Management Discussion and Analysis
of the financial position and results of operations

for the year ended 31 December 2019

CONTENT

Forward-looking statement

The following review of our financial position and results of operations is based on, and should be read in conjunction with, our consolidated financial statements and related notes for the year ended 31 December 2019.

Certain information, including our forecasts and strategy, contains forward-looking statements and is subject to risks and uncertainties, domestically and internationally. In assessing these forward-looking statements, readers should consider various risk factors as the company's actual results may differ materially from the expected results discussed in this report.

Rounding

Certain monetary amounts, percentages and other figures included in this report are subject to rounding adjustments. On occasion, therefore, amounts shown in tables may not be the arithmetic accumulation of the figures that precede them, and figures expressed as percentages in the text and in tables may not total 100 percent. Changes for periods between monetary amounts are calculated based on the amounts in thousands of U.S. dollars stated in our consolidated financial statements, and then rounded to the nearest million or percent.

Executive overview

We are one of the world's leading producers of steel pipes for the oil and gas industry, a global company with extensive network of production facilities, sales companies and representative offices.

The principal activities of our company are the production and distribution of seamless and welded pipes, including pipes with the entire range of premium connections backed by extensive technical support.

Our plants produce almost the entire range of existing pipes used in the oil-and-gas sector, the chemical and petrochemical industries, energy and machine-building, construction and municipal housing, shipbuilding, aviation and aerospace, and agriculture.

We created an up-to date technological complex based on advanced scientific research, manufacturing high-quality competitive products.

Our operations are geographically diversified with manufacturing facilities in Russia, the United States, Canada, Romania and Kazakhstan. We operate R&D centers in Russia and the U.S. Our global market presence is supported by a wide distribution network. In 2019, we delivered 61% of our tubular products to our customers located in Russia and 16% in North America. We estimate our share on global market of seamless OCTG at around 15%.

We are the largest exporter of pipes in Russia. Exports of pipes produced by our Russian plants accounted for 21% of our total sales in 2019.

In 2019, we sold 3,828 thousand tonnes of steel pipes. Seamless pipes comprised 69% of our sales volumes. Sales of seamless and welded OCTG reached 1,764 thousand tonnes, a 9% year-on-year increase, sales of LDP were up by 54% year-on-year to 468 thousand tonnes.

In 2019, our total consolidated revenue decreased by 7% to $4,767 million as compared to 2018. Adjusted EBITDA[1] was $688 million as compared to $700 million in the previous year. Adjusted EBITDA margin was almost flat as compared to 2018 at 14%.

Market conditions for 2019

The Russian pipe market declined by 1% year-on-year, due to lower demand for line pipe, which was almost fully compensated by slightly higher demand for industrial pipe and stable demand for OCTG pipe, supported by the increasing complexity of hydrocarbon production projects in Russia and a higher share of horizontal drilling (up from 48% in 2018 to 53% in 2019).

In the U.S., the OCTG market saw a slowdown in demand, impacted by oil price volatility and a weakening in drilling activity.

In 2019, European pipe producers saw some slowdown in demand compared to the previous year from the key pipe-consuming industries, mainly due to a challenging economic environment, which was accompanied by a permanent pressure on pipe prices.

Key events

In March, SinTZ for the first time produced casing pipes with TMK UP Centum premium threaded connection made from Q125 steel grade. The first batch was shipped to Gazpromneft subsidiary.

In May, we signed a Memorandum of Understanding with National Petroleum Company of Congo (Société Nationale des Pétroles du Congo, SNPC).The Memorandum solidifies the parties' intention to jointly plan and

[1] Adjusted EBITDA - See "Selected financial data".

develop an oil products pipeline on the territory of the Republic of the Congo with the support of both countries' governments.

In June, we signed a Strategic Partnership and Cooperation Agreement with NOVATEK. The agreement outlines key policies and approaches for supplying TMK's premium casing and tubing pipe to NOVATEK. The agreement introduces formula-based pricing to promote efficient production and ensure timely and reliable supplies, and will remain effective until the end of 2023.

On June 28, the general shareholders' meeting approved dividends in respect of the first quarter 2019 in the amount of 2,634 billion Roubles ($42 million at the exchange rate at the date of approval) or 2.55 Roubles per share ($0.04 per share).

In October, we shipped a second batch of casing pipes with TMK UP PF premium threaded connection to Sakhalin Energy Investment Company ltd for Sakhalin-2 project. The pipe string was successfully lowered into the well in the Sea of Okhotsk under TMK supervision. The order was completed in the frame of the long-term agreement for premium tubular products, signed in 2017.

In October, we signed a memorandum with Saudi Aramco for cooperation development in the upcoming projects.

