



**Consolidated Management Report for the year ended on December 31, 2019
as supplemented by the Annex Update as of April 28, 2020**

TERNIUM S.A.
société anonyme
26 Boulevard Royal, 4th floor
L – 2449 Luxembourg
R.C.S. Luxembourg: B 98 668

In light of the economic uncertainty originated by the COVID-19 pandemic, on April 7, 2020, Ternium's board of directors resolved to postpone the company's annual and extraordinary general meetings of shareholders (the "Meetings"), originally to be held in Luxembourg on April 27, 2020. The proxy materials issued by the company on March 20, 2020 for such general meetings were withdrawn and canceled for all purposes.

On April 28, 2020, the company's board of directors convened the Meetings to be held on June 5, 2020 and issued new proxy materials, including this document that contains the Consolidated Management Report for the year ended on December 31, 2019 (the "CMR") and an Annex Update to the CMR as of April 28, 2020 (the "Annex"). The content of the Annex supplements and forms an integral part of the CMR on references made to the annual general meetings of shareholders, the board of directors' dividend proposal for the year 2019 and capital expenditure projects.

Document Contents

- Consolidated Management Report for the year ended on December 31, 2019
- Annex Update as of April 28, 2020

Intentionally left blank.



**Consolidated Management Report
for the year ended on December 31, 2019**

26 Boulevard Royal, 4th floor
L – 2449 Luxembourg
R.C.S. Luxembourg: B 98 668

INDEX TO THE CONSOLIDATED MANAGEMENT REPORT FOR THE YEAR 2019

	Page
About our Company	3
Management's Report	6
Risks Factors	16
Consolidated Financial Statements	33
Parent Financial Statements	125

Ternium S.A. (the "Company") is a Luxembourg company and its American Depositary Shares, or ADSs, are listed on the New York Stock Exchange (NYSE: TX). We refer to Ternium S.A. and its consolidated subsidiaries as "we," "our" or "Ternium."	TX LISTED NYSE	The financial and operational information contained in this consolidated management report is based on Ternium's operational data and on the Company's consolidated financial statements, which were prepared in accordance with IFRS and IFRIC interpretations as issued by the IASB and adopted by the European Union and presented in U.S. dollars (USD) and metric tons.
This consolidated management report contains "forward-looking statements", including with respect to certain of our plans and current goals and expectations relating to Ternium's future financial condition and performance, which are provided to allow potential investors the opportunity to understand management's beliefs and opinions in respect of the future so that they may use such beliefs and opinions as one factor in evaluating an investment in Ternium's securities. All forward-looking statements are based on management's present expectations of future events and are subject to a number of factors and uncertainties that cause actual results, performance or events to differ materially from those expressed or implied by those statements. These risks include but are not limited to risks relating to the steel industry and mining activities, risks relating to countries in which we operate, risks relating to our business, including uncertainties as to gross domestic product, related market demand, global production capacity, tariffs, cyclicalities in the industries that purchase steel products, risks relating to the Company's structure and regulatory risks, as well as other factors beyond Ternium's control.		<p>For a detailed description of Ternium's main risks and uncertainties, please see the section "Risk Factors" included in this consolidated management report.</p> <p>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 Ternium's 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 consolidated management 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 changes of circumstances or management's estimates or opinions, new information, future events or otherwise.</p>

Profile

Ternium is Latin America's leading flat steel producer with an annual crude steel production capacity of 12.4 million tons. We operate in Mexico, Brazil, Argentina, Colombia, the southern United States and Central America through regional manufacturing facilities, service centers and distribution networks. In addition, Ternium participates in the control group of Usiminas, a leading flat steel company in the Brazilian market.

Our customers range from small businesses to large global companies in the automotive, home appliances, heat, ventilation, and air conditioning (HVAC), construction, capital goods, container, food and energy industries across the Americas. Ternium supplies a broad range of high value-added steel products and has advanced customer integration systems that enable us to differentiate ourselves from our competitors through the offering of sophisticated products and services.

Our industrial system has varied production technologies that provide a diversified cost structure, based on different types of raw material and energy sources, and a flexible production configuration. The industrial system includes proprietary iron ore mines, steelmaking facilities, finishing facilities, service centers and a broad distribution network to offer slabs, hot-rolled products, cold-rolled products, galvanized and electro-galvanized sheets, pre-painted sheets, tinplate, welded pipes, rebars and wire rods as well as slit and cut-to-length products. Its innovative culture, industrial expertise and long-term view enable Ternium to continuously achieve new breakthroughs in industrial excellence, competitiveness and customer service.

We believe that Ternium is the leading supplier of flat steel products in Mexico and Argentina, has a significant position as supplier of steel products in Colombia and in various other countries in Latin America, and is a competitive player in the international steel market for steel products. Through its network of commercial offices in several countries in Latin America, the United States and Spain, Ternium maintains an international presence that allows it to reach customers outside its local markets, achieves improved effectiveness in the supply of its products and in the procurement of semi-finished steel, and maintains a fluent commercial relationship with its customers by providing continuous services and assistance.

We operate with a broad and long-term perspective, and we work towards improving the quality of life of our employees, their families and the local communities where we operate.

Environment, Health and Safety

We devote significant resources to environment, health and safety (EHS), as we believe they are key to our long term sustainability. We have standardized environment, health and safety management systems. We also have an energy savings management system in our Brazilian steel mill and we are advancing the implementation of similar systems in other facilities. Our employees are well trained in EHS and our management is accountable for EHS performance. Ternium's health and safety system is certified under OHSAS 18001, our environment system is certified under ISO 14001 and our energy savings system is certified under ISO 50001. We invest in state-of-the-art technologies to reduce our environmental footprint and minimize safety risks.

Integrity

We believe integrity is key to our long term sustainability. We have an audit committee solely composed of independent directors and an Internal Audit Department reporting to the Chairman of the Board and the Audit Committee, which strengthens its independence. We have a Business Conduct Compliance Officer reporting to the CEO and a compliance department that oversees SOX certifications and related party transactions. Our employees are trained and accountable for ensuring a transparent behavior. We have established different policies, codes and procedures for this purpose. In addition, we have confidential channels to report non-compliant behavior.

Communities

We believe that having deep ties with our communities is also fundamental to the company's long-term sustainability. We are having a significant positive impact on our communities, both from a human perspective as well as in terms of economic development. We work together with local institutions to enhance our communities' education and welfare. We provide scholarships, internships, teachers' training and infrastructure funding. We also organize and fund volunteering programs and health prevention campaigns, and sponsor sports, social and arts events.

Steel Industry Value Chain

We support approximately 1,800 small and medium-sized enterprises (SMEs), customers and suppliers, through our ProPymes program. ProPymes provides training, industrial projects and business consultancy, institutional assistance, commercial support and financial aid. The program plays an active role at universities, business schools, government agencies and industrial associations. ProPymes has helped create an industrial network that encourages the professionalization and quest for excellence of SMEs.

Performance Highlights

	2019	2018	2017	2016	2015
Steel Sales Volume (Thousand Tons)					
Mexico	6,305.0	6,544.8	6,622.8	6,405.2	5,933.4
Southern Region	1,938.3	2,301.1	2,456.0	2,220.8	2,552.2
Other Markets	4,268.0	4,105.2	2,517.7	1,138.1	1,114.6
Total	12,511.3	12,951.1	11,596.6	9,764.0	9,600.3
Financial Indicators (USD million)					
Net sales	10,192.8	11,454.8	9,700.3	7,224.0	7,877.4
Operating income	864.6	2,108.4	1,456.8	1,141.7	639.3
EBITDA ⁽¹⁾	1,525.7	2,697.7	1,931.1	1,548.6	1,073.1
Equity in earnings (losses) of non-consolidated companies	61.0	102.8	68.1	14.6	(272.8)
Profit before income tax expense	826.6	2,031.6	1,359.8	1,118.5	267.1
Profit (loss) for the year attributable to:					
Owners of the Parent	564.3	1,506.6	886.2	595.6	8.1
Non-controlling interest	65.8	155.5	136.7	111.3	51.7
Profit (loss) for the year	630.0	1,662.1	1,022.9	706.9	59.8
Capital expenditures	1,052.3	520.3	409.4	435.5	466.6
Free cash flow ⁽²⁾	595.4	1,219.0	(25.5)	664.1	856.8
Balance Sheet (USD Million)					
Total assets	12,935.5	12,547.9	12,122.6	8,322.9	8,062.6
Financial debt	2,188.7	2,037.0	3,221.9	1,218.6	1,521.0
Net financial debt ⁽³⁾	1,453.4	1,734.9	2,748.3	884.3	1,132.3
Total liabilities	5,220.6	5,063.3	6,269.8	3,156.3	3,259.6
Capital and reserves attributable to the owners of the parent	6,611.7	6,393.3	5,010.4	4,391.3	4,033.1
Non-controlling interest	1,103.2	1,091.3	842.3	775.3	769.8
Stock Data (USD per Share/ADS ⁽⁴⁾)					
Basic earnings (losses) per share	0.29	0.77	0.45	0.30	0.00
Basic earnings (losses) per ADS	2.87	7.67	4.51	3.03	0.04
Proposed dividend per ADS	1.20	1.20	1.10	1.00	0.90
Weighted average number of shares outstanding ⁽⁵⁾ (million shares)	1,963.1	1,963.1	1,963.1	1,963.1	1,963.1

⁽¹⁾ EBITDA is operating income adjusted to exclude depreciation and amortization.

⁽²⁾ Free cash flow equals net cash provided by operating activities less capital expenditures.

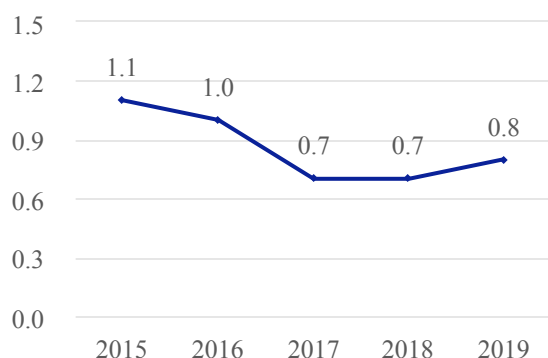
⁽³⁾ Net financial debt equals total financial debt less cash and cash equivalents plus other investments.

⁽⁴⁾ Each ADS represents 10 shares.

⁽⁵⁾ The Company has an authorized share capital of a single class of 3.5 billion shares having a nominal value of USD1.00 per share. As of December 31, 2019, there were 2,004,743,442 shares issued. All issued shares are fully paid. In addition, as of December 31, 2019 the Company held 41,666,666 shares as treasury shares, representing 3% of the subscribed capital.

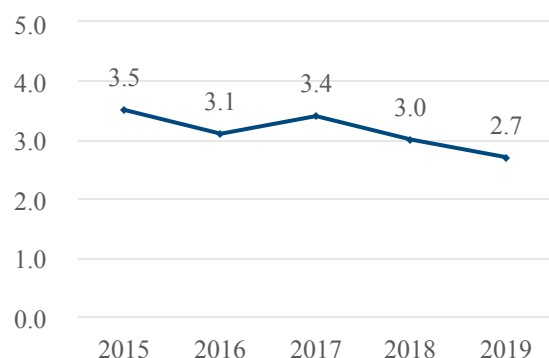
Lost Time Injuries Frequency Rate

Quantity of day-loss injuries per million hours worked



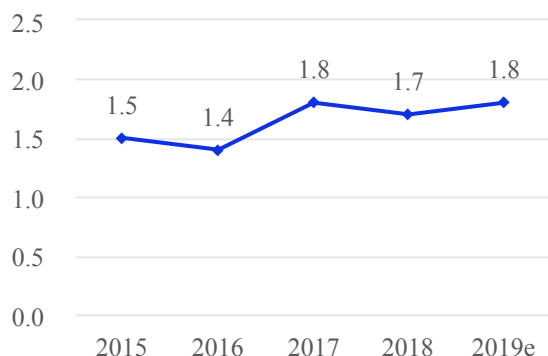
Injuries Frequency Rate

Total quantity of injuries per million hours worked



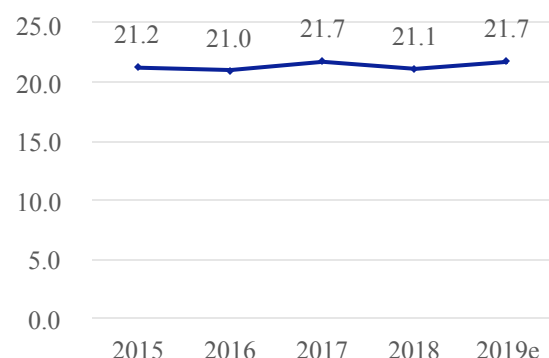
Emission Intensity

Carbon dioxide tons emitted per ton of steel produced. Year-end.



Energy Intensity

Gigajoules consumed per ton of steel produced. Year-end

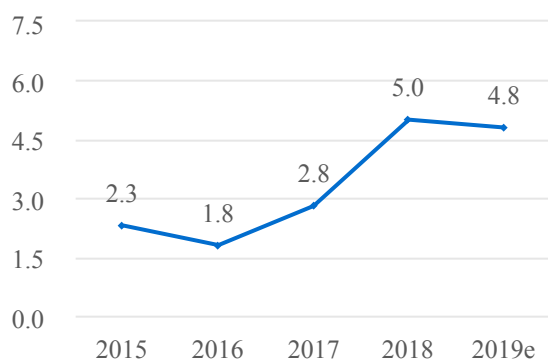


The increased emission intensity reflects the incorporation of the Rio de Janeiro blast furnace-based unit in our crude steel production mix since September 2017.

The increased energy intensity in 2019 mainly reflects the termination of the steam delivery contract from our San Nicolás unit, which reduces its energy efficiency.

Co-Products

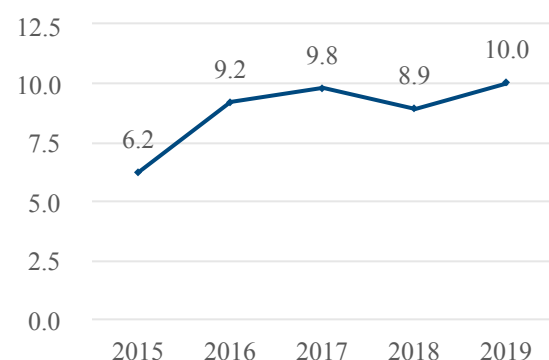
Million Tons



Co-products mainly include blast furnace and steel shop slag, iron ore fines and chemical substances. The increased production reflects the incorporation of the Rio de Janeiro unit since September 2017.

Investment in Product Research and Development

USD million



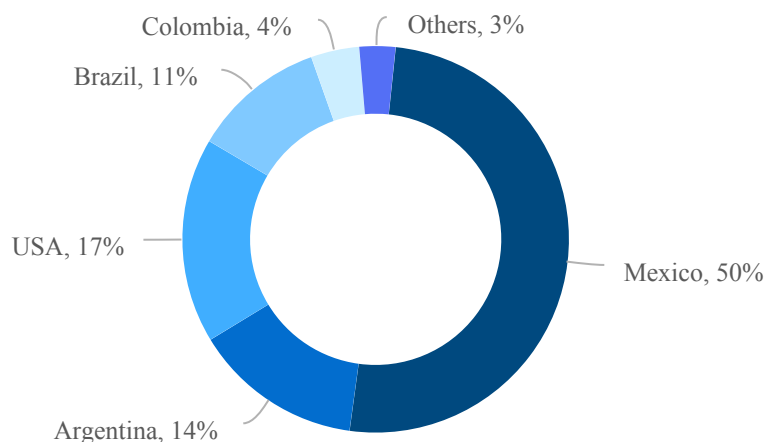
This review of Ternium's financial condition and results of operations is based on, and should be read in conjunction with, the Company's consolidated financial statements as of December 31, 2019 and 2018 and for the years ended December 31, 2019, 2018 and 2017 (including the notes thereto), which are included elsewhere in this consolidated management report. For a detailed description of Ternium's main risks and uncertainties, see the section "Risk Factors" included in this consolidated management report. For information related to the holding of Company's own shares, see "Performance Highlights" in the section "About Our Company" included in this consolidated management report.

Good Profitability Levels in a Challenging Year for the Steel Industry

Ternium produces flat and/or long steel products in Mexico, Brazil, Argentina, the United States, Colombia and Guatemala. We report steel shipments under three geographical regions: Mexico, the Southern Region (encompassing the steel markets of Argentina, Bolivia, Chile, Paraguay and Uruguay) and Other Markets. During 2019, shipments in the Mexican market were 6.3 million tons, representing 50% of Ternium's total steel shipments. Apparent flat steel use decreased in the year reflecting a softer commercial market in 2019 and a strong level of shipments in the first half 2018 in anticipation of rising steel prices. Shipments in the Southern Region reached 1.9 million tons in 2019, or 15% of Ternium's consolidated shipments in the steel segment. Most of Ternium's shipments in the region are destined for the Argentine market. Apparent steel use decreased significantly in Argentina in 2019, as the country's macroeconomic situation deteriorated. Shipments in the Other Markets region reached 4.3 million tons in 2019, or 34% of Ternium's consolidated shipments in the steel segment. Our major shipment destinations in the Other Markets region were the United States, Brazil, Colombia and Central America.

Net sales in 2019 were USD10.2 billion, including steel products net sales of USD9.9 billion on steel shipments of 12.5 million tons, other products net sales of USD296.1 million and iron ore products net sales of USD364 million on iron ore shipments of 3.6 million tons. Most of the iron ore production was consumed in our steel operations. Steel revenue per ton was USD790 in 2019. Steel prices declined in North America during the year following a strong pricing environment in 2018.

Steel Shipments by Country in 2019



EBITDA reached USD1.5 billion in 2019 with EBITDA margin of 15%, remaining at an industry-leading level of profitability. Net income attributable to Ternium's equity owners was USD564.3 million, or USD2.87 per ADS. Free cash flow was USD595.4 million, with a high level of capital expenditures being partially offset by a USD572.7 million reduction in working capital. In 2019, the company's capital expenditures were USD1.1 billion, USD532.0 million higher than in 2018, as Ternium's investment program progresses as planned. The main investments carried out during the year included those made for new hot-rolling, hot-dipped galvanizing and painting production capacity in the company's Pesquería industrial center, a new steel bar and coil mill in Colombia, improvement of environmental and safety conditions at certain facilities, the expansion of connectivity, integration and automation of our operations, and those made in the iron ore mining operations.

Ternium's net debt position reached USD1.5 billion at the end of December 2019, with a net debt to last twelve months EBITDA ratio of 1.0 times.

Summary Results

	2019	2018	Dif.
Steel shipments (tons)	12,511,000	12,951,000	-3%
Iron ore shipments (tons)	3,576,000	3,616,000	-1%
Net sales (USD million)	10,192.8	11,454.8	-11%
Operating income (USD million)	864.6	2,108.4	-59%
EBITDA (USD million)	1,525.7	2,697.7	-43%
EBITDA margin (% of net sales)	15%	24%	-860 bps
EBITDA per ton (USD)	121.9	208.3	-41%
Financial expense, net (USD million)	(99.0)	(179.6)	-45%
Profit for the year (USD million)	630.0	1,662.1	-62%
Profit attributable to owners of the parent (USD million)	564.3	1,506.6	-63%
Basic earnings per ADS (USD)	2.87	7.67	-63%

Ternium's operating income in 2019 was USD864.6 million, reflecting a good level of profitability, soft steel demand in Mexico and a significant decline in steel shipments in Argentina. Operating income in 2019 decreased USD1.2 billion year-over-year, mainly due to USD66 lower revenue per ton, a USD30 increase in operating cost per ton and a 440,000-ton decrease in shipments. Revenue per ton decreased in 2019 principally as a result of declining steel prices in Ternium's North American markets in 2019 following a strong pricing environment in 2018. The increase in the steel segment's operating cost per ton mainly reflected higher raw material and energy costs, and higher depreciation of property plant and equipment, partially offset by lower labor costs and maintenance expenses. Shipments in 2019 reflected a 240,000-ton decrease in Mexico, mainly due to a softer commercial market in 2019 and a strong level of shipments in the first half of 2018 in anticipation of rising steel prices, and a 363,000-ton decrease in the Southern Region, mainly due to weaker steel demand in Argentina, partially offset by a 163,000-ton increase in Other Markets due to higher sales of slabs to third parties. The company's net income in 2019 was USD630.0 million, compared to net income of USD1.7 billion in 2018. The USD1.0 billion year-over-year decrease was mainly due to lower operating income, partially offset by a lower income tax expense and better financial results.

Net Sales

Net sales in 2019 were USD10.2 billion, 11% lower than net sales in 2018. The following table outlines Ternium's consolidated net sales for 2019 and 2018.

	Net Sales (USD million)			Shipments (thousand tons)			Revenue/Ton (USD/ton)		
	2019	2018	Dif.	2019	2018	Dif.	2019	2018	Dif.
Mexico	5,326.7	6,134.0	-13 %	6,305.0	6,544.8	-4 %	845	937	-10 %
Southern Region	1,696.6	1,933.4	-12 %	1,938.3	2,301.1	-16 %	875	840	4 %
Other Markets	2,866.7	3,023.6	-5 %	4,268.0	4,105.2	4 %	672	737	-9 %
Total steel products	9,890.1	11,091.0	-11%	12,511.3	12,951.1	-3%	790	856	-8%
Other products ⁽⁶⁾	296.1	362.4	-18 %						
Steel reporting segment	10,186.2	11,453.4	-11%						
Mining reporting segment	364.0	282.0	29%	3,575.9	3,616.3	-1%	102	78	31%
Intersegment eliminations	(357.4)	(280.6)							
Net sales	10,192.8	11,454.8	-11%						

⁽⁶⁾ The item "Other products" primarily includes Ternium Brasil's and Ternium Mexico's electricity sales.

Cost of Sales

Cost of sales was USD8.5 billion in 2019, a decrease of USD30.9 million compared to 2018. This was principally due to a USD100.1 million, or 5%, decrease in other costs mainly including an USD87.8 million decrease in labor costs, a USD52.5 million decrease in maintenance expense and a USD52.4 million increase in depreciation of property plant and equipment; partially offset by a USD69.2 million increase in raw material and consumables used, mainly reflecting net higher raw material, other inputs and energy costs partially offset by a 3% decrease in steel shipment volumes.

Selling, General and Administrative (SG&A) Expenses

SG&A expenses in 2019 were USD897.5 million, or 9% of net sales, an increase of USD20.7 million compared to SG&A expenses in 2018 mainly due to a USD24.4 million increase in amortization of intangible assets, an USD8.9 million increase in taxes and a USD8.1 million increase in freight and transportation costs, partially offset by a USD26.1 million decrease in labor costs.

Operating Income

Operating income in 2019 was USD864.6 million, or 8% of net sales, compared to operating income of USD2.1 billion, or 18% of net sales, in 2018.

Steel Reporting Segment

The steel segment's operating income was USD770.5 million in 2019, a decrease of USD1.3 billion compared to operating income in 2018, reflecting lower net sales and slightly higher operating cost.

Net sales of steel products in 2019 decreased 11% compared to 2018, reflecting lower revenue per ton and shipments. Revenue per ton decreased 8% mainly as a result of declining steel prices in Mexico in 2019 following a strong pricing environment in 2018. Shipments decreased 3% year-over-year mainly as a result of lower volumes in the Southern Region and Mexico.

Operating cost increased 1% year-over-year as a result of higher operating cost per ton partially offset by the above-mentioned 3% decrease in shipment volumes.

USD million	Steel Segment		Mining Segment		Intersegment Eliminations		Total	
	2019	2018	2019	2018	2019	2018	2019	2018
Net Sales	10,186.2	11,453.4	364.0	282.0	(357.4)	(280.6)	10,192.8	11,454.8
Cost of sales	(8,552.5)	(8,524.9)	(259.5)	(239.9)	359.6	281.5	(8,452.4)	(8,483.3)
SG&A expenses	(885.1)	(860.9)	(12.3)	(15.9)	—	—	(897.5)	(876.8)
Other operating income (expense), net	21.9	12.9	(0.3)	0.7	—	—	21.7	13.7
Operating income	770.5	2,080.6	91.9	26.9	2.2	0.8	864.6	2,108.4
EBITDA	1,383.2	2,618.5	140.3	78.3	2.2	0.8	1,525.7	2,697.7

Mining Reporting Segment

The mining segment's operating income was a gain of USD91.9 million in 2019, compared to a gain of USD26.9 million in 2018, reflecting higher iron ore sales partially offset by higher operating cost.

Net sales of mining products in 2019 were 29% higher than those in 2018, with 31% higher revenue per ton and a 1% decrease in shipments. Operating cost increased 6% year-over-year due to higher operating cost per ton partially offset by the above-mentioned 1% decrease in shipments.

EBITDA

EBITDA in 2019 was USD1.5 billion, or 15.0% of net sales, compared with USD2.7 billion, or 23.6% of net sales, in 2018.

Net Financial Results

Net financial results were USD99.0 million loss in 2019, compared to USD179.6 million loss in 2018. During 2019, Ternium's net financial interest results totaled a loss of USD59.2 million, compared with a loss of USD109.9 million in 2018, mainly reflecting lower average indebtedness and interest rates.

Net foreign exchange loss was a USD40.7 million better result year-over-year mainly related to the effect of the fluctuations of the Argentine peso against the US dollar. In 2019, the Argentine peso depreciated 37% against the US dollar, compared to 51% in 2018, resulting in a relatively lower negative impact in Ternium Argentina's US dollar financial position (which uses the Argentine peso as its functional currency) in 2019.

Change in fair value of financial instruments included in net financial results was a USD10.8 million loss in 2019 compared to a USD99.3 million loss in 2018.

The effect of inflation on Ternium's Argentine subsidiaries and associates' short net monetary position, as a result of the application of IAS 29, was a gain of USD118.0 million in 2019 compared to a USD191.4 million gain in 2018.

Equity in Results of Non-Consolidated Companies

Equity in results of non-consolidated companies was a gain of USD61.0 million in 2019, compared to a gain of USD102.8 million in 2018 mainly due to lower results from Ternium's investment in Usiminas.

Income Tax Expense

Income tax expense in 2019 was USD196.5 million, or 24% of income before income tax, compared to an income tax expense of USD369.4 million, or 18% of income before income tax in 2018.

Net Income Attributable to Non-controlling Interest

Net gain attributable to non-controlling interest in 2019 was USD65.8 million, compared to a net gain of USD155.5 million in 2018.

Liquidity and Capital Resources

We obtain funds from our operations, as well as from short-term and long-term borrowings from financial institutions. These funds are primarily used to finance our working capital and capital expenditures requirements, as well as our acquisitions and dividend payments. We hold money market investments, time deposits and variable-rate or fixed-rate securities. Our net financial indebtedness decreased in 2019, to USD1.5 billion at the end of 2019 from USD1.7 billion at the end of 2018. The following table shows the changes in our cash and cash equivalents for each of the periods indicated below:

In USD million	For the year ended December 31,	
	2019	2018
Net cash provided by operating activities	1,647.6	1,739.3
Net cash used in investing activities	(1,196.6)	(457.0)
Net cash provided by (used in) financing activities	(150.5)	(1,322.3)
Increase (decrease) in cash and cash equivalents	300.5	(40.0)
Effect of exchange rate changes	(31.0)	(47.2)
Cash and cash equivalents at the beginning of the year	250.5	337.8
Cash and cash equivalents at the end of the year	520.0	250.5

During 2019, Ternium's primary source of funding was cash provided by operating activities. Cash and cash equivalents as of December 31, 2019 was USD520.0 million, a USD269.4 million increase from USD250.5 million at the end of the previous year. The increase was mainly attributable to net cash provided by operating activities of USD1.6 billion, partially offset by net cash used in investing activities of USD1.2 billion and net cash used in financing activities of USD150.5 million.

In addition to cash and cash equivalents, as of December 31, 2019, we held other investments with maturity of more than three months for a total amount of USD212.3 million, increasing USD167.8 million compared to December 31, 2018.

Operating Activities

Net cash provided by operating activities in 2019 was USD1.6 billion. Working capital decreased by USD572.7 million in 2019 as a result of a USD511.0 million decrease in inventories and an aggregate USD167.6 million decrease in trade and other receivables, partially offset by an aggregate USD105.9 million decrease in accounts payable and other liabilities. The inventory value decrease in 2019 was due to a USD231.3 million lower steel volume; USD197.5 million inventory value decrease in raw materials, supplies and other; and an USD82.2 million lower cost of steel.

USD million	Change in inventory Dec'19 / Dec'18		
	Price	Volume	Total
Finished steel goods	(20.9)	(61.8)	(82.7)
Steel goods in process	(61.3)	(169.5)	(230.8)
Total steel goods	(82.2)	(231.3)	(313.5)
Raw materials, supplies and allowances			(197.5)
Total inventory			(511.0)

Investing Activities

Net cash used in investing activities in 2019 was USD1.2 billion, primarily attributable to capital expenditures of USD1.1 billion and an increase of USD163.8 million in other investments, partially offset by recovery of loans from non-consolidated company Techgen for a net amount of USD24.5 million. The main investments carried out during 2019 included those made for new hot-rolling, hot-dipped galvanizing and painting production capacity in the company's Pesquería industrial center, a new steel bar and coil mill in Colombia, improvement of environmental and safety conditions at certain facilities, the expansion of connectivity, integration and automation of our operations, and those made in the iron ore mining operations.

Financing Activities

Net cash used in financing activities was USD150.5 million in 2019, primarily attributable to total dividend payments of USD264.1 million (USD235.6 million to the Company's shareholders and USD28.5 million to non-controlling interest) and financial lease payments of USD38.6 million, partially offset by net proceeds from borrowings of USD152.2 million.

Principal Sources of Funding

Funding Policy

Management's policy is to maintain a high degree of flexibility in operating and investment activities by maintaining adequate liquidity levels and ensuring access to readily available sources of financing. We obtain financing primarily in U.S. dollars, Argentine pesos and Colombian pesos. Whenever feasible, management bases its financing decisions, including the election of currency, term and type of the facility, on the intended use of proceeds for the proposed financing and on costs. For information on our financial risk management, see note 30 "Financial risk management" to our consolidated financial statements included in this consolidated management report.

Ternium has in place non-committed credit facilities and management believes it has adequate access to the credit markets. Considering this fact and the funds provided by operating activities, management believes that we have sufficient resources to satisfy our current working capital needs, service our debt and pay dividends. Management also believes that our liquidity and capital resources give us adequate flexibility to manage our planned capital spending programs and to address short-term changes in business conditions.

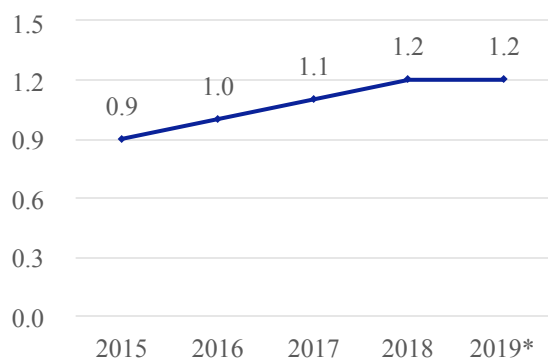
Financial Liabilities

Our financial liabilities consist mainly of loans with financial institutions. As of December 31, 2019, these facilities were mainly denominated in U.S. dollars (97% of total financial liabilities). Total financial debt (inclusive of principal and interest accrued thereon) increased by USD151.7 million in the year, from USD2.0 billion as of December 31, 2018, to USD2.2 billion as of December 31, 2019. As of December 2019, current borrowings were 26% of total borrowings, none of which corresponded to borrowings with related parties.

Net financial debt (total financial debt less cash and cash equivalents plus other investments) decreased by USD0.3 billion in 2019, from USD1.7 billion as of December 31, 2018, to USD1.5 billion as of December 31, 2019. Net financial debt as of December 31, 2019 equaled 1.0 times 2019 EBITDA.

Dividend Payments

USD per ADS



*Proposed dividend

Ternium's weighted average interest rate for 2019 was 2.9% compared to 3.7% average interest rate in 2018. The year-over-year decrease in average interest rates was due mainly to lower participation of Argentine peso denominated debt in the currency mix, as nominal interest rates in Argentina reflect high local inflation rates. This rate was calculated using the rates set for each instrument in its corresponding currency and weighted using the U.S. dollar-equivalent outstanding principal amount of each instrument as of December 31, 2019. Such rates do not include the effect of derivative financial instruments, nor fluctuations in the exchange rate between the instrument's currencies and the U.S. dollar.

Most Significant Borrowings and Financial Commitments

Our most significant borrowings as of December 31, 2019, were those outstanding under Ternium Mexico's 2018 syndicated loan facility, Ternium Brasil's 2019 syndicated loan facility, Ternium Investments S.à.r.l.'s (Ternium Investments) 2017 syndicated loan facility to finance the acquisition of Ternium Brasil and related transactions, and Tenigal's 2012 syndicated loan facility.

USD million

Date	Borrower	Type	Original principal amount	Outstanding principal amount as of December 31, 2019	Maturity
2012/2013	Tenigal	Syndicated loan	200	75	July 2022
September 2017	Ternium Investments	Syndicated loan	1,500	400	September 2022
June 2018	Ternium Mexico	Syndicated loan	1,000	875	June 2023
August 2019	Ternium Brasil	Syndicated loan	500	500	August 2024

The main covenants in our syndicated loan agreements are limitations on liens and encumbrances, limitations on the sale of certain assets and compliance with financial ratios (e.g., leverage ratio). As of December 31, 2019, we were in compliance with all covenants under our loan agreements. Our most significant financial commitments as of December 31, 2019, were the following:

Guarantees covering 48% of the funding of a debt service reserve account under a syndicated loan agreement between Techgen and several banks. Proceeds from the syndicated loan were used by Techgen to refinance in full all amounts owed under a previous syndicated loan between Techgen and several banks for the construction of its facilities. As of December 31, 2019, the amount guaranteed was approximately USD21.4 million.

A corporate guarantee covering 48% of the outstanding value of transportation capacity agreements among Techgen, Kinder Morgan Gas Natural de Mexico, S. de R.L. de C.V., Kinder Morgan Texas Pipeline LLC and Kinder Morgan Tejas Pipeline LLC, starting on August 1, 2016 and ending during the second half of 2036. As of December 31, 2019, the outstanding value of this commitment was approximately USD236 million, and our exposure under the guarantee issued in connection with these agreements amounted to USD115 million.

In addition, Ternium Mexico issued a guarantee letter covering up to approximately USD61 million of the obligations of Techgen under the Clean Energy Certificates trading agreement between Techgen and Enel Green Power S.A. de C.V. The amount of the guarantee equals the amount payable by Techgen in the event it decides to terminate the agreement prior to its expiration (and, accordingly, the guaranteed amount decreases progressively). The trading agreement was signed on May 25, 2018 and terminates on June 30, 2041.

Ternium Mexico also issued a guarantee letter covering up to approximately USD25 million of the obligations of GIMSA, under the natural gas trading agreement between GIMSA and BP Energía México, or BPEM. The credit line granted by BPEM in connection with this natural gas trading agreement amounted to approximately USD25 million. As of December 31, 2019, the outstanding amount under the natural gas trading agreement was USD14 million, which is lower than the amount of the guarantee letter issued by Ternium Mexico.

In addition, Ternium has various off-balance sheet commitments to purchase raw materials, energy (natural gas and electricity), supplies (air, oxygen, nitrogen and argon), production equipment and logistic services. Off-balance sheet commitments are discussed in note 25 (ii) to our consolidated financial statements included elsewhere in this consolidated management report.

For further information on our derivative financial instruments, borrowings, financial leases, commitments and financial risk management, see notes 22, 23, 24, 25 and 30 to our consolidated financial statements included in this consolidated management report.

Recent Developments - Annual Dividend Proposal

On February 18, 2020, the Company's board of directors proposed that an annual dividend of USD0.12 per share (USD1.20 per ADS), or approximately USD235.5 million in the aggregate, be approved at the Company's annual general shareholders' meeting, which is scheduled to be held on April 27, 2020. If approved, the dividend will be paid on May 5, 2020. Ternium's dividend payments have been growing over the years, starting from USD0.50 per ADS in 2006, the year of the initial public offering and listing.

Research and Development Activities

Steel is a highly versatile metal, offering a wide space for product innovation. For example, over 70% of the structural steel parts used to build a car today involve solutions that simply did not exist 20 years ago. Ternium's production strategy is based on offering a complete range of value-added, high-end products, with an emphasis on creating and manufacturing increasingly sophisticated steel products for new applications and industries.

The properties of the steel products required by our customers are usually the result of a combination of their metal composition and the way metal gets processed into finished steel products. Ternium has identified synergies in collaborating with its customers in the early stages of their projects. Anticipating our customers' upcoming steel product requirements, through our participation in joint development projects, is key not only to build customer relationships but also to plan and develop new processes, which may sometimes require the incorporation of new equipment and technology.

At Ternium, we carry out applied research efforts in different ways. We develop steel products through in-house programs, joint projects with leading industrial customers, joint efforts together with recognized universities or research centers, or through our participation in international consortia. Ternium's research programs are open to a broad-based international network of industry consortia. Approximately 50 universities and research laboratories from both the public and private sectors collaborate with us. The goal is to find and develop the best solutions to support an agenda aimed at achieving better and more sustainable steel. The research spans the entire production cycle, from primary steelmaking and metallurgy, to rolling and galvanizing. Ternium is a member of WorldAutoSteel, an organization comprising some of the world's major steel producers. Under the auspices of worldsteel, the group regularly updates the automotive industry on upcoming new steel capabilities available to meet their design and manufacturing requirements.

Ternium has over 120 ongoing product development projects in partnership with industrial customers, and over 50 ongoing research projects including our in-house developments and those involving university researchers and students from some of the world's most prestigious institutions. We have been increasingly engaging universities in our research efforts in order to expand and further diversify Ternium's research network and capabilities. This initiative fosters the development of fundamental knowledge and know-how at participating universities while enabling the optimization of Ternium's in-house research resources. In 2019, approximately thirty undergraduate and postgraduate students pursuing degrees in engineering, materials science and metallurgy took part in the program.

Investing to Incorporate New Equipment and Technologies

The inauguration of the Ternium Industrial Center in Pesquería, Mexico, in 2013, gave way to an intensive product development period. We widened our product range offering to include sophisticated high-end steel products required by the manufacturing industry, particularly automotive manufacturers. These developments were made possible with the incorporation of new production technologies to our industrial system through the new Pesquería unit. Furthermore, the installation in 2015 of state-of-the-art cooling technology in our hot strip mill in our Churubusco unit, Mexico, has allowed developing and processing new advanced high-strength steel grades, including dual phase, ferrite-bainite, martensitic and complex phase grades. Based on these new capabilities, we have further widened our high-end product portfolio for customers in the automotive, metal-mechanic, home appliance, oil & gas and electric motors industries.

