article 166 of the Luxembourg Income Tax Law subject to the fulfillment of the conditions set forth therein.

Non-Luxembourg Holders

Non-Luxembourg individual holders

An individual who is a non-Luxembourg Holder of shares or ADSs (and who does not have a permanent establishment, a permanent representative or a fixed place of business in Luxembourg) will only be subject to Luxembourg taxation on capital gains arising upon disposal of such shares or ADSs if such holder has (alone or together with his or her spouse, civil partner and underage children) directly or indirectly held more than 10% of the capital of the Company at any time during the past five years preceding the disposal, and either (i) such non-Luxembourg Holder has been a resident of Luxembourg for tax purposes for at least 15 years and has become a non-resident within the last five years preceding the realization of the gain, subject to any applicable tax treaty, or (ii) the disposal of shares or ADSs occurs within six months from their acquisition (or prior to their actual acquisition), subject, however, to any applicable tax treaty.

Non-Luxembourg corporate holders

A corporate non-Luxembourg Holder (that is, a *collectivité* within the meaning of Article 159 of the Luxembourg Income Tax Law), which has a permanent establishment, a permanent representative or a fixed place of business in Luxembourg to which shares or ADSs are attributable, will bear Luxembourg corporate income tax and Luxembourg municipal business tax on a gain realized on a disposal of such shares or ADSs as set forth above for a Luxembourg corporate holder. However, capital gains, including currency exchange gains, realized on the sale of the shares or ADSs may benefit from the full exemption provided for by Article 1 of the Grand Ducal Decree dated December 21, 2001 as amended, in combination with Article 166 of the Luxembourg Income Tax Law subject in each case to fulfillment of the conditions set out therein.

¹ A 7% surcharge for the Employment Fund applies on the income tax due. The surcharge for the Employment Fund amounts to 9% for taxpayer in tax class 1 or 1a with taxable income exceeding EUR 150,000 (EUR 300,000 for taxpayer in tax class 2).

A corporate non-Luxembourg Holder, which has no permanent establishment, permanent representative or fixed place of business in Luxembourg to which the shares or ADSs are attributable, will bear non-resident capital gains tax on a gain realized on a disposal of such shares or ADSs under the same conditions applicable to an individual non-Luxembourg Holder, as set out above.

Tax regime applicable to distributions

Withholding tax

Distributions to holders are in principle subject to a 15% Luxembourg withholding tax computed on the gross amount distributed. The rate of the withholding tax may be reduced pursuant to double tax treaty existing between Luxembourg and the country of residence of the relevant holder, subject to the fulfillment of the conditions set forth therein. However, distributions imputed for tax purposes to the special reserve (please see above paragraph “corporate reorganization”) should be exempt from Luxembourg withholding tax under the current tax law.

Nevertheless, no withholding tax applies if the distribution is made to (as far as relevant in the case at hand):

- a Luxembourg resident corporate holder (that is, a fully taxable *collectivité* within the meaning of article 159 of the Luxembourg Income Tax Law),
- an undertaking of collective character which is resident of a Member State of the European Union and is referred to by article 2 of the European Union Council Directive of November 30, 2011 concerning the common fiscal regime applicable to parent and subsidiary companies of different member states (2011/96/UE) as amended, (subject to the general anti-abuse rule provided for by Council Directive 2015/121/EU as implemented into Luxembourg law),
- a capital company or a cooperative company resident in Norway, Iceland or Liechtenstein and subject to a tax comparable to corporate income tax as provided by the Luxembourg Income Tax Law,
- a capital company resident in Switzerland which is subject to corporate income tax in Switzerland without benefiting from an exemption,
- an undertaking with a collective character subject to a tax comparable to corporate income tax as provided by the Luxembourg Income Tax Law which is resident in a country that has concluded a double tax treaty with Luxembourg, *and*
- a Luxembourg permanent establishment of one of the above-mentioned categories, provided each time that at the date of payment, the holder holds or commits to hold directly (or through a company regarded as tax transparent from a Luxembourg tax perspective), during an uninterrupted period of at least twelve months, shares or ADSs representing at least 10% of the share capital of the Company or acquired for an acquisition price of at least EUR 1,200,000.

Luxembourg Holders

With the exception of Luxembourg corporate holders benefiting from the exemption referred to above, Luxembourg individual holders, and Luxembourg corporate holders fully subject to Luxembourg corporate tax, must include the distributions paid on the shares or ADSs in their taxable income, 50% of the amount of such dividends being exempt from tax. The applicable withholding tax can, under certain conditions, entitle the relevant Luxembourg Holder to a tax credit.

Non-Luxembourg Holders

Non-Luxembourg Holders of shares or ADSs and who do not have a permanent establishment, a permanent representative or a fixed place of business in Luxembourg to which the shares or ADSs would be attributable are not liable for any Luxembourg tax on dividends paid on the shares or ADSs, other than a potential withholding tax as described above.

Net wealth tax

Luxembourg Holders

Luxembourg net wealth tax will not be levied on a Luxembourg Holder with respect to the shares or ADSs held unless (i) the Luxembourg Holder is a legal entity subject to net wealth tax in Luxembourg; or (ii) the shares or ADSs are attributable to an enterprise or part thereof which is carried on through a permanent establishment, a fixed place of business or a permanent representative in Luxembourg.

Net wealth tax is levied annually at the rate of 0.5% for taxable net wealth not exceeding EUR 500,000,000 and at a rate of 0.05% for the net wealth exceeding EUR 500,000,000, of enterprises resident in Luxembourg, as determined for net wealth tax purposes. The shares or ADSs may be exempt from net wealth tax subject to the conditions set forth by Paragraph 60 of the Law of October 16, 1934 on the valuation of assets (*Bewertungsgesetz*), as amended.

A minimum net wealth tax charge applies as of January 1, 2016 for all corporate entities having their statutory seat or central administration in Luxembourg. Subject to certain conditions, the amount of minimum net wealth tax may vary.

Non-Luxembourg Holders

Luxembourg net wealth tax will not be levied on a non-Luxembourg Holder with respect to the shares or ADSs held unless the shares or ADSs are attributable to an enterprise or part thereof which is carried on through a permanent establishment or a permanent representative in Luxembourg. The shares or ADSs may be exempt from net wealth tax subject to the conditions set forth by Paragraph 60 of the Law of October 16, 1934 on the valuation of assets (*Bewertungsgesetz*), as amended.

Stamp and registration taxes

No registration tax or stamp duty will be payable by a holder of shares or ADSs in Luxembourg solely upon the disposal of shares or ADSs by sale or exchange.

Estate and gift taxes

No estate or inheritance tax is levied on the transfer of shares or ADSs upon the death of a holder of shares or ADSs in cases where the deceased was not a resident of Luxembourg for inheritance tax purposes and no gift tax is levied upon a gift of shares or ADSs if the gift is not passed before a Luxembourg notary or recorded in a deed registered in Luxembourg.

Where a holder of shares or ADSs is a resident of Luxembourg for tax purposes at the time of his death, the shares or ADSs are included in its taxable estate for inheritance tax or estate tax purposes.

United States federal income taxation

This section describes the material U.S. federal income tax consequences to a U.S. holder (as defined below) of owning shares or ADSs. It applies to you only if you hold your shares or ADSs as capital assets for U.S. federal income tax purposes. This discussion addresses only U.S. federal income taxation and does not discuss all of the tax consequences that may be relevant to you in light of your individual circumstances, including foreign, state or local tax consequences, estate and gift tax consequences, and tax consequences arising under the Medicare contribution tax on net investment income or the alternative minimum tax. This section does not apply to you if you are a member of a special class of holders subject to special rules, including:

- a dealer in securities,
- a bank,
- a trader in securities that elects to use a mark-to-market method of accounting for securities holdings,
- a tax-exempt organization,
- a person who invests through a pass-through entity, including a partnership,
- a life insurance company,

- a former citizen or long-term resident of the United States,
- a person that actually or constructively owns 10% or more of the combined voting power of our voting stock or of the total value of our stock (including ADSs),
- a person that holds shares or ADSs as part of a straddle or a hedging or conversion transaction for U.S. federal income tax purposes,
- a person that purchases or sells shares or ADSs as part of a wash sale for U.S. federal income tax purposes, or
- a person whose functional currency is not the U.S. dollar.

This section is based on the Internal Revenue Code of 1986, as amended, its legislative history, existing and proposed regulations, published rulings and court decisions, all as currently in effect, as well as on the Convention between the Government of the Grand Duchy of Luxembourg and the Government of the United States of America for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to Taxes on Income and Capital (the “Treaty”). These laws are subject to change, possibly on a retroactive basis. In addition, this section is based in part upon the assumption that each obligation in the ADS deposit agreement and any related agreement will be performed in accordance with its terms.

If an entity or arrangement that is treated as a partnership for U.S. federal income tax purposes holds the shares or ADSs, the U.S. federal income tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. Each such partner holding the shares or ADSs is urged to consult his, her or its own tax advisor.

You are a U.S. holder if you are a beneficial owner of shares or ADSs and you are, for U.S. federal income tax purposes:

- an individual citizen or resident of the United States,
- a domestic corporation (or an entity treated as a domestic corporation),
- an estate whose income is subject to U.S. federal income tax regardless of its source, or
- a trust if (i) a U.S. court can exercise primary supervision over the trust’s administration and one or more U.S. persons are authorized to control all substantial decisions of the trust or (ii) the trust has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

In general, and taking into account the earlier assumptions, for U.S. federal income tax purposes, if you hold ADRs evidencing ADSs, you will be treated as the owner of the shares represented by those ADSs. Exchanges of shares for ADRs, and ADRs for shares, generally will not be subject to U.S. federal income tax.

The tax treatment of your shares or ADSs will depend in part on whether or not we are classified as a passive foreign investment company (“PFIC”), for United States federal income tax purposes. Except as discussed below under “PFIC Rules”, this discussion assumes that we are not classified as a PFIC for United States federal income tax purposes.

You should consult your own tax advisor regarding the U.S. federal, state and local and other tax consequences of owning and disposing of shares or ADSs in your particular circumstances.

Taxation of distributions

Under the U.S. federal income tax laws, if you are a U.S. holder, the gross amount of any distribution we pay out of our current or accumulated earnings and profits (as determined for U.S. federal income tax purposes), other than certain pro-rata distributions of our shares, including the amount of any Luxembourg tax withheld, will be treated as a dividend that is subject to U.S. federal income taxation. If you are a non-corporate U.S. holder, dividends paid to you that constitute qualified dividend income will be taxable to you at the preferential rates applicable to long-term capital gains provided that you hold shares or ADSs for more than 60 days during the 121-day period beginning 60 days before the ex-dividend date and meet other holding period requirements. Dividends we pay with respect to the shares or ADSs generally will be qualified dividend income, provided that, in the year that you receive the dividend, we are eligible for the benefits of the Treaty. We believe that we are currently eligible for the benefits of the Treaty and therefore expect that dividends on the shares or ADSs will be qualified dividend income, but there can be no assurance that we will continue to be eligible for the benefits of the Treaty.

You must generally include any Luxembourg tax withheld from the dividend payment in this gross amount even though you do not in fact receive it. The dividend is taxable to you when you receive it, or, in the case of ADSs, when the depository receives the dividend, actually or constructively. The dividend will not be eligible for the dividends-received deduction generally allowed to U.S. corporations in respect of dividends received from other U.S. corporations. Distributions in excess of current and accumulated earnings and profits, as determined for U.S. federal income tax purposes, will be treated as a non-taxable return of capital to the extent of your basis in the shares or ADSs and thereafter as capital gain. However, we do not expect to calculate earnings and profits in accordance with U.S. federal income tax principles. Therefore, you should expect that a distribution will generally be treated as a dividend (as discussed above).

Dividends will generally be income from sources outside the United States and, generally, will be “passive” income for purposes of computing the foreign tax credit allowable to you.

Subject to certain limitations, the Luxembourg tax withheld in accordance with the Treaty and paid over to Luxembourg will be creditable or deductible against your U.S. federal income tax liability. Special rules apply in determining the foreign tax credit limitation with respect to dividends that are subject to the preferential tax rates. To the extent a refund of the tax withheld is available to you under Luxembourg law or under the Treaty, the amount of tax withheld that is refundable will not be eligible for credit against your U.S. federal income tax liability.

In certain circumstances, if you have held ADSs for less than a specified minimum period during which you are not protected from risk of loss, or are obligated to make payments related to the dividends, you will not be allowed a foreign tax credit for foreign taxes imposed on dividends that we pay.

The rules governing the foreign tax credit are complex. You are urged to consult your tax advisors regarding the availability of the foreign tax credit under your particular circumstances.

Taxation of capital gains

If you are a U.S. holder and you sell or otherwise dispose of your shares or ADSs, you will recognize capital gain or loss for U.S. federal income tax purposes equal to the difference between the U.S. dollar value of the amount that you realize and your tax basis, determined in U.S. dollars, in your shares or ADSs. Capital gain of a non-corporate U.S. holder is generally taxed at preferential rates where the property is held for more than one year. The gain or loss will generally be income or loss from sources within the United States for foreign tax credit limitation purposes. The deductibility of capital losses is subject to limitations.

Additional U.S. Federal Income Tax Considerations

PFIC rules. We believe that the shares or ADSs should not currently be treated as stock of a PFIC for U.S. federal income tax purposes, and we do not expect to become a PFIC in the foreseeable future. However, this conclusion is a factual determination that is made annually and thus may be subject to change. It is therefore possible that we could become a PFIC in a future taxable year. If we were to be treated as a PFIC, gain realized on the sale or other disposition of your shares or ADSs would in general not be treated as capital gain. Furthermore, if you are a U.S. holder, unless you are permitted to elect and you do elect to be taxed annually on a mark-to-market basis with respect to the shares or ADSs, upon sale or disposition of your shares or ADSs, you would generally be treated as if you had realized such gain and certain “excess distributions” ratably over your holding period for the shares or ADSs and would be taxed at the highest tax rate in effect for each such year to which the gain was allocated, together with an interest charge in respect of the tax attributable to each such year. With certain exceptions, your shares or ADSs will be treated as stock in a PFIC if we were a PFIC at any time during your holding period in your shares or ADSs. Dividends that you receive from us will not be eligible for the special tax rates applicable to qualified dividend income if we are a PFIC (or are treated as a PFIC with respect to you) either in the taxable year of the distribution or the preceding taxable year, but instead will be taxable at rates applicable to ordinary income and subject to the excess distribution regime described above.

F. Dividends and Paying Agents

Not applicable.

G. Statement by Experts

Not applicable.

H. Documents on Display

The Company is required to file annual and special reports and other information with the SEC. You may read and copy any documents filed by the Company at the SEC’s public reference room at 100 F Street, N.E., Room 1580 Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. The SEC also maintains an Internet website at <http://www.sec.gov> which contains reports and other information regarding registrants that file electronically with the SEC.

The Company is subject to the reporting requirements of the U.S. Securities Exchange Act of 1934, as amended, or the Exchange Act, as applied to foreign private issuers. Because the Company is a foreign private issuer, the SEC's rules do not require it to deliver proxy statements or to file quarterly reports. In addition, the Company's "insiders" are not subject to the SEC's rules that prohibit short-swing trading. We prepare quarterly and annual reports containing consolidated financial statements. The Company's annual consolidated financial statements are audited by an independent accounting firm. The Company submits quarterly financial information with the SEC on Form 6-K simultaneously with or promptly following the publication of that information in Luxembourg or any other jurisdiction in which the Company's securities are listed, and the Company files annual reports on Form 20-F within the time period required by the SEC, which is currently four months from the close of the fiscal year on December 31. These quarterly and annual reports may be reviewed at the SEC's public reference room. Reports and other information filed electronically with the SEC are also available at the SEC's Internet website.

As a foreign private issuer under the Securities Act, the Company is not subject to the proxy rules of Section 14 of the Exchange Act or the insider short-swing profit reporting requirements of Section 16 of the Exchange Act.

For the year ended December 31, 2018, the Company's Depository for issuing ADSs evidencing shares was Deutsche Bank Trust Company Americas. During the time there continues to be ADSs deposited with the Depository, the Company will furnish the Depository with:

- its annual reports, *and*
- copies of all notices of shareholders' meetings and other reports and communications that are made generally available to the Company's shareholders.

The Depository will, as provided in the deposit agreement and if requested in writing by the Company, arrange for the mailing of such reports, notices and communications to all record holders of ADSs, on a basis similar to that for holders of shares, or on such other basis as the Company may advise the Depository may be required by any applicable law or regulation or any requirement of any stock exchange to which the Company may be subject. Any reports and communications, including any proxy solicitation material, shall be furnished in English to the extent such materials are required to be translated into English pursuant to any regulations of the SEC.

Any record holder of ADSs may read the reports, notices, and other communications including any proxy solicitation material at the Depository's office located at 60 Wall Street, New York, New York 10005.

In addition, such reports, notices and other communications are made available to all shareholders and holders of ADSs on the Company's website at: www.tenaris.com/investors.

Whenever a reference is made in this annual report to a contract or other document, please be aware that such reference is not necessarily complete and that you should refer to the exhibits that are a part of this annual report for a copy of the contract or other document. You may review a copy of the annual report at the SEC's public reference room in Washington, D.C.

I. Subsidiary Information

Not applicable.

Item 11. Quantitative and Qualitative Disclosure about Market Risk

The multinational nature of our operations and customer base expose us to a variety of risks, including the effects of changes in foreign currency exchange rates, interest rates and commodity prices. In order to reduce the impact related to these exposures, management evaluates exposures on a consolidated basis to take advantage of natural exposure netting. For the residual exposures, we may enter into various derivative transactions in order to reduce potential adverse effects on our financial performance. Such derivative transactions are executed in accordance with internal policies and hedging practices. We do not enter into derivative financial instruments for trading or other speculative purposes, other than non-material investments in structured products.

The following information should be read together with section III, "Financial risk management" to our audited consolidated financial statements included elsewhere in this annual report.

Debt Structure

The following tables provide a breakdown of our debt instruments at December 31, 2018 and 2017 which included fixed and variable interest rate obligations, detailed by maturity date:

At December 31, 2018	Expected maturity date						Total ⁽¹⁾
	2019	2020	2021	2022	2023	Thereafter	
	(in millions of U.S. dollars)						
Non-current Debt							
Fixed rate	-	4	4	20	-	-	28
Floating rate	-	0	1	0	-	-	1
Current Debt							
Fixed rate	493	-	-	-	-	-	493
Floating rate	17	-	-	-	-	-	17
	<u>510</u>	<u>4</u>	<u>5</u>	<u>20</u>	<u>-</u>	<u>-</u>	<u>539</u>

At December 31, 2017	Expected maturity date						Total ⁽¹⁾
	2018	2019	2020	2021	2022	Thereafter	
	(in millions of U.S. dollars)						
Non-current Debt							
Fixed rate	-	5	4	4	20	0	33
Floating rate	-	0	0	1	0	-	2
Current Debt							
Fixed rate	913	-	-	-	-	-	913
Floating rate	18	-	-	-	-	-	18
	<u>931</u>	<u>5</u>	<u>4</u>	<u>5</u>	<u>20</u>	<u>0</u>	<u>966</u>

(1) As most borrowings are based on short-term fixed rates, or floating rates that approximate market rates, with interest rate resetting every 3 to 6 months, the fair value of the borrowings approximates its carrying amount and is not disclosed separately.

Our weighted average interest rates before tax (considering hedge accounting), amounted to 3.98% at December 31, 2018 and to 3.73% at December 31, 2017.

Our financial liabilities (other than trade payables and derivative financial instruments) consist mainly of bank loans. As of December 31, 2018, U.S. dollar denominated financial debt plus debt denominated in other currencies swapped to the U.S. dollar represented 97% of total financial debt.

For further information about our financial debt, please see note 18 "Borrowings" to our audited consolidated financial statements included in this annual report.

Interest Rate Risk

Fluctuations in market interest rates create a degree of risk by affecting the amount of our interest payments. At December 31, 2018, we had variable interest rate debt of \$19 million and fixed rate debt of \$520 million (\$493 million of the fixed rate debt are short-term).

Foreign Exchange Rate Risk

We manufacture and sell our products in a number of countries throughout the world and consequently we are exposed to foreign exchange rate risk. Since the Company's functional currency is the U.S. dollar, the purpose of our foreign currency hedging program is mainly to reduce the risk caused by changes in the exchange rates of other currencies against the U.S. dollar.

Most of our revenues are determined or influenced by the U.S. dollar. In addition, a relevant part of our costs correspond to steelmaking raw materials and steel coils and plates, also determined or influenced by the U.S. dollar. However, outside the United States, a portion of our expenses is incurred in foreign currencies (e.g. labor costs). Therefore, when the U.S. dollar weakens in relation to the foreign currencies of the countries where we manufacture our products, the U.S. dollar-reported expenses increase. Had the U.S. dollar average exchange rate been weaker by 5% against the currencies of the countries where we have labor costs, operating income would have decreased approximately by \$50 million in 2018, compared with \$51 million in 2017.

Our consolidated exposure to currency fluctuations is reviewed on a periodic basis. A number of hedging transactions are performed in order to achieve an efficient coverage in the absence of operative or natural hedges. Almost all of these transactions are forward exchange rate contracts.

Because certain subsidiaries have functional currencies other than the U.S. dollar, the results of hedging activities as reported in the income statement under IFRS may not reflect entirely management's assessment of its foreign exchange risk hedging needs. Also, intercompany balances between our subsidiaries may generate exchange rate results to the extent that their functional currencies differ.

The value of our financial assets and liabilities is subject to changes arising out of the variation of foreign currency exchange rates. The following table provides a breakdown of our main financial assets and liabilities (including foreign exchange derivative contracts) that impact our profit and loss as of December 31, 2018.

All amounts in millions of U.S. dollars

Currency Exposure	Functional currency	Long / (Short) Position
Argentine Peso	U.S. dollar	(187)
Euro	U.S. dollar	(175)

The main relevant exposures as of December 31, 2018 were to Argentine peso-denominated financial, trade, social and fiscal payables at our Argentine subsidiaries, for which the functional currency is the U.S. dollar, and Euro-denominated intercompany liabilities at certain subsidiaries for which functional currency is the U.S. dollar.

Foreign Currency Derivative Contracts

The net fair value of our foreign currency derivative contracts amounted to a liability of \$3 million at December 31, 2018 and \$32 million at December 31, 2017. For further detail on our foreign currency derivative contracts, please see note 23 "Derivative financial instruments – Foreign exchange derivative contracts and hedge accounting" to our audited consolidated financial statements included in this annual report.

Accounting for Derivative Financial Instruments and Hedging Activities

Derivative financial instruments are classified as financial assets (or liabilities) at fair value through profit or loss. Their fair value is calculated using standard pricing techniques and, as a general rule, we recognize the full amount related to the change in its fair value under financial results in the current period.

We designate for hedge accounting certain derivatives that hedge risks associated with recognized assets, liabilities or highly probable forecast transactions. These instruments are classified as cash flow hedges. The effective portion of the fair value of such derivatives is accumulated in a reserve account in equity. Amounts accumulated in equity are then recognized in the income statement in the same period when the offsetting losses and gains on the hedged item are recorded. The gain or loss relating to the ineffective portion is recognized immediately in the income statement. The fair value of our derivative financial instruments (assets or liabilities) continues to be reflected on the consolidated statement of financial position.

At December 31, 2018, the effective portion of designated cash flow hedges, included in other reserves in shareholders' equity amounted to a debit of \$0.9 million.

Concentration of credit risk

There is no significant concentration of credit from customers. No single customer comprised more than 10% of our net sales in 2018.

Our credit policies related to sales of products and services are designed to identify customers with acceptable credit history, and to allow us to use credit insurance, letters of credit and other instruments designed to minimize credit risk whenever deemed necessary. We maintain allowances for potential credit losses.

Commodity Price Sensitivity

We use commodities and raw materials that are subject to price volatility caused by supply conditions, political and economic variables and other unpredictable factors. As a consequence, we are exposed to risk resulting from fluctuations in the prices of these commodities and raw materials. Although we fix the prices of such raw materials and commodities for short-term periods, typically not in excess of one year, in general we do not hedge this risk.

Item 12. Description of Securities Other Than Equity Securities

A. Debt securities

Not applicable.

B. Warrants and Rights

Not applicable.

C. Other securities

Not applicable.

D. American Depositary Shares

According to our deposit agreement, holders of ADSs may have to pay to the Depositary, either directly or indirectly, fees or charges up to the amounts set forth below:

- A fee of \$5.00 (or less) per 100 ADSs (or portion of 100 ADSs) for: issuance of ADSs, including issuances resulting from a distribution of shares or rights or other property; and cancellation of ADSs for the purpose of withdrawal, including if the deposit agreement terminates.
- A fee of \$0.02 (or less) per ADSs for any cash distribution to ADS registered holders, excluding cash dividend.
- As necessary, charges for taxes and other governmental charges the Depositary or the custodian have to pay on any ADS or share underlying an ADS (e.g., share transfer taxes, stamp duty or withholding taxes).
- Registration or transfer fees for transfer and registration of shares on our share register to or from the name of the Depositary or its agent when you deposit or withdraw shares.
- Expenses of the Depositary for cable, telex and facsimile transmissions (when expressly provided in the deposit agreement); and conversion of foreign currency.
- A fee equivalent to the fee that would be payable if securities distributed to ADS holders had been shares and the shares had been deposited for issuance of ADSs for distribution of securities distributed to holders of deposited securities which are distributed by the Depositary to ADS registered holders.
- As necessary, charges for any costs incurred by the Depositary or its agents for servicing the deposited securities.

The Depositary collects its fees for delivery and surrender of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The Depositary collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The Depositary may collect its annual fee for depositary services by deduction from cash distributions or by directly billing investors or by charging the book-entry system accounts of participants acting for them. The Depositary may generally refuse to provide fee-attracting services until its fees for those services are paid.

Under the deposit agreement with the Depositary, the Depositary is not liable to holders of ADSs, except that the Depositary agrees to perform its obligations specifically set forth therein without gross negligence and willful misconduct.

Fees Payable by the Depository to the Company

Fees incurred in 2018

For the year ended December 31, 2018, the Company received no fees from Deutsche Bank Trust Company Americas, as the Company's Depository. During 2019, the Company and Deutsche Bank Trust Company Americas agreed on the final terms of a new five-year engagement effective as of March 13, 2018, which is expected to be executed by the parties promptly. No amendments to the existing ADS Deposit Agreement were made in connection with the new engagement letter.

Fees to be paid in the future

Pursuant to the final terms of the new agreement with Deutsche Bank Trust Company Americas, as the Company's Depository, the Company may, in the future, receive fees based on the Depository's revenues resulting from issuance and cancellation fees charged to ADR holders, net of custody and safe keeping costs, and the Depository will waive the cost of providing administrative and reporting services, and access charges in connection with the Company's ADR Program.

PART II

Item 13. Defaults, Dividend Arrearages and Delinquencies

None.

Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds

None.

Item 15. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we have evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act as of December 31, 2018).

Based on that evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of December 31, 2018, our disclosure controls and procedures are effective to ensure that information required to be disclosed by us in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and to ensure that such information is accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure. Our disclosure controls and procedures are designed to provide reasonable assurance of achieving their objectives. Our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures are effective at a reasonable assurance level.

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act). Our internal control over financial reporting was designed by management to provide reasonable assurance regarding the reliability of financial reporting and the preparation and fair presentation of its financial statements for external purposes in accordance with IFRS.

In addition, under the Company's articles of association, as supplemented by the audit committee's charter, the audit committee assists the board of directors in fulfilling its oversight responsibilities relating to the effectiveness of the Company's systems of internal control, risk management and internal audit over financial reporting. In particular, the audit committee is required to review the scope and results of the activities of the Company's external auditors and the internal audit function relating to the Company's internal control over financial reporting, and obtain reports on significant findings and recommendations; and is also required to assess, at least annually at the time the annual accounts are approved, the effectiveness of the Company's systems of internal control and risk management over financial reporting.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements or omissions. In addition, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

On a yearly basis, management conducts its assessment of the effectiveness of Tenaris’s internal control over financial reporting based on the framework in *Internal Control- Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

On February 19, 2019, management reported to the audit committee of the Company’s board of directors that management had conducted its assessment of the effectiveness of the Company’s internal controls over financial reporting for the year ended December 31, 2018, and that, based on management’s evaluation and considering the inherent limitations to the effectiveness of any internal control system, management had concluded that the Company’s internal controls over financial reporting were effective as of December 31, 2018.

The effectiveness of Tenaris’s internal control over financial reporting as of December 31, 2018 has been audited by PwC Luxembourg, as stated in their report included herein. See “—Report of Independent Registered Public Accounting Firm”.

Attestation Report of Registered Public Accounting Firm

See page F-1 of the audited consolidated financial statements included in this report.

Change in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting during 2018 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 16A. Audit Committee Financial Expert

The Company’s board of directors has determined that none of the audit committee members meets the attributes defined in Item 16A of Form 20-F for an “audit committee financial expert”. However, applicable Luxembourg law requires that at least one of the audit committee members have competence in accounting or auditing matters, and the Company’s board of directors has determined that Ms. Mónica Tiuba has the requisite competence. In addition the audit committee as a whole has sufficient relevant knowledge of the business and financial experience to properly discharge its functions. The audit committee has the authority, from time to time and as it deems necessary, to engage persons that meet all of the attributes of an “audit committee financial expert” as consultants.

Item 16B. Code of Ethics

The Company has adopted a general code of conduct incorporating guidelines and standards of integrity and transparency applicable to all of our directors, officers and employees. As far as the nature of each relation permits, all principles detailed in the code of conduct also apply to relations with our contractors, subcontractors, suppliers and associated persons. In addition, we have adopted a code of ethics for financial officers which applies specifically to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions and is intended to supplement the Company’s code of conduct.

The text of our code of conduct and code of ethics is posted on our Internet website at: <http://ir.tenaris.com/codeOfConduct.cfm>

Item 16C. Principal Accountant Fees and Services

Fees paid to the Company’s Principal Accountant

In 2018 and 2017, PwC served as the principal external auditor for the Company. Fees for the years ended December 31, 2018 and 2017 are detailed below.

<i>Thousands of U.S. dollars</i>	For the year ended December 31,	
	2018	2017
Audit Fees	3,841	3,995
Audit-Related Fees	43	88
Tax Fees	-	23
All Other Fees	7	30
Total	3,891	4,136

Audit Fees

Audit fees were paid for professional services rendered by the auditors for the audit of the consolidated financial statements and internal control over financial reporting of the Company, the statutory financial statements of the Company and its subsidiaries, and any other audit services required for the U.S. Securities and Exchange Commission or other regulatory filings.

Audit-Related Fees

Audit-related fees are typically services that are reasonably related to the performance of the audit or review of the consolidated financial statements of the Company and the statutory financial statements of the Company and its subsidiaries and are not reported under the audit fee item above. This item includes fees for attestation services on financial information of the Company and its subsidiaries included in their annual reports that are filed with their respective regulators.

Tax Fees

Fees paid for tax compliance professional services.

All Other Fees

Fees paid for the support in the development of training courses.

Audit Committee's Pre-approval Policies and Procedures

The Company's audit committee is responsible for, among other things, the oversight of the Company's external auditors. The audit committee has adopted in its charter a policy of pre-approval of audit and permissible non-audit services provided by its external auditors.

Under the policy, the audit committee makes its recommendations to the shareholders' meeting concerning the continuing appointment or termination of the Company's external auditors. On a yearly basis, the audit committee reviews together with management and the external auditor, the audit plan, audit related services and other non-audit services and approves, *ad-referendum* of the general shareholders' meeting, the related fees. The general shareholders' meeting normally approves such audit fees and authorizes the audit committee to approve any increase or reallocation of such audit fees as may be necessary, appropriate or desirable under the circumstances. The audit committee delegates to its Chairman the authority to consider and approve, on behalf of the audit committee, additional non-audit services that were not recognized at the time of engagement, which must be reported to the other members of the audit committee at its next meeting. No services outside the scope of the audit committee's approval can be undertaken by the external auditor.

The audit committee did not approve any fees pursuant to the *de minimis* exception to the pre-approval requirement provided by paragraph (c)(7)(i)(C) of Rule 2-01 of Regulation S-X during 2018 or 2017.

Item 16D. Exemptions from the Listing Standards for Audit Committees

Not applicable.

Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers

In 2018, there were no purchases of any class of registered equity securities of the Company by the Company or, to our knowledge, any "affiliated purchaser" (as such term is defined in Rule 10b-18(a)(3) under the Exchange Act).

On May 6, 2015, at the Company's general meeting of shareholders, the Company's shareholders authorized the Company and the Company's subsidiaries to acquire, from time to time, shares, including shares represented by ADSs, on the following terms and conditions:

- Purchases, acquisitions or receipts of securities may be made in one or more transactions as the board of directors or the board of directors or other governing bodies of the relevant entity, as applicable, considers advisable.
- The maximum number of securities acquired pursuant to this authorization may not exceed 10% of the Company's issued and outstanding shares or, in the case of acquisitions made through a stock exchange in which the securities are traded, such lower amount as may not be exceeded pursuant to any applicable laws or regulations of such market. The number of securities acquired as a block may amount to the maximum permitted amount of purchases.

The purchase price per share to be paid in cash may not exceed 125% (excluding transaction costs and expenses), nor may it be lower than 75% (excluding transaction costs and expenses), in each case of the average of the closing prices of the Company's securities in the stock exchange through which the Company's securities are acquired, during the five trading days in which transactions in the securities were recorded in such stock exchange preceding (but excluding) the day on which the Company's securities are acquired. For over-the-counter or off-market transactions, the purchase price per ADS to be paid in cash may not exceed 125% (excluding transaction costs and expenses), nor may it be lower than 75% (excluding transaction costs and expenses), in each case of the average of the closing prices of the ADSs in the New York Stock Exchange during the five trading days in which transactions in ADSs were recorded in the New York Stock Exchange preceding (but excluding) the day on which the ADSs are acquired; and, in the case of acquisition of securities, other than in the form of ADSs, such maximum and minimum per security purchase prices shall be equal to the prices that would have applied in case of an ADS purchase pursuant to the formula above divided by the number of underlying shares represented by an ADS at the time of the relevant purchase. Compliance with maximum and minimum purchase price requirements in any and all acquisitions made pursuant to this authorization (including, without limitation, acquisitions carried out through the use of derivative financial instruments or option strategies) shall be determined on and as of the date on which the relevant transaction is entered into, irrespective of the date on which the transaction is to be settled.

