Section 4. The real sector of the economy

4.1. The dynamics and pattern of economic growth¹

4.1.1. The dynamics of the Russian economy in 2019: domestic and external demand

Unlike the previous two years when the domestic market's weakness was made up for by growth in the foreign trade balance and net exports, in 2019 the development of the Russian economy took place amid a simultaneous decline of the growth rates of overall domestic demand and foreign trade.²

In 2019, GDP growth rates calculated as per the methods of the system of national accounts (SNA) amounted to 101.3 percent, a decrease of 1.2 percentage point as compared with the index value of the previous year. For the first time in the past decade, in 2019 the economic situation became complicated owing to a 2.1 percent decrease in exports' volumes as per the SNA methods in comparable prices relative to the previous year's index value.³ Consequently, in 2019 net exports' contribution to GDP as per SNA methods fell to 2.5 percent against 3.6 percent a year before⁴ (*Fig. 1*).

In the past three years, the positive dynamics of domestic demand was underpinned by the contribution of imports of goods and services into gross resources with a simultaneous revival of domestic manufacturing for the internal market. In 2019, growth in imports amounted to 2.2 percent and 2.5 percent as per the SNA methods in comparable prices and the balance of payments method, respectively (*Fig. 2*).

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² Izryadnova O. The Dynamics and Pattern of Economic Growth // Russian Economy in 2018. Trends and Prospects (Issue 40). Moscow. The Gaidar Institute's Publishing House. 2019. pp. 189–208.

³ By 0.3 percent in current prices and by 5.7 percent in volume terms as per the balance of payments methods.

⁴ To 7.7 percent against 10.0 percent a year before in current prices.

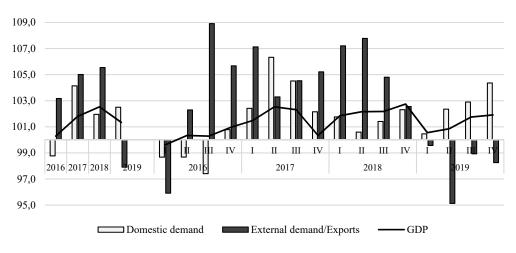
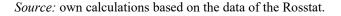
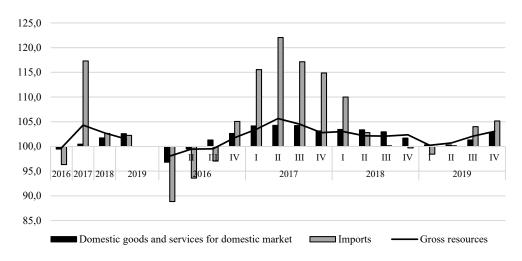
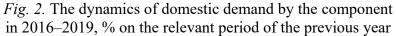


Fig. 1. GDP dynamics by the component of domestic and external demand in 2016–2019, % on the previous year







Source: own calculations based on the data of the Rosstat.

In 2019, the decline of the share of investment goods in imports to the average values seen during the grave investment crisis of 2014–2015 had a negative effect on the dynamics of building and investment activities and processes of technological modernization of capital assets. The growth rates of investments in capital assets amounted to 0.8 percent in 2019 with the annual average value of 4.5 percent in 2017–2018. Growth in the share of intermediate demand goods in imports to the values exceeding the indices of the past decade underpinned the dynamics of domestic output, particularly, in activities with a high share of assembling. All other factors being equal, the expansion of trade in intermediate goods is aimed at reduction of losses by means of upgrading technologies and effective management of production activities, sales, goods promotion and investment strategies, however, the domination of low value-added

goods in exports increases the national economy's dependence on imported high-tech goods (*Table 1*).

Table 1

The pattern of imports by the functional nature of utilization (as per the methods of the balance of payments), %

	Goods				
	consumer	investment	intermediate		
2016	35.6	26.5	37.9		
2017	33.6	27.5	38.9		
2018	33.2	25.4	41.4		
2019	33.8	24.4	41.8		
Ι	34.7	22.9	42.4		
II	32.0	24.3	43.7		
III	33.4	23.9	42.7		
IV	35.0	26.2	38.8		

Source: The Rosstat.

The depreciation of the ruble's exchange rate failed to compensate the shortfall in incomes on the back of changes in the pattern of foreign economic parameters and had an ambiguous effect on the Russian economy. On one side, it reduced the effect of external factors on individual sectors of the Russian economy and facilitated import substitution and modernization of export-oriented industries, while, on the other side, led to growth in production costs as a result of appreciation of imports of intermediate and investment goods and reduction of consumer demand amid the high accumulated inflation rate and low dynamics of households' incomes. It is worthwhile to point out the specifics of formation of domestic consumer market resources. With existing dynamics of production in the consumers' sector of the economy amid appreciation of the national currency, inflation rate targeting, as well as modification of the pattern of prices and consumer demand, the share of import goods in retail trade commodity resources increased in 2019 (*Table 2*).

Table 2

		ommodities	Share of import food products in commodity resources
resources of retail trade	Domestic goods	Import goods	of retail trade in food products
100	62	38	23
100	65	35	23
100	64	36	24
100	62	38	25
100	63	37	25
100	64	36	24
100	61	39	24
100	61	39	27
	trade 100 100 100 100 100 100 100 100 100 100	resources of retail trade Domestic goods 100 62 100 65 100 64 100 62 100 64 100 63 100 64 100 63 100 64	resources of retail trade Domestic goods Import goods 100 62 38 100 65 35 100 64 36 100 62 38 100 64 36 100 63 37 100 64 36 100 63 37 100 64 36 100 64 36

The pattern of the retail trade's commodity resources (in actual prices), %

Including commodition

Source: The Rosstat.

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Amid the depreciation of the exchange rate of the national currency, the effect of import substitution is generally concentrated in manufacturing which is driving out from the market high-priced import goods and leads in the short-term prospect to domestic output growth, but the pattern of demand on domestic and import goods is seriously influenced by consumers' preferences and the income effect.

In 2016–2018, the dynamics and pattern of domestic production were determined by a shift of priorities in favor of support of external demand, which situation defined the specifics of utilization of resources, while the year 2019 saw advanced growth in domestic manufacturing

of goods and provision of services for the domestic market. In addition, changes in the pattern of imports – the reduction of consumer goods supplies and growth in imports of industrial goods – underpinned the domestic market and gave an additional impetus to overcome the recession in domestic manufacturing and expanded the opportunities to diversify the economy (*Fig. 3*).

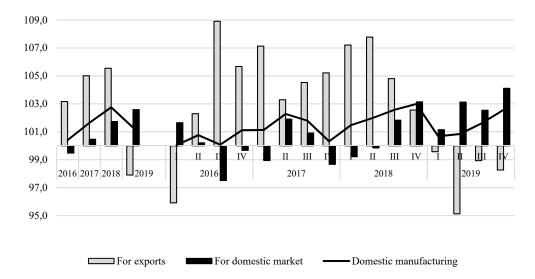


Fig. 3. The dynamics of domestic manufacturing of goods and provision of services by the line of utilization in 2016–2019, % on the relevant period of the previous year

Source: The Rosstat.

In growth models based on the expansion of domestic demand, the key issue is the implementation of the Russian business's potential capacity to react to changes in the environment on the domestic and external markets. It is believed that growth based on high investment activities related to solution of modernization issues is more sustainable, however, in such a situation tougher requirements are set to modification of the pattern of utilization of gross resources.

In 2017–2018, the recovery of growth in ultimate consumption with advanced dynamics of investment demand upturn became a key factor which facilitated to overcome a three-year long recession of the domestic market. In 2019, the ratio of domestic demand factors changed: with a 1.3 percent GDP growth, the ultimate consumption and investments in capital assets increased by 2.5 percent and 0.8 percent on the previous year, respectively. It is to be noted that with the speed-up of domestic demand dynamics as compared with the previous year GDP growth rates saw a downturn trend, reacting more acutely to the level of investment activities. With growth of the domestic market of goods and services being important as a factor of sustainable economic growth, GDP growth rates are more influenced by the dynamics of investments and net exports (*Fig. 4*).

The efficiency of the development process based on external demand can be traced in the values of the indices of the quality and standard of living, as well as employment. Exports of goods and services facilitates growth in labor efficiency in a complex system of networking of various types of economic activities at the sectorial, cross-industry and cross-sectoral levels. Even with sufficient capacity, the domestic market is not able to materialize the overall effect of these economic processes without adequate promotion of activities on external markets.

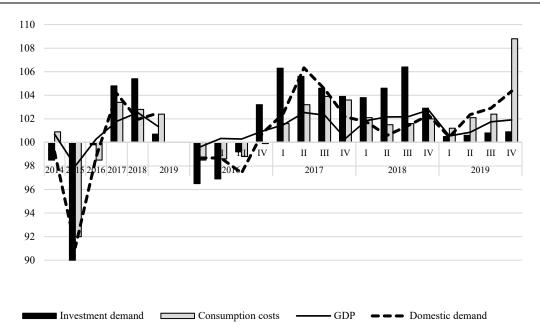


Fig. 4. The dynamics of domestic demand by the component in 2014–2019, % on the relevant period of the previous year

Source: The Rosstat

The correlation between the trade and industrial development can be considered in two aspects: the effect of exports/external demand and imports of intermediate and ultimate demand resources on growth in efficiency in terms of modification of the pattern of production; and the effect of revenues from the foreign trade on the specifics of formation of national saving and motivation of investments and labor remuneration. With the economy functioning amid households' shrinking incomes and budget constraints, the overall domestic demand decreased, so, the issue of mobilization of investment resources as a key prerequisite of support of diversification of exports and support of priority sectors of the economy became quite acute.

4.1.2. Utilization of GDP in 2016-2019:

households' ultimate consumption

The specifics of the 2017–2019 period was the recovery of growth in ultimate consumption after two years of recession. In 2019, with a 1.3 percent GDP growth, ultimate consumption increased by 2.5 percent, including that of households and the public administration by 2.3 percent and 2.8 percent on the previous year, respectively. Unlike 2017–2018, in 2019 the dynamics of GDP was formed amid advanced growth rates of ultimate consumption as compared with investments in capital assets. It is noteworthy that in 2019 ultimate consumption was transformed on the back of increase in dynamics and the share of the public administration's expenditures on individual and collective services to 18.5 percent of GDP, as well as the share of social transfers in households' actual ultimate consumption. So, the slowdown of growth in households' consumption was partially offset by growth in the public administration's expenditures on implementation of national projects. As seen from the analysis of the pattern of GDP utilization as per the SNA-2008 methods in comparable prices the share of expenditures on households' ultimate consumption owing to the implementation of measures

aimed at underpinning social parameters of 2019 amounted to 54.5 percent (50.3 percent in current prices) and returned to the pre-crisis values (*Table 3*).

	2016	2017	2018	2019			
% on previous year							
Gross domestic product	100.3	101.8	102.5	101.3			
Expenditures on ultimate consumption of	98.5	103.4	102.8	102.4			
households	97.4	103.7	103.3	102.3			
public administration	101.4	102.5	101.3	102.8			
	% to 1	total					
Gross domestic product	100	100	100	100			
Expenditures on ultimate consumption of	71.7	71.1	67.2	69.2			
households	52.8	52.5	49.2	50.3			
public administration	18.5	18.2	17.6	18.5			

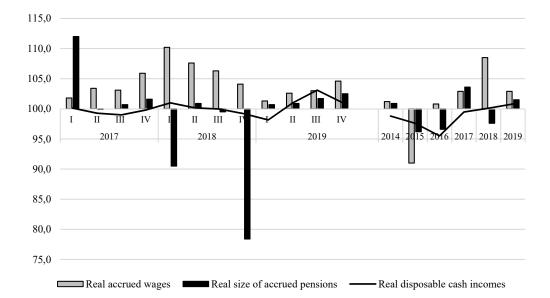
The dynamics and pattern of expenditures on ultimate consumption

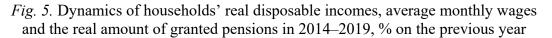
Table 3

Source: The Rosstat.

Households' ultimate consumption was affected considerably by moderate dynamics of changes in households' cash incomes. In the past four years, the formation of the pattern of households' cash incomes was influenced by advanced growth in labor remuneration as compared with social payments and other income sources. The dominating factor behind the formation and modification of the pattern of households' incomes was a growing gap in the dynamics of the actual amount of pensions and wages.

In 2019, households' real disposable income increased by 0.8 percent on the previous year with its dynamics formed amid weakening of the growth rates of wages to 102.9 percent (108.5 percent a year before). In 2019, the size of granted pensions increased by 1.5 percent, which failed to compensate the decrease in the level of pensioners' material security (*Fig. 5*).





Source: The Rosstat.

In the pattern of households' cash incomes in 2016–2019, the share of earned income increased as compared with other sources. With growth in nominal average monthly wages, in 2019 the share of labor remuneration in households' cash incomes increased to 58.1 percent, an increase of 5.8 percentage point on the value seen in 2015 when the minimum growth in nominal wages was registered in the past twenty years of observations. Despite the fact that the share of social payments in households' nominal cash incomes increased from 18.2 percent in 2014 to 19.1 percent in 2019, the real size of pensions decreased by 4.6 percent during that period. The situation became more complicated owing to the weakening of dynamics of households' entrepreneurial and investment activities and eventually resulted in a decrease in the contribution of these components into households' cash incomes to 10.7 percent against 11.8 percent in 2014 (*Table 4*).

Table 4

	Total		Including					
	Cash incomes	Labor remuneration of hired workers	Including wages of workers employed by organizations	Social payments	Incomes from entrepreneuri al activities	Incomes from property	Other cash incomes	
2014	100	54.9		18.2	7.0	4.8	15.1	
2015	100	52.8		18.2	6.5	5.1	17.4	
2016	100	54.0		18.8	6.5	5.1	15.7	
2017	100	54.5		19.4	6.3	4.3	14.6	
2018	100	57.4	39.2	19.1	6.1	4.6	12.8	
2019	100	58.1	40.2	19.0	6.1	4.4	12.4	

The pattern of households' cash incomes in 2014–2019, % to the total

Source: The Rosstat.

The dynamics and pattern of households' cash incomes were characterized by the growing social and economic differentiation and unevenness of distribution of households' incomes and wages. High differentiation and inequality in distribution of incomes and wages is interpreted as a factor restraining economic growth rates and social well-being. In 2019, Gini coefficient and R/P10% ratio remained at the level of the previous year and amounted to 0.413 and 15.6-fold, respectively. The number of the employed with entities with wages below the minimum subsistence level amounted to 3.1 percent of those employed in the economy or 5.2 percent of employees of various institutions. Amid the growing demographic pressure on the able-bodied population, the share of low-paid workers affected seriously the level of poverty. In 2019, the number of the population with incomes below the minimum subsistence level was equal to 19.2 million people (+0.8 million people on the index value seen in 2018) or 13.1 percent (+0.5 percent of the total number of the population). This situation could not, but affect households' consumption.

Households' consumption was formed amid the slowdown of the growth rates of the rate of inflation to 103.0 percent from 104.3 percent in 2018. In 2019, consumer behavior was determined by the slowdown of price dynamics in Q2–Q4 after their speed-up in the beginning of the year. The inflation rate was slowing down at a rather rapid rate with the following price index changes in 2019: food products – 2.6 percent (-1.9 percentage point on 2018), non-food products – 3.0 percent (-1.1 percentage point) and services – 3.8 percent (-0.1 percentage point). On the food market, the price dynamics was influenced by the expansion of the supply of agricultural products, while on the non-food market the appreciation of the ruble weakened growth in prices of import goods and set more moderate dynamics as compared with 2018 (*Fig. 6*).

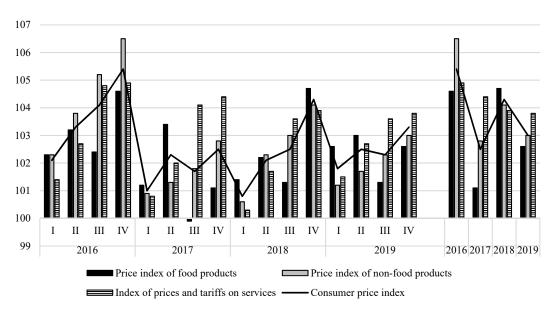


Fig. 6. The dynamics of consumer prices by the market segment in 2016–2019, % on December of the previous year

Source: The Rosstat.