In November, we signed an agreement with Prommashkomplekt, located in Kazakhstan, for billets supplies. Our sales will amount up to 65 thousand tonnes annually. The agreement will be in effect until 2022.

In January 2020, we closed the sale of 100% IPSCO Tubulars Inc. shares to Tenaris. As a result of the deal the parties entered into a 6-year agreement whereby, beginning on January 2, 2020, Tenaris will be the exclusive distributor of TMK's OCTG and line pipe products in the United States and Canada.

In connection with the deal, S&P raised our long-term credit rating from «B+» to «BB-» with Stable outlook. Moody's changed outlook from Stable to Positive and confirmed credit rating at B1.

In January 2020, we commissioned a heat treatment line at STZ. The new facility provides heat treatment for 168–370 mm diameter pipes with 6,4–40 mm pipe walls. The total amount of investments was 5.5 billion Roubles, 110 of new jobs were created. New line allows to produce premuim tubular products for fields with hard to extract reserves and for wells with agressive environment and extreme North conditions.

In February 2020, we have closed a $500 million 7-year Eurobond issue with a coupon of 4.30%. The proceeds from the Eurobond offering will be used to refinance $500 million Eurobond maturing in April 2020.

Business structure

Our operating segments reflect TMK's management structure and the way financial information is regularly reviewed. For management purposes, TMK is organised into business divisions based on geographical location and has three reporting segments:

- *Russian division*: manufacturing facilities located in the Russian Federation and Kazakhstan, and oilfield service companies and trading companies in Russia, Kazakhstan, Switzerland and the United Arab Emirates. The Russian division is engaged in the production and supply of seamless and welded pipe, premium products and the provision of related services to oil and gas companies;
- *American division*: manufacturing facilities and trading companies located in the United States and Canada. The American division is engaged in the production and supply of seamless and welded pipe, premium products and the provision of related services to oil and gas companies;
- *European division*: manufacturing facilities located in Romania and trading companies located in Italy and Germany. The European division is engaged in the production and supply of seamless pipe and steel billets.

Year ended 31 December 2019 results

Results of operations

In 2019, our sales volumes slightly decreased, weaker results of the American division were almost fully compensated by higher results of the Russian division.

	2019	**2018**	**Change**
	in million dollars		***in million dollars***
Sales volume *(in thousand tonnes)*	**3,828**	3,989	(161)
Revenue	**4,767**	5,099	(332)
Cost of sales	**(3,808)**	(4,183)	375
GROSS PROFIT	**959**	916	43
GROSS PROFIT MARGIN	***20%***	*18%*	
Net operating expenses [1]	**(556)**	(517)	(39)
Impairment of assets	**(99)**	(17)	(82)
Foreign exchange gain/(loss), net	**32**	(72)	104
Finance costs, net	**(218)**	(232)	14
Gain/(loss) on disposal of subsidiaries	**0**	(24)	24
Other non-operating income/(expenses)	**(21)**	(9)	(12)
PROFIT/(LOSS) BEFORE TAX	**97**	45	53
Income tax benefit/(expense)	**(32)**	(45)	13
NET PROFIT/(LOSS)	**66**	(0.2)	66
NET INCOME MARGIN	***1%***	*0%*	
ADJUSTED EBITDA	**688**	700	(12)
ADJUSTED EBITDA MARGIN	***14%***	*14%*	

[1] Net operating expenses include selling and distribution, general and administrative, advertising and promotion, research and development, share of profit in associate, gain on disposal of subsidiary and net other operating income/(expense).

Sales

In 2019, our consolidated revenue decreased by $332 million or 7%. Negative currency translation effect[1] was $143 million. Excluding this effect the decrease in revenue was $189 million.

Sales by reporting segments are as follows:

	2019	2018	Change	Change
	in thousand tonnes		*in thousand tonnes*	*in %*
Russia	**3,120**	2,985	135	5%
America	**520**	804	(283)	(35)%
Europe	**187**	201	(13)	(7)%
TOTAL PIPE	**3,828**	3,989	(161)	(4)%

	in million dollars		*in millions dollars*	*in %*
Russia	**3,641**	3,442	199	6%
America	**889**	1,349	(460)	(34)%
Europe	**236**	308	(71)	(23)%
TOTAL REVENUE	**4,767**	5,099	(332)	(7)%

[1] The currency translation effect on income/expense items illustrates the influence of different exchange rates we use to convert these items from functional currencies into the presentation currency, the U.S. dollar, in different reporting periods for financial reporting purposes.