The above maximum and minimum purchase prices shall, in the event of a change in the par value of the shares, a capital increase by means of a capitalization of reserves, a distribution of shares under compensation or similar programs, a stock split or reverse stock split, a distribution of reserves or any other assets, the redemption of capital, or any other transaction impacting on the Company's equity, be adapted automatically, so that the impact of any such transaction on the value of the shares shall be reflected.

The acquisitions of securities may not have the effect of reducing the Company's net assets below the sum of the Company's capital stock plus its undistributable reserves.

Only fully paid-up securities may be acquired pursuant to this authorization.

The acquisitions of securities may be carried out for any purpose, as may be permitted under applicable laws and regulations, including without limitation to reduce the share capital of the Company, to offer such shares to third parties in the context of corporate mergers or acquisitions of other entities or participating interests therein, for distribution to the Company's or the Company's subsidiaries' directors, officers or employees or to meet obligations arising from convertible debt instruments.

The acquisitions of securities may be carried out by any and all means, as may be permitted under applicable laws and regulations, including through any stock exchange in which the Company's securities are traded, through public offers to all shareholders of the Company to buy securities, through the use of derivative financial instruments or option strategies, or in over-the-counter or off-market transactions or in any other manner.

The acquisitions of securities may be carried out at any time, during the duration of the authorization, including during a tender offer period, as may be permitted under applicable laws and regulations.

The authorization granted to acquire securities shall be valid for such maximum period as may be provided for under applicable Luxembourg law as in effect from time to time (such maximum period being, as of to date, 5 years).

The acquisitions of securities shall be made at such times and on such other terms and conditions as may be determined by the board of directors or the board of directors or other governing bodies of the relevant entity, provided that, any such purchase shall comply with Article 430-15 et. seq. of the Luxembourg Company Law (or any successor law) and, in the case of acquisitions of securities made through a stock exchange in which the Company's securities are traded, with any applicable laws and regulations of such market.

In the future, we may, on the terms and subject to the conditions above referred, initiate a stock repurchase or similar program or engage in other transactions pursuant to which we would repurchase, directly or indirectly, the Company's securities. In addition, we or our subsidiaries may enter into transactions involving sales or purchases of derivatives or other instruments, either settled in cash or through physical delivery of securities, with returns linked to the Company's securities. The timing and amount of repurchase transactions under any such program, or sales or purchases of derivatives or other instruments, would depend on market conditions as well as other corporate and regulatory considerations.

Item 16F. Change in Registrant’s Certifying Accountant

Not applicable

Item 16G. Corporate Governance

The Company’s corporate governance practices are governed by Luxembourg Law (including, among others, the Luxembourg Company Law, the law of January 11, 2008, implementing the European Union’s transparency directive, the law of May 24, 2011, implementing the European Union’s directive on the exercise of certain shareholders’ rights in general meetings of listed companies and the Audit Reform Law) and the Company’s articles of association. As a Luxembourg company listed on the New York Stock Exchange (the NYSE), the Bolsa Mexicana de Valores, S.A. de C.V. (the Mexican Stock Exchange), the Bolsa de Comercio de Buenos Aires (the Buenos Aires Stock Exchange) and Borsa Italiana S.p.A. (the Italian Stock Exchange), the Company is required to comply with some, but not all, of the corporate governance standards of these exchanges. The Company, however, believes that the Company’s corporate governance practices meet, in all material respects, the corporate governance standards that are generally required for controlled companies by all of the exchanges on which the Company’s securities trade.

The following is a summary of the significant ways that the Company’s corporate governance practices differ from the corporate governance standards required for controlled companies by the NYSE. The Company’s corporate governance practices may differ in non-material ways from the standards required by the NYSE that are not detailed here.

Non-management directors’ meetings

Under NYSE standards, non-management directors must meet at regularly scheduled executive sessions without management present and, if such group includes directors who are not independent, a meeting should be scheduled once per year including only independent directors. Neither Luxembourg law nor the Company’s articles of association require the holding of such meetings and the Company does not have a set policy for these meetings. For additional information on board meetings, see Item 6.A. “Directors, Senior Management and Employees – Directors and Senior Management – Board of Directors”.

In addition, NYSE-listed companies are required to provide a method for interested parties to communicate directly with the non-management directors as a group. While the Company does not have such a method, it has set up a compliance line for investors and other interested parties to communicate their concerns directly to the members of our audit committee, all of whom are non-management, independent directors.

Audit committee

Under NYSE standards, listed U.S. companies are required to have an audit committee composed of independent directors that satisfies the requirements of Rule 10A-3 promulgated under the Exchange Act. Pursuant to the Company’s articles of association, as supplemented by the audit committee’s charter, for as long as our shares are listed on at least one regulated market, the Company must have an audit committee composed of at least three members, the majority of whom must qualify as independent directors (as defined in the articles of association), provided, however, that the composition and membership of the audit committee shall satisfy such requirements as are applicable to, and mandatory for, audit committees of issuers such as the Company under any law, rule or regulation applicable to the Company (including, without limitation, the applicable laws, rules and regulations of such regulated market or markets). The Company’s audit committee, which currently consists of four members, complies with such requirements. In accordance with NYSE standards, the Company has an audit committee entirely composed of independent directors for purposes of the U.S. Securities Exchange Act Rule 10A-3(b)(1). For more information on the Company’s audit committee see Item 6.C. “Directors, Senior Management and Employees– Board Practices – Audit Committee”.

Under NYSE standards, all audit committee members of listed U.S. companies are required to be financially literate or must acquire such financial knowledge within a reasonable period and at least one of its members shall have experience in accounting or financial administration. In addition, if a member of the audit committee is simultaneously a member of the audit committee of more than three public companies, and the listed company does not limit the number of audit committees on which its members may serve, then in each case the board must determine whether the simultaneous service would prevent such member from effectively serving on the listed company’s audit committee and shall publicly disclose its decision. Luxembourg law provisions on audit committee membership require only that at least one member of the audit committee have competence in accounting or auditing matters. The board of directors of the Company has determined that Ms. Tiuba is competent in accounting or auditing matters. In addition the membership of the audit committee as a whole has sufficient relevant knowledge of the business and financial experience to properly discharge its functions. The audit committee has the authority, from time to time and as it deems necessary, to engage persons that meet all of the attributes of a financial expert as consultants. See Item 16.A. “Audit Committee Financial Expert”.

Standards for evaluating director independence

Under the NYSE standards, the board is required, on a case by case basis, to express an opinion with regard to the independence or lack of independence of each individual director. Neither Luxembourg law nor the Company's articles of association requires the board to express such an opinion. In addition, the definition of "independent" under the NYSE rules differ in some non-material respects from the definition contained in the Company's articles of association. For information on our independent directors and the definition of "independent" under our articles of association see Item 6.A. "Directors, Senior Management and Employees – Directors and Senior Management – Board of Directors" and Item 6.C. "Directors, Senior Management and Employees – Board Practices – Audit Committee".

Audit committee responsibilities

Pursuant to the Company's articles of association, the audit committee shall assist the board of directors in fulfilling its oversight responsibilities relating to the integrity of its consolidated financial statements, the effectiveness of its systems of internal control, risk management and internal audit over financial reporting and the independence and performance of the external auditors. The audit committee is required to review material transactions (as defined by our articles of association) between the Company or its subsidiaries with related parties and also perform the other duties entrusted to it by the board. The NYSE requires certain matters to be set forth in the audit committee charter of U.S. listed companies.

The Company's audit committee charter provides for many of the responsibilities that are expected from such bodies under the NYSE standard and in accordance with applicable Luxembourg law, including the Audit Reform Law; however, due to the Company's equity structure and holding company nature, the charter does not contain all such responsibilities, including provisions related to procedures for the receipt and treatment of complaints (although the Company has established such procedures), funding for payment of administrative expenses and compensation to advisors (although the audit committee has the authority to engage outside advisors), setting hiring policies for employees or former employees of external auditors, and an annual performance evaluation of the audit committee. For more information on our audit committee see Item 6.C. "Directors, Senior Management and Employees – Board Practices – Audit Committee".

Shareholder voting on equity compensation plans

Under NYSE standards, shareholders must be given the opportunity to vote on equity-compensation plans and material revisions thereto, except for employment inducement awards, certain grants, plans and amendments in the context of mergers and acquisitions, and certain specific types of plans. The Company does not currently offer equity based compensation to our directors, senior management or employees, and therefore does not have a policy on this matter. For more information on directors' compensation see Item 6.B. "Directors, Senior Management and Employees – Compensation".

Disclosure of corporate governance guidelines

NYSE-listed companies must adopt and disclose corporate governance guidelines. Neither Luxembourg law nor the Company's articles of association require the adoption or disclosure of corporate governance guidelines. The Company's board of directors follows corporate governance guidelines consistent with its equity structure and holding company nature, but the Company has not codified them and therefore does not disclose them on its website.

Code of business conduct and ethics

Under NYSE standards, listed companies must adopt and disclose a code of business conduct and ethics for directors, officers and employees, and promptly disclose any waivers of the code for directors or executive officers. Neither Luxembourg law nor the Company's articles of association require the adoption or disclosure of such a code of conduct. The Company, however, has adopted a code of conduct that applies to all directors, officers and employees that is posted on its website and which complies with the NYSE's requirements, except that it does not require the disclosure of waivers of the code for directors and officers. In addition, it has adopted a supplementary code of ethics for senior financial officers, which is also posted on our website. See Item 16.B. "Code of Ethics".

Chief Executive Officer certification

A Chief Executive Officer of a U.S. company listed on the NYSE must annually certify that he or she is not aware of any violation by the company of NYSE corporate governance standards. In accordance with NYSE rules applicable to foreign private issuers, the Company's chief executive officer is not required to provide the NYSE with this annual compliance certification. However, in accordance with NYSE rules applicable to all listed companies, the Company's Chief Executive Officer must promptly notify the NYSE in writing after any of our executive officers becomes aware of any noncompliance with any applicable provision of the NYSE's corporate governance standards. In addition, the Company must submit an executed written affirmation annually and an interim written affirmation upon the occurrence of any of the events listed in the foreign private issuer interim written affirmation form by the NYSE.

Item 16H. Mine Safety Disclosure

Not applicable.

PART III**Item 17. Financial Statements**

We have responded to Item 18 in lieu of responding to this Item.

Item 18. Financial Statements

See pages F-1 through F-57 of this annual report.

Item 19. Exhibits

Exhibit Number	Description
1.1	Updated and Consolidated Articles of Association of Tenaris S.A., dated as of May 2, 2018
2.1	Amended and Restated Deposit Agreement entered into between Tenaris S.A. and Deutsche Bank Trust Company Americas *
7.1	Statement Explaining Calculation of Ratios
7.2	Statement Explaining Alternative Performance Measures
8.1	List of Subsidiaries of Tenaris S.A.
12.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
12.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
13.1	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
13.2	Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

* The Amended and Restated Deposit Agreement is incorporated by reference to the Registration Statement on Form F-6 filed by Tenaris S.A. on February 25, 2013 (File No. 333-186825).

TENARIS S.A.

**CONSOLIDATED
FINANCIAL STATEMENTS**

For the years ended December 31, 2018, 2017 and 2016

29, Avenue de la Porte-Neuve – 3rd Floor.
L – 2227 Luxembourg
R.C.S. Luxembourg: B 85 203



Report of Independent Registered Public Accounting Firm

To the Board of Directors and shareholders of
Tenaris S.A.

Opinions on the Consolidated Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated statements of financial position of Tenaris S.A. and its subsidiaries (the “Company”) as of December 31, 2018 and 2017, and the related consolidated statements of income, comprehensive income, changes in equity and cash flows for each of the three years in the period ended December 31, 2018, including the related notes (collectively referred to as the “consolidated financial statements”). We also have audited the Company’s internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018 in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board and in conformity with International Financial Reporting Standards as adopted by the European Union. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company’s management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management’s Report on Internal Control over Financial Reporting appearing under Item 15. Our responsibility is to express opinions on the Company’s consolidated financial statements and on the Company’s internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

*PricewaterhouseCoopers, Société coopérative, 2 rue Gerhard Mercator, B.P. 1443, L-1014 Luxembourg
T : +352 494848 1, F : +352 494848 2900, www.pwc.lu*

*Cabinet de révision agréé. Expert-comptable (autorisation gouvernementale n°10028256)
R.C.S. Luxembourg B 65 477 - TVA LU25482518*



Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

PricewaterhouseCoopers, Société coopérative
Represented by

Luxembourg, April 3, 2019

/s/ Fabrice Goffin
Fabrice Goffin

We have served as the Company's auditor since 2011.

CONSOLIDATED INCOME STATEMENT

(all amounts in thousands of US dollars, unless otherwise stated)

	Notes	Year ended December 31,		
		2018	2017	2016
Continuing operations				
Net sales	1	7,658,588	5,288,504	4,293,592
Cost of sales	2	(5,279,300)	(3,685,057)	(3,165,684)
Gross profit		2,379,288	1,603,447	1,127,908
Selling, general and administrative expenses	3	(1,509,976)	(1,270,016)	(1,196,929)
Other operating income	5	15,059	10,516	21,127
Other operating expenses	5	(12,558)	(9,359)	(11,163)
Operating income (loss)		871,813	334,588	(59,057)
Finance income	6	39,856	47,605	66,204
Finance cost	6	(36,942)	(27,072)	(22,329)
Other financial results	6	34,386	(43,550)	(21,921)
Income (loss) before equity in earnings of non-consolidated companies and income tax		909,113	311,571	(37,103)
Equity in earnings of non-consolidated companies	11	193,994	116,140	71,533
Income before income tax		1,103,107	427,711	34,430
Income tax	7	(229,207)	17,136	(17,102)
Income for continuing operations		873,900	444,847	17,328
Discontinued operations				
Result for discontinued operations	27	-	91,542	41,411
Income for the year		873,900	536,389	58,739
Attributable to:				
Owners of the parent		876,063	544,737	55,298
Non-controlling interests		(2,163)	(8,348)	3,441
		873,900	536,389	58,739
Earnings per share attributable to the owners of the parent during the year:				
Weighted average number of ordinary shares (thousands)		1,180,537	1,180,537	1,180,537
Continuing operations				
Basic and diluted earnings per share (U.S. dollars per share)		0.74	0.38	0.01
Basic and diluted earnings per ADS (U.S. dollars per ADS) (*)		1.48	0.77	0.02
Continuing and discontinued operations				
Basic and diluted earnings per share (U.S. dollars per share)		0.74	0.46	0.05
Basic and diluted earnings per ADS (U.S. dollars per ADS) (*)		1.48	0.92	0.09

(*) Each ADS equals two shares.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

(all amounts in thousands of U.S. dollars)

	Year ended December 31,		
	2018	2017	2016
Income for the year	873,900	536,389	58,739
Items that may be subsequently reclassified to profit or loss:			
Currency translation adjustment	(96,916)	151,762	37,187
Change in value of cash flow hedges and instruments at fair value	(6,701)	4,502	(7,525)
Income tax relating to components of other comprehensive income	34	23	(23)
From participation in non consolidated companies:			
- Currency translation adjustment (*)	1,848	(9,548)	3,473
- Changes in the fair value of derivatives held as cash flow hedges and others	(132)	512	421
	(101,867)	147,251	33,533
Items that will not be reclassified to profit or loss:			
Remeasurements of post employment benefit obligations	7,963	(8,635)	(230)
Income tax on items that will not be reclassified	(1,932)	1,338	(1,760)
Remeasurements of post employment benefit obligations of non-consolidated companies	(3,855)	(376)	(5,475)
	2,176	(7,673)	(7,465)
Other comprehensive (loss) income for the year, net of tax	(99,691)	139,578	26,068
Total comprehensive income for the year	774,209	675,967	84,807
Attributable to:			
Owners of the parent	776,713	683,531	81,702
Non-controlling interests	(2,504)	(7,564)	3,105
	774,209	675,967	84,807
Total comprehensive income for the year attributable to Owners of the parent arises from			
Continuing operations	776,713	591,989	40,291
Discontinued operations	-	91,542	41,411
	776,713	683,531	81,702

(*) Ternaris recognized its share over the effects on the adoption of IAS 29, "Financial Reporting in Hyperinflationary Economies" by Ternium (\$49.3 million) in other comprehensive income as a currency translation adjustment.

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

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

(all amounts in thousands of U.S. dollars)

	Notes	At December 31, 2018		At December 31, 2017	
ASSETS					
Non-current assets					
Property, plant and equipment, net	9	6,063,908		6,229,143	
Intangible assets, net	10	1,465,965		1,660,859	
Investments in non-consolidated companies	11	805,568		640,294	
Other equity investments	30	-		21,572	
Other investments	17	118,155		128,335	
Deferred tax assets	19	181,606		153,532	
Receivables, net	12	151,905	8,787,107	183,329	9,017,064
Current assets					
Inventories, net	13	2,524,341		2,368,304	
Receivables and prepayments, net	14	155,885		135,699	
Current tax assets	15	121,332		132,334	
Trade receivables, net	16	1,737,366		1,214,060	
Derivative financial instruments	23	9,173		8,230	
Other investments	17	487,734		1,192,306	
Cash and cash equivalents	17	428,361	5,464,192	330,221	5,381,154
Total assets			14,251,299		14,398,218
EQUITY					
Capital and reserves attributable to owners of the parent			11,782,882		11,482,185
Non-controlling interests			92,610		98,785
Total equity			11,875,492		11,580,970
LIABILITIES					
Non-current liabilities					
Borrowings	18	29,187		34,645	
Deferred tax liabilities	19	379,039		457,970	
Other liabilities	20 (i)	213,129		217,296	
Provisions	21 (ii)	36,089	657,444	36,438	746,349
Current liabilities					
Borrowings	18	509,820		931,214	
Derivative financial instruments	23	11,978		39,799	
Current tax liabilities	15	250,233		102,405	
Other liabilities	20 (ii)	165,693		157,705	
Provisions	22 (ii)	24,283		32,330	
Customer advances		62,683		56,707	
Trade payables		693,673	1,718,363	750,739	2,070,899
Total liabilities			2,375,807		2,817,248
Total equity and liabilities			14,251,299		14,398,218

Contingencies, commitments and restrictions on the distribution of profits are disclosed in Note 24.

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

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

(all amounts in thousands of U.S. dollars)

	Attributable to owners of the parent						Total	Non-controlling interests	Total
	Share Capital (1)	Legal Reserves	Share Premium	Currency Translation Adjustment	Other Reserves (2)	Retained Earnings (3)			
Balance at December 31, 2017	1,180,537	118,054	609,733	(824,423)	(320,569)	10,718,853	11,482,185	98,785	11,580,970
Changes in accounting policies (Section II AP)	-	-	-	-	2,786	5,220	8,006	12	8,018
Balance at December 31, 2017 restated	1,180,537	118,054	609,733	(824,423)	(317,783)	10,724,073	11,490,191	98,797	11,588,988
Income (loss) for the year	-	-	-	-	-	876,063	876,063	(2,163)	873,900
Currency translation adjustment	-	-	-	(96,673)	-	-	(96,673)	(243)	(96,916)
Remeasurements of post employment benefit obligations, net of taxes	-	-	-	-	6,135	-	6,135	(104)	6,031
Change in value of instruments at fair value through other comprehensive income and cash flow hedges, net of taxes	-	-	-	-	(6,673)	-	(6,673)	6	(6,667)
From other comprehensive income of non-consolidated companies	-	-	-	1,848	(3,987)	-	(2,139)	-	(2,139)
Other comprehensive loss for the year	-	-	-	(94,825)	(4,525)	-	(99,350)	(341)	(99,691)
Total comprehensive income (loss) for the year	-	-	-	(94,825)	(4,525)	876,063	776,713	(2,504)	774,209
Acquisition and other changes in non-controlling interests	-	-	-	-	(2)	-	(2)	(22)	(24)
Dividends paid in cash	-	-	-	-	-	(484,020)	(484,020)	(3,661)	(487,681)
Balance at December 31, 2018	1,180,537	118,054	609,733	(919,248)	(322,310)	11,116,116	11,782,882	92,610	11,875,492

(1) The Company has an authorized share capital of a single class of 2.5 billion shares having a nominal value of \$1.00 per share. As of December 31, 2018 there were 1,180,536,830 shares issued. All issued shares are fully paid.

(2) Other reserves include mainly the result of transactions with non-controlling interest that do not result in a loss of control, the remeasurement of post-employment benefit obligations, the changes in value of cash flow hedges and in financial instruments measured at fair value through other comprehensive income.

(3) The Distributable Reserve and Retained Earnings calculated according to Luxembourg Law are disclosed in Note 24.

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

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (CONT.)

(all amounts in thousands of U.S. dollars)

	Attributable to owners of the parent						Total	Non-controlling interests	Total
	Share Capital (1)	Legal Reserves	Share Premium	Currency Translation Adjustment	Other Reserves (2)	Retained Earnings			
Balance at December 31, 2016	1,180,537	118,054	609,733	(965,955)	(313,088)	10,658,136	11,287,417	125,655	11,413,072
Income (loss) for the year	-	-	-	-	-	544,737	544,737	(8,348)	536,389
Currency translation adjustment	-	-	-	151,080	-	-	151,080	682	151,762
Remeasurements of post employment benefit obligations, net of taxes	-	-	-	-	(7,423)	-	(7,423)	126	(7,297)
Change in value of available for sale financial instruments and cash flow hedges net of tax	-	-	-	-	4,549	-	4,549	(24)	4,525
From other comprehensive income of non-consolidated companies	-	-	-	(9,548)	136	-	(9,412)	-	(9,412)
Other comprehensive income (loss) for the year	-	-	-	141,532	(2,738)	-	138,794	784	139,578
Total comprehensive income (loss) for the year	-	-	-	141,532	(2,738)	544,737	683,531	(7,564)	675,967
Acquisition and other changes in non-controlling interests	-	-	-	-	(4,743)	-	(4,743)	4,694	(49)
Dividends paid in cash	-	-	-	-	-	(484,020)	(484,020)	(24,000)	(508,020)
Balance at December 31, 2017	1,180,537	118,054	609,733	(824,423)	(320,569)	10,718,853	11,482,185	98,785	11,580,970

	Attributable to owners of the parent						Total	Non-controlling interests	Total
	Share Capital (1)	Legal Reserves	Share Premium	Currency Translation Adjustment	Other Reserves (2)	Retained Earnings			
Balance at December 31, 2015	1,180,537	118,054	609,733	(1,006,767)	(298,682)	11,110,469	11,713,344	152,712	11,866,056
Income for the year	-	-	-	-	-	55,298	55,298	3,441	58,739
Currency translation adjustment	-	-	-	37,339	-	-	37,339	(152)	37,187
Remeasurements of post employment benefit obligations, net of taxes	-	-	-	-	(1,781)	-	(1,781)	(209)	(1,990)
Change in value of available for sale financial instruments and cash flow hedges net of tax	-	-	-	-	(7,573)	-	(7,573)	25	(7,548)
From other comprehensive income of non-consolidated companies	-	-	-	3,473	(5,054)	-	(1,581)	-	(1,581)
Other comprehensive income (loss) for the year	-	-	-	40,812	(14,408)	-	26,404	(336)	26,068
Total comprehensive income (loss) for the year	-	-	-	40,812	(14,408)	55,298	81,702	3,105	84,807
Acquisition and other changes in non-controlling interests	-	-	-	-	2	-	2	(1,073)	(1,071)
Dividends paid in cash	-	-	-	-	-	(507,631)	(507,631)	(29,089)	(536,720)
Balance at December 31, 2016	1,180,537	118,054	609,733	(965,955)	(313,088)	10,658,136	11,287,417	125,655	11,413,072

(1) The Company has an authorized share capital of a single class of 2.5 billion shares having a nominal value of \$1.00 per share. As of December 31, 2017 and 2016 there were 1,180,536,830 shares issued. All issued shares are fully paid.

(2) Other reserves include mainly the result of transactions with non-controlling interest that do not result in a loss of control, the remeasurement of post-employment benefit obligations and the changes in value of cash flow hedges and in available for sale financial instruments.

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

CONSOLIDATED STATEMENT OF CASH FLOWS

(all amounts in thousands of U.S. dollars)

	Notes	Year ended December 31,		
		2018	2017	2016
Cash flows from operating activities				
Income for the year		873,900	536,389	58,739
Adjustments for:				
Depreciation and amortization	9 & 10	664,357	608,640	662,412
Income tax accruals less payments	26(ii)	58,494	(193,989)	(128,079)
Equity in earnings of non-consolidated companies	11	(193,994)	(116,140)	(71,533)
Interest accruals less payments, net	26(iii)	6,151	11,550	(2,567)
Changes in provisions		(8,396)	(17,245)	15,597
Income from the sale of Conduit business	27	-	(89,694)	-
Changes in working capital	26(i)	(737,952)	(853,184)	330,964
Derivatives, currency translation adjustment and others		(51,758)	91,648	(1,968)
Net cash provided by (used in) operating activities		610,802	(22,025)	863,565
Cash flows from investing activities				
Capital expenditures	9 & 10	(349,473)	(558,236)	(786,873)
Changes in advance to suppliers of property, plant and equipment		4,851	7,077	50,989
Proceeds from disposal of Conduit business	27	-	327,631	-
Investment in non-consolidated companies	11	-	-	(17,108)
Acquisition of subsidiaries	25	-	(10,418)	-
Investment in companies under cost method		-	(3,681)	-
Loan to non-consolidated companies	11 c	(14,740)	(10,956)	(116,616)
Repayment of loan by non-consolidated companies	11 c	9,370	3,900	74,222
Proceeds from disposal of property, plant and equipment and intangible assets		6,010	5,443	23,609
Dividends received from non-consolidated companies	11	25,722	22,971	20,674
Changes in investments in securities		717,368	565,387	652,755
Net cash provided by (used in) investing activities		399,108	349,118	(98,348)
Cash flows from financing activities				
Dividends paid	8	(484,020)	(484,020)	(507,631)
Dividends paid to non-controlling interest in subsidiaries		(3,498)	(24,000)	(29,089)
Changes in non-controlling interests		(24)	(49)	(1,071)
Proceeds from borrowings		1,019,302	1,196,781	1,180,727
Repayments of borrowings		(1,432,202)	(1,090,129)	(1,295,560)
Net cash used in financing activities		(900,442)	(401,417)	(652,624)
Increase (decrease) in cash and cash equivalents		109,468	(74,324)	112,593
Movement in cash and cash equivalents				
At the beginning of the year		330,090	398,580	286,198
Effect of exchange rate changes		(12,841)	5,834	(211)
Increase (decrease) in cash and cash equivalents		109,468	(74,324)	112,593
At December 31,	26(iv)	426,717	330,090	398,580
Cash and cash equivalents				
		2018	2017	2016
Cash and bank deposits		428,361	330,221	399,900
Bank overdrafts	18	(1,644)	(131)	(1,320)
		426,717	330,090	398,580

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

INDEX TO THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

I GENERAL INFORMATION

II ACCOUNTING POLICIES (“AP”)

- A Basis of presentation
- B Group accounting
- C Segment information
- D Foreign currency translation
- E Property, plant and equipment
- F Intangible assets
- G Impairment of non-financial assets
- H Other investments
- I Inventories
- J Trade and other receivables
- K Cash and cash equivalents
- L Equity
- M Borrowings
- N Current and deferred income tax
- O Employee benefits
- P Provisions
- Q Trade and other payables
- R Revenue recognition
- S Cost of sales and other selling expenses
- T Earnings per share
- U Financial instruments
- V Non-current assets held for sale and discontinued operations

III FINANCIAL RISK MANAGEMENT

- A Financial risk factors
- B Category of financial instruments and classification within the fair value hierarchy
- C Fair value estimation
- D Accounting for derivative financial instruments and hedging activities

IV OTHER NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

- 1 Segment information
- 2 Cost of sales
- 3 Selling, general and administrative expenses
- 4 Labor costs (included in Cost of sales and in Selling, general and administrative expenses)
- 5 Other operating income and expenses
- 6 Financial results
- 7 Income tax
- 8 Dividends distribution
- 9 Property, plant and equipment, net
- 10 Intangible assets, net
- 11 Investments in non-consolidated companies
- 12 Receivables - non current
- 13 Inventories
- 14 Receivables and prepayments
- 15 Current tax assets and liabilities
- 16 Trade receivables, net
- 17 Cash and cash equivalents and other investments
- 18 Borrowings
- 19 Deferred income tax
- 20 Other liabilities
- 21 Non-current allowances and provisions
- 22 Current allowances and provisions
- 23 Derivative financial instruments
- 24 Contingencies, commitments and restrictions on the distribution of profits
- 25 Acquisition of subsidiaries
- 26 Cash flow disclosures
- 27 Discontinued Operations
- 28 Related party transactions
- 29 Principal subsidiaries
- 30 Nationalization of Venezuelan subsidiaries
- 31 Fees paid to the Company's principal accountant
- 32 Subsequent events
- 33 Update as of April 1, 2019

I. GENERAL INFORMATION

Tenaris S.A. (the “Company”) was established as a public limited liability company (*société anonyme*) under the laws of the Grand-Duchy of Luxembourg on December 17, 2001. The Company holds, either directly or indirectly, controlling interests in various subsidiaries in the steel pipe manufacturing and distribution businesses. References in these Consolidated Financial Statements to “Tenaris” refer to the Company and its consolidated subsidiaries. A list of the principal Company’s subsidiaries is included in Note 29 to these Consolidated Financial Statements.

The Company’s shares trade on the Buenos Aires Stock Exchange, the Italian Stock Exchange and the Mexican Stock Exchange; the Company’s American Depositary Securities (“ADS”) trade on the New York Stock Exchange.

These Consolidated Financial Statements were approved for issuance by the Company’s Board of Directors on February 20, 2019.

II. ACCOUNTING POLICIES

The principal accounting policies applied in the preparation of these Consolidated Financial Statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

A Basis of presentation

The Consolidated Financial Statements of Tenaris have been prepared in accordance with International Financial Reporting Standards (“IFRS”), as issued by the International Accounting Standards Board (“IASB”) and in accordance with IFRS as adopted by the European Union, under the historical cost convention, as modified by the revaluation of certain financial assets and liabilities (including derivative instruments) and plan assets at fair value. The Consolidated Financial Statements are, unless otherwise noted, presented in thousands of U.S. dollars (“\$”).

Whenever necessary, certain comparative amounts have been reclassified to conform to changes in presentation in the current year.

Following the sale of the steel electric conduit business in North America, known as Republic Conduit, in January 2017, the results of the mentioned business are presented as discontinued operations in accordance with IFRS 5, “Non-current Assets Held for Sale and Discontinued Operations”. Consequently, all comparative amounts related to discontinued operations within each line item of the Consolidated Income Statement are reclassified into discontinued operations. The Consolidated Statement of Cash Flows includes the cash flows for continuing and discontinued operations, cash flows from discontinued operations and earnings per share are disclosed separately in Note 27, as well as additional information detailing net assets of disposal group classified as held for sale and discontinued operations.

The preparation of Consolidated Financial Statements in conformity with IFRS requires management to make certain accounting estimates and assumptions that might affect among others, the reported amounts of assets, liabilities, contingent assets and liabilities, revenues and expenses. Actual results may differ from these estimates.

(1) *Accounting pronouncements applicable as from January 1, 2018 and relevant for Tenaris*

IFRS 9, “Financial instruments”

Tenaris has adopted IFRS 9, “Financial instruments” from 1 January 2018 which resulted in changes in accounting policies and adjustments to the amounts recognized in the financial statements. In accordance with the transition provisions in IFRS 9, Tenaris has adopted the new rules using the retrospective approach, meaning that the cumulative impact of the adoption was recognized in the opening retained earnings and other reserves of the current period as of January 1, 2018 and that comparatives were not restated.

The new impairment model requires recognition of impairment provisions based on expected credit losses rather than on incurred credit losses. The impact of this change was a decrease of \$6.4 million in the *allowance for doubtful accounts*.

A Basis of presentation (Cont.)

(1) Accounting pronouncements applicable as from January 1, 2018 and relevant for Tenaris (Cont.)

IFRS 9, “Financial instruments” (Cont.)

The measurement category and the carrying amount of financial assets and liabilities in accordance with IAS 39 and IFRS 9 at January 1, 2018 are compared as follows:

			Amortized cost (loans & receivables 2017)	FVOCI (Available for sale 2017)
Financial Assets	FVPL	Held to maturity		
Closing balance December 31, 2017 - IAS 39	1,163,808	344,336	1,541,724	21,572
Reclassified bonds and other fixed income from HTM to FVOCI	-	(344,336)	-	344,336
Reclassified fixed income from FVPL to amortized cost	(550,646)	-	550,646	-
Reclassified bonds and other fixed income from FVPL to FVOCI	(153,702)	-	-	153,702
Opening balance January 1, 2018 - IFRS 9	459,460	-	2,092,370	519,610
Financial Liabilities				
Closing balance December 31, 2017 - IAS 39	39,799		1,716,598	
Opening balance January 1, 2018	39,799		1,716,598	

	Effect on other reserves	Effect on retained earnings
Opening balance January 1, 2018 - IAS 39	(320,569)	10,718,853
Reclassify investments from HTM to FVOCI	3,126	-
Reclassify investments from FVPL to FVOCI	(352)	352
Opening balance January 1, 2018 - IFRS 9	(317,795)	10,719,205

IFRS 15, “Revenue from contracts with customers”

The Company has adopted IFRS 15, “Revenue from contracts with customers” from January 1 2018, which resulted in changes in accounting policies and adjustments to the amounts recognized in the financial statements. The policy sets out the requirements in accounting for revenue arising from contracts with customers and is based on the principle that revenue is recognized when control of a good or service is transferred to the customer. In accordance with the transition provisions in IFRS 15, the group has adopted the new rules using the modified retrospective approach, meaning that the cumulative impact of the adoption was recognized in retained earnings as of January 1, 2018 and that comparatives were not restated.