With rather weak dynamics of growth in real disposable incomes, in 2019 the growth rates of the retail trade turnover slowed down to 1.6 percent (-1.2 percentage point as compared with 2018), while those of the food market and non-food market, to 1.4 percent (-0.7 percentage point) and 1.8 percent (-1.7 percentage point), respectively (*Fig.* 7).

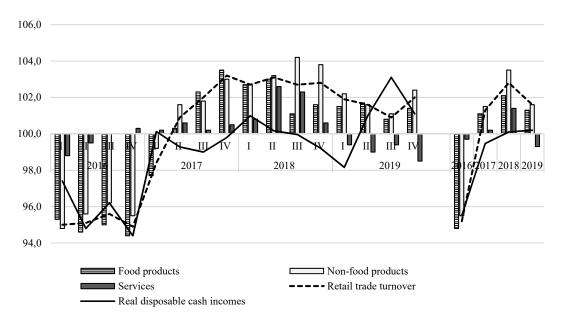


Fig. 7. The dynamics of the consumer market in 2016–2019, % on the previous year *Source:* The Rosstat.

With low dynamics of households' cash incomes in the pattern of households' cash expenditures, the share of consumer spendings increased from 77.5 percent in 2016 to 81.2 percent in 2019 with a decrease in the share of savings from 8.7 percent to 4.3 percent, respectively (*Table 5*).

Table 5

	Consumer	Mandatory payments,	Increase in	Including		
	Consumer spendings	various contributions and other expenditures	households' savings	Savings on bank deposits	Expenditures on purchasing of real property	
2016	77.5	13.8	8.7	4.2	2.1	
2017	79.1	14.2	6.8	4.1	2.0	
2018	80.7	15.1	4.2	3.1	2.4	
2019	81.2	15.4	4.3	3.1	2.5	

The pattern of households' cash incomes in 2016–2019, %

Source: The Rosstat.

A change of the trend in households' expenditures with growth in the share of expenditures on purchasing of goods was accompanied by growth in demand on consumer loans. Households' saving behavior was influenced by cuts in interest rates on mortgage loans with the expansion of supply of housing of a wide price range on the housing market. This situation determined some growth in the share of expenditures on purchasing of real property and growth in households' debt load with a decline of the share of savings in incomes, which factor under certain conditions might create problems with fulfillment by households of their obligations to banks (*Fig. 8*).

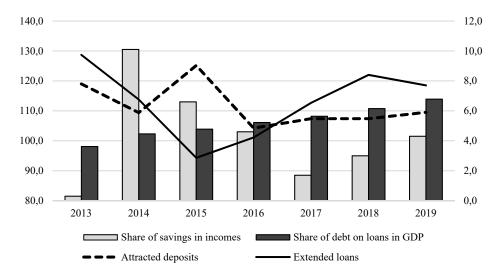


Fig. 8. The share of savings in households' incomes (%) and dynamics of deposits and loans to households in 2013–2019 (% on the previous year)

Source: The Rosstat.

4.1.3. The formation of GDP by income source: wages and labor efficiency

The modification of the pattern of formation of GDP in terms of incomes was determined by means of the mechanisms of redistribution of resources in favor of the business, backbone types of economic activities and enterprises; interest rates and the terms of borrowing and saving with a decrease in investment activities and total factor productivity; dynamics of prices and tariffs, inflation targeting and gradual depreciation of the ruble. The external macroeconomic factors were the dynamics of prices of energy commodities and revenues from exports, as well as the rate of capital outflow. In 2019, the share of gross profit in GDP rose to 41.9 percent against the index value of 42.5 percent in 2018. If the pattern of production costs modified on the back of regulation of labor remuneration and employment, changes in financial performance of economic activities were seriously affected by changes in the level and pattern of prices.

In 2017–2019, the level of profitability of production and dynamics of the balanced financial result were primarily determined by manufacturers' pricing policy. If in 2018 manufacturers' reaction to the trend of recovery of domestic demand was the speed-up of growth rates of prices both in industry and building, in 2019 the situation changed: the decline of producers' prices in extractive industries brought about the adjustment of prices in manufacturing (*Table 6*).

Table 6

Price and tariff indices in 2016–2019, % (December on December of the previous year)

	2016	2017	2018	2019
Consumer price index	105.4	102.5	104.3	103.0
Producer price index, including:	107.4	108.4	111.7	95.7
mining	108.5	123.9	120.7	90.8
manufacturing	107.6	104.2	110.3	96.6
Agricultural producer price index	101.8	92.2	112.9	95.5
Overall index of building material prices	103.2	103.1	107.3	106.0
Index of cargo transportation tariffs	105.6	109.0	100.9	101.5

Source: The Rosstat.

Changes in the level of prices determined the specifics of dynamics of financial performance of economic activities and profitability ratios. In 2019, profitability of production was at the level of 11.4 percent and fell by 0.9 percentage point on the relevant period of 2018. High differentiation of the level of profitability by the type of economic activities was determined by the pattern of domestic prices, the ruble's exchange rate and redistribution of factors of production between various types of economic activities and the domestic and external demand (*Table 7*).

Table 7

of economic activity in 2017–2019, 76						
	2017	2018	2019			
Total in economy	7.5	12.3	11,4			
Agriculture, hunting and forestry	17.3	20.2	18,6			
Mining	24.6	33.6	29,6			
Manufacturing	10.9	12.8	12,1			
Power-, gas-,steam-supply, air conditioning	8.3	8.8	9,2			
Building	3.8	6.1	7,0			
Retail and wholesale trade	4.1	7.3	6,4			
Hotels and public catering	7.0	7.1	5,9			
Transportation and storage	3.4	8.8	8,7			
Information and communications	12.0	14.6	16,0			
Finance and insurance	0.8	11.2	11,8			
Real-estate operations	18.5	15.9	13,7			
Public administration and military security; social security	-1.5	2.4	2,4			
Education	2.7	4.2	6,7			
Health care and social services	7.0	10.4	9,8			

Profitability of sold goods, products, jobs and services by the type of economic activity in 2017–2019, %

Source: The Rosstat.

The indices and dynamics of the nominal pay react more acutely to changes in macroeconomic conditions. A change in the share of labor remuneration in GDP is normally acyclic: it increases in the period of recession and shrinks during recovery. In 2019, the share of labor remuneration in GDP amounted to 46.9 percent and fell by 1.3 percentage point relative to 2016 when the trend towards stabilization of economic growth rates emerged (*Table 8*).

Table 8

	2016	2017	2018	2019
GDP, including:	100	100	100	100
Labor remuneration of hired workers	48.2	47.8	46.1	46.9
Economy's gross profit and gross mixed income	40.8	41.3	42.5	41.9
Net taxes on manufacturing and imports	11.0	10.9	11.4	11.2

The pattern of GDP by the income source in 2016–20
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Source: The Rosstat.

In the Russian economy, changes in economic conditions affect primarily indices of the dynamics of nominal and real wages and slightly the level of employment. In 2019, the number of workforce amounted to 75.4 million people of which 71.9 million people were employed in the economy and 3.5 million people (4.6 percent) were classified as the unemployed (as per the ILO's methods). The level of the rate of unemployment fell all-time low. The level of the rate of unemployment was restrained by the shortage of labor supply justified by demographic factors. With the overall trend of reduction of the share of the able-bodies population in the total number of the population, the dynamics of the number of the workforce and those employed in the economy saw a weak decrease in 2019.

Employers' need in workers declared at state employment services remains approximately at the level of the previous year; tension coefficient per 100 declared vacancies amounted to 52.6 persons (-1.1 persons relative to 2018) late in 2019.

The reaction of the labor market to the changes in the situation remains rather weak because adaptation takes place not by means of release of the workforce, but through adaptation mechanisms of regulation of the work time, administrative measures and the practice of informal labor relations. The macroeconomic instability on the labor market leads to the development of processes of informal employment amounting to 20.5 percent of the total workforce.

Comparison of the dynamics of nominal wages and real wages, labor efficiency and overall labor costs reveals that the values of these indices in 2010-2019 were much below than in the previous decade. In conditions of macroeconomic turbulence, mechanisms of labor remuneration regulation did not lead to adequate growth in labor efficiency. It is to be noted that growth of social claims and the policy of underpinning the standard of living increased the gap between the dynamics of labor efficiency and real wages and reduced the efficiency of the economy and contribution of the total factor productivity. Advanced growth in real wages relative to labor productivity highlighted a lack of automated short-term correlation with indicators of labor market efficiency (*Table 9*).

As seen from the dynamics of labor efficiency in 2017–2019, with a change in the level of prices and the cost of borrowing in industry growth in labor efficiency in mining permitted to underpin positive dynamics of output and facilitated growth in the role of this type of activity in forming the gross value added. In manufacturing, growth in workers' labor efficiency with an increase in the average earned rate facilitated a decrease in labor intensity and offset the reduction of the average annual number of the employed on the back of restructuring of production.

Table 9

	2016	2017	2018	2019
Gross domestic product	100.3	101.8	102.3	101.3
Overall labor costs	99.8	99.6	99.9	99.8
Index of labor efficiency	100.2	101.9	102.3	101.3
Real accrued wages of workers of entities	100.8	102.9	108.5	102.5
Nominal accrued wages	107.9	106.7	111.6	108.5
Number of employed	101.1	99.7	100.3	99.2
Number of unemployed	99.5	93.5	92.2	94.7
Source: The Rosstat				

Labor market indicators in 2016–2019, % on the previous year

Source: The Rosstat

In the investment and building sectors and the trade-related and sales sectors, the retention of jobs became a factor keeping in check social risks on the labor market with a high share of those engaged in these types of activities in the pattern of the economy taken into account, however, labor efficiency dynamics slowed down (Table 10).

Table 10

Dynamics of labor efficiency by the type of economic activities, % on the previous year

1 0				
	2016	2017	2018	2019*
Total in economy	100.2	101.9	102.3	101.4
Agriculture	102.6	105.3	99.8	99.3
Mining	100.3	101.6	101.8	103.1
Manufacturing	102.4	100.7	101.5	101.8
Power-,gas- and steam-supply; air conditioning	101.1	100.1	101.9	100.6
Water-supply; water disposal, waste collection and utilization	100.1	96.7	102.7	103.1
Building	102.3	97.6	102.8	99.7
Wholesale and retail trade	96.4	101.7	102.5	101.5
Transportation and storage	100.8	100.0	100.5	102.6
Hotel business and public catering	94.1	103.5	102.5	103.7
Information and communications	93.7	99.0	100.2	104.3
Real-estate operations	99.6	100.4	95.9	102.3
Professional, scientific and technical activities	94.7	108.4	102.7	101.1
Administrative activities and related additional services	103.9	98.6	101.3	95.4

* preliminary estimate.

Source: The Rosstat.

The most well-paid types of economic activities – mining, production of petrochemicals, pipeline and air transportation and financial activities – retained the leading positions, but the excess of nominal wages over the nationwide average indicator decreased somewhat. Advanced growth in nominal wages in industry was still a factor of retention of human resources. The lowest wages -67 percent of the nationwide average - still prevailed in the agrarian sector. The shrinkage of investment and internal consumer demand slowed down growth in wages in building and trade with restructuring of employment in these types of business activities.

4.2. The output dynamics by the type of economic activities

In 2017–2019, recovery of positive dynamics of the Russian economy was determined by the fact that recession was overcome virtually in all baseline types of economic activities. The highest growth rates were observed in mining and agriculture; weak growth in households' incomes relative to the previous year determined the slowdown of growth rates of the retail trade turnover; weakening of the growth rates of the manufacturing segment of the economy led to the slowdown of the wholesale trade's volumes and transport, while in the investment activity – the volumes of jobs in building.

As per the results of the first three quarters of 2019, growth in industrial production was facilitated by positive dynamics both of the mining sector and the manufacturing sector. At the end of the year, it returned to near-zero growth rates, while recession was observed in power, gas and water production. An increase in output of a number of manufacturing industries was mainly justified by a favorable market environment and state support, however, this trend cannot survive in the long-term prospect because of a lack of structural prerequisites for growth and decline of domestic demand.

For the sake of correct interpretation of the continued existence of negative trends or overcoming thereof in individual industries, it is necessary to carry out decomposing of their output into the following components: calendar, seasonal, irregular and trend; interpretation of the latter is of a substantial interest. The Rosstat publishes the data with exclusion of the seasonal and calendar factors only in respect of the 2017–2019 period and only for the industrial production index as a whole and its most significant components¹, so, experts of the Gaidar Institute cleared a number of indices of all industrial sectors in 2000–2019 of seasonal and calendar components and separated the trend component² on the basis of the latest statistical data published by the Rosstat as regards output indices of the industrial sector of the economy.

The findings of the processing of a series for the industrial production index as a whole are presented in *Fig. 9*. Presented in *Fig. 10* are the findings for the aggregated indices of the mining sector, as well as production and distribution of power, gas and water.

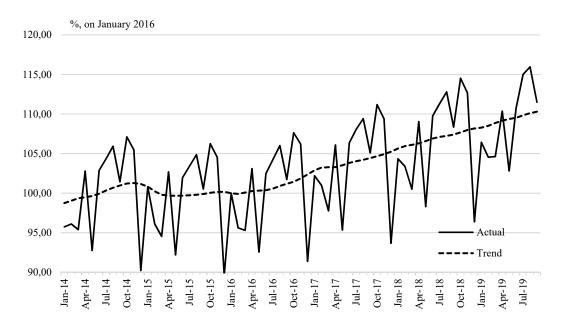
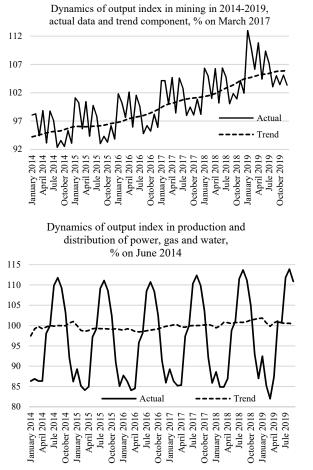


Fig. 9. The dynamics of the industrial production index, 2014–2019 (the actual data and trade component), % on January 2016

¹ Mining; manufacturing; power-, gas- and steam-supply; air conditioning; water-supply, water removal, waste collection and utilization and pollution cleaning.

² Detection of the trend component was carried out by means of the Demetra package with utilization of the X12-ARIMA procedure.



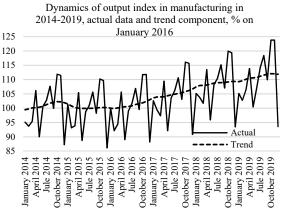


Fig. 10. The dynamics of output indices in mining, manufacturing and production and distribution of power, gas and water, 2014–2019

On the back of extension of the OPEC+ agreement, reduction of oil production in Venezuela and the US warning of sanctions to be introduced against countries importing Iranian oil, in Q1 2019¹ the price of Brent oil appreciated substantially on the global market to USD 68.35 a barrel (an increase of nearly +25 percent as compared with the beginning of the year). Growth in oil prices was accompanied by positive dynamics of the national currency.

Also, early in 2019, changes in the customs and tax regulations affected the volumes of supply and demand in the Russian industrial sector: the beginning of implementation of measures of the final stage of the tax maneuver in the oil and oil-refining industries accompanied by freezing of wholesale prices of gasoline; an increase in excise rates, including those on engine fuel (growth in costs on transportation and storage of goods); change in the VAT rate from 18 percent to 20 percent (growth in prices on products for ultimate consumers).

¹ Kaukin A.S., Miller E.M. Output Dynamics in Q1 2019: Manufacturing Industry Growth // Russia's Economic Development. 2019. Vol. 26. No 5. pp. 14–19.

As per the findings of the calculation, in Q1 2019 the industrial production index saw slow growth like that early in 2018. However, the factors which determined such dynamics early in 2018 and early in 2019 were different: growth in Q1 2019 was facilitated simultaneously by the mining sector and manufacturing, while in the same period of 2018 it was mainly the mining sector that saw growth.