Next Steps

Our capital expenditures program in 2020 will focus on completing our new hot-rolling mill in the Pesquería unit in Mexico, which will integrate high quality slabs from our Rio de Janeiro unit in Brazil with our downstream processing plants in Mexico. The new hot-rolling mill, which will have an annual production capacity of 4.1 million tons, is expected to be operational during the fourth quarter of 2020. This new state-of-the-art facility will target the industrial and commercial markets, improving customer service and reducing lead-times. The investment will constitute a significant technological upgrade to Mexico's steel production capacity, enabling the expansion of Ternium's product range to encompass a broader dimensional offering and the most advanced steel grades, with the aim at replacing high-value-added steel imports.

In Colombia, we are progressing with our new steel bar and coil mill in Palmar de Varela. With annual production capacity of 520,000 tons, the new steel bar and coil mill will increase Ternium's upstream integration in the country. The new mill, expected to be completed during the first half of 2020, will enable us to expand our market share in Colombia's dynamic construction sector by offering an alternative to imports in the country's northern region.

In addition, we expect to make progress with our projects aimed at improving environmental and safety conditions throughout our main facilities.

It may be difficult to assess or predict the effects of COVID19-coronavirus that emerged in China in late 2019. The impact of the coronavirus outbreak on the industry, generally, and on Ternium's operations, in particular, is currently unknown. For more information on the risks associated to the coronavirus outbreak, see the section "Risk Factors" included in this consolidated management report.

Corporate Governance

Board of Directors

The Company's corporate governance practices are governed by the Luxembourg Companies Law and the Company's articles of association. 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 eight 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. In 2019, the Company's board of directors met nine times.

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 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 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.

On May 6, 2019, the Company's annual general shareholders' meeting re-elected Ubaldo José Aguirre, Roberto Bonatti, Carlos Alberto Condorelli, Vincent Robert Gilles Decalf, Adrián Lajous Vargas, Daniel Agustín Novegil, Gianfelice Mario Rocca and Paolo Rocca as members of the board of directors to serve until the next annual shareholders' meeting. The board of directors subsequently reappointed Paolo Rocca as its chairman, Daniel Novegil as its vice-chairman and Máximo Vedoya as chief executive officer of the Company.

Audit Committee

Pursuant to the Company's articles of association, as supplemented by the audit committee's charter, for as long as the Company's shares are listed on at least one regulated markets, 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).

The audit committee of the Company's board of directors currently consists of three members, Ubaldo José Aguirre, Adrián Lajous Vargas and Vincent Robert Gilles Decalf, who were appointed to the audit committee by the Company's board of directors on May 6, 2019. All of them qualify as independent directors for purposes of the U.S. Securities Exchange Act Rule 10A-3(b)(1) and under the Company's articles of association.

The Company's audit committee operates under a charter that was amended and restated by the board of directors on February 20, 2018. The audit committee assists the board of directors in fulfilling its oversight responsibilities with respect to the integrity of the Company's financial statements, including periodically reporting to the board of directors on its activity; and the adequacy of the Company's systems of internal control over financial reporting. The audit committee is also responsible for making recommendations regarding the appointment, dismissal, compensation, retention and oversight of, and for assessing the

independence of, the Company's external auditors. The audit committee also performs other duties imposed by applicable laws, rules and regulations of the regulated market or markets on which the shares of the Company are listed, as well as any other duty entrusted to it by the Company's board of directors. In addition, the audit committee is required by the Company's articles of association and audit committee's charter to review "Material Transactions" (as such term is defined by the Company's articles of association and audit committee's charter), to be entered into by the Company or its subsidiaries with "Related Parties," as such term is defined by the Company's articles of association (other than transactions that were reviewed and approved by the independent members of the board of directors or other governing body of any subsidiary of the Company or through any other procedures as the board of directors may deem substantially equivalent to the foregoing), in order to determine whether their terms are consistent with market conditions or are otherwise fair to the Company and/or its subsidiaries.

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.

Auditors

The Company's articles of association require the appointment of an independent audit firm in accordance with applicable law. Auditors are appointed by the general shareholders' meeting, on the audit committee's recommendation, through a resolution passed by a simple majority vote. The primary responsibility of the auditor is to audit the Company's annual accounts and consolidated financial statements and to submit a report on each set of 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*) and approved by the Luxembourg Financial Sector Supervisory Commission (*Commission de Surveillance du Secteur Financier*).

The shareholders' meeting held on May 6, 2019, re-appointed PwC Luxembourg as the Company's independent approved statutory auditor for the fiscal year ended December 31, 2019. 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, 2020.

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, the Company has adopted a code of ethics for financial officers, which is intended to supplement the Company's code of conduct, and applies specifically to the principal executive officer, the principal financial officer, the principal accounting officer or controller, or persons performing similar functions.

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

Risks Relating to the Steel Industry

A downturn in global or regional economic activity would cause a reduction in worldwide or regional demand for steel and would have a material adverse effect on the steel industry and Ternium.

Steel demand is sensitive to trends in cyclical industries, such as the construction, automotive, appliance and machinery industries, which are significant markets for Ternium's products and are also affected by national, regional or global economic conditions. A downturn in economic activity would reduce demand for steel products. This would have a negative effect on Ternium's business and results of operations. A recession or depression affecting developed economies, or slower growth or recessionary conditions in emerging economies would exact a heavy toll on the steel industry and adversely affect our business and results of operations.

In December 2019, a novel strain of coronavirus ("COVID-19") was reported to have surfaced in China and started spreading to the rest of the world in early 2020. The COVID-19 virus is impacting economic activity worldwide and poses the risk that Ternium or its employees, contractors, suppliers, customers and other business partners may be prevented from conducting certain business activities for an indefinite period of time, including due to shutdowns mandated by governmental authorities or otherwise adopted by companies as a preventive measure. Given the uncertainty around the extent and timing of the future spread of COVID-19 and the imposition or relaxation of protective measures, it is not possible to predict the COVID-19's effects on the industry, generally, and to reasonably estimate the impact on Ternium's results of operations, cash flows or financial condition.

A protracted fall in steel prices would have a material adverse effect on the results of Ternium, as could price volatility.

Steel prices are volatile and are sensitive to trends in steel demand and raw material costs, such as steel scrap, iron ore and metallurgical coal costs. Historically, the length and nature of business cycles affecting steel demand and raw material costs have been unpredictable. For example, US steel prices trended down during most of 2018 and 2019, after peaking during the first half of 2018, as a result of softer steel consumption, increased steel production and, in 2019, lower costs of steel scrap. After a trough during the fourth quarter of 2019, steel prices recovered partially due to higher costs of steel scrap and decreased steel production. A fall in steel prices could adversely affect Ternium's operating results by means of lower revenues and could also lead to inventory write-downs.

Even if raw material costs were to accompany the decrease in steel prices, the resulting reduction in steel production costs would take several months to be reflected in Ternium's operating results as Ternium would first consume older inventories acquired prior to such raw material cost decrease. In addition, Ternium may be unable to recover, in whole or in part, increased costs of raw materials and energy through increased selling prices on its products, or it may take an extended period of time to do so.

Regional or worldwide excess steel production capacity may lead to unfair trade practices in the international steel markets and/or to intense competition, hampering Ternium's ability to sustain adequate profitability.

In addition to economic cycles, the steel industry can also be affected by regional or worldwide production overcapacity. Historically, the steel industry has suffered, especially on downturn cycles, from substantial over-capacity. As a result of a slowdown in steel demand growth and protracted increase in steel production capacity in the last decade, there are signs of over-capacity in all steel markets, particularly in China, which impacted the profitability of the steel industry and Ternium. Currently, global steel production capacity exceeds global steel demand, which affects global steel prices. Moreover, there are several new steel making and steel processing facilities under construction or whose construction was announced both in Mexico and the United States, that will contribute to a significant increase in steel capacity in North America in the coming years.

Excess steel production capacity may require several years to be absorbed by demand and, as a consequence, may contribute to an extended period of depressed margins and industry weakness. International trade of steel products conducted under unfair

conditions increases particularly during downturn cycles and as a result of production over-capacity. Unfair trade practices may result in the imposition by some countries (that are significant producers and consumers of steel) of antidumping and countervailing duties or other trade measures, and may cause fluctuations in international steel trade. The imposition of such trade remedies or temporary tariffs on major steel exporters in significant steel producing countries could in turn exacerbate pressures in other markets, including those in which Ternium operates, as exporters target such other markets to compensate, at least partially, for the loss of business resulting from the imposition of trade remedies or tariffs.

China is the largest steel producing country in the world, accounting for approximately half of worldwide steel production. In 2014 and 2015, Chinese exports of steel products expanded rapidly as a result of decreased domestic consumption. Consequently, Chinese exports of steel products, including exports to Europe, the United States and Mexico, were subject to several antidumping and countervailing investigations, and to the imposition of antidumping and countervailing duties and other trade measures. A decrease in steel consumption in China in the future, including as a result of the COVID-19 pandemic, could stimulate aggressive Chinese steel export offers, exerting downward pressure on sales and margins of steel companies operating in other markets and regions, including those in which Ternium operates. Similarly, a downturn in global or regional economic activity could stimulate unfair steel trade practices and, accordingly, may adversely affect Ternium's business and results of operations.

Sales may fall as a result of fluctuations in industry inventory levels.

Inventory levels of steel products held by companies that purchase Ternium's products can vary significantly from period to period. These fluctuations can temporarily affect the demand for, and price of, Ternium's products, as customers draw from existing inventory during periods of low investment in construction and other industry sectors that purchase Ternium's products and accumulate inventory during periods of high investment and, as a result, such companies may not purchase additional steel products or maintain their current purchasing volume. Accordingly, Ternium may not be able to increase or maintain its current levels of sales volumes or prices.

Intense competition could cause Ternium to lose its share in certain markets and adversely affect its revenues.

The market for Ternium's steel products is highly competitive, particularly with respect to price, quality and service. In both global and regional markets, Ternium competes against other global and local producers of steel products, which in some cases have greater financial and operating resources, or direct and indirect governmental support. Competition from such steel producers could result in declining margins and reductions in shipments. Ternium's competitors could use their resources in a variety of ways that may affect Ternium negatively, including by making additional acquisitions, implementing modernization programs, expanding their production capacity, investing more aggressively in product development, and displacing demand for Ternium's products in certain markets. To the extent that these producers become more efficient, Ternium could confront stronger competition and could fail to preserve its current share of the relevant geographic or product markets. In addition, there has been a trend in the past toward steel industry consolidation among Ternium's competitors, and current smaller competitors in the steel market could become larger competitors in the future.

Moreover, Ternium and other steel makers compete against suppliers of alternative materials, including aluminum, wood, concrete, plastic and ceramics. In particular, certain customers, such as the automotive industry, are increasing their consumption of lighter-weight materials, such as aluminum, composites and carbon fiber, sometimes as a result of regulatory requirements. Competition from these alternative materials could adversely affect the demand for, and consequently the market prices of, certain steel products and, accordingly, could affect Ternium's sales volumes and revenues.

Price fluctuations or shortages in the supply of raw materials, energy and other inputs could adversely affect Ternium's profitability.

Like other manufacturers of steel-related products, Ternium's operations require substantial amounts of raw materials, energy and other inputs from domestic and foreign suppliers. In particular, the Ternium companies consume large quantities of iron ore, metallurgical coal, scrap, ferroalloys, natural gas, electricity, oxygen and other gases in operating their blast and electric arc furnaces. The prices of these raw materials, energy and other inputs can be volatile. Also, the availability and price of a significant portion of such raw materials, energy and other inputs used in Ternium's operations are subject to market conditions, government regulations or other events affecting supply and demand, including wars, natural disasters and public health epidemics (such as COVID-19). For example, the collapse in January 2019 of a tailings dam at a mine operated by Vale S.A., or Vale, in Brumadinho, Brazil, followed by Vale's decommissioning of all upstream tailing dams and the shut down of

operations at its Feijão and Vargem Grande mines, and the governments cancellation of Vale's licenses for eight tailings dams contributed to an increase in iron ore prices in the international markets as well as significant logistic burdens. In Argentina, shortages of natural gas in the past resulted in supply restrictions that, if repeated in the future, could lead to higher costs of production and eventually to production cutbacks at Ternium's facilities in Argentina. In Mexico, constraints in natural gas transportation capacity in the past led to increased imports of liquefied natural gas that, if repeated in the future, could lead to higher costs of production. In the past, Ternium has usually been able to procure sufficient supplies of raw materials, energy and other inputs to meet its production needs; however, it could be unable to procure adequate supplies in the future. Any protracted interruption, discontinuation or other disruption of the supply of principal inputs to the Ternium companies (including as a result of strikes, lockouts, trade restrictions, accidents or natural disasters, worldwide price fluctuations, the availability and cost of transportation, global epidemics such as COVID-19 or other problems) would result in lost sales and would have a material adverse effect on Ternium's business and results of operations.

Ternium depends on a limited number of key suppliers.

Ternium depends on certain key suppliers for their requirements of some of its principal inputs, including Vale for iron ore, BHP Billiton and Warrior for metallurgical coal and Carbo One for pulverized coal. In general, there is a trend in the industry towards consolidation among suppliers of iron ore and other raw materials. The Ternium companies have entered into long-term contracts for the supply of some (but not all) of their principal inputs and it is expected that they will maintain and, depending on the circumstances, renew these contracts. However, if any of the key suppliers fails to deliver or there is a failure to renew these contracts, the Ternium companies could face limited access to some raw materials, energy or other inputs, or higher costs and delays resulting from the need to obtain their input requirements from other suppliers.

Risks Relating To Ternium's Business

If Ternium does not successfully implement its business strategy, its opportunities for growth and its competitive position could be adversely affected.

Ternium plans to continue implementing its business strategy of enhancing its position as a competitive steel producer, focusing on higher margin value-added products, pursuing strategic growth opportunities, implementing Ternium's best practices in acquired and new businesses, providing services to a wider range of customers in the local and export markets, improving utilization levels of its plants, increasing efficiency and further reducing production costs. For example, after the acquisition of a steel slab production plant in Rio de Janeiro, Brazil, Ternium began the construction of a hot-rolling mill in its facility in Pesqueria, Mexico to integrate the Rio de Janeiro unit to its industrial system. For information on Ternium's capital expenditures, see "—B. Business Overview—Capital Expenditure Program. Any of these components or Ternium's business strategy could be delayed or abandoned or could cost more than anticipated, any of which could impact its competitive position and reduce its revenue and profitability. For example, Ternium could fail to develop its projects and/or to make acquisitions and/or integrate newly acquired businesses to increase its steel production capacity, or may lose market share in its regional markets. Even if Ternium successfully implements its business strategy, such strategy may not yield the desired goals.

Future acquisitions or other significant investments could have an adverse impact on Ternium's operations or profits, and Ternium may not realize the benefits it expects from these business decisions.

A key element of Ternium's business strategy is to identify and pursue growth-enhancing opportunities. As part of that strategy, Ternium regularly considers acquisitions, greenfield and brownfield projects and other significant investments. However, any growth project will depend on market and financing conditions. Ternium must necessarily base any assessment of potential acquisitions or other investments on assumptions with respect to operations, profitability and other matters that may subsequently prove to be incorrect. Furthermore, Ternium may fail to find suitable acquisition targets or fail to consummate its acquisitions under favorable conditions. In the past, Ternium acquired interests in various companies, including Hylsamex S.A. de C.V., or Hylsamex, one of the main steel producers, in 2005, in Mexico, and Grupo Industrias Monterrey, or Grupo Imsa, a leading Mexican steel processor, in 2007 (both currently Ternium Mexico); Ferrasa, a Colombian steel producer and processor (currently, Ternium Colombia); and more recently, in 2017, CSA, a Brazilian steel slab producer (currently, Ternium Brasil). Ternium also formed, together with Nippon Steel Corporation, or NSC, Tenigal, a company that manufactures and sells hot-dip galvanized and galvanized steel sheets for the Mexican automotive market. In 2012, Ternium acquired a participation in the control group of Usiminas, the largest flat steel producer in Brazil, and in 2014 and 2016, Ternium significantly increased its equity investment in Usiminas.

Ternium's acquisitions or other investments may not perform in accordance with its expectations and could have an adverse impact on its operations and profits. Furthermore, Ternium may be unable to successfully integrate any acquired businesses into its operations, realize expected synergies or accomplish the business objectives that were foreseen at the time of deciding any such investment. Moreover, Ternium may also acquire, as part of future acquisitions, assets unrelated to its business, and it may not be able to integrate them or sell them under favorable terms and conditions. These risks, and the fact that integration of any acquired businesses will require a significant amount of time and resources from Ternium's management and employees, could have an adverse impact on Ternium's ongoing business and a material adverse effect on its business, financial condition and results of operations.

Ternium may be required to record a significant charge to earnings if it must reassess its goodwill, other amortizable intangible assets, or investments in non-consolidated companies.

In accordance with IFRS, management must test for impairment all of Ternium's assets whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Assets subject to testing include goodwill, intangible assets and investments in non-consolidated companies. In addition, management must test for impairment goodwill at least once a year whether or not there are indicators of impairment. IFRS requires Ternium to recognize a non-cash charge in an amount equal to any impairment.

As of December 31, 2019, goodwill in connection with the Company's Mexican subsidiaries amounted to USD662.3 million and the carrying value of our investment in non-consolidated companies, mainly related to its investment in Usiminas, amounted to USD513.6 million. If Ternium's management determines in the future that the goodwill from its acquisitions or its investments in non-consolidated companies are impaired, Ternium will be required to recognize a non-cash charge against earnings, which could materially adversely affect Ternium's results of operations and net worth.

If Usiminas is not able to successfully implement its business strategy, or if the business conditions in Brazil or in the global steel and mining industries were to be worse than expected, the Company may be required to record a significant charge to earnings in the form of a further impairment of its investment in Usiminas, which could have a material adverse effect on Ternium's results, financial condition or net worth.

Since 2012, Ternium is a member of the control group of Usiminas, the largest flat steel producer in Brazil. In 2014, a conflict arose within the Usiminas control group and its board 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 the company's strategy. Such conflict was resolved by an agreement between Ternium, NSC and Usiminas' employee pension fund (Previdência Usiminas, formerly known as Caixa do Empregados do Usiminas), providing for new governance rules for Usiminas. Under the new Usiminas shareholders' agreement, no control group member can, without the consent of other shareholder group or groups, implement any change to Usiminas' strategy or business practices. If the parties fail to reach consensus, changes at Usiminas that may be necessary to achieve sustainable profitability may not take place or fail to be implemented.

As indicated above, the Company reviews periodically the recoverability of its investment in Usiminas, and as of December 31, 2012, September 30, 2014, and December 31, 2015, Ternium wrote down its investment in Usiminas by USD275.3 million, USD739.8 million and USD191.9 million, respectively. As of December 31, 2019, the carrying value of Ternium's investment in Usiminas was USD486.6 million. The Company reviews the economic policies of Brazil and market expectations relating to the BRL/USD exchange rate on an ongoing basis and will continue to evaluate their impact on the drivers used to calculate the value in use of Ternium's investment in Usiminas. These matters could lead to further changes in the carrying value of Ternium's investment in Usiminas, either through currency translation adjustments, impairment charges or recoveries of impairment charges. Any further write-downs to Ternium's investment in Usiminas could have a material adverse effect on Ternium's results of operations or net worth.

If Ternium does not comply with laws and regulations designed to combat governmental corruption in countries in which it sells its products, Ternium could become subject to fines, penalties or other sanctions and its sales and profitability could suffer.

Ternium conducts business in certain countries known to experience governmental corruption. Although Ternium is committed to conducting business in a legal and ethical manner in compliance with local and international statutory requirements and standards applicable to its business, there is a risk that employees or representatives may take actions that violate applicable

laws and regulations that generally prohibit the making of improper payments 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. In addition, the main countries in which Ternium operates (including Argentina, Mexico and Brazil) have adopted in recent years legislation that imposes strict criminal liability on companies for corrupt practices undertaken by their employees or representatives.

Labor disputes at Ternium's operating subsidiaries could result in work stoppages and disruptions to Ternium's operations.

A substantial majority of Ternium's employees at its manufacturing subsidiaries are represented by labor unions and are covered by collective bargaining or similar agreements, which are subject to periodic renegotiation. Strikes or work stoppages could occur prior to or during the negotiations leading to new collective bargaining agreements, during wage and benefits negotiations or, occasionally, during other periods for other reasons. Ternium could also suffer plant stoppages or strikes if it were to implement cost reduction plans. From time to time, Ternium takes measures in order to become more competitive; none of the measures taken in the past have resulted in significant labor unrest. However, Ternium cannot assure that this situation will remain stable or that future measures will not result in labor actions against Ternium companies. Any future stoppage, strike, disruption of operations or new collective bargaining agreements could result in lost sales and could increase Ternium's costs, thereby affecting its results of operations.

Changes in exchange rates or any limitation in the ability of the Ternium companies, including associates, to hedge against exchange rate fluctuations could adversely affect Ternium's business and results.

The operations of the Ternium companies expose them to the effects of changes in foreign currency exchange rates and changes in foreign exchange regulations. A significant portion of Ternium's sales are carried out in currencies other than the U.S. dollar. As a result of this foreign currency exposure, exchange rate fluctuations impact the Ternium companies' results and net worth as reported in their income statements, statements of comprehensive income and statements of financial position in the form of both translation risk and transaction risk. In the ordinary course of business, the Ternium companies may see fit to enter from time to time into exchange rate derivatives agreements to manage their exposure to exchange rate changes. Future regulatory or financial restrictions in the countries where Ternium operates may affect its ability to mitigate its exposure to exchange rate fluctuations, and thus could cause an adverse impact on Ternium's results of operations, financial condition or cash flows.

Cyberattacks could have a material adverse impact on Ternium's business and results of operation.

Ternium relies heavily on information systems to conduct its business. Although Ternium devotes significant resources to protect its systems and data, from time to time it experiences varying degrees of cyber incidents in the normal conduct of its 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, spoofing and/or cyberattacks. These threats often arise from numerous sources, not all of which are within Ternium's control, such as fraud or malice from third parties, including fraud involving business email, failures of computer servers or other accidental technological failure, electrical or telecommunication outages or other damage to its property or assets. Given the rapidly evolving nature of cyber threats, there can be no assurance that the systems that Ternium has 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 its systems when such incidents or attacks do occur. While Ternium attempts to mitigate these risks, it remains 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 its systems or networks, as well as unauthorized access, use, disclosure, modification or destruction of such information, systems and/or networks.

If Ternium's systems for protecting against cybersecurity risks are circumvented or breached, this could also result in disruptions to its business operations (including but not limited to, defective products or production downtimes), access to its financial reporting systems, the loss of access to critical data or systems, misuse or corruption of critical data and proprietary information (including its intellectual property and customer data), as well as damage to its reputation with 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, Ternium may be required to devote additional resources in the future to enhance its protective measures or to investigate and/or remediate any cybersecurity vulnerabilities. Moreover, any investigation of a cyber-attack would take time before completion, during which Ternium 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). Ternium does not maintain any specific insurance coverage to protect against cybersecurity risks. Even if such coverage is contracted in the future, Ternium cannot ensure that it will be sufficient to cover any particular losses resulting from a cyberattack.

Risks Relating To Ternium's Mining Activities

Ternium has equity interests in two iron ore mining companies in Mexico: a 100% interest in Las Encinas and a 50% interest in Consorcio Peña Colorada. Ternium's mining activities are subject to the following risks:

Unexpected natural and operational catastrophes may impact the environment or cause exposure to hazardous substances, adversely impact Ternium's operations and profitability, and result in material liabilities to Ternium.

Ternium operates extractive, processing and logistical operations, including tailings dams, in many geographic locations. Liabilities associated with Ternium's mining activities include those resulting from tailings and sludge disposal, effluent management, and rehabilitation of land disturbed during mining processes. Ternium's operations involve the use, handling, storage, discharge and disposal into the environment of hazardous substances and the use of natural resources. The iron ore mining industry is generally subject to significant risks and hazards, including environmental pollution, such as spilling or emissions of polluting substances or other hazardous materials; operational incidents, such as open-cut pit wall failures, rock falls or tailings dam breaches; transportation incidents, involving mobile equipment or machinery, slurry pipes and cable transportation; and may also be subject to unexpected natural catastrophes. This could result in environmental damage, damage to or destruction of properties and facilities, personal injury or death, and delays in production. For example, in January 2019, a tailings dam at Vale's Córrego do Feijão mine in Brumadinho, Brazil, collapsed, releasing a mudflow that resulted in hundreds of people dead or missing. This incident followed a previous one in November 2015, when the collapse of the Samarco dam, operated by Vale and BHP, resulted in the death of 19 people. Ternium operates mines with tailings dams in Mexico and could become subject to liabilities arising from similar incidents in the future. Over time, Ternium has conducted stability studies of its tailings dams, with the help of consultant companies, using increasingly strict standards for seismic areas and, as a result, has been carrying out several investment projects to reinforce certain dams. Although Ternium believes that, once completed, ongoing investment projects will further mitigate the risk of incidents, it cannot guarantee that failures or breaches will not occur prior to or after the completion of reinforcement works.

Ternium may also be subject to claims under federal and local laws and regulations for toxic torts, natural resource damages and other damages, as well as for the investigation and clean-up of soil, surface water, sediments, groundwater and other natural resources. Such claims for damages and reclamation may arise out of current or former conditions at sites that Ternium owns, leases or operates or at inactive sites that Ternium currently owns, leased-land sites and third-party waste disposal sites. Ternium may be named as a responsible party at other sites in the future. Ternium also could be subject to litigation for alleged bodily injuries arising from claimed exposure to hazardous substances allegedly used, released, or disposed of by Ternium. Environmental impacts as a result of Ternium's operations could result in costs and liabilities that could materially and adversely affect margins, cash flow and profitability. Third-party claims arising from these events may exceed the limit of liability of the insurance policies we could have in place.

Required governmental concessions could be subject to changes or termination, permits and rights of use and occupancy could be difficult to obtain or maintain and taxes or royalties applicable to the mining industry could increase, all of which could adversely affect Ternium's mining activities and operating costs.

Ternium's mining activities are subject to specific regulations and depend on concessions and authorizations granted by governmental authorities. Amendments to applicable laws and regulations in Mexico may change the terms pursuant to which Ternium is required to pursue exploration, mining and ore processing activities. For example, in 2014, a comprehensive tax reform became effective in Mexico, imposing new taxes and royalties on mining activities, which in the case of Ternium's iron ore mining subsidiaries resulted in a 7.5% royalty on mining profits, calculated on a special tax basis. Additional changes to Mexican laws and regulations may result in new taxes or royalties or require modifications to the processes and technologies used in Ternium's mining activities, leading to unexpected capital expenditures and higher costs.

Concessions may be revoked if the competent government authorities determine that Ternium does not comply with its obligations under the respective concession terms and agreements. Furthermore, in order to explore or exploit mines, it is necessary to obtain the right of use and occupancy of the land where the mines are situated. Even though government regulations frequently establish provisions intended to facilitate the establishment of such rights, in some cases it may be

difficult to reach and maintain agreements with the landowners or such agreements may be excessively onerous. If Ternium is unable to establish use and occupancy rights on acceptable terms, its mining activities may be compromised. In addition, Ternium's iron ore mining subsidiaries need to obtain, in the normal course of business, permits for the preparation of new iron ore bodies at the mines and for the expansion of tailings deposit capacity. If Ternium is unable to obtain such permits on a timely basis, it may need to alter its mining and/or production plans, which could lead to unexpected capital expenditures and higher costs.

Ternium's reserve estimates may differ materially from actually recoverable mineral quantities, or its estimates of mine life may prove inaccurate; and market price fluctuations and changes in operating and capital costs may render certain ore reserves uneconomical to mine in the future or cause Ternium to revise its reserve estimates.

Ternium's reserves are estimated quantities of ore that it has determined can be economically mined and processed under present and anticipated conditions to extract their mineral content. There are numerous uncertainties inherent in estimating quantities of reserves and in projecting potential future rates of mineral production, including factors beyond Ternium's control. Reserve calculations involve estimating deposits of minerals that cannot be measured in an exact manner, and the accuracy of any reserve estimate is a function of the quality of available data and engineering and geological interpretation and judgment. Reserve estimates also depend on assumptions relating to the economic viability of extraction, which are established through the application of a life of mine plan for each operation or project providing a positive net present value on a forward-looking basis, using forecasts of operating and capital costs based on historical performance, with forward adjustments based on planned process improvements, changes in production volumes and in fixed and variable proportions of costs, and forecasted fluctuations in costs of raw material, supplies, energy and wages. These forecasts and projections involve assumptions and estimations that, although Ternium believes are reasonable at the time of estimating its reserves, may change in the future and may fail to anticipate geological, environmental or other factors or events that could make it difficult or unprofitable to mine certain ore deposits.

In addition, Ternium's reserve estimates are of in-place material after adjustments for mining depletion and mining losses and recoveries, with no adjustments made for metal losses due to processing. As a result, no assurance can be given that the indicated amount of ore will be recovered from Ternium's reserves, or that it will be recovered at the anticipated rates, or that extracted ore will be converted into saleable production over the mine life at levels consistent with its reserve estimates. Reserve estimates may vary from those included in this consolidated management report, and results of mining and production subsequent to the date of an estimate may lead to future revisions of estimates. Estimates of mine life may require revisions based on actual production figures, changes in reserve estimates and other factors. For example, fluctuations in the market prices of minerals, reduced recovery rates or increased operating and capital costs due to inflation, exchange rates, mining duties or other factors could affect Ternium's mine life projections. To the extent that market price fluctuations or changes in its operating and capital costs increase its costs to explore, locate, extract and process iron ore, Ternium may be required to lower its reserve estimates if certain ore reserves become uneconomical to mine in the future.

Ternium's exploration activities are subject to uncertainties as to the results of such exploration; even if the exploration activities lead to the discovery of ore deposits, the effective exploitation of such deposits remains subject to several risks.

Exploration activities are highly speculative, involve substantial risks and may be unproductive. Ternium may incur substantial costs for exploration which do not yield the expected results. The failure to find sufficient and adequate reserves could adversely affect Ternium's business. In addition, even if ore deposits are discovered, the ability to pursue exploitation activities may be delayed for a long time during which market conditions may vary. Significant resources and time need to be invested in order to establish ore resources through exploration, define the appropriate processes that shall be undertaken, obtain environmental licenses, concessions and permits (including water usage permits), acquire land, build the necessary facilities and infrastructure for greenfield projects and obtain the ore or extract the metals from the ore. If a project does not turn out to be economically feasible by the time Ternium is able to exploit it, Ternium may incur substantial write-offs.

Inability to complete investment projects required to maintain iron ore and pellets production rates over time could increase Ternium's steel production costs.

Mining requires continuous investment to sustain production rates. Such investments require, among other things, the design of the project, the awarding of environmental permits and the successful execution of civil works. If Ternium fails to timely carry out the investment projects required to maintain iron ore and pellets production rates over time, including tailing dams, Ternium

could have to substitute internally produced iron ore with third party purchases, with a consequent increase in steel production costs.

Ternium's expected costs and capital expenditure requirements for exploration, exploitation or restoration activities may vary significantly and affect its financial condition and expected results of operations.

Ternium may be subject to increased costs or delays relating to the acquisition of adequate equipment for the exploration and exploitation of ore deposits, or restoration of exhausted mines. Moreover, Ternium may face increasing costs or capital expenditure requirements related to several factors, including diminished iron ore reserve grades, deeper pits and operational sections of its mines, iron ore deposits within the pit area that are more difficult to locate or extract, additional maintenance works in dams and ponds, and increased energy supply requirements that may be difficult to obtain. Adverse mining conditions and other situations related to the operation of the mine and related facilities during their life cycle, whether permanent or temporary, may lead to a significant increase in projected capital expenditures and costs, as well as affect Ternium's ability to produce the expected quantities of mineral. If this occurs, Ternium's financial condition and expected results of operations may also be negatively affected.

Difficulties in relationships with local communities may adversely affect Ternium's mining activities and results of operations.

Communities living or owning land near areas where Ternium operates may take actions to oppose and interfere with its mining activities. Although Ternium makes significant efforts to maintain good relationships with such communities, actions taken by them (or by interest groups within those communities) may hamper Ternium's ability to conduct its mining activities as planned, request the government to revoke or cancel its concessions or environmental or other permits, prevent Ternium from fulfilling agreements reached with the government, or significantly increase the cost of exploring and/or exploiting the mines, thereby adversely affecting Ternium's business and results of operations.

In the past, Ternium faced actions by certain native or local Mexican communities demanding higher compensation or other benefits, or seeking to stop Ternium's activities. Although attempted legal actions against Ternium did not succeed, Mexican legislation affords judges the power to preemptively suspend environmental or other permits or concessions, and take certain other measures to protect the ejidos (land jointly owned by native communities) until the claim is resolved. An adverse legal decision suspending or cancelling permits, or the illegal occupation of facilities, could adversely impact Ternium's mining activities and results of operations.

Risks Relating To The Structure Of The Company

The Company's dividend payments depend on the results of operations and financial condition of its subsidiaries and could be affected by legal, contractual or other limitations or tax changes.

The Company is a holding company and conducts all 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 their 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 on exchange controls recently imposed in Argentina, see "Risks Relating to the Countries in Which Ternium Operates-Argentina: Argentine exchange controls could prevent Ternium from paying dividends or other amounts from cash generated by Ternium Argentina".

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. In addition, the Company's dividend distributions (which are currently imputed to a special tax reserve and are therefore not

subject to Luxembourg withholding tax) may be subject to Luxembourg withholding tax if current Luxembourg tax law were to change.

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 consolidated management report, San Faustin beneficially owned 62.02% of Ternium's outstanding voting shares and Tenaris, which is also controlled by San Faustin, held 11.46% of Ternium's outstanding voting shares. Rocca & Partners Stichting Administratiekantoor Aandelen San Faustin, or RP STAK, holds voting rights in San Faustin sufficient in number to control 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.

Non-controlling interests in the Company's subsidiaries could delay or prevent us from completing our strategy.

The Company does not own 100% of the interests in certain of the Company's subsidiaries. As of February 29, 2020, 26.03% of Ternium Argentina was held by Administración Nacional de la Seguridad Social, or ANSeS, Argentina's governmental social security agency, and 11.95% was publicly held. ANSeS became a significant shareholder of Ternium Argentina in the last quarter of 2008 as a result of the nationalization of Argentina's private pension system, which caused assets under administration of Argentina's private pension funds-including significant interests in publicly traded companies, such as Ternium Argentina, held by such funds-to be transferred to ANSeS. In addition, Ternium holds a 51% ownership interest in Tenigal, and NSC holds the remaining 49%. Ternium also has a participation in the control group of Usiminas. The existence of non-controlling interests in these companies could prevent Ternium from taking actions that, while beneficial to Ternium, might not be beneficial to each relevant subsidiary, considered separately. As a result, the Company could be delayed or prevented from completing the Company's strategy or fully maximizing Ternium's competitive strengths.

Risks Relating To The Countries In Which Ternium Operates

Negative economic, political, social and regulatory developments in certain markets where Ternium has a significant portion of its operations and assets could hurt Ternium's shipment volumes or prices, increase its costs or disrupt its manufacturing operations, thereby adversely affecting its results of operations and financial condition.

The results of Ternium's operations are subject to the risks of doing business in emerging markets, principally in Mexico, Brazil and Argentina and to a lesser extent in Colombia, and have been, and could in the future be, affected from time to time to varying degrees by economic, political, social, and regulatory developments, such as nationalization, expropriation or forced divestiture of assets; restrictions on production, domestic sales, imports and exports; travel or trade bans; interruptions in the supply of essential energy inputs; restrictions on the exchange or transfer of currency; inability or increasing difficulties to repatriate income or capital or to make contract payments; inflation; devaluation; or other events, including wars and other international conflicts, natural disasters and public health epidemics (such as COVID-19); civil unrest and local security concerns that threaten the safe operation of its facilities and operations; direct and indirect price controls; tax increases and changes (including retroactive) in the interpretation, application or enforcement of tax laws and other claims or challenges; cancellation of contract rights; and delays or denial of governmental approvals. Both the likelihood of such occurrences and their overall effect upon Ternium 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 Ternium's subsidiaries located in the affected country and, depending on their materiality, on the results of operations and financial condition of Ternium as a whole.

Mexico

Ternium has significant manufacturing operations and assets located in Mexico and a majority of its sales are made to customers in this country. The majority of Ternium's revenues from its Mexican operations, therefore, are related to market conditions in Mexico and to changes in its economic activity. Ternium's business could be materially and adversely affected by economic, political and regulatory developments in Mexico.

Political, economic and social conditions and government policies in Mexico could negatively impact Ternium's business and results of operations.

In the past, Mexico has experienced several periods of slow or negative economic growth, high inflation, high interest rates, currency devaluation and other economic problems. Furthermore, the Mexican national economy tends to reflect changes in the economic environment in the United States and could be affected by changes in the terms of trade. In addition, actions and policies that could be adopted by the Mexican federal government concerning the economy could have a significant impact on market conditions affecting Ternium's operations in Mexico. If problems such as deterioration in Mexico's economic conditions re-emerge (for example, as a result of lower revenues due to a decline in the price of oil) or there is a future re-emergence of social instability, political unrest, reduction in government spending or other adverse social or political developments, foreign exchange and financial markets may exhibit continued volatility, which, depending on its severity and duration, could adversely affect the business, results of operations, financial condition or liquidity of Ternium. Moreover, adverse economic conditions in Mexico could result in, among other things, higher interest rates coupled with reduced opportunities for refunding or refinancing, reduced domestic consumption of Ternium's products, decreased operating results and delays in the completion of ongoing and future capital expenditures.

Regulatory changes in Mexico could adversely impact Ternium's results of operations and net results.

In the past, Mexico went through various economic and labor reforms. In December 2012, new labor regulations introduced a reassessment of the status of third-party workers, changes in rest periods, and an increase in the amounts of fines and penalties for violations of such regulations. In addition, in 2014 a comprehensive tax reform became effective in Mexico, which, among other things, maintained the corporate income tax at 30% (eliminating a scheduled reduction to 28%); introduced a 10% withholding tax on dividend distributions; and created a new royalty over mining activities, which in the case of Ternium's iron ore mining subsidiaries resulted in a 7.5% royalty on mining profits calculated on a special tax basis. These measures resulted in a deferred tax loss of USD22.3 million in Ternium's 2013 results. Any additional new changes to Mexican regulations could adversely impact Ternium's results of operations and net results.