Sales by group of products are as follows:

	2019	2018	Change	Change
	in thousand tonnes		*in thousand tonnes*	*in %*
Seamless pipe	**2,651**	2,743	(92)	(3)%
Welded pipe	**1,177**	1,246	(69)	(6)%
TOTAL PIPE	**3,828**	3,989	(161)	(4)%

	in million dollars		*in millions dollars*	*in %*
Seamless pipe	**3,413**	3,550	(137)	(4)%
Welded pipe	**1,154**	1,272	(117)	(9)%
TOTAL PIPE	**4,567**	4,822	(254)	(5)%
Other operations	**199**	277	(78)	(28)%
TOTAL REVENUE	**4,767**	5,099	(332)	(7)%

Russia. The division's revenue increased by $199 million or 6% year-on-year. Negative currency translation effect was $126 million. Excluding this effect revenue was up by $325 million.

Revenue from sales of *seamless* pipe increased by $226 million due to better sales mix, reflecting higher sales volumes of *OCTG*, including pipes with *Premium connections*, and better pricing environment.

Revenue from sales of *welded* pipe increased by $152 million mainly as a result of higher *LDP* sales, which also led to better product mix.

Revenue from other operations decreased by $53 million mainly as a result of a significant drop in *billets* sales.

America. In the American division revenue decreased by $460 million or 34% year-on-year.

Revenue from sales of both *seamless* and *welded* pipe decreased by $214 million and $240 million respectively following significantly lower *OCTG* sales.

Revenue from other operations decreased by $6 million year-on-year.

Europe. In the European division revenue decreased by $71 million or 23% year-on-year. Negative currency translation effect was $17 million. Excluding this effect revenue fell by $54 million.

Revenue from sales of *seamless* pipe decreased by $41 million as compared to the last year as a result of lower sales volumes and unfavorable pricing environment.

Revenue from other operations decreased by $12 million as compared to previous year mostly as a result of lower *billets* sales.

Gross profit

In 2019, our consolidated gross profit increased by $43 million or 5% year-on-year and amounted to $959 million. Negative currency translation effect was $28 million. Excluding this effect our gross profit increased by $71 million. Gross profit margin was 20% compared to 18% in 2018.

Gross profit results by reporting segments are as follows:

	2019		2018		Change
	in million dollars	*in % to revenue*	*in million dollars*	*in % to revenue*	*in million dollars*
Russia	**863**	**24%**	652	19%	211
America	**45**	**5%**	182	13%	(136)
Europe	**50**	**21%**	82	27%	(32)
TOTAL GROSS PROFIT	**959**	**20%**	916	18%	43

Gross profit results by group of products are as follows:

	2019		2018		Change
	in million dollars	*in % to revenue*	*in million dollars*	*in % to revenue*	*in million dollars*
Seamless pipe	**858**	**25%**	824	23%	33
Welded pipe	**91**	**8%**	67	5%	24
TOTAL PIPE	**949**	**21%**	892	18%	57
Other operations	**10**	**5%**	24	9%	(14)
TOTAL GROSS PROFIT	**959**	**20%**	916	18%	43

Russia. The division's gross profit increased by $211 million. Negative currency translation effect was $25 million. Excluding this effect gross profit increased by $236 million. Gross profit margin was 24% compared to 19% in 2018.

Gross profit from sales of *seamless* pipe grew by $169 million as a result of the improved product mix and favorable pricing environment.

Gross profit from sales of *welded* pipe increased by $71 million as a result of significant growth in *LDP* sales volumes, which also led to better product mix.

Gross profit from other operations decreased by $4 million.

America. The American division's gross profit dropped by $136 million or 75%. Gross profit margin amounted to 5% compared to 13% in 2018.

Gross profit from sales of *seamless* and *welded* pipe decreased by $82 million and $48 million following lower *OCTG* sales volumes.

Gross profit from other operations decreased by $7 million.

Europe. Gross profit in the European division decreased by $32 million or 39%. Negative currency translation effect was $4 million. Excluding this effect gross profit decreased by $28 million. Gross profit margin amounted to 21% compared to 27% in 2018.

Gross profit from sales of *seamless* pipe fell by $24 million as a result of unfavorable pricing environment. Gross profit was also affected by lower sales volumes.

Gross profit from other operations decreased by $4 million.

Net operating expenses

Net operating expenses were higher by $39 million or 7%. The share of net operating expenses, expressed as a percentage of revenue, was 12% compared to 10% in 2018.

Adjusted EBITDA

In 2019, adjusted EBITDA decreased by $12 million or 2% as compared to previous year. Adjusted EBITDA margin was almost flat at 14%.