In Q1 2019, industries engaging in production of fuel and energy commodities were growing despite negative factors on the part of supply: the beginning of fulfillment of obligations under the OPEC+ agreement on reduction of the daily rate of oil production. Growth was facilitated in particular by some changes in demand:

- early in the year abnormally warm weather in Europe led to the reduction of export supplies of natural gas, however, it was offset by growth in reserves at European and Russian underground gas storage facilities:
- substantial reduction of global prices of gas resulted in a partial replacement of coal by natural gas, particularly, in Germany;
- implementation of the program of reduction of carbon dioxide emissions in Europe, gradual scale down of the coal-fired power industry and, consequently, a switchover to renewable energy resources and gas;
- growth in Russian coal supplies to Ukraine by railway, including re-exports via Belarus in January-February 2019.¹

In Q1 2019, growth in manufacturing industries was driven by the following: the food industry – partially because of import substitution's residual effects; metallurgy – owing to growth in output volumes of industries, which are end-users of manufactured products (manufacturing of transport vehicles) and lifting of sanctions from the Rusal; the chemical industry – owing to continued investments in building of new production facilities; woodworking and manufacturing of wood products – thanks to putting into operation of a number of large industrial facilities in the timber industry in 2018.

A slump in the pulp-and-paper industry was justified by entering of the existing capacities into the active modernization phase and introduction of new ones, which situation slowed down production somewhat. In the next few years, the pulp-and-paper industry is expected to see the expansion of its production capacities and growth in its output and exports.

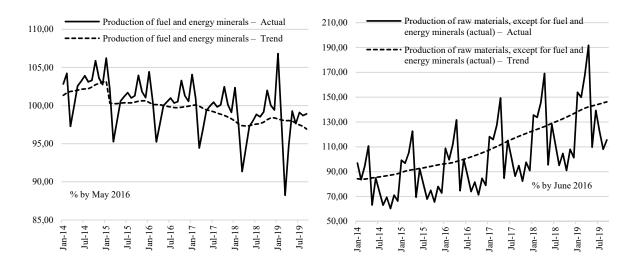
Despite coming into effect from January 1, 2019 of measures to complete tax reforming in the oil industry and the agreement on the extension of a freeze on wholesale prices of gasoline, production of petrochemicals and charred coal saw slow growth as per the results of Q1 2019, which can be explained by an increase in production capacities in January-February 2019 as compared with the previous year, that is, putting into operation of the Euro-5 gasoline production facilities at the Antipinsky Oil Refinery and the Taneko Plant in autumn 2018.²

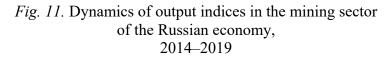
The findings of separation of trend components of sectorial indices of the mining and manufacturing sectors are presented in *Fig. 11–12*.

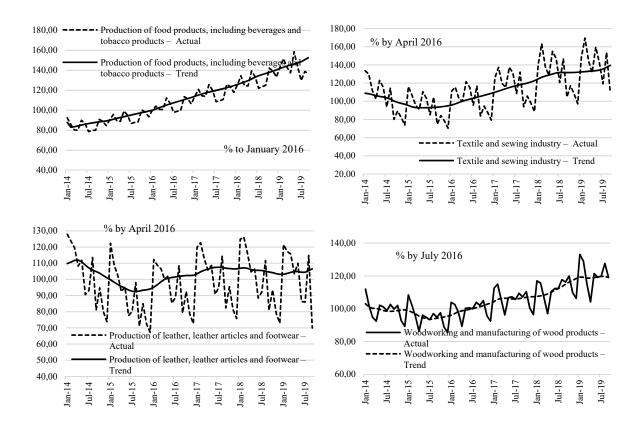
¹ IPEM's indices. Monitoring of the Situation in the Industry // IPEM. February 2019.

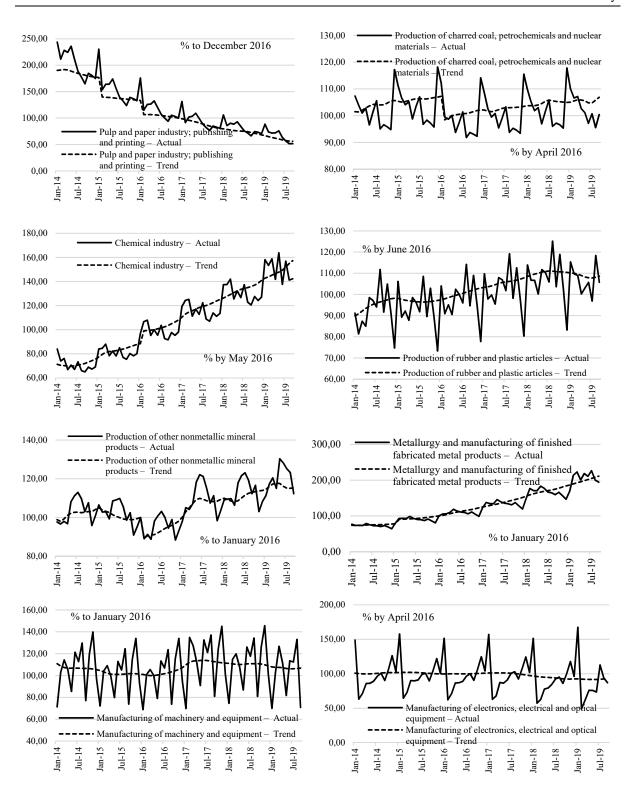
² The Energy Bulletin: New Requirements to Marine Fuels// The Analytical Center under the RF Government.

February 2019. Issue No. 69. p. 7-8.









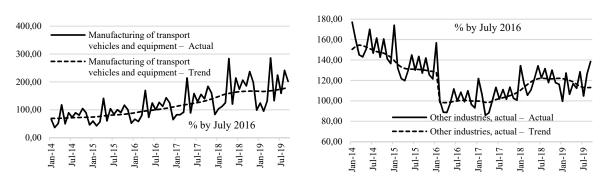
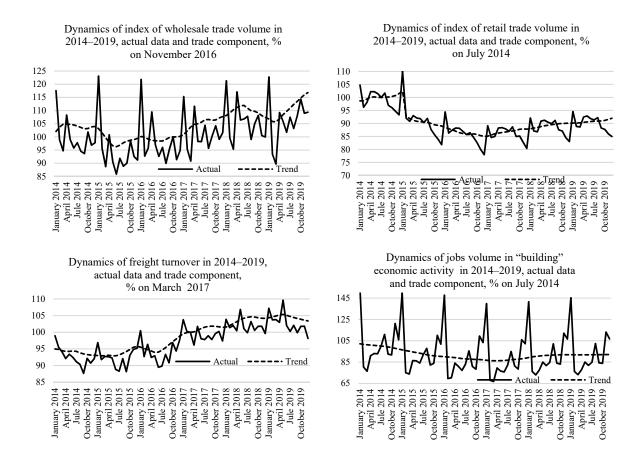


Fig. 12. Dynamics of output indices in the manufacturing sector of the Russian economy, 2014–2019

Also, a slump was observed in wholesale trade, while in Q1 2019 other important sectors of the Russian economy (retail trade, building and paid services to households) saw small-scale positive dynamics. This can be explained by stockpiling by enterprises of reserves late in 2018 ahead of the VAT increase, which situation sped up economic growth in that period, but Q1 2019 saw quite the opposite dynamics of the wholesale trade. Early in 2019, the freight turnover dynamics increased mainly on the back of growth in volumes of transportation of fuel and energy commodities (*Fig. 13*).



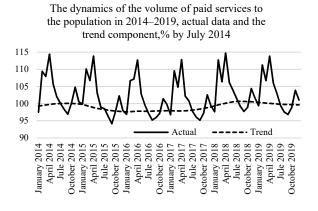


Fig. 13. Dynamics of indices of other industries of the real sector of the economy, 2014–2019

In Q2 2019¹, experts were particularly concerned about exports², which fell amid the continued appreciation of the national currency and oil prices. The factors behind the decline of exports were as follows: first, a large share of the fuel and energy complex in exports, that is, over 60 percent (Q2 2019 saw a reduction in export volumes of natural gas and coal); second, the policy of tariff barriers pursued by a number of countries-consumers of domestic products, for example, metal products; third, a relatively low quality of Russian products which can compete on the international market only in terms of price, but with appreciation of the ruble such prospects largely decreased. With sluggish domestic demand, a drop in private investments and capital outflow observed, this situation could be evidence of the slowdown of economic growth in this country.

Despite concerns, the dynamics of the industrial production index and its trend component highlighted growth which was achieved, as in Q1 2019, owing both to the mining and manufacturing sectors of the Russian industry.

The mining sector was still under influence of the OPEC+ agreement on reduction of oil production volumes. Also, it was affected by an unfavorable pricing environment on the global coal market that made enterprises of this sector adjust their output plans, that is, to reduce output volumes by the end of Q2 and reorient supplies to Asian markets.³ Growth in the gas industry was facilitated by expectations of appreciation of prices of gas before winter, so European countries started to accumulate it actively at their underground gas storage facilities buying it at current relatively lower prices. The fill rate of gas storage facilities increased by nearly 100 percent as compared with last June.

In Q2 2019, in the manufacturing sector growth was still observed in the food industry, the timber industry, the chemical industry, the iron and steel industry and manufacturing of transport vehicles. The factors behind growth remained the same, that is, the state support and a favorable market environment. The wholesale trade's positive dynamics recovered. The

¹ Kaukin A.S., Miller E.M. Industrial Output Dynamics in H1 2019 // Russia's Economic Development. 2019. Vol. 26. Issue No. 8. pp. 27–32.

² Bashkatova A. Russia's Export Curse Stats to Come True // The Nezavisimaya Gazeta. 13.06.2019. [URL: http://www.ng.ru/economics/2019-06-13/4_7597_export.html].

³ In Kuzbas, coal production fell by 7 percent on the back of depreciation of prices in Europe // RBK. 22.07.2019. URL: [https://www.rbc.ru/business/22/07/2019/5d35dc409a7947aa069fe85f?from=newsfeed].

highest growth was registered in freight turnover mainly owing to motor transport. Among the factors which had an effect on it were the following:

- Extension of the transportation range thanks to the commissioning of new high-speed highways;
- Speed up of the car fleet renewal. As compared with the similar period of the previous year, the rate of leasing and extension of loans to transportation carriers against new vehicles was higher (those who postponed the renewal of their car fleet started to do it actively). With new vehicles in use, the rate of breakdown and idle time instances becomes lower and the number of hauls over the distance of more than 300 km increases;¹
- increase in small batch deliveries because of restrictions which were in effect in April in the Central Federal Okrug, the North-Western Federal Okrug and the Privolzhsky Federal Okrug.²

Other important sectors of the Russian economy did not see any significant growth: paid services to households, retail trade and the building industry demonstrated near-zero dynamics.

According to the data of the IHS Markit company,³ in September 2019 the business activity index in Russian industry decreased considerably, the largest drop since May 2009.⁴ According to the company's survey, manufacturers pointed to a decrease in the volume of orders and loss of customers on the domestic market and reduction of export orders.

Also, the evidence of shrinkage of domestic demand is the decline of the "balance of estimates of demand in products (order portfolio)" component of the business confidence index calculated by the Rosstat in respect of the manufacturing and mining sectors in September 2019. Indirect evidence of reduction of domestic demand is the shrinkage of the wholesale trade turnover: in January-August 2019 the index value was equal to 97.9 percent as compared with the relevant period of the previous year.

A number of the following factors hindered growth in volumes of production of key raw materials: the extension of the OPEC+ agreement on reduction of the oil production rate to 228,000 barrels a day; a decrease in natural gas export supplies by the PAO Gazprom to the EU countries (filling up of the EU's gas storage facilities to full capacity) and to Turkey (competition on the part of low-priced gas supplied from Azerbaijan via the TANAP gas pipeline); a decrease in exports of coal to Europe (a shrinkage of demand in coal in European countries) and infeasibility to increase coal exports to Asia due to the overloading of the route network. Despite the existence of these factors, Q3 2019 saw positive dynamics in the mining industry.

Among the factors which underpinned growth in the mining sector, the following can be singled out: first, fulfillment of the obligations as regards the reduction of the daily rate of oil production in full volume was complicated due to the cleaning of organochloride soiling of the Druzhba pipeline and a drop in Saudi Arabia's oil production after the attack on its oil-refining facilities (as a consequence, the reduction of oil production in August and September was equal

¹ Traft: Cargo turnover is growing, among other things, owing to the extension of haul distance // The Single Transportation Website. 28.05.2019. [URL: https://trans.ru/news/traft-gruzooborot-rastet-v-tom-chisle-i-za-schet-uvelicheniya-dalnosti-perevozok].

² Spring 2019 Limitations: Where, When and What Tonnage // The Single Transportation Website. 07.02.2019. [URL: https://trans.ru/news/vesennie-ogranicheniya-2019-gde-kogda-i-na-skolko-tonn].

³ The IHS Markit PMI Index of manufacturing industries // 01.10.2019. [URL: https://www.markiteconomics. com/Public/Home/PressRelease/2a2da5ec9fcb4af8aca0938ef2b77877].

⁴ Slump was equal to 46.3 points. The IHS Markit PMI index varies from 0 to 100. The index value of over 50 indicates the overall increase on the previous month, while that of below 50, the overall decrease.

to 140,000 barrels a day and 160 barrels a day, respectively, which values were below the target); second, in August the volume of the Gazprom's exports was underpinned by the reduction of supply of pipeline gas from Norway and liquefied natural gas from Qatar; third, from July in respect of the tariff on export shipments of power-generating coal towards port railway stations of the North Caucasian Railway, a reduced rate (0.9259 to the existing tariffs of Section 2 of Price List No.10-01) was applied; the extension of the period of application of this rate till the end of 2019 had a positive impact on Russian exporters' costs in Q3 2019.

Based on the results of Q3 2019, the main contribution to manufacturing industries' growth was made by the food industry owing to the substantial surplus in the agrarian sector's output indices as compared with the previous year (the yield of grain, pulses, potatoes and vegetables surpassed largely the results of 2018); the chemical industry – mainly owing to the pharmaceutical industry (whose growth was related to an increase in demand on domestic generic drugs on the part of Kazakhstan, Uzbekistan and Belarus); production of other non-metallic mineral products – on the back of growth in production of building materials.

In the beginning of H2 2019, growth in metallurgy continued though metal prices remained below the level seen in 2018 because of high smelting volumes in China, excess of the supply of metals over demand in the US and subdued demand on metals in the EU. Growth in metallurgy can be explained by formation of commodity stocks in the building industry in Q2 for implementation of future investment projects.

In September 2019, growth in manufacturing of transport vehicles was justified by an increase in manufacturing of light commercial vehicles, mainly, busses. According to experts¹, until the end of the year the industry expects a decrease in output due to weak consumer demand and the reduced state support (since the beginning of the year for this purpose RUB 10.4 billion have been allocated out of the federal budget, of which RUB 6 billion and RUB 4 billion were spent on subsidized automotive lending and leasing, respectively).

In Q3 2019, other baseline sectors, particularly, the building industry, freight turnover, retail trade and paid services to households saw near-zero growth rates. The wholesale trade continued its growth: output growth amid slowdown of domestic demand led to the speed up of accumulation of stockpiles (*Table 11*).

Table 11

	Share in index of industrial production, %	December 2019 on June 2019, %	December 2019 on December 2018, %	Change in past few months
1	2	3	4	5
Index of industrial production		100.43	101.69	stagnation
Mining	34.54	100.64	101.48	stagnation
Manufacturing	54.91	100.99	102.28	stagnation
including:				
Production of food products, including beverages and tobacco	16.34	107.33	112.54	growth
Textile and sewing industry	1.14	108.01	109.92	growth
Production of leather, leather articles and footwear	0.27	104.98	106.28	growth

Change in the output index by industry, %

¹ Romanova T. Car Sales Will Fall This Year after Two Years of Explosive Growth // The Vedomosti daily 04.10.2019. [URL: https://www.vedomosti.ru/business/articles/2019/10/04/812909-prodazhi-avtomobilei#].