The impact of the adoption as of January 1, 2018 on the aggregate of revenues, cost of sales and selling expenses was a decrease of \$0.7 million net.

(2) New and amended standards not yet adopted and relevant for Tenaris

IFRS 16, “Leases”

In January 2016, the IASB issued IFRS 16, "Leases". The new standard will result in almost all leases recognized on the balance sheet (except for short term and low value leases), as the distinction between operating and finance leases is removed. IFRS 16 must be applied on annual periods beginning on or after January 1, 2019.

The Company has assessed the effects of applying the new standard and the main area affected will be the accounting for operating leasing.

The Company expects to recognize right-of-use assets and lease liabilities of approximately \$260 million on January 1, 2019.

The Company intends to adopt this standard using the simplified transition approach and will not restate comparative amounts for the year prior to first adoption.

Other accounting pronouncements that became effective during 2018 have no material effect on the Company’s financial condition or results of operations.

B Group accounting

(1) Subsidiaries and transactions with non-controlling interests

Subsidiaries are all entities over which Tenaris has control. Tenaris controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is exercised by the Company and are no longer consolidated from the date control ceases.

The acquisition method of accounting is used to account for the acquisition of subsidiaries by Tenaris. The cost of an acquisition is measured as the fair value of the assets transferred, equity instruments issued and liabilities incurred or assumed at the date of exchange. Acquisition-related costs are expensed as incurred. Identifiable assets acquired, liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. Any non-controlling interest in the acquiree is measured either at fair value or at the non-controlling interest's proportionate share of the acquiree's net assets. The excess of the aggregate of the consideration transferred and the amount of any non-controlling interest in the acquiree over the fair value of the identifiable net assets acquired is recorded as goodwill. If this is less than the fair value of the net assets of the subsidiary acquired, the difference is recognized directly in the Consolidated Income Statement.

Contingent consideration is classified either as equity or as a financial liability. Amounts classified as a financial liability are subsequently remeasured to fair value with changes in fair value recognized in profit or loss.

If the business combination is achieved in stages, the acquisition date carrying value of the acquirer's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date. Any gains or losses arising from such remeasurement are recognized in profit or loss.

Transactions with non-controlling interests that do not result in a loss of control are accounted as transactions with equity owners of the Company. For purchases from non-controlling interests, the difference between any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded in equity.

When the Company ceases to have control or significant influence, any retained interest in the entity is remeasured to its fair value, with the change in carrying amount recognized in profit or loss. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognized in other comprehensive income in respect of that entity are accounted for as if the group had directly disposed of the related assets or liabilities. This may mean that amounts previously recognized in other comprehensive income are reclassified to profit or loss.

Material intercompany transactions, balances and unrealized gains (losses) on transactions between Tenaris subsidiaries have been eliminated in consolidation. However, since the functional currency of some subsidiaries is its respective local currency, some financial gains (losses) arising from intercompany transactions are generated. These are included in the Consolidated Income Statement under *Other financial results*.

(2) Non-consolidated companies

Non-consolidated companies are all entities in which Tenaris has significant influence but not control, generally accompanying a shareholding of between 20% and 50% of the voting rights. Investments in non-consolidated companies (associates and joint ventures) are accounted for by the equity method of accounting and are initially recognized at cost. The Company's investment in non-consolidated companies includes goodwill identified in acquisition, net of any accumulated impairment loss.

Under the equity method of accounting, the investments are initially recognized at cost and adjusted thereafter to recognize Tenaris's share of the post-acquisition profits or losses of the investee in profit or loss, and Tenaris's share of movements in other comprehensive income of the investee in other comprehensive income. Dividends received or receivable from associates and joint ventures are recognized as a reduction in the carrying amount of the investment.

If material, unrealized results on transactions between Tenaris and its non-consolidated companies are eliminated to the extent of Tenaris's interest in the non-consolidated companies. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment indicator of the asset transferred. Financial statements of non-consolidated companies have been adjusted where necessary to ensure consistency with IFRS.

The Company's pro-rata share of earnings in non-consolidated companies is recorded in the Consolidated Income Statement under *Equity in earnings (losses) of non-consolidated companies*. The Company's pro-rata share of changes in other reserves is recognized in the Consolidated Statement of Changes in Equity under *Other Reserves*.

B Group accounting (Cont.)

(2) *Non-consolidated companies (Cont.)*

Ternium

At December 31, 2018, Tenaris holds 11.46% of Ternium S.A. (“Ternium”)’s common stock. The following factors and circumstances evidence that Tenaris has significant influence (as defined by IAS 28, “Investments in associates companies and Joint Ventures”) over Ternium, and as a result the Company’s investment in Ternium has been accounted for under the equity method:

§ Both the Company and Ternium are under the indirect common control of San Faustin S.A.;

§ Four out of eight members of Ternium’s Board of Directors (including Ternium’s Chairman) are also members of the Company’s Board of Directors;

§ Under the shareholders’ agreement by and between the Company and Techint Holdings S.à r.l, a wholly owned subsidiary of San Faustin S.A. and Ternium’s main shareholder, dated January 9, 2006, Techint Holdings S.à.r.l, is required to take actions within its power to cause (a) one of the members of Ternium’s Board of Directors to be nominated by the Company and (b) any director nominated by the Company to be only removed from Ternium’s Board of Directors pursuant to previous written instructions of the Company.

Usiminas

At December 31, 2018, Tenaris holds through its Brazilian subsidiary Confab Industrial S.A. (“Confab”), 5.2% of the shares with voting rights and 3.07% of Usinas Siderúrgicas de Minas Gerais S.A. (“Usiminas”) total share capital.

The acquisition of Usiminas shares was part of a larger transaction performed on January 16, 2012, pursuant to which Ternium, certain of its subsidiaries and Confab joined Usiminas’ existing control group through the acquisition of ordinary shares representing 27.7% of Usiminas’ total voting capital and 13.8% of Usiminas’ total share capital. A shareholders’ agreement governed the rights and obligations of the several control group members.

In April and May 2016 Tenaris’s subsidiary Confab subscribed, in the aggregate, to 1.3 million preferred shares (BRL1.28 per share) for a total amount of BRL1.6 million (approximately \$0.5 million) and 11.5 million ordinary shares (BRL5.00 per share) for a total amount of BRL57.5 million (approximately \$16.6 million). The preferred and ordinary shares were issued on June 3, 2016 and July 19, 2016, respectively. Consequently as of December 31, 2018 Tenaris owns 36.5 million ordinary shares and 1.3 million preferred shares of Usiminas.

In 2014, a conflict arose between the T/T Group (comprising Confab and Ternium’s subsidiaries Ternium Investments, Ternium Argentina and Prosid Investments) and Nippon Steel & Sumitomo Metal Corporation (“NSSMC”) with respect to the governance of Usiminas.

On February 8, 2018, Ternium Investments resolved the dispute with NSSMC, and on April 10, 2018, the T/T Group entities (including Confab), NSSMC and Previdência Usiminas entered into a new shareholders’ agreement for Usiminas, amending and restating the previously existing shareholders agreement (the “New SHA”). Usiminas’ control group now holds, in the aggregate, 483.6 million ordinary shares bound to the New SHA, representing approximately 68.6% of Usiminas’ voting capital, with the T/T Group holding approximately 47.1% of the total shares held by the control group (39.5% corresponding to the Ternium entities and the other 7.6% corresponding to Confab); NSSMC holding approximately 45.9% of the total shares held by the control group; and Previdência Usiminas holding the remaining 7% of the total shares held by the control group.

The New SHA reflects the agreed-upon corporate governance rules for Usiminas, including, among others, an alternation mechanism for the nomination of each of the chief executive officer and the Chairman of the board of directors, as well as a mechanism for the nomination of other members of Usiminas’ executive board. The New SHA also incorporates an exit mechanism consisting of a buy-and-sell procedure, exercisable at any time during the term of the New SHA after the fourth-and-a-half-year anniversary from the May 2018 election of Usiminas’ executive board. Such exit mechanism shall apply with respect to shares held by NSSMC and the T/T Group, and would allow either Ternium or NSSMC to purchase all or a majority of the Usiminas shares held by the other shareholder.

B Group accounting (Cont.)

(2) *Non-consolidated companies (Cont.)*

Usiminas (Cont.)

In connection with the execution of the New SHA, Confab and the Ternium entities amended and restated their separate shareholders' agreement governing their respective rights and obligations as members of the T/T Group to include provisions relating to the exit mechanism and generally to conform such separate shareholders' agreement to the other provisions of the New SHA. The rights of Confab and Ternium and its subsidiaries within the Ternium - Tenaris Group are governed under such amended and restated separate shareholders agreement. Those circumstances evidence that Tenaris has significant influence over Usiminas, and consequently, accounted it for under the equity method (as defined by IAS 28).

Techgen

Techgen S.A. de C.V. ("Techgen") is a Mexican joint venture company owned 48% by Ternium, 30% by Tecpetrol International S.A. and 22% by Tenaris. Techgen operates a natural gas-fired combined electric power plant in the Pesquería area of the State of Nuevo Leon, México. Tenaris, Ternium and Tecpetrol International S.A. are parties to a shareholders' agreement relating to the governance of Techgen. In addition, the Company, Ternium and Tecpetrol International S.A. are under the indirect common control of San Faustin S.A. Those circumstances evidence that Tenaris has significant influence over Techgen, and consequently, accounted it for under the equity method (as defined by IAS 28).

Tenaris carries its investment in Ternium, Usiminas and Techgen under the equity method, with no additional goodwill or intangible assets recognized. Tenaris reviews investments in non-consolidated companies for impairment whenever events or changes in circumstances indicate that the asset's carrying amount may not be recoverable, such as a significant or prolonged decline in fair value below the carrying value. At December 31, 2018, 2017 and 2016, no impairment provisions were recorded on Tenaris's investment in Ternium and Usiminas. See Note 11.

C Segment information

The Company is organized in one major business segment, Tubes, which is also the reportable operating segment.

The Tubes segment includes the production and sale of both seamless and welded steel tubular products and related services mainly for the oil and gas industry, particularly oil country tubular goods (OCTG) used in drilling operations, and for other industrial applications with production processes that consist in the transformation of steel into tubular products. Business activities included in this segment are mainly dependent on the oil and gas industry worldwide, as this industry is a major consumer of steel pipe products, particularly OCTG used in drilling activities. Demand for steel pipe products from the oil and gas industry has historically been volatile and depends primarily upon the number of oil and natural gas wells being drilled, completed and reworked, and the depth and drilling conditions of these wells. Sales are generally made to end users, with exports being done through a centrally managed global distribution network and domestic sales are made through local subsidiaries. Corporate general and administrative expenses have been allocated to the Tubes segment.

Others includes all other business activities and operating segments that are not required to be separately reported, including the production and selling of sucker rods, industrial equipment, coiled tubing, utility conduits for buildings, energy and raw materials that exceed internal requirements.

Tenaris's Chief Operating Decision Maker (CEO) holds monthly meetings with senior management, in which operating and financial performance information is reviewed, including financial information that differs from IFRS principally as follows:

- § The use of direct cost methodology to calculate the inventories, while under IFRS it is at full cost, including absorption of production overheads and depreciations;
- § The use of costs based on previously internally defined cost estimates, while, under IFRS, costs are calculated at historical cost;
- § Other timing differences, if any.

Tenaris presents its geographical information in five areas: North America, South America, Europe, Middle East and Africa and Asia Pacific. For purposes of reporting geographical information, net sales are allocated to geographical areas based on the customer's location; allocation of assets, capital expenditures and associated depreciations and amortizations are based on the geographical location of the assets.

D Foreign currency translation

(1) *Functional and presentation currency*

IAS 21 (revised), “The effects of changes in foreign exchange rates” defines the functional currency as the currency of the primary economic environment in which an entity operates.

The functional and presentation currency of the Company is the U.S. dollar. The U.S. dollar is the currency that best reflects the economic substance of the underlying events and circumstances relevant to Tenaris’s global operations.

Except for the Brazilian and Italian subsidiaries whose functional currencies are their local currencies, Tenaris determined that the functional currency of its other subsidiaries is the U.S. dollar, based on the following principal considerations:

- § Sales are mainly negotiated, denominated and settled in U.S. dollars. If priced in a currency other than the U.S. dollar, the sales price may consider exposure to fluctuation in the exchange rate versus the U.S. dollar;
- § Prices of their critical raw materials and inputs are priced and settled in U.S. dollars;
- § Transaction and operational environment and the cash flow of these operations have the U.S. dollar as reference currency;
- § Significant level of integration of the local operations within Tenaris’s international global distribution network;
- § Net financial assets and liabilities are mainly received and maintained in U.S. dollars;
- § The exchange rate of certain legal currencies has long-been affected by recurring and severe economic crises.

(2) *Transactions in currencies other than the functional currency*

Transactions in currencies other than the functional currency are translated into the functional currency using the exchange rates prevailing at the date of the transactions or valuation where items are re-measured.

At the end of each reporting period: (i) monetary items denominated in currencies other than the functional currency are translated using the closing rates; (ii) non-monetary items that are measured in terms of historical cost in a currency other than the functional currency are translated using the exchange rates prevailing at the date of the transactions; and (iii) non-monetary items that are measured at fair value in a currency other than the functional currency are translated using the exchange rates prevailing at the date when the fair value was determined.

Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in currencies other than the functional currency are recorded as gains and losses from foreign exchange and included in *Other financial results* in the Consolidated Income Statement, except when deferred in equity as qualifying cash flow hedges and qualifying net investment hedges.

(3) *Translation of financial information in currencies other than the functional currency*

Results of operations for subsidiaries whose functional currencies are not the U.S. dollar are translated into U.S. dollars at the average exchange rates for each quarter of the year. Financial statement positions are translated at the year-end exchange rates. Translation differences are recognized in a separate component of equity as currency translation adjustments. In the case of a sale or other disposal of any of such subsidiaries, any accumulated translation difference would be recognized in income as a gain or loss from the sale.

Goodwill and fair value adjustments arising from the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the closing rate.

E Property, plant and equipment

Property, plant and equipment are recognized at historical acquisition or construction cost less accumulated depreciation and impairment losses. Historical cost includes expenditure that is directly attributable to the acquisition of the items. Property, plant and equipment acquired through acquisitions accounted for as business combinations have been valued initially at the fair market value of the assets acquired.

Major overhaul and rebuilding expenditures are capitalized as property, plant and equipment only when it is probable that future economic benefits associated with the item will flow to the Company and the investment enhances the condition of assets beyond its original condition. The carrying amount of the replaced part is derecognized. Maintenance expenses on manufacturing properties are recorded as cost of products sold in the year in which they are incurred.

Cost may also include transfers from equity of any gains or losses on qualifying cash flow hedges of foreign currency purchases of property, plant and equipment.

Borrowing costs that are attributable to the acquisition or construction of certain capital assets are capitalized as part of the cost of the asset, in accordance with IAS 23(R), "Borrowing Costs". Assets for which borrowing costs are capitalized are those that require a substantial period of time to prepare for their intended use.

Depreciation method is reviewed at each year end. Depreciation is calculated using the straight-line method to depreciate the cost of each asset to its residual value over its estimated useful life, as follows:

Land	No Depreciation
Buildings and improvements	30-50 years
Plant and production equipment	10-40 years
Vehicles, furniture and fixtures, and other equipment	4-10 years

The assets' residual values and useful lives of significant plant and production equipment are reviewed and adjusted, if appropriate, at each year-end date. An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Management's re-estimation of assets useful lives, performed in accordance with IAS 16, "Property, Plant and Equipment", did not materially affect depreciation expenses for 2018, 2017 and 2016.

Tenaris depreciates each significant part of an item of property, plant and equipment for its different production facilities that (i) can be properly identified as an independent component with a cost that is significant in relation to the total cost of the item, and (ii) has a useful operating life that is different from another significant part of that same item of property, plant and equipment.

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount of assets and are recognized under *Other operating income* or *Other operating expenses* in the Consolidated Income Statement.

F Intangible assets

(1) Goodwill

Goodwill represents the excess of the acquisition cost over the fair value of Tenaris's share of net identifiable assets acquired as part of business combinations determined mainly by independent valuations. Goodwill is tested at least annually for impairment and carried at cost less accumulated impairment losses. Impairment losses on goodwill are not reversed. Goodwill is included in the Consolidated Statement of Financial Position under *Intangible assets, net*.

For the purpose of impairment testing, goodwill is allocated to a subsidiary or group of subsidiaries that are expected to benefit from the business combination which generated the goodwill being tested.

F Intangible assets (Cont.)

(2) *Information systems projects*

Costs associated with maintaining computer software programs are generally recognized as an expense as incurred. However, costs directly related to the development, acquisition and implementation of information systems are recognized as intangible assets if it is probable that they have economic benefits exceeding one year and comply with the recognition criteria of IAS 38, "Intangible Assets".

Information systems projects recognized as assets are amortized using the straight-line method over their useful lives, generally not exceeding a period of 3 years. Amortization charges are mainly classified as *Selling, general and administrative expenses* in the Consolidated Income Statement.

Management's re-estimation of assets useful lives, performed in accordance with IAS 38, did not materially affect amortization expenses for 2018, 2017 and 2016.

(3) *Licenses, patents, trademarks and proprietary technology*

Licenses, patents, trademarks, and proprietary technology acquired in a business combination are initially recognized at fair value at the acquisition date. Licenses, patents, proprietary technology and those trademarks that have a finite useful life are carried at cost less accumulated amortization. Amortization is calculated using the straight-line method to allocate the cost over their estimated useful lives, and does not exceed a period of 10 years. Amortization charges are mainly classified as *Selling, general and administrative expenses* in the Consolidated Income Statement.

The balance of acquired trademarks that have indefinite useful lives according to external appraisal amounts to \$86.7 million at December 31, 2018 and 2017, and are included in Hydril CGU. Main factors considered in the determination of the indefinite useful lives include the years that they have been in service and their recognition among customers in the industry.

Management's re-estimation of assets useful lives, performed in accordance with IAS 38, did not materially affect amortization expenses for 2018, 2017 and 2016.

(4) *Research and development*

Research expenditures as well as development costs that do not fulfill the criteria for capitalization are recorded as *Cost of sales* in the Consolidated Income Statement as incurred. Research and development expenditures included in *Cost of sales* for the years 2018, 2017 and 2016 totaled \$63.4 million, \$63.7 million and \$68.6 million, respectively.

(5) *Customer relationships*

In accordance with IFRS 3, "Business Combinations" and IAS 38, Tenaris has recognized the value of customer relationships separately from goodwill attributable to the acquisition of Maverick and Hydril groups.

Customer relationships acquired in a business combination are recognized at fair value at the acquisition date, have a finite useful life and are carried at cost less accumulated amortization. Amortization is calculated using the straight line method over the initial expected useful life of approximately 14 years for Maverick and 10 years for Hydril.

Maverick's Tubes business, has experienced a significant change in its customers portfolio. While initially Maverick was selling OCTG products mostly to distributors, today it is selling mostly through Rig Direct® to end users. By the end of 2018, Maverick supplied the majority of its customers of OCTG products with Rig Direct® services. Additionally, line pipe products while still being sold largely to distributors due to the different nature of this market, are now focused on large pipeline projects through a completely different set of distributors. Based on these circumstances, the Company has reviewed the useful life of Maverick's Tubes customer relationships and decided to reduce the remaining useful life from 2 years to zero, consequently a higher amortization charge of approximately \$109 million was recorded in the Consolidated Income Statement under *Selling, general and administrative expenses* for the year ended December 31, 2018.

As of December 31, 2018 the residual value of Maverick's coiled tubing customer relationships amounts to \$19.9 million and the residual useful life is 2 years, while Hydril's customer relationships is fully amortized.

G Impairment of non-financial assets

Long-lived assets including identifiable intangible assets are reviewed for impairment at the lowest level for which there are separately identifiable cash flows (cash generating units, or CGU). Most of the Company's principal subsidiaries that constitute a CGU have a single main production facility and, accordingly, each of such subsidiary represents the lowest level of asset aggregation that generates largely independent cash inflows.

Assets that are subject to amortization are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Intangible assets with indefinite useful lives, including goodwill, are subject to at least an annual impairment test.

In assessing whether there is any indication that a CGU may be impaired, external and internal sources of information are analyzed. Material facts and circumstances specifically considered in the analysis usually include the discount rate used in Tenaris's cash flow projections and the business condition in terms of competitive and economic factors, such as the cost of raw materials, oil and gas prices, capital expenditure programs for Tenaris's customers and the evolution of the rig count.

An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher between the asset's value in use and fair value less costs of disposal. Any impairment loss is allocated to reduce the carrying amount of the assets of the CGU in the following order:

- (a) first, to reduce the carrying amount of any goodwill allocated to the CGU; and
- (b) then, to the other assets of the unit (group of units) pro-rata on the basis of the carrying amount of each asset in the unit (group of units), considering not to reduce the carrying amount of the asset below the highest of its fair value less cost of disposal, its value in use or zero.

The value in use of each CGU is determined on the basis of the present value of net future cash flows which would be generated by such CGU. Tenaris uses cash flow projections for a five year period with a terminal value calculated based on perpetuity and appropriate discount rates.

For purposes of calculating the fair value less costs of disposal, Tenaris uses the estimated value of future cash flows that a market participant could generate from the corresponding CGU.

Management judgment is required to estimate discounted future cash flows. Actual cash flows and values could vary significantly from the forecasted future cash flows and related values derived using discounting techniques.

Non-financial assets other than goodwill that suffered an impairment are reviewed for possible reversal at each reporting date.

Tenaris regularly conducts assessments of the carrying values of its assets. The value-in-use was used to determine the recoverable value. Value-in-use is calculated by discounting the estimated cash flows over a five-year period based on forecasts approved by management. For the subsequent years beyond the five-year period, a terminal value is calculated based on perpetuity considering a nominal growth rate of 2%.

Tenaris's main source of revenue is the sale of products and services to the oil and gas industry and the level of such sales is sensitive to international oil and gas prices and their impact on drilling activities.

For purposes of assessing key assumptions, Tenaris uses external sources of information and management judgment based on past experience.

The main key assumptions used in estimating the value in use are discount rate, growth rate and competitive and economic factors applied to determine Tenaris's cash flow projections, such as oil and gas prices, average number of active oil and gas drilling rigs (rig count), capital expenditure programs for Tenaris's customers, and raw material costs.

Management has determined the value of each of the key assumptions as follows:

- Discount rate: based on the applicable weighted average cost of capital (WACC), which is considered to be a good indicator of capital cost, taking into account the industry, country and size of the business. For each CGU where assets are allocated, a specific WACC was determined taking into account the industry, country and size of the business. In 2018, the main discount rates used were in a range between 8.7% and 11.7%.

G Impairment of non-financial assets (Cont.)

- Growth rate: considers the long-term average growth rate for the oil and gas industry, the inflation impact on prices and costs, the higher demand to offset depletion of existing fields and the Company's expected market penetration.

- Oil and gas prices and customer's capital expenditures: based on industry analysts' reports and management's expectations of market development respectively.

- Rig count: based on information published by Baker Hughes and management's expectations.

- Raw material costs: based on industry analysts' reports and management's expectations.

The main factors that could result in additional impairment charges in future periods would be an increase in the discount rate or a decrease in growth rate used in the Company's cash flow projections, a deterioration of the business, competitive and economic factors, such as a decrease in oil and gas prices, and the evolution of the rig count.

As of December 31, 2018, for all CGUs, a reasonably possible change in key assumptions would not cause the carrying amount to exceed recoverable amount.

No impairment charge was recorded in 2018, 2017 and 2016.

H Other investments

Other investments consist primarily of investments in financial instruments and time deposits with a maturity of more than three months at the date of purchase.

Certain non-derivative financial assets that the Company held not for trading have been categorized as financial assets "at fair value through other comprehensive income" (FVTOCI). They are carried at fair value and interest income from these financial assets is included in finance income using the effective interest rate method. Unrealized gains or losses are recorded as a fair value adjustment in the Consolidated Statement of Comprehensive Income and transferred to the Consolidated Income Statement when the financial asset is sold. Exchange gains and losses and impairments related to the financial assets are immediately recognized in the Consolidated Income Statement. FVTOCI instruments with maturities greater than 12 months after the balance sheet date are included in non-current assets.

Other investments in financial instruments and time deposits are categorized as financial assets "at fair value through profit or loss" because such investments are held for trading and their performance is evaluated on a fair value basis. The results of these investments are recognized in *Financial Results* in the Consolidated Income Statement.

Purchases and sales of financial investments are recognized as of their settlement date.

The fair values of quoted investments are generally based on current bid prices. If the market for a financial investment is not active or the securities are not listed, Tenaris estimates the fair value by using standard valuation techniques (see Section III Financial Risk Management).

I Inventories

Inventories are stated at the lower between cost and net realizable value. The cost of finished goods and goods in process is comprised of raw materials, direct labor, utilities, freights and other direct costs and related production overhead costs, and it excludes borrowing costs. The allocation of fixed production costs is based on the normal level of production capacity. Supplies and raw material cost is mainly based on the FIFO method while goods in progress and finished goods cost are mainly based on specific historical production costs for each production order. Tenaris estimates net realizable value of inventories by grouping, where applicable, similar or related items. Net realizable value is the estimated selling price in the ordinary course of business, less any estimated costs of completion and selling expenses. Goods in transit as of year-end are valued based on the supplier's invoice cost.

Tenaris establishes an allowance for obsolete or slow-moving inventories related to finished goods, goods in process, supplies and spare parts. For slow moving or obsolete finished products, an allowance is established based on management's analysis of product aging. An allowance for obsolete and slow-moving inventory of supplies and spare parts is established based on management's analysis of such items to be used as intended and the consideration of potential obsolescence due to technological changes, aging and consumption patterns.

J Trade and other receivables

Trade and other receivables are recognized initially at fair value that corresponds to the amount of consideration that is unconditional unless they contain significant financing components. The Company holds trade receivables with the objective to collect the contractual cash flows and therefore measures them subsequently at amortized cost using the effective interest method. Due to the short-term nature, their carrying amount is considered to be the same as their fair value.

Tenaris applies the IFRS 9 simplified approach to measure expected credit losses, which uses a lifetime expected loss allowance for all trade receivables. To measure the expected credit losses, trade receivables have been grouped based on shared credit risk characteristics and the days past due. The expected loss rates are based on the payment profiles of sales over a period of three years and the corresponding historical credit losses experienced within this period. The historical loss rates are adjusted to reflect current and forward-looking information on macroeconomic factors affecting the ability of the customers to settle the receivables.

K Cash and cash equivalents

Cash and cash equivalents are comprised of cash at banks, liquidity funds and short-term investments with a maturity of less than three months at the date of purchase which are readily convertible to known amounts of cash. Assets recorded in cash and cash equivalents are carried at fair market value or at historical cost which approximates fair market value.

In the Consolidated Statement of Financial Position, bank overdrafts are included in *Borrowings* in current liabilities.

For the purposes of the Consolidated Statement of Cash Flows, *cash and cash equivalents* includes overdrafts.

L Equity

(1) Equity components

The Consolidated Statement of Changes in Equity includes:

- § The value of share capital, legal reserve, share premium and other distributable reserves calculated in accordance with Luxembourg law;
- § The currency translation adjustment, other reserves, retained earnings and non-controlling interest calculated in accordance with IFRS.

(2) Share capital

The Company has an authorized share capital of a single class of 2.5 billion shares having a nominal value of \$1.00 per share. Total ordinary shares issued and outstanding as of December 31, 2018, 2017 and 2016 are 1,180,536,830 with a par value of \$1.00 per share with one vote each. All issued shares are fully paid.

(3) Dividends distribution by the Company to shareholders

Dividends distributions are recorded in the Company's financial statements when Company's shareholders have the right to receive the payment, or when interim dividends are approved by the Board of Directors in accordance with the by-laws of the Company.

Dividends may be paid by the Company to the extent that it has distributable retained earnings, calculated in accordance with Luxembourg law (see Note 24 (iii)).

M Borrowings

Borrowings are recognized initially at fair value net of transaction costs incurred and subsequently measured at amortized cost. Any difference between the proceeds (net of transaction costs) and the redemption amount is recognized in profit or loss over the period of the borrowings using the effective interest method.

N Current and Deferred income tax

The income tax expense or credit for the period is the tax payable on the current period's taxable income based on the applicable income tax rate for each jurisdiction adjusted by changes in deferred tax assets and liabilities attributable to temporary differences and to unused tax losses. Tax is recognized in the Consolidated Income Statement, except for tax items recognized in the Consolidated Statement of Other Comprehensive Income.

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the reporting date in the countries where the Company's subsidiaries operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions when appropriate.

Deferred income tax is recognized applying the liability method on temporary differences arising between the tax basis of assets and liabilities and their carrying amounts in the financial statements. The principal temporary differences arise from fair value adjustments of assets acquired in business combinations, the effect of currency translation on depreciable fixed assets and inventories, depreciation on property, plant and equipment, valuation of inventories and provisions for pension plans. Deferred tax assets are also recognized for net operating loss carry-forwards. Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the time period when the asset is realized or the liability is settled, based on tax laws that have been enacted or substantively enacted at the reporting date.

Deferred tax assets are recognized to the extent that it is probable that future taxable income will be available against which the temporary differences can be utilized. At the end of each reporting period, Tenaris reassesses unrecognized deferred tax assets. Tenaris recognizes a previously unrecognized deferred tax asset to the extent that it has become probable that future taxable income will allow the deferred tax asset to be recovered.

Deferred tax liabilities and assets are not recognized for temporary differences between the carrying amount and tax basis of investments in foreign operations where the company is able to control the timing of the reversal of the temporary differences and it is probable that the differences will not reverse in the foreseeable future.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same taxation authority. Current tax assets and tax liabilities are offset where the entity has a legally enforceable right to offset and intends either to settle on a net basis, or to realize the asset and settle the liability simultaneously.

Deferred tax assets and liabilities are re-measured if tax rates change. These amounts are charged or credited to the Consolidated Income Statement or to the item *other comprehensive income for the year* in the Consolidated Statement of Comprehensive Income, depending on the account to which the original amount was charged or credited.

O Employee benefits

(1) Short-term obligations

Liabilities for wages and salaries are recognized in respect of employees' services up to the end of the reporting period and are measured at the amounts expected to be paid when the liabilities are settled. The liabilities are presented as current employee benefit obligations in the balance sheet.

(2) Post employment benefits

The Company has defined benefit and defined contribution plans. A defined benefit plan is a pension plan that defines an amount of pension benefit that an employee will receive on retirement, usually dependent on one or more factors such as age, years of service and compensation.

The liability recognized in the statement of financial position in respect of defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets, if any. The defined benefit obligation is calculated annually (at year end) by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related pension obligation.

O Employee benefits (Cont.)

(2) *Post employment benefits (Cont.)*

Remeasurement gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in *Other comprehensive income* in the period in which they arise. Past-service costs are recognized immediately in the Income Statement.

For defined benefit plans, net interest income/expense is calculated based on the surplus or deficit derived by the difference between the defined benefit obligations less fair value of plan assets. For defined contribution plans, the Company pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. The Company has no further payment obligations once the contributions have been paid. The contributions are recognized as employee benefit expenses when they are due. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in the future payments is available.

Tenaris sponsors funded and unfunded defined benefit pension plans in certain subsidiaries. The most significant are:

- § An unfunded defined benefit employee retirement plan for certain senior officers. The plan is designed to provide certain benefits to those officers (additional to those contemplated under applicable labor laws) in case of termination of the employment relationship due to certain specified events, including retirement. This unfunded plan provides defined benefits based on years of service and final average salary. As of December 31, 2018 the outstanding liability for this plan amounts to \$41.2 million.
- § Employees' service rescission indemnity: the cost of this obligation is charged to the Consolidated Income Statement over the expected service lives of employees. This provision is primarily related to the liability accrued for employees at Tenaris's Italian subsidiary. As from January 1, 2007 as a consequence of a change in an Italian law, employees were entitled to make contributions to external funds, thus, Tenaris's Italian subsidiary pays every year the required contribution to the funds with no further obligation. As a result, the plan changed from a defined benefit plan to a defined contribution plan effective from that date, but only limited to the contributions of 2007 onwards. As of December 31, 2018 the outstanding liability for this plan amounts to \$17.3 million.
- § Funded retirement benefit plans held in Canada for salary and hourly employees hired prior a certain date based on years of service and, in the case of salaried employees, final average salary. Plan assets consist primarily of investments in equities and money market funds. Both plans were replaced for defined contribution plans. Effective June 2016 the salary plan was frozen for the purposes of credited service as well as determination of final average pay. As of December 31, 2018 the outstanding liability for this plan amounts to \$8.2 million.
- § Funded retirement benefit plan held in the US for the benefit of some employees hired prior a certain date, frozen for the purposes of credited service as well as determination of final average pay for the retirement benefit calculation. Plan assets consist primarily of investments in equities and money market funds. Additionally, an unfunded postretirement health and life plan is present that offers limited medical and life insurance benefits to the retirees, hired before a certain date. As of December 31, 2018 the outstanding liability for these plans amounts to \$13.7 million.

(3) *Other long term benefits*

During 2007, Tenaris launched an employee retention and long term incentive program (the "Program") applicable to certain senior officers and employees of the Company, who will be granted a number of Units throughout the duration of the Program. The value of each of these Units is based on Tenaris's shareholders' equity (excluding non-controlling interest). Also, the beneficiaries of the Program are entitled to receive cash amounts based on (i) the amount of dividend payments made by Tenaris to its shareholders, and (ii) the number of Units held by each beneficiary to the Program. Until 2017 units were vest ratably over a period of four years and will be mandatorily redeemed by the Company ten years after grant date, with the option of an early redemption at seven years after the grant date. From 2018 units were vest ratably over the same period and will be mandatorily redeemed by the Company seven years after grant date. As the cash payment of the benefit is tied to the book value of the shares, and not to their market value, Tenaris valued this long-term incentive program as a long term benefit plan as classified in IAS 19, "Employee Benefits".