	2019		**2018**		**Change**
	in million dollars	***in % to revenue***	***in million dollars***	***in % to revenue***	***in million dollars***
Russia	**636**	**17%**	485	14%	151
America	**30**	**3%**	164	12%	(134)
Europe	**22**	**9%**	51	17%	(29)
TOTAL ADJUSTED EBITDA	**688**	**14%**	700	14%	(12)

Russia. Adjusted EBITDA was higher by $151 million following an increase in gross profit, which was partially offset by an increase in selling, general and administrative expenses. Adjusted EBITDA margin was 17% compared to 14% in 2018.

America. Adjusted EBITDA decreased by $134 million following challenging market environment. Adjusted EBITDA margin was 3% as compared to 12% last year.

Europe. Adjusted EBITDA decreased by $29 million as compared to 2018 following a decrease in gross profit, which was partially offset by lower selling, general and administrative expenses. Adjusted EBITDA margin amounted to 9% as compared to 17% in 2018.

Impairment of assets

In the year ended December 31, 2019, we recognised the impairment loss of $99 million compared to $17 million loss in 2018.

Foreign exchange movements

In 2019, we recorded a foreign exchange gain in the amount of $32 million as compared to a $72 million loss in 2018. In addition, we recognised a foreign exchange gain from exchange rate fluctuations in the amount of $73 million (net of income tax) as compared to a $93 million loss (net of income tax) in 2018 in the statement of other comprehensive income. In 2018, we recognised the reclassification of foreign currency reserves related to the hedged net investment in foreign operation from other comprehensive loss to the income statement in the amount of $23 million (net of income tax), related to partially disposed ownership in TMK GIPI.

The amount in the statement of comprehensive income represents the effective portion of foreign exchange gains or losses on our hedging instruments.

Net finance costs

In 2019, net finance costs decreased by $14 million or 6%. The weighted average nominal interest rate was 6.95% as of 31 December 2019 as compared to 7.29% as of 31 December 2018.

Cash flows

The following table presents our cash flows:

	2019	**2018**	**Change**
	in million dollars		***in million dollars***
Cash provided by operating activities before working capital changes	**665**	682	(17)
Decrease/ (increase) in inventories	**(49)**	(122)	73
Decrease/ (increase) in settlements with customers	**12**	(89)	101
Increase/ (decrease) in settlements with suppliers	**37**	66	(29)
Income tax paid	**(69)**	(27)	(42)
Net cash provided by operating activities	**598**	**510**	**88**
Payments for property and equipment	**(219)**	(273)	54
Other investments	**(145)**	18	(163)
Free Cash Flow	**234**	256	(22)
Change in loans	**(50)**	(46)	(4)
Interest paid	**(219)**	(235)	16
Other financing activities	**45**	(31)	76
Free Cash Flow to Equity	**10**	(57)	66
Dividends paid	**(43)**	(39)	(4)
Effect of exchange rate changes	**(1)**	(4)	3
Cash and cash equivalents at the beginning of period	**392**	491	(99)
Cash and cash equivalents at period end	**357**	392	(34)

Net cash flows provided by operating activities increased by $88 million to $598 million from $510 million in the previous year. In 2019, working capital remained almost unchanged compared to a $145 million increase in 2018. The increase in 2018 was mainly a result of growth in inventories and trade receivables.

Net repayment of borrowings amounted to $50 million as compared to net repayment in the amount of $46 million in 2018.

Cash and cash equivalents at the end of the period amounted to $357 million as compared to $392 million at the end of 2018.

Indebtedness

Our overall financial debt increased to $3,006 million as of 31 December 2019 from $2,867 million as of 31 December 2018. Net repayment of borrowings in 2019 was $50 million. The increase in debt was a result of the Rouble appreciation against the U.S. dollar. Our Net debt amounted to $2,503 million as compared to $2,437 million as of 31 December 2018.

As of 31 December 2019, our debt portfolio comprised diversified debt instruments, including bank loans, bonds and other credit facilities. As of 31 December 2019, the U.S. dollar-denominated portion of our debt represented 39%, Rouble-denominated portion of debt represented 56%, euro-denominated portion of debt represented 5% of our total debt.

The share of our short-term debt was 45% as of 31 December 2019 compared to 31% as of 31 December 2018.

As of 31 December of 2019, our weighted average nominal interest rate decreased by 35 basis points to 6.95% compared to 31 December 2018.