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	Со			Cont'a
1	2	3	4	5
Woodworking and manufacturing of wood articles	2.02	99.19	99.94	stagnation
Pulp and paper industry;	3.35	92.54	79.61	slump
Production of charred coal and petrochemicals	17.25	104.24	104.09	growth
Chemical products	7.56	107.75	114.23	growth
Production of rubber and plastic articles	2.14	100.97	98.64	stagnation
Production of other nonmetallic mineral products	4.02	99.47	101.35	stagnation
Metallurgy and manufacturing of fabricated metal end products	17.42	107.58	118.06	growth
Manufacturing of machinery and equipment	6.97	103.91	101.32	growth
Manufacturing of electronics, electrics and optical equipment	6.27	101.31	100.44	stagnation
Manufacturing of transport vehicles and equipment	6.75	107.50	110.80	growth
Other industries	2.42	83.79	78.28	slump
Power, gas and water	13.51	98.74	97.68	slow recession
Wholesale trade		106.53	108.74	growth
Retail trade		101.39	102.06	slow growth
Freight turnover		98.36	99.23	slow recession
Building		100.27	100.18	stagnation
Volume of paid services to households		101.61	104.04	stagnation

Source: own calculations.

Based on the results of Q4, 2019¹, the manufacturing and mining sectors of the Russian economy returned to near-zero growth rates; slump was registered in power, gas and water production. The slowdown of the mining sector is related to the fulfillment of the OPEC+ agreement on reduction of the daily rate of oil production and weakening of external demand on Russian gas on the part of European countries because of the warm weather and filling up of European storage facilities.² The highest positive impact was made by the coal industry on the back of reduction of the tariff on export shipments of power-generating coal towards port railway stations of the North Caucasian Railway; from November 1 this tariff was also applied to escort shipments from railway stations of the Kemerovo Region towards port railway stations of the Oktyabrskaya Railway, the Northern Railway and the Kaliningrad Railway.³ The reduced tariff on export shipments 31, 2019.

The analysis of output trend components of individual manufacturing industries in Q4 highlighted the following common factors:

- the list of industries which demonstrated growth did not change as compared with Q3 2019: the food industry, the chemical industry and the iron and steel industry. Growth sources remained the same. Despite the fact that growth was demonstrated by the industries which accounted for 70 percent of the gross value added of the manufacturing industry, the overall index of growth rates in manufacturing was near-zero (such a difference was registered in the Rosstat's primary observations based on output indices, too; the interpretation of the

¹ Kaukin A., Miller E. Industrial Output Dynamics in Q4 2019 // The Online Monitoring of Russia's Economic Outlook. Trends and Challenges of the Socioeconomic Development. 2020. Issue No.2. Vol. 103. pp. 12–15.

² For the PAO Gazprom, REPO commodity deals are a current capital management instrument permitting to monetize own gas reserves during the low demand period. De jure change of the owner is deemed as exports, but actually it is the volume of supplies for the next period.

³ The reduced rate was introduced in July because of worsening of demand on western markets.

results of the manufacturing sector as a whole requires apparently the update by the Rosstat of online statistical data);

- a substantial slump (79 percent in 2019 on the relevant period of the previous year) was registered in the pulp and paper industry because of a temporary pause related to the commissioning of new production facilities and modernization of the existing ones;¹
- stagnation was observed in the timber industry and manufacturing of wood products (the implications of wild fires in Siberia and the Far East); production of rubber and plastic articles (a decrease in the share of Russian-made tires and casings on the market to 49 percent²); production of other nonmetallic mineral products on the back of near-zero growth rates in the building industry, which is the major consumer of these products.

Based on the results of Q4, the wholesale trade saw growth. Paid services to households demonstrated near-zero growth rates due to the stagnation of households' disposable cash incomes. Building volumes kept growing at a low rate (100.18 percent in December 2019 on the relevant period of the previous year). Slump continued in freight turnover (99.23 percent in December 2019 on the relevant period of the previous year).

Positive dynamics in the manufacturing sector was observed amid moderate capital investments being made, that is, only the existing production capacities were mainly used. Taking into account the role of fuel and energy industries in the Russian economy, the decision of OPEC+ as regards the new reduction of oil production causes further concern (from January 1 till March 31, 2020 Russia has to reduce the daily rate of oil production by 300,000 barrels as compared with the reduction of 228,000 barrels a day late in 2019).

Thus, in the first three quarters of 2019 industrial growth was facilitated by the manufacturing and mining sectors. In Q4, the industry returned to near-zero growth rates. At the same time, relatively sustainable growth remained in the food industry, the chemical industry (production of fertilizers) and metallurgy, that is, the sectors of the economy with a relatively low gross value added. Growth in industries with a relatively high gross value added was observed only in manufacturing of transport vehicles and would probably be short-termed as the state subsidizing of the sector decreased and domestic demand fell. The industries with high value added potential, such as manufacturing of machinery, equipment and electrics saw the near-zero or weak negative dynamics.

Registered as per calculations late in 2019, the stagnation of industrial production, investment, building sector, transport and logistics determined the starting conditions and moderate estimates of growth dynamics in 2020. Early in 2020, the economic situation became complicated due to dramatic changes in the foreign trade situation, primarily, on the hydrocarbons market. The external factors were supplemented by a simultaneous shrinkage of demand and supply on the domestic market because of changes in prices and the exchange rate of the national currency, as well as the urgent solution of acute economic issues related to the outbreak of the coronavirus COVID-19. The most likely development scenario will consist in stepping up of measures to adapt the economy to changes in the global and domestic

¹ Capital investments in the industry increased by 20 percent in 2018 on 2017; a larger portion was spent on technological modernization. See, for example, Golubkina M. Wealth of Opportunities// The Rossiiskaya Gazeta. 12.09.2019. [URL: https://rg.ru/2019/09/12/reg-szfo/po-prognozu-moshchnosti-celliulozno-bumazhnoj-promyshlennosti-v-rf-vyrastut.html].

 $^{^{2}}$ As per the marketing research – "The Market of Tires and Casings in Russia: Research and Forecast till 2023" – prepared by the ROIF Expert marketing agency, the market changed its pattern for the first time. As per the retrospective analysis, domestic manufacturers accounted traditionally for a larger share of the market.

environment in the context of implementation of the package of anti-crisis measures both in the healthcare sector and other sectors affected the most by the coronavirus outbreak.

4.3. Russian industrial sector in 2019 (based on survey findings)¹

This Chapter has been prepared on the results of business surveys of industrial enterprises, which have been conducted by the Gaidar Institute using a European harmonized method in monthly cycles since September 1992.

Business survey questionnaire contains a limited number of questions (not more than 15–20). The original composition of questions of the IEP questionnaire was developed in 1992 on the basis of recommendations from the Organization of Economic Cooperation and Development that monitor business surveys in all countries of the world. Present IEP business questionnaire numbers not only the minimum set of questions recommended by OECD but includes other questions developed on the many years' experience of monitoring the state of the Russian economy and allowing to better understand the features of the dynamic and state of the industry. It became especially important in recent years.

The questions in the business survey questionnaire deal with actual and projected changes in the key indexes of enterprises performance as well as with assessment of the current state. Enterprises are offered to give responses across scale "go up", "no changes", "go down" or "above normal", "normal", and "below normal." We use specific derived index, which we call balance, for the analysis of business surveys' findings. Balances are calculated as difference between the percent of those who answered "go up" (or "above normal") and percent of those who answered "go down" (or "below normal"). The obtained difference allows us to present responses to each question by one number with "+" or "- ". Business survey questionnaires practically lack classic quantitative questions (customary for economists).

A simple construction of questions and responses gives the respondents the chance to fill out questionnaires quickly and without turning to consult documentation. It is paramount that the respondent at each enterprise be a manager of the highest rank having complete idea about the state of affairs at the enterprises and be directly involved in the administration

4.3.1. General assessment of 2019

Prolonged period of industrial business surveys conducted by the Gaidar Institute and representative range of indicators permit to resolve the first task – analyze the situation in the sector in 2019 – determine the place for the year 2019 in all the 28 years' history of our monitoring the industrial sector. For this purpose, first of all, we will use aggregate indicators. The latter are usually calculated on a monthly basis on the findings obtained from monthly surveys and became widely popular owing to promptness of the findings and limitations of official data released on the Russian industrial sector. However, this approach to present surveys' findings complicates assessment of each year as a whole. That is why we analyze all consolidated indicators in a year-on-year basis for the entire period of IET business surveys launched in 1992.

¹ This section was written by *Tsukhlo S.V.*, Candidate of sciences (Economics), Head of the Business Surveys Department, Gaidar Institute.

The IEP Industrial Confidence Index¹ is the most general characteristic computed by all organizations on the basis of surveys and provides the first insight into the state of business in the sector.

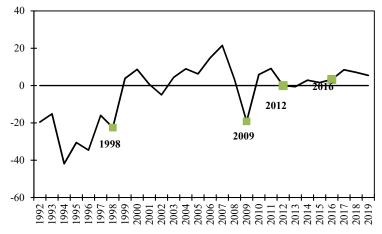


Fig. 14. IEP Industrial Confidence Index, 1992-2019, percentage points

In 2019, the Index demonstrated an ongoing downward trend in the Russian industrial sector following the local maximum seen in 2017 (*Fig. 14*). Over the last year, this Index shed another 1.5 points, and the total decrease after 2017 constituted -3 points. In 2017, when industry commenced recovering from the 2012–2016 stagnation, the Index abruptly went up by 5 points. However, in 2018 the recovery halted and reduction of the index seen in 2019 can signal a protracted entrance of industry into a new wave of stagnation. Slipping into the previous stagnation was tougher for the Russian industry – in 2012 the Index abruptly shed 9 points. In the officially crisis year of 2015 the index contracted by merely 1 point.

Decrease of the Industrial Confidence Index seen in 2019 was triggered by three indexes out of four used in its computing. The worsened dynamic of industrial products demand (balance changes in actual sales) that lost 3 points was the key factor of the economic outlook in Russian industry in 2019. The total loss over 2018–2019 of the Index stood at 10 points. Certainly, such decrease is far from a really crisis reduction by 32 points seen in 2008–2009. Reduction of the same balance during the allegedly crisis year of 2015 constituted solely 6 points.

The negative demand dynamic seen over last 2 years has logically triggered enterprises' disillusionment with the sales volumes. The balance of assessment of actual sales volumes of products achieved in 2019 fell by 5 points. In 2018, this indictor shed merely 1 point. Similar contraction (i.e. the scale of disillusionment of industry with actual demand volumes) in the

- 1) Actual change of demand, balance = percent growth percent decline;
- 2) Estimate of demand, difference of assessments = percent above normal + percent normal percent below normal;
- Estimate of finished goods inventory, balance = percent above normal percent below normal, opposite sign;
- 4) Plans for output change, balance = percent growth percent decline.

¹ The Index is computed as a simple arithmetic average (difference in responses) to four questions from the IEP's monthly business survey questionnaire:

Balances of questions 1 and 4 are seasonally and calendar adjusted. The Index can range from -100 to +100 points. Positive index values imply the prevalence of positive assessments. Negative index values mean that adverse assessments prevail. Decline of index's values is the sign of deteriorating situation. Growth of index's values – the sing of ameliorating situation.

crisis 2015 year also came to 1 point. The most sweeping after the crisis of 2008–2009 was the disillusionment of industry with sales achieved in 2012 – then the balance of assessments had literally plummeted by 15 points.

The balance of assessments of stocks of finished products, which is used in this case with the opposite sign decreased (deteriorated) by 2.5 points in 2019, i.e. stocks of finished products were a little be in excess than seen in 2018. The growth of average annual inventory excess in 2019 was due to two in general contrary factors. On the one hand, slowdown of demand and output reported at the year-end triggered "bad" growth of finished goods inventory. On the other hand, the higher level of confidence in projections of demand and sales plans in 2019 has brought about a "correct" manageable by industry of inventory excess accumulated by businesses in the face of hopes for demand and output growth. Industry registered more of such hopes in 2019 against 2018.

Really, balance of output plans (part of the Industrial Confidence Index) increased by 4 points in 2019 and was the only original indicator positively contributing to dynamic of the composite Index. As a result, this index has returned to the 2017 level but was below its values seen in crisis 2015. Following the full-fledged crisis of 2008–2009, the most optimistic for the Russian industry regarding this index remain 2010–2011 when the balance constituted +22 and +21 points, respectively. However, the advent of stagnation in the Russian industrial sector in 2012 triggered a reduction of this index to +12 points. But this reduction and such balance value are far from the crisis situation seen in 2008–2009 when the indicator plummeted from +35 to +1 point. In the 2015 crisis the balance of output plans declined to 16.5 points against 17.2 points obtained in the 2014 non-crisis year. The minimal optimism of the output plans after the recovery from the crisis of 2008–2009 was registered in 2016 and constituted +11.4 points.

In 2019, surveys registered not only optimism growth arisen from the output plans but of balance growth arisen from projections for demand and employment. As a result, the Industrial Prediction Index¹ – our second composite indicator – demonstrated growth in 2019 due to positive dynamic of all its projections (projections of certain indicators (*Fig. 15*). In 2018, all reviewed herein projections of enterprises on the contrary went down.

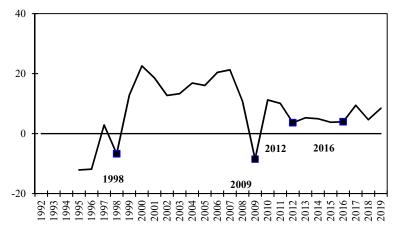


Fig. 15. Industrial Prediction Index, 1992–2019, percentage points

¹ The Industrial Prediction Index is measured as the arithmetical mean of the balances of three questions included in a survey questionnaire: demand change forecasts, output changes plans, and expected occupational employment changes. The Index can vary from -100 to +100 points.

Optimist growth based on the output plans was due to the optimism growth arisen from demand projections in 2019. Projected changes in demand were more optimistic by 3.5 points but failed to hit the 2017 level – the best year for this index for 2011–2019. 2015 remains the worst year for the mentioned period. However, in this officially recognized crises year the balance of demand projections fell by merely 4 points after the 2014 non-crisis year and barely got into "minus." In the 2008–2009 crisis, decreased of the index hit 27 points and the result was worse than that in 2018.

Occupational employment projections in 2019 went up by 4 points and hit the record high (very optimistic) values since 2017. High value of occupational employment balance was calculated not only on the basis with optimism growth generated by the output plans and demand projections but amid growth of staff shortage in industry. According to enterprises' estimates, the balance of supply of industrial workers in 2019 plummeted and was the lowest since 2011. That is why projections optimism regarding employment is largely forced – industry not for the fun of it demonstrated intention to hire workers. The same stance enterprises adhered in the officially registered crisis year of 2015. Then industry instead of the crisis-like growth of dismissals demonstrated decline of such intentions (by 3 points), which looked very strange for a normal crisis of 2008–2009. It should be noted that during that classical crisis the share of information on cutting the headcount increased from 16 to 29 percent. However, dismissals plan for 2019 did not avert a spike in excessive headcount in that crisis year. In seemingly crisis 2015 year plans for raising the headcount intertwined with constant estimates of excessive employment in the Russian industry at 11.5 percent.

The Industrial Projection Index is computed on the basis of balances. The latter is achieved by a deduction from responses "go up" responses "go down." Responses "remain unchanged" are unused. However, in the context of prolonged stagnation analysis of responses "remain unchanged" are of interest.

In 2019, propensity of the Russian industry towards stagnation increased across all indicators (expectations) of enterprises. In their projects (plans) for changes of demand, output, and employment proportion of responses "remain unchanged" increased (*Fig. 16*). Having said that, in all three cases an all-time high has been updated. The highest growth of stagnation expectation was registered regarding demand – this indicator went up by 3 points and hit 69%. All-time (monitoring period 1995–2019) low of expectations of demand changes happened to be in 2008 and amounted to 52 percent. From 2012 stagnation sales projections demonstrate annual growth except the crisis year 2015. Then the share of projections "remain unchanged" decreased symbolically by 2 percentage points¹.

By 2 percentage points moved up propensity towards stagnation regarding output plans. In 2019, an all-time (1992–2019) minimum also happened to be in 2008. From 2011 the share of stagnation output plans demonstrate growth with the same small and highly symbolical exception (decline by 1 point) in 2015. In crisis 2009 propensity towards the output stagnation increased by 10 points.

Occupational employment projections are marked by the highest propensity towards stagnation. On average in 1993–2019 sixty-five percent of enterprises reported projections to retain the occupational employment. Such expectations averaged 60 percent regarding demand and 48 percent regarding output. In 2019, this index with respect to occupational employment went up by 1 point hitting 77 percent. However, in the midst of industrial stagnation seen in

¹ It should be noted that in crisis 2009 the reviewed index went up by 5 points.