Violence and crime in Mexico could negatively impact Ternium's business and operations.

In recent years, there have been high incidences of violence and crime related to drug trafficking in Mexico, including the Monterrey area in Nuevo León, where Ternium's main facilities are located, and Michoacán, where some of Ternium's mining facilities are placed. 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. Security issues could affect Ternium's day-to-day operations and could also result in an economic slowdown, reducing domestic demand for its products and thereby having an adverse effect on Ternium's business. A deterioration of the security situation could result in significant obstacles or additional costs to the implementation of growth plans in Mexico, including delays in the completion of capital expenditures.

Unexpected changes in trade rules with the United States could adversely impact Ternium's results of operations and net results.

Mexico the United States and Canada recently ratified the United States-Mexico-Canada Agreement, or USMCA, a new trade agreement that will become effective and replace the current NAFTA once uniformed regulations and local legislation is passed. In addition, during 2019 Mexico and the United States agreed to waive a 25% tariff on steel products exported to the United States, which had been imposed during 2018, subject to an agreed premise of continuous monitoring for surges in steel imports and transshipment of non-NAFTA material into the United States. Furthermore, in 2019 the United States, Mexico and Canada agreed to modify the definition of "North American steel" (with such amendment becoming effective after the seventh anniversary of USMCA), for purposes of vehicles being awarded preferential treatment under USMCA, restricting the defined term to steel melted and poured within the three countries. Uncertainties about the possibility of new trade conflicts in the future have adversely affected the investment climate and economic activity in Mexico and may continue to worsen in the future. Moreover, amendments to, or the termination of current terms of trade could adversely and materially affect Ternium's shipments, results of operations and net worth.

Brazil

Ternium has significant manufacturing operations and assets located in Rio de Janeiro, Brazil, and some of its sales are made in Brazil. Ternium Brasil's profitability could be materially and adversely affected by economic, political, social, fiscal and regulatory developments in Brazil.

Changing economic policies and political conditions in Brazil, which on several occasions in the past resulted in economic uncertainties and recession, may occur in the future, thereby adversely affecting Ternium's business, financial condition and results.

The Brazilian economy has been characterized by frequent and occasionally extensive intervention by the Brazilian government. The Brazilian government has often changed monetary, taxation, credit, tariff and other policies to influence the course of the country's economy. The Brazilian government's actions to control inflation and implement other policies have involved hikes in interest rates, wage and price controls, foreign exchange controls and devaluation, freezing of bank accounts, capital controls and restrictions on imports. If repeated in the future, such governmental policies may adversely affect Ternium's results of operations. The Brazilian government's policies may also result in increases in tax payments or tariffs, which could adversely affect industry profitability. For example, the Brazilian congress is currently discussing major changes to the Brazilian tax regime, which, among other things, would replace current federal, state and municipal taxes levied on the trade of good and services with a single national value added tax. Ternium cannot predict whether, if approved, the new tax regime would result in a net tax burden increase for its operations. Any increase in the applicable tax burden or tariffs may make it more difficult for Ternium to maintain its projected cash flow and profitability. The Brazilian economy has been affected by inflation, energy shortages, illiquid lending markets and other political, diplomatic, social and economic developments. Uncertainty over whether the Brazilian government will change policies or regulations affecting these or other factors may contribute to economic instability in Brazil. Ternium's business and results of operations in Brazil could be adversely affected by rapidly changing economic conditions in Brazil or by the Brazilian government's policy response to such conditions.

Political instability could adversely affect Ternium's business, financial condition and results.

Brazil's political environment has historically influenced, and continues to influence, the performance of the country's economy. Political crises have affected and continue to affect public and investor confidence, which resulted in economic deceleration. Brazil has experienced heightened economic and political instability derived from various investigations into allegations of money laundering and corruption being conducted by the Office of the Brazilian Federal Prosecutor, including the Lava Jato investigation, which has had a negative impact on the Brazilian economy and political environment and contributed to a decline in market confidence in Brazil. Ternium cannot predict whether new allegations against government officials or businessmen will arise in the future leading to further political and economic instability. In addition, it cannot predict the outcome of such investigations nor their effect on the Brazilian economy and, consequently, on the results of operations and financial conditions of Ternium's businesses in Brazil.

Inflation may undermine economic growth in Brazil and impact Ternium's costs, thereby adversely affecting its results of operations and financial position.

High levels of inflation have in the past undermined the Brazilian economy and the government's ability to stimulate economic growth. Although consumer price inflation in Brazil has been under control in recent years, if inflation were to increase again in the future, Ternium's results of operations and financial position could be negatively impacted, as BRL-denominated costs (mainly labor-related costs) at Ternium Brasil increase, thereby affecting Ternium's cost-competitiveness. Inflationary pressures may also lead to the imposition of additional government policies to combat inflation and hinder access to Brazilian capital markets, which could adversely affect Ternium's business and ability to finance operations and capital expenditures, making it impossible to estimate with reasonable certainty future results of operations of Ternium Brasil.

Argentina

A significant portion of Ternium's sales are made in Argentina through its subsidiary, Ternium Argentina. Most of Ternium Argentina's sales revenue is affected by market conditions in Argentina and changes in Argentina's gross domestic product, or GDP, and per capita disposable income. Accordingly, Ternium Argentina's business could be materially and adversely affected by economic, political, social, fiscal and regulatory developments in Argentina.

Economic and political instability in Argentina, which on several occasions resulted in economic uncertainties and recession, may adversely affect Ternium's business, financial condition and results.

Ternium's business and results of operations in Argentina depend on macroeconomic conditions, among other factors. Steel shipments to the Argentine domestic market were severely affected in different opportunities over the last decade. This happened with the 2008-2009 downturn in the global economy, in 2016 when the country faced a significant rebalancing of the economy's relative prices, and in 2018-2019 as the economy was affected by a severe downturn resulting from financial market volatility, high interest rates and heightened political uncertainty during the presidential election process.

Over the past years, the Argentine economy has been affected and capital investment has declined significantly due to, among other factors, political, economic and financial uncertainties as well as government intervention in, or limitations to, the conduct of business in the private sector and other government measures affecting investor confidence.

The Argentine economy is currently facing significant challenges, including high and unpredictable inflation rates and declining capital investment. Inflation and declining capital investment may continue to affect growth and, accordingly, cause demand for the Company's local subsidiary's products in the domestic market to remain at low levels or continue to drop.

In addition, Argentina is currently undergoing a sovereign debt restructuring process with the International Monetary Fund, or IMF, and private bondholders whose outcome is uncertain. Moreover, Argentine credit rating has been downgraded to near-default by Fitch Ratings and S&P Global Ratings in late December 2019. Debt holders may elect not to participate in Argentina's restructuring efforts and sue Argentina for payment upon default. In the past, litigation over defaulted sovereign debt has taken a long time to settle and has adversely affected the country's (as well as local corporations, such as Ternium Argentina) ability to attract capital and access the international capital markets. Failure to achieve a successful debt restructuring could further adversely affect the country's economy.

Ternium's business and results of operations in Argentina could be adversely affected by rapidly changing economic conditions in Argentina or by the Argentine government's policy response to such conditions.

Inflation may undermine economic growth in Argentina and impact Ternium's costs, thereby adversely affecting its results of operations and financial position.

In the past, inflation has undermined the Argentine economy and the government's ability to stimulate economic growth. Consumer price inflation in Argentina, as reported by INDEC, the Argentine statistics and census bureau, reached 53.8% in 2019, 47.6% in 2018 and 24.8% in 2017. Sustained high inflation in Argentina negatively impacts Ternium's results of operations and financial position, as ARS-denominated costs (mainly labor-related costs) at Ternium Argentina increase, thereby affecting cost-competitiveness and margins. A high inflation economy could undermine Argentina's foreign competitiveness in international markets and negatively affect economic activity and employment levels. Argentine inflation rate volatility makes it impossible to estimate with reasonable certainty the extent to which activity levels and results of operations of Ternium Argentina could be affected in the future.

The Argentine government has increased taxes on Argentine companies and could further increase the fiscal burden in the future, which could adversely affect Ternium's results of operations, net results and financial condition.

Between 1992 and 2017, Argentine companies were not allowed to make inflation adjustments on the value of fixed assets and inventories for tax purposes. Since 2018 the application of an inflation adjustment on the value of inventories is permitted as long as the consumer inflation rate surpasses certain threshold (15% for the year 2020). As a result of the significant devaluation of the Argentine peso against the U.S. dollar and high inflation rates over the last decade, the real value that Ternium Argentina was permitted to deduct as depreciation for investments in plant, property and equipment and as cost of sales, has materially decreased, thus creating artificial gains for tax purposes which resulted in effective tax rates that are higher than statutory tax rates. In addition, provincial taxes on Ternium Argentina's sales have increased over the last years. During September 2018, the Argentine government suspended tax rebates and imposed a new general tax on exports of goods. Although the current tax rate is 5%, the relevant export tax may not exceed, in the case of Ternium Argentina, ARS3 (approximately USD0.05) per each U.S. dollar worth of exports. In 2017, Congress passed a new tax law that gradually decreased the tax burden on Argentine corporations over a five-year period. However, such law was suspended at the end of 2019, and as a result the personal asset tax payable by shareholders of domestic companies for the year 2019 was increased

from 0.25% to 0.50%. If the tax burden on Ternium Argentina's operations or its shareholders is increased again in the future, Ternium's results of operations, net results and financial condition could be adversely affected.

Argentine exchange controls could prevent Ternium from paying dividends or other amounts from cash generated by Ternium Argentina's operations.

In the past, the Argentine authorities took several measures to reduce volatility in the ARS/USD exchange rate, and implemented formal and informal restrictions on capital inflows into Argentina and capital outflows from Argentina. Certain foreign exchange restrictions that had been lifted in 2016 were reinstated during the fourth quarter of 2019. The Argentine government tightened controls on the flows of capital by requiring Argentine companies to repatriate export proceeds from sale of goods and services, limiting the purchase of foreign currency for saving purposes, and restricting or conditioning the ability of Argentine companies to transfer funds outside of Argentina (including for the purchase of goods or services, payment of principal and interest on foreign debt, and payment of dividends or royalties). In addition, a 30% rate tax was imposed on purchases of foreign currency. As a result, Ternium Argentina is currently required to repatriate to Argentina all export proceeds (including U.S. dollars received through advance payment and pre-financing facilities) and convert such proceeds into Argentine pesos at the applicable exchange rate as of the repatriation date. With limited exceptions, prior approval from the Argentine central bank is required to purchase foreign currency to pay dividends to foreign shareholders and to make other payments to affiliates or third parties abroad. There can be no assurance that the Argentine central bank or other Argentine authority will not tighten exchange controls or impose new currency restrictions in the future. The existing controls and restrictions, and any others that may be imposed in the future, could expose Ternium to losses resulting from fluctuations in the exchange rate, affect Ternium's ability to finance its investments and operations in Argentina and impair Ternium Argentina's ability to make payments to foreign creditors, pay dividends abroad, or fund investments or other activities offshore. Restrictions on the import of key steelmaking inputs for Ternium Argentina's operations could adversely affect its production and revenues and negatively impact Ternium's results of operations.

Some of Ternium Argentina's key steelmaking inputs, including iron ore and metallurgical coal, are imported into Argentina. In the past, government administrations implemented significant import restrictions; for instance, all payments on imports of goods and services were required to be approved by the Argentine federal tax authority and other authorities, such as the Secretary of Commerce. Although most restrictions were lifted some years ago, such import restrictions, if reinstated, could delay imports and adversely affect Ternium's business, operations and growth projects in Argentina. In addition, they could affect Ternium Argentina's exports from Argentina, considering that foreign countries could adopt and implement counter-trade measures.

Restrictions on supply or an increase in the cost of energy to Ternium Argentina's operations could curtail its production and negatively impact Ternium's results of operations.

In the past, Argentina has suffered from an insufficient level of investment in natural gas and electricity supply and transport capacity, coupled with a substantial increase in demand for natural gas and electricity. This, in turn, resulted in shortages of natural gas and electricity to residential users and, in particular, to industrial users, including Ternium Argentina, during periods of high demand. Ternium Argentina's operations experienced constraints in their natural gas supply requirements and interruptions in their electricity supply at peak hours on many occasions. If demand for natural gas and electricity increases and a matching increase in natural gas and electricity supply and transport capacity fails to materialize on a timely basis, Ternium Argentina's local production (or that of its main customers and suppliers) could be curtailed, and Ternium Argentina's sales and revenues could decline. In addition, the government's subsidies for natural gas and electricity have been gradually reduced and could be reduced further in the future. This could result in an increase in Ternium Argentina's energy costs, which may adversely affect Ternium Argentina's results of operations. For further information, see "—Risks Relating to the Steel Industry —Price fluctuations or shortages in the supply of raw materials, energy and other inputs could adversely affect Ternium's profitability" above.

Certain Regulatory Risks And Litigation Risks

International trade actions or regulations and trade-related legal proceedings could adversely affect Ternium's sales, revenues and overall business.

International trade-related administrative proceedings, legal actions and restrictions pose a constant risk for Ternium's international operations and sales throughout the world. Ternium purchases steel products, including significant quantities of

steel slabs, from diverse local and foreign suppliers for its operations in Mexico, Colombia and Argentina. The Mexican, Argentine or Colombian governments may impose or increase duties on steel products imports. Trade liberalization, mainly through free trade agreements, can reduce certain input costs and increase access to many foreign markets. However, greater trade liberalization in Ternium's domestic markets increases competition in such markets. In recent years, as a consequence of a global downturn and an economic slowdown in China, the number of antidumping, countervailing, safeguard measures and other actions limiting trade has increased substantially. Accordingly, producers that are restricted from certain markets need to find alternative markets for their products. As a result, Ternium's domestic market share could be eroded by foreign imports, and increased exports to foreign markets where import barriers have been reduced may not completely offset domestic market share losses resulting from increased foreign competition.

Countries may impose restrictive import duties and other restrictions on imports under various national trade laws. The timing and nature of the imposition of trade-related restrictions potentially affecting Ternium's exports are unpredictable. Trade restrictions on Ternium's exports could adversely affect Ternium's ability to sell products abroad and, as a result, Ternium's profit margins, financial condition and overall business could suffer. One significant source of trade restrictions results from the imposition of "antidumping" and "countervailing" duties, as well as "safeguard measures". These duties can severely limit or altogether prevent exports to relevant markets. In several of Ternium's export destinations, such as the United States or Europe, safeguard duties and other protective measures have been imposed against a large number of steel imports. For example, during 2018, the United States imposed a 25% tariff on steel imports under Section 232 of the Trade Expansion Act of 1962. Although Australia was excluded from such Section 232 tariffs; Argentina, Brazil and South Korea were also excluded subject to quota system agreements covering steel imports from those countries and Canada and Mexico were exempted in 2019 subject to an agreed premise of continuous monitoring for surges in steel imports and transshipment of non-NAFTA material into the United States. Furthermore, in 2019 the United States, Mexico and Canada agreed to modify the definition of "North American steel" (with such amendment becoming effective after the seventh anniversary of USMCA), for purposes of vehicles being awarded preferential treatment under USMCA, restricting the defined term to steel melted and poured within the three countries.

In addition, certain domestic producers have filed antidumping and/or countervailing duty actions against particular steel imports. Some of these actions have led or may lead to restrictions on Ternium's sales of certain types of steel products to certain steel markets. Antidumping and/or countervailing duty actions and other government actions are largely unpredictable and additional duties or restrictions could be imposed in the future, limiting Ternium's sales to and potential growth in those markets.

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

Ternium's steelmaking and mining activities 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 due to the risks inherent in the industries in which Ternium operates. Laws and regulations protecting the environment have become increasingly complex and more stringent in recent years, leading to higher costs of compliance.

Furthermore, environmental laws and regulations may, in some cases, impose strict liability 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. Such laws and regulations may expose Ternium to liability for the conduct of, or conditions caused by, third parties or for actions that complied with applicable laws at the time they were performed.

Based on the Paris Agreement on climate change and the commitments adopted by signatories to the Agreement, future national legislation and regulations on greenhouse gas emissions, including carbon taxes and border adjustments, could become applicable to the steel industry and therefore to Ternium's operations. The ultimate impact of complying with environmental laws and regulations is not always clearly known or determinable as some of these laws have not yet been regulated or are under review. The expenditures required to comply 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 Ternium's financial condition and profitability.

While Ternium incurs 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 Ternium's reputation or operations. Some of the activities for which Ternium supplies products, such as production of food cans, construction and the automotive industry, are subject to inherent risks that could result in death, personal injury, property damage or environmental pollution, and result in product liability risks that could extend to liability for damages caused by such products. Furthermore, Ternium's products are also sold to, and used in, certain safety-critical appliances. Actual or claimed defects in Ternium's products may give rise to claims for losses suffered by customers and expose Ternium to claims for damages. Liability insurance may not be adequate or available to protect Ternium in the event of a claim, coverage may be limited, canceled or otherwise terminated, or the coverage amount may be lower than the related impact on enterprise value after a loss.

Risks Relating To the Company's ADSs

The market price for the Company's ADSs could be highly volatile.

Volatility in the price of the Company's ADSs may be caused by factors within or outside of the Company's control and may be unrelated or disproportionate to the Company's operating results. In particular, announcements of potentially adverse developments, such as proposed regulatory changes, new government investigations or the commencement or threat of litigation against Ternium, as well as announcements of transactions, investments, or changes in strategies or business plans of Ternium or its competitors, could adversely affect the trading price of the Company's ADSs, regardless of the likely outcome of those developments. Broad market and industry factors could adversely affect the market price of the Company's ADSs, regardless of their actual effect in operating performance. As an example of this volatility, from a high closing price of USD32.24 on January 15, 2014, the price of the Company's ADSs fell to a low closing price of USD10.56 on January 15, 2016. In the 2016-2017 period, the price of the Company's ADSs recovered and reached a high closing price of USD42.19 on April 26, 2018, but then fell to a low closing price of USD16.24 on August 26, 2019. Although the market price of the Company's ADSs recovered some ground until January 2020, the coronavirus outbreak has sent stock market prices sharply down, including the Company's ADSs. The trading price of the Company's ADSs could also suffer as a result of developments in emerging markets. Although the Company is organized as a Luxembourg corporation, almost all of its assets and operations are located in Latin America. Financial and securities markets for companies with a substantial portion of their assets and operations in Latin America are, to varying degrees, influenced by political, economic and market conditions in emerging market countries. Although market conditions are different in each country, investor reaction to developments in one country can have significant effects on the securities of issuers with assets or operations in other emerging markets, including Mexico, Brazil, Argentina and Colombia. See "Risks Relating to the Countries in Which Ternium Operates."

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

There may be less publicly available information about the Company 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 the Company prepares its consolidated financial statements, differ in certain material aspects from the accounting standards used in the United States.

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 right 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 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. The Bank of New York Mellon, or BNY Mellon, as depositary under the ADS deposit agreement, 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 the Company makes a distribution in the form of securities, the depositary is allowed, at its discretion, to sell the right to acquire those securities on your behalf and to instead distribute the net proceeds to you. Also, under certain circumstances, such as the Company's failure to provide the Depositary with voting materials on a timely basis, you may not be able to vote by giving

instructions to the Depositary. If the depositary does not receive voting instructions from the holder of ADSs or the instructions are not in proper form, then the depositary shall deem such holder of ADSs to have instructed the depositary to vote the underlying shares represented by ADSs in favour 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 (x) it does not wish such proxy given, (y) substantial opposition exists, or (z) the matter materially and adversely affects the rights of the holders of ADSs.

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

Pursuant to the Luxembourg Company 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. Although the validity period of such authorization will expire on June 5, 2020, the board of directors has convened an extraordinary meeting of shareholders to be held on April 27, 2020, which will consider the renewal of such authorization for an additional five-year period. Notwithstanding the waiver of any preemptive subscription rights, for as long as the shares of the Company are listed on a regulated market, any issuance of shares for cash within the limits of the authorized share capital shall be subject to the pre-emptive subscription rights of existing shareholders, except (i) any issuance of shares for, within, in conjunction with or related to, an initial public offering of the shares of the Company on one or more regulated markets (in one or more instances); (ii) any issuance of shares against a contribution other than in cash; (iii) any issuance of shares upon conversion of convertible bonds or other instruments convertible into shares of the Company; provided, however, that the preemptive subscription rights of the then-existing shareholders shall apply in connection with any issuance of convertible bonds or other instruments convertible into shares of the Company for cash; and (iv) 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 or, 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).

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, or the Securities Act, with respect to those rights or an exemption from registration requirements of the Securities Act is available. The Company intends 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 it considers appropriate at the time, and then to make a decision as to whether to register additional shares. The Company 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 obtain or enforce judgments against the Company outside Luxembourg.

The Company is a public limited liability company (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 consolidated management report reside in different jurisdictions. As a result, investors may not be able to effect service of process upon the Company or its directors or officers. Investors may also not be able to enforce against the Company or its 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 or its 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.

Intentionally left blank.



TERNIUM S.A.
Consolidated Financial Statements
as of December 31, 2019 and 2018
for the years ended on December 31, 2019, 2018 and 2017

26 Boulevard Royal, 4th floor
L – 2449
R.C.S. Luxembourg: B 98 668

INDEX TO THE CONSOLIDATED FINANCIAL STATEMENTS

	Page
Report of Independent Registered Public Accounting Firm	35
Consolidated Income Statements for the years ended December 31, 2019, 2018 and 2017	39
Consolidated Statements of Comprehensive Income for the years ended December 31, 2019, 2018 and 2017	40
Consolidated Statements of Financial Position as of December 31, 2019 and 2018	41
Consolidated Statements of Changes in Equity for the years ended December 31, 2019, 2018 and 2017	42
Consolidated Statements of Cash Flow for the years ended December 31, 2019, 2018 and 2017	45
Index to the Notes to the Consolidated Financial Statements	46



Audit report

To the Shareholders of
Ternium S.A.

Report on the audit of the consolidated financial statements

Our opinion

In our opinion, the accompanying consolidated financial statements give a true and fair view of the consolidated financial position of Ternium S.A. (the “Company”) and its subsidiaries (the “Group”) as at 31 December 2019, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union.

What we have audited

The Group’s consolidated financial statements comprise:

- the consolidated statement of financial position as at 31 December 2019;
- the consolidated income statement for the year then ended;
- the consolidated statement of comprehensive income for the year then ended;
- the consolidated statement of changes in equity for the year then ended;
- the consolidated statement of cash flows for the year then ended; and
- the notes to the consolidated financial statements, which include a summary of significant accounting policies.

Basis for opinion

We conducted our audit in accordance with the Law of 23 July 2016 on the audit profession (Law of 23 July 2016) and with International Standards on Auditing (ISAs) as adopted for Luxembourg by the “Commission de Surveillance du Secteur Financier” (CSSF). Our responsibilities under the Law of 23 July 2016 and ISAs as adopted for Luxembourg by the CSSF are further described in the “Responsibilities of the “Réviseur d’entreprises agréé” for the audit of the consolidated financial statements” section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

We are independent of the Group in accordance with the International Ethics Standards Board for Accountants’ Code of Ethics for Professional Accountants (IESBA Code) as adopted for Luxembourg by the CSSF together with the ethical requirements that are relevant to our audit of the consolidated financial statements. We have fulfilled our other ethical responsibilities under those ethical requirements.

Other information

The Board of Directors is responsible for the other information. The other information comprises the information stated in the Consolidated Management Report including the management's report but does not include the consolidated financial statements and our audit report thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Board of Directors and those charged with governance for the consolidated financial statements

The Board of Directors is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRSs as adopted by the European Union, and for such internal control as the Board of Directors determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Board of Directors is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Responsibilities of the "Réviseur d'entreprises agréé" for the audit of the consolidated financial statements

The objectives of our audit are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an audit report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Law of 23 July 2016 and with ISAs as adopted for Luxembourg by the CSSF will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.



As part of an audit in accordance with the Law of 23 July 2016 and with ISAs as adopted for Luxembourg by the CSSF, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control;
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Board of Directors;
- conclude on the appropriateness of the Board of Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our audit report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our audit report. However, future events or conditions may cause the Group to cease to continue as a going concern;
- evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation;
- obtain sufficient appropriate audit evidence regarding the financial information of the entities and business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and communicate to them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.



Report on other legal and regulatory requirements

The management's report is consistent with the consolidated financial statements and has been prepared in accordance with applicable legal requirements.

PricewaterhouseCoopers, Société coopérative
Represented by

Luxembourg, 20 March 2020

A handwritten signature in black ink, appearing to be 'M. Minet', written over a light blue grid background.

Marc Minet

TERNIUM S.A.

Consolidated Financial Statements as of December 31, 2019 and 2018
and for the years ended December 31, 2019, 2018 and 2017
(All amounts in USD thousands)

Consolidated Income Statements

		Year ended December 31,		
	Notes	2019	2018	2017
Net sales	5	10,192,818	11,454,807	9,700,296
Cost of sales	6	<u>(8,452,440)</u>	<u>(8,483,328)</u>	<u>(7,403,025)</u>
Gross profit		1,740,378	2,971,479	2,297,271
Selling, general and administrative expenses	7	(897,475)	(876,764)	(824,247)
Other operating income (expenses), net	9	<u>21,663</u>	<u>13,656</u>	<u>(16,240)</u>
Operating income		864,566	2,108,371	1,456,784
Finance expense	10	(88,284)	(131,172)	(114,583)
Finance income	10	29,071	21,236	19,408
Other financial income (expenses), net	10	<u>(39,756)</u>	<u>(69,640)</u>	<u>(69,915)</u>
Equity in earnings (losses) of non-consolidated companies	14	<u>60,967</u>	<u>102,772</u>	<u>68,115</u>
Profit before income tax expense		826,564	2,031,567	1,359,809
Income tax expense	11	<u>(196,519)</u>	<u>(369,435)</u>	<u>(336,882)</u>
Profit for the year		630,045	1,662,132	1,022,927
Attributable to:				
Owners of the parent		564,269	1,506,647	886,219
Non-controlling interest		<u>65,776</u>	<u>155,485</u>	<u>136,708</u>
Profit for the year		630,045	1,662,132	1,022,927
Weighted average number of shares outstanding		1,963,076,776	1,963,076,776	1,963,076,776
Basic and diluted (losses) earnings per share for profit attributable to the owners of the parent (expressed in USD per share)		0.29	0.77	0.45

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

TERNIUM S.A.

Consolidated Financial Statements as of December 31, 2019 and 2018
and for the years ended December 31, 2019, 2018 and 2017
(All amounts in USD thousands)

Consolidated Statements of Comprehensive Income

	Year ended December 31,		
	2019	2018	2017
Profit for the year	630,045	1,662,132	1,022,927
Items that may be reclassified subsequently to profit or loss:			
Currency translation adjustment	(41,455)	(376,220)	(95,462)
Currency translation adjustment from participation in non-consolidated companies	(20,470)	(73,761)	(8,931)
Changes in the fair value of financial instruments at fair value through other comprehensive income	(877)	(1,036)	—
Income tax related to financial instruments at fair value	—	122	—
Changes in the fair value of derivatives classified as cash flow hedges	(750)	(132)	735
Income tax relating to cash flow hedges	225	(73)	(107)
Other comprehensive income items	669	(897)	(96)
Other comprehensive income items from participation in non-consolidated companies	6	499	191
Items that will not be reclassified subsequently to profit or loss:			
Remeasurement of post employment benefit obligations	(67,601)	(38,263)	(15,068)
Income tax relating to remeasurement of post employment benefit obligations	19,312	9,259	4,916
Remeasurement of post employment benefit obligations from participation in non-consolidated companies	(18,918)	(3,780)	3,954
Other comprehensive loss for the year, net of tax	(129,859)	(484,282)	(109,868)
Total comprehensive income for the year	500,186	1,177,850	913,059
Attributable to:			
Owners of the parent	445,473	1,176,964	815,434
Non-controlling interest	54,713	886	97,625
Total comprehensive income for the year	500,186	1,177,850	913,059

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

TERNIUM S.A.

Consolidated Financial Statements as of December 31, 2019 and 2018
and for the years ended December 31, 2019, 2018 and 2017
(All amounts in USD thousands)

Consolidated Statements of Financial Position

		Balances as of		
	Notes	December 31, 2019	December 31, 2018	
ASSETS				
Non-current assets				
Property, plant and equipment, net	12	6,539,581	5,817,609	
Intangible assets, net	13	943,838	1,012,524	
Investments in non-consolidated companies	14	513,648	495,241	
Other investments	18	3,253	7,195	
Derivative financial instruments	22	—	818	
Deferred tax assets	20	163,538	134,224	
Receivables, net	15	592,565	649,447	
Trade receivables, net	16	897	8,757,320	4,766
				8,121,824
Current assets				
Receivables, net	15	334,713	309,750	
Derivative financial instruments	22	1,196	770	
Inventories, net	17	2,158,298	2,689,829	
Trade receivables, net	16	949,672	1,128,470	
Other investments	18	212,271	44,529	
Cash and cash equivalents	18	519,965	4,176,115	250,541
Non-current assets classified as held for sale			2,098	2,149
			4,178,213	4,426,038
Total Assets			12,935,533	12,547,862
EQUITY				
Capital and reserves attributable to the owners of the parent			6,611,665	6,393,255
Non-controlling interest			1,103,208	1,091,321
Total Equity			7,714,873	7,484,576
LIABILITIES				
Non-current liabilities				
Provisions	19	613,352	643,950	
Deferred tax liabilities	20	403,278	474,431	
Other liabilities	21	507,603	414,541	
Trade payables		1,174	935	
Derivative financial instruments	22	17	—	
Lease liabilities	23	298,219	65,798	
Borrowings	24	1,628,892	3,452,535	1,637,101
				3,236,756
Current liabilities				
Current income tax liabilities		47,053	150,276	
Other liabilities	21	240,934	351,216	
Trade payables		876,803	904,171	
Derivative financial instruments	22	3,007	12,981	
Lease liabilities	23	40,546	8,030	
Borrowings	24	559,782	1,768,125	399,856
				1,826,530
Total Liabilities			5,220,660	5,063,286
Total Equity and Liabilities			12,935,533	12,547,862

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

TERNIUM S.A.

Consolidated Financial Statements as of December 31, 2019 and 2018
and for the years ended December 31, 2019, 2018 and 2017
(All amounts in USD thousands)

Consolidated Statements of Changes in Equity

	Attributable to the owners of the parent (1)								Non-controlling interest	Total Equity
	Capital stock (2)	Treasury shares (2)	Initial public offering expenses	Reserves (3)	Capital stock issue discount (4)	Currency translation adjustment	Retained earnings	Total		
Balanace at January 1, 2019	2,004,743	(150,000)	(23,295)	1,385,701	(2,324,866)	(2,702,477)	8,203,449	6,393,255	1,091,321	7,484,576
Profit for the year							564,269	564,269	65,776	630,045
Other comprehensive income (loss) for the period										
Currency translation adjustment						(57,569)		(57,569)	(4,356)	(61,925)
Remeasurement of post employment benefit obligations				(60,730)				(60,730)	(6,477)	(67,207)
Cash flow hedges and others, net of tax				(268)				(268)	(257)	(525)
Others				(229)				(229)	27	(202)
Total comprehensive income (loss) for the year	—	—	—	(61,227)	—	(57,569)	564,269	445,473	54,713	500,186
Dividends paid in cash (5)							(235,569)	(235,569)	—	(235,569)
Dividends paid in cash to non-controlling interest (6)								—	(28,530)	(28,530)
Acquisition of non-controlling interest (7)				8,506				8,506	(14,296)	(5,790)
Balance at December 31, 2019	2,004,743	(150,000)	(23,295)	1,332,980	(2,324,866)	(2,760,046)	8,532,149	6,611,665	1,103,208	7,714,873

(1) Shareholders' equity determined in accordance with accounting principles generally accepted in Luxembourg is disclosed in Note 25 (iii).

(2) The Company has an authorized share capital of a single class of 3.5 billion shares having a nominal value of USD 1.00 per share. As of December 31, 2019, there were 2,004,743,442 shares issued. All issued shares are fully paid. Also, as of December 31, 2019, the Company held 41,666,666 shares as treasury shares.

(3) Include mainly legal reserve under Luxembourg law for USD 200.5 million, undistributable reserves under Luxembourg law for USD 1.4 billion, hedge accounting reserve, net of tax effect, for negative USD 0.1 million and reserves related to the acquisition of non-controlling interest in subsidiaries for negative USD 80.0 million.

(4) Represents the difference between book value of non-monetary contributions received from shareholders under Luxembourg GAAP and IFRS.

(5) Represents USD 0.12 per share (USD 1.20 per ADS). Related to the dividends distributed on May 6, 2019, and as 41,666,666 shares are held as treasury shares by Ternium, the dividends attributable to these treasury shares amounting to USD 5.0 million were included in equity as less dividend paid.

(6) Corresponds to the dividends paid by Ternium Argentina S.A.

(7) Corresponds to the acquisition of non-controlling interest participation of Ternium Argentina S.A.

Dividends may be paid by Ternium to the extent distributable retained earnings calculated in accordance with Luxembourg law and regulations exist. Therefore, retained earnings included in these consolidated financial statements may not be wholly distributable. See Note 25 (iii). The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statements of Changes in Equity

	Attributable to the owners of the parent (1)									
	Capital stock (2)	Treasury shares (2)	Initial public offering expenses	Reserves (3)	Capital stock issue discount (4)	Currency translation adjustment	Retained earnings	Total	Non-controlling interest	Total Equity
Balance as of January 1, 2018	2,004,743	(150,000)	(23,295)	1,416,121	(2,324,866)	(2,403,664)	6,491,385	5,010,424	842,347	5,852,771
Impact of adopting IFRS 9 at January 1, 2018				450			(147)	303	204	507
Impact of adopting IAS 29 at January 1, 2018 (see note 4 (cc))							421,502	421,502	268,824	690,326
Adjusted Balance at January 1, 2018	2,004,743	(150,000)	(23,295)	1,416,571	(2,324,866)	(2,403,664)	6,912,740	5,432,229	1,111,375	6,543,604
Profit for the year							1,506,647	1,506,647	155,485	1,662,132
Other comprehensive income (loss) for the period										
Currency translation adjustment						(298,813)		(298,813)	(151,168)	(449,981)
Remeasurement of post employment benefit obligations				(29,418)				(29,418)	(3,366)	(32,784)
Cash flow hedges and others, net of tax				(288)				(288)	83	(205)
Others				(1,164)				(1,164)	(148)	(1,312)
Total comprehensive income (loss) for the year	—	—	—	(30,870)	—	(298,813)	1,506,647	1,176,964	886	1,177,850
Dividends paid in cash (5)							(215,938)	(215,938)	—	(215,938)
Dividends paid in cash to non-controlling interest (6)								—	(20,940)	(20,940)
Balance at December 31, 2018	2,004,743	(150,000)	(23,295)	1,385,701	(2,324,866)	(2,702,477)	8,203,449	6,393,255	1,091,321	7,484,576

(1) Shareholders' equity is determined in accordance with accounting principles generally accepted in Luxembourg.

(2) The Company has an authorized share capital of a single class of 3.5 billion shares having a nominal value of USD 1.00 per share. As of December 31, 2018, there were 2,004,743,442 shares issued. All issued shares are fully paid. Also, as of December 31, 2018, the Company held 41,666,666 shares as treasury shares.

(3) Include mainly legal reserve under Luxembourg law for USD 200.5 million, undistributable reserves under Luxembourg law for USD 1.4 billion, hedge accounting reserve, net of tax effect, for USD 0.5 million and reserves related to the acquisition of non-controlling interest in subsidiaries for negative USD 88.5 million.

(4) Represents the difference between book value of non-monetary contributions received from shareholders under Luxembourg GAAP and IFRS.

(5) Represents USD 0.11 per share (USD 1.10 per ADS). Related to the dividends distributed on May 2, 2018, and as 41,666,666 shares are held as treasury shares by Ternium, the dividends attributable to these treasury shares amounting to USD 4.6 million were included in equity as less dividend paid.

(6) Corresponds to the dividends paid by Ternium Argentina S.A.

Dividends may be paid by Ternium to the extent distributable retained earnings calculated in accordance with Luxembourg law and regulations exist. Therefore, retained earnings included in these consolidated financial statements may not be wholly distributable. See Note 25 (iii). The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statements of Changes in Equity

	Attributable to the owners of the parent (1)								Non-controlling interest	Total Equity
	Capital stock (2)	Treasury shares (2)	Initial public offering expenses	Reserves (3)	Capital stock issue discount (4)	Currency translation adjustment	Retained earnings	Total		
Balance as of January 1, 2017	2,004,743	(150,000)	(23,295)	1,420,171	(2,324,866)	(2,336,929)	5,801,474	4,391,298	775,295	5,166,593
Profit for the year							886,219	886,219	136,708	1,022,927
Other comprehensive income (loss) for the period										
Currency translation adjustment						(66,735)		(66,735)	(37,658)	(104,393)
Remeasurement of post employment benefit obligations				(4,642)				(4,642)	(1,556)	(6,198)
Cash flow hedges and others, net of tax				504				504	124	628
Others				88				88	7	95
Total comprehensive loss for the year	—	—	—	(4,050)	—	(66,735)	886,219	815,434	97,625	913,059
Dividends paid in cash (5)							(196,308)	(196,308)	—	(196,308)
Dividends paid in cash to non-controlling interest (6)								—	(30,573)	(30,573)
Balance at Balance as of December 31, 2017	2,004,743	(150,000)	(23,295)	1,416,121	(2,324,866)	(2,403,664)	6,491,385	5,010,424	842,347	5,852,771

(1) Shareholders' equity is determined in accordance with accounting principles generally accepted in Luxembourg.

(2) The Company has an authorized share capital of a single class of 3.5 billion shares having a nominal value of USD1.00per share. As of December 31, 2017, there were 2,004,743,442 shares issued. All issued shares are fully paid. Also, as of December 31, 2017, the Company held 41,666,666 shares as treasury shares.

(3) Include mainly legal reserve under Luxembourg law for USD 200.5 million, undistributable reserves under Luxembourg law for USD 1.4 billion, hedge accounting reserve, net of tax effect, for USD 0.6 million and reserves related to the acquisition of non-controlling interest in subsidiaries for USD (88.5) million.