Our most significant credit facilities as of 31 December 2019 were as follows:

Type of borrowing	Bank	Original currency	Outstanding principal amount	Maturity period
			in millions of U.S. dollars	
Eurobonds		USD	500	April 2020
Loan	Gazprombank	USD	270	February 2020
Loan	Sberbank	RUR	226	August 2022
Loan	Alfa-bank	USD	181	January 2020
Loan	Gazprombank	RUR	181	March 2022
Loan	VTB	RUR	162	August 2020
Loan	VTB	RUR	162	December 2021
Bonds		RUR	162	May 2021
Loan	Gazprombank	USD	130	January 2020
Loan	Alfa-bank	RUR	97	July 2021
			2,070	
Other credit facilities			939	
Unamortised debt issue costs			(3)	
TOTAL LOANS AND BORROWINGS			**3,006**	

Development trends

In Russia, we expect pipe consumption by domestic oil and gas companies to remain stable in 2020. The increased complexity of hydrocarbon production projects in Russia is expected to result in higher demand for high tech products.

In Europe, we expect seamless industrial pipe shipments at the European division to remain stable year-on-year, mainly supported by demand for high value-added products.

Selected financial data

Adjusted EBITDA

Reconciliation of income before tax to Adjusted EBITDA for the twelve months ended:

	31 December 2019	30 September 2019	30 June 2019	31 March 2019	31 December 2018
			in million dollars		
Income before tax	**97**	143	140	91	45
Depreciation and amortisation	**205**	231	248	261	268
Finance costs, net	**218**	216	216	221	232
Impairment of assets	**99**	14	14	17	17
Foreign exchange (gain)/loss, net	**(32)**	(4)	9	48	72
Loss/(gain) on disposal of property, plant and equipment	**14**	9	10	13	12
Movement in allowances and provisions (except for provisions for bonuses)	**44**	34	16	8	5
Other non-operating income/(expenses)	**40**	40	58	55	50
Other non-cash items	**4**	3	2	2	(1)
Adjusted EBITDA	**688**	687	713	715	700

Adjusted EBITDA is not a measure of our operating performance under IFRS and should not be considered as an alternative to gross profit, net profit or any other performance measures derived in accordance with IFRS or as an alternative to cash flow from operating activities or as a measure of our liquidity. In particular, Adjusted EBITDA should not be considered to be a measure of discretionary cash available to invest in our growth. Adjusted EBITDA has limitations as an analytical tool, and potential investors should not consider it in isolation, or as a substitute for analysis of our operating results as reported under IFRS.

The following limitations of Adjusted EBITDA as an analytical tool should be considered:

• Adjusted EBITDA does not reflect the impact of financing or finance costs on our operating performance, which can be significant and could further increase if we were to incur more debt;

• Adjusted EBITDA does not reflect the impact of income taxes on our operating performance;

• Adjusted EBITDA does not reflect the impact of depreciation and amortisation on our operating performance. The assets that are being depreciated and/or amortised will have to be replaced in the future and such depreciation and amortisation expense may approximate the cost to replace these assets in the future. By excluding this expense from Adjusted EBITDA, it does not reflect our future cash requirements for these replacements; and

• Adjusted EBITDA does not reflect the impact of other non-cash items on our operating performance, such as foreign exchange (gain)/loss, impairment/(reversal of impairment) of non-current assets, movements in allowances and provisions, (gain)/loss on disposal of property, plant and equipment, (gain)/loss on changes in fair value of financial instruments, share of (profit)/loss of associate and other non-cash items.

Net Debt

Net debt has been calculated as of the dates indicated:

	31 December 2019	30 September 2019	30 June 2019	31 March 2019	31 December 2018
			in million dollars		
Loans and borrowings less interest payable	**3,006**	3,064	2,974	2,851	2,867
Net of:					
Cash and short-term financial investments[1]	**(503)**	(393)	(333)	(332)	(430)
NET DEBT	**2,503**	2,672	2,640	2,519	2,437
NET DEBT TO EBITDA (LTM[2])	**3.64**	3.89	3.70	3.52	3.48

Net Debt is not a measure under IFRS, and it should not be considered to be an alternative to other measures of financial position. Other companies in the pipe industry may calculate Net Debt differently and therefore comparability may be limited. Net Debt is a measure of our operating performance that is not required by, or presented in accordance with, IFRS. Although Net Debt is a non IFRS measure, it is widely used to assess liquidity and the adequacy of a company's financial structure. Management believes Net Debt provides an accurate indicator of our ability to meet our financial obligations, represented by gross debt, from available cash. Net Debt demonstrates investors the trend in our net financial position over the periods presented.

[1] Cash and short-term financial investments include Cash and cash equivalents, Other financial assets and short-term loans issued.

[2] Net Debt-to-EBITDA ratio is defined as the quotient of Net Debt at the end of the given reporting date divided by the Adjusted EBITDA for the 12 months immediately preceding the given reporting date. Adjusted EBITDA – see "Selected financial data".