2012–2016, the share of responses "remain unchanged" regarding future headcount took a special turn. From 2011, the share of such responses commenced to decline and fell in 2014 to a local low (60 percent). The proportion of projections exhibiting occupational employment change is growing. However, among projections for change projections for decrease exceed projections for growth - the balance is negative. However, this aspect does not result from the goal-directed activity of enterprises. The negative balance of assessments of current occupational employment demonstrates the onset of personnel shortage in industry which was insurmountable at the onset of stagnation. And solely the onset of the officially recognized crisis years of 2015–2016 allowed enterprises to lower pessimism of their projections and get rid of the personnel shortage.

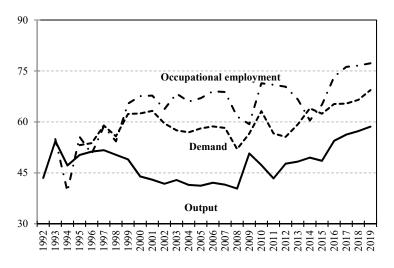


Fig. 16. Propensity of Russian industry towards stagnation (share of stagnation projections), 1992–2019, % of enterprises

Consequently, year to year the share of responses "will not change" in responses of enterprises regarding demand, output and occupational employment is increasing. The share of change projections (notably, in any direction) regarding mentioned indicators is leaving fewer and fewer hopes. In 2019, hopes for improvement in the situation in the Russian industry are few as never before. This, certainly, marks negatively the last year. This being said, enterprises that projected a change in the situation to happen in 2019 raised the number projects for improved situation over projections for deterioration of the situation year-on-year, which remains a positive outcome of 2019.

The growing share of projections "remain unchanged" has ensured the increase of certainty in industrial situation. The uncertainty index based on the calculation of concentration of projections in one of three categories (change strands) – "will increase", "remain unchanged", "will decrease" has ungraded an all-time low across all three projections under review. The highest reduction of uncertainty was obtained for demand projects (0.050), uncertainty for output projections fell a little less (by 0.035), and projections for occupational employment change have shed 0.009. It should be noted that uncertainty of demand and output plans projections demonstrated a crisis spike and hitting an all-time low in the classical crisis year of 2008. Growth of uncertainty of demand and output was also registered in 2012 – first year of stagnation, but practically was nonexistent in 2015. Uncertainty of occupational employment also went up in crisis year of 2008 but failed to update a record of 1996. The next peak of

uncertainty on projections for occupational employment was recorded in the non-crisis year of 2014.

However, non-crisis situation in the industrial sector seen in 2012–2019, prolonged stagnation and minimal hopes (plans) for recovery ensure a rather comfortable performance of industry, because do not require risky decisions on increasing investment, recruitment of the workforce, growth of output and replenishment of inventories. In 2019, the Industry Adaptability (normality) Index nearly returned to an all-time high registered in 2017 (*Fig. 18*).

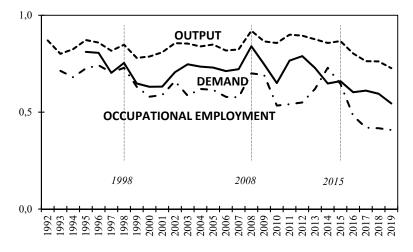


Fig. 17. Uncertainty on projections for demand, output and occupational employment, 1992–2019

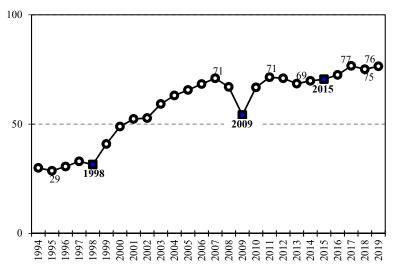


Fig. 18. Industry Adaptability (normality) Index, 1994-2019, percent

The Industry Adaptability (normality) Index – is the third consolidated indicator, measured according to the findings obtained in the course of business surveys conducted by us. Then, assessment of the situation by the Russian industrial sector at the onset of the official crisis year of 2015 made to turn attention to a business survey questionnaire asking industrial enterprises to measure their key performance figures using a grading scale: "higher than normal", "normal", "lower than normal" performance. The average share of answers like "normal" shows the extent to which industrial enterprises consider their situation as acceptable, that is, the extent

to which they are adapted to present economic conditions. The Industry Adaptability (Normality) Index is measured by industrial enterprises' assessments of demand, finished goods inventory, raw and other materials, number of workers, provision of capacities and financial and economic situation.

In 2019, used for the measure of the Industry Adaptability Index initial components demonstrated a variety of trends: three indexes went up and three moved down. The highest reduction was posted by assessments of current demand, which shed a little over 1 percentage point and dropped to 58 percent. Total reduction of the index since 2017 – first year of recovery from stagnation of 2012–2016 constituted 3 percentage points. Such small change in the share of normal assessments was registered not only in 2018–2019 but also was observed over 2012–2016. Then the index stood in the range of 50–52 perce4nt and did not exhibit any crisis-like drop in 2015. It should be noted that over the officially registered crisis of 2008–2009, this index shed more than 40 percentage points, however, during the recovery from that crisis in 2010–2011 managed to regain 30 points. Stagnation that lasted for 5 years denied this index its former dynamic.

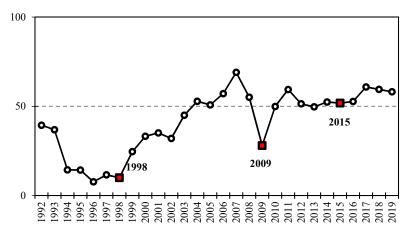


Fig. 19. Normal self-assessment of product demand, 1992-2019, percent

Second in amount but also symbolic was reduction in 2019 of the share of normal assessments of inventories of raw materials and supplies, which constituted less than 1 percentage point. Such insignificant change of this indicator in last year marks its retention at the maximum level, which has been registered for four years in a row – around 80 percent of enterprises boast of normal inventories of raw materials and supplies. Taking into account slack economic dynamic and good financial results of industrial performance, such assessments of supply of raw materials rather fit into a general picture of state of affairs in industry. Another hallmark of resolution of issues related to raw materials was a reduction to all-time (1993–2019) low of assessments of those inventories as insufficient. In 2019, there were solely 11 percent of such responses.

Decline of the share of "normal" assessments of finished goods inventory at 2019 year-end was still more symbolic and came to 0.2 percentage points, which provides more reasons for considering normal supply of stocks of finished products by Russian industry at the previous level of 73 percent. This is the best result seen throughout our surveys over 1992–2019. Industry, thus, continues confidently control its finished products inventory avoiding both critical overstocking and their pessimistic depletion. Industry retained such confident control in

2015. Moreover, in that officially recognized crisis year industry reported non-crisis-like dynamic of its finished products inventory. Then the share of normal assessments against the generally accepted assessment of economic situation as a crisis-like one increased by 3 points and the balance decreased by 3 points. Over the really crisis-like for the industry 2019, dynamic of these indicators was polar opposite but logical for the crisis: first of them as is due in crisis dropped by 5 points and the second went up by 5 points.

2019 registered growth of normal assessments of occupational employment, provision of industrial capacities and financial and economic situation of enterprises. Growth of these indexes turned out to be more significant than the reduction of three mentioned before indicators, which ensured increase of the final Index of normality.

Normal provision of the Russian industrial sector with qualified personnel went up over the year by 5 points and hit 84 percent, which was next all-time high of this indicator. The previous record registered in 2017 was surpassed by 2 points. This is undoubtedly a positive result amid a complicated demographic situation in the country, which sits well with negative dynamic of other enterprises' assessments of their personnel issues. In 2019, our survey registered a plunge in the balance of responses "more than sufficient" minus "less than sufficient". After 4-year stay around zero and even achieving in 2018 a symbolic plus in the last year this indicator literally plummeted by 5 points. Such sharp reduction of the assessment balance has not registered since 2011. Then, assessment of the personnel shortage plummeted to -6.5 balance points, and now it comes to -4.5 points. Reduction of the balance seen in 2019 was due to a sharp reduction of the share of enterprises with excessive headcount. At present, the Russian industry registers solely 6 percent of such enterprises reported excessive headcount.

Growth in 2019 of "normal" provision of capacities in the Russian industrial sector came to 3.5 points and lifted this indicator to 75 percent, i.e. three quarters of industrial enterprises boasted of sufficient provision of machinery and equipment on the back of expected demand changes. This indicator posted maximum in 2017 and stood at 77 percent. However, the situation with capacities in the Russian industrial sector on the whole differs crucially from the headcount situation. If in 2019 enterprises experienced shortage of the latter, then capacities were in excess. Balance of their assessments remained positive and constituted +11 points over last three years. During the industrial stagnation 2012–2016 the balance was relatively stable staying over entire 5 years in the range of +16...+20 points. Having said that, there was no spike in excess of capacities in the officially registered crisis year of 2015. All those years the share of responses "more than sufficient" stayed in the range of +23...+26 percent. The crisis year 2009 reported a spike of excessive capacities from 15 to 37 percent. Only 7 percent of Russian enterprises reported shortage of capacities in 2019. This value is close to the minimum seen in recent years obtained in 2009 (then 5.5 percent of such assessments were rece3ived). Absolute minimum of capacities shortage was registered in 1996 and constituted 4.4 percent.

Enterprises' assessments of their financial and economic situation in 2019 went up to 91 percent and formally updated the previous record registered in 2017. Then there were 90 percent of such responses. Following industrial recovery from 2012–2016 stagnation period the reviewed indicator did not fell below 88 percent. In crisis 2015 year the sum of good and satisfactory self-assessments of economic and financial situation declined to 81 percent, which resulted from a gradual decline ongoing from 2013 and constituting 1–2 percentage points year-on-year. In other words, there was no crisis nosedive, which would even remotely remind of 2009 outcome with its abrupt 21 points of reduction, in 2015 industry did not report.

4.3.2. Dynamics of key industrial indexes in 2019

In early 2019, Russian industry faced slowdown of demand accelerated in late 2018 on the back of the announced VAT rise. In January the sales dynamic after a local December spike triggered by an anticipatory response of the VAT and prices rise demonstrated an adverse adjusted balance of actual sales by 1 point. In February-March, the index shed another point. Such relatively small slowdown of the sales dynamic triggered similar small disappointment with the sales volumes. In Q1 2019, the average proportion of normal demand assessments declined to 57 percent, which was an 8-quarter low. In Q1 2019, demand projections made by Russian industry retained high (+4 points) optimism accumulated in late last year. Previously in Q2 and Q3 2018, the balance of expected changes of sales ranged -1...+1 point. Previously our surveys did not register such stable around-zero balance of sales projection.

However, businesses were unsure that upbeat sales projections of late 2018 – early 2019 will be fully realized and launch sustainable and statistically distinguishable industrial growth based on the effective demand growth. Around-zero balances of assessments of final goods inventories, which were registered by surveys even from early 2018 were in favor of such uncertainty. When Russian industry is confident in sustainable positive demand dynamic, it brings its inventories to a small surplus. Precisely that was seen in 2017 and this did not happen in 2018. In Q1 2019, balance of assessments of finished goods inventories constituted +2 points, meanwhile in Q1 2017, it hit +10 points.

In the context of positive demand dynamic recovery, the industry demonstrated in Q1 a rather high output growth against the disastrous H2 2018. And solely January was a weak month for the key index of the official statistics – industrial output volumes. However, difficulty in assessment of results when the whole country is on national holidays makes us to view with caution the January results regarding changes of any indexes.

Price estimates as of late 2018 in view of the VAT increase, customary January surge of prices and feasible ruble's depreciation demonstrated and upsurge comparable with the December 2014 results. Then balance of inflationary expectations surged to +37 points, in December 2018–to +34 points and exceeded all intermediary maximums. However, this spike of inflationary expectations was not realized by industrial enterprises in January 2019: actual price growth rate came to only +13 points. Such significant deviation of the actual price dynamic from expectations has not been registered by our surveys for a long time. The latter made enterprises to drastically adjust their price projections. In January, their balance literally plummeted to common +16 points.

In February, businesses were slowing down price growth: balance of their actual changes declined by 11 points. However, new price projections grew again and nearly hit December (2018) level. Inflationary wave maintained in the economy could have again push industry to raise the factory gate price. And rightly so, in March industry announced about the price increase. Balance added 7 points following February reduction by 11 points. Price policy of the Russian industry was ailing amid self-adjustment of the economy towards VAT increase. Nevertheless, the February projections of price changes envisaged precisely that development of affairs. And March projections demonstrated a reverse price movement – towards more moderate growth in April-May 2019.

In January 2019, enterprises reported about the biggest layoffs over recent years – balance (rate) of the headcount change declined to values, which already were not registered in January for four years. This resulted in shortage of industrial workers: balance of estimates of their number ("more than sufficient" minus "less than sufficient") in January was negative and

dropped to 10-quarters low. Having said that, headcount surplus contracted to an all-time lowmerely 5 percent of enterprises estimated their actual headcount as "more than sufficient". Such value of this index previously was registered only in January 2008 – at the peak of the pre-crisis overheating of the Russian economy. However, the staff shortage in January 2019 also was relatively small – barely 10 percent of enterprises reported it. The vast majority (85 percent – then an all-time low) boasted for early 2019 of sufficient number of qualified staff. However, a difficult situation seen on the labor market, optimism of demand and output plans projections made the Russian industrial sector to bring (expected scale) recruitment plans to such extreme values that were registered for the last time in early 2008.

Following customary January dismissals seen in February-March, as was planned, industry proceeded to hire the required number of workers. Balance of headcount actual changes increased from the January 16 points first to +5 points and then to +7 points. Enterprises planned to continue hiring: balance of headcount change projections moved up by quarter-end to +16 points and hit levels that were not registered from early 2011.

In early 2019, Russian industry as usual demonstrated an impressive growth of investment plans optimism. Balance of these projections added another 12 points (after the December 2018 hike by 10 points) and hit 7-years high, i.e. the highest investment optimism the surveys registered only in 2011 – early 2012 – prior to the 2012–2016 stagnation. However, minimum capacities shortage was, probably, one of the reasons for negative adjustment of the investment plans. Balance of estimates of this resource has remained positive since 2008 (industry boasts of capacities surplus), and in Q1 2019 this index increased by 4 points and hit 9-quarters high. In early 2019, solely 5 percent of enterprises reported capacities shortage. That is why, already in February balance of investment projections began sliding and in March dropped to +3 points – customary investment hike of the turn of the year ran its course at Q1-end.

Thus, in Q1 2019 the Russian industry retained output growth amid recovery of the sales positive movement and zero balance of estimates of finished goods inventory. However, enterprises did not count on further (prolonged) demand strengthening, although retained high optimism in the output plans and recruitment schedules.

In early Q2, the demand dynamic according to enterprises deteriorated insignificantly. Balance (rate) of sales changes after seasonal and randomized adjustment shed 1 point. At Q2-end, the index regained the score. As a result, the achieved sales volumes in Q2 were estimated as "normal" by 60 percent of enterprises. Demand projections for the entire quarter constantly stayed "in positive territory" – not as large as it was in 2017, but clearly better than seen in 2018, industry retained optimism in sales growth.

However, actually enterprises still were not getting ready to a gradual positive scenario over next months. This way we can interpret the estimates of finished goods inventories. Balance of this indicator ("above norm" minus "below norm") from early 2018 stood around zero amid an absolute (no less than 70 percent) majority of responses "normal." Industry still avoided accumulation of small manageable surplus of finished products stocks, which were prevailing at the confidence periods regarding demand growth. Meanwhile, such balance of estimates of stocks of finished products demonstrated a firm control over their stockpiles.

Nevertheless, retention of optimism in demand growth maintained the industrial output. According to enterprises, in April industrial production retained a positive dynamic. May demonstrated the ongoing output but to a lesser extent – prolonged holidays hamper both industrial performance and adjustment of initial data from seasonal and calendar factors. According to enterprises, output growth rate remained in the black around zero. The output

plans, which gained in early 2019 high optimism level, later began falling but gradually and by merely 4 points for the first six months of the year.