As of December 31, 2018 and 2017, the outstanding liability corresponding to the Program amounts to \$91.2 million and \$79.2 million, respectively. The total value of the units granted (vested and unvested) to date under the program, considering the number of units and the book value per share as of December 31, 2018 and 2017, is \$106 million and \$94.8 million, respectively.

O Employee benefits (Cont.)

(4) Termination benefits

Termination benefits are payable when employment is terminated by Tenaris before the normal retirement date, or when an employee accepts voluntary redundancy in exchange for these benefits. Tenaris recognizes termination benefits at the earlier of the following dates: (a) when it can no longer withdraw the offer of those benefits; and (b) when the costs for a restructuring that is within the scope of IAS 37 and involves the payment of terminations benefits. In the case of an offer made to encourage voluntary redundancy, the termination benefits are measured based on the number of employees expected to accept the offer.

(5) Other compensation obligations

Employee entitlements to annual leave and long-service leave are accrued as earned.

Compensation to employees in the event of dismissal is charged to income in the year in which it becomes payable.

P Provisions

Tenaris is subject to various claims, lawsuits and other legal proceedings, including customer claims, in which a third party is seeking payment for alleged damages, reimbursement for losses or indemnity. Tenaris's potential liability with respect to such claims, lawsuits and other legal proceedings cannot be estimated with certainty. Management periodically reviews the status of each significant matter and assesses potential financial exposure. If, as a result of past events, a potential loss from a claim or proceeding is considered probable and the amount can be reliably estimated, a provision is recorded. Accruals for loss contingencies reflect a reasonable estimate of the losses to be incurred based on information available to management as of the date of preparation of the financial statements, and take into consideration Tenaris's litigation and settlement strategies. These estimates are primarily constructed with the assistance of legal counsel. As the scope of liabilities become better defined, there may be changes in the estimates of future costs which could have a material adverse effect on its results of operations, financial condition and cash flows.

If Tenaris expects to be reimbursed for an accrued expense, as would be the case for an expense or loss covered under an insurance contract, and reimbursement is considered virtually certain, the expected reimbursement is recognized as a receivable.

This note should be read in conjunction with Note 24.

Q Trade and other payables

Trade and other payables are recognized initially at fair value, generally the nominal invoice amount and subsequently measured at amortized cost. They are presented as current liabilities unless payment is not due within twelve months after the reporting period. Due to the short-term nature their carrying amounts are considered to be the same as their fair value.

R Revenue recognition

Revenue comprises the fair value of the consideration received or receivable for the sale of goods and services in the ordinary course of Tenaris's activities. The revenue recognized by the Company is measured at the transaction price of the consideration received or receivable to which the Company is entitled to, reduced by estimated returns and other customer credits, such as discounts and volume rebates, based on the expected value to be realized and after eliminating sales within the group.

Revenue is recognized at a point in time or over time from sales when control has been transferred and there is no unfulfilled performance obligation that could affect the acceptance of the product by the customer. Delivery occurs when the products have been shipped to the specific location, the risks of obsolescence and loss have been transferred and either the customer has accepted the product in accordance with the sales contract, the acceptance provisions have lapsed or the Company has objective evidence that all criteria for acceptance have been satisfied, including all performance obligations. For bill and hold transactions revenue is recognized only to the extent that (a) the reason for the bill and hold arrangement must be substantive (for example, the customer has requested the arrangement); (b) the products have been specifically identified and are ready for delivery; (c) the Company cannot have the ability to use the product or to direct it to another customer; (d) the usual payment terms apply.

In addition, some contracts include a right of return. Therefore, a provision and a right to the returned goods are recognized for the products expected to be returned. Accumulated experience is used to estimate such returns.

R Revenue recognition (Cont.)

Where the contracts include multiple performance obligations, the transaction price is allocated to each performance obligation based on the stand-alone selling prices. Where these are not directly observable, they are estimated based on the expected cost plus margin.

Other revenues earned by Tenaris are recognized on the following basis:

- § Interest income: on the effective yield basis.
- § Dividend income from investments in other companies: when Tenaris's right to receive payment is established.
- § Construction contracts revenues is recognized in accordance with the stage of the project completion.

The Company does not expect to have any contracts where the period between the transfer of the promised goods or services to the customer and payment by the customer exceeds one year. As a consequence, the Company does not adjust any of the transaction prices for the time value of money.

S Cost of sales and other selling expenses

Cost of sales and other selling expenses are recognized in the Consolidated Income Statement on the accrual basis of accounting.

Commissions, freights and other selling expenses, including shipping and handling costs, are recorded in *Selling, general and administrative expenses* in the Consolidated Income Statement.

T Earnings per share

Earnings per share are calculated by dividing the income attributable to owners of the parent by the daily weighted average number of common shares outstanding during the year.

There are no dilutive potential ordinary shares.

U Financial instruments

Non derivative financial instruments comprise investments in financial debt instruments and equity, time deposits, trade and other receivables, cash and cash equivalents, borrowings and trade and other payables.

Since January 1, 2018 the Company classifies its financial instruments according to the following measurement categories:

Amortized Cost: Assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest. Interest income from these financial assets is included in finance income using the effective interest rate method.

Exchange gains and losses and impairments related to the financial assets are immediately recognized in the Consolidated Income Statement.

Fair value through other comprehensive income ("FVOCI"): Assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest. Interest income from these financial assets is included in finance income using the effective interest rate method. Unrealized gains or losses are recorded as a fair value adjustment in the Consolidated Statement of Comprehensive Income and transferred to the Consolidated Income Statement when the financial asset is sold.

Fair value through profit and loss ("FVPL"): Assets that do not meet the criteria for amortized cost or FVOCI. Changes in fair value of financial instruments at FVPL are immediately recognized in the Consolidated Income Statement.

The classification depends on the Company's business model for managing the financial assets and contractual terms of the cash flows.

Financial assets and liabilities are recognized and derecognized on their settlement date.

Accounting for derivative financial instruments and hedging activities is included within the Section III, Financial Risk Management.

U Financial instruments (Cont.)

Until December 2017, Tenaris's non derivative financial instruments were classified according to the following categories:

- § Financial instruments at fair value through profit and loss: comprised mainly Other Investments current, investments in certain financial debt instruments and time deposits held for trading expiring in less than ninety days from the measurement date (included within cash and cash equivalents).
- § Loans and receivables: comprised cash and cash equivalents, trade receivables and other receivables and were measured at amortized cost using the effective interest rate method less any impairment.
- § Available for sale assets: comprised the Company's interest in the Venezuelan Companies.
- § Held to maturity: comprised financial assets that the Company had both the ability and the intention to hold to maturity. They were measured at amortized cost using the effective interest method.
- § Other financial liabilities: comprise borrowings, trade and other payables and were measured at amortized cost using the effective interest rate method.

The classification depended on the nature and purpose that the Company set to the financial instrument.

Financial assets and liabilities were recognized and derecognized on their settlement date.

Financial assets were initially measured at fair value, net of transaction costs, except for those financial assets classified as financial assets at fair value through profit or loss.

Financial liabilities, including borrowings, were initially measured at fair value, net of transaction costs and subsequently measured at amortized cost using the effective interest method, with interest expense recognized on an effective yield basis.

V Non-current assets held for sale and discontinued operations

Non-current assets (or disposal groups) are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use and a sale is considered highly probable. They are measured at the lower of their carrying amount and fair value less costs to sell, except for assets such as deferred tax assets, assets arising from employee benefits and financial assets that are carried at fair value.

An impairment loss is recognized for any initial or subsequent write-down of the asset (or disposal group) to fair value less costs to sell. A gain is recognized for any subsequent increase in fair value less costs to sell of an asset (or disposal group), but not in excess of any cumulative impairment loss previously recognized.

Non-current assets (including those that are part of a disposal group) are not depreciated or amortized while they are classified as held for sale. Interest and other expenses attributable to the liabilities of a disposal group classified as held for sale continue to be recognized.

Non-current assets classified as held for sale and the assets of a disposal group classified as held for sale are presented separately from the other assets in the balance sheet. The liabilities of a disposal group classified as held for sale are presented separately from other liabilities in the balance sheet.

A discontinued operation is a component of the entity that has been disposed of or is classified as held for sale and that represents a separate line of business or geographical area of operations, is part of a single coordinated plan to dispose of such a line of business or area of operations, or is a subsidiary acquired exclusively with a view to resale. The results of discontinued operations are presented separately in the Consolidated Income Statement. See Note 27.

III. FINANCIAL RISK MANAGEMENT

The multinational nature of Tenaris's operations and customer base exposes the Company to a variety of risks, mainly related to market risks (including the effects of changes in foreign currency exchange rates and interest rates), credit risk and capital market risk. In order to manage the volatility related to these exposures, management evaluates exposures on a consolidated basis, taking advantage of exposure netting. The Company or its subsidiaries may then enter into various derivative transactions in order to prevent potential adverse impacts on Tenaris's financial performance. Such derivative transactions are executed in accordance with internal policies and hedging practices.

A. Financial Risk Factors*(i) Capital Risk Management*

Tenaris seeks to maintain a low debt to total equity ratio considering the industry and the markets where it operates. The year-end ratio of debt to total equity (where "debt" comprises financial borrowings and "total equity" is the sum of financial borrowings and equity) is 0.04 as of December 31, 2018 and 0.08 as of December 31, 2017. The Company does not have to comply with regulatory capital adequacy requirements.

(ii) Foreign exchange risk

Tenaris manufactures and sells its products in a number of countries throughout the world and consequently is exposed to foreign exchange rate risk. Since the Company's functional currency is the U.S. dollar the purpose of Tenaris's foreign currency hedging program is mainly to reduce the risk caused by changes in the exchange rates of other currencies against the U.S. dollar.

Tenaris's exposure to currency fluctuations is reviewed on a periodic consolidated basis. A number of derivative transactions are performed in order to achieve an efficient coverage in the absence of operative or natural hedges. Almost all of these transactions are forward exchange rates contracts (see Note 23 Derivative financial instruments).

Tenaris does not enter into derivative financial instruments for trading or other speculative purposes, other than non-material investments in structured products.

In the case of subsidiaries with functional currencies other than the U.S. dollar, the results of hedging activities, reported in accordance with IFRS, may not reflect entirely the management's assessment of its foreign exchange risk hedging program. Intercompany balances between Tenaris's subsidiaries may generate financial gains (losses) to the extent that functional currencies differ.

The value of Tenaris's financial assets and liabilities is subject to changes arising from the variation of foreign currency exchange rates. The following table provides a breakdown of Tenaris's main financial assets and liabilities (including foreign exchange derivative contracts) which impact the Company's profit and loss as of December 31, 2018 and 2017:

All amounts Long / (Short) in thousands of U.S. dollars	As of December 31,	
Currency Exposure / Functional currency	2018	2017
Argentine Peso / U.S. Dollar	(186,867)	(64,482)
Euro / U.S. Dollar	(175,419)	(365,926)

The main relevant exposures correspond to:

§ Argentine Peso / U.S. dollar

As of December 31, 2018 and 2017 consisting primarily of Argentine Peso-denominated financial, trade, social and fiscal payables at certain Argentine subsidiaries whose functional currency is the U.S. dollar. A change of 1% in the ARS/USD exchange rate would have generated a pre-tax gain / loss of \$1.9 million and \$0.6 million as of December 31, 2018 and 2017 respectively.

§ Euro / U.S. dollar

As of December 31, 2018 and 2017, consisting primarily of Euro-denominated intercompany liabilities at certain subsidiaries whose functional currency is the U.S. dollar. A change of 1% in the EUR/USD exchange rate would have generated a pre-tax gain / loss of \$1.3 million and \$3.7 million as of December 31, 2018 and 2017, respectively, which would have been to a large extent offset by changes in currency translation adjustment included in Tenaris's net equity position.

A. Financial Risk Factors (Cont.)*(ii) Foreign exchange risk (Cont.)*

Considering the balances held as of December 31, 2018 on financial assets and liabilities exposed to foreign exchange rate fluctuations, Tenaris estimates that the impact of a simultaneous 1% appreciation / depreciation movement in the levels of foreign currencies exchange rates relative to the U.S. dollar, would be a pre-tax gain / loss of \$3.6 million (including a loss / gain of \$2.3 million due to foreign exchange derivative contracts), which would be partially offset by changes to Tenaris's net equity position of \$1.9 million. For balances held as of December 31, 2017, a simultaneous 1% favorable / unfavorable movement in the foreign currencies exchange rates relative to the U.S. dollar, would have generated a pre-tax gain / loss of \$5.3 million (including a loss / gain of \$6.7 million due to foreign exchange derivative contracts), which would have been partially offset by changes to Tenaris's net equity position of \$3.4 million.

The Company entered into foreign exchange derivative contracts to mitigate the exposure to fluctuations in exchange rates.

(iii) Interest rate risk

Tenaris is subject to interest rate risk on its investment portfolio and its debt. The Company uses a mix of variable and fixed rate debt in combination with its investment portfolio strategy. The Company may choose to enter into interest rate swaps to mitigate the exposure to changes in the interest rates.

The following table summarizes the proportions of variable-rate and fixed-rate debt as of each year end.

	As of December 31,			
	2018		2017	
	Amount in thousands of U.S. dollars	%	Amount in thousands of U.S. dollars	%
Fixed rate (*)	520,471	97%	946,215	98%
Variable rate	18,536	3%	19,644	2%
Total	539,007		965,859	

(*) Out of the \$520 million fixed rate borrowings \$493 million are short-term.

The Company estimates that, if market interest rates applicable to Tenaris's borrowings had been 100 basis points higher, then the additional pre-tax loss would have been \$8.2 million in 2018 and \$8.0 million in 2017.

(iv) Credit risk

Credit risk arises from cash and cash equivalents, deposits with banks and financial institutions, as well as credit exposures to customers, including outstanding receivables and committed transactions. The Company also actively monitors the creditworthiness of its treasury, derivative and insurance counterparties in order to minimize its credit risk.

There is no significant concentration of credit risk from customers. No single customer comprised more than 10% of Tenaris's net sales in 2018, 2017 and 2016.

Tenaris's credit policies related to sales of products and services are designed to identify customers with acceptable credit history and to allow Tenaris to require the use of credit insurance, letters of credit and other instruments designed to minimize credit risks whenever deemed necessary. Tenaris maintains allowances for impairment for potential credit losses (See Section II J).

As of December 31, 2018 and 2017 trade receivables amount to \$1,737.4 million and \$1,214.1 million respectively. Trade receivables have guarantees under credit insurance of \$181.7 million and \$190.7 million, letter of credit and other bank guarantees of \$62.3 million and \$42.2 million, and other guarantees of \$42.2 million and \$14.1 million as of December 31, 2018 and 2017 respectively.

As of December 31, 2018 and 2017 past due trade receivables amounted to \$368.4 million and \$230.9 million, respectively. The amount of past due trade receivables up to 15 days amounted to \$139 million and \$50 million respectively. Consequently the past due trade receivables over 15 days amounted to \$229.4 million and \$180.9 million. As of December 31, 2018 and 2017, guaranteed trade receivables amounted to \$31.5 million and \$27.3 million while \$66.5 million and \$78.4 million are included in the allowance for doubtful accounts. Both the allowance for doubtful accounts and the existing guarantees are sufficient to cover doubtful trade receivables.

A. Financial Risk Factors (Cont.)

(v) *Counterparty risk*

Tenaris has investment guidelines with specific parameters to limit issuer risk on marketable securities. Counterparties for derivatives and cash transactions are limited to high credit quality financial institutions, normally investment grade.

Approximately 83% of Tenaris's liquid financial assets correspond to Investment Grade-rated instruments as of December 31, 2018, in comparison with approximately 71% as of December 31, 2017.

(vi) *Liquidity risk*

Tenaris financing strategy aims to maintain adequate financial resources and access to additional liquidity. During 2018, Tenaris has counted on cash flows from operations as well as additional bank financing to fund its transactions.

Management maintains sufficient cash and marketable securities to finance normal operations and believes that Tenaris also has appropriate access to market for short-term working capital needs.

Liquid financial assets as a whole (comprising cash and cash equivalents and other investments) were 7% of total assets at the end of 2018 compared to 11% at the end of 2017.

Tenaris has a conservative approach to the management of its liquidity, which consists of i) cash and cash equivalents (cash in banks, liquidity funds and investments with a maturity of less than three months at the date of purchase), and ii) Other Investments (fixed income securities, time deposits, and fund investments).

Tenaris holds primarily investments in money market funds and variable or fixed-rate securities from investment grade issuers. As of December 31, 2018 and 2017, Tenaris does not have direct exposure to financial instruments issued by European sovereign counterparties.

Tenaris holds its investments primarily in U.S. dollars. As of December 31, 2018 and 2017, U.S. dollar denominated liquid assets represented approximately 95% and 93% of total liquid financial assets respectively.

(vii) *Commodity price risk*

In the ordinary course of its operations, Tenaris purchases commodities and raw materials that are subject to price volatility caused by supply conditions, political and economic variables and other factors. As a consequence, Tenaris is exposed to risk resulting from fluctuations in the prices of these commodities and raw materials. Tenaris fixes the prices of such raw materials and commodities for short-term periods, typically not in excess of one year, in general Tenaris does not hedge this risk.

B. Category of financial instruments and classification within the fair value hierarchy

As mentioned in note II.A, the Company classifies its financial instruments in the following measurement categories: amortized cost, fair value through other comprehensive income ("FVOCI") and fair value through profit and loss ("FVPL"). For financial instruments that are measured in the statement of financial position at fair value, IFRS 13, "Fair value measurement" requires a disclosure of fair value measurements by level according to the following fair value measurement hierarchy:

Level 1 - Quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2 - Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices).

Level 3 - Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs).

B. Category of financial instruments and classification within the fair value hierarchy (Cont.)

The following tables present the financial instruments by category and levels as of December 31, 2018 and 2017.

	Carrying amount	Measurement Categories			At Fair Value		
		Amortized Cost	FVOCI	FVPL	Level 1	Level 2	Level 3
December 31, 2018							
Assets							
Cash and cash equivalents	428,361	268,163	-	160,198	160,198	-	-
Other investments	487,734	300,410	166,094	21,230	168,165	19,159	-
Fixed income (time-deposit, zero coupon bonds, commercial papers)	300,410	300,410	-	-	-	-	-
Certificates of deposits	198,912	198,912	-	-	-	-	-
Commercial papers	9,932	9,932	-	-	-	-	-
Other notes	91,566	91,566	-	-	-	-	-
Bonds and other fixed income	187,324	-	166,094	21,230	168,165	19,159	-
U.S. government securities	1,077	-	1,077	-	1,077	-	-
Non - U.S. government securities	24,912	-	24,912	-	24,912	-	-
Corporates securities	142,176	-	140,105	2,071	142,176	-	-
Structured notes	19,159	-	-	19,159	-	19,159	-
Derivative financial instruments	9,173	-	-	9,173	-	9,173	-
Other Investments Non-current	118,155	-	113,830	4,326	113,830	-	4,326
Bonds and other fixed income	113,830	-	113,830	-	113,830	-	-
Other investments	4,326	-	-	4,326	-	-	4,326
Trade receivables	1,737,366	1,737,366	-	-	-	-	-
Receivables C and NC (*)	307,790	139,474	48,711	-	-	52	48,659
Other receivables	188,185	139,474	48,711	-	-	52	48,659
Other receivables (non-financial)	119,605	-	-	-	-	-	-
Total		2,445,413	328,635	194,927	442,193	28,384	52,985
Liabilities							
Borrowings C and NC	539,007	539,007	-	-	-	-	-
Trade payables	693,673	693,673	-	-	-	-	-
Derivative financial instruments	11,978	-	-	11,978	-	11,978	-
Total		1,232,680	-	11,978	-	11,978	-

(*) Includes balances related to interest in our Venezuelan companies, see Note 30.

	Carrying Amount	Measurement Categories				At Fair Value		
		Loans & Receivables	Held to Maturity	Available for sale	Fair value through profit and loss	Level 1	Level 2	Level 3
December 31, 2017								
Assets								
Cash and cash equivalents	330,221	150,948	-	-	179,273	179,273	-	-
Cash at banks	150,948	150,948	-	-	-	-	-	-
Liquidity funds	66,033	-	-	-	66,033	66,033	-	-
Short – term investments	113,240	-	-	-	113,240	113,240	-	-
Other investments	1,192,306	-	220,838	-	971,468	459,476	511,992	-
Fixed income (time-deposit, zero coupon bonds, commercial papers)	437,406	-	-	-	437,406	9,943	427,463	-
Certificates of deposits	297,788	-	-	-	297,788	-	297,788	-
Commercial papers	9,943	-	-	-	9,943	9,943	-	-
Other notes	129,675	-	-	-	129,675	-	129,675	-
Bonds and other fixed income	754,800	-	220,838	-	533,962	449,533	84,429	-
U.S. government securities	130,477	-	-	-	130,477	130,477	-	-
Non - U.S. government securities	161,063	-	36,283	-	124,780	124,780	-	-
Corporates securities	378,831	-	184,555	-	194,276	194,276	-	-
Structured notes	68,044	-	-	-	68,044	-	68,044	-
Mortgage and asset-backed securities	16,385	-	-	-	16,385	-	16,385	-
Others	100	-	-	-	100	-	100	-
Other Investments Non-current	128,335	-	123,498	-	4,837	-	-	4,837
Bonds and other fixed income	123,498	-	123,498	-	-	-	-	-
Other investments	4,837	-	-	-	4,837	-	-	4,837
Trade receivables	1,214,060	1,214,060	-	-	-	-	-	-
Receivables C and NC	327,258	176,716	-	-	8,230	-	8,230	-
Foreign exchange derivatives contracts	8,230	-	-	-	8,230	-	8,230	-
Other receivables	176,716	176,716	-	-	-	-	-	-
Other receivables (non-financial)	142,312	-	-	-	-	-	-	-
Available for sale assets	21,572	-	-	21,572	-	-	-	21,572
Total		1,541,724	344,336	21,572	1,163,808	638,749	520,222	26,409
Liabilities								
Borrowings C and NC	965,859	965,859	-	-	-	-	-	-
Trade payables	750,739	750,739	-	-	-	-	-	-
Other liabilities	197,504	-	-	-	39,799	-	39,799	-
Foreign exchange derivatives contracts	39,799	-	-	-	39,799	-	39,799	-
Other liabilities (non-financial)	157,705	-	-	-	-	-	-	-
Total		1,716,598	-	-	39,799	-	39,799	-

There were no transfers between levels during the year.

The fair value of financial instruments traded in active markets is based on quoted market prices at the reporting date. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service, or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis. The quoted market price used for financial assets held by Tenaris is the current bid price. These instruments are included in Level 1 and comprise primarily corporate and sovereign debt securities.

B. Category of financial instruments and classification within the fair value hierarchy (Cont.)

The fair value of financial instruments that are not traded in an active market (such as certain debt securities, certificates of deposits with original maturity of more than three months, forward and interest rate derivative instruments) is determined by using valuation techniques which maximize the use of observable market data when available and rely as little as possible on entity specific estimates. If all significant inputs required to value an instrument are observable, the instrument is included in Level 2. Tenaris values its assets and liabilities included in this level using bid prices, interest rate curves, broker quotations, current exchange rates, forward rates and implied volatilities obtained from market contributors as of the valuation date.

If one or more of the significant inputs are not based on observable market data, the instruments are included in Level 3. Tenaris values its assets and liabilities in this level using observable market inputs and management assumptions which reflect the Company's best estimate on how market participants would price the asset or liability at measurement date. Main balances included in this level correspond to the Company interest in Venezuelan companies (see Note 30).

The following table presents the changes in Level 3 assets and liabilities:

	Year ended December 31,	
	2018	2017
	Assets / Liabilities	
At the beginning of the year	26,409	23,242
Addition / (Decrease)	26,768	3,117
Currency translation adjustment and others	(192)	50
At the end of the year	52,985	26,409

C. Fair value estimation

Financial assets or liabilities classified at fair value through profit or loss are measured under the framework established by the IASB accounting guidance for fair value measurements and disclosures.

The fair values of quoted investments are generally based on current bid prices. If the market for a financial asset is not active or no market is available, fair values are established using standard valuation techniques.

The fair value of all outstanding derivatives is determined using specific pricing models that include inputs that are observable in the market or can be derived from or corroborated by observable data. The fair value of forward foreign exchange contracts is calculated as the net present value of the estimated future cash flows in each currency, based on observable yield curves, converted into U.S. dollars at the spot rate of the valuation date.

Borrowings are comprised primarily of fixed rate debt and variable rate debt with a short term portion where interest has already been fixed. They are classified under other financial liabilities and measured at their amortized cost. Tenaris estimates that the fair value of its main financial liabilities is approximately 99.3% of its carrying amount including interests accrued in 2018 as compared with 99.4% in 2017. Fair values were calculated using standard valuation techniques for floating rate instruments and comparable market rates for discounting flows.

The carrying amount of investments valued at amortized cost approximates its fair value.

D. Accounting for derivative financial instruments and hedging activities

Derivative financial instruments are initially recognized in the statement of financial position at fair value through profit and loss on each date a derivative contract is entered into and are subsequently remeasured at fair value. Specific tools are used for calculation of each instrument's fair value and these tools are tested for consistency on a monthly basis. Market rates are used for all pricing operations. These include exchange rates, deposit rates and other discount rates matching the nature of each underlying risk.

As a general rule, Tenaris recognizes the full amount related to the change in fair value of derivative financial instruments in *Financial Results* in the Consolidated Income Statement.

D. Accounting for derivative financial instruments and hedging activities (Cont.)

Tenaris designates certain derivatives as hedges of particular risks associated with recognized assets or liabilities or highly probable forecast transactions. These transactions (mainly currency forward contracts on highly probable forecast transactions) are classified as cash flow hedges. The effective portion of the fair value of derivatives that are designated and qualify as cash flow hedges is recognized in equity. Amounts accumulated in equity are then recognized in the income statement in the same period as the offsetting losses and gains on the hedged item. The gain or loss relating to the ineffective portion is recognized immediately in the income statement. The fair value of Tenaris's derivative financial instruments (assets or liabilities) continues to be reflected in the statement of financial position. The full fair value of a hedging derivative is classified as a current or non-current asset or liability according to its expiry date.

For transactions designated and qualifying for hedge accounting, Tenaris documents at the inception of the transaction the relationship between hedging instruments and hedged items, as well as its risk management objectives and strategy for undertaking various hedge transactions. Tenaris also documents its assessment on an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in the fair value or cash flow of hedged items. At December 31, 2018 and 2017, the effective portion of designated cash flow hedges which is included in *Other Reserves* in equity amounts to \$0.9 million and \$0.2 million debit respectively (see Note 23 Derivative financial instruments).

The fair values of various derivative instruments used for hedging purposes and the movements of the hedging reserve included within *Other Reserves* in equity are disclosed in Note 23.

IV. OTHER NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(In the notes all amounts are shown in thousands of U.S. dollars, unless otherwise stated)

1 Segment information

As mentioned in section II. AP – C, the Segment Information is disclosed as follows:

Reportable operating segments

(All amounts in millions of U.S. dollars)

Year ended December 31, 2018	Tubes	Other	Continuing operations	Discontinued operations
IFRS - Net Sales	7,233	426	7,659	-
Management view - operating income	702	81	783	-
Difference in cost of sales	112	7	119	-
<i>Direct cost and others</i>	127	6	133	-
<i>Absorption</i>	(15)	1	(14)	-
Differences in depreciation and amortization	(34)	0	(34)	-
Differences in selling, general and administrative expenses	(2)	6	4	-
Differences in other operating income (expenses), net	-	-	-	-
IFRS - operating income	777	95	872	-
Financial income (expense), net			37	-
Income before equity in earnings of non-consolidated companies and income tax			909	-
Equity in earnings of non-consolidated companies			194	-
Income before income tax			1,103	-
<i>Capital expenditures</i>	346	3	349	-
<i>Depreciation and amortization</i>	645	19	664	-
Year ended December 31, 2017	Tubes	Other	Continuing operations	Discontinued operations
IFRS - Net Sales	4,966	323	5,289	12
Management view - operating income	115	48	163	3
Difference in cost of sales	164	1	165	(1)
<i>Direct cost and others</i>	115	-	115	(1)
<i>Absorption</i>	49	1	50	-
Differences in depreciation and amortization	(3)	-	(3)	-
Differences in selling, general and administrative expenses	14	(6)	8	-
Differences in other operating income (expenses), net	2	-	2	-
IFRS - operating income	292	43	335	2
Financial income (expense), net			(23)	-
Income before equity in earnings of non-consolidated companies and income tax			312	2
Equity in earnings of non-consolidated companies			116	-
Income before income tax			428	2
<i>Capital expenditures</i>	550	8	558	-
<i>Depreciation and amortization</i>	594	15	609	-
Year Ended December 31, 2016	Tubes	Other	Continuing operations	Discontinued operations
IFRS - Net Sales	4,015	278	4,294	235
Management view - operating income	19	19	38	62
Difference in cost of sales	(108)	(8)	(116)	4
<i>Direct cost and others</i>	(114)	(8)	(122)	4
<i>Absorption</i>	6	-	6	-
Differences in depreciation and amortization	28	-	28	-
Differences in selling, general and administrative expenses	(5)	1	(4)	-
Differences in other operating income (expenses), net	(5)	-	(5)	-
IFRS - operating (loss) income	(71)	12	(59)	66
Financial income (expense), net			22	-
(Loss) income before equity in earnings of non-consolidated companies and income tax			(37)	66
Equity in earnings of non-consolidated companies			71	-
Income before income tax			34	66
<i>Capital expenditures</i>	752	33	785	2
<i>Depreciation and amortization</i>	643	14	657	5

Transactions between segments, which were eliminated in consolidation, are mainly related to sales of scrap, energy, surplus raw materials and others from the Other segment to the Tubes segment for \$52, \$53 and \$47 million in 2018, 2017 and 2016, respectively.

In addition to the amounts reconciled above, the main differences in net income arise from the impact of functional currencies on financial result, deferred income taxes as well as the result of investment in non-consolidated companies and changes on the valuation of inventories according to cost estimation internally defined.

1 Segment information (Cont.)**Geographical information**

(all amounts in thousands of U.S. dollars)	North America	South America	Europe	Middle East & Africa	Asia Pacific	Unallocated (*)	Total continuing operations	Total discontinued operations
Year ended December 31, 2018								
Net sales	3,611,509	1,462,044	724,733	1,559,988	300,314	-	7,658,588	-
Total assets	7,971,311	2,489,522	1,913,589	588,746	482,563	805,568	14,251,299	-
Trade receivables	791,190	280,801	215,202	383,358	66,815	-	1,737,366	-
Property, plant and equipment, net	3,859,060	1,133,113	848,178	94,040	129,517	-	6,063,908	-
Capital expenditures	196,220	68,603	77,467	2,047	5,136	-	349,473	-
Depreciation and amortization	441,705	108,558	82,769	10,389	20,936	-	664,357	-
Year ended December 31, 2017								
Net sales	2,451,357	1,142,142	545,777	937,439	211,789	-	5,288,504	11,899
Total assets	7,925,520	2,975,599	2,002,658	391,029	441,546	661,866	14,398,218	-
Trade receivables	582,204	234,877	214,944	135,524	46,511	-	1,214,060	-
Property, plant and equipment, net	3,914,229	1,190,145	878,788	102,481	143,500	-	6,229,143	-
Capital expenditures	430,142	58,949	57,285	7,562	4,153	-	558,091	145
Depreciation and amortization	354,091	126,273	93,900	12,094	22,282	-	608,640	-
Year ended December 31, 2016								
Net sales	1,320,297	1,210,527	565,173	1,055,994	141,601	-	4,293,592	234,911
Total assets	7,467,842	2,803,848	1,925,784	593,649	482,132	578,603	13,851,858	151,417
Trade receivables	229,390	204,746	161,291	308,919	50,339	-	954,685	33,620
Property, plant and equipment, net	3,652,032	1,237,391	847,318	106,941	158,257	-	6,001,939	41,470
Capital expenditures	646,545	59,780	35,270	24,166	19,201	-	784,962	1,911
Depreciation and amortization	381,811	128,458	113,875	11,053	21,912	-	657,109	5,303

There are no revenues from external customers attributable to the Company's country of incorporation (Luxembourg). For geographical information purposes, "North America" comprises Canada, Mexico and the USA (33%); "South America" comprises principally Argentina (13%), Brazil and Colombia; "Europe" comprises principally Italy and Romania; "Middle East and Africa" comprises principally Egypt, Kazakhstan, Nigeria and Saudi Arabia and; "Asia Pacific" comprises principally China, Japan, Indonesia and Thailand.

(*) For 2018 includes Investments in non-consolidated companies, for 2017 and 2016 includes Investments in non-consolidated companies and Other equity investments for \$21.6 million (see Note 11 and 30).

Revenue is mainly recognized at a point in time to direct customers, when control has been transferred and there is no unfulfilled performance obligation that could affect the acceptance of the product by the customer. Tenaris's revenues related to governmental institutions represents approximately 14% and 16% in 2018 and 2017 respectively. At December 2018, 2017 and 2016, the Company recognized contract liabilities related to customer advances in the amount of \$ 62.7, 56.7 and 39.7 million, respectively. These amounts related to years 2017 and 2016 were reclassified to revenues during the subsequent year. In these periods, no significant adjustment in revenues were performed related to performance obligations previously satisfied.