Principal risks and uncertainties

Industry risks

Dependence on the oil and gas industry

The oil and gas industry is the principal consumer of steel pipe products worldwide and accounts for most of our sales, in particular sales of OCTG, line pipe and large-diameter pipe. In 2019, sales volumes of pipes used in oil and gas industry accounted for approximately 79% of our tubular products.

The oil and gas industry has historically been volatile and downturns in the oil and gas markets can adversely affect demand for our products, which largely depends on the number of oil and gas wells being drilled, completed and reworked, the depth and drilling conditions of wells and the construction of oil and gas pipelines. The level of such industry specific activities in turn depends on the level of capital spending by major oil and gas companies. The level of investment activities of oil and gas companies, which is largely driven by prevailing prices for oil and natural gas and their stability, significantly affects the level of consumption of our products.

Thus, the decline in oil and gas exploration, drilling and production activities, prices for energy commodities and other economic factors beyond our control could adversely affect our results of operations.

Increases in the cost of raw materials

We require substantial quantities of raw materials to produce steel pipes. The principal raw materials used in production processes include scrap and ferroalloys for use in steelmaking operations, steel billets used for the production of seamless pipe and steel coils and plates for the production of welded pipe. The demand for the principal raw materials we utilize is generally correlated with macroeconomic fluctuations, which in turn are affected by global economic conditions.

Prices for raw materials and supplies have a key influence on our production costs and are one of the main factors affecting our results of operations. There are many factors, which influence raw materials prices, including oil and gas prices, worldwide production capacity, capacity utilization rates, inflation, exchange rates, trade barriers and developments in steelmaking processes. We are negotiating new contract terms with our major clients based on pricing formulas, which secure us against growing raw materials prices. The share of raw materials' and consumables' costs in the total cost of sales in 2019 was 65%. In 2019, the cost of scrap metal for TMK's plants in Russia in Rouble-terms decreased on average by 7%, and the cost of coils decreased by 8%. The increase in prices for scrap, coils and other raw materials, if not passed to customers can adversely affect our profit, margins and results of operations.

Our plants also consume significant quantities of energy, particularly electricity and gas. In 2019, energy and utility costs comprised approximately 8% of our total cost of sales. The prices for electricity for our plants increased by 8% in Rouble-terms compared to 2018, while the average prices for domestic natural gas for our plants increased by 3% in Rouble-terms. If we are required to pay higher prices for gas and electricity in the future, our costs will rise and this could have a material adverse effect on our business, financial condition, results of operations and prospects.

Dependence on a small group of customers

As we focus on supplying primarily the oil and gas industry, our largest customers are oil and gas companies. In 2019, our five largest customers in Russia were Rosneft, Gazprom, Surgutneftegas, Gazpromneft and Lukoil, which together accounted for 34% of our total sales volumes. The increased dependence of pipe sales on a single large customer bears the risk of an adverse effect on results of operations in the event that our relationship with any of these major customers deteriorates.

Our LDP business is largely dependent on one of our largest customers, Gazprom. In 2019, 43% of our LDP were sold for Gazprom projects. Increased competition in the supply of LDP or a change in relationships with Gazprom could negatively affect our competitive position in the large-diameter pipe market, resulting in decreased revenues from sales of these products and adversely affecting our business, financial position and results of operations. Additionally, large-diameter pipe business depends significantly upon the level of construction of new oil and gas pipelines in Russia and the CIS. The delay, cancellation or other changes in the scale or scope of significant pipeline projects, or the selection by the sponsors of such projects of other suppliers could have an adverse effect on our sales of LDP, and thus on the results of operations and financial position.

Competition

The global market for steel pipe products, particularly in the oil and gas sector, is highly competitive. In the Russian and CIS markets, we face competition primarily from ChTPZ, as well as OMK and ZTZ in the LDP segment, and the Ukrainian and Chinese pipe producers.

After accession to the WTO Russia had adjusted its national legislation in full accordance with WTO rules and regulations, what allowed Russia along with the EEU (Eurasian Economic Union) to use WTO trade defense mechanism for the national market protection. To date, the following antidumping measures are effective in EEU: antidumping duties in the amount 18.9%-19.9% on imports of some types of steel tubes and pipes originated from Ukraine that were extended till 2021, anti-dumping duties ranging from 4.32% to 18.96% on imports of seamless corrosion resistant steel tubes and pipes originating from Ukraine, antidumping duties in the amount 19.15% on imports of cold-drawn stainless steel pipes originated from China and Malaysia, antidumping duties 12.23%-31% in respect to OGTG originated from China.

Outside Russia and the CIS, we compete against a limited number of premium-quality pipe products producers, including Tenaris, Vallourec, Sumitomo, Voestalpine and Chinese producers.