Q2 saw a decisive slowdown of industrial price growth letting to understand the authorities that increased VAT rate pass-through was over. Over first two months of the quarter their growth rate slowed down from +13 to -4 points, and enterprises turned to absolute cut of their prices. In June, balance went up to +4 points amid planned tariffs increase onset from early H1. However, not for long as further surveys have demonstrated. Industrial prices projections had similar dynamic. By May they declined to 21-years low, i.e. such moderate (after seasonal and random movements) inflation expectations were not seen in industry from mid-1998. However, later they slightly increased: thus industry was getting ready to react to customary tariffs growth in H2, but hoped to continue slowing down production costs growth. Balance of its projections decreased compared to Q1 by another 8 points and total decline compared to the peak (due to VAT rate rise) November 2018 hit 22 points.

Large scale recruitment of workers following the customary January layoffs allowed enterprises to reduce staff shortage in Q2 2019 to 20-years low. In April only 7 percent of enterprises reported shortage of headcount "due to expected demand changes." Smaller shortage of headcount (4–6 percent) was registered in industry solely before the 1998 default. Normal provision of enterprises with workforce hit an all-time high. In Q2 2019, 86 percent of enterprises assessed it as "sufficient."

Against this backdrop, industrial sector commences to adjust actual recruitment and its plans towards slowing down, but in H2 2019 failed to increase headcount. Balance of changes of actual headcount remained around zero despite clear plans demonstrated by enterprises to achieve a positive occupational employment dynamic. However, by June optimism regarding these plans dropped from +10 to +5 points, which probably made them more realistic. But most likely, this will not resolve the issue of the headcount shortage in the industrial sector due to unwillingness of the management to raise paychecks. In H1 2019, solely 15 percent of enterprises estimated their level of paychecks as "below norm." This is the minimum (i.e. the best value) for the entire period (2007–2019) of this index monitoring. Maximum (i.e. the worst value) was registered over really crisis Q2 2009 and came to 59 percent. During the officially crisis 2015 the worst value of the index constituted by far not crisis-like 30 percent.

The investment plans of the industrial sector in early H2 2019 continued shedding optimism gained by early 2019. The balance of these plans hit maximum (+15 points) registered in 2017 and 2018. However, later it began losing positions shedding over February-April 17 points and went "negative": investment pessimism in the industrial sector exceeded the investment optimism. However, May reported termination of the index downward trend and even registered growth to +5 points, which signified an onset of customary around zero plateau, which was observed in the investment plans of 2017–2018 after a spike of optimism reported at the beginning of the calendar year. The June investment plans again went into the red. However, in 2019 this plateau was popping up in March whereas in 2018 the onset was registered in June and in 2017 – even in July. Thus, the investment optimism of the turn of the year could make it in 2019 only for two first months.

This being said, the industrial sector was rather satisfied with the volumes of its real investments in Q2: 69 percent of enterprises (maximum for the entire period of this index monitoring 2010–2019) estimated them as "normal" amid prolonged stagnation and highly unclear prospects of recovery.

Accessibility of credits for the Russian industrial sector following the April local failure recovered to customary 68 percent seen in 2017–2019. However, prolonged stagnation has affected borrowing plans of the Russian industry. In Q2 2019, balance of these plans fell to a minimum (+6 points for the entire period of our monitoring those plans. The ability of enterprises to service credits remained high and came in Q2 2019 to 90 percent (i.e. 90 percent of enterprises were able to pay for obtained credits). This is near the maximum for the entire monitoring of the index in 2009–2019. The highest value of the index came to 92 percent and was registered in late 2018.

Therefore, in Q2 favorable demand dynamic allowed Russian industry to demonstrate a rather large output growth for the given historic period. Furthermore, projections of demand and output plans retained a rather high and stable optimism seen since the turn of the year. The same could not be said about the borrowing plans, which plummeted to an all-time low despite a good accessibility of credits and high ability to service them.

The onset of H2 demonstrated the ongoing stagnation in the industrial sector. Moderate but relatively stable dynamic of demand over 2019 prevented businesses from achieving desirable sales volumes made them stem the output growth but still did not hamper to manage the finished products inventories. Businesses faced problems with hiring workers which has brought the headcount shortage to the 6-year low in the wake of sustainable excessive capacities overhang.

Pace of the demand change in July 2019 remained around best values of the index over the previous 12 months and was above the July 2018 index when surveys registered plunge of sales following a relatively good results sown over the first 6 months of the previous year. However, satisfaction with the obtained (or on the contrary unobtained) sales volumes in June-July 2019 was very low (or for unobtained – high). Solely 55% of enterprises considered these volumes "normal." This value was the index minimum seen from February 2018.

Enterprises' "normal" responses regarding the estimates of finished products inventories steadily prevailed. From the onset of 2019, their share did not go below 70%. Balance of remaining 24-30% of responses was in favor of "above normal" responses, but with a small pure symbolic predominance of 2–3 percentage points. Enterprises maintained a minimum surplus of inventories which signified a lack of real hopes for demand growth for the foreseeable future. Having said that the pace of the output growth remained in the positive territory around zero. In June the balance of real output change stood at +1 point.

Amid hopes to revive the weak demand and reach bigger sales volumes the industrial sector halted producers' price increase achieving a near zero balance in their change after the June balance of +4 points. Enterprises' price plans were subject to similar adjustments. This being said, the proportion of responses about a planned price growth declined to 6–7%, beating the record seen in the crisis 2009 when this index dropped to 8–9%. The industrial sector to the best of its power supported the government policy aimed at curbing inflation.

Companies have failed to overcome the negative (for industry) trend of reducing the headcount. Balance of real occupational employment changes in June was "in minus"– industry continued losing workers and dismally failed to increase hiring. Balances of planned occupational employment changes stayed net positive from the year onset although dropped to +3 points in June against March peak of +16 points. Enterprises have failed to implement even such modest plans. The latter has logically triggered the shortage of workers in the Russian industrial sector. The balance of estimates of available qualified personnel "more than sufficient" minus "less than sufficient" plummeted in early H2 2019 to -9 points. Such across the board shortage of personnel was not registered over 6 years.

That said, Russian industry boasts of capacities and even of their excess. The net balance of enterprises who report sufficient provision of industrial capacities remains positive over 11 years just from mid-2008. In this context, capacities shortage cannot be a valid factor for the Russian enterprises to increase fixed investment. And really, the investment optimism of the industry has already been waning for the third year following a surge in Q1. The investment plans of companies for July never managed to get rid of the pessimism accumulated in June. Then, the net balance of enterprises' investment projections plummeted by 10 points hitting -6 points. The Russian industrial sector did not register such investment pessimism since 2016. Although, the net balance went up to -2 points in July but remained in the black. The industrial sector none the less reported plans for the cutting the investments.

A symbolic deterioration of the sales dynamic seen in August did not change the general picture of the first 8 months of 2019: demand demonstrated strikingly stable against 2018 but obviously not as good rates of change compared to 2017. Sales projections were marked by stability in 2019. The net balance of this index seasonally adjusted and cleared of random factors stayed in the rage of +3...+4 points, which was definitely better expectations of H2 2018, but below the 2017 results.

Under the circumstances, it was hard for enterprises to monitor their inventories of finished products and demonstrate remote hopes for the feasibility of demand and output growth. The net balance of the enterprises' estimates of those inventories for over 20 months remained around zero which points to the lack of real hopes of demand growth.

Successful fight of the monetary authorities with inflation and enterprises' attempts to revive sales have again forced the industrial sector to cancel the factory gate price growth. In August, the net balance of the real price change dropped to zero. The same situation for the first time was registered in May 2019. Enterprises' price projections were also exceptionally frosted. In May, the net balance of price changes plummeted from +9 to -7 points. In July-August, the Index stabilized at the level of +2 points. That said, the share of price retention projections hit in August 2019 customary high of 86%.

In August, the Russian industry managed to overcome the negative trend of personnel reduction which took shape in April-July. The 4-months-long period of the headcount decline has led to an outbreak of the most widespread for the recent 6 years personnel shortage in industry and dissatisfaction of workers and specialists with the compensation rate. However, enterprises are unlikely to go on hiring personnel in industry. The balance of hiring plans lost in August both traditionally high optimism inherent to the year onset and moderate positive sentiment of Q2.

Accessibility of credits for the Russian industry retained in 2019 as a whole a customary for the recent years level. In August, 68% of enterprises considered it normal. The net balance of enterprises' borrowing plans recovered and achieved a customary for the end of 2018-early 2019 moderate optimism against a collapse seen in Q2.

In September, enterprises notified about a symbolic improvement of demand dynamic against a symbolic deterioration in August. As a result, the seasonally adjusted and cleared of random fluctuations balance of industrial products sales still demonstrated exceptional stability. Enterprises' demand projections for September retained stability by remaining in the range of +3...+4 points after seasonal adjustment and cleared of random fluctuations. Thus, industry retained the very same stability which to date is called stagnation.

In this context (amid stagnation) it was rather easy to enterprises to manage their inventories of finished products. As a result, Russian industrial enterprises report a record high level of

"normal" estimates of inventories. In September 2019, such estimates hit 78% – an all-time high for 328 surveys. The average result over first 9 months constituted 73% – also a record high for entire 28 years of surveys on 9-months data. The balance (disparity) of remaining estimates stood around zero without exceeding the range -2...+3 points from early 2019. The industrial sector still did not have grounds for accumulating manageable excessive inventories inherent for the periods of confidence in demand growth.

The output growth rates (seasonally adjusted and cleared of random fluctuations) remained in the positive around zero for a second quarter in a row – from April this index constantly demonstrates values in the range of 0...+1. In Q1 2019, the balance (rate) of actual output changes stayed according to surveys in the range of +2...+3 points. Despite such sluggish output dynamic, the industrial sector retained optimism of its output plans at the high level over the current year. In Q3, the net balance of the output projections averaged +13 points a little bit less than +16 points registered in Q1 2019. It should be noted that in 2018 the enterprises' output plans demonstrated less optimism: all quarterly balances stayed in the range of +11...+12 points.

In September, industry tried to raise selling prices – the balance of their real changes went up to +5 points against 0 points in August. However, enterprises considered this step illconceived. Price projections, on the contrary, declined by 5 points – industry again was ready to back down from raising them. In September 10% of enterprises reported an intention to cut prices which was nearly a record for the last 7 years. More responses about price cut (13%) were received solely in May 2019.

In September, the balance of enterprises forecasting a change in the personnel number stood at zero. Consequently, the negative downward trend formed over May-July amid the need of hiring more personnel has been overcome. However, enterprises' personnel projections have lost their optimism seen at the onset of the year. The net balance of this index remained at zero for a second consecutive month, in other words enterprises already did not plan headcount growth. And the vast majority of enterprises (83%) directly reported in Q3 2019 about the intention to retain the headcount. Such across the board intention of the Russian industrial enterprises not to change the number of headcount has not been registered not in a single quarter from the launch of the index monitoring in 1993. A close value (82%) was obtained in Q2 2019. The previous "record" of the Russian industry to freeze creation of new work places was registered in 2018 and stood at 78%.

In view of this, enterprises' stable projections dynamic regarding demand let them in Q3 to confidently control stocks of finished products by demonstrating around zero output growth rate and confidence in impracticality of optimistic output plans. Having said that, enterprises' reluctance to create new jobs has hit an all-time high over 1993–2019.

According to enterprises estimates, in early Q4 2019 the demand dynamic continued demonstrating stability: both regarding the real changes and projection-wise. Both real sales growth rate and expected sales growth rate seasonally adjusted and cleared of random fluctuations deviated from the average annual level not more than by 1 percentage point. Such unique situation was never registered over the previous years. However, in October industry ran the risk to increase output growth rates. This measure in the wake of stable dynamic of real sales and stable projections has triggered increase of excessive inventories of finished products. In October, the balance of their estimates went up to +6 points, which was a 12-month high. This being said, the output plans so far remained at the minimum of the current year: the industrial sector is not ready, which makes sense, to continue ramping up production.

The Russian industry was unable to get rid of the headcount shortage in Q4. 14% of enterprises reported shortage of personnel for a second consecutive month, which was a 3-year maximum. Solely 6% of enterprises registered surplus of headcount, which was close to an all-time low. Typical balance was negative and the worst over the last 5 years. The industrial sector has not seen such massive shortage of headcount from mid-2014. Furthermore, enterprises personnel projections hitting in early 2019 a post-crisis high by October declined by nearly zero – and this was in the wake of the significant headcount shortage.

Personnel shortage reported over H2 triggered growth of dissatisfaction with paychecks level in the industrial sector. The share of responses "below normal" has gone up to 23%, which was a 3-year low for the index, although at the onset of the year dissatisfaction with wages stood at an all-time low. However, in early 2020, enterprises were not hoping to mend the wage situation. The net balance of enterprises' expectations of wage changes in late 2019 was negative – companies responded about a cut in wages.

By the end of Q4, the Russian Industry faced an obvious slowdown of demand growth on its products. According to the December survey findings with seasonal adjustment and clearance of random fluctuations the net balance (rate) of sales declined to 48-months low, in other words the worst value of the index was obtained in late crisis year of 2015. Logically, such result underwhelmed enterprises: December sales were considered "normal" by only 55% of enterprises. On average over 2019, this index came to 58% down against 2018 (59%) and 2017 (61%). However, demand projects at the year-end remained at the previous level +3...+4 points (where they stayed over entire 12 months of the year) by conclusively proving an exceptional stability of enterprises' expectations.

Negative demand dynamic seen at the year-end logically triggered excessive inventories growth. In December, the balance of their estimates hit +11 points. Such high overhang was not registered since March-May 2017. However, then industry really saw a chance to exit from protracted recession of 2012–2016 and purposefully brought its inventories up to indicated excessive level. In late 2019 the situation is reverse – industry had to estimate its inventories as excessive and went on to slowdown the output growth in order to avoid their further stockpile and/or reduce inventories volume down to acceptable level. And sure enough in November-December 2019 enterprises decisively commenced slowing down the output growth. Over the last quarter industry proceeded from a slight output growth to similar output cut.

Slowdown of demand and successful fight of the government with inflation made enterprises refuse to increase selling prices and proceed to their absolute cut. Over Q4 2019 the balance of actual price change dropped from +5 points to -9. Surveys did not register such rapid price drop (with the balance of -9 points) over 6 years – from 2013. However, in December 2008, this index plunged to -24 points. Industrial projects demonstrated readiness of enterprises to demonstrate in early 2019 a typical price growth, however seasonal adjustment and clearance of random fluctuations revealed an utmost modesty of those intentions in late 2019.

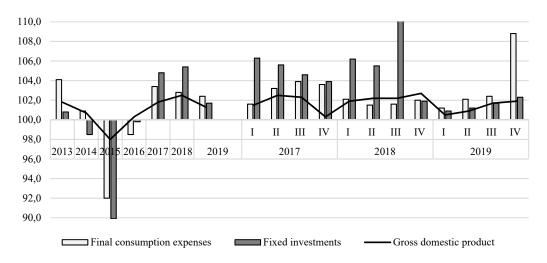
4.4. Fixed investment¹

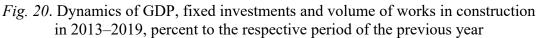
4.4.1. Investment resources

In 2019, growth rates in fixed investments amounted to 1.7 percent relative to the previous year, while the corresponding indicator a year earlier reached the level of 5.4 percent. Despite

¹ This section was written by *Izryadnova O.I.*, Head of the Structural Policy Department, Gaidar Institute, Leading Researcher of the Structural Policy Department, IAES RANEPA.

certain success in the economic recovery growth in the previous two years, the dynamics of main components of the investment activity was negatively affected by persistence of crisis developments in the construction and investment sector, where fixed investments amounted to 99.2 percent in 2019, and the construction work volume was 97.2 percent against the indicator of 2013 (beginning of investment stagnation) (*Fig. 20*).





Source: Rosstat.

Compared to the previous year, the pattern of investment activity in 2019 was significantly affected by a decrease in interest rates, a slowdown in the dynamics of prices for machinery and equipment, and an increase in international credit ratings to the investment level of the Russian economy. According to advance estimates by the RF Central Bank, the volume of direct foreign investments in the Russian economy amounted to \$ 26.9 billion in 2019, and net private capital outflows fell to \$ 26.7 billion against \$ 63.0 billion a year earlier (*Table 12*).