(4) Represents the difference between book value of non-monetary contributions received from shareholders under Luxembourg GAAP and IFRS.

(5) Represents USD 1.10 per share (USD 1.00 per ADS). Related to the dividends distributed on May 3, 2017, and as 41,666,666 shares are held as treasury shares by Ternium, the dividends attributable to these treasury shares amounting to USD 4.2 million were included in equity as less dividend paid.

(6) Corresponds to the dividends paid by Ternium Argentina S.A.

Dividends may be paid by Ternium to the extent distributable retained earnings calculated in accordance with Luxembourg law and regulations exist. Therefore, retained earnings included in these consolidated financial statements may not be wholly distributable. See Note 25 (iii). The accompanying notes are an integral part of these consolidated financial statements.

TERNIUM S.A.

Consolidated Financial Statements as of December 31, 2019 and 2018
and for the years ended December 31, 2019, 2018 and 2017
(All amounts in USD thousands)

Consolidated Statements of Cash Flows

	Notes	Year ended December 31,		
		2019	2018	2017
Cash flows from operating activities				
Profit for the year		630,045	1,662,132	1,022,927
Adjustments for:				
Depreciation and amortization	12 & 13	661,112	589,299	474,299
Income tax accruals less payments	27 (b)	(208,805)	(154,366)	(273,443)
Equity in earnings of non-consolidated companies	14	(60,967)	(102,772)	(68,115)
Interest accruals less payments	27 (b)	3,405	(13,014)	19,484
Changes in provisions	19	(1,544)	(7,659)	2,783
Changes in working capital (1)	27 (b)	572,684	(228,577)	(864,970)
Net foreign exchange results and others		51,689	(5,778)	70,894
Net cash provided by operating activities		1,647,619	1,739,265	383,859
Cash flows from investing activities				
Capital expenditures	12 & 13	(1,052,252)	(520,250)	(409,402)
Recovery/(Loans) to non-consolidated companies	14	24,480	(24,480)	(23,904)
(Increase)/Decrease in other investments	18	(163,800)	86,857	14,986
Proceeds from the sale of property, plant and equipment		788	861	1,124
Dividends received from non-consolidated companies		—	—	65
Acquisition of business				
Purchase consideration	3	—	—	(1,890,989)
Cash acquired	3	—	—	278,162
Acquisition of non-controlling interest		(5,790)	—	—
Net cash used in investing activities		(1,196,574)	(457,012)	(2,029,958)
Cash flows from financing activities				
Dividends paid in cash to company's shareholders		(235,569)	(215,938)	(196,308)
Dividends paid in cash to non-controlling interests		(28,530)	(20,940)	(30,573)
Finance lease payments		(38,569)	(7,565)	(4,157)
Proceeds from borrowings		1,529,766	1,188,731	3,239,121
Repayments of borrowings		(1,377,605)	(2,266,560)	(1,205,827)
Net cash used in financing activities		(150,507)	(1,322,272)	1,802,256
Increase (Decrease) in cash and cash equivalents		300,538	(40,019)	156,157
Movement in cash and cash equivalents				
At January 1,		250,541	337,779	183,463
Effect of exchange rate changes and inflation adjustment	4 (cc)	(31,114)	(47,219)	(1,841)
Increase (Decrease) in cash and cash equivalents		300,538	(40,019)	156,157
Cash and cash equivalents at December 31, (2)		519,965	250,541	337,779
Non-cash transactions:				
Acquisition of PP&E under lease contract agreements		21,963	73,828	—

(1) The working capital is impacted by non-cash movement of USD (6.3) million as of December 31, 2019 (USD (74.5) million and USD (70.0) million as of December 31, 2018 and 2017, respectively) due to the variations in the exchange rates used by subsidiaries with functional currencies different from the US dollar.

(2) It includes restricted cash of USD 69, USD 2,216 and USD 50 as of December 31, 2019, 2018 and 2017, respectively. In addition, the Company had other investments with a maturity of more than three months for USD 212,271, USD 44,529 and USD 135,864 as of December 31, 2019, 2018 and 2017, respectively.

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

INDEX TO THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

	Page
1 General information	47
2 Basis of presentation	48
3 Acquisition of business	51
4 Accounting policies	55
5 Segment information	80
6 Cost of sales	83
7 Selling, general and administrative expenses	84
8 Labor costs (included in cost of sales and selling, general and administrative expenses)	84
9 Other operating income (expenses), net	85
10 Other financial income (expenses), net	85
11 Income tax expense	86
12 Property, plant and equipment, net	87
13 Intangible assets, net	89
14 Investments in non-consolidated companies	90
15 Receivables, net - non-current and current	93
16 Trade receivables, net - non-current and current	94
17 Inventories, net	94
18 Cash, cash equivalents and other investments	95
19 Allowances and provisions - non-current and current	95
20 Deferred income tax	96
21 Other liabilities - non-current and current	98
22 Derivative financial instruments	100
23 Leases Liabilities	102
24 Borrowings	103
25 Contingencies, commitments and restrictions on the distribution of profits	105
26 Related party transactions	112
27 Other required disclosures	114
28 Change in the functional currency of Argentine subsidiaries	115
29 Recently issued accounting pronouncements	116
30 Financial risk management	117
31 Subsequent events - COVID-19	124

Notes to the Consolidated Financial Statements**1. GENERAL INFORMATION**

Ternium S.A. (the “Company” or “Ternium”), was incorporated on December 22, 2003 to hold investments in flat and long steel manufacturing and distributing companies. The Company has an authorized share capital of a single class of 3.5 billion shares having a nominal value of USD 1.00 per share. As of December 31, 2019, there were 2,004,743,442 shares issued. All issued shares are fully paid.

Ternium’s American Depositary Shares (“ADSs”) trade on the New York Stock Exchange under the symbol “TX”.

The Company was initially established as a public limited liability company (société anonyme) 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 and 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, 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 in high income tax jurisdictions, as defined under Luxembourg law, will continue to be exempt from corporate income tax in Luxembourg under Luxembourg’s participation exemption.

As part of the Company’s corporate reorganization in connection with the termination of Luxembourg’s 1929 holding company regime, on December 6, 2010, the Company contributed its equity holdings in all its subsidiaries and all its financial assets to its Luxembourg wholly-owned subsidiary Ternium Investments S.à r.l., or Ternium Investments, in exchange for newly issued corporate units of Ternium Investments. As the assets contributed were recorded at their historical carrying amount in accordance with Luxembourg GAAP, the Company’s December 2010 contribution of such assets to Ternium Investments resulted in a non-taxable revaluation of the accounting value of the Company’s assets under Luxembourg GAAP. The amount of the December 2010 revaluation was equal to the difference between the historical carrying amounts of the assets contributed and the value at which such assets were contributed and amounted to USD 4.0 billion. However, for the purpose of these consolidated financial statements, the assets contributed by Ternium to its wholly-owned subsidiary Ternium Investments were recorded based on their historical carrying amounts in accordance with IFRS, with no impact on the financial statements.

1. GENERAL INFORMATION (continued)

Following the completion of the corporate reorganization, and upon its conversion into an ordinary Luxembourg holding company, the Company voluntarily recorded a special reserve exclusively for tax-basis purposes. As of December 31, 2019 and 2018, this special tax reserve amounted to USD 6.3 billion and USD 6.6 billion, respectively. The Company expects that, as a result of its corporate reorganization, its current overall tax burden will not increase, as all or substantially all of its dividend income will come from high income tax jurisdictions.

2. BASIS OF PRESENTATION**a) Basis of presentation**

These consolidated financial statements have been prepared in accordance with IFRS (International Financial Reporting Standards) issued and effective or issued and early adopted as at the time of preparing these statements (February 2020), as issued by the International Accounting Standards Board and in conformity with International Financial Reporting Standards as adopted by the European Union ("EU"). These consolidated financial statements are presented in thousands of United States dollars ("USD"), except otherwise indicated.

These Consolidated financial statements fairly present the consolidated equity and consolidated financial situation of Ternium as of December 31, 2019, and the consolidated results of its operations, the Changes in the Consolidated Statement of Comprehensive Income, the Changes in Consolidated Net Equity and the Consolidated Cash Flows of Ternium for the year then ended.

Elimination of all material intercompany transactions and balances between the Company and their respective subsidiaries has been made in consolidation.

These consolidated financial statements have been prepared under the historical cost convention, as modified by the revaluation of available-for-sale financial assets, and financial assets and financial liabilities (including derivative instruments) at fair value through profit or loss.

These consolidated financial statements have been approved for issue by the Board of Directors on February 18, 2020. The Directors have the power to amend and reissue the consolidated financial statements.

Detailed below are the companies whose financial statements have been consolidated and accounted for interest in these consolidated financial statements.

2. BASIS OF PRESENTATION (continued)

Company	Country of Organization	Main activity	Percentage of ownership at December 31,		
			2019	2018	2017
Ternium S.A.	Luxembourg	Holding	100.00 %	100.00 %	100.00 %
Ternium Investments S.à.r.l.	Luxembourg	Holding	100.00 %	100.00 %	100.00 %
Ternium Participações S.A. (1) (formerly Ternium Brasil S.A.)	Brazil	Holding	100.00 %	100.00 %	100.00 %
Ternium Internacional España S.L. (1)	Spain	Holding and marketing of steel products	100.00 %	100.00 %	100.00 %
Ternium Investments Switzerland AG (1)	Switzerland	Holding	100.00 %	100.00 %	100.00 %
Ternium USA Inc. (1)	USA	Manufacturing and selling of steel products	100.00 %	100.00 %	100.00 %
Ternium Argentina S.A. (formerly Siderar S.A.I.C.) (2)	Argentina	Manufacturing and selling of flat steel products	61.50 %	60.94 %	60.94 %
Impeco S.A. (3)	Argentina	Manufacturing of pipe products	61.54 %	60.97 %	60.97 %
Prosid Investments S.A. (4)	Uruguay	Holding	61.51 %	60.94 %	60.94 %
Ternium Mexico S.A. de C.V. (5)	Mexico	Manufacturing and selling of steel products	88.94 %	88.78 %	88.78 %
Hylsa S.A. de C.V. (6)	Mexico	Manufacturing and selling of steel products	88.94 %	88.78 %	88.78 %
Las Encinas S.A. de C.V. (6)	Mexico	Exploration, exploitation and pelletizing of iron ore	88.94 %	88.78 %	88.78 %
Ferropak Comercial S.A. de C.V. (6)	Mexico	Scrap services company	88.94 %	88.78 %	88.78 %
Transamerica E. & I. Trading Corp. (6)	USA	Scrap services company	88.94 %	88.78 %	88.78 %
Técnica Industrial S.A. de C.V. (6)	Mexico	Services	88.94 %	88.78 %	88.78 %
Galvacer Chile S.A. (6)	Chile	Distributing company	88.94 %	88.78 %	88.78 %
Ternium Gas México S.A. de C.V. (7)	Mexico	Energy services company	88.94 %	88.78 %	88.78 %
Consorcio Minero Benito Juárez Peña Colorada S.A. de C.V. (8)	Mexico	Exploration, exploitation and pelletizing of iron ore	44.47 %	44.39 %	44.39 %
Peña Colorada Servicios S.A. de C.V. (8)	Mexico	Services	44.47 %	44.39 %	44.39 %
Exiros B.V. (8)	Netherlands	Procurement and trading services	50.00 %	50.00 %	50.00 %
Servicios Integrales Nova de Monterrey S.A. de C.V. (9)	Mexico	Medical and Social Services	66.26 %	66.14 %	66.14 %
Ternium Internacional Nicaragua S.A.	Nicaragua	Manufacturing and selling of steel products	99.38 %	99.38 %	99.38 %
Ternium Internacional Honduras S.A. de C.V.	Honduras	Manufacturing and selling of steel products	99.18 %	99.18 %	99.18 %
Ternium Internacional El Salvador S.A. de C.V.	El Salvador	Manufacturing and selling of steel products	99.92 %	99.92 %	99.92 %
Ternium Internacional Costa Rica S.A.	Costa Rica	Manufacturing and selling of steel products	99.98 %	99.98 %	99.98 %
Ternium Internacional Guatemala S.A. (10)	Guatemala	Manufacturing and selling of steel products	99.98 %	99.98 %	99.98 %
Ternium Colombia S.A.S. (formerly Ferrasa S.A.S.) (10)	Colombia	Manufacturing and selling of steel products	100.00 %	100.00 %	100.00 %
Ternium del Cauca S.A.S. (formerly Perfilamos del Cauca S.A.S.) (10)	Colombia	Manufacturing and selling of steel products	100.00 %	100.00 %	100.00 %
Ternium Siderúrgica de Caldas S.A.S. (formerly Siderúrgica de Caldas S.A.S.) (10)	Colombia	Manufacturing and selling of steel products	100.00 %	100.00 %	100.00 %
Tenigal S. de R.L. de C.V. (11)	Mexico	Manufacturing and selling of steel products	51.00 %	51.00 %	51.00 %
Ternium Internacional S.A.	Uruguay	Marketing of steel products	100.00 %	100.00 %	100.00 %
Ternium Treasury Services S.A.	Uruguay	Financial Services	100.00 %	100.00 %	100.00 %
Ternium Internationaal B.V. (12)	Netherlands	Marketing of steel products	100.00 %	100.00 %	100.00 %
Ternium International Inc. (12)	Panama	Marketing of steel products	100.00 %	100.00 %	100.00 %
Ternium Procurement S.A. (13)	Uruguay	Marketing of steel products and procurement services	100.00 %	100.00 %	100.00 %

2. BASIS OF PRESENTATION (continued)

Company	Country of Organization	Main activity	Percentage of ownership at December 31,		
			2019	2018	2017
Technology & Engineering Services S.A. (13)	Uruguay	Engineering and other services	100.00 %	100.00 %	100.00 %
Soluciones Integrales de Gestión S.A. (14)	Argentina	Other services	100.00 %	100.00 %	100.00 %
Ternium Staal B.V. (15)	Netherlands	Holding and marketing of steel	100.00 %	100.00 %	100.00 %
Ternium Brasil Ltda. (15)	Brazil	Manufacturing and selling of steel products	100.00 %	100.00 %	100.00 %
Ternium del Atlántico S.A.S (16)	Colombia	Manufacturing and selling of steel products	100.00 %	100.00 %	100.00 %
Ternium Solutions S.A. (formerly Tericer Trading S.A.) (17)	Uruguay	Other services	100.00 %	100.00 %	— %
Imsamex Ecuador S.A. (18)	Ecuador	Distributing company	— %	88.78 %	88.78 %
Ternium Solutions A.G. (19)	Switzerland	Other services	— %	100.00 %	100.00 %
Ternium Ingeniería y Servicios de México S.A. de C.V. (20)	Mexico	Engineering and other services	— %	99.89 %	99.89 %
Ternium International USA Corporation (21)	USA	Marketing of steel products	— %	100.00 %	100.00 %
Acedor S.A. de C.V. (22)	Mexico	Holding	— %	— %	88.78 %
Ecosteel Gestao de Águas Industriais S.A. (23)	Brazil	Other services	— %	— %	100.00 %
Ecosteel Gestao de Efuente Industriais S.A. (24)	Brazil	Other services	— %	— %	100.00 %
Galvatubing Inc. (25)	USA	Manufacturing and selling of pipe products	— %	— %	88.78 %
Galvamet America Corp. (26)	USA	Manufacturing and selling of insulated panel products	— %	— %	88.78 %
Ternium Internacional de Colombia S.A.S. (27)	Colombia	Marketing of steel products	— %	— %	100.00 %

(1) Indirectly through Ternium Investments S.à.r.l. Total voting rights held: 100.00%.

(2) Since the third quarter of 2019, indirectly through Ternium Internacional España S.L. Total voting rights held 61.50%. Before that, indirectly through Ternium Internacional España S.L. total voting rights was 60.94%. During the fourth quarter of 2017, Siderar S.A.I.C. changed its business name to Ternium Argentina S.A.

(3) Since the fourth quarter of 2017, indirectly through Ternium Argentina S.A. and Soluciones Integrales de Gestión S.A. Total voting rights held 100.00%. Before that, indirectly through Ternium Argentina S.A. and Ternium Internacional S.A.

(4) Since the fourth quarter of 2017, indirectly through Ternium Argentina S.A. and Ternium Procurement S.A. Total voting rights held 100.00%. Before that, indirectly through Ternium Argentina S.A. and Ternium Internacional S.A.

(5) Since the fourth quarter of 2017, indirectly through Ternium Argentina S.A. and Ternium Internacional España S.L. Total voting rights held 100.00%. Before that, indirectly through Ternium Argentina S.A., Ternium Internacional S.A. and Ternium Internacional España S.L.

(6) Indirectly through Ternium Mexico S.A. de C.V. Total voting rights held: 100.00%.

(7) Indirectly through Ternium Mexico S.A. de C.V. and Tenigal S. de R.L. de C.V. Total voting rights held: 100.00%.

(8) Total voting rights held: 50.00%. The Company recognizes the assets, liabilities, revenue and expenses in relation to its interest in the joint operation.

(9) Indirectly through Ternium Mexico S.A. de C.V. Total voting rights held: 74.50%.

(10) Indirectly through Ternium Internacional España S.L. Total voting rights held: 100.00%.

(11) Indirectly through Ternium Internacional España S.L. Total voting rights held: 51.00%.

(12) Since the third quarter of 2017, indirectly through Ternium Investments S.à.r.l. Total voting rights held: 100.00%. Before that, indirectly through Ternium Investments Switzerland AG.

(13) Since the third quarter of 2017, indirectly through Ternium Internacional España S.L. Total voting rights held: 100.00%. Before that, indirectly through Ternium Investments Switzerland AG.

(14) Since the third quarter of 2017, indirectly through Ternium Investments S.à.r.l. and Ternium Internacional España S.L. Total voting rights held 100.00%. Before that, indirectly through Ternium Investments S.à.r.l. and Technology and Engineering Services S.A.

(15) Indirectly through Ternium Investments S.à.r.l. Total voting rights held: 100.00%.

(16) Indirectly through Ternium Internacional España S.L. Total voting rights held: 100.00%.

(17) Indirectly through Ternium Investments S.à.r.l. Total voting rights held: 100.00%.

(18) This company was dissolved as of December 19, 2019.

(19) This company was dissolved as of July 3, 2019.

(20) This company was dissolved as of March 29, 2019.

(21) Merged with Ternium USA Inc. during the first quarter of 2019.

(22) Merged with Ternium México S.A. de C.V. during the fourth quarter of 2018.

(23) This company was dissolved as of December 3, 2018.

(24) This company was dissolved as of May 4, 2018.

(25) This company was dissolved as of July 19, 2018.

(26) This company was dissolved as of August 3, 2018.

(27) This company was dissolved as of October 3, 2018.

2. BASIS OF PRESENTATION (continued)

The most important non-controlling interest is related to the investment in Ternium Argentina S.A., which is a company listed in the Buenos Aires Stock Exchange. Ternium Argentina stated in its annual accounts as of and for the year ended December 31, 2019, that revenues amounted to USD 1,789 million (2018: USD 1,959 million), net profit from continuing operations to USD 131 million (2018: USD 254 million), total assets to USD 2,969 million (2018: USD 3,184 million), total liabilities to USD 338 million (2018: USD 606 million) and shareholders' equity to USD 2,631 million (2018: USD 2,578 million). All the information related to this investment could be found in the Buenos Aires Stock Exchange webpage.

3. ACQUISITION OF BUSINESS

CSA Siderúrgica do Atlântico Ltda. (now Ternium Brasil Ltda.) and thyssenkrupp Slab International B.V. (now Ternium Staal B.V.)

(a) The acquisition

On September 7, 2017, Ternium completed the acquisition from thyssenkrupp AG ("tkAG") of a 100% ownership interest in thyssenkrupp Slab International B.V. ("tkSI") and its wholly-owned subsidiary CSA Siderúrgica do Atlântico Ltda. ("CSA"), a steel slab producer with a steelmaking facility located in the state of Rio de Janeiro, Brazil, and having an annual production capacity of 5 million tons of high-end steel slabs, a deep-water harbor and a 490 MW combined cycle power plant. The acquisition was expected to substantially increase Ternium's steelmaking capacity and strengthen its business in strategic industrial sectors across Latin America.

As part of the transaction, tkAG assigned to Ternium a slab commitment agreement providing for an arrangement relating to the purchase of CSA-manufactured carbon steel slabs under the terms of a slab frame supply agreement and related annual slab off-take agreements between tkSI and the entity that acquired thyssenkrupp's former Calvert re-rolling facility in Alabama, United States of America. Such slab commitment agreement provided for a commitment by such entity to purchase from tkSI approximately 2.0 million tons of CSA-manufactured carbon steel slabs per year until September 30, 2019, at the price resulting from the pricing formula set forth therein. This slab commitment agreement was amended on December 20, 2017, spreading deliveries of the remaining slab volumes committed under such agreement through December 2020.

The purchase price paid by Ternium in the acquisition totaled approximately USD 1,891 million.

Ternium began consolidating the balance sheets and results of operations of tkSI and CSA as from September 7, 2017, and CSA changed its name to Ternium Brasil Ltda. and tkSI was renamed Ternium Staal B.V..

(b) Fair value of net assets acquired

The application of the purchase method required 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 were based mainly on discounted cash flows and other valuation techniques.

3. ACQUISITION OF BUSINESS (continued)

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

Fair value of acquired assets and liabilities:	USD
Property, plant and equipment and Intangible assets	1,573,946
Inventories	400,047
Cash and cash equivalents	278,162
Trade receivables	63,710
Other receivables	705,058
Deferred tax assets	13,686
Provisions	(799,938)
Trade payables	(219,604)
Other assets and liabilities, net	(124,078)
Net assets acquired	1,890,989

According to this purchase price allocation, no goodwill was recorded.

Ternium entered into several derivative contracts to partially hedge the currency volatility risk associated with the Euro-denominated transaction price. As of the date of the closing of the acquisition, the fair value of those contracts amounted to USD 75.9 million. Such value was deducted from the purchase consideration.

The purchase price allocation disclosed above was prepared with the assistance of a third-party expert. As of December 31, 2018, no adjustment has been recorded to the assets and liabilities assumed in comparison to the amounts registered as of December 31, 2017.

(c) Main contingencies associated with the acquired business

Contrary to the recognition principles in IAS 37 Provisions, Contingent Liabilities and Contingent Assets, IFRS 3 Business Combinations requires an acquirer of a business to recognize contingent liabilities assumed in a business acquisition at the acquisition date even if it is not probable that an outflow of resources will be required to settle the obligation.

The main contingencies recognized in the Company's consolidated financial statements pursuant to IFRS 3 Business Combinations in connection with the acquisition of tkSI and CSA include the following:

(i) Fishermen associations' claims

Civil contingencies include lawsuits brought by a number of fishermen associations on behalf of their associates, alleging that the dredge of Ternium Brasil's deep-water port has had a negative impact on fish farming and exploitation activities in the Sepetiba Bay area in Rio de Janeiro and that, as a result, fishermen in that area had suffered damages. A provision in the amount of USD 24.5 million was recorded at the acquisition date in connection with this matter (USD 14.1 million and USD 19.7 million as of December 31, 2019 and 2018, respectively).

3. ACQUISITION OF BUSINESS (continued)**(ii) Tax assessments relating to the use of certain ICMS tax credits**

The Imposto Sobre Operações Relativas à Circulação de Mercadorias e Serviços, or ICMS, is a Brazilian value-added tax on the services (inter-states) and the transfer of goods in Brazil. Payment of ICMS generates tax credits that, subject to applicable law, rules and regulations, may be either used to offset ICMS payment obligations generated in connection with domestic sales of products and services, or sold and transferred to third parties.

The Rio de Janeiro State Treasury Office is challenging the use by Ternium Brasil of ICMS tax credits generated in connection with purchases of refractory materials in the period from December 2010 through December 2016, and intends to assess taxes and impose fines on Ternium Brasil on the argument that such materials may not be qualified as “raw materials” or “intermediary products” but as “goods for consumption” and, accordingly, ICMS tax credits generated in connection with their purchase are not available and may not be used to offset ICMS payment obligations generated in connection with Ternium Brasil’s domestic sales of carbon steel slabs. Ternium Brasil has appealed against the Rio de Janeiro State Treasury Office tax assessments and fines. A provision in the amount of USD 57.7 million was recorded as of the acquisition date in connection with this matter (USD 45.0 million and USD 46.9 million as of December 31, 2019 and 2018, respectively).

(iii) ICMS deferral tax benefit - Unconstitutionality

Through State Law No. 4,529, of March 31, 2005, the State of Rio de Janeiro granted Ternium Brasil a tax incentive consisting of a deferment of ICMS payable by Ternium Brasil in connection with the construction and operation of the company’s Rio de Janeiro steelmaking complex. The incentive applies in respect of the acquisition of fixed assets and certain raw materials (i.e. iron ore, pellets, alloys, coke, coal and scrap) and significantly reduces input ICMS credit accumulation by Ternium Brasil. The tax incentive was granted for a period of 20 years from the commencement of the construction works for Ternium Brasil’s Rio de Janeiro steel complex.

In 2012, a Brazilian political party filed a direct action of unconstitutionality against the above-mentioned State Law before the Brazilian Federal Supreme Court, predicated on the argument that, since the tax incentive granted pursuant to such State Law had not been approved by Brazil’s National Council of Fiscal Policy (Conselho Nacional de Política Fazendária, or CONFAZ), such State Law should be declared unconstitutional.

In August 2017, the Brazilian Congress enacted Supplementary Law No. 160/2017, instituting a mechanism through which the States may confirm any ICMS incentives they had granted in prior years without CONFAZ approval and, in furtherance of such Supplementary Law, in December 2017 the States adopted ICMS Convention 190/2017, establishing the applicable rules and deadlines for so confirming such ICMS incentives. As per the terms of ICMS Convention 190/2017, all States are required to publish in their official gazettes, on or before March 29, 2018, a list of the ICMS incentives that are to be confirmed pursuant to Supplementary Law No. 160. On March 6, 2018, the State of Rio de Janeiro published its list of ICMS incentives, including, among others, the ICMS benefit granted to Ternium Brasil. ICMS Convention 190/2017 also required that all relevant documents concerning such incentives be filed with CONFAZ, and the State of Rio de Janeiro satisfied such requirements as well. On July 27, 2018, the Governor of Rio de Janeiro issued Executive Order (Decreto) No. 46,78, pursuant to which the State of Rio de Janeiro reconfirmed, in accordance with ICMS Convention 190/2017, the ICMS tax benefits listed in its official gazette publication made pursuant to the Convention, including, among others, Ternium Brasil’s ICMS tax benefits.

3. ACQUISITION OF BUSINESS (continued)

In October 2018, the State of Rio de Janeiro and the Federation of Industries of the State of Rio de Janeiro (Federação das Indústrias do Estado do Rio de Janeiro, or FIRJAN) filed petitions arguing that the action of unconstitutionality against the March 31, 2005 Rio de Janeiro State Law No. 4,529 could not be judged by the Federal Supreme Court since, following the revalidation of such law under Supplementary Law No.160/17 and the ICMS Convention 190/2017, such action of unconstitutionality had lost its purpose. Following the filing of such petitions, the Reporting Justice Minister in charge of the case summoned the plaintiff in such action of unconstitutionality, the Federal Attorney General's Office (Advocacia-Geral da União, or AGU) and the Chief of the Public Minister (Procuradoria-Geral da República, or PGR) to submit statements expressing their respective views on the arguments presented by the State of Rio de Janeiro and the FIRJAN with respect to the effect of Supplementary Law No.160/17 and the ICMS Convention 190/2017 on the pending action of unconstitutionality. In their respective statements, the plaintiff argued that Supplementary Law No.160/17 and the ICMS Convention 190/2017 do not affect the unconstitutionality of ICMS benefits granted through State Law No. 4,529, while the AGU stated that, in light of the additional legal support provided by Supplementary Law No.160/17 and the ICMS Convention 190/2017, a finding of unconstitutionality of State Law No. 4,529 would not be warranted. In turn, the PGR stated that a decision on the case should be postponed until the Federal Supreme Court completes its analysis of Supplementary Law No.160/17 and ICMS Convention 190/2017. As of the date of these consolidated financial statements, the Brazilian Federal Supreme Court has not yet ruled on the action of unconstitutionality against Rio de Janeiro's State Law No. 4,529.

The tax benefits accumulated under Ternium Brasil's ICMS incentive amounted to approximately USD 1,089 million as of the acquisition date. In accordance with the guidance in IFRS 3, the Company recorded as of the acquisition date a provision of USD 651.8 million (including estimated penalties and interest) in connection with this matter, together with an asset of USD 325.9 million arising from its right to recover part of the contingency amount from Thyssenkrup Veerhaven B.V. (USD 508.9 million and USD 254.4 million, respectively, as of December 31, 2019, and USD 529.4 million and USD 264.7 million, respectively, as of December 31, 2018). The calculation of this contingency related to an uncertain tax position has been determined taking into consideration the probability of negative outcome for the Company, if any, on an estimated total risk as of the acquisition date of USD 1,630 million (including estimated penalties and interests) (USD 1,948 million as of December 31, 2019). In connection with the asset related to the Company's right to recover part of the contingency amount from Thyssenkrup Veerhaven B.V., the following two events need to happen within the following time frames: the Supreme Federal Court of Brazil or any Civil Court of the State of Rio de Janeiro would need to issue a decision voiding above mentioned law prior to September 7, 2020, and Ternium Brasil would have to make a payment or repayment of ICMS tax incentives prior to September 7, 2022.

3. ACQUISITION OF BUSINESS (continued)

(d) Acquisition financing

The acquisition was mainly financed through an unsecured 5-year syndicated facility in the principal amount of USD 1.5 billion granted to the Company's subsidiary, Ternium Investments S.à.r.l., by a syndicate of banks. The facility is to be repaid in eight consecutive and equal semi-annual installments, commencing on March 5, 2019, and has been guaranteed by the Company's subsidiary, Ternium México, S.A. de C.V. The borrower and the guarantor are subject to certain covenants customary for transactions of this type, including limitations on liens and encumbrances, transactions with affiliates, consolidations and mergers and restrictions on investments. The guarantor is additionally subject to limitations on the sale of certain assets and compliance with a leverage ratio. There are no limitations to the payment of dividends applicable to the borrower or the guarantor, except, with respect to the borrower, upon an event of default under the facility. During 2018 and 2019, the Company made prepayments of principal for USD 375 million and USD 725 million, respectively. As of December 31, 2019, the outstanding value of this syndicated facility was USD 400 million and both the borrower and the guarantor were in compliance with all of its covenants.

4. ACCOUNTING POLICIES

The following is a summary of the principal accounting policies followed in the preparation of these Consolidated Financial Statements:

(a) Group accounting

(1) Subsidiary companies and transactions with non-controlling interests

Subsidiaries are all entities over which the Company has control. The Company controls an entity when the Company 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 transferred to the Company. They are deconsolidated from the date that control ceases.

The Company uses the acquisition method of accounting to account for business combinations. The consideration transferred for the acquisition of a subsidiary is the fair values of the assets transferred, the liabilities incurred and the equity interests issued by the Company. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Acquisition-related costs are expensed as incurred. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at the fair values at the acquisition date. Indemnification assets are recognized at the same time that the Company recognizes the indemnified item and measures them on the same basis as the indemnified item, subject to the need for a valuation allowance for uncollectible amounts. The Company measures the value of a reacquired right recognized as an intangible asset on the basis of the remaining contractual term of the related contract regardless of whether market participants would consider potential contractual renewals in determining its fair value.

On an acquisition-by-acquisition basis, the Company recognizes any non-controlling interest in the acquiree at the non-controlling interest's proportionate share of the acquiree's net assets.

4. ACCOUNTING POLICIES (continued)

The excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the Company's share 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 in the case of a bargain purchase, the difference is recognized directly in the income statement.

The measurement period is the earlier of the date that the acquirer receives the information that it is looking for or cannot obtain the information and one year after the acquisition date. Where the accounting for a business combination is not complete by the end of the reporting period in which the business combination occurred provisional amounts are reported.

The Company treats transactions with non-controlling interests 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.

Inter-company transactions, balances and unrealized gains on transactions between group companies are eliminated. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the group. However, the fact that the functional currency of some subsidiaries is their respective local currency, generates some financial gains (losses) arising from intercompany transactions, that are included in the consolidated income statement under Other financial expenses, net.

(2) Investments in non-consolidated companies

Associated companies are those entities in which Ternium has significant influence, but which it does not control.

Joint arrangements are understood as combinations in which there are contractual agreements by virtue of which two or more companies hold an interest in companies that undertake operations or hold assets in such a way that any financial or operating decision is subject to the unanimous consent of the partners. A joint arrangement is classed as a joint operation if the parties hold rights to its assets and have obligations in respect of its liabilities or as a joint venture if the venturers hold rights only to the investee's net assets.

4. ACCOUNTING POLICIES (continued)

Investments in non-consolidated companies (associated companies and joint ventures) are accounted for using the equity method of accounting. Under this method, interests in joint ventures and associates are initially recognized in the consolidated statement of financial position at cost and adjusted thereafter to recognize the Company's share of the post-acquisition profits or losses in the income statement, and its share of post-acquisition changes in reserves recognized in reserves and in other comprehensive income in the income statement. Unrealized gains on transactions among the Company and its non-consolidated companies are eliminated to the extent of the Company's interest in such non-consolidated companies; unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset. When the Company's share of losses in a non-consolidated company equals or exceeds its interest in such non-consolidated company, the Company does not recognize further losses unless it has incurred obligations or made payments on behalf of such non-consolidated company.

The Company's investment in associates and joint ventures includes notional goodwill identified on acquisition.

The Company determines at each reporting date whether there is any objective evidence that the investment is impaired. If this is the case, the group calculates the amount of impairment as the difference between the recoverable amount of the investment and its carrying value and recognizes the amount within "Equity on earnings (losses) of non-consolidated companies".

(b) Foreign currency translation*(1) Functional and presentation currency*

Items included in the financial statements of each of the Company's subsidiaries and associated companies are measured using the currency of the primary economic environment in which the entity operates (the "functional currency"). Except for the Argentine and the non-consolidated companies whose functional currencies are their local currencies, Ternium determined that the functional currency of its subsidiaries is the U.S. dollar. Although Ternium is located in Luxembourg, it operates in several countries with different currencies. The USD is the currency that best reflects the economic substance of the underlying events and circumstances relevant to Ternium as a whole.

(2) Subsidiary companies

The results and financial position of all the group entities (except for the ones which operates in a hyperinflationary economy; see note 4 (cc)) that have a functional currency different from the presentation currency, are translated into the presentation currency as follows:

- (i) assets and liabilities are translated at the closing rate of each statement of financial position;
- (ii) income and expenses for each income statement are translated at average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the rate on the dates of the transactions); and
- (iii) all resulting translation differences are recognized within other comprehensive income.

4. ACCOUNTING POLICIES (continued)

In the case of a sale or other disposition of any such subsidiary, any accumulated translation differences would be recognized in the income statement as part of the gain or loss on sale.

(3) 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 income (expenses), net" in the consolidated income statement, except when deferred in equity as qualifying cash flow hedges and qualifying net investment hedges. Translation differences on non-monetary financial assets and liabilities such as equities held at fair value through profit or loss are recognized in profit or loss as part of the "fair value gain or loss," while translation differences on non-monetary financial assets such as equities classified as fair value through other comprehensive income are included in other gains/(losses).

(c) Financial instruments*Non derivative financial instruments*

Non derivative financial instruments comprise investments in equity and debt securities, trade and other receivables, cash and cash equivalents, loans and borrowings, and trade and other payables.

From January 1, 2018, the Company classifies its financial instruments in the following measurement categories:

- Amortized cost: instruments that are held for collection or repayment of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortized cost. Interest income and expenses from these financial instruments are included in finance income or expense using the effective interest rate method. Any gain or loss arising on derecognition is recognized directly in profit or loss and presented in finance income or expense, together with foreign exchange gains and losses. Impairment losses are presented as separate line items in the statement of profit or loss.

4. ACCOUNTING POLICIES (continued)

- Fair value through other comprehensive income (“FVOCI”): financial 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, are measured at FVOCI. Movements in the carrying amount are taken through OCI, except for the recognition of impairment gains or losses, interest revenue and foreign exchange gains and losses which are recognized in profit or loss. When the financial asset is derecognized, the cumulative gain or loss previously recognized in OCI is reclassified from equity to profit or loss and recognized in other gains/(losses). Interest income from these financial assets is included in finance income using the effective interest rate method. Foreign exchange gains and losses are presented in other gains/(losses) and impairment expenses are presented as separate line item in the statement of profit or loss.
- Fair value through profit or loss (“FVPL”): financial instruments that do not meet the criteria for amortized cost or FVOCI are measured at FVPL. A gain or loss on a debt investment that is subsequently measured at FVPL is recognized in profit or loss and presented net within other gains/(losses) in the period in which it arises.

The classification depends on the Company’s business model for managing the financial instruments and the contractual terms of the cash flows.

For financial instruments measured at fair value, gains and losses will either be recorded in profit or loss or OCI. For investments in equity instruments that are not held for trading, this will depend on whether the group has made an irrevocable election at the time of initial recognition to account for the equity investment at FVOCI.

At initial recognition, the Company measures a financial instrument at its fair value plus, in the case of a financial instrument not at FVPL, transaction costs that are directly attributable to the acquisition of the financial instrument. Transaction costs of financial instruments carried at FVPL are expensed in profit or loss. Subsequent measurement of debt instruments depends on the Company’s business model for managing the asset and the cash flow characteristics of the asset.

Until December 31, 2017, Ternium non derivative financial instruments were classified into the following categories:

- Financial instruments at fair value through profit or loss: comprising mainly cash and cash equivalents and investments in debt securities held for trading;
- Held-to-maturity instruments: measured at amortized cost using the effective interest method less impairment losses. As of December 31, 2017, there were USD 6.1 million classified under this category;
- Loans and receivables: measured at amortized cost using the effective interest method less impairment losses;
- Available-for-sale (“AFS”) financial assets: gains and losses arising from changes in fair value were recognized within other comprehensive income (“OCI”) with the exception of impairment losses, interest calculated using the effective interest method and foreign exchange gains and losses on monetary assets, which were recognized directly in profit or loss. Where the investment was disposed of or was determined to be impaired, the cumulative gain or loss previously recognized in OCI was included in the income statement for the period. As of December 31, 2017, there were no AFS amounts classified under this category;
- Other financial liabilities: measured at amortized cost using the effective interest method.

4. ACCOUNTING POLICIES (continued)

The classification depended on the nature and purpose of the financial assets and was determined at the time of initial recognition.