The US market is protected by more than 50 defense measures, the trade defense of the American market is constantly being improved. For example, in 2018 in the USA antidumping duties were prolonged in the amount of 30.8% for LDP from Japan, the following defense measures were introduced for pipe products: anti-dumping and countervailing duties for non-alloy welded pipes from Brazil, Mexico, Korea and Taiwan in the amount of 4.91% to 103.38%, on welded carbon pipes from Taiwan - from 9.7% to 43.7%

A number of new trade investigations were also initiated: anti-dumping on welded pipes from China, compensatory and anti-dumping against the import of large-diameter pipes from Canada, Greece, Turkey, China and India.

In accordance with Section 232 of the Trade Expansion Act, in February 2018, protective duties, which amounts to 25%, were imposed in the USA on imports of steel goods.

We may not be able to compete effectively against existing or potential producers and preserve our current share of the various geographical or product markets in which we operate. A failure to compete effectively in one or more of these markets could have a material adverse effect on our business, financial condition, results of operations and prospects.

Financial risks

Liquidity risk

Liquidity risk is the risk that we will not be able to meet our financial obligations as they fall due. Our approach to managing liquidity is to ensure that it will always have sufficient liquidity assets to meet its obligations when due.

We manage liquidity risk by maintaining adequate cash reserves and borrowing facilities, by continuously monitoring forecast and actual cash flows and matching the maturity profiles of financial assets and liabilities.

As of December 31, 2019, our total debt increased to $3,006 million as compared to $2,867 million at the end of 2017, as a result of the Rouble appreciation against the US dollar. Net repayment amounted to $50 million. As of December 31, 2019, our Net-Debt-to-EBITDA ratio was 3.64x.

As of December 31, 2019, we committed credit lines in Russian, European and American banks with the available limit of $779 million.

Nevertheless, there can be no assurance that our efforts to improve liquidity profile and reduce leverage will prove successful. The negative debt market reaction on deteriorating global political and financial situation, US and EU sanctions, economic situation in Russia may have an adverse impact on our ability to borrow in banks or on capital markets, and may put pressure on our liquidity, significantly increase borrowing costs, temporary reduce the availability of credit lines or lead to and possibility to incur financing on acceptable terms.

Compliance with covenants

Certain amount of our loan agreements and public debt securities currently include financial covenants. Some covenants impose financial ratios that must be maintained, others impose restrictions in respect of certain transactions, including restrictions in respect of indebtedness, pledging of assets and material asset disposals. A breach of financial or other covenants in existing debt facilities, if not resolved by means such as obtaining a waiver from the relevant lender and/or making amendments to debt facilities, could trigger a default under our obligations.

As of December 31, 2019, we were in compliance with lenders' requirements under covenants.

Nevertheless, in case financial markets or economic situation on the markets, where we operate, deteriorate in the future, we may not comply with relevant covenants. In case of possible breach we will apply best efforts to obtain all necessary waivers or standstill letters. We do not expect the occurrence of such events in the near future.

Interest rate risk

Loans and borrowings at variable interest rate create an exposure to interest rate risk, that is, fluctuations of cash flows due to changes in market interest rates. The exposure of interest rate risk did not materialise for us in the reporting period, as substantially all of our loans and borrowings bore interest at fixed rates or the CBR base rate increased by a fixed margin.

Currency risk

Our products' prices as well as our costs are nominated both in Roubles and in other currencies (generally, in US dollars and euro).We hedge our net investment in operations located in the United States against foreign currency risks using US dollar denominated liabilities. Gains or losses on the hedging instruments relating to the effective portion of the hedge are recognised as other comprehensive income while any gains or losses relating to the ineffective portion are recognised in the income statement. In 2019, we incurred foreign exchange gain from spot rate changes in the total amount of $32 million. In addition, we recognised foreign exchange gain of $73 million (net of income tax) in the statement of comprehensive income.

Also we are exposed to currency risk on the borrowings that are denominated in currencies other than the functional currencies of the respective Group's members. The currencies in which these transactions are denominated are primarily Rubles, US dollars and euro. As of December 31, 2019, 39% of our loans were denominated in US dollar. In this regards, as well as taking into consideration continuing volatility of the Rouble against US dollar, the risk of losses owing to the Rouble devaluation remains sufficiently high. Depreciation of the Rouble against the US dollar could adversely affect our net profit as coherent losses will be reflected in our consolidated income statements. Nevertheless, we are partly secured from currency risks as foreign currency denominated sales occasionally are used to cover repayment of foreign currency denominated borrowings.