2 Cost of sales

(all amounts in thousands of U.S. dollars)	Year ended December 31,		
	2018	2017	2016
Inventories at the beginning of the year	2,368,304	1,563,889	1,843,467
Plus: Charges of the year			
Raw materials, energy, consumables and other	3,400,396	2,794,503	1,528,532
Services and fees	275,130	244,035	199,210
Labor cost	855,040	778,408	658,975
Depreciation of property, plant and equipment	432,497	383,490	376,965
Amortization of intangible assets	8,220	18,621	27,244
Maintenance expenses	185,782	183,370	122,553
Allowance for obsolescence	25,457	(12,917)	32,765
Taxes	133,308	18,542	16,693
Other	119,507	88,823	89,575
	5,435,337	4,496,875	3,052,512
Less: Inventories at the end of the year (*)	(2,524,341)	(2,368,304)	(1,593,708)
From discontinued operations	-	(7,403)	(136,587)
	5,279,300	3,685,057	3,165,684

(*) Inventories as of December 31, 2016 include \$ 29.8 million related to discontinued operations.

3 Selling, general and administrative expenses

(all amounts in thousands of U.S. dollars)

	Year ended December 31,		
	2018	2017	2016
Services and fees	128,090	132,301	123,653
Labor cost	470,928	443,338	441,355
Depreciation of property, plant and equipment	16,968	17,979	16,965
Amortization of intangible assets	206,672	188,550	241,238
Commissions, freight and other selling expenses	491,555	339,759	243,401
Provisions for contingencies	23,498	17,664	30,841
Allowances for doubtful accounts	1,751	(5,421)	(12,573)
Taxes	71,110	56,826	67,724
Other	99,404	81,061	76,563
	1,509,976	1,272,057	1,229,167
From discontinued operations	-	(2,041)	(32,238)
	1,509,976	1,270,016	1,196,929

4 Labor costs (included in Cost of sales and in Selling, general and administrative expenses)

(all amounts in thousands of U.S. dollars)

	Year ended December 31,		
	2018	2017	2016
Wages, salaries and social security costs	1,250,783	1,144,341	988,794
Severance indemnities	25,225	34,497	73,741
Defined contribution plans	13,217	12,401	10,758
Pension benefits - defined benefit plans	15,390	15,066	10,563
Employee retention and long term incentive program	21,353	15,441	16,474
	1,325,968	1,221,746	1,100,330
From discontinued operations	-	(853)	(28,306)
	1,325,968	1,220,893	1,072,024

The following table shows the geographical distribution of the employees:

Country	2018	2017	2016
Mexico	5,728	5,139	4,968
Argentina	5,569	5,221	4,755
USA	2,410	1,953	1,636
Italy	2,173	2,088	1,979
Romania	1,877	1,870	1,631
Brazil	1,374	1,382	1,166
Colombia	1,106	1,003	750
Canada	1,034	919	473
Indonesia	554	506	509
Japan	399	410	458
Other	1,248	1,114	1,074
	23,472	21,605	19,399
From discontinued operations	-	-	(323)
	23,472	21,605	19,076

5 Other operating income and expenses

(all amounts in thousands of U.S. dollars)	Year ended December 31,		
	2018	2017	2016
<i>Other operating income</i>			
Net income from other sales	3,604	4,395	16,275
Net rents	4,909	4,325	4,852
Other	6,546	1,796	-
	15,059	10,516	21,127
<i>Other operating expenses</i>			
Contributions to welfare projects and non-profits organizations	11,379	9,158	9,534
Loss on fixed assets and material supplies disposed / scrapped	-	118	57
Allowance for doubtful receivables	1,179	84	432
Other	-	-	1,388
	12,558	9,360	11,411
From discontinued operations	-	(1)	(248)
	12,558	9,359	11,163

6 Financial results

(all amounts in thousands of U.S. dollars)	Year ended December 31,		
	2018	2017	2016
Interest Income	42,244	51,525	60,405
Net result on changes in FV of financial assets at FVTPL	(2,388)	(3,920)	5,799
Finance income (*)	39,856	47,605	66,204
Finance cost	(36,942)	(27,072)	(22,329)
Net foreign exchange transactions results (**)	28,845	(48,955)	(2,146)
Foreign exchange derivatives contracts results (***)	6,576	(8,996)	(31,310)
Other	(1,035)	14,392	11,447
Other financial results	34,386	(43,559)	(22,009)
Net financial results	37,300	(23,026)	21,866
From discontinued operations	-	9	88
	37,300	(23,017)	21,954

(*) In 2018 includes \$3.6 million of interest related to instruments carried at FVTPL.

(**) In 2018 includes the result from the Argentine peso depreciation against the U.S. dollar on Peso denominated financial, trade, social and fiscal payables and receivables at Argentine subsidiaries with functional currency U.S. dollar, together with the positive impact from Euro depreciation against the U.S. dollar on Euro denominated intercompany liabilities in subsidiaries with functional currency U.S. Dollar, largely offset by an increase in currency translation adjustment reserve from our Italian subsidiary.

In 2017 includes the negative impact from Euro appreciation against the U.S. dollar on Euro denominated intercompany liabilities in subsidiaries with functional currency U.S. Dollar, largely offset by an increase in currency translation adjustment reserve from our Italian subsidiary.

(***) In 2016 includes the negative impact from Brazilian Real appreciation against the U.S. dollar on hedging instruments and of Cash and cash equivalent and other investments denominated in U.S. dollar in subsidiaries with functional currency Brazilian Real, partially offset by an increase in currency translation adjustment reserve from the Brazilian subsidiaries.

7 **Income tax**

(all amounts in thousands of U.S. dollars)	Year ended December 31,		
	2018	2017	2016
Current tax	343,104	184,016	174,410
Deferred tax	(113,897)	(100,432)	(132,969)
	229,207	83,584	41,441
From discontinued operations	-	(100,720)	(24,339)
	229,207	(17,136)	17,102

The tax on Tenaris's income before tax differs from the theoretical amount that would arise using the tax rate in each country as follows:

(all amounts in thousands of U.S. dollars)	Year ended December 31,		
	2018	2017	2016
Income before income tax	1,103,107	427,711	34,430
Tax calculated at the tax rate in each country	207,422	6,456	(91,628)
Non taxable income / Non deductible expenses, net	(57,591)	40,298	51,062
Changes in the tax rates	1,824	(62,968)	4,720
Effect of currency translation on tax base (*)	77,552	(922)	105,758
Accrual / Utilization of previously unrecognized tax losses	-	-	(52,810)
Tax charge	229,207	(17,136)	17,102

(*)Tenaris applies the liability method to recognize deferred income tax on temporary differences between the tax bases of assets and their carrying amounts in the financial statements. By application of this method, Tenaris recognizes gains and losses on deferred income tax due to the effect of the change in the value on the tax basis in subsidiaries (mainly Argentina and Mexico), which have a functional currency different than their local currency. These gains and losses are required by IFRS even though the revalued / devalued tax bases of the relevant assets will not result in any deduction / obligation for tax purposes in future periods

Non Taxable income/ Non deductible expenses, net, includes a net tax charge of approximately \$59 million booked in the last quarter of 2018 related to impact resulting from the special tax revaluation regime of fixed assets in Argentina (option granted by Law to Argentinian Tax payers).

Changes in the tax rates, in 2017 it includes mainly the effect of the changes in tax rate in Argentine and US subsidiaries for approximately \$46 million and \$15.2 million respectively.

Accrual/ Utilization of previously unrecognized tax losses, includes a deferred tax income of approximately \$45 million booked in the last quarter of 2016 related to capital losses. The amount was carried forward in line with US Regulation in force and offset in 2017 capital gains.

8 **Dividends distribution**

On October 31, 2018, the Company's Board of Directors approved the payment of an interim dividend of \$0.13 per share (\$0.26 per ADS), or approximately \$153 million, paid on November 21, 2018, with an ex-dividend date of November 19, 2018.

On May 2, 2018, the Company's Shareholders approved an annual dividend in the amount of \$0.41 per share (\$0.82 per ADS). The amount approved included the interim dividend previously paid in November 22, 2017 in the amount of \$0.13 per share (\$0.26 per ADS). The balance, amounting to \$0.28 per share (\$0.56 per ADS), was paid on May 23, 2018. In the aggregate, the interim dividend paid in November 2017 and the balance paid in May 2018 amounted to approximately \$484.0 million.

On May 3, 2017, the Company's Shareholders approved an annual dividend in the amount of \$0.41 per share (\$0.82 per ADS). The amount approved included the interim dividend previously paid in November 23, 2016 in the amount of \$0.13 per share (\$0.26 per ADS). The balance, amounting to \$0.28 per share (\$0.56 per ADS), was paid on May 24, 2017. In the aggregate, the interim dividend paid in November 2016 and the balance paid in May 2017 amounted to approximately \$484.0 million.

On May 4, 2016 the Company's Shareholders approved an annual dividend in the amount of \$0.45 per share (\$0.90 per ADS). The amount approved included the interim dividend previously paid in November 25, 2015 in the amount of \$0.15 per share (\$0.30 per ADS). The balance, amounting to \$0.30 per share (\$0.60 per ADS), was paid on May 25, 2016. In the aggregate, the interim dividend paid in November 2015 and the balance paid in May 2016 amounted to approximately \$531.2 million.

9 Property, plant and equipment, net

Year ended December 31, 2018	Land and civil buildings	Industrial buildings, plant and production equipment	Vehicles, furniture and fixtures	Work in progress	Spare parts and equipment	Total
Cost						
Values at the beginning of the year	712,061	11,954,585	370,542	167,079	42,413	13,246,680
Translation differences	(5,628)	(117,977)	(5,458)	(2,269)	(424)	(131,756)
Additions	723	681	1,245	294,163	20,756	317,568
Disposals / Consumptions	(221)	(21,836)	(10,269)	(42)	(3,541)	(35,909)
Transfers / Reclassifications	25,643	306,116	21,200	(331,553)	3,993	25,399
Values at the end of the year	732,578	12,121,569	377,260	127,378	63,197	13,421,982
Depreciation						
Accumulated at the beginning of the year	101,197	6,612,871	303,469	-	-	7,017,537
Translation differences	(1,383)	(72,141)	(4,939)	-	-	(78,463)
Depreciation charge	11,153	417,229	21,083	-	-	449,465
Transfers / Reclassifications	-	173	(671)	-	-	(498)
Disposals / Consumptions	(53)	(21,232)	(8,682)	-	-	(29,967)
Accumulated at the end of the year	110,914	6,936,900	310,260	-	-	7,358,074
At December 31, 2018	621,664	5,184,669	67,000	127,378	63,197	6,063,908

Year ended December 31, 2017	Land and civil buildings	Industrial buildings, plant and production equipment	Vehicles, furniture and fixtures	Work in progress	Spare parts and equipment	Total
Cost						
Values at the beginning of the year	599,710	10,034,500	346,486	1,492,572	25,404	12,498,672
Translation differences	5,493	178,598	5,518	284	331	190,224
Additions	63	7,423	1,252	497,423	18,490	524,651
Disposals / Consumptions	(1,293)	(3,966)	(7,319)	(94)	(1,812)	(14,484)
Increase due to business combinations (*)	2,187	5,654	2,444	-	-	10,285
Transfers / Reclassifications	105,901	1,732,376	22,161	(1,823,106)	-	37,332
Values at the end of the year	712,061	11,954,585	370,542	167,079	42,413	13,246,680
Depreciation						
Accumulated at the beginning of the year	89,274	6,125,552	281,907	-	-	6,496,733
Translation differences	1,204	114,675	4,959	-	-	120,838
Depreciation charge	9,406	368,850	23,213	-	-	401,469
Transfers / Reclassifications	1,699	7,575	(405)	-	-	8,869
Disposals / Consumptions	(386)	(3,781)	(6,205)	-	-	(10,372)
Accumulated at the end of the year	101,197	6,612,871	303,469	-	-	7,017,537
At December 31, 2017	610,864	5,341,714	67,073	167,079	42,413	6,229,143

Property, plant and equipment include capitalized interests for net amounts at December 31, 2018 and 2017 of \$37.4 million and \$39.5 million, respectively. The average capitalization interest rate applied during 2017 was 1.97%.

(*) Related to Garrett LLC acquisition, see Note 25.

10 Intangible assets, net

Year ended December 31, 2018	Information system projects	Licenses, patents and trademarks (*)	Goodwill	Customer relationships	Total
Cost					
Values at the beginning of the year	560,692	465,963	2,090,073	2,058,859	5,175,587
Translation differences	(6,153)	(183)	(4,137)	-	(10,473)
Additions	31,632	273	-	-	31,905
Transfers / Reclassifications	(5,493)	-	-	-	(5,493)
Disposals	(56)	(1,482)	-	-	(1,538)
Values at the end of the year	580,622	464,571	2,085,936	2,058,859	5,189,988
Amortization					
Accumulated at the beginning of the year	478,946	372,746	797,592	1,865,444	3,514,728
Translation differences	(5,551)	-	-	-	(5,551)
Amortization charge	40,635	720	-	173,537	214,892
Disposals	(46)	-	-	-	(46)
Accumulated at the end of the year	513,984	373,466	797,592	2,038,981	3,724,023
At December 31, 2018	66,638	91,105	1,288,344	19,878	1,465,965

Year ended December 31, 2017	Information system projects	Licenses, patents and trademarks (*)	Goodwill	Customer relationships	Total
Cost					
Values at the beginning of the year	554,330	461,619	2,090,257	2,058,946	5,165,152
Translation differences	6,265	483	(184)	(87)	6,477
Additions	28,335	5,105	-	-	33,440
Transfers / Reclassifications	(28,371)	(92)	-	-	(28,463)
Increase due to business combinations (**)	133	-	-	-	133
Disposals	-	(1,152)	-	-	(1,152)
Values at the end of the year	560,692	465,963	2,090,073	2,058,859	5,175,587
Amortization					
Accumulated at the beginning of the year	408,373	362,292	797,592	1,734,068	3,302,325
Translation differences	5,232	-	-	-	5,232
Amortization charge	65,249	10,546	-	131,376	207,171
Transfers / Reclassifications	92	(92)	-	-	-
Accumulated at the end of the year	478,946	372,746	797,592	1,865,444	3,514,728
At December 31, 2017	81,746	93,217	1,292,481	193,415	1,660,859

(*) Includes Proprietary Technology.

(**) Related to Garrett LLC acquisition.

The geographical allocation of goodwill for the year ended December 31, 2018 was \$1,168.5 million for North America, \$117.1 million for South America, \$1.9 million for Europe and \$0.7 million for Middle East & Africa.

The carrying amount of goodwill allocated by CGU, as of December 31, 2018, was as follows:

(All amounts in million US dollar)

As of December 31, 2018

CGU	Tubes Segment			Other Segment		Total
	Maverick Acquisition	Hydril Acquisition	Other	Maverick Acquisition		
OCTG (USA)	225	-	-	-	-	225
Tamsa (Hydril and other)	-	346	19	-	-	365
Siderca (Hydril and other)	-	265	93	-	-	358
Hydril	-	309	-	-	-	309
Coiled Tubing	-	-	-	4	-	4
Confab	-	-	24	-	-	24
Other	-	-	3	-	-	3
Total	225	920	139	4	-	1,288

11 Investments in non-consolidated companies

	Year ended December 31,	
	2018	2017
At the beginning of the year	640,294	557,031
Translation differences	1,848	(9,548)
Equity in earnings of non-consolidated companies	193,994	116,140
Dividends and distributions received (*)	(26,581)	(22,971)
Decrease / increase in equity reserves and others	(3,987)	(358)
At the end of the year	805,568	640,294

(*)Related to Ternium and Usiminas of which 25.7 were collected during the year.

The principal non-consolidated companies are:

Company	Country of incorporation	% ownership at December 31,		Value at December 31,	
		2018	2017	2018	2017
a) Ternium (*)	Luxembourg	11.46%	11.46%	725,548	563,735
b) Usiminas (**)	Brazil	3.07%	3.08%	72,988	70,642
Others	-	-	-	7,032	5,917
				805,568	640,294

(*) Including treasury shares.

(**)At December 31, 2018 and 2017 the voting rights were 5.2%.

a) Ternium

Ternium, is a steel producer with production facilities in Mexico, Argentina, Brazil, Colombia, United States and Guatemala and is one of Tenaris's main suppliers of round steel bars and flat steel products for its pipes business.

At December 31, 2018, the closing price of Ternium's ADSs as quoted on the New York Stock Exchange was \$27.1 per ADS, giving Tenaris's ownership stake a market value of approximately \$622.5 million. At December 31, 2018, the carrying value of Tenaris's ownership stake in Ternium, based on Ternium's IFRS Financial Statements, was approximately \$725.5 million.

As of December 31, 2018 the Company concluded that the carrying amount does not exceed the recoverable value of the investment.

Summarized selected financial information of Ternium, including the aggregated amounts of assets, liabilities, revenues and profit or loss is as follows:

	Ternium	
	2018	2017
Non-current assets	8,121,824	7,727,283
Current assets	4,426,038	4,395,283
Total assets	12,547,862	12,122,566
Non-current liabilities	3,236,756	3,442,521
Current liabilities	1,826,530	2,827,275
Total liabilities	5,063,286	6,269,796
Non-controlling interests	1,091,321	842,347
Revenues	11,454,807	9,700,296
Gross profit	2,971,479	2,297,271
Net income for the year attributable to owners of the parent	1,506,647	886,219
Total comprehensive income for the year, net of tax, attributable to owners of the parent	1,176,964	815,434

11 Investments in non-consolidated companies (Cont.)**b) Usiminas**

Usiminas is a Brazilian producer of high quality flat steel products used in the energy, automotive and other industries.

As of December 31, 2018, the closing price of the Usiminas' ordinary and preferred shares, as quoted on the B3 - Brasil Bolsa Balcão S.A, was BRL11.44 (\$2.95) and BRL9.22 (\$2.38), respectively, giving Tenaris's ownership stake a market value of approximately \$110.8 million. As that date, the carrying value of Tenaris's ownership stake in Usiminas was approximately \$73 million.

Summarized selected financial information of Usiminas, including the aggregated amounts of assets, liabilities, revenues and profit or loss is as follows:

	Usiminas	
	2018	2017
Non-current assets	4,696,896	5,661,947
Current assets	2,148,322	2,193,096
Total assets	6,845,218	7,855,043
Non-current liabilities	1,933,207	2,344,042
Current liabilities	860,862	920,924
Total liabilities	2,794,069	3,264,966
Non-controlling interests	369,333	425,988
Revenues	3,766,241	3,367,937
Gross profit	612,156	513,712
Net income for the year attributable to owners of the parent	194,381	74,019

c) Techgen

Techgen is a Mexican company that operates a natural gas-fired combined cycle electric power plant in the Pesquería area of the State of Nuevo León, Mexico. The company started producing energy on December 1, 2016 and has a power capacity of 900 megawatts. As of December 31, 2018, Tenaris held 22% of Techgen's share capital, and its affiliates, Ternium and Tecpetrol International S.A. (a wholly-owned subsidiary of San Faustin S.A., the controlling shareholder of both Tenaris and Ternium), held 48% and 30% respectively.

Techgen is a party to transportation capacity agreements for a purchasing capacity of 150,000 MMBtu/Gas per day starting on August 1, 2016 and ending on July 31, 2036, and a party to a contract for the purchase of power generation equipment and other services related to the equipment. As of December 31, 2018, Tenaris's exposure under these agreements amounted to \$55.1 million and \$1.8 million respectively. Furthermore, during the quarter, Techgen entered a contract for the purchase of clean energy certificates. As of December 31, 2018 Tenaris's exposure under this agreement amounted to \$17.1 million.

Tenaris issued a corporate guarantee covering 22% of the obligations of Techgen under a syndicated loan agreement between Techgen and several banks, which was used in the construction of the facility. The main covenants under the corporate guarantee are Tenaris's commitment to maintain its participation in Techgen or the right to purchase at least 22% of Techgen's firm energy, and compliance with a maximum permitted leverage ratio. As of December 31, 2018, the amount outstanding under the loan agreement was \$600 million and, as a result, the amount guaranteed by Tenaris was approximately \$132 million. For a description of the recently agreed-upon refinancing of the syndicated loan agreement and the release of Tenaris's corporate guarantee, see "Subsequent events – Techgen refinancing."

During 2018 the shareholders of Techgen made additional investments, in Techgen, in form of subordinated loans, which in case of Tenaris amounted to \$14.7 million. In the same period, there were repayments of these loans for \$9.4 million. As of December 31, 2018, the aggregate outstanding principal amount under these loans was \$98.6 million.

12 Receivables – non current

	Year ended December 31,	
	2018	2017
Receivables from related parties	58,128	88,595
Receivable Venezuelan subsidiaries	48,659	27,075
Tax credits	16,025	29,404
Legal deposits	12,446	13,568
Employee advances and loans	3,740	5,891
Advances to suppliers and other advances	7,592	12,443
Others	5,263	6,353
Derivative financial instruments	52	-
Government entities	-	641
	151,905	183,970
Allowances for doubtful accounts (see Note 21 (i))	-	(641)
	151,905	183,329

13 Inventories

	Year ended December 31,	
	2018	2017
Finished goods	1,025,999	923,316
Goods in process	709,497	619,796
Raw materials	256,816	281,083
Supplies	504,286	486,002
Goods in transit	237,539	274,175
	2,734,137	2,584,372
Allowance for obsolescence (see Note 22 (i))	(209,796)	(216,068)
	2,524,341	2,368,304

14 Receivables and prepayments

	Year ended December 31,	
	2018	2017
Prepaid expenses and other receivables	31,599	36,587
Government entities	2,182	2,085
Employee advances and loans	6,521	12,205
Advances to suppliers and other advances	23,467	25,205
Government tax refunds on exports	4,896	17,353
Receivables from related parties	63,321	28,397
Miscellaneous	30,683	20,122
	162,669	141,954
Allowance for other doubtful accounts (see Note 22 (i))	(6,784)	(6,255)
	155,885	135,699

15 Current tax assets and liabilities

	Year ended December 31,	
	2018	2017
Current tax assets		
V.A.T. credits	67,322	76,714
Prepaid taxes	54,010	55,620
	121,332	132,334
Current tax liabilities		
Income tax liabilities	182,711	35,210
V.A.T. liabilities	18,091	14,313
Other taxes	49,431	52,882
	250,233	102,405

16 Trade receivables, net

	Year ended December 31,	
	2018	2017
Current accounts	1,778,796	1,240,769
Receivables from related parties	25,105	51,676
	1,803,901	1,292,445
Allowance for doubtful accounts (see Note 22 (i))	(66,535)	(78,385)
	1,737,366	1,214,060

The following table sets forth details of the aging of trade receivables:

	Trade Receivables	Not Due	Past due	
			1 - 180 days	>180 days
At December 31, 2018				
Guaranteed	286,250	254,743	30,884	623
Not guaranteed	1,517,651	1,180,788	260,675	76,188
Guaranteed and not guaranteed	1,803,901	1,435,531	291,559	76,811
Expected loss rate	0.07%	0.04%	0.17%	0.43%
Allowances for doubtful accounts	(1,396)	(564)	(510)	(322)
Nominative allowances for doubtful accounts	(65,139)	-	(1,436)	(63,703)
Net Value	1,737,366	1,434,967	289,613	12,786
At January 1, 2018				
Guaranteed	247,079	219,764	22,978	4,337
Not guaranteed	1,045,366	841,737	115,245	88,384
Guaranteed and not guaranteed	1,292,445	1,061,501	138,223	92,721
Expected loss rate	0.08%	0.04%	0.17%	0.43%
Allowances for doubtful accounts	(1,075)	(447)	(252)	(376)
Nominative allowances for doubtful accounts	(77,310)	-	-	(77,310)
Net Value	1,214,060	1,061,054	137,971	15,035
Effect of adoption of new standard	(6,423)	-	-	(6,423)
Net Value after adoption of new standard	1,207,637	1,061,054	137,971	8,612

Trade receivables are mainly denominated in U.S. dollars.

17 Cash and cash equivalents and Other investments

	Year ended December 31,	
	2018	2017
Cash and cash equivalents		
Cash at banks	81,211	150,948
Liquidity funds	160,198	66,033
Short – term investments	186,952	113,240
	428,361	330,221
Other investments - current		
Fixed Income (time-deposit, zero coupon bonds, commercial papers)	300,410	437,406
Bonds and other fixed Income	187,324	754,800
Others	-	100
	487,734	1,192,306
Other investments - Non-current		
Bonds and other fixed Income	113,829	123,498
Others	4,326	4,837
	118,155	128,335

18 Borrowings

	Year ended December 31,	
	2018	2017
Non-current		
Bank borrowings	29,214	34,626
Finance lease liabilities	-	59
Costs of issue of debt	(27)	(40)
	29,187	34,645
Current		
Bank borrowings	508,143	930,957
Bank overdrafts	1,644	131
Finance lease liabilities	44	138
Costs of issue of debt	(11)	(12)
	509,820	931,214
Total Borrowings	539,007	965,859

The maturity of borrowings is as follows:

	1 year or less	1 - 2 years	2 - 3 years	3 - 4 years	4 - 5 years	Over 5 years	Total
At December 31, 2018							
Financial lease	44	-	-	-	-	-	44
Other borrowings	509,776	4,271	4,771	20,145	-	-	538,963
Total borrowings	509,820	4,271	4,771	20,145	-	-	539,007
Interest to be accrued (*)	8,182	1,175	1,166	169	-	-	10,692
Total	518,002	5,446	5,937	20,314	-	-	549,699
	1 year or less	1 - 2 years	2 - 3 years	3 - 4 years	4 - 5 years	Over 5 years	Total
At December 31, 2017							
Financial lease	138	59	-	-	-	-	197
Other borrowings	931,076	4,876	4,484	4,978	20,248	-	965,662
Total borrowings	931,214	4,935	4,484	4,978	20,248	-	965,859
Interest to be accrued (*)	14,512	1,212	1,203	1,190	174	-	18,290
Total	945,726	6,147	5,687	6,168	20,422	-	984,149

(*) Includes the effect of hedge accounting.

Significant borrowings include:

In million of USD				
Disbursement date	Borrower	Type	Original & Outstanding	Final maturity
2018	Tamsa	Bank loans	347	2019
2018	Siderca	Bank loans	66	2019
2018	TuboCaribe	Bank loan	50	May 2019

As of December 31, 2018, Tenaris was in compliance with all of its covenants.

The weighted average interest rates before tax shown below were calculated using the rates set for each instrument in its corresponding currency as of December 31, 2018 and 2017, considering hedge accounting where applicable.

	2018	2017
Total borrowings	3.98%	3.73%

Breakdown of long-term borrowings by currency and rate is as follows:

18 Borrowings (Cont.)**Non-current borrowings**

Currency	Interest rates	Year ended December 31,	
		2018	2017
USD	Fixed	18,762	19,120
EUR	Fixed	9,023	13,828
EUR	Variable	1,402	1,638
Others	Variable	-	59
Total non-current borrowings		29,187	34,645

Breakdown of short-term borrowings by currency and rate is as follows:

Current borrowings

Currency	Interest rates	Year ended December 31,	
		2018	2017
USD	Variable	16,847	17,640
USD	Fixed	138,303	187,872
EUR	Variable	198	169
EUR	Fixed	4,178	839
MXN	Fixed	301,047	412,719
ARS	Fixed	49,125	311,829
Others	Variable	89	138
Others	Fixed	33	8
Total current borrowings		509,820	931,214

Borrowings evolution

	Year ended December 31, 2018	
	Non current	Current
At the beginning of the year	34,645	931,214
Translation differences	(623)	(8,191)
Proceeds and repayments, net	(1,330)	(411,570)
Interests accrued less payments	(5)	(6,646)
Reclassifications	(3,500)	3,500
Overdrafts variation	-	1,513
At the end of the year	29,187	509,820

19 Deferred income tax

Deferred income taxes are calculated in full on temporary differences under the liability method using the tax rate of each country.

The evolution of deferred tax assets and liabilities during the year are as follows:

Deferred tax liabilities

	Fixed assets (*)	Inventories	Intangible and Other	Total
At the beginning of the year	744,926	34,934	55,585	835,445
Effect of adoption of new standards	-	-	35	35
Translation differences	(876)	-	92	(784)
Charged directly to other comprehensive income	-	-	288	288
Income statement charge	(33,055)	(9,886)	(9,468)	(52,409)
At December 31, 2018	710,995	25,048	46,532	782,575

19 Deferred income tax (Cont.)**Deferred tax liabilities (Cont.)**

	Fixed assets (*)	Inventories	Intangible and Other	Total
At the beginning of the year	625,488	36,891	152,281	814,660
Translation differences	2,241	(2)	23	2,262
Charged directly to other comprehensive income	-	-	(583)	(583)
Income statement credit (charge)	117,197	(1,955)	(96,136)	19,106
At December 31, 2017	744,926	34,934	55,585	835,445

(*) Includes the effect of currency translation on tax base (See Note 7).

Deferred tax assets

	Provisions and allowances	Inventories	Tax losses (*)	Other	Total
At the beginning of the year	(26,475)	(89,555)	(354,944)	(60,033)	(531,007)
Effect of adoption of new standards	952	-	-	(164)	788
Translation differences	2,532	1,447	1,014	(38)	4,955
Charged directly to other comprehensive income	23	-	-	1,587	1,610
Income statement charge / (credit)	6,852	1,523	(42,327)	(27,536)	(61,488)
At December 31, 2018	(16,116)	(86,585)	(396,257)	(86,184)	(585,142)

(*) As of December 31, 2018, the net unrecognized deferred tax assets amount to \$127.3 million.

	Provisions and allowances	Inventories	Tax losses	Other	Total
At the beginning of the year	(33,276)	(94,176)	(199,326)	(81,838)	(408,616)
Translation differences	(223)	(972)	322	(606)	(1,479)
Charged directly to other comprehensive income	-	-	-	(778)	(778)
Income statement charge / (credit)	7,024	5,593	(155,940)	23,189	(120,134)
At December 31, 2017	(26,475)	(89,555)	(354,944)	(60,033)	(531,007)

The estimated recovery analysis of deferred tax assets and deferred tax liabilities is as follows:

	Year ended December 31,	
	2018	2017
Deferred tax assets to be recovered after 12 months	(452,330)	(405,416)
Deferred tax liabilities to be recovered after 12 months	739,670	808,108

Deferred income tax assets and liabilities are offset when (1) there is a legally enforceable right to set-off current tax assets against current tax liabilities and (2) when the deferred income taxes relate to the same fiscal authority on either the same taxable entity or different taxable entities where there is an intention to settle the balances on a net basis. The following amounts, determined after appropriate set-off, are shown in the Consolidated Statement of Financial Position:

	Year ended December 31,	
	2018	2017
Deferred tax assets	(181,606)	(153,532)
Deferred tax liabilities	379,039	457,970
	197,433	304,438

The movement in the net deferred income tax liability account is as follows:

	Year ended December 31,	
	2018	2017
At the beginning of the year	304,438	406,044
Effect of adoption of new standards	823	-
Translation differences	4,171	783
Charged directly to Other Comprehensive Income	1,898	(1,361)
Income statement credit	(113,897)	(101,028)
At the end of the year	197,433	304,438

20 Other liabilities**(i) Other liabilities – Non current**

	Year ended December 31,	
	2018	2017
Post-employment benefits	115,087	125,012
Other-long term benefits	78,492	68,244
Miscellaneous	19,550	24,040
	213,129	217,296

Post-employment benefits**§ Unfunded**

	Year ended December 31,	
	2018	2017
Values at the beginning of the year	101,889	96,229
Translation differences	(3,849)	2,893
Current service cost	7,400	7,851
Interest cost	5,070	5,462
Curtailements and settlements	-	21
Remeasurements (*)	(3,946)	10,907
Benefits paid from the plan	(9,719)	(22,107)
Other	473	633
At the end of the year	97,318	101,889

(*) For 2018 a gain of \$0.2 million is attributable to demographic assumptions and a gain of \$3.7 million to financial assumptions. For 2017 a loss of \$0.09 million is attributable to demographic assumptions and a loss of \$10.8 million to financial assumptions.

The principal actuarial assumptions used were as follows:

	Year ended December 31,	
	2018	2017
Discount rate	2% - 7%	1% - 7%
Rate of compensation increase	0% - 3%	0% - 3%

As of December 31, 2018, an increase / (decrease) of 1% in the discount rate assumption of the main plans would have generated a (decrease) / increase on the defined benefit obligation of \$7 million and \$6.2 million respectively, and an increase / (decrease) of 1% in the rate of compensation assumption of the main plans would have generated an increase / (decrease) impact on the defined benefit obligation of \$3.4 million and \$3.0 million respectively. The above sensitivity analyses are based on a change in discount rate and rate of compensation while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated.

§ Funded

The amounts recognized in the statement of financial position for the current annual period and the previous annual period are as follows:

	Year ended December 31,	
	2018	2017
Present value of funded obligations	146,885	165,486
Fair value of plan assets	(132,438)	(145,692)
Liability (*)	14,447	19,794

(*) In 2018 and 2017, \$3.3 million corresponding to an overfunded plan were reclassified within other non-current assets, respectively.

20 Other liabilities (Cont.)**Post-employment benefits (Cont.)****§ Funded (Cont.)**

The movement in the present value of funded obligations is as follows:

	Year ended December 31,	
	2018	2017
At the beginning of the year	165,485	159,612
Translation differences	(8,182)	7,300
Current service cost	1,328	592
Interest cost	5,691	6,034
Remeasurements (*)	(7,984)	3,602
Benefits paid	(9,453)	(11,654)
At the end of the year	146,885	165,486

(*) For 2018 a loss of \$0.4 million is attributable to demographic assumptions and a gain of \$8.4 million to financial assumptions. For 2017 a gain of \$0.4 million is attributable to demographic assumptions and a loss of \$4.1 million to financial assumptions. respectively.

The movement in the fair value of plan assets is as follows:

	Year ended December 31,	
	2018	2017
At the beginning of the year	(145,692)	(132,913)
Translation differences	7,514	(6,802)
Return on plan assets	(4,936)	(5,849)
Remeasurements	3,967	(5,874)
Contributions paid to the plan	(3,108)	(6,230)
Benefits paid from the plan	9,453	11,654
Other	364	323
At the end of the year	(132,438)	(145,692)

The major categories of plan assets as a percentage of total plan assets are as follows:

	Year ended December 31,	
	2018	2017
Equity instruments	53.5%	53.4%
Debt instruments	42.8%	42.9%
Others	3.7%	3.7%

The principal actuarial assumptions used were as follows:

	Year ended December 31,	
	2018	2017
Discount rate	4 % - 5 %	4%
Rate of compensation increase	0 % - 3 %	0 % - 3 %

The expected return on plan assets is determined by considering the expected returns available on the assets underlying the current investment policy. Expected return on plan assets is determined based on long-term, prospective rates of return as of the end of the reporting period.