Financial assets and liabilities were recognized and derecognized on the 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.

Impairment of financial assets

From January 1, 2018, the Company assesses on a forward-looking basis the expected credit losses associated with its debt instruments carried at amortized cost and FVOCI. The impairment methodology applied depends on whether there has been a significant increase in credit risk.

For trade receivables, the Company applies the simplified approach permitted by IFRS 9, which requires expected lifetime losses to be recognized from initial recognition of the receivables, see note 4 (i) for further details.

Until December 31, 2017, the Company assessed at the end of each reporting period whether there was objective evidence that a financial asset or group of financial assets was impaired. A financial asset or a group of financial assets was impaired and impairment losses were incurred only if there was objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset (a "loss event") and that loss event (or events) had an impact on the estimated future cash flows of the financial asset or group of financial assets that could be reliably estimated. The Company first assessed whether objective evidence of impairment existed.

For loans and receivables category and for held-to-maturity investments, the amount of the loss was measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the financial asset's original effective interest rate. The carrying amount of the asset was reduced and the amount of the loss was recognized in the consolidated income statement.

If, in a subsequent period, the amount of the impairment loss decreased and the decrease could be related objectively to an event occurring after the impairment was recognized, the reversal of the previously recognized impairment loss was recognized in the consolidated income statement.

Derivative financial instruments

Information about accounting for derivative financial instruments and hedging activities is included in Note 30 "Financial Risk management" and Note 4 (y).

4. ACCOUNTING POLICIES (continued)**(d) Property, plant and equipment***(1) Property, plant and equipment*

Land and buildings comprise mainly factories and offices. All property, plant and equipment are recognized at historical acquisition or construction cost less accumulated depreciation and accumulated impairment (if applicable), except for land, which is carried at acquisition cost less accumulated impairment (if applicable). There are no material residual values for property, plant and equipment items.

Major overhaul and rebuilding expenditures are recognized as a separate asset when future economic benefits are expected from the item, and the cost can be measured reliably.

Ordinary maintenance expenses on manufacturing properties are recorded as cost of products sold in the period in which they are incurred.

Where a tangible fixed asset comprises major components having different useful lives, these components are accounted for as separate items. Spare parts are included in property, plant and equipment.

Depreciation method is reviewed at each year end. Depreciation is calculated using the straight-line method to amortize the cost of each asset to its residual value over its estimated useful life as follows:

Land	No depreciation
Buildings and improvements	10-50 years
Production equipment	5-40 years
Vehicles, furniture and fixtures and other equipment	3-20 years

Property, plant and equipment used in mining activities are depreciated over its useful life or over the remaining life of the mine if shorter and there is no alternative use possible.

The assets' useful lives are reviewed, and adjusted if appropriate, at each year end. The re-estimation of assets useful lives by the Company did not materially affect depreciation charges in 2019, 2018 and 2017.

Gains and losses on disposals are determined by comparing the proceeds with the corresponding carrying amounts and are included in the income statement.

If the carrying amount of an asset were greater than its estimated recoverable amount, it would be written down to its recoverable amount (see Note 4 (f) "Impairment").

Amortization charges are included in cost of sales, selling, general and administrative expenses.

4. ACCOUNTING POLICIES (continued)*(2) Right-of-use assets*

The Company is a party to lease contracts for:

- Land
- Plants and equipment for the production of industrial gases and other production materials.
- Transportation and maintenance equipment.
- Warehouses and office spaces.

These leases are recognized, measured and presented in accordance to IFRS 16 “Leases”, following the guidelines described below.

Accounting by the lessee

The Company recognizes a right-of-use asset and a lease liability at the commencement date of each lease contract that grants the right to control the use of an identified asset during a period of time. The commencement date is the date in which the lessor makes an underlying asset available for use by the lessee.

The Company applied exemptions for leases with a duration lower than 12 months, with a value lower than thirty thousand dollars and/or with clauses related to variable payments. These leases have been considered as short-term leases and, accordingly, no right-of-use asset or lease liability have been recognized.

At initial recognition, the right-of-use asset is measured considering:

- The value of the initial measurement of the lease liability;
- Any lease payments made at or before the commencement date, less any lease incentives; and
- Any initial direct costs incurred by the lessee; and

After initial recognition, the right-of-use assets are measured at cost, less any accumulated depreciation and/or impairment losses, and adjusted for any re-measurement of the lease liability.

Depreciation of the right-of-use asset is calculated using the straight-line method over the estimated duration of the lease contract, as follows:

Buildings and facilities	2-20 years
Machinery	2-17 years

If the lease transfers ownership of the underlying asset to the Company by the end of the lease term, or if the cost of the right-of-use asset reflects that the Company will exercise a purchase option, the Company depreciates the right-of-use asset from the commencement date to the end of the useful life of the underlying asset. Otherwise, the Company depreciates the right-of-use asset from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term.

4. ACCOUNTING POLICIES (continued)

Accounting by the lessor

When the Company is acting as a lessor, each of its leases is classified as either operating or finance lease:

- Leases where a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases.
- Leases where all substantial risks and rewards of ownership are transferred by the lessor to the lessee are classified as finance leases.

(e) Intangible assets

(1) Information system projects

Generally, costs associated with developing or maintaining computer software programs are recognized as an expense as incurred. However, costs directly related to the acquisition and implementation of information systems are recognized as intangible assets if they have a probable economic benefit exceeding the cost beyond one year and comply with the recognition criteria of IAS 38.

Information system projects recognized as assets are amortized using the straight-line method over their useful lives, not exceeding a period of 3 years. Amortization charges are included in cost of sales, selling, general and administrative expenses.

(2) Mining assets

Mining assets include:

- (a) Mining licenses acquired;
- (b) Capitalized exploration and evaluation costs, reclassified from exploration and evaluation costs (see note 4 (e) 3); and
- (c) Capitalized developmental stripping costs (see note 4 (u)).

Mining licenses were recognized as separate intangible assets upon the acquisition of the investment in Mexico and comprise the right to exploit the mines and are recognized at its fair value at acquisition date less accumulated amortization.

These mining concessions were granted for a 50-year period; following the expiration of the initial concession term, the concessions are renewable for an additional 50-year term in accordance with, and subject to the procedures set forth in, applicable Mexican mining law.

Amortization charge is calculated by using the unit-of-production method, on the basis of actual mineral extracted in each period compared to the estimated mineral reserves, and is included in cost of sales. Any change in the estimation of reserves is accounted for prospectively. The resulting amortization rate for the years ended December 31, 2019, 2018 and 2017, is approximately 5%, 8% and 7% per year, respectively.

4. ACCOUNTING POLICIES (continued)*(3) Exploration and evaluation costs*

Exploration and evaluation activities involve the search for iron ore resources, the determination of technical feasibility and the assessment of commercial viability of an identified resource.

Exploration and evaluation costs are measured at cost. Costs directly associated with exploration and evaluation activities are capitalized as intangible assets until the determination of reserves is evaluated. The costs associated to the acquisition of machinery and equipment are recognized as property, plant and equipment. If it is determined that commercial discovery has been achieved, costs incurred are reclassified into Mining assets and amortization starts once production begins.

Exploration costs are tested for impairment when there are indicators that impairment exists. Indicators of impairment include, but are not limited to:

- Rights to explore in an area have expired or will expire in the near future without renewal;
- No further exploration and evaluation is planned or budgeted;
- A decision to discontinue exploration and evaluation in an area because of the absence of commercial reserves; and
- Sufficient data exists to indicate that the book value will not be fully recovered from future development and production.

When analyzing the existence of impairment indicators, the exploration and evaluation areas from the mining cash-generating units will be evaluated.

(4) Goodwill

Goodwill represents the excess of the acquisition cost over the fair value of Ternium's participation in acquired companies' net assets at the acquisition date. Under IFRS 3, goodwill is considered to have an indefinite life and not amortized, but is subject to annual impairment testing.

Goodwill is allocated to Cash-generating units ("CGU") for the purpose of impairment testing. The allocation is made to those cash-generating units expected to benefit from the business combination which generated the goodwill being tested. The impairment losses on goodwill cannot be reversed.

As of December 31, 2019 and 2018, the carrying amount of goodwill allocated to the Mexico CGUs was USD 662.3 million, of which USD 619.8 million corresponds to steel operations and USD 42.5 million to mining operations.

(5) Research and development

Research expenditures are recognized as expenses as incurred. Development costs are recorded as cost of sales in the income statement as incurred because they do not fulfill the criteria for capitalization. Research and development expenditures for the years ended December 31, 2019, 2018 and 2017 totaled USD 10.0 million, USD 8.9 million and USD 9.8 million, respectively.

4. ACCOUNTING POLICIES (continued)*(6) Customer relationships acquired in a business combination*

In accordance with IFRS 3 and IAS 38, Ternium has recognized the value of customer relationships separately from goodwill in connection with the acquisitions of Grupo Imsa and Ternium Colombia S.A.S. These customer relationships were amortized using the straight-line method over a useful life of approximately 10 years. As of December 31, 2018, these assets were fully amortized.

In accordance with IFRS 3 and IAS 38, Ternium has recognized the value of customer relationships in connection with the acquisition of Ternium Staal B.V. The value of the slab commitment agreement by which Ternium Investments S.à r.l. is entitled to invoice, under certain conditions, the price difference between slabs and hot rolled coils will be amortized using the units of slabs sold method.

(7) Trademarks acquired in a business combination

In accordance with IFRS 3 and IAS 38, Ternium has recognized the value of trademarks separately from goodwill in connection with the acquisitions of Grupo Imsa and Ternium Colombia S.A.S. As of December 31, 2018, these assets were fully amortized.

Trademarks are amortized using the straight-line method over a useful life of between 5 to 10 years.

(f) Impairment

Assets that have an indefinite useful life (including goodwill) are not subject to amortization and are tested annually for impairment or whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Assets that are subject to amortization and investments in affiliates are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. 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 of an asset's fair value less cost to sell and the value in use.

To carry out these tests, assets are grouped at the lowest levels for which there are separately identifiable cash flows (each, a CGU). When evaluating long-lived assets for potential impairment, the Company estimates the recoverable amount based on the value in use of the corresponding CGU. The value in use of each CGU is determined on the basis of the present value of net future cash flows which will be generated by the assets tested.

Determining the present value of future cash flows involves highly sensitive estimates and assumptions specific to the nature of each CGU's activities, including estimates and assumptions relating to amount and timing of projected future cash flows, expected changes in market prices, expected changes in the demand of Ternium products and services, selected discount rate and selected tax rate.

Ternium uses cash flow projections for the next five years based on past performance and expectations of market development; thereafter, it uses a perpetuity rate. Application of the discounted cash flow (DCF) method to determine the value in use of a CGU begins with a forecast of all expected future net cash flows. Variables considered in forecasts include the gross domestic product (GDP) growth rates of the country under study and their correlation with steel demand, level of steel prices and estimated raw material costs as observed in industry reports.

4. ACCOUNTING POLICIES (continued)

Cash flows are discounted at rates that reflect specific country and currency risks associated with the cash flow projections. The discount rates used are based on the weighted average cost of capital (WACC), which is considered to be a good indicator of cost of capital. As of December 31, 2019 the discount rate used to test goodwill allocated to the Steel and Mining Mexico CGUs for impairment was 9.80% (as of December 31, 2018, 11.68%).

As a result of the above factors, actual cash flows and values could vary significantly from the forecasted future cash flows and related values derived using discounting techniques. Based on the information currently available, however, Ternium believes that it is not reasonably possible that the variation would cause the carrying amount to exceed the recoverable amount of the CGUs.

Considering the deteriorated economic situation in Argentina, the increase in the inflation rates, the devaluation of the Argentine peso and the expectations of a weaker industrial environment, the Company decided to assess the recoverability of its investments in Argentina, resulting in no impairment charges to be recognized. As of December 31, 2019, the discount rate used to test the investment in Argentine subsidiaries for impairment was 14.3%.

During the years 2019, 2018 and 2017, no impairment provisions were recorded in connection with assets that have an indefinite useful life (including goodwill).

(g) Other investments

Other investments consist primarily of investments in financial debt instruments and equity investments where the Company holds a minor equity interest and does not exert significant influence.

All purchases and sales of investments are recognized on the settlement date, which is not significantly different from the trade date, which is the date that Ternium commits to purchase or sell the investment.

Income from financial instruments at fair value through profit or loss is recognized in Other financial income (expenses), net in the consolidated income statement. The fair value of quoted investments is based on current bid prices. If the market for a financial investment is not active or the securities are not listed, the Company estimates the fair value by using standard valuation techniques. Dividends from investments in equity instruments are recognized in the income statement when the Company's right to receive payments is established.

Certain fixed income financial instruments purchased by the Company have been categorized as at fair value through other comprehensive income. The results of these financial investments are recognized in Finance Income in the Consolidated Income Statement using the effective interest method. Unrealized gains and losses other than impairment and foreign exchange results are recognized in Other comprehensive income. On maturity or disposal, net gain and losses previously deferred in Other comprehensive income are recognized in Finance Income in the Consolidated Income Statement.

4. ACCOUNTING POLICIES (continued)**(h) Inventories**

Inventories are stated at the lower of cost (calculated using the first-in-first-out "FIFO" method) or net realizable value. The cost of finished goods and goods in process comprises raw materials, direct labor, depreciation, other direct costs and related production overhead costs. It excludes borrowing costs. Goods acquired in transit at year end are valued at supplier's invoice cost.

The cost of iron ore produced in our mines comprises all direct costs necessary to extract and convert stockpiled inventories into raw materials, including production stripping costs, depreciation of fixed assets related to the mining activity and amortization of mining assets for those mines under production.

The Company assesses the recoverability of its inventories considering their selling prices, if the inventories are damaged, or if they have become wholly or partially obsolete (see note 4 (bb) (4)).

(i) Trade receivables and other receivables

Trade and other receivables are recognized initially at fair value, generally the original invoice amount. Since January 1, 2018, the Company applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables. To measure the expected credit losses, trade receivables are grouped based on shared credit risk characteristics and the days past due. The Company keeps an allowance for trade receivables, recorded in an asset account to offset the trade receivables in an amount estimated sufficient to cover the losses resulting from the impossibility for the debtors to cancel the amounts owed. This allowance for trade receivables is recorded with a charge to selling expenses.

(j) Cash and cash equivalents

Cash and cash equivalents and highly liquid short-term securities are carried at fair market value or at a historical cost which approximates fair market value.

For purposes of the cash flow statement, cash and cash equivalents comprise cash, bank current accounts and short-term highly liquid investments (original maturity of three months or less at date of acquisition) and overdrafts.

In the consolidated statement of financial position, bank overdrafts are included in borrowings within current liabilities.

(k) Non-current assets (disposal groups) classified as held for sale

Non-current assets (disposal groups) are classified as assets held for sale, complying with the recognition criteria of IFRS 5, and stated at the lower of carrying amount and fair value less cost to sell if their carrying amount is recovered principally through a sale transaction rather than through continuing use.

The carrying value of non-current assets classified as held for sale, at December 31, 2019 and 2018 totals USD 2.1 million and USD 2.1 million, respectively, which corresponds principally to land and other real estate items. Sale is expected to be completed within a one-year period.

4. ACCOUNTING POLICIES (continued)**(l) Borrowings**

Borrowings are recognized initially for an amount equal to the net proceeds received. In subsequent periods, borrowings are stated at amortized cost following the effective interest method.

(m) Lease liabilities

The lease liability is initially measured at the present value of the lease payments that are not paid at such date, including the following concepts:

- Fixed payments, less any lease incentives receivable;
- Variable lease payments that depend on an index or rate, initially measured using the index or rate as of the commencement date;
- Amounts expected to be payable by the lessee under residual value guarantees;
- The exercise price of a purchase option if the lessee is reasonably certain to exercise that option; and
- Payments of penalties for terminating the lease, if the lease term reflects the lessee exercising an option to terminate the lease.

Variable lease liabilities with payments dependent on external factors, such as minimum volumes sold or used, are not included in the initial measurement of the lease liabilities and such payments are recognized directly in profit and loss.

Lease payments are discounted using incremental borrowing rates for the location and currency of each lease contract or, if available, the rate implicit in the lease contract.

The finance cost is charged to profit or loss over the lease period to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

The lease term determined by the Company comprises:

- Non-cancelable period of lease contracts;
- Periods covered by an option to extend the lease if the lessee is reasonably certain to exercise that option; and
- Periods covered by an option to terminate the lease if the lessee is reasonably certain not to exercise that option.

After the commencement date, the Company measures the lease liability by:

- Increasing the carrying amount to reflect interest on the lease liability;
- Reducing the carrying amount to reflect lease payments made; and
- Re-measuring the carrying amount to reflect any reassessment or lease modifications.

(n) Income taxes - current and deferred

The current income tax charge is calculated on the basis of the tax laws in force in the countries in which Ternium and its subsidiaries operate. Management evaluates positions taken in tax returns with respect to situations in which applicable tax regulation could be subject to interpretation. A liability is recorded for tax benefits that were taken in the applicable tax return but have not been recognized for financial reporting.

4. ACCOUNTING POLICIES (continued)

Deferred income taxes are calculated using the liability method on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. Deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting, nor taxable profit or loss. The principal temporary differences arise on fixed assets, intangible assets, inventories valuation and provisions for pensions. Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period when the asset is realized or the liability is settled, based on tax rates and tax laws that have been enacted or substantially enacted at year end. Under IFRS, deferred income tax assets (liabilities) are classified as non-current assets (liabilities).

Deferred tax assets are recognized to the extent it is probable that future taxable income will be available to offset temporary differences.

Deferred income tax is provided on temporary differences arising on investments in subsidiaries and associated companies, except where the timing of the reversal of the temporary difference is controlled by the Company and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax assets and liabilities are re-estimated 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 liabilities**(1) *Post-employment obligations***

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. 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. In countries where there is no deep market in such bonds, the market rates on government bonds are used.

Actuarial 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 income.

For defined benefit plans, net defined benefit liabilities/asset is calculated based on the surplus or deficit derived by the difference between the defined benefit obligations less plan assets.

4. ACCOUNTING POLICIES (continued)

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 expense 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.

Mexico

Ternium Mexico has defined benefit and defined contribution plans.

The valuation of the liabilities for the defined benefit employee retirement plans (pensions and seniority premiums) covers all employees and is based primarily on their years of service, their present age and their remuneration at the date of retirement. The cost of the employee retirement plans (pension, health-care expenses and seniority premiums) is recognized as an expense in the year in which services are rendered in accordance with actuarial studies made by independent actuaries. The formal retirement plans are congruent with and complementary to the retirement benefits established by the Mexican Institute of Social Security. Additionally, the Company has established a plan to cover health-care expenses of retired employees. The Company has established a commitment for the payment of pensions and seniority premiums, as well as for health-care expenses.

The defined contribution plans provide a benefit equivalent to the capital accumulated with the company's contributions, which are provided as a match of employees' contributions to the plan. The plan provides vested rights according to the years of service and the cause of retirement.

Argentina

Ternium Argentina implemented 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 Argentine 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.

(2) Termination benefits

Termination benefits are payable when employment is terminated before the normal retirement date, or whenever an employee accepts voluntary redundancy in exchange for these benefits. The Company recognizes termination benefits when it is demonstrably committed to either: (i) terminating the employment of current employees according to a detailed formal plan without possibility of withdrawal or (ii) providing termination benefits as a result of an offer made to encourage voluntary redundancy.

(3) Other compensation obligations

Employee entitlements to annual leave and long-service leave are accrued as earned.

4. ACCOUNTING POLICIES (continued)

During 2007, Ternium launched an incentive retention 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 Ternium'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 Ternium to its shareholders, and (ii) the number of Units held by each beneficiary to the Program. Units vest ratably over a period of four years and will be redeemed by the Company ten years after grant date, with the option of an early redemption at seven years after 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, Ternium valued this long-term incentive program as a long term benefit plan as classified in IAS 19.

As of December 31, 2019 and 2018, the outstanding liability corresponding to the Program amounts to USD 36.2 million and USD 43.0 million, respectively. The total value of the units granted to date under the program, considering the number of units and the book value per share as of December 31, 2019 and 2018, is USD 36.0 million and USD 42.2 million, respectively.

Under Mexican law, Ternium's subsidiaries are required to pay their employees an annual benefit which is determined as a percentage of taxable profit for the year.

(4) Social security contributions

Social security laws in force in the countries in which the Company operates provide for pension benefits to be paid to retired employees from government pension plans and/or private fund managed plans to which employees may elect to contribute. As stipulated by the respective laws, Ternium Argentina and Ternium Mexico make monthly contributions calculated based on each employee's salary to fund such plans. The related amounts are expensed as incurred. No additional liabilities exist once the contributions are paid.

(p) Provisions

Ternium has certain contingencies with respect to existing or potential claims, lawsuits and other proceedings. Unless otherwise specified, Ternium accrues a provision for a present legal or constructive obligation as a result of a past event, when it is probable that future cost could be incurred and that cost can be reasonably estimated. Generally, accruals are based on developments to date, Ternium's estimates of the outcomes of these matters and the advice of Ternium's legal advisors.

(q) Trade payables

Trade payables are recognized initially at fair value and subsequently measured at amortized cost using the effective interest method.

4. ACCOUNTING POLICIES (continued)

(r) Revenue recognition and other income

Revenue is recognized at a point of time from sales to direct customers upon the satisfaction of performance obligations, which occurs when control of the goods transfers to the customer and the customer obtains the benefits from the goods, the potential cash flows and the transaction price can be measured reliably, and it is probable that the Company will collect the consideration in connection with the exchange of the goods. The control over the goods is obtained by the customer depending on when the goods are made available to the shipper or the customer takes possession of the goods, depending on the delivery terms. The Company considers that it has completed its performance obligations when the goods are delivered to its customers or to a shipper who will transport the goods to its customers. 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.

Interest income is recognized on an effective yield basis.

(s) Borrowing Costs

General and specific borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are capitalized during the period of time that is required to complete and prepare the asset for its intended use or sale. Qualifying assets are assets that necessarily take a substantial period of time to get ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalization.

Other borrowing costs are expensed in the period in which they are incurred.

The amount of borrowing costs that Ternium capitalized during a period will not exceed the amount of borrowing costs incurred during that period. At December 31, 2019, 2018 and 2017, the capitalized borrowing costs were of USD 16.1 million, USD 7.4 million and USD 0.5 million, respectively.

(t) Cost of sales, selling, general and administrative expenses

Cost of sales and expenses are recognized in the income statement on the accrual basis of accounting.

Commissions, freight and other selling expenses, including shipping and handling costs, are recorded in Selling, general and administrative expenses in the Consolidated Income Statement.

(u) Stripping costs

Stripping costs are the costs associated with the removal of overburden and other waste materials and can be incurred before the mining production commences (“development stripping”) or during the production stage (“production stripping”).

4. ACCOUNTING POLICIES (continued)

Development stripping costs that contribute to the future economic benefits of mining operations are capitalized as intangible assets (Mining assets). Production stripping costs which are part of on-going activities are included in the cost of the inventory produced (that is extracted) at each mine during the period in which they are incurred.

Capitalization of development stripping costs finishes when the commercial production of the mine commences. At that time, all development stripping costs are presented within Mining assets and depreciated on a unit-of-production basis. It is considered that commercial production begins when the production stage of mining operations begins and continues throughout the life of a mine.

(v) Mining development costs

Mining development costs are the costs associated to the activities related to the establishment of access to the mineral reserve and other preparations for commercial production. These activities often continue during production.

Development expenditures are capitalized and classified as Work in progress. On completion of development, all assets included in Work in progress are individually reclassified to the appropriate category of property, plant and equipment and depreciated accordingly.

(w) Asset retirement obligations

Ternium records asset retirement obligations (“ARO”) initially at the fair value of the legal or constructive obligation in the period in which it is incurred and capitalizes the ARO by increasing the carrying amount of property, plant and equipment. The fair value of the obligation is determined as the discounted value of the expected future cash flows and is included in Provisions. The liability is accreted to its present value through net financing cost and the capitalized cost is depreciated based in the unit of production method.

(x) Earnings per share

Earnings per share are calculated by dividing the net income attributable to shareholders by the daily weighted average number of ordinary shares issued during the year, excluding the average number of shares of the parent Company held by the Group. There are no dilutive securities for the periods presented.

(y) Derivative financial instruments and hedging activities

Ternium designates certain derivatives as hedges of a particular risk associated with a recognized asset or liability or a highly probable forecast transaction. These transactions are classified as cash flow hedges (mainly interest rate swaps, collars, currency forward contracts on highly probable forecast transactions and commodities contracts). The effective portion of the fair value of derivatives that are designated and qualify as cash flow hedges is recognized in OCI. Amounts accumulated in OCI are recognized in the income statement in the same period as any 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 Ternium derivative financial instruments (asset or liability) continues to be reflected in the statement of financial position.

4. ACCOUNTING POLICIES (continued)

For transactions designated and qualifying for hedge accounting, Ternium documents the relationship between hedging instruments and hedging items, as well as its risk management objectives and strategy for undertaking various hedge transactions. At December 31, 2019 and 2018, the effective portion of designated cash flow hedges (net of taxes) amounted to USD (0.1) million and USD 0.5 million, respectively, and were included under "changes in the fair value of derivatives classified as cash flow hedges" line item in the statement of comprehensive income (see Note 27 (a)).

More information about accounting for derivative financial instruments and hedging activities is included in Note 30 "Financial risk management".

(z) Treasury shares

Acquisitions of treasury shares are recorded at acquisition cost, deducted from equity until disposal. The gains and losses on disposal of treasury shares are recognized under "Reserves" in the consolidated statement of financial position.

(aa) Cash flow

The consolidated statements of cash flows have been prepared using the indirect method and contain the use of the following expressions and their respective meanings:

- a) Operating activities: activities that constitute ordinary Group revenues, as well as other activities that cannot be qualified as investing or financing.
- b) Investing activities: acquisition, sale or disposal by other means of assets in the long-term and other investments not included in cash and cash equivalents.
- c) Financing activities: activities that generate changes in the size and composition of net equity and liabilities that do not form part of operating activities.

(bb) Critical Accounting Estimates

The preparation of financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and the related disclosure of contingent assets and liabilities. Estimates and judgments are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Management makes estimates and assumptions concerning the future. Actual results may differ significantly from these estimates under different assumptions or conditions.

The principal estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are addressed below.

(1) Goodwill impairment test

Assessment of the recoverability of the carrying value of goodwill requires significant judgment. Management evaluates goodwill allocated to the operating units for impairment on an annual basis or whenever there is an impairment indicator.

4. ACCOUNTING POLICIES (continued)

Goodwill is tested at the level of the CGUs. Impairment testing of the CGUs is carried out and the value in use determined in accordance with the accounting policy stated in Note 4(f). The discount rates used for these tests are based on Ternium's weighted average cost of capital adjusted for specific country and currency risks associated with the cash flow projections. The discount rate used at December 31, 2019 was 9.80% and no impairment charge resulted from the impairment test performed. See notes 4(f) and 4(e)(4).

(2) Income taxes

Management calculates current and deferred income taxes according to the tax laws applicable to each subsidiary in the countries in which such subsidiaries operate. However, due to uncertain tax positions, certain adjustments necessary to determine the income tax provision are finalized only after the balance sheet is issued. In cases in which the final tax outcome is different from the amounts that were initially recorded, such differences will impact the income tax and deferred tax provisions in the period in which such determination is made.

Also, when assessing the recoverability of tax assets, management considers the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies.

(3) Loss contingencies

Ternium is subject to various claims, lawsuits and other legal proceedings that arise in the ordinary course of business, including customer claims in which a third party is seeking reimbursement or indemnity. The Company's liability with respect to such claims, uncertain tax positions, lawsuits and other legal proceedings cannot be estimated with certainty. Periodically, management reviews the status of each significant matter and assesses potential financial exposure. If the potential loss from the claim or proceeding is considered probable and the amount can be reasonably estimated, a liability is recorded. Management estimates the amount of such liability based on the information available and the assumptions and methods it has concluded are appropriate, in accordance with the provisions of IFRS. Accruals for such contingencies reflect a reasonable estimate of the losses to be incurred based on information available, including the relevant litigation or settlement strategy, as of the date of preparation of these financial statements. As additional information becomes available, management will reassess its evaluation of the pending claims, lawsuits and other proceedings and revise its estimates. The loss contingencies provision amounts to USD 613.4 million and USD 643.9 million as of December 31, 2019 and 2018, respectively (see note 3).

(4) Allowance for obsolescence of supplies and spare parts and slow-moving inventory

Management assesses the recoverability of its inventories considering their selling prices or whether they are damaged or have become wholly or partly obsolete.

Net realizable value is the estimated selling price in the ordinary course of business, less the costs of completion and selling expenses.

The Company establishes an allowance for obsolete or slow-moving inventory in connection with finished goods and goods in process. The allowance for slow-moving inventory is recognized for finished goods and goods in process based on management's analysis of their aging. In connection with supplies and spare parts, the calculation is based on management's analysis of their aging, the capacity of such materials to be used based on their levels of preservation and maintenance, and their potential obsolescence due to technological change.

4. ACCOUNTING POLICIES (continued)

As of December 31, 2019 and 2018, the Company recorded no allowance for net realizable value and USD 62.2 million and USD 55.5 million, respectively, as allowance for obsolescence.

(5) *Useful Lives and Impairment of Property, Plant and Equipment and Other Long-lived Assets*

In determining useful lives, management considered, among others, the following factors: age, operating condition and level of usage and maintenance. Management conducted visual inspections for the purpose of (i) determining whether the current conditions of such assets are consistent with normal conditions of assets of similar age; (ii) confirming that the operating conditions and levels of usage of such assets are adequate and consistent with their design; (iii) establishing obsolescence levels and (iv) estimating life expectancy, all of which were used in determining useful lives. Management believes, however, that it is possible that the periods of economic utilization of property, plant and equipment may be different than the useful lives so determined. Furthermore, management believes that this accounting policy involves a critical accounting estimate because it is subject to change from period to period as a result of variations in economic conditions and business performance.

When assessing whether an impairment indicator may exist, the Company evaluates both internal and external sources of information, such as the following:

- whether significant changes with an adverse effect on the entity have taken place during the period, or will take place in the near future, in the technological, market, economic or legal environment in which the entity operates or in the market to which an asset is dedicated;
- whether market interest rates or other market rates of return on investments have increased during the period, and those increases are likely to affect the discount rate used in calculating an asset's value in use and decrease the asset's recoverable amount materially;
- whether the carrying amount of the net assets of the entity is more than its market capitalization;
- whether evidence is available of obsolescence or physical damage of an asset.
- whether significant changes with an adverse effect on the entity have taken place during the period, or are expected to take place in the near future, in the extent to which, or manner in which, an asset is used or is expected to be used. These changes include the asset becoming idle, plans to discontinue or restructure the operation to which an asset belongs, plans to dispose of an asset before the previously expected date, and reassessing the useful life of an asset as finite rather than indefinite; and
- whether evidence is available from internal reporting that indicates that the economic performance of an asset is, or will be, worse than expected.

Considering the economic situation in Argentina, the Company tested the recoverability of its investment in Ternium Argentina as of December 31, 2019, resulting in no impairment charges to be recognized.

Considering that no impairment indicators were identified in the rest of subsidiaries as of December 31, 2019 and 2018, the Company additionally tested the value of the goodwill for impairment, resulting in no impairment charges to be recognized.

4. ACCOUNTING POLICIES (continued)*(6) Mining reserve estimates*

Reserves are estimates of the amount of product that can be economically and legally extracted from the Company's mining concessions. In order to estimate reserves, a range of geological, technical and economic factors is required to be considered. Estimating the quantity and/or grade of reserves requires complex and difficult geological judgments to interpret the data. Because the economic assumptions used to estimate reserves change from period to period, and because additional geological data is generated during the course of operations, estimates of reserves may change from period to period.

Changes in reported reserves may affect the Company's financial results and financial position, including the following:

- Asset carrying amounts may be affected due to changes in estimated future cash flows.
- Depreciation and amortization charges may change where such charges are determined by the units of production basis, or where the useful economic lives of assets change.
- Stripping costs recognized in Mining assets or charged to results may change due to changes in stripping ratios or the units of production basis of depreciation.
- Asset retirement obligations may change where changes in estimated reserves affect expectations about the timing or cost of these activities.

(7) Post-employment obligation estimates

The Company estimates at each year-end the provision necessary to meet its post-employment obligations in accordance with the advice from independent actuaries. The calculation of post-employment and other employee obligations requires the application of various assumptions. The main assumptions for post-employment and other employee obligations include discount rates, compensation growth rates, pension growth rates and life expectancy. Changes in the assumptions could give rise to adjustments in the results and liabilities recorded and might have an impact on the post-employment and other employee obligations recognized in the future.

(8) Business combinations

The recognition of business combinations requires the excess of the purchase price of acquisitions over the net book value of assets acquired to be allocated to the assets and liabilities of the acquired entity. The Company makes judgments and estimates in relation to the fair value allocation of the purchase price. If any unallocated portion is positive, it is recognized as goodwill, and if negative, it is recognized in the income statement. See further information in note 3.

(9) Valuation of lease liabilities and right-of-use assets

The application of IFRS 16 requires the Company to make judgments that affect the recognition and valuation of the lease liabilities and the right-of-use assets, including the determination of the contracts within the scope of the Standard, the contract term and the interest rate used for the discount of future cash flows.

4. ACCOUNTING POLICIES (continued)

The lease term determined by the Company generally comprises non-cancellable period of leases contracts, periods covered by an option to extend the lease if the Company is reasonably certain to exercise that option and periods covered by an option to terminate the lease if the Company is reasonably certain not to exercise that option. The same term is applied as economic useful life of right-of-use assets.

The present value of the lease payments is determined using the discount rate representing a risk-free interest rate, adjusted by a spread related to the credit quality of the Company in each location and currency rate in connection with each lease contract.

(cc) Application of IAS 29 in financial reporting of Argentine subsidiaries and associates

IAS 29 “Financial Reporting in Hyperinflationary Economies” requires that the financial statements of entities whose functional currency is that of a hyperinflationary economy to be adjusted for the effects of changes in a suitable general price index and to be expressed in terms of the current unit of measurement at the closing date of the reporting period. Accordingly, the inflation produced from the date of acquisition or from the revaluation date, as applicable, must be computed in the non-monetary items.

In order to conclude on whether an economy is categorized as hyperinflationary under the terms of IAS 29, the Standard details a series of factors to be considered, including the existence of a cumulative inflation rate in three years that approximates or exceeds 100%.

Considering that the downward trend in inflation in Argentina observed in the previous year has reversed and observing a significant increase in inflation during 2018, which exceeded the 100% three-year cumulative inflation rate, and that the rest of the indicators do not contradict the conclusion that Argentina should be considered a hyperinflationary economy for accounting purposes, the Company considered that there was sufficient evidence to conclude that Argentina is a hyperinflationary economy under the terms of IAS 29 as from July 1, 2018, and, accordingly, applied IAS 29 as from that date in the financial reporting of its subsidiaries and associates with the Argentine peso as functional currency.

According to this principle, the financial statements of an entity that reports in the currency of a hyperinflationary economy should be stated in terms of the measuring unit current on the date of the financial statements. All statement of financial position amounts that are not stated in terms of the measuring unit current on the date of the financial statements must be restated by applying a general price index. All income statement components must be stated in terms of the measuring unit current on the date of the financial statements, applying the change in the general price index that occurred since the date when revenues and expenses were originally recognized in the financial statements.

The inflation adjustment on the initial balances was calculated by means of conversion factor derived from the Argentine price indexes published by the National Institute of Statistics (“INDEC”). The price index for the year period ended December 31, 2019, was 1.54.

4. ACCOUNTING POLICIES (continued)

The main procedures for the above-mentioned adjustment are as follows:

- Monetary assets and liabilities which are carried at amounts current at the balance sheet date are not restated because they are already expressed in terms of the monetary unit current at the balance sheet date.
- Non-monetary assets and liabilities which are not carried at amounts current at the balance sheet date, and components of shareholders' equity are adjusted by applying the relevant conversion factors.
- All items in the income statement are restated by applying the relevant conversion factors.
- The effect of inflation on the Company's net monetary position is included in the income statement, in Other financial income (expenses), net, under the caption "Inflation adjustment results".
- The ongoing application of the re-translation of comparative amounts to closing exchanges rates under IAS 21 and the hyperinflation adjustments required by IAS 29 will lead to a difference in addition to the difference arising on the adoption of hyperinflation accounting.

The comparative figures in these consolidated financial statements presented in a stable currency are not adjusted for subsequent changes in the price level or exchange rates. This resulted in an initial difference, arising on the adoption of hyperinflation accounting, between the closing equity of the previous year and the opening equity of the current year. The Company recognized this initial difference directly in equity.

5. SEGMENT INFORMATION

REPORTABLE OPERATING SEGMENTS

The Company is organized in two reportable segments: Steel and Mining.

The Steel segment includes the sales of steel products, which comprises slabs, hot rolled coils and sheets, cold rolled coils and sheets, tin plate, welded pipes, hot dipped galvanized and electro-galvanized sheets, pre-painted sheets, billets (steel in its basic, semi-finished state), wire rod and bars and other tailor-made products to serve its customers' requirements. It also includes the sales of energy.

The Steel segment comprises four operating segments: Mexico, Southern Region, Brazil and Other markets. These four segments have been aggregated considering the economic characteristics and financial effects of each business activity in which the entity engages; the related economic environment in which it operates; the type or class of customer for the products; the nature of the products; and the production processes. The Mexico operating segment comprises the Company's businesses in Mexico. The Southern region operating segment manages the businesses in Argentina, Paraguay, Chile, Bolivia and Uruguay. The Brazil operating segment includes the business generated in Brazil. The Other markets operating segment includes businesses mainly in United States, Colombia, Guatemala, El Salvador, Honduras, Costa Rica, and Nicaragua.

The Mining segment includes the sales of mining products, mainly iron ore and pellets, and comprises the mining activities of Las Encinas, an iron ore mining company in which Ternium holds a 100% equity interest and the 50% of the operations and results performed by Peña Colorada, another iron ore mining company in which Ternium maintains that same percentage over its equity interest. Both mining operations are located in Mexico. For Peña Colorada, the Company recognizes its assets, liabilities, revenue and expenses in relation to its interest in the joint operation.

Ternium'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 is at full cost, including absorption of production overheads and depreciation.
- The use of costs based on previously internally defined cost estimates, while, under IFRS, costs are calculated at historical cost (with the FIFO method).
- Other timing and non-significant differences.