Inflation risk

A significant amount of our production activities are located in Russia, and a majority of direct costs are incurred in Roubles. We tend to experience inflation-driven increases in certain costs, such as raw material costs, transportation costs, energy costs and salaries that are linked to the general price level in Russia. In 2019, inflation in Russia increased to 3% as compared to 4.3% in 2018. In spite of the measures of the Russian government to contain inflation, growth of inflation rates may be significant in the short-term outlook. We may not be able to increase the prices sufficiently in order to preserve existing operating margins.

Inflation rates in the United States, with respect to our American division operations, are historically much lower than in Russia. In 2019, inflation in the United States was 2.3%, which is slightly higher than 1.9% in 2018.

High rates of inflation, especially in Russia, could increase our costs, decrease our operating margins and adversely affect our business and financial position.

Legal risks

Changes in tax legislation and tax system

Our subsidiaries make significant tax and non-budgetary funds payments, in particular, profit tax, VAT, property tax and payments to social security funds. Changes in tax legislation could lead to an increase in tax payments and, consequently, to a lowering of financial results. As significant part of the operations is located in Russia, the main risks relate to changes in the legislation of the Russian tax system. The Russian Government continually reviews the Russian tax legislation. The new laws generally reduce the number of taxes and the overall tax burden on business while simplifying tax legislation. Nevertheless, should the Russian taxation system suffer any changes related to increasing of tax rates, this could adversely affect our business.

Moreover, the Russian oil industry is subject to substantial taxes, including significant resources production taxes and significant export customs duties. Changes to the tax regime and customs duties rates may adversely affect the level of oil and gas exploration and development in Russia, which can adversely affect the demand for our products in Russia.

Changes in environmental law

We meet the requirements of national environmental laws at our industrial capacities location areas: the directives and regulations of Russian, the United States, the European Union, Romanian and Kazakhstan legislation.

The main ecological-and-economical risks of our Russian plants are related to changes and tightening of the Russian environmental protection laws. Environmental legislation in Russia is constantly developing. The imposition of a new law and regulation system may require further expenditures to install new technological and waste disposal equipment, pollution and wastewater control equipment, as well as will lead to growth of the rate of payments for negative impact on the environment. It is expected that compliance with the regulations will be accompanied by stricter control by state monitoring authorities.

We estimate that the environmental legislation of the European Union and the United States, Romania and Kazakhstan will not undergo any material changes in the near future. Nevertheless, if such changes arise, the cost of compliance with new requirements could have a material adverse effect on our business.

Other risks

Equipment failures or production curtailments or shutdowns

Our production capacities are subject to equipment failures and to the risk of catastrophic loss due to unanticipated events, such as fires, explosions and adverse weather conditions. Our manufacturing processes depend on critical pieces of steel-making and pipe-making equipment. Such equipment may, on occasion, be out of service as a result of unanticipated failures, which could require us to close part or all of the relevant production facility or cause us to reduce production on one or more of our production lines.

Any interruption in production capability may require us to make significant and unanticipated capital expenditures to effect repairs, which could have a negative effect on our profitability and cash flows. Any recoveries under insurance coverage that we may obtain may not offset the lost revenues or increased costs resulting from a disruption of our operations.

A sustained disruption to our business could also result in delays to or cancellations of customer orders and contractual penalties, which may also negatively impact our reputation among our customers. Any or all of these occurrences could have a material adverse effect on our business, results of operations, financial condition and prospects.

Insurance against all potential risks and losses

We maintain insurance against losses that may arise in case of property damage including business interruption insurance, accidents, transportation of goods. We also maintain corporate product liability and directors and officers liability insurance policies.

We maintain obligatory insurance policies required by law and provide employees with medical insurance as part of our compensation arrangements with our employees.

Nevertheless, we do not carry insurance against all potential risks and losses, and our insurance might be inadequate to cover all of our losses or liabilities or may not be available on commercially reasonable terms.

Ability to effect staff alterations and shortages of skilled labor

Our Russian subsidiaries are in many regions the largest employers in the cities in which they operate, such as Volzhsky, Taganrog, Kamensk-Uralsky and Polevskoy. While we do not have any specific legal social obligations or responsibilities with respect to these regions, the ability to effect alterations in the number our employees may nevertheless be subject to political and social considerations. Any inability to make planned reductions in the number of employees or other changes to operations in such regions could have an adverse effect on the results of operations and prospects.

Competition for skilled labor in the steel pipe industry remains relatively intense, and labor costs continue to increase moderately, particularly in the CIS, Eastern Europe and the United States. We expect the demand and, hence, costs for skilled engineers and operators will continue to increase, reflecting the significant demand from other metallurgical companies and other industries. Continual high demand for skilled labor and continued increases in labor costs could have a material adverse effect on our business, financial position and results of operations.