As of December 31, 2018, an increase / (decrease) of 1% in the discount rate assumption of the main plans would have generated a (decrease) / increase on the defined benefit obligation of \$17.2 million and \$14.1 million respectively, and an increase / (decrease) of 1% in the compensation rate assumption of the main plans would have generated an increase / (decrease) on the defined benefit obligation of \$1.6 million and \$1.5 million respectively. The above sensitivity analyses are based on a change in discount rate and rate of compensation while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated.

The employer contributions expected to be paid for the year 2019 amount approximately to \$3.3 million.

The methods and types of assumptions used in preparing the sensitivity analysis did not change compared to the previous period.

20 Other liabilities (Cont.)**(ii) Other liabilities – current**

	Year ended December 31,	
	2018	2017
Payroll and social security payable	148,069	141,886
Miscellaneous	17,624	15,819
	165,693	157,705

21 Non-current allowances and provisions*(i) Deducted from non-current receivables*

	Year ended December 31,	
	2018	2017
Values at the beginning of the year	(641)	(913)
Translation differences	110	106
Used	531	166
Values at the end of the year	-	(641)

(ii) Liabilities

	Year ended December 31,	
	2018	2017
Values at the beginning of the year	36,438	63,257
Translation differences	(5,261)	366
Additional provisions	14,397	3,994
Reclassifications	(2,406)	(7,591)
Used	(7,079)	(23,588)
Values at the end of the year	36,089	36,438

22 Current allowances and provisions*(i) Deducted from assets*

	Allowance for doubtful accounts - Trade receivables	Allowance for other doubtful accounts - Other receivables	Allowance for inventory obsolescence
	Year ended December 31, 2018		
Values at the beginning of the year	(78,385)	(6,255)	(216,068)
Effect of adoption of new standards	6,423	-	-
Translation differences	329	359	3,575
Additional allowances	(1,751)	(1,179)	(25,457)
Used	6,849	291	28,154
At December 31, 2018	(66,535)	(6,784)	(209,796)

	Allowance for doubtful accounts - Trade receivables	Allowance for other doubtful accounts - Other receivables	Allowance for inventory obsolescence
	Year ended December 31, 2017		
Values at the beginning of the year	(85,724)	(6,332)	(240,242)
Translation differences	(345)	(220)	(3,575)
Reversals / (additional) allowances	5,421	(84)	12,917
Used	2,263	381	14,832
At December 31, 2017	(78,385)	(6,255)	(216,068)

22 Current allowances and provisions (Cont.)*(ii) Liabilities*

Year ended December 31, 2018	Sales risks	Other claims and contingencies	Total
Values at the beginning of the year	11,396	20,934	32,330
Translation differences	(103)	(2,205)	(2,308)
Additional provisions	2,638	6,463	9,101
Reclassifications	-	2,406	2,406
Used	(7,117)	(10,129)	(17,246)
At December 31, 2018	6,814	17,469	24,283

Year ended December 31, 2017	Sales risks	Other claims and contingencies	Total
Values at the beginning of the year	13,885	8,871	22,756
Translation differences	247	227	474
Additional provisions	4,238	9,432	13,670
Reclassifications	-	7,591	7,591
Used	(6,974)	(5,187)	(12,161)
At December 31, 2017	11,396	20,934	32,330

23 Derivative financial instruments*Net fair values of derivative financial instruments*

The net fair values of derivative financial instruments, in accordance with IFRS 13, are:

	Year ended December 31,	
	2018	2017
Derivatives hedging borrowings and investments	5,604	2,036
Other Derivatives	3,621	6,194
Contracts with positive fair values (*)	9,225	8,230
Derivatives hedging borrowings and investments	(11,667)	(34,770)
Other Derivatives	(311)	(5,029)
Contracts with negative fair values	(11,978)	(39,799)
Total	(2,753)	(31,569)

(*) Includes \$52 thousand of non-current derivatives.

Foreign exchange derivative contracts and hedge accounting

Tenaris applies hedge accounting to certain cash flow hedges of highly probable forecast transactions. The net fair values of exchange rate derivatives and those derivatives that were designated for hedge accounting as of December 2018 and 2017, were as follows:

Purchase currency	Sell currency	Term	Fair Value		Hedge Accounting Reserve	
			2018	2017	2018	2017
ARS	USD	2019	(6,542)	(13,715)	(895)	(1,067)
USD	ARS	2018	-	22	-	-
USD	BRL	2019	(131)	(17)	-	-
EUR	USD	2019	203	5,660	-	1,881
USD	EUR	2018	-	(367)	-	-
MXN	USD	2019	888	(20,447)	(411)	(534)
USD	MXN	2018	-	490	-	-
JPY	USD	2019	271	(101)	-	-
USD	KWD	2019	522	(630)	390	(520)
USD	CAD	2019	2,089	(2,072)	-	-
Others			(53)	(392)	-	-
Total			(2,753)	(31,569)	(916)	(240)

23 Derivative financial instruments (Cont.)

Following is a summary of the hedge reserve evolution:

	Equity Reserve Dec-16	Movements 2017	Equity Reserve Dec-17	Movements 2018	Equity Reserve Dec-18
Foreign Exchange	(4,742)	4,502	(240)	(676)	(916)
Total Cash flow Hedge	(4,742)	4,502	(240)	(676)	(916)

Tenaris estimates that the cash flow hedge reserve at December 31, 2018 will be recycled to the Consolidated Income Statement during 2019.

24 Contingencies, commitments and restrictions on the distribution of profits**(i) Contingencies**

Tenaris is from time to time subject to various claims, lawsuits and other legal proceedings, including customer, employee, tax and environmental-related claims, in which third parties are seeking payment for alleged damages, reimbursement for losses, or indemnity. Management with the assistance of legal counsel periodically reviews the status of each significant matter and assesses potential financial exposure.

Some of these claims, lawsuits and other legal proceedings involve highly complex issues, and often these issues are subject to substantial uncertainties and, therefore, the probability of loss and an estimation of damages are difficult to ascertain. Accordingly, with respect to a large portion of such claims, lawsuits and other legal proceedings, Tenaris is unable to make a reliable estimate of the expected financial effect that will result from ultimate resolution of the proceeding. In those cases, Tenaris has not accrued a provision for the potential outcome of these cases.

If a potential loss from a claim, lawsuit or other proceeding is considered probable and the amount can be reasonably estimated, a provision is recorded. Accruals for loss contingencies reflect a reasonable estimate of the losses to be incurred based on information available to management as of the date of preparation of the financial statements and take into consideration litigation and settlement strategies. In a limited number of ongoing cases, Tenaris was able to make a reliable estimate of the expected loss or range of probable loss and has accrued a provision for such loss but believes that publication of this information on a case-by-case basis would seriously prejudice Tenaris's position in the ongoing legal proceedings or in any related settlement discussions. Accordingly, in these cases, the Company has disclosed information with respect to the nature of the contingency but has not disclosed its estimate of the range of potential loss.

The Company believes that the aggregate provisions recorded for potential losses in these Consolidated Financial Statements are adequate based upon currently available information. However, if management's estimates prove incorrect, current reserves could be inadequate and Tenaris could incur a charge to earnings which could have a material adverse effect on Tenaris's results of operations, financial condition, net worth and cash flows.

Below is a summary description of Tenaris's material legal proceedings which are outstanding as of the date of these Consolidated Financial Statements. In addition, Tenaris is subject to other legal proceedings, none of which is believed to be material.

§ *CSN claims relating to the January 2012 acquisition of Usiminas shares*

Confab Industrial S.A. ("Confab"), a Brazilian subsidiary of the Company, is one of the defendants in a lawsuit filed in Brazil by Companhia Siderúrgica Nacional (CSN) and various entities affiliated with CSN against Confab and several Ternium subsidiaries that acquired a participation in Usiminas' control group in January 2012.

The CSN lawsuit alleges that, under applicable Brazilian laws and rules, the acquirers were required to launch a tag-along tender offer to all non-controlling holders of Usiminas' ordinary shares for a price per share equal to 80% of the price per share paid in such acquisition, or BRL28.8, and seeks an order to compel the acquirers to launch an offer at that price plus interest. If so ordered, the offer would need to be made to 182,609,851 ordinary shares of Usiminas not belonging to Usiminas' control group, and Confab would have a 17.9% share in that offer.

24 Contingencies, commitments and restrictions on the distribution of profits (Cont.)

(i) Contingencies (Cont.)

§ *CSN claims relating to the January 2012 acquisition of Usiminas shares (Cont.)*

On September 23, 2013, the first instance court dismissed the CSN lawsuit, and on February 8, 2017, the court of appeals maintained the understanding of the first instance court. On March 6, 2017, CSN filed a motion for clarification against the decision of the Court of Appeals of São Paulo, which was rejected on July 19, 2017. On August 18, 2017, CSN filed an appeal to the Superior Court of Justice seeking the review and reversal of the decision issued by the Court of Appeals. On March 5, 2018, the court of appeals ruled that CSN's appeal did not meet the requirements for submission to the Superior Court of Justice and rejected the appeal. On May 8, 2018, CSN appealed against such ruling and on January 22, 2019, the court of appeals rejected it and ordered that the case be submitted to the Superior Court of Justice. The Superior Court of Justice will review admissibility of CSN's appeal, and, if declares it admissible, will then render a decision on the merits. The Superior Court of Justice is restricted to the analysis of alleged violations to federal laws and cannot assess matters of fact.

Tenaris continues to believe that all of CSN's claims and allegations are groundless and without merit, as confirmed by several opinions of Brazilian legal counsel, two decisions issued by the Brazilian securities regulator (CVM) in February 2012 and December 2016, and the first and second instance court decisions referred to above.

§ *Veracel cellulose accident litigation*

On September 21, 2007, an accident occurred in the premises of Veracel Celulose S.A. ("Veracel") in connection with a rupture in one of the tanks used in an evaporation system manufactured by Confab. The Veracel accident allegedly resulted in material damages to Veracel. Itaú Seguros S.A. ("Itaú"), Veracel's insurer at the time of the Veracel accident and currently replaced by Chubb Seguros Brasil S/A ("Chubb"), initiated a lawsuit against Confab seeking reimbursement of damages paid to Veracel in connection with the Veracel accident. Veracel initiated a second lawsuit against Confab seeking reimbursement of the amount paid as insurance deductible with respect to the Veracel accident and other amounts not covered by insurance. Itaú and Veracel claimed that the Veracel accident was caused by failures and defects attributable to the evaporation system manufactured by Confab. Confab believes that the Veracel accident was caused by the improper handling by Veracel's personnel of the equipment supplied by Confab in violation of Confab's instructions. The two lawsuits were consolidated and are considered by the 6th Civil Court of São Caetano do Sul; however, each lawsuit will be adjudicated separately.

On September 28, 2018 Confab and Chubb, entered into a settlement agreement pursuant to which on October 9, 2018, Confab paid an amount of approximately \$3.5 million to Chubb, without assuming any liability for the accident or the claim.

On October 10, 2018, Confab was notified that the court had issued rulings for both lawsuits. Both decisions were unfavorable to Confab:

§ With respect to Chubb's claim, Confab was ordered to pay an amount of approximately BRL89.8 million (approximately \$23.2 million) (including interest, fees and expenses). On October 15, 2018, Confab filed a request for homologation of the settlement agreement mentioned above, as such settlement agreement remains valid and binding between the parties. On November 8, 2018, the settlement agreement was homologated by the court.

§ With respect to Veracel's claim, Confab was ordered to pay the insurance deductible and other concepts not covered by insurance, currently estimated to amount to BRL57.8 million (approximately US\$ 14.9 million) (including interest, fees and expenses). Both parties filed motions for clarification against the court's decision, which were partially granted. Although the contract between Confab and Veracel expressly provided that Confab would not be liable for damages arising from lost profits, the court award would appear to include BRL49.5 million (approximately \$12.8 million) of damages arising therefrom; Confab has additional defense arguments in respect of a claim for lost profits. On December 18, 2018, Confab filed an appeal against the first instance court decision. At this stage the Company cannot predict the outcome of the claim or the amount or range of loss in case of an unfavorable outcome.

24 Contingencies, commitments and restrictions on the distribution of profits (Cont.)**(i) Contingencies (Cont.)***§ Ongoing investigation*

The Company has learned that Italian and Swiss authorities are investigating whether certain payments were made from accounts of entities presumably associated with affiliates of the Company to accounts controlled by an individual allegedly related with officers of Petróleo Brasileiro S.A. and whether any such payments were intended to benefit Confab. Any such payments could violate certain applicable laws, including the U.S. Foreign Corrupt Practices Act. The Company had previously reviewed certain of these matters in connection with an investigation by the Brazilian authorities related to “Operation Lava Jato” and the Audit Committee of the Company’s Board of Directors has engaged external counsel in connection with a review of the alleged payments and related matters. In addition, the Company has voluntarily notified the U.S. Securities and Exchange Commission and the U.S. Department of Justice. The Company continues to review these matters and to respond to requests from and otherwise cooperate with the appropriate authorities. At this time, the Company cannot predict the outcome of these matters or estimate the range of potential loss or extent of risk, if any, to the Company’s business that may result from resolution of these matters.

§ Petroamazonas penalties

On January 22, 2016, Petroamazonas (“PAM”), an Ecuadorian state-owned oil company, imposed penalties to the Company’s Uruguayan subsidiary, Tenaris Global Services S.A. (“TGS”), for its alleged failure to comply with delivery terms under a pipe supply agreement. The penalties amount to approximately \$22.5 million as of the date hereof. On June 27, 2018, TGS initiated arbitration proceedings against PAM before the Quito Chamber of Commerce Arbitration Center, seeking the annulment of the penalties. In September 2018, PAM filed its response to the arbitration claim. The claim is currently in evidentiary stage before the arbitration panel. Tenaris believes, based on the advice of counsel, that PAM had no legal basis to impose the penalties and that TGS has meritorious defenses against PAM. However, the Company cannot predict the outcome of a claim against a state-owned company.

§ Contractor claim for additional costs

Tenaris Bay City Inc. (“Tenaris Bay City”), a U.S. subsidiary of the Company, received claims from a contractor for alleged additional costs in the construction of a project located in the Bay City area for an amount initially stated to be in excess of \$90 million; however, subsequently the contractor amended the amount of the claim to \$48 million plus attorneys’ fees and arbitration costs. On June 30, 2017, the contractor filed a demand for arbitration of these claims. An arbitral panel was selected and a scheduling order issued. The parties have already submitted statements of claim and responses to the other party’s claim. The final trial hearings on this matter have begun in February 2019. At this stage the Company cannot predict the outcome of the claim or the amount or range of loss in case of an unfavorable outcome.

§ Claim for differences on gas supply prices

On July 7, 2016, Siderca was notified of a claim initiated by an Argentine state-owned company for an amount of \$25.4 million, allegedly owed as a result of differences in the price paid for gas supplied to Siderca during three months in 2013. In November 2018, Siderca was notified of a decision issued by the competent administrative agency confirming that Siderca paid the correct price for its gas purchases. As the decision was not appealed, it became final and, accordingly, the claim was finalized in favor of Siderca.

§ Tax assessment in Mexico regarding tax deductions on purchases of scrap

In 2017, Tamsa and Servicios Generales Tenaris Tamsa S.A (“Segeta”), two Mexican subsidiaries of the Company, were informed that the Mexican tax authorities had determined that the tax deductions associated with certain purchases of scrap made by the companies during 2013 failed to comply with applicable requirements and, accordingly, should be rejected. Tamsa and Segeta filed their respective responses and complaints against the determination and provided additional information evidencing compliance with applicable requirements for the challenged tax deductions. On August 30, 2018 and January 24, 2019, administrative decisions were issued in the proceedings against Segeta and Tamsa, respectively, determining a tax obligation in the amount of MXN1,540 million (approximately \$78 million) for Segeta and MXN3,749 million (approximately \$190 million) for Tamsa. On October 15, 2018 and March 8, 2019, Segeta and Tamsa filed revocation requests (recursos de revocación exclusivos) against the August 2018 decision as to Segeta and the January 2019 decision as to Tamsa. On March 27, 2019, Segeta was notified that the Mexican tax authorities had reversed and left without effects their former tax determination. Tenaris believes, based on the advice of counsel and on the recent favorable resolution regarding Segeta, that it is unlikely that the ultimate resolution of either tax assessment will result in a material obligation.

24 Contingencies, commitments and restrictions on the distribution of profits (Cont.)**(i) Contingencies (Cont.)***§ Putative class actions*

The Company is aware that, following its November 27, 2018 announcement that its Chairman and CEO Paolo Rocca was included in an Argentine court investigation known as the Notebooks Case, two putative class action complaints were filed in the U.S. District Court for the Eastern District of New York purportedly on behalf of purchasers of Tenaris securities from May 1, 2014 through November 27, 2018. The individual defendants named in the complaint are Tenaris's Chairman and CEO and Tenaris's CFO. Neither the Company nor any of the individual defendants have been served. Each complaint alleges that during the class period (May 2014–November 2018), the Company and the individual defendants inflated the Tenaris share price by failing to disclose that sale proceeds received by Ternium (in which Tenaris held an 11.46% stake) when Sidor was expropriated by Venezuela were received or expedited as a result of alleged improper payments made to Argentine officials. The complaint does not specify the damages that plaintiff is seeking.

§ Investigation concerning alleged price overcharges in Brazil

In 2018, two Brazilian subsidiaries of the Company were notified of formal charges arising from a review by the Tribunal de Contas da Uniao (TCU) for alleged price overcharges on goods supplied to Petróleo Brasileiro S.A.- Petrobras under a supply contract. Both companies have already filed their defenses. The estimated amount of this claim is BRL27 million (approximately \$7 million). Tenaris believes, based on the advice of counsel and external consultants, that the prices charged under the Petrobras contract do not result in overprices and that it is unlikely that the ultimate resolution of this matter will result in a material obligation.

(ii) Commitments and other purchase orders

Set forth is a description of Tenaris's main outstanding commitments:

- § A Tenaris company entered into a contract with Transportadora de Gas del Norte S.A. for the service of natural gas transportation to the facilities of Siderca, an Argentine subsidiary of Tenaris. As of December 31, 2018, the aggregate commitment to take or pay the committed volumes for a 9-year term totalled approximately \$40.1 million.
- § Several Tenaris companies entered into a contract with Praxair S.A. for the service of oxygen and nitrogen supply. As of December 31, 2018, the aggregate commitment to take or pay the committed volumes for a 14-year term totalled approximately \$57.7 million.
- § Several Tenaris companies entered into a contract with Graftech for the supply of graphite electrodes. As of December 31, 2018, the aggregate commitment to take or pay the committed volumes totalled approximately \$55 million.
- § A Tenaris company entered into a 25-year contract (effective as of December 1, 2016, through December 1, 2041) with Techgen for the supply of 197 MW (which represents 22% of Techgen's capacity). Monthly payments are determined on the basis of capacity charges, operation costs, back-up power charges, and transmission charges. As of the seventh contract year (as long as Techgen's existing or replacing bank facility has been repaid in full), the Tenaris company has the right to suspend or early terminate the contract if the rate payable under the agreement is higher than the rate charged by the Comisión Federal de Electricidad ("CFE") or its successors. The Tenaris company may instruct Techgen to sell to any affiliate, to CFE, or to any other third party all or any part of unused contracted energy under the agreement and the Tenaris company will benefit from the proceeds of such sale.
- § A Tenaris company entered into a contract with Vale International S.A. for the supply of iron ore, for which it is committed to purchase at least 70% of its annual iron ore needs, up to 770 thousand tons of pellets annually. The contract expires on December 31, 2020. The aggregate commitment amounts to approximately \$136.9 million.
- § A Tenaris company entered into a contract with Canadian National Railway for the service of rail transportation from its raw material supplier to its Canadian production center. The total commitment ending June 30, 2020 is \$22.8 million.
- § A Tenaris company entered into a contract with Air Liquide Mexico, S. de R.L de C.V. for the supply of argon gas. As of December 31, 2018, the aggregate commitment totalled approximately \$20.8 million.

Additionally the Company issued performance guarantees mainly related to long term commercial contracts with several customers and parent companies guarantees for approximately \$2.1 billion.

24 Contingencies, commitments and restrictions on the distribution of profits (Cont.)

(iii) Restrictions to the distribution of profits and payment of dividends

As of December 31, 2018, equity as defined under Luxembourg law and regulations consisted of:

(all amounts in thousands of U.S. dollars)

Share capital	1,180,537
Legal reserve	118,054
Share premium	609,733
Retained earnings including net income for the year ended December 31, 2018	16,439,438
Total equity in accordance with Luxembourg law	18,347,762

At least 5% of the Company's net income per year, as calculated in accordance with Luxembourg law and regulations, must be allocated to the creation of a legal reserve equivalent to 10% of the Company's share capital.

As of December 31, 2018, this reserve is fully allocated and additional allocations to the reserve are not required under Luxembourg law. Dividends may not be paid out of the legal reserve.

The Company may pay dividends to the extent, among other conditions, that it has distributable retained earnings calculated in accordance with Luxembourg law and regulations.

At December 31, 2018, distributable amount under Luxembourg law totals \$17.0 billion, as detailed below:

(all amounts in thousands of U.S. dollars)

Retained earnings at December 31, 2017 under Luxembourg law	16,956,761
Other income and expenses for the year ended December 31, 2018	(33,303)
Dividends approved	(484,020)
Retained earnings at December 31, 2018 under Luxembourg law	16,439,438
Share premium	609,733
Distributable amount at December 31, 2018 under Luxembourg law	17,049,171

25 Acquisition of subsidiaries

In September 2017, Tenaris acquired 100% of Garrett (a pipe services and trucking business) through the payment of a price of \$10.4 million.

If the acquisition had occurred on January 1, 2017, Tenaris's unaudited pro forma net sales and net income from continuing operations would not have changed materially.

26 Cash flow disclosures

	Year ended December 31,		
	2018	2017	2016
(i) Changes in working capital			
Inventories	(176,443)	(804,415)	244,720
Receivables and prepayments and Current tax assets	30,144	(4,564)	53,639
Trade receivables	(517,579)	(259,375)	146,824
Other liabilities	(22,984)	4,226	(79,046)
Customer advances	5,976	17,039	(95,112)
Trade payables	(57,066)	193,905	59,939
	(737,952)	(853,184)	330,964
(ii) Income tax accruals less payments			
Tax accrued	229,207	(17,136)	41,441
Taxes paid	(170,713)	(176,853)	(169,520)
	58,494	(193,989)	(128,079)
(iii) Interest accruals less payments, net			
Interest accrued	(2,914)	(20,534)	(43,872)
Interest received	40,613	50,001	60,163
Interest paid	(31,548)	(17,917)	(18,858)
	6,151	11,550	(2,567)
(iv) Cash and cash equivalents			
Cash at banks, liquidity funds and short - term investments	428,361	330,221	399,900
Bank overdrafts	(1,644)	(131)	(1,320)
	426,717	330,090	398,580

27 Discontinued Operations

On December 15, 2016, Tenaris entered into an agreement with Nucor Corporation (NC) pursuant to which it has sold to NC the steel electric conduit business in North America, known as Republic Conduit for an amount of \$328 million (net of transaction costs). The sale was completed on January 19, 2017, with effect from January 20, 2017. The result of this transaction was an after-tax gain of \$89.7 million, calculated as the net proceeds of the sale less the book value of net assets held for sale, the corresponding tax effect and related expenses.

	Year ended December 31,	
	2017	2016
Income from discontinued operations	1,848	41,411
After tax gain on the sale of Conduit	89,694	-
Net Income for discontinued operations	91,542	41,411

Details of Conduit sale

Cash received	331,295
Transaction and other costs	(3,663)
Carrying amount of net assets sold	(137,814)
Gain on sale before income tax	189,817
Income tax expense on gain	(100,123)
Gain on sale after income tax	89,694

The financial performances presented are relative to the 19 days of January 2017 and for the years ended December 31 and 2016.

Analysis of the result of discontinued operations:

	Year ended December 31,	
	2017	2016
Revenues	11,899	234,911
Gross profit	4,496	98,324
Net income	1,848	41,411
Basic and diluted earnings per share (U.S. dollars per share)	-	0.04
Basic and diluted earnings per ADS (U.S. dollars per ADS)	-	0.07

Summarized cash flow information is as follows:

	2017	2016
Cash at the beginning	18,820	15,343
Cash at the end	206	18,820
(Decrease) Increase in cash	(18,614)	3,477
(Used in) provided by operating activities	(3,046)	24,535
Provided by (used in) investing activities	32	(1,058)
Used in financing activities	(15,600)	(20,000)

These amounts were estimated only for disclosure purposes, as cash flows from discontinued operations were not managed separately from other cash flows.

The following table shows the current and non-current assets and liabilities of disposal group as at 31 December 2016, and the carrying amounts of assets and liabilities as at the date of sale.

Current and non-current assets and liabilities of disposal group

	At January 19, 2017	At December 31, 2016
Non-current assets	87,332	87,364
Current assets	69,332	64,053
Total assets of disposal group classified as held for sale	156,664	151,417
Non-current liabilities	5,294	5,376
Current liabilities	13,556	12,718
Total liabilities of disposal group classified as held for sale	18,850	18,094

28 Related party transactions

As of December 31, 2018:

- § San Faustin S.A., a Luxembourg société anonyme (“San Faustin”), owned 713,605,187 shares in the Company, representing 60.45% of the Company’s capital and voting rights.
- § San Faustin owned all of its shares in the Company through its wholly-owned subsidiary Techint Holdings S.à.r.l., a Luxembourg société à responsabilité limitée (“Techint”), who is the holder of record of the above-mentioned Tenaris shares.
- § Rocca & Partners Stichting Administratiekantoor Aandelen San Faustin, a Dutch private foundation (Stichting) (“RP STAK”) held voting shares in San Faustin sufficient in number to control San Faustin.
- § No person or group of persons controls RP STAK.

Based on the information most recently available to the Company, Tenaris’s directors and senior management as a group owned 0.08% of the Company’s outstanding shares.

Transactions and balances disclosed as with “non-consolidated parties” are those with companies over which Tenaris exerts significant influence or joint control in accordance with IFRS, but does not have control. All other transactions and balances with related parties which are not non-consolidated parties and which are not consolidated are disclosed as “Other”. The following transactions were carried out with related parties:

(all amounts in thousands of U.S. dollars)

	Year ended December 31,		
	2018	2017	2016
(i) Transactions			
(a) Sales of goods and services			
Sales of goods to non-consolidated parties	23,709	32,362	21,174
Sales of goods to other related parties	131,548	94,624	32,613
Sales of services to non-consolidated parties	7,641	11,637	9,542
Sales of services to other related parties	5,647	3,751	2,948
	168,545	142,374	66,277
(b) Purchases of goods and services			
Purchases of goods to non-consolidated parties	245,186	234,361	67,048
Purchases of goods to other related parties	106,624	17,711	20,150
Purchases of services to non-consolidated parties	9,556	12,077	11,528
Purchases of services to other related parties	46,179	50,794	53,530
	407,545	314,943	152,256

(all amounts in thousands of U.S. dollars)

	At December 31,	
	2018	2017
(ii) Period-end balances		
(a) Arising from sales / purchases of goods / services		
Receivables from non-consolidated parties	122,135	117,853
Receivables from other related parties	24,419	50,815
Payables to non-consolidated parties	(33,197)	(49,354)
Payables to other related parties	(17,595)	(14,475)
	95,762	104,839

Directors’ and senior management compensation

During the years ended December 31, 2018, 2017 and 2016, the cash compensation of Directors and Senior managers amounted to \$33.7 million, \$45.8 million and \$38.6 million respectively. These amounts include cash benefits paid to certain senior managers in connection with the pre-existing retirement plans. In addition, Directors and Senior managers received 558, 484 and 500 thousand units for a total amount of \$5.6 million, \$4.7 million and \$4.8 million respectively in connection with the Employee retention and long term incentive program mentioned in Note O Employee benefits – Other long term benefits.

29 Principal subsidiaries

The following is a list of Tenaris's principal subsidiaries and its direct and indirect percentage of ownership of each controlled company at December 31, 2018.

Company	Country of Incorporation	Main activity	Percentage of ownership at December 31, (*)		
			2018	2017	2016
ALGOMA TUBES INC.	Canada	Manufacturing of seamless steel pipes	100%	100%	100%
CONFAB INDUSTRIAL S.A. and subsidiaries	Brazil	Manufacturing of welded steel pipes and capital goods	100%	100%	100%
KAZAKHSTAN PIPE THREADERS LIMITED LIABILITY PARTNERSHIP	Kazakhstan	Threading of premium products	100%	100%	100%
HYDRIL COMPANY and subsidiaries (except detailed) (a)	USA	Manufacture and marketing of premium connections	100%	100%	100%
DALMINE S.p.A.	Italy	Manufacturing of seamless steel pipes	100%	100%	100%
MAVERICK TUBE CORPORATION and subsidiaries	USA	Manufacturing of welded steel pipes	100%	100%	100%
S.C. SILCOTUB S.A.	Romania	Manufacturing of seamless steel pipes	100%	100%	100%
NKKTUBES	Japan	Manufacturing of seamless steel pipes	51%	51%	51%
SIAT SOCIEDAD ANONIMA	Argentina	Manufacturing of welded and seamless steel pipes	100%	100%	100%
PRUDENTIAL STEEL LTD.	Canada	Manufacturing of welded steel pipes	100%	100%	100%
SIDERCA SOCIEDAD ANONIMA INDUSTRIAL Y COMERCIAL and subsidiaries	Argentina	Manufacturing of seamless steel pipes	100%	100%	100%
P.T. SEAMLESS PIPE INDONESIA JAYA	Indonesia	Manufacturing of seamless steel products	89%	89%	77%
TUBOS DE ACERO DE MEXICO, S.A.	Mexico	Manufacturing of seamless steel pipes	100%	100%	100%
TENARIS GLOBAL SERVICES (U.S.A.) CORPORATION	USA	Marketing of steel products	100%	100%	100%
TENARIS BAY CITY, INC.	USA	Manufacturing of seamless steel pipes	100%	100%	100%
TENARIS GLOBAL SERVICES (UK) LTD	United Kingdom	Holding company and marketing of steel products	100%	100%	100%
TENARIS INVESTMENTS SWITZERLAND AG and subsidiaries	Switzerland	Holding company	100%	100%	100%
TENARIS FINANCIAL SERVICES S.A.	Uruguay	Financial company	100%	100%	100%
TENARIS GLOBAL SERVICES (CANADA) INC.	Canada	Marketing of steel products	100%	100%	100%
TENARIS INVESTMENTS S.a.r.l.	Luxembourg	Holding company	100%	100%	100%
TENARIS CONNECTIONS BV	Netherlands	Development, management and licensing of intellectual property	100%	100%	100%
TENARIS GLOBAL SERVICES S.A. and subsidiaries (except detailed) (b)	Uruguay	Holding company and marketing of steel products	100%	100%	100%
TALTA - TRADING E MARKETING SOCIEDADE UNIPessoal LDA.	Portugal	Holding Company	100%	100%	100%

(*) All percentages rounded.

(a) Tenaris Investments S.a.r.l. holds 100% of Hydril's subsidiaries shares except for Technical Drilling & Production Services Nigeria. Ltd where it holds 80%.

(b) Tenaris Investments S.a.r.l. holds 97.5% of Tenaris Supply Chain S.A., 60% of Gepnaris S.A. and 40% of Tubular Technical Services and Pipe Coaters, and 49% of Amaja Tubular Services Limited and Tubular Services Angola Ltd.

30 Nationalization of Venezuelan Subsidiaries

In May 2009, within the framework of Decree Law 6058, Venezuela's President announced the nationalization of, among other companies, the Company's majority-owned subsidiaries TAVSA - Tubos de Acero de Venezuela S.A. ("Tavsa") and, Matesi Materiales Siderúrgicos S.A ("Matesi"), and Complejo Siderúrgico de Guayana, C.A ("Comsigua"), in which the Company has a non-controlling interest (collectively, the "Venezuelan Companies"). Tenaris and its wholly-owned subsidiary, Talta - Trading e Marketing Sociedad Unipessoal Lda ("Talta"), initiated arbitration proceedings against Venezuela before the ICSID in Washington D.C. in connection with these nationalizations.

Matesi

On January 29, 2016, the tribunal released its award on the arbitration proceeding concerning the nationalization of Matesi. The award upheld Tenaris's and Talta's claim that Venezuela had expropriated their investments in Matesi in violation of Venezuelan law as well as the bilateral investment treaties entered into by Venezuela with the Belgium-Luxembourg Economic Union and Portugal. The award granted compensation in the amount of \$87.3 million for the breaches and ordered Venezuela to pay an additional amount of \$85.5 million in pre-award interest, aggregating to a total award of \$172.8 million, payable in full and net of any applicable Venezuelan tax, duty or charge. The tribunal granted Venezuela a grace period of six months from the date of the award to make payment in full of the amount due without incurring post-award interest, and resolved that if no, or no full, payment is made by then, post-award interest will apply at the rate of 9% per annum. As of December 31, 2018, post-award interest amounted to approximately \$50 million.

On March 14, 2016, Venezuela requested the rectification of the award pursuant to article 49(2) of the ICSID Convention and ICSID Arbitration Rule 49. The tribunal denied Venezuela's request on June 24, 2016, ordering Venezuela to reimburse Tenaris and Talta for their costs. On September 21, 2016, Venezuela submitted a request for annulment of the award as well as the stay of enforcement of the award in accordance with the ICSID Convention and Arbitration Rules. On March 24, 2017, an ad hoc committee constituted to decide on Venezuela's requests rendered its decision to lift the stay of enforcement of the award. On August 8, 2018, the ad hoc committee rejected Venezuela's application to annul the award.