Most information on segment assets is not disclosed as it is not reviewed by the CEO.

5. SEGMENT INFORMATION (continued)

	Year ended December 31, 2019			
	Steel	Mining	Inter-segment eliminations	Total
IFRS				
Net sales	10,186,171	364,058	(357,411)	10,192,818
Cost of sales	<u>(8,552,493)</u>	<u>(259,535)</u>	<u>359,588</u>	<u>(8,452,440)</u>
Gross profit	<u>1,633,679</u>	<u>104,523</u>	<u>2,177</u>	<u>1,740,378</u>
Selling, general and administrative expenses	(885,146)	(12,330)	—	(897,475)
Other operating income, net	<u>21,931</u>	<u>(268)</u>	<u>—</u>	<u>21,663</u>
Operating income - IFRS	<u>770,466</u>	<u>91,924</u>	<u>2,177</u>	<u>864,566</u>
Management view				
Net sales	10,230,650	417,619	(410,972)	10,237,297
Operating income	841,169	146,636	2,177	989,982
Reconciliation items:				
Differences in Cost of sales				99,315
Effect of inflation adjustment (Note 4 (cc))				(224,731)
Operating income - IFRS				<u>864,566</u>
Financial income (expense), net				(98,969)
Equity in earnings (losses) of non-consolidated companies				<u>60,967</u>
Income before income tax expense - IFRS				<u>826,564</u>
Depreciation and amortization - IFRS	<u>(612,744)</u>	<u>(48,368)</u>	<u>—</u>	<u>(661,112)</u>
	Year ended December 31, 2018			
	Steel	Mining	Inter-segment eliminations	Total
IFRS				
Net sales	11,453,420	282,000	(280,613)	11,454,807
Cost of sales	<u>(8,524,890)</u>	<u>(239,893)</u>	<u>281,455</u>	<u>(8,483,328)</u>
Gross profit	<u>2,928,530</u>	<u>42,107</u>	<u>842</u>	<u>2,971,479</u>
Selling, general and administrative expenses	(860,881)	(15,883)	—	(876,764)
Other operating income, net	<u>12,950</u>	<u>706</u>	<u>—</u>	<u>13,656</u>
Operating income - IFRS	<u>2,080,599</u>	<u>26,930</u>	<u>842</u>	<u>2,108,371</u>
Management view				
Net sales	11,723,883	333,892	(332,505)	11,725,270
Operating income	1,768,115	91,418	(6,213)	1,853,319
Reconciliation items:				
Differences in Cost of sales				541,492
Effect of inflation adjustment (Note 4 (cc))				<u>(286,440)</u>
Operating income - IFRS				<u>2,108,371</u>
Financial income (expense), net				(179,576)
Equity in earnings (losses) of non-consolidated companies				<u>102,772</u>
Income before income tax expense - IFRS				<u>2,031,567</u>
Depreciation and amortization - IFRS	<u>(537,885)</u>	<u>(51,415)</u>	<u>—</u>	<u>(589,299)</u>

5. SEGMENT INFORMATION (continued)

	Year ended December 31, 2017			
	Steel	Mining	Inter-segment eliminations	Total
IFRS				
Net sales	9,700,260	271,477	(271,441)	9,700,296
Cost of sales	(7,465,751)	(212,860)	275,586	(7,403,025)
Gross profit	2,234,509	58,617	4,145	2,297,271
Selling, general and administrative expenses	(811,487)	(12,760)	—	(824,247)
Other operating income, net	(17,011)	771	—	(16,240)
Operating income - IFRS	1,406,011	46,628	4,145	1,456,784
Management view				
Net sales	9,700,260	287,152	(287,116)	9,700,296
Operating income	1,065,605	66,694	(1,291)	1,131,008
Reconciliation items:				
Differences in Cost of sales				325,776
Operating income - IFRS				1,456,784
Financial income (expense), net				(165,090)
Equity in earnings (losses) of non-consolidated companies				68,115
Income before income tax expense - IFRS				1,359,809
Depreciation and amortization - IFRS	(424,529)	(49,770)	—	(474,299)

GEOGRAPHICAL INFORMATION

The Company has revenues attributable to the Company's country of incorporation (Luxembourg) related to a contract acquired as a part of the business combination disclosed in note 3.

For purposes of reporting geographical information, net sales are allocated based on the customer's location. Allocation of depreciation and amortization is based on the geographical location of the underlying assets.

	Year ended December 31, 2019			
	Mexico	Southern region	Other markets (2)	Total
Net sales	5,477,690	1,704,132	3,010,996	10,192,818
Non-current assets (1)	4,584,802	1,008,860	1,889,757	7,483,419
	Year ended December 31, 2018			
	Mexico	Southern region	Other markets (2)	Total
Net sales	6,345,137	1,941,168	3,168,502	11,454,807
Non-current assets (1)	4,093,288	1,071,705	1,665,140	6,830,133
	Year ended December 31, 2017			
	Mexico	Southern region	Other markets (2)	Total
Net sales	5,629,267	2,316,444	1,754,585	9,700,296
Non-current assets (1)	4,042,914	643,411	1,756,007	6,442,332

(1) Includes Property, plant and equipment and Intangible assets.

(2) Includes the assets related to the business acquisition disclosed in note 3.

5. SEGMENT INFORMATION (continued)**REVENUES BY PRODUCT**

	Year ended December 31,		
	2019	2018	2017
Semi-finished (1)	51,496	103,099	123,752
Slabs	1,753,090	1,818,235	715,513
Hot rolled (2)	3,275,941	3,961,144	3,366,697
Cold rolled	1,165,406	1,264,940	1,321,663
Coated (3)	3,263,463	3,506,040	3,391,328
Roll-formed and tubular (4)	380,688	437,514	472,253
Other products (5)	302,734	363,835	309,090
TOTAL SALES	10,192,818	11,454,807	9,700,296

(1) Semi-finished includes billets and round bars.

(2) Hot rolled includes hot rolled flat products, merchant bars, reinforcing bars, stirrups and rods.

(3) Coated includes tin plate and galvanized products.

(4) Roll-formed and tubular includes tubes, beams, insulated panels, roofing and cladding, roof tiles, steel decks and pre-engineered metal building systems.

(5) Other products include mainly sales of energy and pig iron.

6. COST OF SALES

	Year ended December 31,		
	2019	2018	2017
Inventories at the beginning of the year	2,689,829	2,550,930	1,647,869
Acquisition of business (Note 3)	—	—	400,047
Effect of initial inflation adjustment (Note 4 (cc))	—	191,708	—
Translation differences	(21,919)	(413,436)	(97,148)
Plus: Charges for the year			
Raw materials and consumables used and other movements	6,165,654	6,961,704	6,337,283
Services and fees	151,373	158,551	110,949
Labor cost	611,615	699,447	673,821
Depreciation of property, plant and equipment	508,934	456,522	348,415
Amortization of intangible assets	17,805	25,374	35,275
Maintenance expenses	467,090	519,625	480,496
Office expenses	8,513	8,586	7,350
Insurance	9,674	8,769	7,968
Charge of obsolescence allowance	8,413	17,322	(4,028)
Recovery from sales of scrap and by-products	(23,793)	(27,744)	(25,973)
Others	17,550	15,799	31,631
Less: Inventories at the end of the year	(2,158,298)	(2,689,829)	(2,550,930)
Cost of Sales	8,452,440	8,483,328	7,403,025

7. SELLING, GENERAL AND ADMINISTRATIVE EXPENSES	Year ended December 31,		
	2019	2018	2017
Services and fees (1)	79,283	76,066	86,990
Labor cost	215,418	241,552	229,529
Depreciation of property, plant and equipment	16,034	13,561	12,345
Amortization of intangible assets	118,339	93,842	78,264
Maintenance and expenses	4,894	5,096	5,038
Taxes	104,014	95,072	98,786
Office expenses	35,956	35,663	35,922
Freight and transportation	307,958	300,676	259,898
(Decrease) Increase of allowance for doubtful accounts	(293)	1,629	685
Others	15,872	13,607	16,790
Selling, general and administrative expenses	897,475	876,764	824,247

(1) For the year ended December 31, 2019, it includes fees accrued for professional services rendered by PwC to Ternium S.A. and its subsidiaries that amounted to USD 3,804, including USD 3,485 for audit services, USD 54 for audit-related services, USD 190 for tax services and USD 75 for all other services.

For the year ended December 31, 2018, it includes fees accrued for professional services rendered by PwC to Ternium S.A. and its subsidiaries that amounted to USD 4,704, including USD 3,937 for audit services, USD 61 for audit-related services, USD 281 for tax services and USD 425 for all other services.

For the year ended December 31, 2017, it includes fees accrued for professional services rendered by PwC to Ternium S.A. and its subsidiaries that amounted to USD 3,501, including USD 2,863 for audit services, USD 91 for audit-related services, USD 229 for tax services and USD 318 for all other services.

8. LABOR COSTS (Included Cost of sales and Selling, General and Administrative expenses)

	Year ended December 31,		
	2019	2018	2017
Wages, salaries and social security costs	759,678	884,536	849,354
Termination benefits	28,269	26,601	25,783
Post-employment benefits (Note 21 (i))	39,086	29,862	28,213
Labor costs	827,033	940,999	903,350

As of December 31, 2019, 2018 and 2017, the number of employees was 19,863, 20,660 and 21,335, respectively.

9. OTHER OPERATING INCOME (EXPENSES), NET

	Year ended December 31,		
	2019	2018	2017
Results of sundry assets	258	1,895	1,190
Provision for legal claims and other matters (Note 19 and 25 (ii))	1,997	7,625	—
Other operating income	19,408	4,136	—
Other operating income	21,663	13,656	1,190
Provision for legal claims and other matters (Note 19 and 25 (ii))	—	—	(2,783)
Other operating expense	—	—	(14,647)
Other operating expense	—	—	(17,430)
Other operating income (expenses), net	21,663	13,656	(16,240)

10. OTHER FINANCIAL INCOME (EXPENSES), NET

	Year ended December 31,		
	2019	2018	2017
Interest expense	(88,284)	(131,172)	(114,583)
Finance expense	(88,284)	(131,172)	(114,583)
Interest income	29,071	21,236	19,408
Finance income	29,071	21,236	19,408
Net foreign exchange (loss) gain	(136,897)	(177,645)	(65,479)
Inflation adjustment results (Note 4 (cc))	117,956	191,427	—
Change in fair value of financial assets	—	—	(1,057)
Derivative contract results	(10,831)	(99,259)	4,132
Others	(9,984)	15,837	(7,511)
Other financial income (expenses), net	(39,756)	(69,640)	(69,915)

11. INCOME TAX EXPENSE

Income tax expense for each of the years presented is as follows:

	Year ended December 31,		
	2019	2018	2017
Current tax			
Current tax	(256,460)	(588,773)	(450,384)
Effect of changes in tax law (1)	4,178	(28,596)	—
Deferred tax (Note 20)			
Deferred tax	38,785	232,485	106,047
Effect of changes in tax law (1)	16,979	—	7,455
Recovery of income tax (2)	—	15,449	—
Income tax expense	(196,519)	(369,435)	(336,882)

(1) For 2019, it includes mainly the application of the new tax law in Argentina that enables the tax inflation adjustment. The reduction of the tax rate in Argentina enacted in 2017 was modified in 2019, setting the corporate income tax rate to 30% for the year 2020 and to 25% from the year 2021 going forward. For 2018, it includes mainly the option exercised by the Company of the asset revaluation for tax purposes in Argentina, for which an amount of USD 28.6 million was included.

For 2017, it includes mainly the effects of the Argentine tax reform, which became effective starting January 1, 2018, including a reduction in the corporate income tax rate from 35% to 30% during the first two years (i.e., fiscal years starting on or after January 1, 2018 until December 31, 2019, inclusive) and to 25% going forward. Also, a one-time tax on an asset revaluation for tax purposes was approved.

It also includes the effects of the US tax reform, which among other provisions, reduced the US corporate tax rate from 35% to 21%, effective January 1, 2018. This required a revaluation of the deferred tax assets and liabilities and certain current tax payables to the newly enacted tax rates at the date of enactment. Consequently, the Company has recorded a net adjustment to deferred income tax benefit of USD 5.2 million for the year ended December 31, 2017.

(2) It includes the recovery of tax credits in Ternium Brasil Ltda.

Income tax expense for the years ended December 31, 2019, 2018 and 2017 differed from the amount computed by applying the statutory income tax rate in force in each country in which the company operates to pre-tax income as a result of the following:

	Year ended December 31,		
	2019	2018	2017
Income before income tax	826,564	2,031,567	1,359,809
Income tax expense at statutory tax rate	(247,592)	(604,493)	(387,666)
Non taxable income	71,101	102,870	16,232
Non deductible expenses	(476)	(16,201)	(24,070)
Effect of currency translation on tax base (1)	33,133	161,536	51,167
Increase of unrecognized tax losses carried-forward	(73,842)	—	—
Recovery of income tax	—	15,449	—
Effect of changes in tax law	21,157	(28,596)	7,455
Income tax expense	(196,519)	(369,435)	(336,882)

(1) Ternium 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, Ternium recognizes gains and losses on deferred income tax due to the effect of the change in the value on the tax basis in subsidiaries, which have a functional currency different to their local currency, mainly Mexico.

Tax rates used to perform the reconciliation between tax expense (income) and accounting profit are those in effect at each relevant date or period in each applicable jurisdiction.

12. PROPERTY, PLANT AND EQUIPMENT, NET

(1) *Property, plant and equipment, net*

	Year ended December 31, 2019							
	Land	Buildings and improvements	Production equipment	Vehicles, furniture and fixtures	Work in progress	Spare parts	Right-of-use assets	Total
Values at the beginning of the year								
Cost	587,174	3,303,174	6,748,644	264,782	617,950	124,220	55,288	11,701,232
Accumulated depreciation	—	(1,520,976)	(4,126,060)	(217,394)	—	(13,275)	(5,918)	(5,883,623)
Net book value at January 1, 2019	587,174	1,782,198	2,622,584	47,388	617,950	110,945	49,370	5,817,609
Opening net book value	587,174	1,782,198	2,622,584	47,388	617,950	110,945	49,370	5,817,609
Effect of initial recognition under IFRS 16	—	—	—	—	—	—	280,493	280,493
Translation differences	(596)	(16,174)	(9,959)	(316)	(1,716)	(1,089)	(1,263)	(31,113)
Additions	7,531	9,367	2,063	4,821	923,599	38,476	40,864	1,026,721
Capitalized borrowing costs	—	—	—	—	16,085	—	—	16,085
Disposals / Consumptions	—	(750)	(117)	(1,204)	(2,988)	(21,489)	(18,901)	(45,449)
Transfers	326	154,544	264,122	14,843	(433,582)	(50)	—	203
Depreciation charge	—	(135,163)	(324,112)	(15,167)	—	(6,421)	(44,105)	(524,968)
Closing net book value	594,435	1,794,022	2,554,581	50,365	1,119,348	120,372	306,458	6,539,581
Values at the end of the year								
Cost	594,435	3,412,904	6,931,970	268,398	1,119,348	140,028	355,928	12,823,011
Accumulated depreciation	—	(1,618,882)	(4,377,389)	(218,033)	—	(19,656)	(49,470)	(6,283,430)
Net book value at December 31, 2019	594,435	1,794,022	2,554,581	50,365	1,119,348	120,372	306,458	6,539,581

	Year ended December 31, 2018							
	Land	Buildings and improvements	Production equipment	Vehicles, furniture and fixtures	Work in progress	Spare parts	Right-of-use assets	Total
Values at the beginning of the year								
Cost	562,042	2,096,959	4,927,478	151,883	456,021	113,188	—	8,307,571
Accumulated depreciation	—	(563,523)	(2,286,828)	(104,303)	—	(3,164)	—	(2,957,818)
Net book value at January 1, 2018	562,042	1,533,436	2,640,650	47,580	456,021	110,024	—	5,349,753
Opening net book value	562,042	1,533,436	2,640,650	47,580	456,021	110,024	—	5,349,753
Effect of initial inflation adjustment (Note 16)	19,646	434,683	282,577	5,698	25,568	19,858	—	788,030
Translation differences	(2,217)	(140,879)	(124,066)	(5,102)	(29,005)	(10,836)	—	(312,105)
Additions	1,888	4,083	3,647	3,569	446,002	23,880	—	483,069
Capitalized borrowing costs	—	—	—	—	7,368	—	—	7,368
Disposals / Consumptions	—	(93)	(2,186)	(1,236)	(3,563)	(24,470)	—	(31,548)
Transfers	5,815	80,197	187,284	11,726	(284,441)	2,543	—	3,124
Depreciation charge	—	(129,229)	(315,952)	(14,847)	—	(10,055)	—	(470,083)
Closing net book value	587,174	1,782,198	2,671,954	47,388	617,950	110,944	—	5,817,608
Values at the end of the year								
Cost	587,174	3,303,174	6,803,932	264,782	617,950	124,220	—	11,701,232
Accumulated depreciation	—	(1,520,976)	(4,131,978)	(217,394)	—	(13,275)	—	(5,883,623)
Net book value at December 31, 2018	587,174	1,782,198	2,671,954	47,388	617,950	110,945	—	5,817,609

12. PROPERTY, PLANT AND EQUIPMENT, NET (continued)

(2) Right-of-use assets

	Right-of-use assets			Total
	Buildings and improvements	Production equipment	Vehicles, furniture and fixtures	
Values at the beginning of the year				
Cost	—	55,288	—	55,288
Accumulated depreciation	—	(5,918)	—	(5,918)
Net book value at January 1, 2019	—	49,370	—	49,370
Opening net book value	—	49,370	—	49,370
Effect of initial recognition under IFRS 16	226,936	52,469	1,088	280,493
Translation differences	(115)	(1,148)	—	(1,263)
Net additions	18,931	21,933	—	40,864
Disposal/Derecognition	—	(18,094)	(807)	(18,901)
Depreciation charge	(28,895)	(14,929)	(281)	(44,105)
Closing net book value	216,857	89,601	—	306,458
Values at the end of the year				
Cost	245,752	110,176	—	355,928
Accumulated depreciation	(28,895)	(20,575)	—	(49,470)
Net book value at December 31, 2019	216,857	89,601	—	306,458

The cost related to variable-lease payments that do not depend on an index or rate amounted to USD 17.4 million for the year ended December 31, 2019. The expenses related to leases for which the Company applied the practical expedient described in paragraph 5 (a) of IFRS 16 (leases with contract term of less than 12 months) amounted to USD 3.4 million for the year ended December 31, 2019.

13. INTANGIBLE ASSETS, NET

	Year ended December 31, 2019					
	Information system projects	Mining assets	Exploration and evaluation costs	Customer relationships and other contractual rights	Trademarks	Goodwill
Values at the beginning of the year						
Cost	320,600	216,203	23,209	604,931	73,935	662,307
Accumulated depreciation	(248,839)	(139,915)	—	(425,972)	(73,935)	—
Net book value at January 1, 2019	71,761	76,288	23,209	178,959	—	662,307
Opening net book value	71,761	76,288	23,209	178,959	—	662,307
Translation differences	(463)	—	—	—	—	(463)
Additions	31,812	12,580	24,265	—	—	68,657
Transfers	(738)	27,954	(27,952)	—	—	(736)
Depreciation charge	(27,991)	(12,305)	—	(95,848)	—	(136,144)
Closing net book value	74,381	104,517	19,522	83,111	—	662,307
Values at the end of the year						
Cost	342,857	256,736	19,522	604,929	73,935	662,307
Accumulated depreciation	(268,476)	(152,219)	—	(521,818)	(73,935)	—
Net book value at December 31, 2019	74,381	104,517	19,522	83,111	—	662,307

	Year ended December 31, 2018					
	Information system projects	Mining assets	Exploration and evaluation costs	Customer relationships and other contractual rights	Trademarks	Goodwill
Values at the beginning of the year						
Cost	249,379	216,196	10,333	604,931	73,935	662,307
Accumulated depreciation	(188,470)	(121,859)	—	(340,238)	(73,935)	—
Net book value at January 1, 2018	60,909	94,337	10,333	264,693	—	662,307
Opening net book value	60,909	94,337	10,333	264,693	—	662,307
Effect of initial inflation adjustment (Note 4 (cc))	4,966	—	—	—	—	4,966
Translation differences	(6,674)	—	—	—	—	(6,674)
Additions	27,594	10,243	2,641	—	—	40,478
Disposals / Consumptions	(87)	—	—	—	—	(87)
Transfers	480	(10,237)	10,235	—	—	478
Depreciation charge	(15,427)	(18,055)	—	(85,734)	—	(119,216)
Closing net book value	71,761	76,288	23,209	178,959	0	662,307
Values at the end of the year						
Cost	320,600	216,203	23,209	604,931	73,935	662,307
Accumulated depreciation	(248,839)	(139,915)	0	(425,972)	(73,935)	0
Net book value at December 31, 2018	71,761	76,288	23,209	178,959	—	662,307

The Company has not registered any impairment charges in connection with Goodwill.

14. INVESTMENTS IN NON-CONSOLIDATED COMPANIES

	As of December 31,	
	2019	2018
At the beginning of the year	495,241	478,348
Equity in earnings of non-consolidated companies	60,967	102,772
Other comprehensive income	(39,449)	(77,042)
Dividends from non-consolidated companies	(3,111)	(8,837)
At the end of the year	513,648	495,241

The principal investments in non-consolidated companies, all of which are unlisted, except for Usiminas, are:

Company	Country of incorporation	Main activity	Voting rights at		Value at	
			December 31, 2019	December 31, 2018	December 31, 2019	December 31, 2018
Usinas Siderurgicas de Minas Gerais S.A. - USIMINAS	Brazil	Manufacturing and selling of steel products	34.39 %	34.39 %	486,643	480,084
Techgen S.A. de C.V.	Mexico	Provision of electric power	48.00 %	48.00 %	21,573	10,291
Other non-consolidated companies (1)					5,432	4,866
					513,648	495,241

(1) It includes the investment held in Finma S.A.I.F., Arhsa S.A., Techinst S.A., Recrotek S.R.L. de C.V. and Gas Industrial de Monterrey S.A. de C.V.

(a) Usinas Siderurgicas de Minas Gerais S.A. – USIMINAS

Ternium, through its subsidiaries Ternium Investments S.à r.l. (“Ternium Investments”), Ternium Argentina S.A. (“Ternium Argentina”) and Prosid Investments S.A. (“Prosid”), owns a total of 242.6 million ordinary shares and 8.5 million preferred shares, representing 20.4% of the issued and outstanding share capital of Usinas Siderurgicas de Minas Gerais S.A. - USIMINAS (“Usiminas”), the largest flat steel producer in Brazil for the energy, automotive and other industries.

Ternium Investments, Ternium Argentina and Prosid, together with Tenaris S.A.’s Brazilian subsidiary Confab Industrial S.A. (“TenarisConfab”), are part of Usiminas’ control group, comprising the so-called T/T Group. The other members of Usiminas’ control group are Previdência Usiminas (Usiminas’ employee pension fund) and the so-called NSSMC Group, comprising Nippon Steel & Sumitomo Metal Corporation Group (“NSSMC”), Nippon Usiminas Co., Ltd., Metal One Corporation and Mitsubishi Corporation do Brasil, S.A.

14. INVESTMENTS IN NON-CONSOLIDATED COMPANIES (continued)

As of December 31, 2019, the closing price of the Usiminas ordinary and preferred shares, as quoted on the BM&F Bovespa Stock Exchange, was BRL 9.87 (approximately USD 2.45; December 31, 2018: BRL 11.44 - USD 2.95) per ordinary share and BRL 9.51 (approximately USD 2.36; December 31, 2018: BRL 9.22 - USD 2.38) per preferred share, respectively. Accordingly, as of December 31, 2019, Ternium's ownership stake had a market value of approximately USD 614.1 million and a carrying value of USD 486.6 million.

The Company reviews periodically the recoverability of its investment in Usiminas. To determine the recoverable value, the Company estimates the value in use of the investment by calculating the present value of the expected cash flows or its fair value less costs of disposal.

As of December 31, 2019 and 2018, the value of the investment in Usiminas is comprised as follows:

	USIMINAS	
	As of December 31, 2019	As of December 31, 2018
Value of investment		
At the beginning of the year	480,084	466,299
Share of results (1)	48,502	97,733
Other comprehensive income	(38,896)	(75,195)
Dividends	(3,047)	(8,753)
At the end of the year	486,643	480,084

(1) It includes the adjustment of the values associated to the purchase price allocation.

The investment in Usiminas is based in the following calculation:

Usiminas' shareholders' equity	3,484,115
Percentage of interest of the Company over shareholders' equity	20.42 %
Interest of the Company over shareholders' equity	711,558
Purchase price allocation	73,264
Goodwill	257,879
Impairment	(556,058)
Total Investment in Usiminas	486,643

On February 14, 2020, Usiminas approved its annual accounts as of and for the year ended December 31, 2019.

14. INVESTMENTS IN NON-CONSOLIDATED COMPANIES (continued)

Summarized balance sheet (in million USD)	USIMINAS	
	As of December 31, 2019	As of December 31, 2018
Assets		
Non-current	4,336	4,697
Current	1,721	1,711
Other current investments	166	151
Cash and cash equivalents	311	286
Total Assets	6,534	6,845
Liabilities		
Non-current	718	544
Non-current borrowings	1,237	1,389
Current	687	740
Current borrowings	30	121
Total Liabilities	2,672	2,794
Non-controlling interest	378	369
Shareholders' equity	3,484	3,682

Summarized income statement (in million USD)	USIMINAS	
	As of December 31, 2019	As of December 31, 2018
Net sales	3,790	3,766
Cost of sales	(3,312)	(3,154)
Gross Profit	478	612
Selling, general and administrative expenses	(181)	(213)
Other operating income (loss), net	(100)	(153)
Operating income	197	246
Financial expenses, net	(132)	15
Equity in earnings of associated companies	46	70
Profit (Loss) before income tax	110	331
Income tax benefit	(16)	(110)
Net profit (loss) before non-controlling interest	94	221
Non-controlling interest in other subsidiaries	(41)	(28)
Net profit (loss) for the year	53	193

(a) Techgen S.A. de C.V.

Techgen is a Mexican 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 1st, 2016 and is fully operational. As of February 2017, Ternium, Tenaris, and Tecpetrol International S.A. (a wholly-owned subsidiary of San Faustin S.A., the controlling shareholder of both Ternium and Tenaris) completed their investments in Techgen. Techgen is currently owned 48% by Ternium, 30% by Tecpetrol and 22% by Tenaris. Ternium and Tenaris also agreed to enter into power supply and transportation agreements with Techgen, pursuant to which Ternium and Tenaris will contract 78% and 22%, respectively, of Techgen's power capacity of 900 megawatts. During 2017 and 2016, Techgen's shareholders made additional investments in Techgen, in the form of subordinated loans, which in the case of Ternium amounted to USD 127.7 million as of December 31, 2019, and which are due in June 2026. For commitments from Ternium in connection with Techgen, see note 25.

15. RECEIVABLES, NET – NON CURRENT AND CURRENT

	As of December 31,	
	2019	2018
Receivables with related parties (Notes 26 and 14 (b))	126,948	151,388
Employee advances and loans	1,572	2,425
Advances to suppliers for the purchase of property, plant and equipment	50,079	74,741
Advances to suppliers for the purchase of property, plant and equipment with related parties (Note 26)	7,827	7,493
Other receivables (note 3 (c)(iii))	254,446	264,683
Tax credits	150,721	146,711
Others	972	2,006
Receivables, net – Non-current	592,565	649,447

	As of December 31,	
	2019	2018
Value added tax	162,121	156,627
Tax credits	99,315	72,957
Employee advances and loans	3,667	4,701
Advances to suppliers	10,134	15,563
Advances to suppliers with related parties (Note 26)	16,126	2,854
Expenses paid in advance	9,781	15,862
Government tax refunds on exports	14,805	17,311
Receivables with related parties (Note 26)	3,696	9,536
Others	15,068	14,339
Receivables, net – Current	334,713	309,750

16. TRADE RECEIVABLES, NET - NON CURRENT AND CURRENT

	As of December 31,	
	2019	2018
Trade receivables	897	4,766
Trade receivables, net – Non-current	897	4,766
Current accounts	920,937	1,096,072
Trade receivables with related parties (Note 26)	41,696	46,744
Allowance for doubtful accounts (Note 19)	(12,961)	(14,346)
Trade receivables, net - Current	949,672	1,128,470

Trade receivables, net as of December 31, 2019			
	Total	Fully performing	Past due
Guaranteed	469,087	424,052	45,035
Not guaranteed	494,443	453,184	41,259
Trade receivables	963,530	877,236	86,294
Allowance for doubtful accounts (Note 19)	(12,961)	—	(12,961)
Trade receivables, net	950,569	877,236	73,333

Trade receivables, net as of December 31, 2018			
	Total	Fully performing	Past due
Guaranteed	564,015	502,822	61,193
Not guaranteed	583,567	532,214	51,353
Trade receivables	1,147,582	1,035,036	112,546
Allowance for doubtful accounts (Note 19)	(14,346)	—	(14,346)
Trade receivables, net	1,133,236	1,035,036	98,200

17. INVENTORIES, NET

	As of December 31,	
	2019	2018
Raw materials, materials and spare parts	731,901	850,182
Goods in process	975,553	1,187,071
Finished goods	396,401	464,154
Goods in transit	116,610	243,876
Obsolescence allowance (Note 19)	(62,167)	(55,454)
Inventories, net	2,158,298	2,689,829

18. CASH, CASH EQUIVALENTS AND OTHER INVESTMENTS – NON CURRENT AND CURRENT

	As of December 31,	
	2019	2018
Investments in debt instruments	3,001	6,943
Other investments	252	252
Other investments, net – Non-current	3,253	7,195

	As of December 31,	
	2019	2018
(i) Other investments		
Other deposits with maturity of more than three months	212,271	44,529
Other investments - Current	212,271	44,529
(ii) Cash and cash equivalents		
Cash and banks	115,575	87,863
Restricted cash	69	2,216
Short-term bank deposits	199,878	140,456
Other deposits with maturity of less than three months	204,443	20,006
Cash and cash equivalents	519,965	250,541

19. ALLOWANCES AND PROVISIONS - NON CURRENT AND CURRENT**Provisions and allowances - Non current**

	Liabilities	Liabilities
	Legal claims and other matters	Asset retirement obligation
Year ended December 31, 2019		
Values at the beginning of the year	643,950	24,554
Translation differences	(25,701)	1,077
Additions	2,689	925
Reversals	(4,417)	—
Uses	(3,170)	—
At December 31, 2019	613,351	26,556
Year ended December 31, 2018		
Values at the beginning of the year	768,517	27,829
Effect of initial inflation adjustment (note 4 (cc))	1,315	—
Translation differences	(113,571)	82
Additions	6,438	5,383
Reversals	(14,097)	(8,740)
Uses	(4,652)	—
At December 31, 2018	643,950	24,554

19. ALLOWANCES AND PROVISIONS – NON CURRENT AND CURRENT (continued)

Provisions and allowances - Current

	Deducted from assets		Liabilities
	Allowance for doubtful accounts	Obsolescence allowance	Asset retirement obligation
Year ended December 31, 2019			
Values at the beginning of the year	14,346	55,454	9,851
Translation differences	(285)	(458)	348
Additions	787	18,036	5,201
Reversals	(1,080)	(9,623)	—
Uses	(807)	(1,242)	(6,898)
At December 31, 2019	12,961	62,167	8,502
Year ended December 31, 2018			
Values at the beginning of the year	16,543	36,197	2,659
Effect of initial inflation adjustment (note 4 (cc))	202	6,530	—
Translation differences	(2,076)	(2,384)	(10)
Additions	2,732	22,822	7,659
Reversals	(1,103)	(5,500)	—
Uses	(1,952)	(2,211)	(457)
At December 31, 2018	14,346	55,454	9,851

20. DEFERRED INCOME TAX

Deferred income taxes are calculated in full on temporary differences under the liability method using the tax rate of the applicable country.

Changes in deferred income tax are as follows:

	As of December 31,	
	2019	2018
At the beginning of the year	(340,207)	(392,265)
Translation differences	25,166	(7,201)
Effect of changes in tax law (note 11)	16,979	—
Effect of initial inflation adjustment	—	(182,773)
Credits (Charges) directly to other comprehensive income	19,537	9,547
Deferred tax (charge) credit (note 11)	38,785	232,485
At the end of the year	(239,740)	(340,207)

20. DEFERRED INCOME TAX (continued)

The changes in deferred tax assets and liabilities (prior to offsetting the balances within the same tax jurisdiction) during the year are as follows:

Deferred tax liabilities	PP&E	Inventories	Intangible assets	Other	Total at December 31, 2019
At the beginning of the year	(522,455)	(41,316)	(15,926)	(1,088)	(580,785)
Translation differences	27,077	2,604	316	—	29,997
Income statement credit (charge)	58,002	(24,748)	(1,499)	(101)	31,654
At the end of the year	(437,376)	(63,460)	(17,109)	(1,189)	(519,134)

Deferred tax assets	Provisions	Trade receivables	Tax losses (1)	Other	Total at December 31, 2019
At the beginning of the year	72,947	11,265	33,382	122,984	240,578
Translation differences	(572)	(539)	—	(3,720)	(4,831)
Credits (Charges) directly to other comprehensive income	—	—	—	19,537	19,537
Effect of changes in tax law	—	—	—	16,979	16,979
Income statement credit (charge)	(26,721)	(526)	9,384	24,994	7,131
At the end of the year	45,654	10,200	42,766	180,774	279,394

(1) As of December 31, 2019, the recognized deferred tax assets on tax losses amount to USD 42,766 and there are net unrecognized deferred tax assets of USD 0.4 billion and unrecognized tax losses amounting to USD 1.4 billion. These two last effects are connected to the acquisition of Ternium Brasil (see note 3).

Deferred tax liabilities	PP&E	Inventories	Intangible assets	Other	Total at December 31, 2018
At the beginning of the year	(539,839)	(57,006)	(18,692)	(2,056)	(617,593)
Translation differences	9,726	527	497	(688)	10,062
Effect of initial inflation adjustment	(161,044)	(20,967)	(762)	—	(182,773)
Income statement credit (charge)	168,702	36,130	3,031	1,656	209,519
At the end of the year	(522,455)	(41,316)	(15,926)	(1,088)	(580,785)

Deferred tax assets	Provisions	Trade receivables	Tax losses (2)	Other	Total at December 31, 2018
At the beginning of the year	61,101	8,200	43,355	112,672	225,328
Translation differences	(6,036)	(1,089)	—	(10,137)	(17,263)
Charges directly to other comprehensive income	—	—	—	9,547	9,547
Income statement credit (charge)	17,882	4,154	(9,973)	10,903	22,966
At the end of the year	72,947	11,265	33,382	122,984	240,578

(2) As of December 31, 2018, the recognized deferred tax assets on tax losses amount to USD 33,383 and there are net unrecognized deferred tax assets of USD 0.4 billion and unrecognized tax losses amounting to USD 1.3 billion. These two last effects are connected to the acquisition of Ternium Brasil (see note 3).

Deferred tax assets and liabilities are offset when the entity a) has a legally enforceable right to set off the recognized amounts; and b) intends to settle the tax on a net basis or to realize the asset and settle the liability simultaneously.

20. DEFERRED INCOME TAX (continued)

The amounts shown in the statement of financial position (prior to offsetting the balances within the same tax jurisdiction) include the following:

	As of December 31,	
	2019	2018
Deferred tax assets to be recovered after more than 12 months	203,607	153,681
Deferred tax assets to be recovered within 12 months	75,787	86,897
Deferred tax liabilities to be settled after more than 12 months	(454,763)	(538,854)
Deferred tax liabilities to be settled within 12 months	(64,371)	(41,931)
	(239,740)	(340,207)

21. OTHER LIABILITIES-NON CURRENT AND CURRENT

	As of December 31,	
	2019	2018
(i) Other liabilities - Non current		
Post-employment benefits	405,935	312,293
Other employee benefits	44,496	38,891
Asset retirement obligation (note 19) (1)	26,556	24,554
Other	30,616	38,803
Other liabilities – Non-current	507,603	414,541

(1) The asset in connection with this liability is included in Property, plant and equipment.

Post-employment benefits

The amounts recognized in the consolidated statement of financial position are determined as follows:

	Post-employment benefits	
	As of December 31,	
	2019	2018
Present value of unfunded obligations	405,935	312,293
Liability in the statement of financial position	405,935	312,293

The amounts recognized in the consolidated income statement are as follows:

	Post-employment benefits	
	Year ended December 31,	
	2019	2018
Current service cost	11,293	7,284
Interest cost	27,310	22,578
Total included in labor costs	39,086	29,862

21. OTHER LIABILITIES-NON CURRENT AND CURRENT (continued)

Changes in the liability recognized in the consolidated statement of financial position are as follows:

	Post-employment benefits	
	As of December 31,	
	2019	2018
At the beginning of the year	312,293	275,950
Transfers, new participants and funding of the plan	(6)	(3,177)
Total expense	39,086	29,862
Remeasurements	67,601	38,263
Effect of changes in demographic assumptions	674	22,575
Effect of changes in financial assumptions	55,059	2,272
Effect of experience adjustments	11,868	13,416
Translation differences	12,228	(283)
Contributions paid	(25,267)	(28,322)
At the end of the year	405,935	312,293

The principal actuarial assumptions used were as follows:

Mexico	Year ended December 31,	
	2019	2018
Discount rate	7.25%	8.75%
Compensation growth rate	6.00% - 7.00%	6.00% - 7.00%

Argentina	Year ended December 31,	
	2019	2018
Discount rate	6.00% - 7.00%	6.00% - 7.00%
Compensation growth rate	2.00% - 3.00%	2.00% - 3.00%

The sensitivity of the defined benefit obligation to changes in the weighted principal assumptions is as follows:

	Impact on defined benefit obligation		
	Change in assumption	Increase in assumption	Decrease in assumption
Discount rate	1.00 %	-9.4 %	11.7 %
Compensation growth rate	1.00 %	1.8 %	-4.3 %
Pension growth rate	1.00 %	-1.3 %	1.6 %
Life expectancy	1 year	-1.7 %	1.7 %

The estimated future payments for the next five years will be between 25.1 million and 32.6 million per year.