Table	12
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r mancial conditions for investment activity in 2014–2017											
	2014	2015	2016	2017	2018	2019					
Key rate (year- end), percent	17.00	11.00	10.00	7.75	7.75	6.25					
International reserves of the Russian Federation (year- end), USD billion	385.5	368.0	376.3	432.1	468.5	549.8					
Private sector transactions (net lending (+) / net borrowing (-)), USD billion	152.1	57.1	18.5	24.3	63.0	26.7					
Direct foreign investments in Russian economy, USD billion.	22.0	6.9	32.5	28.6	8,8	26.9					
Direct Russian investment abroad, USD billion	57.1	22.1	22.3	36.8	31.4	16.9*					
Price index for investment purposes goods, December to December of previous year, percent	107.2	110.3	103.2	103.1	107.3	106.0					
Including:											
Producers of construction products	104.6	104.1	106.6	104.9	106.5	106.6					
Purchase of machinery and equipment	112.3	120.1	97.8	101.1	108.9	107.1					
Official Ruble USD exchange rate (year-end), RUB/USD	56.26	72.88	60.66	57.60	69.47	61.91					

Financial conditions for investment activity in 2014–2019

* January-September 2019.

Sources: Rosstat; Central Bank of Russia.

In the context of economy income growth seen in 2016–2019, the structure of GDP registered increase of the share of gross national savings. However, the current ratio of interest rates, inflation and earning record as a whole for the period have not significantly affected the investment decision making. The share of fixed investments amounted to 17.7 percent of GDP in 2019. The share of attracted by credit institutions corporate funds in 2019 amounted to 19.8 percent of GDP and households deposits to 27.9 percent of GDP under continued high interest rates (*Table 13*).

1	able	13
1	ubie	15

2015	2016	2017	2018	2019
27.6	26.2	26.8	31.1	31.3*
16.7	17.2	17.4	17.0	17.7
47.8	48.2	47.8	46.1	46.9
32.3	32.8	33.3	35.8	35.8
2.3	2.2	2.1	2.1	2.1
1.4	1.2	1.1	0.6	0.97
27.8	28.2	28.2	27.5	27.9
22.,8	19.0	19.4	20.9	19.8
	27.6 16.7 47.8 32.3 2.3 1.4 27.8	27.6 26.2 16.7 17.2 47.8 48.2 32.3 32.8 2.3 2.2 1.4 1.2 27.8 28.2	27.6 26.2 26.8 16.7 17.2 17.4 47.8 48.2 47.8 32.3 32.8 33.3 2.3 2.2 2.1 1.4 1.2 1.1 27.8 28.2 28.2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

Main characteristics	of investment sources	in 2015–2019. as	percent of GDP
intann characteristics	of investment sources	- III #010 #0179 us	percent of ODI

* Advance estimates.

Source: Rosstat.

Resource potential of investment activity was determined by reserves and capital stock. Coefficient of renewal of fixed assets has gone up amid reduction of depreciation degree and contraction of proportion of outspent fixed assets for the whole of economy, while maintaining positive dynamics of capital stock commissioning in 2016–2018. However, this was not kept up with increased return on assets and significant change in the investment structure in fixed assets by source and by type of activity.

4.4.2. Fixed investment financing by source

and by type of ownership

In 2019, financing of investment resources was dominated by own funds of enterprises and organizations. The share of investment from own funds of organizations hit maximum for twenty years monitoring period of 57.1 percent of the total fixed investment volume. The long-term financial investments decreased to 9.1 percent in the pattern of financial fixed assets against the indicator of 13.2 percent in 2018. Growing rate of own funds in financial resources of enterprises and organizations in 2019 was entailed by slowdown in increase of financial performance results for the whole of economy to 17.5 percent (66.4 percent a year earlier) and rate of return to 11.4 percent against 12.3 percent in 2018).

Participation of Russian banks in financing investment projects in 2019 was marked by reduction of the contraction of loans share by 2.5 percentage points relative to the previous year. Moreover, share of foreign loans and investments from abroad contracted to 2.1 percent (-2.3 pp against 2018) and 0.5 percent (-0.1 pp) respectively in the structure of fixed investments sources. Loans of Russian banks did not compensate the reduction of foreign loans within investment resources.

In 2019, volumes of budget funds for investment spending have insignificantly increased against reduction of the federal budget and increase of budgets of the RF subjects and local budgets (*Table 14*). At the end of 2019, financing of the federal targeted investment program from the federal budget appropriations amounted to 66 percent compared to 70.1 percent a year earlier. The federal budget expenditures for national projects in 2019 amounted to 91.4 percent

(89.3 percent according to data of the "Electronic Budget" portal) or RUB 1.6 trillion vs planned indicator RUB 1.75 trillion.

This is due to the low rhythm of funding: in H1, exercising of the federal budget spending on the implementation of national projects and the comprehensive plan amounted to 32.4 percent at the end of September, with 52 percent, the major part, used in December 2019.

Table 14

Structure of fixed investments by sources of financing in 2016–2019 (less small
businesses and informal activity)

	2016	2017	2018	2019
Fixed investment	100	100	100	100
Including by sources of financing: Own funds	51.0	51.3	53.0	57.1
Attracted funds	49.0	48.7	47.0	42.0
Including: Bank loans	10.4	11.2	11.2	8.7
Of which: Foreign banks loans	2.9	5.4	4.4	2.1
Russian banks loans	7.5	5.8	6.8	6.6
Borrowed funds from other institutions	6.0	5.4	4.3	4.1
Foreign investments	0.8	0.8	0.6	0.5
Budget funds	16.4	16.3	15.3	15.8
including: Federal budget	9.3	8.5	7.0	6.6
RF subjects budget funds	6.0	6.7	5.6	6.0
Local budget funds	1.1	1.1	1.1	1.3
Extrabudgetary funds	0.2	0.2	0.2	0.2
Funds obtained from shared construction (organization and population)	3.0	3.3	3.5	3.7
Including funds of population	237	2.5	2.5	2.9
Other	12.2	11.5	11.9	9.5

Source: Rosstat.

The share of Russian ownership investments in 2019 increased to 82.8 percent (in investments without small businesses and the parameters of informal activity), mainly due to an increase in the share of private Russian ownership to 50.5 percent and state ownership to 19.8 percent (*Table 15*).

The positive role of private sector in 2017–2018 was determined by dynamic growth of fixed investments, which compensated the reduction of public, mixed Russian forms of ownership and ownership of state corporations. In 2019, the situation has changed: private investments gave way to the state investments (*Table 15*). Herewith, it should be noted that structural shifts in fixed investments by forms of ownership were developed amid reduction of share of mixed Russian, foreign, and joint Russian and foreign forms of ownership.

Таблица 15

	On f	ull range	of busir	iesses	Without small businesses and parameters of informal activity			
	2015	2016	2017	2018	2018	2019		
Fixed investment, total	100	100	100	100	100	100		
Including form of ownership								
Russian	84.3	83.1	83.8	85.6	81.3	82.8		
State	14.8	15.2	14.4	13.8	18.3	19.8		
Municipal	3	2.7	2.5	2.2	2.9	3.5		
Private	56.8	55.9	58.1	60.9	49.0	50.5		
Mixed Russian	8.2	7.8	7.5	7.4	9.5	7.6		
State corporations	1.4	1.4	1.2	1.2	1.5	1.3		
Foreign	8.3	7.4	7.4	6.2	8.0	7.9		
Joint Russian and foreign	7.4	9.5	8.8	8.2	10.7	9.3		

4.4.3. Fixed investments by type of capital stock

Short – term acceleration of the indicators dynamics in construction-investment activity in 2018 did not compensate the impact of the 4-years investment crisis. In 2019, the growth of construction volume constituted 0.6 percent against the previous year after 6.3 percent a year earlier. The investment structure by types of fixed assets was influenced by factors of renewal of capital stock, modernization and reconstruction of fixed assets. With a general tendency to weaken financing of construction works and services, their structure by types of fixed assets showed a steady increase in the share of costs for machinery and equipment. The increase in demand for new equipment in the majority of cases is due to critical aspects of physical depreciation and economic inefficiency in the operation of the old types of equipment.

With the implementation of projects on modernization, reconstruction and technical reequipment, the priority area is the comprehensive re-instrumentation of production, purchasing of electronic computer technology, mechanical equipment and automation of engineering and administrative work.

Positive factor was seen in the increase of investment rate in information technology, computer and telecommunications equipment, which create conditions for further development of digital technologies. In the structure of investments by type of capital stock the share of investment in machinery and equipment in 2019 moved up to 38.5 percent in the context of exceptionally low for twenty years of statistical monitoring indicator of 31.5 percent in 2016 (*Table 16*).

Structure of fixed investments by type of capital stock in 2016–2019, in percent to total	On fu	ll range of bus	inesses	Without small businesses and parameters of informal activity		
	2016	2017	2018	2018	2019	
Fixed investments, total	100.0	100	100	100	100	
Including:						
Residential buildings and facilities	14.7	13.6	12.7	5.5	5.5	
Buildings (minus housing) and facilities	44.7	43.8	43.3	48.7	44.5	
Spending on land improvement				0.1	0.03	
Machinery, equipment, transportation	31,5	33,7	34,6	35,4	38,5	
Of which: information, computer and TV communication equipment (ICT)				3.6	4.0	
Intellectual property items		2.8	3.1	41	4.3	
Other	9.1	6.1	6.3	6.2	7.2	

Table 16

Source: Rosstat.

The slowdown in domestic production and imports of investment goods in 2019 hindered the renewal of fixed assets, introduction of new technologies, cost saving and creating new jobs.

Change in the performance of construction activity was followed by structural shifts in the use of investments by type of capital goods. The 2019 distinctive feature was the reduction of fixed investments aggregate share in housing buildings and non-housing facilities.

Following the peak of spending on housing construction seen in 2015, subsequent three years registered gradual contraction of investment percentage by this type of capital goods. In 2019, the ratio of investment in construction of buildings and facilities remained at the previous year level and constituted 5.5 percent of the total volume of investment in the economy (without small businesses and parameters of informal activity).

The development of housing construction and housing services in state and program documents is determined by priority trend for improving the quality of life and prerequisite for modernization of the social sphere and economy.

The dynamics of expenditures and their structure for housing construction is affected by both the growing demand of households and the need to reconstruct the housing stock, while reducing the share of dilapidated and substandard housing having poor chances for improvement.

In accordance with the budget parameters of the national project "Housing and urban environment for the period 2019–2024" almost half of the allocated funds are planned to be used to ensure sustainable reduction of unsuitable housing stock.

Despite the positive dynamics in resettlement of dilapidated housing and the overhaul of apartment buildings in recent years, the existing rates remain insufficient to finally resolve these problems. Important in this regard is the attraction of private and institutional investors in housing construction and the formation of effective regional overhaul systems.

A positive impact on the development of housing construction was secured by measures to promote competition and reduce administrative barriers, simplify the preparation of planning projects, develop and hold state examination of project documents, issue building permits and provide land for housing construction.

Business activity in housing construction was supported by such measures as the implementation of the program of subsidizing the interest rate on loans for purchasing housing in new buildings, the reduction of interest rates on mortgages, the implementation of mortgage programs for certain social groups at a reduced rate. Given the current level and structure of households' incomes and expenditures, the low availability to purchase housing at market prices remains the principal issue for popular majority.

In 2019, for the first time after a three-year drop, the rate of commissioning of housing climbed positive and amounted to 104.9 percent compared to the previous year indicator. At the same time, housing construction was most dynamically expanded due to own funds and loans attracted by households. In 2019, the share of living space paid by household funds reached a historic maximum of 45.2 percent of the total volume of commissioning (*Table 17*).

Table 17

Year	Housing commissioning,	Inclu	ding		of housing ng, percent to tal	Rate of commissioning, percent to pre- year		
	mln sq.m	By organizations	By populations	By organizations	By population	Total	By organizations	By population
2013	70.5	39.3	28.4	55.8	43.5	107.3	106.2	106.0
2014	84.2	47.6	30.7	56.6	43.0	119.4	121.1	108.1
2015	85.3	49.5	36.2	58.1	41.2	101.3	104.0	117.9
2016	80.2	47.4	31.8	59.2	39.6	94.0	95.8	87.8
2017	79.2	45.4	33.0	57.4	41.6	98.8	95.8	103.8
2018	75.7	42.9	32.	56.6	42.9	95.6	94.5	98.2
2019	79.4	43.5	35.9	54.8	45.2	104.9	101.4	110.8

Size, structure and dynamics of commissioned residential housing by developers in 2013–2019

Source: Rosstat.

Changes in the living-standard-criteria, the national currency exchange rate, consumer prices and prices for construction and assemblage works as well as government measures related to supporting household incomes and the mortgage market will improve the situation in the housing market in 2020.

4.4.4. Investment activity by type of economic activity

A sharp slowdown in construction and investment activity in 2019 was registered for almost all basic types of economic activity. Fixed investments by large businesses, which account for almost 3/4 of capital investments in the national economy, amounted to 97.8 percent in 2019 compared to the indicator of the previous year. The largest decline in investment activity was registered in mining industries: 92.8 percent relative to 2018.

Structural shifts in the mining industry in 2019 were determined by the renewal of growth of investments in the extraction of crude oil and natural gas and maintaining high investment activity in coal mining. The share of fixed investments in the extraction of fuel and energy resources increased in the structure of investments for the whole to 15.5 percent (+1.1 percentage points relative to 2018) and up to 70.8 percent (+7.1 percentage points) in fixed investments and mining operations (*Fig. 21*).

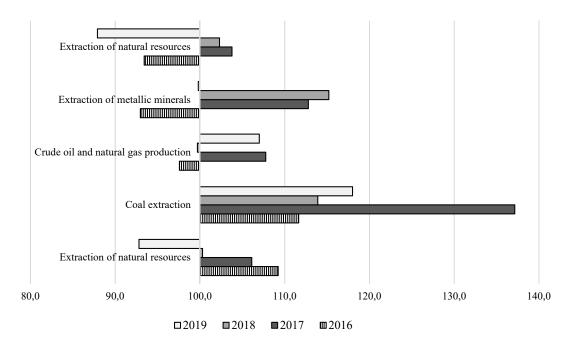


Fig. 21. Fixed investments dynamics in natural resources extraction during 2016–2019, percent to previous year

Source: Rosstat.

In manufacturing, fixed investments increased by 0.9 percent in 2019 compared to 3.6 percent in the previous year. In contrast to 2018, the positive dynamics was maintained due to the increase in construction and investment activity in the oil refining complex with the simultaneous increase in coke production (210.0 percent by 2018) and in the production of petroleum products (128.1 percent). The continued growth of fixed investments in the metallurgical complex in 2019 was supported by a change in the proportions between metallurgical production and production of finished metal products.

Amid slowdown of dynamics of the fixed investments and the volume of construction work for the whole of economy, a drop in capital investments in the machine-building complex and in the production of construction materials was recorded in 2019. In the machine-building complex, a drop of fixed investments in the production of motor vehicles by 24.3 percent, in the production of computers and electronic-optical products by 14.2 percent and electrical equipment by 17.2 percent relative to 2018, led to curbing the technical and technological renovation of these industries, as well as of other types of economic activity.

In the chemical/pharmaceutical sector, in 2019, in contrast with growth in capital investments for all sub-productions in 2018, the positive dynamics of investment demand maintained only in production of medicines (112.7 percent relative to 2018). Decline in investments in production of chemicals, rubber and plastic articles, which account for 3.3 percent of investments in economy, exceeded 10 percent (*Fig. 22*). Reduction of fixed investments in the consumer complex amid concurrent decline of investments in agriculture, is disturbing.

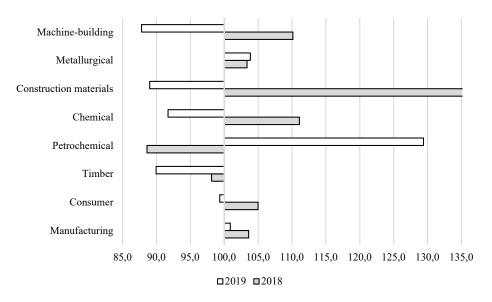


Fig. 22. Fixed investment dynamic in manufacturing industry in 2018–2019, in percent to previous year

Source: Rosstat.