On June 8, 2018, Tenaris and Talta filed an action in federal court in the District of Columbia to recognize and enforce the awards. Tenaris and Talta are in the process of effecting service on Venezuela in accordance with US law.

Tavsa and Comsigua

On December 12, 2016, the tribunal issued its award upholding Tenaris's and Talta's claim that Venezuela had expropriated their investments in Tavsa and Comsigua in violation of the bilateral investment treaties entered into by Venezuela with the Belgium-Luxembourg Economic Union and Portugal. The award granted compensation in the amount of \$137 million and ordered Venezuela to reimburse Tenaris and Talta \$3.3 million in legal fees and ICSID administrative costs. In addition, Venezuela was ordered to pay interest from April 30, 2008 until the day of effective payment at a rate equivalent to LIBOR + 4% per annum, which as of December 31, 2018 amounted to approximately \$102 million.

On April 11, 2017, Venezuela submitted a request for annulment of the award as well as the stay of enforcement of the award in accordance with the ICSID Convention and Arbitration Rules. On February 23, 2018, an ad hoc committee constituted to decide on Venezuela's requests rendered its decision to lift the stay of enforcement of the award. On December 28, 2018, the ad hoc committee rejected Venezuela's application to annul the award.

On June 8, 2018, Tenaris and Talta filed an action in federal court in the District of Columbia to recognize and enforce the awards. Tenaris and Talta are in the process of effecting service on Venezuela in accordance with US law.

As of December 31, 2018 the Company has receivables related to its interest in the Venezuelan Companies for a total amount of approximately \$49 million (see Note III.B).

31 Fees paid to the Company's principal accountant

Total fees accrued for professional services rendered by PwC Network firms to Tenaris S.A. and its subsidiaries are detailed as follows:

(all amounts in thousands of U.S. dollars)

	Year ended December 31,		
	2018	2017	2016
Audit fees	3,841	3,995	3,588
Audit-related fees	43	88	64
Tax fees	-	23	14
All other fees	7	30	3
Total	3,891	4,136	3,669

32 Subsequent events*Acquisition of Saudi Steel Pipe Company*

a) Acquisition

On January 21, 2019, Tenaris acquired 47.79% of the shares of Saudi Steel Pipe Company ("SSP"), a welded steel pipes producer listed on the Saudi stock market, for a total amount of SAR529.8 million (approximately \$141 million). The amount was paid with Tenaris cash in hand. SSP's facilities are located in the Eastern Province of the Kingdom of Saudi Arabia and have a manufacturing capacity of 360,000 tons per year. SSP started its operations in 1980 and serves energy industrial and commercial segments, is qualified to supply products with major national oil companies in the region. Upon closing of the acquisition, four Tenaris's nominees were appointed as new members of the SSP's board of directors and a senior executive with Tenaris was appointed as managing director and chief executive officer of SSP.

The Company has begun consolidating SSP's balances and results of operations as from January 21, 2019.

b) Fair value of net assets acquired

The application of the purchase method requires certain estimates and assumptions specially concerning the determination of the fair values of the acquired intangible assets and property, plant and equipment as well as the liabilities assumed at the date of the acquisition. The fair values determined at the acquisition date are based mainly on discounted cash flows and other valuation techniques.

The preliminary allocation of the fair values determined for the assets and liabilities arising from the acquisition is as follows:

Fair value of acquired assets and liabilities:	SAR million	\$ million
Property, Plant and Equipment	675	180
Intangible assets	278	74
Investment in associated	77	21
Working capital	168	45
Cash and Cash Equivalents	32	8
Other Receivables	11	3
Borrowings	(304)	(81)
Employees end of service benefits	(59)	(16)
Net assets acquired	878	234

Tenaris acquired 47.79% of total assets and liabilities shown above, approximately \$112 million.

The preliminary purchase price allocation disclosed above is currently under analysis with the assistance of a third party expert. Following IFRS 3, the Company will continue reviewing the allocation and make any necessary adjustments (mainly over Property, Plant and Equipment, Intangible Assets and Provisions) during the twelve months following the acquisition date.

32 Subsequent events (Cont.)

Agreement to build welded pipe plant in West Siberia

On February 5, 2019 Tenaris entered into an agreement with PAO Severstal to build a welded pipe plant to produce OCTG products in the Surgut area, West Siberia, Russian Federation. Tenaris will hold a 49% interest in the company, while PAO Severstal will own the remaining 51%. The commencement of the project is subject to regulatory approvals and other customary conditions. The plant, which is estimated to require an investment of \$240 million and a two-year construction period, is planned to have an annual production capacity of 300,000 tons.

Techgen refinancing

On February 13, 2019, Techgen entered into a \$640 million loan agreement with several banks to refinance its obligations under the existing syndicated loan. Techgen's obligations under the new facility, which is "non-recourse" on the sponsors, will be guaranteed by a Mexican security trust covering Techgen's shares, assets and accounts as well as Techgen's affiliates rights under certain contracts. In addition, Techgen's collection and payment accounts not subject to the trust have been pledged in favor of the lenders under the new loan agreement, and certain direct agreements –customary for these type of transactions– have been entered into with third parties and affiliates, including in connection with the agreements for the sale of energy produced by the project and the agreements for the provision of gas and long-term maintenance services to Techgen. The commercial terms and conditions governing the purchase, by the Company's Mexican subsidiary Tamsa, of 22% of the energy generated by the project remain unchanged.

Under the loan agreement, Techgen is committed to maintain a debt service reserve account covering debt service becoming due during two consecutive quarters; such account is funded by stand-by letters of credit issued for the account of Techgen's sponsors in proportion to their respective participations in Techgen. Accordingly, the Company and its Swiss subsidiary Tenaris Investments Switzerland AG applied for stand-by letters of credit covering 22% of the debt service coverage ratio, which as of the date hereof amounts to \$9.8 million.

The proceeds of the new loan, which is expected to be drawn on or about February 26, 2019, will be used to repay all loans outstanding under the existing facility. Upon repayment of such loans, Tenaris's corporate guarantee thereunder will be automatically released.

Annual Dividend Proposal

On February 20, 2019 the Company's Board of Directors proposed, for the approval of the Annual General Shareholders' meeting to be held on May 6, 2019, the payment of an annual dividend of \$0.41 per share (\$0.82 per ADS), or approximately \$484 million, which includes the interim dividend of \$0.13 per share (\$0.26 per ADS) or approximately \$153 million, paid on November 21, 2018. If the annual dividend is approved by the shareholders, a dividend of \$0.28 per share (\$0.56 per ADS), or approximately \$331 million will be paid on May 22, 2019, with an ex-dividend date of May 20, 2019. These Consolidated Financial Statements do not reflect this dividend payable.

33 Update as of April 1, 2019¹

On March 22, 2019, Tenaris entered into a definitive agreement to acquire from TMK, a Russian company and manufacturer of steel pipes, 100% of the shares of its wholly owned U.S. subsidiary IPSCO, for \$1,209 million. The transaction is subject to regulatory approvals, including approval by the U.S. antitrust authorities, and other customary conditions. IPSCO is a U.S. domestic producer of seamless and welded OCTG and line pipe products, with an annual production capacity of 450,000 metric tons of steel bars, 400,000 metric tons of seamless pipes and 1,000,000 metric tons of welded pipes, and production facilities spread throughout the country.

Edgardo Carlos
Chief Financial Officer

¹ This note was added subsequent to the approval of these Consolidated Financial Statements by the Company's Board of Directors on February 20, 2019.

EXHIBIT INDEX

Exhibit Number	Description
1.1	Updated and Consolidated Articles of Association of Tenaris S.A., dated as of May 2, 2018
2.1	Amended and Restated Deposit Agreement entered into between Tenaris S.A. and Deutsche Bank Trust Company Americas *
7.1	Statement Explaining Calculation of Ratios
7.2	Statement Explaining Alternative Performance Measures
8.1	List of Subsidiaries of Tenaris S.A.
12.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
12.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
13.1	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
13.2	Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

* The Amended and Restated Deposit Agreement is incorporated by reference to the Registration Statement on Form F-6 filed by Tenaris S.A. on February 25, 2013 (File No. 333-186825).

SIGNATURES

The registrant hereby certifies that it meets all the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

April 3, 2019

TENARIS S.A.

By /s/ Edgardo Carlos
Name: Edgardo Carlos
Title: Chief Financial Officer

« TENARIS S.A. »
Société anonyme
Luxembourg
R.C.S. Luxembourg, section B numéro 85.203

STATUTS COORDONNES à la date du 2 mai 2018



**Title 1. Name and Legal Structure, Corporate Object,
Registered Office, Duration**

Article 1. Name and Legal Structure. TENARIS S.A. is a société anonyme governed by these Articles of Association and by the applicable laws and regulations of the Grand Duchy of Luxembourg.

Article 2. Corporate Object. The object of the Company is the business directly or indirectly related to the taking of interests, in any form whatsoever, in Luxembourg or foreign corporations or other business entities, the administration, management, control and development thereof.

The Company may use its resources to organize, manage, enhance in value and liquidate a portfolio consisting of any kind of securities, patents and pertaining licenses, to participate in the organization, development and control of any business entity to acquire by way of capital contribution, subscription, underwriting, option, purchase or in any manner whatsoever any kind of securities, patents and pertaining licenses as well as to sell, transfer, exchange or otherwise, to enhance in value such securities, patents and rights through any person and in any manner whatsoever, and to afford to companies in which it has an interest any assistance, loans, advances or guarantees.

The Company may raise money in order to finance its activities through the private or public issue of loans, notes, bonds, debentures or other similar instruments or equity certificates denominated in any currency (and may pledge part or all of its assets to secure any money so raised).

In general, the Company may carry out any permitted activities which it may deem appropriate or necessary for the accomplishment of its corporate object.

Article 3. Registered Office. The registered office is established in Luxembourg-City.

The registered office may be transferred within the same locality by decision of the Board of Directors.

The Board of Directors may establish branches or offices abroad.

Whenever there shall occur or be imminent extraordinary political, economic or social developments of any kind likely to jeopardize the normal functioning of the registered office or easy communication between such office and the outside world, the registered office may be declared temporarily, and until the complete termination of such unusual conditions, transferred abroad, without affecting the nationality of the Company, which, notwithstanding such temporary transfer of the registered office, shall remain that of Luxembourg. Such declaration of transfer of the registered office shall be made and brought to the knowledge of third parties by one of the executive bodies of the Company authorized to bind it for acts of current and daily management.

Article 4. Duration. The Company shall be constituted for an unlimited duration.

Title II.- Share Capital

Article 5. Share Capital. The share capital of the Company is set at one billion one hundred and eighty million five hundred and thirty six thousand eight hundred and thirty US dollars (USD 1,180,536,830), represented by one billion one hundred and eighty million five hundred and thirty six thousand eight hundred and thirty (1,180,536,830) shares with a par value of one US dollar (USD 1) per share.

The authorized capital of the Company shall be two billion five hundred million US dollars (USD 2,500,000,000.-), including the issued share capital, represented by two billion five hundred million (2,500,000,000) shares with a par value of one US dollar (USD 1.-) per share.

The board of directors, or any delegate(s) duly appointed by the board of directors, may from time to time, for a period starting on the date of the Extraordinary General Meeting of Shareholders held on 6th May 2015 and ending on the fifth anniversary of the date of the publication in the Mémorial of the deed recording the minutes of such Extraordinary General Meeting of Shareholders, issue shares within the limits of the authorized share capital against contributions in cash, contributions in kind or by way of incorporation of available reserves at such times and on such terms and conditions, including the issue price, as the board of directors, or its delegate(s), may in its or their discretion resolve.

The Extraordinary General Meeting of Shareholders held on 6th May 2015 has authorized the board of directors, for a period starting on the date of such Extraordinary General Meeting of Shareholders and ending on the fifth anniversary of the date of the publication in the Mémorial of the deed recording the minutes of such Extraordinary General Meeting of Shareholders, to waive, suppress or limit any pre-emptive subscription rights of shareholders provided for by law to the extent it deems such waiver, suppression or limitation advisable for any issue or issues of shares within the authorized share capital, and has waived any pre-emptive subscription rights provided for by law and related procedures.

Notwithstanding the waiver of any preemptive subscription rights provided for by law and related procedures, by provision of the present Articles of Association, any issuance of shares for cash within the limits of the authorized share capital shall be subject to the pre-emptive subscription rights of the then existing shareholders, except in the following cases (in which cases no pre-emptive subscription rights shall apply):

(i) any issuance of shares (including, without limitation, the direct issuance of shares or upon the exercise of options, rights convertible into shares, or similar instruments convertible or exchangeable into shares) against a contribution other than in cash; and

(ii) any issuance of shares (including by way of free shares or at discount), up to an amount of 1.5% of the issued share capital of the Company, to directors, officers, agents, employees of the Company, its direct or indirect subsidiaries, or its affiliates (collectively, the "Beneficiaries"), including, without limitation, the direct issuance of shares or upon the exercise of options, rights convertible into shares, or similar instruments convertible or exchangeable into shares, issued for the purpose of compensation or incentive of the Beneficiaries or in relation thereto (which the board of directors shall be authorized to issue upon such terms and conditions as it deems fit).

Any issuance of shares within the authorized share capital must be recorded by notarial deed and this Article 5 must be amended accordingly.

Each share entitles the holder thereof to cast one vote at any shareholders' meeting, subject to applicable law.

The board of directors may authorize the issuance of bonds which may be but are not required to be, convertible into registered shares, in

such denominations and payable in such monies as it shall determine in its discretion. The board of directors shall determine the type, price, interest rates, terms of issuance and repayment and any other conditions for such issues. A register of registered bonds shall be held by the Company.

Article 6. Shares. The shares shall be in registered form. The board of directors may issue registered share certificates.

The shares may be entered without serial numbers into fungible securities accounts with financial institutions or other professional depositaries. The shares held in deposit or on an account with such financial institution or professional depositary shall be recorded in an account opened in the name of the depositor and may be transferred from one account to another, whether such account is held by the same or a different financial institution or depositary. The depositor whose shares are held through such fungible securities accounts shall have the same rights and obligations as if his shares were recorded in the registered share register of the Company.

Transfer of registered shares, carried in the registered share register and which are not held through fungible securities accounts, shall be effected by a written declaration of transfer signed by the transferor and the transferee or by their attorneys. The board of directors may accept and enter in the register a transfer on the basis of any appropriate document(s) recording the transfer between the transferor and the transferee.

For the exercise of rights against it as well as for the exercise of rights to vote at general meetings and all rights conferred upon the shareholders, the Company shall recognize only one single owner per share. If there are several owners of a share, the company shall be entitled to suspend the exercise of the rights attached thereto until one person is designated as being the owner of such share with regard to the Company or until a single representative of the owners representing them towards the Company has been appointed.

The rights and obligations attached to any share shall pass to any transferee thereof.

All communications and notices to be given to a registered shareholder shall be deemed validly made to the latest address communicated by the shareholder to the Company.

Article 7. Changes of Share Capital. The subscribed and the authorized capital of the Company may be increased or reduced by decision of the shareholders in general meeting whose resolutions shall be taken in the manner required for the amendment of the Articles.

Title III.- Management, Supervision

Article 8. Board of Directors. The Company shall be managed by a board of directors consisting of a minimum of three (3) members and a maximum of fifteen (15) members appointed by the general meeting. In case the shares of the Company are listed on a regulated market, the minimum number of directors shall be five (5). The terms of their office shall not exceed one (1) year; they may be reappointed and dismissed at any time, with or without cause.

In the case of a vacancy in any position as director, the remaining directors shall have the right to temporarily fill such vacancy by a majority vote; in such case the next general meeting shall be called upon to ratify such election.

Any director elected in replacement of another, whose term of office has not expired, shall complete the term of office of the director whom he replaces.

Article 9. Procedure. The board of directors shall elect a chairman from among its members and, if considered appropriate, one or several vice-chairmen and shall determine the period of their office, not exceeding their appointment as director.

The board of directors shall meet as often as required by the interests of the Company and at least four (4) times per year, upon notice by the chairman or by two (2) directors, either at the registered office or at any other place indicated in the notice, under the chairmanship of the chairman or, if the latter is prevented from attending, under the chairmanship of the (any) vice-chairman or of the director chosen among his colleagues.

The board of directors may deliberate and act validly only if a majority of its members in office are present in person or by proxy.

Board of directors meetings can be validly held by means of telephonic conference call, video conference or any other means genuinely allowing for the participation, interaction and intercommunication of the attending directors.

Any director who is prevented or absent may give a proxy in writing, telegram or facsimile, to one of his colleagues on the board to represent him at the meetings of the board and to vote in his place and stead.

All decisions shall be taken by a majority of votes of those present or represented; in case of a tie the chairman has a casting vote.

Written decisions, signed by all the directors, are proper and valid as though they had been taken at a meeting of the board of directors duly convened and held. Such a decision can be documented by several separate instruments having the same tenor, each signed by one or more directors.

The Board of Directors may appoint a secretary and one or more assistant secretaries and determine their responsibilities, powers and authorities. These secretaries and assistant secretaries need not be members of the Board of Directors.

Article 10. Minutes of the Board. The proceedings of the board of directors shall be set forth in minutes signed by either (i) the chairman of the board of directors or the chairman of the meeting, together with the secretary of the board of directors, or (ii) a majority of the persons present at the meeting.

Copies of these minutes, or excerpts thereof, as well as any other document of the Company, may be certified by the chairman of the board of directors, the chairman of the relevant meeting, any member of the board of directors, the secretary of the board of directors, or any assistant secretary of the board of directors».

Article 11. Powers. The board of directors is invested with the broadest powers to act on behalf of the Company and accomplish or authorize all acts and transactions of management and disposal which are within its corporate purpose and which are not specifically reserved to the general meeting.

The Company will be bound by the joint signature of two directors or the sole signature of any persons to whom such signatory power shall be delegated by the board of directors or by any two directors.

The board of directors is invested with the power to interpret and apply the present Articles of Association and to issue guidelines and rules for that purpose.

Within the limits of applicable law, the board of directors may: 1. delegate to one or more persons, whether or not members of the board of directors, the powers necessary to carry out its decisions and to provide day-to-day management; provided that the approval of material transactions with related parties shall not be delegated and the opinion of the Audit Committee on such material transactions shall be taken into consideration prior to their approval by the board of directors;

2. confer to one or more persons, whether or not members of the board of directors, the powers deemed to be appropriate for the general technical, administrative and commercial management of the Company;

3. constitute an Audit Committee, made up by directors, determining its function and authority;

4. constitute any committee, the members of which may be selected either from among the directors or outside thereof, and determine their functions and authority.

The board may authorize all substitutions in the powers it may confer or has conferred.

In case the shares of the Company are listed on one or more regulated markets, the Company shall have an Audit Committee composed of at least three (3) members, the majority of which shall qualify as Independent Directors; provided, however, that the composition and membership of the Audit Committee shall satisfy such requirements as are applicable to, and mandatory for, audit committees of issuers such as the Company under any law, rule or regulation applicable to the Company (including, without limitation, the applicable laws, rules and regulations of such regulated market or markets). The members of the Audit Committee shall not be eligible to participate in any incentive compensation plan for employees of the Company or any of its subsidiaries. The Audit Committee shall (I) assist the board of directors in fulfilling its oversight responsibilities relating to the integrity of the financial statements of the Company, the Company's system of internal controls and the independence and performance of the Company's internal and independent auditors. It shall also perform the other duties entrusted to it by the board of directors, particularly as regards relations with the independent auditor and (II) review material transactions between the Company or its subsidiaries with related parties to determine whether their terms are consistent with market conditions or are otherwise fair to the Company and its subsidiaries. To that end, (A) the term «material» shall mean (a) any transaction, or series of transactions within the period of one year prior to the determination, by which the Company or any of its subsidiaries would be required to pay or would receive aggregate sums in excess of 1.5% of the Company's consolidated net sales made in the fiscal year preceding the year on which the determination is made or (b) any corporate reorganization transaction (including a merger, spin-off or bulk transfer of a business) affecting the

Company or any of its subsidiaries for the benefit of or involving also a related party;

and (B) the term «related party» shall mean any of the following persons in relation to the Company or the subsidiaries of the Company: (i) a member of the board of directors of the Company or of any of the subsidiaries; (ii) any company or person that controls directly or indirectly the Company or is a member of the board of directors of a company controlling directly or indirectly the Company; (iii) any company or person that holds a significant interest in the equity of the Company or of a subsidiary of the Company; (iv) spouses, parents, siblings or relatives up to the third degree of any person referred to in (i), (ii) or (iii); and (v) companies in whose equity the persons referred in (i) and (iii) hold a significant interest.

The board of directors shall appoint one of the members of the Audit Committee as its Chairman. The Audit Committee shall report to the board of directors on its activity and the adequacy of the internal control system once a year, at the time the annual accounts are approved.

For the purpose of the present Articles of Association, the term «Independent Director» shall mean a director who: (i) is not, and has not been employed by the Company or its subsidiaries in an executive capacity, within the five years immediately prior to the annual meeting at which the nominees of the board of directors will be voted upon;

(ii) is not a person that directly or indirectly controls the Company and is not a member of the board of directors of a company controlling directly or indirectly the Company;

(iii) has not (and is not affiliated with a company or a firm that has) a significant business relationship with the Company, its subsidiaries or the person that directly or indirectly controls the Company;

(iv) is not, and has not been affiliated with or employed by a (present or former) auditor of the Company, its subsidiaries or the person that directly or indirectly controls the Company, within the five years immediately prior to the annual meeting at which the nominees of the board of directors will be voted upon;

(v) is not a spouse, parent, sibling or relative up to the third degree of any person above described from (i) to (v).

Article 12. Directors' Remuneration. The remuneration of the board of directors will be decided by the general meeting.

The Company shall, to the fullest extent permitted by Luxembourg law, indemnify any director or officer, as well as any former director or officer, against all costs, charges and expenses, reasonably incurred by him in connection with the defense or settlement of any civil, criminal or administrative action, suit or proceeding to which he may be made a party by reason of his being or having been a director or officer of the Company, if (i) he acted honestly and in good faith, and (ii) in the case of criminal or administrative proceedings, he had reasonable grounds for believing that his conduct was lawful. Notwithstanding the foregoing, the current or former director or officer will not be entitled to indemnification in case of an action, suit or proceeding brought against him by the Company or in case he shall be finally adjudged in an action, suit or proceeding to be liable for gross negligence, wilful misconduct, fraud, dishonesty or any other criminal offence. Furthermore, in case of settlement, the current or former director

or officer will only be entitled to indemnification hereunder, if he settles such action, suit or proceeding in good faith and in a manner he reasonably believes to be in or not opposed to the best interests of the Company and if notice of the intention of settlement of such action, suit or proceeding is given to the Company at least 10 business days prior to such settlement.

Article 13. Auditors. The annual accounts of the Company shall be audited by auditors or audit firms in accordance with applicable law, appointed by the general meeting of shareholders. The general meeting shall determine their number and the term of their office which shall not exceed one (1) year. They may be reappointed and dismissed at any time.

Title IV.- General Meetings

Article 14. Powers. The general meeting, duly constituted, represents all of the shareholders. It has the broadest powers to carry out or ratify acts of concern to the Company.

Article 15. Date and Place. The annual general meeting shall meet each year in Luxembourg, at the place indicated in the notices of meeting, within six (6) months from the end of the previous financial year.

The general Meetings, including the annual general meeting, may be held in a foreign country whenever there occur circumstances of force majeure as determined by the board of directors in its discretion. In such event, the terms and conditions necessary to provide proper deliberations and publications will continue to be those provided for by the laws of Luxembourg.

Article 16. Notices of Meeting. The board of directors shall convene all general meetings.

The convening notice for any ordinary or extraordinary general meeting shall comply with the requirements (including as to content and publicity) established by applicable law. For so long as the shares or other securities of the Company are listed on a regulated market, the notice of a general meeting of shareholders shall comply with the requirements (including as to content and publicity) and follow the customary practices in such market.

Article 17. Admission. Admission to a general meeting of shareholders shall be governed by applicable Luxembourg law and the present Articles of Association. For as long as the shares or other securities of the Company are listed on a regulated market within the European Union, participation in a general meeting shall inter alia be subject to the relevant shareholder holding shares of the Company on the fourteenth day (14th) midnight central European time prior to the meeting (unless otherwise provided for by applicable law).

The board of directors may determine other conditions that must be satisfied by shareholders in order to participate in a general meeting in person or by proxy, including with respect to deadlines for submitting supporting documentation to or for the Company.

Article 18. Procedure. Every general meeting will be presided over by the chairman pro tempore appointed by the general meeting. The general meeting will appoint a scrutineer who shall keep the attendance list.

The board of the general meeting so constituted shall designate the secretary.

Irrespective of the agenda, the board of directors may adjourn any ordinary or extraordinary general meeting in accordance with the formalities and time limits stipulated for by law.

Article 19. Vote and Minutes. Subject to applicable law, resolutions at ordinary general meetings will be passed by the simple majority of the votes validly cast, irrespective of the number of shares present or represented.

Extraordinary general meetings may not validly deliberate on proposed amendments to the Articles of Association unless at least half of the issued share capital is represented, unless otherwise provided for by applicable law. If the required quorum is not reached at a first meeting, a second meeting may be convened in accordance with the present Articles of Association and applicable law and such second meeting shall validly deliberate regardless of the number of shares represented.

Resolutions as to amendments to the Articles of Association shall be adopted by two-thirds majority of the votes validly cast, unless otherwise provided for by applicable law.

The nationality of the Company may be changed and the commitments of its shareholders may be increased only with the unanimous consent of all the shareholders and bondholders, if any.

To the extent that no shareholder requests a full account of the voting at the general meeting, the Company may establish the voting results only to the extent needed to ensure that the required majority is reached for each matter submitted to the general meeting.

Minutes of the general meetings shall be signed by the members of the bureau of the meeting. Copies or excerpts of the minutes may be certified by the chairman of the board of directors, the chairman of the relevant meeting, any member of the board of directors, the secretary of the board of directors, or any assistant secretary of the board of directors.

Title V.- Financial Year, Distributions

Article 20. Financial Year. The financial year will run from the first (1st) of January of each year until the thirty-first (31st) of December of the same year.

Each year, the management will cause an inventory to be drawn up with current and fixed assets together with all debts and liabilities of the Company, accompanied by an annex containing a summary of all corporate commitments and all debts of the directors towards the Company.

The management will prepare the balance sheet, the profit and loss statement and the notes to the accounts and remit those documents within the legal time limit to the auditors.

Copy of the annual accounts, the auditor's report on such annual accounts and such other documents required by law shall be made available to shareholders in compliance with applicable law.

Article 21. Distributions. The surplus after deduction of charges and amortizations represents the net profit at the disposal of the general meeting for free allocation.

The board of directors may initiate dividend installments out of profits, share premium or any other available reserves, in accordance with applicable law.

Dividends or other distributions decided by the general meeting as well as interim dividends or other distributions for the current financial year decided by the board of directors in accordance with the law, are paid at the periods and places fixed by the board of directors.

The Company may be discharged of its obligation in respect of such distributions by transferring funds to a depository having as principal activity the operation of a settlement system in relation to transactions on securities, dividends, interest, matured capital or other matured monies of securities or of other financial instruments being handled through the system of such depository. Said depository shall distribute these funds to his depositors according to the amount of securities or other financial instruments recorded in their name.

Title VI.- Appraisal rights

Article 22. Appraisal rights.

(A) In case the general meeting approves (i) the de-listing of the Company's shares from all regulated markets where the Company's shares are listed at that time (ii) consummation of a merger in which the Company is not the surviving person (unless the shares or other equity securities of such person are listed in the New York or London stock exchanges);

(iii) consummation of a sale, lease, exchange or other disposition of all or substantially all of the assets of the Company; (iv) amendment of the articles of association that has the effect of changing materially the Company's corporate purpose; (v) relocation of the Company's domicile outside of the Grand Duchy of Luxembourg; (vi) amendments to the Articles of Association that restrict the rights of the shareholders, dissenting or absent shareholders shall have the right to have their shares purchased by the Company at (a) the average market value of the ninety (90) calendar days preceding the general meeting or (b) in the event that the shares of the Company are not traded in any regulated market, the amount that results from applying the proportion of the Company's equity that the shares being sold represent over of the Company's net worth on the day of the general meeting. The Company must consummate the purchase in this clause (a) of this Article within six (6) months following the date of the general meeting. Dissenting or absent shareholders must present their claim within one (1) month following the date of the general meeting and supply the Company with evidence of their share holding at the date of the general meeting. Shareholders which voted in favor of the relevant resolution are not entitled to the right provided in this article.

(B) In case the general meeting approves the de-listing from one or more, but not all, of the regulated markets where the Company's shares are listed, only dissenting or absent shareholders with shares held through participants in the local clearing system for that market at the earlier of (i) the date of the public announcement by the Company of the intention to make the de-listing or (ii) the date of the publication of the call for the general meeting that approved such de-listing will be entitled to have their shares repurchased by the Company in accordance with clause (a) of this Article.

Dissenting or absent shareholders must present their claim within one (1) month following the date of the general meeting and supply the Company with evidence of their share holding at the earlier of (i) the date of the public announcement by the Company of the intention to make the

de-listing or (ii) the date of the publication of the call to the general meeting.

Shareholders which voted in favor of the relevant resolution are not entitled to this appraisal right.

(C) Article 49-3(1)(d) of the Luxembourg law governing commercial companies shall apply in case the shareholders exercise their appraisal right.

Title VII.- Dissolution, Liquidation

Article 23. Dissolution. The board of directors may, at any time, propose to the extraordinary general meeting the dissolution of the Company.

Article 24. Liquidation. Upon the dissolution of the Company, the liquidation shall be effected by one or more liquidators, natural persons or legal entities, appointed by the general meeting, which shall determine their powers and their remuneration.

Title VIII.- General Provisions

Article 25. Applicable law. All points not covered by the present Articles of Association shall be governed by Luxembourg law.

TRADUCTION FRANCAISE DU TEXTE OUI PRECEDE

Titre 1. Dénomination et forme juridique, objet social, siège social, durée

Article 1er. Dénomination et forme juridique. TENARIS S.A. est une société anonyme régie par les présents Statuts et par les lois et réglementations en vigueur au Grand-Duché de Luxembourg.

Article 2. Objet social. L'objet de la Société est tout activité directement ou indirectement liée à la prise de participations, sous quelque forme que ce soit, dans des sociétés luxembourgeoises ou étrangères ou dans d'autres entités commerciales, l'administration, la gestion, le contrôle et le développement de celles-ci.

La société peut utiliser ses ressources pour organiser, gérer, valoriser et liquider un portefeuille comprenant toutes sortes de titres, de brevets et de licences y relatives, pour participer à l'organisation, au développement et au contrôle de toutes entités commerciales, pour acquérir par voie de contribution de capital, de souscription, de participation, d'option, d'achat ou de toute autre manière, toutes sortes de titres, de brevets et de licences y relatives, ainsi que pour vendre, céder, échanger ou d'une autre manière, pour valoriser de tels titres, brevets et droits par l'intermédiaire de toute personne et sous quelque forme que ce soit, et d'offrir aux sociétés dans lesquelles elle détient un intérêt, toutes assistances, tous prêts, avances ou garanties.

La Société peut lever des fonds en vue de financer ses activités au travers de l'émission, privée ou publique, d'emprunts, d'obligations, de titres obligataires, d'instruments de dette ou de tous autres instruments similaires ou de certificats d'actions libellés en n'importe quelle devise (et elle peut mettre en gage tout ou partie de ses actifs pour garantir les fonds ainsi levés).

De manière générale, la Société peut exercer toutes activités autorisées qu'elle juge appropriées ou nécessaires à l'accomplissement de son objet social.

Article 3. Siège social. Le siège social est établi à Luxembourg-Ville.

Le siège social peut être transféré à l'intérieur de la même localité par décision du conseil d'administration.

Le conseil d'administration peut ouvrir des succursales ou des bureaux à l'étranger.

Lorsque apparaissent ou sont imminents des développements politiques, économiques ou sociaux extraordinaires de quelque sorte que se soit et qui sont de nature à mettre en péril le fonctionnement normal du siège social ou la communication aisée entre un tel siège et le monde extérieur, le siège social peut être déclarée temporairement transférée à l'étranger jusqu'à la disparition complète de ces conditions extraordinaires, sans que soit altérée la nationalité de la Société qui, nonobstant un tel transfert temporaire du siège social, restera luxembourgeoise. Une telle déclaration de transfert du siège social sera faite et portée à la connaissance des parties tierces par un des membres des organes exécutifs de la Société autorisés à l'engager par des actes de gestion courante et quotidienne.

Article 4. Durée. La Société est constituée pour une durée illimitée.

Titre II.- Capital social

Article 5. Capital social. Le capital social est fixé à un milliard cent quatre-vingt millions cinq cent trente-six mille huit cent trente dollars américains (1.180.536.830 USD), divisé en un milliard cent quatre-vingt millions cinq cent trente-six mille huit cent trente actions (1.180.536.830), d'une valeur nominale d'un dollar américain (1 USD) par action.

Le capital autorisé de la Société est fixé à deux milliards cinq cent millions dollars américains (2.500.000.000 USD), comprenant le capital social émis, représenté par deux milliards cinq cent millions actions (2.500.000.000) d'une valeur nominale d'un dollar américain (1 USD) par action.

Le conseil d'administration, ou tout mandataire(s) dûment nommé(s) par le conseil d'administration, peut de temps en temps, pour un période commençant à la date de l'Assemblée Générale Extraordinaire des Actionnaires tenue le 6 mai 2015 et se terminant le jour du cinquième anniversaire de la date de publication dans le Mémorial de l'acte contenant le procès-verbal de cette Assemblée Générale Extraordinaire des Actionnaires, émettre des actions dans les limites du capital autorisé, par apport en numéraire, en nature ou par voie d'incorporation de réserves disponibles à ce moment, et aux termes et conditions, notamment le prix d'émission, décidés par le conseil d'administration ou son/ses mandataire(s), à leur seul discrétion.