21. OTHER LIABILITIES – NON CURRENT AND CURRENT (continued)

	As of December 31,	
	2019	2018
(ii) Other liabilities - Current		
Payroll and social security payable	107,999	177,407
VAT liabilities	58,799	79,060
Other tax liabilities	38,153	36,203
Termination benefits	493	1,501
Related Parties (Note 26)	2,074	3,341
Asset retirement obligation (Note 19)	8,502	9,851
Others	24,914	43,853
Other liabilities – Current	240,934	351,216

22. DERIVATIVE FINANCIAL INSTRUMENTS**Net fair values of derivative financial instruments**

The net fair values of derivative financial instruments at December 31, 2019 and 2018 were as follows:

	As of December 31,	
	2019	2018
Contracts with positive fair value		
Interest rate swap contracts	—	818
Foreign exchange contracts	1,196	770
	1,196	1,588
Contracts with negative fair value		
Interest rate swap contracts	(17)	—
Foreign exchange contracts	(3,007)	(12,981)
	(3,024)	(12,981)

Derivative financial instruments breakdown is as follows:

(a) Interest rate contracts

Fluctuations in market interest rates create a degree of risk by affecting the amount of the Company's interest payments and the value of its floating-rate debt. As of December 31, 2019, most of the Company's long-term borrowings were at variable rates.

During 2012 and 2013, Tenigal entered into several forward starting interest rate swap agreements in order to fix the interest rate to be paid over an aggregate amount of USD 100 million, at an average rate of 1.92%. These agreements are effective from July 2014, will due on July 2022 and have been accounted for as cash flow hedges. As of December 31, 2019, the after-tax cash flow hedge reserve related to these agreements amounted to USD (0.1) million.

22. DERIVATIVE FINANCIAL INSTRUMENTS (continued)

Changes in fair value of derivative instruments designated as cash flow hedges for each of the years presented are included below:

	Cash flow hedges		
	Gross amount	Income tax	Total
At December 31, 2017	810	(129)	681
(Decrease) / Increase	(14)	(108)	(122)
Reclassification to income statement	(117)	35	(82)
At December 31, 2018	679	(202)	477
(Decrease) / Increase	(475)	142	(333)
Reclassification to income statement	(276)	83	(193)
At December 31, 2019	(72)	23	(49)

The gross amount of the pre-tax reserve recorded in other comprehensive income at December 31, 2019 (amounting to a loss of USD 0.1 million) is expected to be reclassified to the income statements in accordance to the payments of interests in connection with the borrowings hedged by these derivative contracts, during 2020 and up to the end of the life of the borrowing in 2022.

(b) Foreign exchange contracts

From time to time, Ternium's subsidiaries enter into derivative agreements to manage their exposure to currencies other than the USD, in accordance with the Company's policy for derivative instruments.

During 2019, Ternium Argentina entered into several non-deliverable forward agreements in order to manage the exchange rate exposure generated by Argentine peso-denominated financial assets and liabilities.

Furthermore, during 2019, 2018 and 2017, Ternium Colombia S.A.S. has entered into non-deliverable forward agreements to manage the exposure of certain actual and future trade receivables denominated in its local currency. As of December 31, 2019, the notional amount on these agreements amounted to USD 70.2 million.

During 2019 and 2018, Ternium Mexico entered into a several forward agreement in order to manage the exchange rate exposure generated by future payables in EUR related to the investment plan. As of December 31, 2019, the notional amount on these agreement amounted to USD 146.5 million.

During 2019 and 2018, Ternium Investments S.à r.l., entered into several forward agreements in order to manage the exchange rate exposure generated by the consolidated financial position in EUR, including future payables in EUR related to the investment plan of Ternium del Atlántico and future receivables in EUR related to sales of Ternium Internacional España, among others. As of December 31, 2019, the notional amount on these agreements amounted to USD 10.9 million.

22. DERIVATIVE FINANCIAL INSTRUMENTS (continued)

The net fair values of the exchange rate derivative contracts as of December 31, 2019 and December 31, 2018 were as follows:

Currencies	Contract	Notional amount	Fair value at December 31,	
			2019	2018
EUR/USD	ND Forward - Buy EUR	140.8 million EUR	1,196	(12,954)
COP/USD	ND Forward - Sell COP	241.9 billion COP	(3,007)	109
BRL/USD	ND Forward - Buy BRL	34.5 million BRL	—	(493)
EUR/USD	ND Forward - Sell EUR	1.9 million EUR	—	(27)
BRL/USD	ND Forward - Sell BRL	32.0 million BRL	—	1,154
			(1,811)	(12,211)

ARS: Argentine pesos; COP: Colombian pesos; EUR: Euros; USD: US dollars; BRL: Brazilian reais.

23. LEASES LIABILITIES

	Lease liabilities		
	Current	Non Current	Total
Values at the beginning of the year	8,030	65,798	73,828
Effect of initial recognition under IFRS 16	34,848	245,645	280,493
Translation differences	2,659	(7,139)	(4,480)
Net proceeds	1,474	24,545	26,019
Repayments	(38,569)	—	(38,569)
Interest accrued	16,755	—	16,755
Interest paid	(15,281)	—	(15,281)
Reclassifications	30,630	(30,630)	—
As of December 31, 2019	40,546	298,219	338,765

The weighted average lessee's incremental borrowing rate applied to the lease liabilities on January 1, 2019, was of 4.05%.

	As of December 31, 2019	As of December 31, 2018
Commitments in relation to finance leases are payable as follows:		
Within one year	55,670	8,328
Later than one year but not later than five years	197,956	33,312
Later than five years	204,101	71,482
Minimum lease payments	457,727	113,122
Future finance charges	(118,962)	(39,294)
Total Financial lease liabilities	338,765	73,828

The present value of finance lease liabilities is as follows:

Within one year	40,546	8,030
Later than one year but not later than five years	149,830	27,208
Later than five years	148,389	38,590
Total minimum lease payments	338,765	73,828

24. BORROWINGS

	As of December 31,	
	2019	2018
(i) Non-current		
Bank borrowings	1,639,604	1,648,124
Less: debt issue costs	(10,712)	(11,023)
	1,628,892	1,637,101
(ii) Current		
Bank borrowings	564,497	404,390
Less: debt issue costs	(4,715)	(4,534)
	559,782	399,856
Total Borrowings	2,188,674	2,036,957

The maturity of borrowings is as follows:

	Expected Maturity Date				
	2020	2021	2022 and thereafter	At December 31, (1)	
				2019	2018
Fixed Rate	165,623	—	—	165,623	289,883
Floating Rate	394,159	308,847	1,320,045	2,023,051	1,747,074
Total	559,782	308,847	1,320,045	2,188,674	2,036,957

(1) As most borrowings incorporate floating rates that approximate market rates and the contractual repricing occurs mostly every 1 month, the fair value of the borrowings approximates their carrying amount and it is not disclosed separately. Fixed rate borrowings are uncommitted short-term revolving loans and their fair value approximates to their carrying amount.

The weighted average interest rates - which incorporate instruments denominated mainly in US dollars which do not include the effect of derivative financial instruments nor the devaluation of these local currencies - at year-end were as follows:

	As of December 31,	
	2019	2018
Bank borrowings	2.94 %	3.65 %

The nominal average interest rates shown above were calculated using the rates set for each instrument in its corresponding currency and weighted using the dollar-equivalent outstanding principal amount of said instruments at December 31, 2019 and 2018, respectively.

24. BORROWINGS (continued)

Breakdown of borrowings by currency is as follows:

Currencies	Contract	As of December 31,	
		2019	2018
USD	Floating	1,977,617	1,747,074
USD	Fixed	148,712	262,873
ARS	Floating	10	—
MXN	Floating	14,789	—
COP	Floating	30,634	—
COP	Fixed	16,912	17,009
GTQ	Fixed	—	10,001
		2,188,674	2,036,957

USD: US dollars; ARS: Argentine pesos; COP: Colombian pesos; GTQ: Guatemalan quetzals; MXN: Mexican pesos.

Ternium's most significant borrowings as of December 31, 2019, were those incurred under Ternium México's syndicated loan facilities, in order to finance the construction of its hot rolling mill, hot-dip galvanizing and painting lines in Pesquería, under Tenigal's syndicated loan facility, in order to finance the construction of its hot-dipped galvanizing mill in Pesquería, Mexico, under Ternium Investments S.à r.l., in order to finance the acquisition of Ternium Brasil, and under Ternium Brasil's syndicated loan facility, in order to finance solely activities related to its exports of goods:

Date	Borrower	Type	In USD million		Maturity
			Original principal amount	Outstanding principal amount as of December 31, 2019	
Years 2012 and 2013	Tenigal	Syndicated loan	200	75	July 2022
September 2017	Ternium Investments S.à r.l.	Syndicated loan	1,500	400	September 2022
June 2018	Ternium Mexico	Syndicated loan	1,000	875	June 2023
August 2019	Ternium Brasil	Syndicated loan	500	500	August 2024

The main covenants on these loan agreements are limitations on liens and encumbrances, limitations on the sale of certain assets and compliance with financial ratios (i.e. leverage ratio). As of December 31, 2019, Ternium was in compliance with all of its covenants.

25. CONTINGENCIES, COMMITMENTS AND RESTRICTIONS ON THE DISTRIBUTION OF PROFITS

Ternium 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, Ternium is unable to make a reliable estimate of the expected financial effect that will result from ultimate resolution of the proceeding. In those cases, Ternium 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, Ternium 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 Ternium'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 are adequate based upon currently available information. However, if management's estimates prove incorrect, current reserves could be inadequate and Ternium could incur a charge to earnings which could have a material adverse effect on Ternium's results of operations, financial condition, net worth and cash flows.

For the contingencies related to Ternium Brasil, please refer to note 3.

*(i) Tax claims and other contingencies**(a) Companhia Siderúrgica Nacional (CSN) - Tender offer litigation*

In 2013, the Company was notified of a lawsuit filed in Brazil by Companhia Siderúrgica Nacional, or CSN, and various entities affiliated with CSN against Ternium Investments, its subsidiary Ternium Argentina, and TenarisConfab. The entities named in the CSN lawsuit had acquired a participation in Usiminas 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 BRL 28.8, 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; Ternium Investments and Ternium Argentina's respective shares in the offer would be 60.6% and 21.5%.

**25. CONTINGENCIES, COMMITMENTS AND RESTRICTIONS ON THE DISTRIBUTION OF PROFITS
(continued)**

On September 23, 2013, the first instance court dismissed the CSN lawsuit, and on February 8, 2017, the court of appeals of São Paulo 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, which was rejected on July 19, 2017. On August 18, 2017, CSN filed with the court of appeals an appeal seeking the review and reversal of the decision issued by the court of appeals by the Superior Court of Justice. On March 5, 2018, the court of appeals ruled that CSN's appeal did not meet the requirements for review by the Superior Court of Justice and rejected such appeal. On May 8, 2018, CSN appealed against such ruling and on January 22, 2019, the court of appeals rejected such appeal and ordered that the case be submitted to the Superior Court of Justice. On September 10, 2019, the Superior Court of Justice declared CSN's appeal admissible. The Superior Court of Justice will review the case and 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.

Ternium 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. Accordingly, no provision has been recorded in these Consolidated Financial Statements.

(b) Shareholder claims relating to the October 2014 acquisition of Usiminas shares

On April 14, 2015, the staff of the CVM determined that an acquisition of additional ordinary shares of Usiminas by Ternium Investments made in October 2014, triggered a requirement under applicable Brazilian laws and regulations for Usiminas' controlling shareholders to launch a tender offer to all non-controlling holders of Usiminas ordinary shares. The CVM staff's determination was made further to a request by NSSMC and its affiliates, who alleged that Ternium's 2014 acquisition had exceeded a threshold that triggers the tender offer requirement. In the CVM staff's view, the 2014 acquisition exceeded the applicable threshold by 5.2 million shares. On April 29, 2015, Ternium filed an appeal to be submitted to the CVM's Board of Commissioners. On May 5, 2015, the CVM staff confirmed that the appeal would be submitted to the Board of Commissioners and that the effects of the staff's decision would be stayed until such Board rules on the matter.

On June 15, 2015, upon an appeal filed by NSSMC, the CVM staff changed its earlier decision and stated that the obligation to launch a tender offer would fall exclusively on Ternium. Ternium's appeal has been submitted to the CVM's Board of Commissioners and it is currently expected that such Board will rule on the appeal in 2019. In addition, on April 18, 2018, Ternium filed a petition with the CVM's reporting Commissioner requesting that the applicable threshold for the tender offer requirement be recalculated taking into account the new ordinary shares issued by Usiminas in connection with its 2016 BRL 1 billion capital increase and that, in light of the replenishment of the threshold that would result from such recalculation, the CVM staff's 2015 determination be set aside. In the event the appeal is not successful, under applicable CVM rules Ternium may elect to sell to third parties the 5.2 million shares allegedly acquired in excess of the threshold, in which case no tender offer would be required.

**25. CONTINGENCIES, COMMITMENTS AND RESTRICTIONS ON THE DISTRIBUTION OF PROFITS
(continued)***(c) Potential Mexican income tax adjustment*

In March 2015, the Mexican tax authorities, as part of a tax audit to Ternium Mexico with respect to fiscal year 2008, challenged the deduction by Ternium Mexico's predecessor IMSA Acero of a tax loss arising from an intercompany sale of shares in December 2008. Although the tax authorities have not yet determined the amount of their claim, they have indicated in a preliminary report that they have observations that may result in an income tax adjustment currently estimated at approximately USD 59.7 million, including interest and fines. Additionally, in September 2018, the Mexican tax authority, as a result of a tax audit for the fiscal year 2011 to Ternium Mexico, as predecessor of APM, objected mainly the deduction of the tax loss remaining for the year 2008, for which the estimated income tax adjustment would be of approximately USD 27.3 million, including interest and fines.

Ternium Mexico requested an injunction from the Mexican courts against the audit observations for the year 2008 and the fiscal credit of the year 2011, and also filed its defense and supporting documents with the Mexican tax authorities. The Company, based on the advice of counsel, believes that an unfavorable outcome in connection with this uncertain tax position is not probable and, accordingly, no provision has been recorded in its financial statements.

(d) Putative Class action

Following the Company's November 27, 2018 announcement that its chairman Paolo Rocca had been included in an Argentine court investigation known as the Notebooks Case (a decision subsequently reversed by a higher court), a putative class action complaint was filed in the U.S. District Court for the Eastern District of New York. On January 31, 2019, the court appointed lead plaintiff and lead counsel. On June 17, 2019, the lead plaintiff filed an amended complaint purportedly on behalf of purchasers of Ternium securities from May 1, 2014 through November 27, 2018. The individual defendants named in the amended complaint are our chairman, our former CEO, our current CEO and our CFO. That complaint alleges that during the class period, the Company and the individual defendants inflated the price of Ternium's ADSs by failing to disclose that sale proceeds received by Ternium 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. Defendants' motions to dismiss are expected to be decided during 2020. 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.

**25. CONTINGENCIES, COMMITMENTS AND RESTRICTIONS ON THE DISTRIBUTION OF PROFITS
(continued)**

(ii) Commitments

The following are Ternium's main off-balance sheet commitments:

(a) Ternium Argentina signed agreements to cover 80% of its required iron ore, pellets and iron ore fines volumes until December 31, 2021, for an estimated total amount of USD 462.4 million. Although they do not set a minimum amount or a minimum commitment to purchase a fixed volume, under certain circumstances a penalty is established for the party that fails of:

- 7% in case the annual operated volume is between 70% and 75% of the total volume of purchases of the Company; such percentage is applied over the difference between the actual purchased volume and the 80% of the total volume of purchases.
- 15% in case the annual operated volume is lower than 70% of the total volume of purchases of the Company; such percentage is applied over the difference between the actual purchased volume and the 80% of the total volume of purchases.

(b) Ternium Argentina also signed various contracts for the provision of natural gas, including Tecpetrol, a related company of Ternium, assuming firm commitments for a total of USD 35.9 million payable until April 2021.

(c) Ternium Argentina signed an agreement with Air Liquide Argentina S.A. for the supply of oxygen, nitrogen and argon until 2021, for an aggregate amount of USD 15.8 million, which is due to terminate in 2032.

(d) On April 24, 2017, Ternium Mexico entered into a 25-year contract (effective as of December 1, 2016, through December 1, 2041) with Techgen, S.A. de C.V. for the supply of 699 MW (which represents 78% of Techgen's capacity) and covers most of Ternium Mexico's facilities electricity needs. 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), Ternium Mexico has the right to suspend or early terminate the contract if the rate payable under the agreement is higher than the rate charged by Comisión Federal de Electricidad ("CFE") or its successors. Ternium Mexico may instruct Techgen to sell to any affiliate of Ternium Mexico, to CFE, or to any other third party all or any part of unused contracted energy under the agreement and Ternium Mexico will benefit from the proceeds of such sale.

**25. CONTINGENCIES, COMMITMENTS AND RESTRICTIONS ON THE DISTRIBUTION OF PROFITS
(continued)**

(e) On December 20, 2000, Hylsa (Ternium Mexico's predecessor) entered into a 25-year contract with Iberdrola Energía Monterrey, S.A. de C.V. ("Iberdrola"), a Mexican subsidiary of Iberdrola Energía, S.A., for the supply of energy to four of Ternium Mexico's plants. On March 31, 2008, two of those plants were terminated by Iberdrola. The contracted electrical demand as of December 31, 2018, is 51.7 MW. Iberdrola currently supplies approximately 7% of Ternium Mexico's electricity needs under this contract. Although the contract was to be effective through 2027, on April 28, 2014, Ternium Mexico and Iberdrola entered into a new supply contract and terminated the previous one. In consideration of the termination of the previous contract, Iberdrola has granted Ternium Mexico a credit of USD 750 thousand per MW of the 111.2 MW originally contracted capacity, resulting over time in a total value of USD 83.4 million. In addition, Iberdrola agreed to recognize to Ternium México USD 15.0 million through discounted rates. The above-mentioned credit and discount ended in June 2019 and Ternium Mexico's rates under the contract are now market rates with a 2.5% discount; however Ternium Mexico is entitled to terminate the contract without penalty.

(f) Following the maturity of a previously existing railroad freight services agreement during 2013, in April 2014, Ternium México and Ferrocarril Mexicano, S. A. de C. V. ("Ferromex") entered into a new railroad freight services agreement pursuant to which Ferromex will transport Ternium Mexico's products through railroads operated by Ferromex for a term of five years through 2019. Subject to Ternium's board approval, both Ternium Mexico and Ferromex would be required to make (within a period of 36 months) certain investments to improve the loading and unloading of gondolas. The total investment commitment of Ternium México and Ferromex was already invested as of December 31, 2019. Under the agreement, Ternium Mexico has guaranteed to Ferromex its services for the minimum average transport load of 200,000 metric tons per month in any six-month period. In the event that the actual per-month average transport loads in any six-month period were lower than such guaranteed minimum, Ternium Mexico would be required to compensate Ferromex for the shortfall so that Ferromex receives a rate equivalent to a total transport load of 1,200,000 metric tons for such six-month period. However, any such compensation will not be payable if the lower transport loads were due to adverse market conditions, or to adverse operating conditions at Ternium Mexico's facilities.

(g) Ternium México issued a guarantee letter covering up to approximately USD 25.0 million of the obligations of Gas Industrial de Monterrey, S.A. de C.V. ("GIMSA"), under the natural gas trading agreement between GIMSA and BP Energía México ("BPEM"). The credit line granted by BPEM in connection with this natural gas trading agreement amounted to approximately USD 25.0 million. As of December 31, 2019, the outstanding amount under the natural gas trading agreement was USD 14.0 million, which is below the amount included in the guarantee letter issued by Ternium México.

**25. CONTINGENCIES, COMMITMENTS AND RESTRICTIONS ON THE DISTRIBUTION OF PROFITS
(continued)**

(h) On June, 2018, Ternium Mexico entered into a loan agreement with a syndicate of banks for a USD 1,000 million syndicated loan facility for the purpose of financing capital expenditures, the repayment or prepayment of existing debt, and other general corporate purposes. The loan has a one year availability period in which Ternium Mexico can disburse in one or several drawings. The Company entered the Facility on June 12, 2018, and the final maturity date is on June 12, 2023, being payable in eight consecutive and equal semi-annual installments commencing on December 13, 2019. The main financial covenant that the Facility requires to meet is the consolidated net senior leverage ratio to be not greater than 3.5 to 1.00. As of December 31, 2019, USD 1000 million were disbursed under the facility and the Company complied with the aforementioned financial covenant.

(i) Ternium Mexico issued a guarantee letter covering up to approximately USD 60.8 million of the obligations of Techgen, S.A. de C.V. ("Techgen"), under the Clean Energy Certificates trading agreement between Techgen and Enel Green Power ("ENEL"). The amount equals the remnant balance if Techgen decides to terminate the agreement prior to the expiration date (and decreases as time of the contract passes). The contract was signed in May 25, 2018 and terminates on June 30, 2041.

(j) Techgen is a party to gas transportation capacity agreements with Kinder Morgan Gas Natural de Mexico, S. de R.L. de C.V., Kinder Morgan Texas Pipeline LLC and Kinder Morgan Tejas Pipeline LLC for the whole transportation capacity starting on August 1, 2016 and ending during the second half of 2036. As of December 31, 2019, the outstanding value of this commitment was approximately USD 236 million. Ternium's exposure under the guarantee in connection with these agreements amounts to USD 115 million, corresponding to the 48% of the agreements' outstanding value as of December 31, 2019.

(k) Ternium issued two stand-by letters of credit covering 48% of the funding of a debt service reserve account under a syndicated loan agreement between Techgen and several banks led by Citigroup Global Markets Inc., Credit Agricole Corporate and Investment Bank, and Natixis, New York Branch acting as joint bookrunners. The loan agreement dated as of February 13, 2019, amounted to USD 640 million and the proceeds were used by Techgen to refinance in full all amounts owed under a previous syndicated loan between Techgen and several banks, which funds were used in the construction of the facility. As of December 31, 2019, the outstanding aggregated amount under the stand-by letters of credit was USD 44.6 million, as a result the amount guaranteed by Ternium was approximately USD 21.4 million.

(l) During 2006, CSA, the predecessor of Ternium Brasil, has entered into a 15-year contract denominated "Contrato de comercialização de energia elétrica no ambiente regulado - CCEAR por disponibilidade" to provide electric energy to 24 distributors starting on 2011. Under this contract, Ternium Brasil has to provide 200 MW average per year and the price is adjusted by the Brazilian inflation index. The penalty for not delivering the volume of energy of the contract is the difference between the spot price and the unit variable cost (calculated and published by the Agência Nacional de Energia Elétrica), calculated per hour.

**25. CONTINGENCIES, COMMITMENTS AND RESTRICTIONS ON THE DISTRIBUTION OF PROFITS
(continued)**

(m) Ternium Brasil signed an exclusivity agreement with Vale S.A. for the purchase of iron ore (pellets, sinter feed and lump ore), which is due to terminate in 2029. The total purchased volume, in accordance with the actual production capacity, is of approximately 8.0 million tons per year. Ternium Brasil has not the obligation to take or pay the mentioned volume and only should pay logistic costs in case of not purchasing the contracted volume.

(n) Ternium Brasil, for its activity of energy generation through gas and steam turbines, signed on March 2017 a contract with GE Global Parts and Products GMBH, General Electric International Inc. and Alstom Energia Térmica e Indústria Ltda. for the maintenance services of such turbines (including the supply of spare parts) for a period of 20 years. As of December 31, 2019, the outstanding amount of this commitment was USD 157.0 million.

(o) Ternium Brasil also signed on November 2007 a contract with Primetals Technologies Brazil Ltda. for the provision of maintenance services at a central workshop for the entire steel mill complex, including caster maintenance for the steel plant. As of December 31, 2019, the outstanding amount of the mentioned services was approximately USD 89.9 million and is due to terminate on November 2024. Ternium Brasil is currently using more hours than the minimum quantity of contracted hours.

(p) Ternium Brasil is a party to a long-term contract with the Consortium formed by Air Liquide Brasil Ltda., AirSteel Ltda., White Martins Gases Industriais Ltda., White Martins Steel Ltda. and ThyssenKrupp MinEnergy GmbH for the supply of air, oxygen, nitrogen and argon to satisfy the requirements up to January 2029. The outstanding amount was approximately USD 307.2 million as of December 31, 2019. The contract has minimum daily-required volumes.

(q) Ternium Brasil signed on January 2015 a contract with Naturgy (formerly Companhia Distribuidora de Gás do Rio de Janeiro) for the supply of natural gas, which was due to terminate on December 2019. This agreement was automatically renewed for another year and is due to terminate on December 2020, but it is still under negotiation. The aggregate amount for the year 2019 was of USD 33.3 million or 61.5 million m³. Ternium Brasil is currently purchasing more than the minimum volume required by the contract, which is 85% of the volume mentioned before.

(r) Ternium Brasil signed on May 2016 a contract with Stahllog Solução Logísticas Ltda. for logistic services. This agreement was due to terminate on May 2021 and it was extended until June 2023 with an outstanding amount of USD 18.2 million as of December 31, 2019. The contract has minimum required volumes.

(s) Ternium Brasil signed on May 2019 a contract with LSI Logística S.A. for mobile equipment rental. This agreement is due to terminate on May 2024 and the outstanding amount was USD 18.3 million as of December 31, 2019. The contract only has a penalty in case of anticipated termination.

(t) Ternium Brasil signed on December 2018 a contract with Gas Verde S.A. for the supply of bio methane gas for a period of two years since the beginning of the supply, which started on October 2019. The outstanding amount for this agreement was USD 16.5 million (or 46.1 million m³) as of December 31, 2019. The contract has a penalty for early termination and requires minimum volumes.

**25. CONTINGENCIES, COMMITMENTS AND RESTRICTIONS ON THE DISTRIBUTION OF PROFITS
(continued)**

(iii) Restrictions on the distribution of profits

In accordance with Luxembourg Law, the Company is required to transfer a minimum of 5% of its net profit for each financial year to a legal reserve until such reserve equals 10% of the issued share capital.

As of December 31, 2019, 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.

26. RELATED PARTY TRANSACTIONS

As of December 31, 2019, Techint Holdings S.à r.l. (“Techint”) owned 62.02% of the Company’s share capital and Tenaris Investments S.à r.l. (“Tenaris”) held 11.46% of the Company’s share capital. Each of Techint and Tenaris were controlled by San Faustin S.A., a Luxembourg company (“San Faustin”). Rocca & Partners Stichting Administratiekantoor Aandelen San Faustin (“RP STAK”), a Dutch private foundation (Stichting), held voting shares in San Faustin sufficient in number to control San Faustin. No person or group of persons controls RP STAK.

For commitments with Related parties, see note 25.

26. RELATED PARTY TRANSACTIONS (continued)

The following transactions were carried out with related parties:

	Year ended December 31,		
	2019	2018	2017
(i) Transactions			
(a) Sales of goods and services			
Sales of goods to non-consolidated parties	515,123	774,526	453,551
Sales of goods to other related parties	77,375	141,230	164,694
Sales of services and others to non-consolidated parties	171	176	177
Sales of services and others to other related parties	1,060	1,286	660
	593,729	917,218	619,082
(b) Purchases of goods and services			
Purchases of goods from non-consolidated parties	408,309	483,182	404,891
Purchases of goods from other related parties	71,324	50,928	57,941
Purchases of services and others from non-consolidated parties	14,563	10,266	13,126
Purchases of services and others from other related parties	155,289	90,536	111,439
Purchases of goods and services in connection with lease contracts from other related parties	8,859	—	—
	658,344	634,912	587,397
(c) Financial results			
Income with non-consolidated parties	9,478	9,330	7,611
Expenses in connection with lease contracts from other related parties	(945)	—	—
	8,533	9,330	7,611
(d) Dividends received			
Dividends received from non-consolidated parties	3,111	8,837	3,360
	3,111	8,837	3,360
(e) Other income and expenses			
Income (expenses), net with non-consolidated parties	929	1,012	2,723
Income (expenses), net with other related parties	986	492	247
	1,915	1,504	2,970
(ii) Year-end balances			
(a) Arising from sales/purchases of goods/services and other transactions			
Receivables from non-consolidated parties		167,312	201,693
Receivables from other related parties		5,027	5,975
Advances from non-consolidated parties		8,017	2,812
Advances to suppliers with other related parties		15,936	7,534
Payables to non-consolidated parties		(44,784)	(37,384)
Payables to other related parties		(41,849)	(23,495)
Lease liabilities with other related parties		(7,310)	—
		102,349	157,135

(iii) Officers and Directors' compensation

During the year ended December 31, 2019, the cash compensation of Officers and Directors amounted to USD 26,942 (2018: USD 16,205). In addition, Officers received 1,075,500 Units for a total amount of USD 3,546 (2018: USD 2,851) in connection with the incentive retention program mentioned in note 4 (o)(3).

27. OTHER REQUIRED DISCLOSURES**(a) Statement of comprehensive income**

	Cash flow hedges			Currency translation adjustment
	Gross amount	Income tax	Total	
At December 31, 2017	810	(129)	681	(3,257,038)
(Decrease) / Increase	(14)	(108)	(122)	(449,981)
Reclassification to income statement	(117)	35	(82)	—
At December 31, 2018	679	(202)	477	(3,707,019)
(Decrease) / Increase	(475)	142	(333)	(61,925)
Reclassification to income statement	(276)	83	(193)	—
At December 31, 2019	(72)	23	(49)	(3,768,944)

(b) Statement of cash flows

	Year ended December 31,		
	2019	2018	2017
(i) Changes in working capital (1)			
Inventories	510,972	(186,409)	(540,162)
Receivables and others	6,175	8,652	(108,257)
Trade receivables	161,454	(123,388)	(303,114)
Other liabilities	(95,131)	17,138	40,230
Trade payables	(10,786)	55,430	46,333
	572,684	(228,577)	(864,970)
(ii) Income tax accrual less payments			
Tax accrued (Note 11)	196,519	369,435	336,882
Taxes paid	(405,324)	(523,801)	(610,325)
	(208,805)	(154,366)	(273,443)
(iii) Interest accruals less payments			
Interest accrued (Note 10 and 23)	104,855	131,172	114,583
Interest paid	(101,450)	(144,186)	(95,099)
	3,405	(13,014)	19,484

(1) Changes in working capital are shown net of the effect of exchange rate changes.

27. OTHER REQUIRED DISCLOSURES (continued)**(c) Financial debt reconciliation**

	Financial debt			
	Finance lease liabilities	Short term borrowings	Long term borrowings	Total
As of December 31, 2017	(77,035)	(1,505,570)	(1,716,337)	(3,298,942)
Cash flows	7,565	1,492,568	(401,725)	1,098,408
Reclassifications	—	(459,520)	459,520	—
Foreign exchange adjustments	(47,390)	(121,801)	—	(169,191)
Other non cash movements	43,032	194,467	21,441	258,940
As of December 31, 2018	(73,828)	(399,856)	(1,637,101)	(2,110,785)
Cash flows	53,850	231,967	(297,780)	(11,963)
Reclassifications	—	(306,262)	306,262	—
Effect of initial recognition under IFRS 16	(280,493)	—	—	(280,493)
Acquisitions - finance leases	(26,019)	—	—	(26,019)
Foreign exchange adjustments	(8,834)	(79,365)	—	(88,199)
Other non cash movements	(3,441)	(6,266)	(273)	(9,980)
As of December 31, 2019	(338,765)	(559,782)	(1,628,892)	(2,527,439)

28. CHANGE IN THE FUNCTIONAL CURRENCY OF ARGENTINE SUBSIDIARIES

The determination of the functional currency requires management to make significant judgements. Ternium Argentina has performed a review of its functional currency and concluded that the currency that most faithfully represents the economics effects of the entity is the US dollar and therefore its functional currency has changed from the local currency to the US dollar. This change is prospective from January 1, 2020, and does not affect the balances at December 31, 2019, not results or cash flows for the year then ended.

It is based on the following considerations:

- In the last two years, the exchange rate of the Argentine peso has been severely affected by devaluations against the US dollar and Argentina continues to be a highly inflationary economy. These events had very limited impact on sale's price in US dollar;
- In this context, there is also a greater proportion of total production cost in US dollar;
- Furthermore, new global trade restrictions, affecting the international trade of steel along with limited restrictions of imports in Argentina, have led to a greater correlation of local prices to global prices.
- Factors to determine the functional currency were always mixed. However, currently most of revenue and costs of production are negotiated and priced in US dollar.

The change in functional currency of Ternium Argentina will significantly reduce the volatility of the Company's earnings that was due to foreign exchange movements and application of IAS29 - Financial Reporting in Hyperinflationary Economies.

29. RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

The following amendments, standards and interpretations have been applied on the year starting January 1, 2019:

International Financial Reporting Standard 16, "Leases"

In January 2016, the IASB issued IFRS 16, "Leases", which will result in almost all leases being recognized on the balance sheet, as the distinction between operating and finance leases is removed. Under the new standard, an asset (the right to use the leased item) and a financial liability to pay rentals are recognized.

IFRS 16 was adopted following the simplified approach, without restating comparative. The reclassifications and the adjustments arising from the new lease accounting rules are directly recognized in the opening balance sheet on January 1, 2019.

	Property, plant and equipment	Lease liabilities Current (*)	Lease liabilities Non Current (*)
Closing balance as of December 31, 2018 - IFRS 16	5,817,609	8,030	65,798
Initial recognition of right-of-use assets	280,493	—	—
Initial recognition of lease liabilities	—	34,848	245,645
Opening balance as of January 1, 2019 - IFRS 16	6,098,102	42,878	311,443

(*) Lease liabilities in the Consolidated Financial Statements as of December 31, 2018.

On adoption of IFRS 16, the Company recognized lease liabilities in relation to leases which had previously been classified as 'operating leases' under the principles of IAS 17 Leases. For the initial recognition, these liabilities were measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate as of January 1, 2019. The weighted average lessee's incremental borrowing rate applied to the lease liabilities on January 1, 2019, was of 4.05%.

The difference between the amount of the lease liability recognized in the statement of financial position at the date of initial application and the operating lease commitments under IAS 17 is due to leases with a duration lower than 12 months and leases with a value lower than thirty thousand dollars and/or with clauses related to variable payments.

The adoption of IFRS 16 Leases from January 1, 2019, resulted in changes in accounting policies and adjustments to the amounts recognized in the financial statements.

30. FINANCIAL RISK MANAGEMENT**1) Financial risk factors**

Ternium's activities expose the Company to a variety of risks: market risk (including the effects of changes in foreign currency exchange rates, interest rates and commodities prices), credit risk and liquidity risk.

Ternium's overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the financial performance. Ternium's subsidiaries may use derivative financial instruments to hedge certain risk exposures.

1.1) Market Risk*(i) Foreign exchange rate risk*

Ternium operates and sells its products in different countries, and as a result is exposed to foreign exchange rate volatility. In addition, the Company entered into several borrowings that contain covenants providing for the compliance with certain financial ratios, including ratios measured in currencies other than the U.S. dollar. This situation exposes Ternium to a risk of non-compliance derived from volatility in foreign exchange rates. Ternium's subsidiaries may use derivative contracts in order to hedge their exposure to exchange rate risk derived from their trade and financial operations.

Ternium's foreign exchange policy is to minimize the negative impact of fluctuations in the value of other currencies with respect to the U.S. dollar. Ternium's subsidiaries monitor their net cash flows in currencies other than the U.S. dollar, and analyze potential hedging according to market conditions. This hedging can be carried out by netting positions or by financial derivatives. However, regulatory or legal restrictions in the countries in which Ternium's subsidiaries operate, could limit the possibility of the Company carrying out its hedging policy.

Ternium has foreign operations, whose net assets are exposed to foreign currency translation risk, some of which may impact net income. The fact that some subsidiaries have measurement currencies other than the U.S. dollar may, at times, distort the results of the hedging efforts as reported under IFRS.

The following table shows a breakdown of Ternium's assessed financial position exposure to currency risk as of December 31, 2019. These balances include intercompany positions where the intervening parties have different functional currencies.

USD million Exposure to	Functional currency	
	USD	ARS
US dollar (USD)	—	(56)
EU euro (EUR)	(85)	(3)
Argentine peso (ARS)	(7)	—
Mexican peso (MXN)	(561)	—
Brazilian real (BRL)	(184)	(2)
Colombian peso (COP)	(25)	—
Other currencies	(4)	—

30. FINANCIAL RISK MANAGEMENT (continued)

The main relevant exposures correspond to:

(a) Argentine peso vs. US dollar

The cumulative devaluation for the Argentine peso during 2019 was 37.1% (2018: 50.5%) and the cumulative inflation during 2019 was 53.8% (2018: 47.6%). The devaluation, net of the impact of inflation, generated a negative effect of USD 43 million (2018: USD 37 million), included as currency translation adjustment in Other comprehensive income in connection with the valuation of Ternium's Argentine subsidiaries' equities (mainly Ternium Argentina S.A.), and a loss of USD 111 million (2018: USD 184 million), included as net foreign exchange results in the Income Statement, partially offset by the positive impact of the inflation adjustment of USD 118 million (2018: USD 191 million).

If the Argentine peso had weakened by 1% against the US dollar, it would have generated a pre-tax loss of USD 0.6 million as of December 31, 2019, and a pre-tax loss of USD 2.1 million as of December 31, 2018.

(b) Mexican peso vs. US dollar

If the Mexican peso had weakened by 1% against the US dollar, it would have generated a pre-tax gain of USD 5.6 million and USD 5.8 million as of December 31, 2019 and 2018, respectively.

(c) Colombian peso vs. US dollar

If the Colombian peso had weakened by 1% against the US dollar, it would have generated a pre-tax gain of 0.3 million and a pre-tax loss of USD 0.2 million as of December 31, 2019 and 2018, respectively.

(d) Brazilian real vs. US dollar

If the Brazilian real had weakened by 1% against the US dollar, it would have generated a pre-tax gain of USD 1.8 million and a pre-tax gain of USD 1.5 million as of December 31, 2019 and 2018, respectively.

We estimate that if the Argentine peso, Mexican peso, Colombian peso and Brazilian real had weakened simultaneously by 1% against the US dollar with all other variables held constant, total pre-tax income for the year would have been USD 7.1 million higher (USD 5.0 million higher as of December 31, 2018), as a result of foreign exchange gains/losses on translation of US dollar-denominated financial position, mainly trade receivables, trade payables, leases liabilities borrowings and other liabilities.

Considering the same variation of the currencies against the US dollar of all net investments in foreign operations amounting to USD 1.9 billion, the currency translation adjustment included in total equity would have been USD 18.5 million lower (USD 17.7 million lower as of December 31, 2018), arising mainly from the adjustment on translation of the equity related to the Argentine peso and the Brazilian real.

(ii) Interest rate risk

Ternium manages its exposure to interest rate volatility through its financing alternatives and hedging instruments. Borrowings issued at variable rates expose the Company to the risk of increased interest expense in the event of a raise in market interest rates, while borrowings issued at fixed rates expose the Company to a variation in its fair value. The Company's interest-rate risk mainly arises from long-term borrowings that bear variable-rate interest that is partially fixed through different derivative transactions, such as interest rate swaps.

30. FINANCIAL RISK MANAGEMENT (continued)

Ternium's nominal weighted average interest rate for its debt instruments, which do not include neither the effect of derivative financial instruments, nor the devaluation of the local currencies, was 2.94% and 3.65% as of December 31, 2019 and 2018, respectively. These rates were calculated using the rates set for each instrument in its corresponding currency and weighted using the dollar-equivalent outstanding principal amount of each instrument.

Ternium's total variable interest rate debt amounted to USD 2,023 million (92.4% of total borrowings) at December 31, 2019 and USD 1,747 million (85.8% of total borrowings) at December 31, 2018.

If interest rates on the aggregate average notional of US dollar denominated borrowings held during 2019, excluding borrowings with derivatives contracts mentioned in Note 22 (a), had been 100 basis points higher with all other variables held constant, total pre-tax income for the year ended December 31, 2019 would have been USD 22.4 million lower (USD 26.8 million lower as of December 31, 2018).

1.2) 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. Ternium's subsidiaries have credit guidelines in place to ensure that derivative and treasury counterparties are limited to high credit quality financial institutions.

Ternium invests in financial assets with a minimum credit rating of investment grade established by an international qualification agency renowned in the financial market, in line with corporate investment portfolio policies. Approximately 92.6% of the Company's liquid financial assets correspond to investment grade rated instruments as of December 31, 2019, in comparison with approximately 82.6% as of December 31, 2018.

Ternium has no significant concentrations of credit risk from customers. No single customer accounts for more than ten percent of Ternium's sales. Ternium's subsidiaries have policies in place to ensure that sales are made to customers with an appropriate credit history, and that credit insurances, letters of credit or other instruments are requested to reduce credit risk whenever deemed necessary. The subsidiaries maintain allowances for potential credit losses. The utilization of credit limits is regularly monitored.

Trade and other receivables are carried at face value less allowance for doubtful accounts, if applicable. This amount does not differ significantly from fair value. The other receivables do not contain significant impaired assets.

As of December 31, 2019, trade receivables total USD 950.6 million (USD 1,133.2 million as of December 31, 2018). These trade receivables are collateralized by guarantees under letter of credit and other bank guarantees of USD 3.4 million (USD 23.3 million as of December 31, 2018), credit insurance of USD 469.3 million (USD 506.8 million as of December 31, 2018) and other guarantees of USD 16.4 million (USD 18.6 million as of December 31, 2018).

As of December 31, 2019, trade receivables of USD 877.2 million (USD 1,035.0 million as of December 31, 2018) were fully performing.

30. FINANCIAL RISK MANAGEMENT (continued)

As of December 31, 2019, trade receivables of USD 86.3 million (USD 112.5 million as of December 31, 2018) were past due (mainly up to 180 days).

The amount of the allowance for doubtful accounts was USD 13.0 million as of December 31, 2019 (USD 14.3 million as of December 31, 2018).

The carrying amounts of the Company's trade and other receivables as of December 31, 2019, are denominated in the following currencies:

Currency	USD million
US dollar (USD)	965
EU euro (EUR)	36
Argentine peso (ARS)	14
Mexican peso (MXN)	150
Brazilian real (BRL)	387
Colombian peso (COP)	69
Other currencies	2
	1,623

1.3) Liquidity risk

Management maintains sufficient cash and marketable securities and credit facilities to finance normal operations. Management monitors rolling forecasts of the group's liquidity reserve on the basis of expected cash flow.

The table below analyses financial liabilities into relevant maturity groups based on the remaining period at the date of the statement of financial position to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows.

USD million	2020	2021	2022	2023	Thereafter
Borrowings	560	309	660	137	523
Interests to be accrued (1)	60	49	33	19	7
Trade payables and other liabilities	867	9	9	5	30
Lease liabilities	41	42	41	40	175
Total	1,528	409	743	201	735

(1) These amounts do not include the effect of derivative financial instruments.

As of December 31, 2019, total borrowings less cash and cash equivalents and other current and non-current investments amounted to USD 1,453.4 million.

1.4) Capital risk

Ternium seeks to maintain an adequate debt/equity ratio considering the industry and the markets where it operates. The year-end ratio debt over debt plus equity is 0.22 and 0.21 as of December 31, 2019 and 2018, respectively. The Company does not have to comply with regulatory capital adequacy requirements as known in the financial services industry.

30. FINANCIAL RISK MANAGEMENT (continued)**2) Financial instruments by category and fair value hierarchy level**

The accounting policies for financial instruments have been applied to the line items below. According to the scope and definitions set out in IFRS 7 and IAS 32, employers' rights and obligations under employee benefit plans, and non-financial assets and liabilities such as advanced payments and income tax payables, are not included.

As of December 31, 2019 (in USD thousands)	Amortized cost	Assets at fair value through profit and loss	Assets at fair value through OCI	Total
(i) Assets as per statement of financial position				
Receivables	406,370	—	—	406,370
Derivative financial instruments	—	1,196	—	1,196
Trade receivables	950,569	—	—	950,569
Other investments	176,470	—	38,803	215,273
Cash and cash equivalents	320,088	199,877	—	519,965
Total	1,853,497	201,073	38,803	2,093,373

As of December 31, 2019 (in USD thousands)	Liabilities at fair value through profit or loss	Amortized cost	Total
(ii) Liabilities as per statement of financial position			
Other liabilities	—	88,403	88,403
Trade payables	—	836,204	836,204
Derivative financial instruments	3,024	—	3,024
Finance lease liabilities	—	338,765	338,765
Borrowings	—	2,188,674	2,188,674
Total	3,024	3,452,046	3,455,070

As of December 31, 2018 (in thousands)	Amortized cost	Assets at fair value through profit and loss	Assets at fair value through OCI	Total
(i) Assets as per statement of financial position				
Receivables	449,077	—	—	449,077
Derivative financial instruments	—	1,588	—	1,588
Trade receivables	1,133,236	—	—	1,133,236
Other investments	14,843	—	36,630	51,473
Cash and cash equivalents	110,086	140,455	—	250,541
Total	1,707,242	142,043	36,630	1,885,915

As of December 31, 2018 (in thousands)	Liabilities at fair value through profit or loss	Amortized cost	Total
(ii) Liabilities as per statement of financial position			
Other liabilities	—	105,659	105,659
Trade payables	—	864,827	864,827
Derivative financial instruments	12,981	—	12,981
Finance lease liabilities	—	73,828	73,828
Borrowings	—	2,036,957	2,036,957
Total	12,981	3,081,271	3,094,252

30. FINANCIAL RISK MANAGEMENT (continued)***Fair Value by Hierarchy***

Following the requirements contained in IFRS 13, Ternium categorizes each class of financial instrument measured at fair value in the statement of financial position into three levels, depending on the significance of the judgment associated with the inputs used in making the fair value measurements:

- Level 1 comprises financial assets and financial liabilities whose fair values have been determined on the basis of quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2 includes financial assets and financial liabilities for which fair values have been estimated using inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3 comprises financial instruments for which inputs to estimate fair value of the assets or liabilities are not based on observable market data (unobservable inputs).

The following table presents the assets and liabilities that are measured at fair value as of December 31, 2019 and 2018:

Fair value measurements as of December 31, 2019			
(in USD thousands):			
Description	Total	Level 1	Level 2
Financial assets at fair value through profit or loss / OCI			
Cash and cash equivalents	199,877	199,877	—
Other investments	38,803	38,803	—
Derivative financial instruments	1,196	—	1,196
Total assets	239,876	238,680	1,196
Financial liabilities at fair value through profit or loss / OCI			
Derivative financial instruments	3,024	—	3,024
Total liabilities	3,024	—	3,024

Fair value measurements as of December 31, 2018			
(in USD thousands):			
Description	Total	Level 1	Level 2
Financial assets at fair value through profit or loss/OCI			
Cash and cash equivalents	140,455	140,455	—
Other investments	36,630	36,630	—
Derivative financial instruments	1,588	—	1,588
Total assets	178,673	177,085	1,588
Financial liabilities at fair value through profit or loss/OCI			
Derivative financial instruments	12,981	—	12,981
Total liabilities	12,981	—	12,981

30. FINANCIAL RISK MANAGEMENT (continued)

There were no significant transfers between Level 1 and Level 2 of the fair value hierarchy and there were no financial assets and liabilities considered as Level 3.

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 Ternium is the current mid price. These instruments are included in Level 1 and comprise primarily corporate and sovereign debt securities.

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. Ternium values its assets and liabilities included in this level using mid prices, interest rate curves, broker quotations, current exchange rates and forward rates 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. Ternium 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.

3) Accounting for derivative financial instruments and hedging activities

Derivative financial instruments are initially recognized in the statement of financial position at cost and subsequently measured at fair value. Changes in fair value are disclosed under "Other financial income (expenses), net" line item in the income statement. Ternium does not hedge its net investments in foreign entities.

Ternium designates certain derivatives as hedges of a particular risk associated with a recognized asset or liability or a highly probable forecast transaction. These transactions are classified as cash flow hedges (mainly interest rate swaps). The effective portion of the fair value of derivatives that are designated and qualify as cash flow hedges is recognized within other comprehensive income. Amounts accumulated in other comprehensive income are recognized in the income statement in the same period than any 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 Ternium derivative financial instruments (asset or liability) continues to be reflected on the statement of financial position.

For transactions designated and qualifying for hedge accounting, Ternium documents at inception the relationship between hedging instruments and hedged items, as well as its risk management objectives and strategy for undertaking various hedge transactions. The Company also documents its assessment, both at hedge inception and on an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of hedged items. At December 31, 2019, the effective portion of designated cash flow hedges amounts to USD (0.1) million (net of taxes) and is included as "Cash flow hedges" line item in the statement of comprehensive income.

The fair values of various derivative instruments used for hedging purposes are disclosed in Note 22. The full fair value of a hedging derivative is classified as a non-current asset or liability when the remaining maturity of the hedged item is more than 12 months and as a current asset or liability when the remaining maturity of the hedged item is less than 12 months.

Changes in the fair value of any derivative instruments that do not qualify for hedge accounting under IAS 39 are recognized immediately in the income statement.

30. FINANCIAL RISK MANAGEMENT (continued)**4) Fair value estimation**

The estimated fair value of a financial instrument is the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale.

For the purpose of estimating the fair value of financial assets and liabilities with maturities of less than one year, the Company uses the market value less any estimated credit adjustments. For other investments, the Company uses quoted market prices.

As most borrowings incorporate floating rates that approximate market rates and the contractual repricing occurs mostly every 1 month, the fair value of the borrowings approximates their carrying amount and it is not disclosed separately.

In assessing the fair value of derivatives and other financial instruments, Ternium uses a variety of methods, including, but not limited to, estimated discounted value of future cash flows using assumptions based on market conditions existing at each year-end.

31. SUBSEQUENT EVENTS - COVID-19

In December 2019, a novel strain of coronavirus ("COVID-19") was reported to have surfaced in China and started spreading to the rest of the world in early 2020. The COVID-19 virus is impacting economic activity worldwide and poses the risk that Ternium or its employees, contractors, suppliers, customers and other business partners may be prevented from conducting certain business activities for an indefinite period of time, including due to shutdowns mandated by governmental authorities or otherwise adopted by companies as a preventive measure. Given the uncertainty around the extent and timing of the future spread of COVID-19 and the imposition or relaxation of protective measures, it is not possible to predict the COVID-19's effects on the industry, generally, and to reasonably estimate the financial effect on the Company.



Pablo Brizzio
Chief Financial Officer



TERNIUM S.A. Société Anonyme
Audited Annual Accounts
as at December 31, 2019

26 Boulevard Royal, 4th floor
L – 2449 Luxembourg
R.C.S. Luxembourg: B 98 668

INDEX TO THE ANNUAL ACCOUNTS

	Page
Audit Report	127
Balance sheet	130
Profit and loss account	131
Notes to the annual accounts	132

Audit Report

To the Shareholder of
Ternium S.A.

Our opinion

In our opinion, the accompanying annual accounts give a true and fair view of the financial position of Ternium S.A. (the "Company") as at 31 December 2019, and of the results of its operations for the year then ended in accordance with Luxembourg legal and regulatory requirements relating to the preparation and presentation of the annual accounts.

What we have audited

The Company's annual accounts comprise:

- the balance sheet as at 31 December 2019;
- the profit and loss account for the year then ended; and
- the notes to the annual accounts, which include a summary of significant accounting policies.

Basis for opinion

We conducted our audit in accordance with the Law of 23 July 2016 on the audit profession (Law of 23 July 2016) and with International Standards on Auditing (ISAs) as adopted for Luxembourg by the "Commission de Surveillance du Secteur Financier" (CSSF). Our responsibilities under the Law of 23 July 2016 and ISAs as adopted for Luxembourg by the CSSF are further described in the "Responsibilities of the "Réviseur d'entreprises agréé" for the audit of the annual accounts" section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

We are independent of the Company in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (IESBA Code) as adopted for Luxembourg by the CSSF together with the ethical requirements that are relevant to our audit of the annual accounts. We have fulfilled our other ethical responsibilities under those ethical requirements.

Responsibilities of the Board of Directors and those charged with governance for the annual accounts

The Board of Directors is responsible for the preparation and fair presentation of the annual accounts in accordance with Luxembourg legal and regulatory requirements relating to the preparation and presentation of the annual accounts, and for such internal control as the Board of Directors determines is necessary to enable the preparation of the annual accounts that are free from material misstatement, whether due to fraud or error.

In preparing the annual accounts, the Board of Directors is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Company's financial reporting process.

Responsibilities of the “Réviseur d'entreprises agréé” for the audit of the annual accounts

The objectives of our audit are to obtain reasonable assurance about whether the annual accounts as a whole are free from material misstatement, whether due to fraud or error, and to issue an audit report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Law of 23 July 2016 and with ISAs as adopted for Luxembourg by the CSSF will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these annual accounts.

As part of an audit in accordance with the Law of 23 July 2016 and with ISAs as adopted for Luxembourg by the CSSF, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- identify and assess the risks of material misstatement of the annual accounts, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control;
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Board of Directors;
- conclude on the appropriateness of the Board of Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our audit report to the related disclosures in the annual accounts or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our audit report. However, future events or conditions may cause the Company to cease to continue as a going concern;
- evaluate the overall presentation, structure and content of the annual accounts, including the disclosures, and whether the annual accounts represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and communicate to them all relationships and other matters that may

reasonably be thought to bear on our independence, and where applicable, related safeguards.

PricewaterhouseCoopers, Société coopérative
Represented by

Luxembourg, 20 March 2020

A handwritten signature in black ink, consisting of a large, stylized 'M' followed by a horizontal line and a vertical stroke.

Marc Minet

Balance sheet as at December 31, 2019

	Notes	31/12/2019	31/12/2018
ASSETS			
C. Fixed assets			
II. Tangible assets	2.3		
3 Other fixtures and fittings, tools and equipment		78,265	108,035
III. Financial assets			
1 Shares in affiliated undertakings	2.4 & 3	6,260,124,196	6,500,998,036
		<u>6,260,202,461</u>	<u>6,501,106,071</u>
D. Current assets			
II. Debtors	2.5		
2 Amounts owed by affiliated undertakings			
a) becoming due and payable within one year	4	164,234	11,202,871
4 Other debtors			
a) becoming due and payable within one year		77,912	34,947
III. Investments	2.6		
2 Own shares		59,599,747	59,599,747
		<u>59,841,893</u>	<u>70,837,565</u>
IV. Cash at bank and in hand	2.7	557,970	256,657
		<u>60,399,863</u>	<u>71,094,222</u>
Total assets		6,320,602,324	6,572,200,293
CAPITAL, RESERVES AND LIABILITIES			
A Capital and reserves	5		
I. Subscribed capital		2,004,743,442	2,004,743,442
II. Share premium account		1,414,121,505	1,414,121,505
IV. Reserves			
1 Legal reserve	6	200,474,346	200,474,346
2 Reserve for own shares		59,599,747	59,599,747
V. Profit or loss brought forward		2,631,727,878	2,887,917,575
VI. Profit or loss for the financial year		(19,093,305)	(20,620,484)
		<u>6,291,573,613</u>	<u>6,546,236,131</u>
B. Provisions			
1 Provisions for pensions and similar obligations	2.8	12,019,539	20,227,485
		<u>12,019,539</u>	<u>20,227,485</u>
C. Creditors	2.9		
6 Amounts owed to affiliated undertakings			
a) becoming due and payable within one year	4	13,328,757	885,475
b) becoming due and payable after more than one	4	535,478	2,342,575
8 Other creditors			
c) Other creditors			
i) becoming due and payable within one year		3,144,936	2,508,627
		<u>17,009,172</u>	<u>5,736,677</u>
Total capital, reserves and liabilities		6,320,602,324	6,572,200,293

The accompanying notes form an integral part of these annual accounts.

**Profit and loss account for the year ended
December 31, 2019**

	Notes	31/12/2019	31/12/2018
8 Other operating expenses	8	(18,512,337)	(20,124,028)
11 Other interest receivable and similar income			
a) derived from affiliated undertakings		119,275	209,263
b) other interest and similar income		230,803	115,664
14 Interest payable and similar expenses			
a) concerning affiliated undertakings		(924,573)	(833,571)
b) other interest and similar expenses		(2,082)	17,696
16 Profit or loss after taxation		(19,088,914)	(20,614,976)
17 Other taxes not shown under items 1 to 16	9	(4,391)	(5,507)
18 Profit or loss for the financial year		(19,093,305)	(20,620,484)

The accompanying notes form an integral part of these annual accounts.

1. GENERAL INFORMATION

Ternium S.A. (hereafter the “Company” or “Ternium”), was incorporated on December 22, 2003 to hold investments in flat and long steel manufacturing and distributing companies for an unlimited period. The Company has an authorized share capital of a single class of 3.5 billion shares having a nominal value of USD 1,00 per share. As of December 31, 2019, there were 2.004.743.442 shares issued. All issued shares are fully paid.

Following a corporate reorganization carried out during fiscal year 2005, in January 2006 the Company successfully completed its registration process with the United States Securities and Exchange Commission (“SEC”). Ternium’s ADSs began trading on the New York Stock Exchange under the symbol “TX” on February 1, 2006. The Company’s initial public offering was settled on February 6, 2006.

The Company was initially established as a public limited liability company (société anonyme) 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 and 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 laws and taxes (including, among others, 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 in high income tax jurisdictions, as defined under Luxembourg law, will continue to be exempt from corporate income tax in Luxembourg under Luxembourg’s participation exemption.

As part of the Company’s corporate reorganization in connection with the termination of Luxembourg’s 1929 holding company regime, on December 6, 2010, the Company contributed its equity holdings in all its subsidiaries and all its financial assets to its Luxembourg wholly-owned subsidiary Ternium Investments S.à r.l., or Ternium Investments, in exchange for newly issued corporate units of Ternium Investments. As the assets contributed were recorded at their historical carrying amount in accordance with Luxembourg GAAP, the Company’s December 2010 contribution of such assets to Ternium Investments resulted in a non-taxable revaluation of the accounting value of the Company’s assets under Luxembourg GAAP. The amount of the December 2010 revaluation was equal to the difference between the historical carrying amounts of the assets contributed and the value at which such assets were contributed and amounted to USD 4,0 billion.

Following the completion of the corporate reorganization, and upon its conversion into an ordinary Luxembourg holding company, the Company voluntarily recorded a special reserve exclusively for tax-basis purposes. As of December 31, 2019 and 2018, this special tax reserve amounted to USD 6,3 billion and USD 6,6 billion, respectively. The Company expects that, as a result of its corporate reorganization, its current overall tax burden will not increase, as all or substantially all of its dividend income will come from high income tax jurisdictions.

The financial year of the Company starts on January 1 and ends on December 31 of each year.

The Company also prepares consolidated financial statements, which are published according to the provisions of the Luxembourg Law.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**2.1. Basis of presentation**

These annual accounts have been prepared in accordance with Luxembourg legal requirements and accounting standards under the historical cost convention.

Accounting policies and valuation rules are, besides the ones laid down by the law of December 19, 2002 as amended on December 18, 2015, determined and applied by the Board of Directors.

The preparation of annual accounts requires the Board of Directors to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and the related disclosure of contingent assets and liabilities. Estimates and judgments are continually evaluated and are based on historical experience and other factors, including expectations of

future events that are believed to be reasonable under the circumstances. Management makes estimates and assumptions concerning the future. Actual results may differ significantly from these estimates under different assumptions or conditions.

2.2. Foreign currency translation

The Company maintains its books and records in USD. Transactions expressed in currencies other than USD are translated into USD at the exchange rate effective at the time of the transaction. Formation expenses and long-term assets expressed in currencies other than USD are translated into USD at the exchange rate effective at the time of the transaction. At the balance sheet date, these assets remain translated at historical exchange rates. Cash at bank is translated at the exchange rate effective at the balance sheet date. Exchange losses and gains are recorded in the profit and loss account of the year. Other assets and liabilities are translated separately respectively at the lower or at the higher of the value converted at the historical exchange rate or the value determined on the basis of the exchange rates effective at the balance sheet date. Solely the unrealized exchange losses are recorded in the profit and loss account. The exchange gains are recorded in the profit and loss account at the moment of their realization. Where there is an economic link between an asset and liability, these are valued in total according to the method described above and the net unrealized losses are recorded in the profit and loss account whereas the net unrealized exchange gains are not recognized.

2.3. Tangible assets

Tangible assets are recognized at purchase price or construction cost less accumulated depreciation; purchase price includes expenditure that is directly attributable to the acquisition of the items. Depreciation is calculated for each asset over its estimated useful life, which is, in average, 10 years for buildings and 5 years for other fixtures and fittings, tools and equipment.

Where the Company considers that a tangible fixed asset has suffered a durable depreciation in value, an additional write-down is recorded to reflect this loss. These value adjustments are not continued if the reasons for which the value adjustments were made have ceased to apply.

2.4. Financial assets

Shares in affiliated undertakings are valued at purchase or contribution price including the expenses incidental thereto. Loans to affiliated undertakings are stated at nominal value.

Whenever necessary the Company conducts impairment test on its financial assets in accordance with Luxembourg regulations.

In the case of durable depreciation in value according to the opinion of the Board of Directors, value adjustments are made in respect of financial assets, so that they are valued at the lower figure to be attributed to them at the balance sheet date. These value adjustments are not continued if the reasons for which the value adjustments were made have ceased to apply.

2.5. Debtors

Amounts owed by affiliated undertakings and other debtors are valued at nominal value. They are subject to value adjustments when their recovery is compromised. These value adjustments are not continued if the reasons for which the value adjustments were made have ceased to apply.

2.6. Investments

Investments are valued at the lower of purchase price, including expenses incidental thereto and calculated on the basis of weighted average prices, or market value, expressed in the currency in which the annual accounts are prepared. A value adjustment is recorded where the market value is lower than the purchase price. These value adjustments are not continued if the reasons for which the value adjustments were made have ceased to apply.

2.7. Cash at bank and in hand

Cash at bank and in hand also comprise cash equivalents, liquidity funds and short-term investments with a maturity of less than three months at the date of purchase. Assets recorded in cash and cash equivalents are carried at fair market value or at historical cost which approximates fair market value.

2.8. Provisions for pensions and similar obligations

During 2007, Ternium launched an incentive retention 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 Ternium’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 Ternium to its shareholders, and (ii) the number of Units held by each beneficiary to the Program. Units vest ratably over a period of four years and will be redeemed by the Company ten years after grant date, with the option of an early redemption at 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, Ternium valued this long-term incentive program as a long term benefit plan as classified in IAS 19. Actuarial gains and losses are charged or credited in the profit or loss in the period in which they arise.

As of December 31, 2019, the outstanding liability corresponding to the Program amounts to USD 9,8 million.

2.9. Creditors

Creditors are recorded at their reimbursement value. When the amount repayable on account is greater than the amount received, the difference is shown as an asset and is written off over the period of the debt based on a linear method.

3. FINANCIAL ASSETS

On June 13, 2019, as result of the master credit agreement entered between Ternium Investments S.à r.l. (“Ternium Investments”) and Ternium S.A. where Ternium Investments pursuant to which, upon request from Ternium, Ternium Investments may, but shall not be required to, from time to time make loans to Ternium. Any loan under the master credit agreement may be repaid or prepaid from time to time through a reduction of the capital of Ternium Investments by an amount equivalent to the amount of the loan then outstanding (including accrued interest). As a result of the cancellation of loans granted to Ternium, the reductions in the capital of Ternium Investments made on June 13, 2019 amounted to USD 240.873.840.

As a result of the transactions detailed above, the financial assets of the Company as at December 31, 2019, consist of:

Company	Country	% of beneficial ownership	Book value at 12.31.2018	Net (Decreases)/ Additions	Book value at 12.31.2019	Equity at 12.31.2019
Ternium Investments S.à r.l.	Luxembourg	100 %	6,500,998,036	(240,873,840)	6,260,124,196	7,615,027,758
Shares in affiliated undertakings			6,500,998,036	(240,873,840)	6,260,124,196	7,615,027,758

TERNIUM S.A.

Notes to the Annual Accounts
(All amounts are in USD)

4. BALANCES WITH AFFILIATED UNDERTAKINGS

	December 31, 2019	December 31, 2018
Assets		
Debtors		
Ternium Investments S.à r.l.	153,385	11,202,871
HYLSA, S.A. de C.V.	10,849	
	164,234	11,202,871
Liabilities		
Creditors		
Exiros México, S.A. de C.V.	535,479	2,346,163
Ternium Argentina S.A.	543,168	638,798
Soluciones Integrales de Gestión S.A. (SIGSA)	247,420	238,774
Ternium Investments S.À.r.l. - Zug Branch	—	4,315
	1,326,067	3,228,050
Borrowings		
Ternium Investments S.à.r.l.	12,538,169	—
	12,538,169	—

5. CAPITAL AND RESERVES

	Subscribed Capital	Share Premium	Legal Reserve	Reserve for own shares or own corporate units (2)	Profit or loss brought forward	Result for the financial year	Total capital and reserves
Balance at December 31, 2018	2,004,743,442	1,414,121,505	200,474,346	59,599,747	2,887,917,575	(20,620,484)	6,546,236,131
Allocation of previous year results ⁽¹⁾	—	—	—	—	(20,620,484)	20,620,484	—
Payment of dividends ⁽¹⁾	—	—	—	—	(235,569,213)	—	(235,569,213)
Loss for the year	—	—	—	—	—	(19,093,305)	(19,093,305)
Balance at December 31, 2019	2,004,743,442	1,414,121,505	200,474,346	59,599,747	2,631,727,878	(19,093,305)	6,291,573,613

(1) As approved by the Annual General Meeting of Shareholders held on May 6, 2019.

(2) As of December 31, 2019, the Company held 41.666.666 shares as treasury shares.

6. LEGAL RESERVE

In accordance with Luxembourg law, the Company is required to set aside a minimum of 5% of its annual net profit for each financial period to a legal reserve. This requirement ceases to be necessary once the balance of the legal reserve has reached 10% of the Company's issued share capital. At December 31, 2019, this reserve reached the above-mentioned threshold, the legal reserve is not available for distribution to shareholders.

7. RESERVE FOR OWN SHARES

In accordance with the law, the company has created a non distributable reserve included in the account "reserve for own shares" for an amount of USD 59,599,747.

8. OTHER OPERATING EXPENSES

	December 31, 2019	December 31, 2018
Services and fees	14,188,562	16,308,150
Senior management and board of director's accrued fees	3,568,155	2,743,981
Other expenses	755,620	1,071,897
Total	18,512,337	20,124,028

Services and fees are mainly composed of professional, audit and legal services.

9. TAXES

For the year ended December 31, 2019, the Company did not realize any profits subject to tax in Luxembourg.

10. INCOME FROM FINANCIAL FIXED ASSETS DERIVED FROM AFFILIATED UNDERTAKINGS

During the period, the Company did not receive any dividends.

11. OWN SHARES

The Company has an authorized share capital of a single class of 3.5 billion shares having a nominal value of USD 1.00 per share. As of December 31, 2019, there were 2,004,743,442 shares issued. All issued shares are fully paid. Also, as of December 31, 2019, the Company held 41,666,666 shares as treasury shares.

12. PARENT COMPANY

As of December 31, 2019, Techint Holdings S.à r.l. ("Techint") owned 62.02% of the Company's share capital and Tenaris Investments S.à r.l. ("Tenaris") held 11.46% of the Company's share capital. Each of Techint and Tenaris were controlled by San Faustin S.A., a Luxembourg company ("San Faustin"). Rocca & Partners Stichting Administratiekantoor Aandelen San Faustin ("RP STAK"), a Dutch private foundation (Stichting), held voting shares in San Faustin sufficient in number to control San Faustin. No person or group of persons controls RP STAK.

13. CONTINGENCIES AND COMMITMENTS**13.1 Contingencies****Putative class action**

Following the Company's November 27, 2018 announcement that its chairman Paolo Rocca had been included in an Argentine court investigation known as the Notebooks Case (a decision subsequently reversed by a higher court), a putative class action complaint was filed in the U.S. District Court for the Eastern District of New York. On January 31, 2019, the court appointed lead plaintiff and lead counsel. On June 17, 2019, the lead plaintiff filed an amended complaint purportedly on behalf of purchasers of Ternium securities from May 1, 2014 through November 27, 2018. The individual defendants named in the amended complaint are our chairman, our former CEO, our current CEO and our CFO. That complaint alleges that during the class period, the Company and the individual defendants inflated the price of Ternium's ADSs by failing to disclose that sale proceeds received by Ternium 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. Defendants' motions to dismiss are expected to be decided during 2020. 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.

13.2 Commitments

Techgen S.A. de C.V is a Mexican natural gas-fired combined cycle electric power plant owned by Ternium (48%), Tenaris S.A. (22%) and Tecpetrol International S.A. (30%) (a wholly-owned subsidiary of San Faustin S.A., the controlling shareholder of both Ternium and Tenaris).

Techgen is a party to gas transportation capacity agreements with Kinder Morgan Gas Natural de Mexico, S. de R.L. de C.V., Kinder Morgan Texas Pipeline LLC and Kinder Morgan Tejas Pipeline LLC for the whole transportation capacity starting on August 1, 2016 and ending during the second half of 2036. As of December 31, 2019, the outstanding value of this commitment was approximately USD 236 million. Ternium's exposure under the guarantee in connection with these agreements amounts to USD 115 million, corresponding to the 48% of the agreements' outstanding value as of December 31, 2019.

Ternium issued two Corporate Guarantee in favor of Credit Agricole CIB and Natixis covering 48% of the funding of the Debt Service Reserve Account, a collateral account under a syndicated loan agreement between Techgen and several banks led by Citigroup Global Markets Inc., Credit Agricole Corporate and Investment Bank, and Natixis, New York Branch acting as joint bookrunners. The loan agreement dated as of February 13, 2019, amounted to USD 640 million and the proceeds were used by Techgen to refinance in full all amounts owed under a previous syndicated loan between Techgen and several banks, which funds were used in the construction of the facility. As of December 31, 2019, the outstanding aggregated amount under the Corporate Guarantees was USD 44.6 million, as a result the amount guaranteed by Ternium was approximately USD 21.4 million. The main covenants under the Corporate Guarantee are limitations to the sale of certain assets and compliance with financial ratios (e.g. leverage ratio). As of December 31, 2019, Techgen and Ternium, as guarantor, were in compliance with all of their covenants.

14. SUBSEQUENT EVENTS - COVID-19

In December 2019, a novel strain of coronavirus ("COVID-19") was reported to have surfaced in China and started spreading to the rest of the world in early 2020. The COVID-19 virus is impacting economic activity worldwide and poses the risk that Ternium or its employees, contractors, suppliers, customers and other business partners may be prevented from conducting certain business activities for an indefinite period of time, including due to shutdowns mandated by governmental authorities or otherwise adopted by companies as a preventive measure. Given the uncertainty around the extent and timing of the future spread of COVID-19 and the imposition or relaxation of protective measures, it is not possible to predict the COVID-19's effects on the industry, generally, and to reasonably estimate the financial effect on the Company.



Pablo Brizzio
Chief Financial Officer

Intentionally left blank.



**Annex to the Consolidated Management Report for the year ended on December 31, 2019
Update as of April 28, 2020**

TERNIUM S.A.
société anonyme
26 Boulevard Royal, 4th floor
L – 2449 Luxembourg
R.C.S. Luxembourg: B 98 668

Introduction

In light of the economic uncertainty originated by the COVID-19 pandemic, on April 7, 2020, Ternium's board of directors resolved to postpone the company's annual and extraordinary general meetings of shareholders (the "Meetings"), originally to be held in Luxembourg on April 27, 2020. The proxy materials issued by the company on March 20, 2020 for such general meetings were withdrawn and canceled for all purposes.

On April 28, 2020, the company's board of directors convened the Meetings to be held on June 5, 2020 and issued new proxy materials, including the Consolidated Management Report for the year ended on December 31, 2019 (the "CMR") and this Annex to the CMR (the "Annex"). The content of this Annex supplements and forms an integral part of the CMR on references made to the annual general meetings of shareholders, the board of directors' dividend proposal for the year 2019 and capital expenditure projects.

Recent Developments - Effect of COVID-19 outbreak on Ternium's activities

A novel strain of coronavirus ("COVID-19") was reported to have surfaced in China in December 2019, spreading to the rest of the world in the first quarter of 2020. In March 2020, the World Health Organization declared COVID-19 a global pandemic. The COVID-19 outbreak is impacting economic activity worldwide.

Each jurisdiction where Ternium operates has adopted specific measures in response to the pandemic and the Company is adjusting its operations on a country-by-country basis to comply with applicable rules and requirements and adapt to a rapidly evolving scenario. As of the issue date of this Annex, the operational status of the main facilities is as follows:

- In Mexico, the company continues to operate its main production lines, meeting reduced market demand, mainly from the auto industry and, to a lesser extent, from the construction sector, but also gradually from other sectors as they scale back operations.
- In Argentina and Colombia, Ternium has reduced its activity following the imposition of mandatory lockdowns in these countries, and its Argentine blast furnace, steel shop and coke oven batteries are currently operating at technical minimums. Further, the company has ceased operations in most of its other productions lines in Argentina and Colombia, with the exception of shipments to essential sectors such as food, health and energy in both countries.
- In Brazil, Ternium's slab facility is operating at technical minimums due to lower forecasted demand.

Although in all of these countries the lockdowns or restrictions to operate are expected to end or be relaxed during the second quarter of 2020, these could be extended and/or made more stringent if so decided by the appropriate authorities as the circumstances could require.

In order to safeguard the health and safety of its employees, customers and suppliers, Ternium has taken preventive measures, including remote working for the majority of white collar employees, restricting onsite access to essential operational personnel, keeping personnel levels at a minimum, implementing a special operations protocol to ensure social distancing and providing medical assistance and supplies to onsite employees. As of the date of this Annex, remote work and other work arrangements have not materially adversely affected Ternium's ability to conduct operations. In addition, these alternative working arrangements have not adversely affected our financial reporting systems, internal control over financial reporting or disclosure controls and procedures.

Ternium has taken steps to ensure the continued strength of its financial position, the maintenance of its operations and a return to growth once economic activity normalizes. In order to mitigate the impact of expected lower sales, Ternium has slowed or postponed several capital expenditure projects across its facilities. Although the specific reduction will depend on the pace at which economic activity and steel market demand return, Ternium currently expects to delay the startup of its new hot-rolling mill in the Pesquería unit in Mexico to the first half of 2021, and its new steel bar and coil mill in the Palmar de Varela unit in Colombia to the second half of 2020.

Without limiting the generality of the risks described in the CMR. "Risk Factors—Risks Relating to the Steel Industry - A downturn in global or regional economic activity would cause a reduction in worldwide or regional demand for steel and would have a material adverse effect on steel industry and Ternium; Regional or worldwide excess steel production capacity may lead to unfair trade practices in the international steel markets and/or to intense competition, hampering Ternium's ability to sustain adequate profitability; and Price fluctuations or shortages in the supply of raw materials, energy and other inputs could adversely affect Ternium's profitability", the COVID-19 pandemic poses the following main risks and challenges to Ternium:

- Ternium or its employees, contractors, suppliers, customers and other business partners may be prevented from conducting certain business activities for a prolonged period of time. If that happens, our future operations may be severely affected.
- Chinese steel consumption may decrease in the future as a result of the COVID-19 crisis, stimulating aggressive Chinese steel export offers, which would exert downward pressure on sales and margins of steel companies operating in other markets and regions, including those in which Ternium operates. Similarly, a downturn in global or regional economic activity could stimulate unfair steel trade practices as has happened in the past. These practices, if resumed, may adversely affect Ternium's business and results of operations.
- A continuing spread of COVID-19 may affect the availability and price of raw materials, energy and other inputs used by Ternium in its operations. Any such disruption or increased prices could adversely affect Ternium's profitability.

As of the issue date of this Annex, the Company's capital and financial resources, and overall liquidity position, remain strong. With net debt of \$1.3 billion as of March 31, 2020, a cash position of \$1.0 billion and a manageable debt amortization schedule, the company has in place non-committed credit facilities and management believes it has adequate access to the credit markets. Considering this fact and the funds provided by operating activities, management believes that the Company has sufficient resources to satisfy its current working capital needs and service its debt. Management also believes that the Company's liquidity and capital resources give adequate flexibility to manage the revised capital spending programs and address short-term changes in business conditions, and that it is unlikely that Ternium will not be able to meet its financial covenants.

In accordance with IFRS, management must test for impairment all of Ternium's assets whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Assets subject to testing include goodwill, intangible assets, investments in non-consolidated companies, long-lived assets and right-of-use assets. In addition, management must test goodwill for impairment at least once a year whether or not there are indicators of impairment. Management carried out impairment tests as of March 31, 2020, resulting in no impairment charges to be recognized for any of its cash-generating units. Similarly, management does not expect to disclose or incur any material COVID-19-related contingencies.

In addition, given the uncertainty around the effects of the recession originated by COVID-19 on the industry, and on their impact on Ternium's results of operations, cash flows or financial condition in the medium term, Ternium's board of directors has decided to withdraw its previously-announced annual dividend proposal for fiscal year 2019.