L'Assemblée Générale Extraordinaire des Actionnaires tenue le 6 mai 2015 a autorisé le Conseil d'Administration, pour un période commençant à la date de cette Assemblée Générale Extraordinaire des Actionnaires et se terminant au jour du cinquième anniversaire de la date de publication dans le Mémorial de l'acte contenant le procès-verbal de cette Assemblée Générale Extraordinaire des Actionnaires, à renoncer, supprimer ou limiter tout droits préférentiel de souscriptions des actionnaires prévus par la loi en ce qu'il considère la renonciation, la suppression ou la limitation recommandée pour toute émission ou

émissions d'actions dans la limite du capital autorisé et à renoncer à tout droit préférentiel de souscription prévu par la loi et les procédures y liées.

Nonobstant la renonciation à tout droit de souscription préférentiel prévu par la loi et les procédures liées, par applications des dispositions des présents Statuts, toute émission d'actions par apport en numéraire, dans la limite du capital autorisé, doit être conforme aux droits de souscription préférentiels des actionnaires existants, à l'exception des cas suivants (dans ces cas, aucun droit préférentiel de souscription ne s'applique) :

(i) toute émission d'actions (notamment et sans limitation les émissions directes d'actions ou sur exercice d'options, de droits convertibles en actions ou des instruments similaires convertibles ou échangeables en actions) par apport autre qu'en numéraire; et

(ii) toute émission d'actions (y compris gratuitement ou avec remise) jusqu'à 1,5% du capital social émis de la Société, aux administrateurs, fondateurs de pouvoir, agents, ou employés de la Société, à leurs filiales directes ou indirectes, ou à leurs affiliés (collectivement, les « Bénéficiaires »), y compris et sans limitation l'émission directe d'actions ou par l'exercice d'options, de droit de conversion en actions, ou des instruments similaires convertibles ou échangeables en actions émises dans un but de compensation ou incitation des Bénéficiaires ou y afférent (le Conseil d'Administration doit être autorisé à émettre sous les termes et conditions décrites).

Toute émission d'action dans les limites du capital social autorisé doit être enregistrée par acte notarié et cet Article 5 doit être modifié en conséquence.

Chaque action autorise le détenteur de celle-ci à émettre un vote à chaque assemblée générale, conformément à la loi applicable.

Le conseil d'administration peut autoriser toute émission d'obligations qui peuvent être, mais qui ne doivent pas être obligatoirement, convertibles en actions nominatives sous une dénomination et payables dans une monnaie déterminée par lui et à sa seule discrétion. Le conseil d'administration doit déterminer le type, le prix, les taux d'intérêt, les conditions d'émission et de remboursement et toutes autres conditions de ces émissions. Un registre des obligations nominatives doit être tenu par la Société.

Article 6. Actions. Les actions seront nominatives. Le conseil d'administration peut émettre des certificats d'actions nominatives.

Les actions peuvent être inscrites sans matricules dans des comptes de titres fongibles ouverts auprès d'institutions financières ou d'autres dépositaires professionnels. Les actions détenues en dépôt ou sur un compte auprès d'une telle institution financière ou d'un tel dépositaire professionnel seront inscrites sur un compte ouvert au nom du déposant et peuvent être transférées d'un compte à un autre, que ce compte soit détenu par une la même ou une autre institution financière ou dépositaire professionnel. Le déposant dont les actions sont détenues sur de tels comptes de titres fongibles auront les mêmes droits et obligations que si ses actions étaient inscrites au registre d'actions nominatives de la Société.

Le transfert des actions nominatives, porté au registre d'actions nominatives et qui ne sont pas détenues sur des comptes de titres

fongibles, sera réalisé par une déclaration écrite de transfert signée par le cédant et le cessionnaire ou par leurs mandants. Le conseil d'administration peut accepter et inscrire dans le registre un transfert sur base de tout document(s) approprié(s) constatant le transfert entre le cédant et le cessionnaire.

Pour l'exercice des droits à son encontre ainsi que pour l'exercice des droits de vote aux assemblées générales et de tous droits octroyés aux actionnaires, la Société ne reconnaîtra qu'un seul et unique propriétaire par action. S'il existe plusieurs propriétaires d'une action, la Société aura le droit de suspendre l'exercice de tous les droits y attachés jusqu'à ce qu'une personne ait été désignée comme étant propriétaire de cette action à l'égard de la Société ou jusqu'à ce qu'un seul représentant des propriétaires ait été nommé pour les représenter à l'égard de la Société.

Les droits et obligations attachés à toute action se transmettront à tout cessionnaire.

Toutes communications et notifications devant être faites aux actionnaires nominatifs seront considérées comme valablement faites à la dernière adresse communiquée par l'actionnaire à la Société.

Article 7. Modification du capital social. Le capital souscrit et autorisé de la Société peuvent être augmentés ou diminués par décision des actionnaires en assemblée générale dont les décisions seront prises de la façon requise pour modifier les Statuts.

Titre III.- Administration, Surveillance

Article 8. Conseil d'administration. La Société sera gérée par un conseil d'administration comprenant un minimum de trois (3) et un maximum de quinze (15) membres nommés par l'assemblée générale. En case de cotation des actions de la société sur un marché réglementé, le nombre minimum d'administrateurs sera de cinq (5). La durée de leur mandat ne pourra excéder un (1) an; ils peuvent être réélus ou révoqués à tout moment, avec ou sans motifs.

En cas de vacance d'un poste d'administrateur, les administrateurs restants auront le droit de pourvoir temporairement à une telle vacance par un vote pris à la majorité; dans ce cas, il sera demandé à la prochaine assemblée générale de ratifier une telle nomination.

Tout administrateur élu en remplacement d'un autre, dont la durée du mandat n'est pas expirée, terminera le terme du mandat de l'administrateur qu'il remplace.

Article 9. Procédure. Le conseil d'administration élira un président parmi ses membres et, si il est jugé opportun, un ou plusieurs vice-présidents et il déterminera le terme de leur mandat, ce dernier ne pouvant excéder leur nomination en tant qu'administrateur.

Le conseil d'administration se réunira aussi souvent que les intérêts de la Société l'exigent et au moins quatre (4) fois par an, sur convocation du président ou de deux (2) administrateurs, soit au siège social ou à tout autre endroit indiqué dans la convocation, sous la présidence du président ou, si ce dernier est empêché, sous la présidence du ou de tout vice-président ou d'un administrateur choisi parmi ses collègues.

Le conseil d'administration ne peut délibérer et agir valablement que si une majorité de ses membres en fonction est présente en personne ou est représentée.

Les réunions du conseil d'administration peuvent être valablement tenues au moyen de conférences téléphoniques, vidéoconférences, ou tous autres moyens permettant une véritable participation, interaction et intercommunication des administrateurs qui y assistent.

Tout administrateur qui est empêché ou absent peut donner mandat par écrit, télégramme ou télécopie à un de ses collègues du conseil afin de se faire représenter aux réunions du conseil et de voter à sa place.

Toutes décisions seront prises à la majorité des voix des administrateurs présents ou représentés ; en cas d'égalité de vote, le président a une voix prépondérante.

Les décisions circulaires, signées par tous les administrateurs, ont la même valeur que si elles avaient été prises lors d'une réunion du conseil d'administration dûment convoquée et tenue. Une telle décision peut être documentée par plusieurs instruments séparés ayant la même teneur, chacun signé par un ou plusieurs administrateurs.

Le conseil d'administration peut nommer un secrétaire et un ou plusieurs secrétaires-assistants et décide sur leurs responsabilités, pouvoirs et autorités. Ces secrétaire et secrétaires assistants n'ont pas besoin d'être des administrateurs.

Article 10. Procès verbaux du conseil. Les décisions du conseil d'administration seront consignées dans les procès-verbaux signés (i) par le président du conseil d'administration ou par le président de l'assemblée et par le secrétaire du conseil d'administration, ou (ii) par la majorité des personnes présentes à cette assemblée.

Les copies de ces procès-verbaux, sauf dérogations, ainsi que tous autres documents de la Société, peuvent être certifiés par le président du conseil d'administration, le président de l'assemblée concernée, tout membre du conseil d'administration, le secrétaire du conseil d'administration ou tout secrétaire assistant du conseil d'administration.

Article 11. Pouvoirs. Le conseil d'administration est investi des pouvoirs les plus larges pour agir au nom de la Société et pour accomplir ou autoriser tous actes et toutes opérations d'administration et de disposition qui font partie de son objet social et qui ne sont pas spécifiquement réservés à l'assemblée générale.

La Société sera engagée par la signature collective de deux administrateurs ou la seule signature de toute(s) personne(s) à laquelle (auxquelles) pareils pouvoirs de signature auront été délégués par le conseil d'administration ou par un des deux administrateurs.

Le conseil d'administration est investi du pouvoir d'interpréter et de mettre en oeuvre les présents statuts et d'émettre des lignes directrices et des règles à cet effet.

Dans les limites de la loi applicable, le conseil d'administration peut:

1. déléguer à une ou plusieurs personnes, qu'elles soient membres ou non du conseil d'administration, les pouvoirs nécessaires pour mettre en oeuvre ses décisions et pour pourvoir à la gestion journalière; à condition que l'approbation de transactions matérielles avec des parties liées ne soit pas déléguée et que l'avis du Comité d'Audit sur ces transactions matérielles soit pris en compte préalablement à leur approbation par le conseil d'administration;

2. accorder à une ou plusieurs personnes, qu'elles soient membres ou non du conseil d'administration, les pouvoirs considérés comme

appropriés pour la gestion technique, administrative et commerciale de la Société;

3. constituer un Comité d'Audit, composé d'administrateurs, déterminer sa fonction et son pouvoir;

4. constituer tout comité dont les membres peuvent être choisis parmi les administrateurs ou non, et déterminer leur fonctions et pouvoirs.

Le conseil peut autoriser toutes substitutions dans les pouvoirs qu'il peut accorder ou a accordé.

Dans le cas où les actions sont cotées sur un ou plusieurs marchés réglementés, la Société sera pourvue d'un Comité d'Audit composé de au moins trois (3) membres, dont la majorité devra qualifier d'Administrateur Indépendant ; à la condition toutefois que la composition et les membres du Comité d'Audit satisfassent aux exigences applicables et obligatoires aux comités d'audit pour les émetteurs tels que la Société en vertu de toute loi, règle ou réglementation applicables à la Société (y inclus, sans limitation, les lois, règles et réglementations applicables de tels marchés). Les membres du Comité d'Audit n'auront pas le droit de participer à un système quelconque de primes d'encouragement prévu pour les employés de la Société ou d'une de ses filiales. Le Comité d'Audit (I) assistera le conseil d'administration dans l'exécution de ses responsabilités de surveillance liées à l'intégrité des documents comptables de la Société, au système de contrôle interne de la Société et à l'indépendance et au travail des réviseurs d'entreprises et des comptables internes de la Société.

Il accomplira également les autres tâches que lui confiera le conseil d'administration, particulièrement celles concernant les relations avec le réviseur d'entreprises et (II) examinera les transactions matérielles entre la Société ou ses filiales et des parties liées afin d'évaluer si les conditions auxquelles elles sont conclues sont conformes au prix du marché ou sont équitables envers la Société et ses filiales. A ces fins, (A) l'expression «matérielle» désignera (a) toute transaction, ou série de transactions effectuées pendant une période de une année avant la détermination, en vertu de laquelle la Société ou toute filiale devrait opérer un paiement ou recevoir des montants s'élevant à plus de 1,5% des ventes nettes consolidées de l'année fiscale précédent celle durant laquelle la détermination sera prise ou (b) toute transaction de restructuration d'entreprise (y compris toute fusion, cession d'action ou apport d'une universalité) portant atteinte à la Société ou à ses filiales au profit ou en rapport également avec une partie liée; et (B) l'expression «partie liée» désignera toute personne visée ci-après en relation avec la Société ou les filiales de la Société: (i) tout membre du conseil d'administration de la Société ou de ceux de ses filiales; (ii) toute société ou personne contrôlant directement ou indirectement la Société ou étant membre du conseil d'administration d'une société contrôlant directement ou indirectement la Société; (iii) toute société ou personne détenant une participation importante dans la Société ou de toute filiale de la Société; (iv) conjoints, parents, fratries ou parents jusqu'au troisième degré de toute personne désignée au (i), (ii) ou (iii); et (v) toute société dont les personnes visées aux (i) et (iii) détiennent une participation importante.

Le conseil d'administration nommera un des membres du Comité d'Audit comme son Président. Le Comité d'Audit fera un rapport au conseil d'administration de son activité et du caractère adéquat du système de

contrôle interne une fois par an au moment où les comptes annuels sont approuvés.

Pour les besoins des présents statuts, le terme «Administrateur Indépendant» signifie un administrateur qui: (i) n'est pas, et n'a pas été employé par la Société ou ses filiales en tant que membre exécutif, endéans les cinq ans précédant immédiatement l'assemblée annuelle à laquelle il sera voté sur les personnes candidates à l'élection du conseil d'administration;

(ii) n'est pas une personne qui contrôle directement ou indirectement la Société et n'est pas un membre du conseil d'administration d'une société contrôlant directement ou indirectement la Société;

(iii) n'a pas (et n'est pas lié à une société ou une entreprise qui a) une relation d'affaire significative avec la Société, ses filiales ou la personne qui contrôle directement ou indirectement la Société;

(iv) n'est pas, et n'a pas été liée à ou employée par un réviseur (actuel ou ancien) de la Société, de ses filiales ou de la personne qui contrôle directement ou indirectement la Société, endéans les cinq ans précédant immédiatement l'assemblée annuelle à laquelle il sera voté sur les personnes candidates à l'élection du conseil d'administration;

(v) n'est pas une épouse, un parent, un enfant des mêmes parents ou un membre de la famille jusqu'au troisième degré de toute personne décrite ci-avant aux points (i) à (v).

Article 12. Rémunération des administrateurs. La rémunération du conseil d'administration sera décidée par l'assemblée générale.

La Société, dans les limites admises par la loi luxembourgeoise, devra rembourser tout administrateur ou dirigeant, ainsi que tout ancien administrateur ou dirigeant, de tous coûts, charges et dépenses raisonnablement supportés par lui et liés à la défense ou à une transaction relative à toute action, poursuite ou procédure de nature civile, pénale ou administrative à laquelle il peut être partie en raison du fait d'être ou d'avoir été un administrateur ou un dirigeant de la Société, si (i) il a agit de manière honnête et de bonne foi, et (ii) en cas de procédure pénale ou administrative, il a eu de bonnes raisons de croire que sa conduite était légale. Sans préjudice de ce qui précède, l'actuel ou l'ancien administrateur ou dirigeant ne sera pas remboursé en cas d'action, poursuite ou procédure portée à son encontre par la Société ou au cas où il serait finalement jugé à l'occasion d'une action, poursuite ou procédure, comme étant responsable de négligence grave, de mauvaise gestion intentionnelle, fraude, malhonnêteté ou autre faute pénale. En outre, en cas de transaction, l'actuel ou l'ancien administrateur ou dirigeant ne pourra être en droit d'être remboursé en vertu du présent paragraphe que s'il transige ladite action, poursuite ou procédure de bonne foi et d'une manière qu'il estime raisonnablement être la plus conforme ou non contraire aux intérêts de la Société et si une notification de l'intention de transiger ladite action, poursuite ou procédure est faite à la Société au moins dix jours ouvrables avant une telle transaction.

Article 13. Commissaires. Les comptes annuels de la Société doivent être audités par des réviseurs d'entreprises ou des sociétés de réviseurs d'entreprise conformément à la loi applicable, nommés par l'assemblée générale des actionnaires. L'assemblée générale doit

déterminer leur nombre et le terme de leur mandat qui ne doit pas excéder un (1) an. Ils peuvent être réélus ou révoqués à tout moment.

Titre IV.- Assemblées générales

Article 14. Pouvoirs. L'assemblée générale, régulièrement constituée, représente tous les actionnaires. Elle a les pouvoirs les plus larges pour faire ou ratifier tous les actes concernant la Société.

Article 15. Date et lieu. L'assemblée générale annuelle se réunit chaque année au Luxembourg au lieu indiqué dans la convocation de l'assemblée dans les six (6) mois de la fin de l'exercice financier précédent.

Les Assemblées Générale des Actionnaires, y inclus l'Assemblée Générale annuelle des Actionnaires, peuvent être tenues dans un pays étranger lorsque surviennent des événements de force majeure tel que déterminés par le Conseil d'Administration de façon discrétionnaire. Dans un tel cas, les délais et les conditions nécessaires afin d'assurer la validité des délibérations et des publications continueront à être ceux prévus par les lois du Luxembourg.

Article 16. Convocation à l'assemblée. Le conseil d'administration doit convoquer toutes les assemblées générales. Les convocations de toutes les assemblées générales ordinaires ou extraordinaires doivent être conformes à la loi (quant au contenu et à la publicité). Tant que les actions et autres titres de la Société sont cotés sur un marché réglementé, les convocations de l'assemblée générale des actionnaires doivent être conformes aux exigences (quant au contenu et à la publicité) et aux coutumes de ce marché.

Article 17. Admission. L'admission à une assemblée générale des actionnaires doit être soumise au droit luxembourgeois et aux présents statuts. Tant que les actions et autres titres de la Société sont cotés sur un marché réglementé de l'Union Européenne, la participation à l'assemblée générale doit être liée inter alia à la détention d'actions de la Société par l'actionnaire concerné au quatorzième (14ème) jour à minuit du fuseau horaire d'Europe centrale précédant l'assemblée (à moins que la loi ne décide autrement).

Le conseil d'administration peut ajouter d'autres conditions qui doivent être remplies par les actionnaires en personne ou par leurs mandataires, pour participer à l'assemblée générale y compris le respect des délais pour présenter les documents justificatifs à ou pour la Société.

Article 18. Procédure. Chaque assemblée générale sera présidée par un président pro tempore nommé par l'assemblée générale. L'assemblée générale nommera un scrutateur qui tiendra la liste de présence.

Le bureau de l'assemblée générale ainsi constitué désignera le secrétaire.

Sans égard à l'ordre du jour, le conseil d'administration peut ajourner toute assemblée générale ordinaire ou extraordinaire conformément aux formalités et aux délais disposés par la loi.

Article 19. Votes et procès verbaux. Conformément à la loi en vigueur, les résolutions des assemblées générales ordinaires doivent être

prises par un vote à la majorité simple des votes valablement émis, sans égard au nombre d'actions présentes ou représentées.

Les assemblées générales extraordinaires ne peuvent valablement délibérer sur les modifications de Statuts proposées que si la moitié du capital social est présente ou représentée, à moins que la loi ne décide autrement. Si le quorum requis n'est pas atteint à la première assemblée, une deuxième assemblée peut être convoquée conformément aux présents Statuts et à la loi applicable et cette deuxième assemblée doit délibérer valablement sans égard au nombre d'actions représentées.

Les résolutions qui modifient les Statuts doivent être adoptées à une majorité de deux tiers des votes émis, à moins que la loi ne décide autrement.

La nationalité de la Société ne peut être modifiée et les engagements de ces actionnaires ne peuvent être augmentés qu'avec l'accord unanime de tous les actionnaires et le cas échéant, des obligataires.

Dans la mesure où aucun actionnaire n'exige un compte total de votes à l'assemblée générale, la Société peut établir les résultats des votes seulement pour vérifier que la majorité requise est atteinte sur chaque point soumis à l'assemblée générale.

Les procès-verbaux des assemblées générales doivent être signés par les membres du bureau de l'assemblée. Les copies ou extraits des procès-verbaux peuvent être certifiés par le président du conseil d'administration, le président de l'assemblée concernée, tout membre du conseil d'administration, le secrétaire du conseil d'administration ou tout secrétaire assistant du conseil d'administration.

Titre V.- Année sociale, Distributions

Article 20. Année sociale. L'année sociale commencera le premier (1er) janvier de chaque année et se terminera le trente et un (31) décembre de la même année.

Chaque année, la gérance fera dresser un inventaire contenant les actifs actuels et immobilisés ainsi que toutes les dettes et le passif de la Société, accompagné d'une annexe contenant un résumé de tous les engagements sociaux et de toutes les dettes des administrateurs envers la Société.

La gérance préparera le bilan, le compte de profits et pertes et l'annexe et remettront ces documents aux commissaires endéans le délai légal.

Une copie des comptes annuels, du rapport du commissaire sur ces comptes annuels et tous autres documents requis par la loi doivent être à la disposition des actionnaires conformément à la loi applicable.

Article 21. Distributions Le reliquat après déduction des charges et des amortissements représente le profit net mis à la disposition de l'assemblée générale pour une distribution libre.

Le conseil d'administration peut décider du versement de dividendes à partir des bénéfices, de la prime d'émission ou toute autre réserve, conformément à la loi applicable.

Les dividendes ou autres distributions décidées par l'assemblée générale, ainsi que le versement de dividendes intérimaires ou autres distributions pour l'année sociale en cours, décidées par le conseil

d'administration en conformité avec la loi, sont payées aux moments et aux lieux déterminés par le conseil d'administration.

La Société peut être libérée de ses obligations relatives aux distributions en transférant des fonds à un dépositaire ayant pour activité principale un système de compensation relatif aux transactions sur titres, dividendes, intérêts, capitaux échus ou autres titres échus sur des monnaies ou d'autres instruments financiers détenus au travers du système de ce dépositaire. Ce dépositaire doit distribuer ces fonds à ses déposants en fonction du montant des titres ou des autres instruments financiers inscrits en leur nom.

Titre VI.- Droits de sortie

Article 22. Droits de sortie.

(A) Dans le cas où l'assemblée générale approuve (i) la radiation de la cotation des actions de la Société de tous les marchés réglementés où les actions de la Société sont alors cotées, (ii) l'accomplissement d'une fusion dans laquelle la Société n'est pas l'entité qui survit (sauf à ce que les actions ou tout autre titre de participation coté de ladite entité soient cotées sur le marché boursier de New York ou de Londres); (iii) la réalisation de la vente, location, échange ou tout autre acte de disposition de tous ou presque tous les actifs de la Société; (iv) la modification des statuts ayant pour effet de un changement matériel de l'objet social de la Société; (v) la relocalisation de la domiciliation de la Société hors du Grand Duché du Luxembourg; (vi) la modification des statuts restreignant les droits des actionnaires, les actionnaires qui s'y sont opposés ou qui étaient absents auront le droit de faire acheter leurs actions par la Société (a) au prix moyen du marché des quatre-vingt-dix (90) jours calendriers précédant l'assemblée générale ou (b) dans l'hypothèse où les actions de la Société ne seraient pas cotées sur un marché réglementé, au prix résultant du rapport entre la part dans le capital social représentée par les actions vendues et la valeur nette de la Société au jour de l'assemblée générale. La Société doit effectuer l'achat énoncé au (a) du présent article endéans les six (6) mois qui suivent la date de l'assemblée générale. Les actionnaires qui s'y sont opposés ou qui étaient absents doivent présenter leur requête dans le mois (1 mois) qui suit la date de l'assemblée générale et fournir à la Société la preuve de leur détention des actions à la date de l'assemblée générale. Les actionnaires qui ont voté en faveur de la résolution en question ne se verront pas attribués le droit énoncé au présent article.

(B) Dans le cas où l'assemblée générale approuve la radiation de la cotation d'un ou de plusieurs, mais pas de tous, marchés réglementés où les actions de la Société sont cotées, seuls les actionnaires qui s'y sont opposés ou qui étaient absents et détenant des actions par l'intermédiaire de participants au système de compensation local de ce marché au plus tôt de (i) la date de l'annonce publique par la Société de l'intention d'effectuer la radiation ou de (ii) la date de la publication de la convocation à l'assemblée générale qui a approuvée un telle radiation, auront le droit de faire racheter leurs actions par la Société conformément aux dispositions de la clause (a) du présent Article. Les actionnaires qui s'y sont opposés ou qui étaient absents doivent présenter leur requête dans le mois (1 mois) qui suit la date de l'assemblée générale et fournir à la Société la preuve de leur détention d'actions au plus tôt de (i) la date de l'annonce publique par

la Société de l'intention d'effectuer la radiation ou de (ii) la date de la publication de la convocation à l'assemblée générale.

Les actionnaires qui ont voté en faveur de la résolution en question ne se verront pas attribués ce droit de sortie.

(C) L'article 49-3(1)(d) de la loi luxembourgeoise concernant les sociétés commerciales s'appliquera au cas où les actionnaires exercent leur droit de sortie.

Titre VII.- Dissolution, Liquidation

Article 23. Dissolution. Le conseil d'administration peut à tout moment proposer à l'assemblée générale extraordinaire la dissolution de la Société.

Article 24. Liquidation. Suite à la dissolution de la Société, il sera procédé à la liquidation par les soins d'un ou de plusieurs liquidateurs qui pourront être des personnes physiques ou morales, nommés par l'assemblée générale qui déterminera leurs pouvoirs et leurs rémunérations.

Titre VIII.- Dispositions générales

Article 25. Loi applicable. Tous les points non prévus par les présents Statuts seront régis par la loi luxembourgeoise.

POUR COPIE CONFORME DES STATUTS COORDONNES,

Belvaux, le 6 mai 2015.

Tenaris – Liquid financial assets over total assets

<i>Thousands of U.S. dollars</i>	At December 31,		
	2018	2017	2016
Cash and cash equivalents	428,361	330,221	399,737
Other current investments	487,734	1,192,306	1,633,142
Bonds and other fixed income	113,829	123,498	248,049
Liquid financial assets	1,029,924	1,646,025	2,280,928
Total assets	14,251,299	14,398,218	14,003,275
Ratio	7%	11%	16%

Tenaris – Total Liabilities to Total Assets Ratio

<i>Thousands of U.S. dollars</i>	At December 31,		
	2018	2017	2016
Total liabilities	2,375,807	2,817,248	2,590,203
Total assets	14,251,299	14,398,218	14,003,275
Ratio	0.17	0.20	0.18

Tenaris – Current borrowings to total borrowings

<i>Millions of U.S. dollars</i>	At December 31,		
	2018	2017	2016
Current borrowings	509,820	931,214	808,694
Total borrowings	539,007	965,859	840,236
Ratio	0.95	0.96	0.96

Alternative performance measures

EBITDA, Earnings before interest, tax, depreciation and amortization.

EBITDA provides an analysis of the operating results excluding depreciation and amortization and impairments, as they are non-cash variables which can vary substantially from company to company depending on accounting policies and the accounting value of the assets. EBITDA is an approximation to pre-tax operating cash flow and reflects cash generation before working capital variation. EBITDA is widely used by investors when evaluating businesses (multiples valuation), as well as by rating agencies and creditors to evaluate the level of debt, comparing EBITDA with net debt. EBITDA is calculated in the following manner:

EBITDA = Operating results + Depreciation and amortization + Impairment charges/(reversals).

<i>Millions of U.S. dollars</i>	For the year ended December 31,		
	2018	2017	2016
Operating income (loss)	872	335	(59)
Depreciation and amortization	664	609	662
Depreciation and amortization from discontinued operations	-	-	(5)
Impairment	-	-	-
EBITDA	1,536	943	598

Net cash/(debt) position

This is the net balance of cash and cash equivalents, other current investments and fixed income investments held to maturity less total borrowings. It provides a summary of the financial solvency and liquidity of the company. Net cash / (debt) is widely used by investors and rating agencies and creditors to assess the company's leverage, financial strength, flexibility and risks.

Net cash/ debt is calculated in the following manner:

Net cash= Cash and cash equivalents + Other investments (Current and Non-Current) +/- Derivatives hedging borrowings and investments – Borrowings (Current and Non-Current).

<i>Millions of U.S. dollars</i>	At December 31,		
	2018	2017	2016
Cash and cash equivalents	428	330	400
Other current investments	488	1,192	1,633
Non-current Investments	114	123	248
Derivatives hedging borrowings and investments	(6)	(33)	(35)
Borrowings – current and non-current	(539)	(966)	(840)
Net cash position	485	647	1,406

Free Cash Flow

Free cash flow is a measure of financial performance, calculated as operating cash flow less capital expenditures. FCF represents the cash that a company is able to generate after spending the money required to maintain or expand its asset base. Free cash flow is calculated in the following manner:

Free cash flow = Net cash (used in) provided by operating activities – Capital expenditures.

<i>Millions of U.S. dollars</i>	For the year ended December 31,		
	2018	2017	2016
Net cash provided by (used in) operating activities	611	(22)	864
Capital expenditures	(349)	(558)	(787)
Free cash flow	261	(580)	77

Tenaris – List of subsidiaries of Tenaris S.A.

Principal subsidiaries

We conduct all our operations through subsidiaries. The following table shows the principal subsidiaries of the Company and its direct and indirect ownership in each subsidiary as of December 31, 2018, 2017 and 2016.

Company	Country of Incorporation	Main activity	Percentage of ownership at December 31, (*)		
			2018	2017	2016
ALGOMA TUBES INC.	Canada	Manufacturing of seamless steel pipes	100%	100%	100%
CONFAB INDUSTRIAL S.A. and subsidiaries	Brazil	Manufacturing of welded steel pipes and capital goods	100%	100%	100%
KAZAKHSTAN PIPE THREADERS LIMITED LIABILITY PARTNERSHIP	Kazakhstan	Threading of premium products	100%	100%	100%
HYDRIL COMPANY and subsidiaries (except detailed) (a)	USA	Manufacture and marketing of premium connections	100%	100%	100%
DALMINE S.p.A.	Italy	Manufacturing of seamless steel pipes	100%	100%	100%
MAVERICK TUBE CORPORATION and subsidiaries	USA	Manufacturing of welded steel pipes	100%	100%	100%
S.C. SILCOTUB S.A.	Romania	Manufacturing of seamless steel pipes	100%	100%	100%
NKKTUBES	Japan	Manufacturing of seamless steel pipes	51%	51%	51%
SIAT SOCIEDAD ANONIMA	Argentina	Manufacturing of welded and seamless steel pipes	100%	100%	100%
PRUDENTIAL STEEL LTD.	Canada	Manufacturing of welded steel pipes	100%	100%	100%
SIDERCA SOCIEDAD ANONIMA	Argentina	Manufacturing of seamless steel pipes	100%	100%	100%
INDUSTRIAL Y COMERCIAL and subsidiaries	Argentina		100%	100%	100%
P.T. SEAMLESS PIPE INDONESIA JAYA	Indonesia	Manufacturing of seamless steel products	89%	89%	77%
TUBOS DE ACERO DE MEXICO, S.A.	Mexico	Manufacturing of seamless steel pipes	100%	100%	100%
TENARIS GLOBAL SERVICES (U.S.A.) CORPORATION	USA	Marketing of steel products	100%	100%	100%
TENARIS BAY CITY, INC.	USA	Manufacturing of seamless steel pipes	100%	100%	100%
TENARIS GLOBAL SERVICES (UK) LTD	United Kingdom	Holding company and marketing of steel products	100%	100%	100%
TENARIS INVESTMENTS SWITZERLAND AG and subsidiaries	Switzerland	Holding company	100%	100%	100%
TENARIS FINANCIAL SERVICES S.A.	Uruguay	Financial company	100%	100%	100%
TENARIS GLOBAL SERVICES (CANADA) INC.	Canada	Marketing of steel products	100%	100%	100%
TENARIS INVESTMENTS S.à.r.l.	Luxembourg	Holding company	100%	100%	100%
TENARIS CONNECTIONS BV	Netherlands	Development, management and licensing of intellectual property	100%	100%	100%
TENARIS GLOBAL SERVICES S.A. and subsidiaries (except detailed) (b)	Uruguay	Holding company and marketing of steel products	100%	100%	100%
TALTA - TRADING E MARKETING SOCIEDADE UNIPessoal LDA.	Portugal	Holding Company	100%	100%	100%

(*) All percentages rounded.

(a) Tenaris Investments S.a.r.l. holds 100% of Hydril's subsidiaries shares except for Technical Drilling & Production Services Nigeria, Ltd where it holds 80%.

(b) Tenaris holds 97.5% of Tenaris Supply Chain S.A., 60% of Gepnaris S.A. and 40% of Tubular Technical Services and Pipe Coaters, and 49% of Amaja Tubular Services Limited and Tubular Services Angola Ltd.

CERTIFICATE

I, PAOLO ROCCA, CERTIFY THAT:

1. I have reviewed this annual report on Form 20-F of Tenaris S.A.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; *and*
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; *and*
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; *and*
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 3, 2019

/s/ Paolo Rocca

Name: Paolo Rocca
Title: Chief Executive Officer

CERTIFICATE

I, EDGARDO CARLOS, CERTIFY THAT:

1. I have reviewed this annual report on Form 20-F of Tenaris S.A.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; *and*
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; *and*
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; *and*
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 3, 2019

/s/ Edgardo Carlos

Name: Edgardo Carlos
Title: Chief Financial Officer

CERTIFICATION

PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

(SUBSECTIONS (A) AND (B) OF SECTION 1350, CHAPTER 63 OF TITLE 18, UNITED STATES CODE)

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code), the undersigned officer of Tenaris S.A. (the "Company"), hereby certifies, to such officer's knowledge, that the Company's Annual Report on Form 20-F for the year ended December 31, 2018 (the "Report"), fully complies with the requirements of section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 3, 2019

/s/ Paolo Rocca
Name: Paolo Rocca
Title: Chief Executive Officer

The foregoing certification is being furnished solely pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code) and is not being filed as part of the Report or as a separate disclosure document.

CERTIFICATION

PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

(SUBSECTIONS (A) AND (B) OF SECTION 1350, CHAPTER 63 OF TITLE 18, UNITED STATES CODE)

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code), the undersigned officer of Tenaris S.A. (the "Company"), hereby certifies, to such officer's knowledge, that the Company's Annual Report on Form 20-F for the year ended December 31, 2018 (the "Report"), fully complies with the requirements of section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 3, 2019

/s/ Edgardo Carlos
Name: Edgardo Carlos
Title: Chief Financial Officer

The foregoing certification is being furnished solely pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code) and is not being filed as part of the Report or as a separate disclosure document.