The growth of fixed investments in education activities (119.6 percent), healthcare (115.0 percent) continued in the sector of services under strengthening of social profile of investment policy in 2019. Such positive aspects as the outstripping growth of investments in the field of information and communication (115.6 percent against 2018), in professional and scientific-technical activities (115.6 percent) should also be noted. However, the decrease in investments in the development of transport and logistics (97.1 percent) and trade and marketing services (87.9 percent), especially in the context of the implementation of a comprehensive plan for modernization and expansion of the main infrastructure, is particularly alarming.

Low investment activity in 2019 and new challenges early in the year 2020, associated with an extremely unfavorable factor combination, i.e. Ruble depreciation, decline in oil prices and the need to finance emergency measures in the health sector and related economic activities, will have a significant impact on the dynamics and structure of public investment and determine the structural changes in investment activity in 2020.

4.5. The Oil and gas sector in 2019¹

The oil and gas sector is among the basic ones of the Russian economy and is playing an important role in the income generation for the state budget and Russia's trade balance. Implementation of the OPE, Russia and a number of other countries agreement on the production cut with a simultaneous global crude oil demand growth in 2019 has resulted in the world crude oil prices stabilization in the range of \$60–70 per barrel. In 2019, the volumes of crude oil production peaked for the entire post-Soviet period and the extraction of the natural gas hit an all-time high. Under the effect the tax maneuver in force in the oil industry, the crude oil refining volumes have stabilized and significantly increased the refining depth, production of fuel oil and its exports have contracted. March 2020 revealed a crucial discrepancy between the positions taken by Russia and the OPEC member states regarding the deal parameters for the subsequent period. Hence, there were no new agreements, the current deal was not extended and Saudi Arabia notified about the intention to ramp up production. In the wake of coronavirus pandemic and a plunge of the global oil demand the crude oil prices have collapsed.

4.5.1. Dynamic of global oil and gas prices

Over recent years the world crude oil market was marked by fundamental changes. Following the prolonged period of exceptionally high world crude oil prices (in 2011-H1 2014 they stood at USD 107–112 per barrel) the rapid growth of global crude oil production resulted in a substantial excess of crude oil supply over production and a plunge of crude oil prices. The main factor for the oil glut was the development of U.S.'s shale oil-fields bolstered by advanced drilling methods. Facing this context, OPEC countries refused to cut their oil production quota and in fact switched to a policy of retaining their market share on the global oil market, seeking to ramp up the supply volumes and thus offset contraction of revenues. Subsequently, the price of the Russian Urals crude oil on the world market dropped from USD 107.1 per barrel registered in H1 2014 to USD 51.2 per barrel in 2015 and to USD 41.9 per barrel in 2016, that said in January 2016 the price plummeted to USD 28.8 bpd. (*Table 18, Fig. 23*).

Table 18

	2014	2015	2016	2017	2018	Q12019	Q22019	Q32019	Q42019	2019
Brent crude price, Great Britain	98.9	52.4	44.0	54.4	71.1	63.3	68.3	61.9	62.7	64.0
Urals crude price, Russia	97.7	51.2	41.9	53.1	69.8	63.3	68.1	61.3	62.1	63.7
Average export price on Russian gas, USD/thousand cubic m.	314	225	157	179	223.3	226.2	183.6	162.7	174.8	186.8

World crude oil and natural gas prices in 2014–2019, USD/bbl.

Источник: OECD/IEA; World Bank; Росстат.

The decline in oil prices spurred oil-producing countries into taking decisive actions on output cuts. At the end of 2016, OPEC and a group of oil producing countries from outside OPEC, including Russia, (OPEC+) concluded a production cut agreement for 6 months period in effect since 1 January 2017. In compliance with this agreement OPEC+ obligated to reduce its oil production by 1.8 million barrel per day, including OPEC member states – by 1.2 million barrels per day and 11 non-OPEC countries, agree to cut output by 558,000 barrels per day, of which Russia by 300,000 barrel per day. In an effort to decrease further the oil supply glut, the

¹ This section was written by *Bobylev Yu.N.*, Candidate of science (Economics), Head of Mineral Sector Economics Department, Gaidar Institute.

OPEC+ parties to the agreement decided in May 2017 to extend the agreement for another nine months, that is, between July 2017 and March 2018, and in late November 2017 the deal was extended till the end of 2018. Meanwhile, some of the parties to the agreement (Venezuela, etc.), for various reasons, experienced a steep downfall in oil production. As a result, the real cut in oil production by OPEC+ has turned out to be a considerably higher target than envisaged by the agreement.

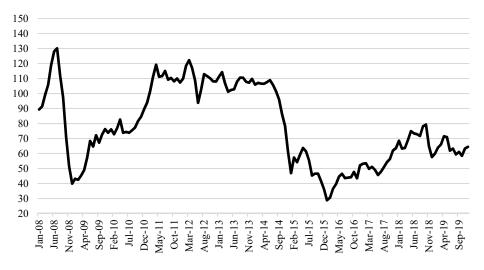


Fig. 23. Urals crude oil price in 2008–2019, USD/bbl.

Source: Rosstat.

In this context, in June 2018 OPEK+ decide to raise production from early July by 1 million barrels per day compared to May. That said, a provision was envisaged for switching from the previous per-country control over the agreed output targets to a control over total crude oil output (by 1.8 million barrels per day below the level of October 2016) of the parties to the agreement. Hence, countries with spare potential had the opportunity to boost their production in H2 2018. Saudi Arabia (representing nearly 70 percent of OPEC's available capacities) and Russia were the first to do this. However, production ramp up by major crude oil producers (USA, Saudi Arabia, and Russia) and some other factors resulted in the crude price drop over last months of 2018 (to USD 57–58 per barrel).

In this context, in December 2018 OPEC+ members agreed to cut oil production by 1.2 million barrels per day from early 2019 onwards from the output seen in October 2018. This deal was effective over 6 months (January-June 2019). Under the deal the cut of crude oil production by OPEC members was in the amount of 800 thousand bpd, and by non-OPEC major crude oil producers by 400 thousand bpd, with Russia taking on 228 thousand bpd. However, the output cut commitments did not apply to Iran, Venezuela and Libya where oil production was already low, plus Iran was facing the risk of reducing further its output in case of tougher U.S. sanctions against purchases of Iranian crude, which really occurred. By late 2019 compared to Q1 2018, oil output in Iran under the burden of sanctions dropped by 47%. Similar situation was observed in Venezuela: over that period oil production decreased by 57.5%. In early July 2019, the deal was extended for next 9 months (July 2019 – March 2020).

Implementation of OPEC+ agreements with simultaneous growth of the global oil demand resulted in the noticeable rise of the global oil prices and their stabilization in the range of

USD 60–70 per barrel. In 2018, the price of the Russian crude oil on the world market averaged USD 69.8 per barrel, in 2019 – USD 63.7 per barrel. In 2019, the price dropped by 8.7% against 2018. That said, in H2 the oil price declined to USD 61–61 per barrel and in some months decreased still further (for example, in October 2019 it stood at USD 58.5 per barrel).

Reason for the 2019 oil price drop was a slowdown of the global oil demand and ramp up production in countries outside of the deal, first of all, in the US (*Table 19*). Technological advancement and cost effectiveness allowed the U.S. oil industry to adapt to lower prices: in 2018 the US produced 10.99 million bpd (up by 17.5 percent against 2017), and in 2019–12.24 million bpd (up by 11.4 percent against 2018).

Table 19

	2016	2017	2018	Q12019	Q22019	Q32019	Q42019	2019
USA	8.86	9.35	10.99	11.81	12.10	12.23	12.82	12.24
OPEC, total	32.68	32.68	31.96	30.47	30.00	29.20	29.48	29.78
Saudi Arabia	10.42	10.09	10.38	10.00	9.92	9.38	9.83	9.78
Iraq	4.43	4.44	4.60	4.75	4.70	4.70	4.65	4.70
Iran	3.57	3.82	3.52	2.63	2.33	2.10	2.03	2.27
Venezuela	2.18	1.92	1.43	1.05	0.79	0.73	0.68	0.81

Oil production in US and OPEC members in 2016–2019, mn bpd.

Source: US EIA.

In the context of growing oil supply by producers outside of the deal, in December 2019 the OPEC+ members agreed on additional cut of crude oil production from January 1, 2020 by another 503 thousand bpd (in addition to the effective commitments in the amount of 1.2 million bpd). That said, the OPEC members have to additionally cut production by 372 thousand bpd and other countries outside of the deal – by 131 thousand bpd. Taking into account this reduction, which had to stay in force over Q1 2020 the aggregate reduction by OPEC+ members compared to October 2018 should come to 1.7 million bpd.

Saudi Arabia accounted for a major cut: under effective commitments cut production totaling 322 thousand bpd it had to cut production by another 167 thousand bpd. Russia according to December agreement has to cut another 70 thousand bpd. As a result, taking into account effective commitments to the tune of 228 thousand bpd Russia's total production cut should be 298 thousand bpd. Moreover, on the insistence of the Russian party from 2020 the Russian quota will not include condensate, which corresponds the effective OPEC methodology applied to countries members of OPEC. This fact will allow Russia not to limit condensate production.

It should be noted that the effect of Russia's adherence to the OPEC+ agreements on the crude oil production in the country was rather limited: in 2017 compared to 2016, the annual oil output declined by 0.15 percent, and in 2018 and 2019, went up by 1.7 and 0.9 percent, respectively. With regard to the 2017 situation, we should point out two aspects. Firstly, the OPEC+ countries took production level of October 2016 as a benchmark for the oil production cut. During 2016, the oil production in Russia was growing and in October hit maximum (above the average level posted in 2016). Moreover, by virtue of technological and climatic features Russia was cutting production gradually in the curse of several months. Ultimately, the annual production in 2017 against the previous year decreased relatively insignificantly.

In 2018, Russia jumped at the opened within the framework of the agreement opportunity to raise production in the second half which led to an increase of annual production. In 2019, the annual oil production growth was triggered both by a relatively high benchmark level of October 2018 and by the relatively slow reduction of production due to technological and climatic factors.

As a result of Russia's 3-year adherence to the OPEC+ agreements (2017–2019), the annual oil production in the country went up by 2.4 percent.

Accordingly, the OPEC+ agreements on joint efforts aimed at the oil production cut were a substantial factor severely affecting global oil prices. The three-year experience of their implementation has demonstrated that such agreements allow to reduce risks of price crises and contribute to maintain a certain level of the global oil prices.

Whereas the effective agreement covered solely Q1 2020 in early March 2020 next meeting of the OPEC+ representatives took place where the issue of further joint actions on the production cut were to be taken. However, the meeting revealed a crucial discrepancy between the positions taken by Russia and the OPEC member states regarding the deal parameters for the subsequent period. The OPEC members considered necessary to additionally cut oil production by 1.5 mn bpd from April 1, 2020, the Russian position resided in retaining parameters of the ongoing agreement for the next quarter. Hence, the new agreement collapsed and the effective deal was not extended.

Starting from April 1, 2020 the agreement participants got a chance to exit from the restrictions regime and Saudi Arabia has notified about its intention to boost its production. In the second half of March 2020 the futures price on Brent crude declined to USD 25–28 per barrel.

Prices on Russian natural gas exported abroad on long-term contracts, as a rule, are tied to the prices of petroleum products and owing to this factor follow the world crude oil prices with a certain lag. Meanwhile changes that took place on the European market over recent years – increased supply of gas by other natural gas producers and lower spot prices on natural gas compared to the prices of long-term contracts signed by Gazprom produce downward pressure on the Russian natural gas. In 2019, the average export price on Russian gas stood at USD 186.8 per cub m or declined by 16.3 percent compared to 2018 and by 40.5 percent against 2014 (*Table 18, Fig. 24*).



in 2010–2019, USD/thousand cub m

Source: Rosstat.

4.5.2. Production dynamic in the oil and gas sector

Volumes of crude oil output in 2019 were governed by Russia's compliance with her commitments taken within OPEC+ agreements. Along with this, in 2019 oil production in

Russia hit 560.8 million t or went up by 0.9 percent compared to 2018 (*Table 20, Fig. 25*). This was an all-time high since 1989 (Russia peaked its oil output in 1987 by 569.4 million tons). Extraction of natural gas in 2019 increased to 758.1 billion cubic meters (Up by 2.3 percent against 2018), which is an all-time high. In recent years, production of liquefied gas has surged (from 10.9 million t in 2016 to 29.5 million t in 2019). Russia boasts of a substantial potential in order to maintain and ramp up current volumes of oil and gas output. At the same time, the oil sector faces objectively deteriorated production conditions. Considerable share of producing fields demonstrate a downward trend of extraction and the new deposits in the majority of cases are marked with not as good mining-and-geological and geographic parameters, their development requires higher investment, running and transportation costs. In order to offset falling production on the brown fields, it is necessary to develop both new oil deposits in regions with underdeveloped infrastructure or in those regions that lack infrastructure altogether, and to develop low quality deposits in developed regions.¹

Table 20

	2010	2014	2015	2016	2017	2018	2019
Crude oil including condensate, million tons	505,1	526,7	534,0	547,6	546,8	556,0	560,8
Natural gas, billion cubic meters	665,5	654,2	645,9	652,6	704,1	741,1	758,1
Natural liquefied gas, million tons	10,0	10,7	10,8	10,9	11,8	20,0	29,5
Primary crude oil refining, million tons	249,3	294,4	287,2	284,5	284,3	290,7	290,0
Share of crude oil refining in crude production, percent	49,4	55,9	53,8	52,0	51,9	52,3	51,7
Crude oil refining depth, percent	71,1	72,4	74,4	79,1	81,0	82,1	82,7

Production of crude oil and natural gas and oil refining in Russia in 2010–2019

Sources: Rosstat, Ministry of Energy of the Russian Federation.

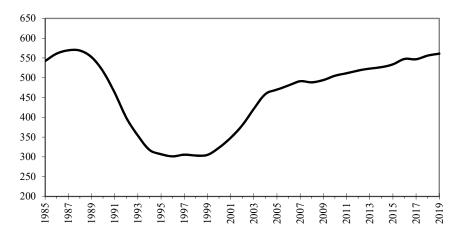


Fig. 25. Crude oil production, including condensate in 1985–2019, mn t

Sources: Rosstat, Ministry of energy of Russia.

Year 2018 demonstrates that the tax maneuver has delivered positive results from the first phase of the tax maneuver in force in the oil industry from 2015: a structural tax reform in this

¹ See Yu. Bobylev, O. Rasenko. Russia Oil Sector: main trends. Moscow, Delo Publishers, RANEPA, 2016.

sector envisages gradual reduction of export duties on both crude oil and petroleum products, as well as higher mineral extraction tax (MET).¹ Such restructuring of the tax system has created incentives for upgrading of oil refining capacities and has resulted in current trend changes.

In 2000–2014, the Russian oil sector saw growing volumes of both oil refining and exports of petroleum products owing to the increase of production and exports of fuel oil (the least valuable refining product which in Europe is used for further refining and obtaining light petroleum products). The oil refining depth was not growing at that and constituted solely 71–72 percent (while, in the leading industrial countries it came to 90–95 percent). Then tax system actually conserved technological backwardness of Russia's oil refining sector and led to marked losses for the state budget as a result of hidden subsidizing of the oil refining sector and other EAEU member states owing to lower compared to the world oil prices as well as lower export duties on petroleum products against the oil export duties.

Implementation of the tax maneuver resulted in the turnaround of existing trends. Among the new trends emerged in 2015–2019, and some of them deserve to be mentioned here: firstly, the oil refining depth increased notably as production of fuel oil declined, secondly, owing to the contraction of exports of fuel oil more lucrative crude oil exports moved up, thirdly, crude oil refining declined in volume terms due to the above two factors. The oil refining depth in Russia increased from 72.4 percent in 2014 to 82.7 percent in 2019 which is the all-time high (*Fig. 26*). Production of gasoline and diesel fuel went up while production of fuel oil declined by 39.6 percent. The share of refined oil in its production decreased from 55.9 percent to 51.7 percent. Petroleum products exports contracted by 13.3 percent

In view of this, thanks to the implementation of the tax maneuver previously observed trends which demonstrated growth of refined oil volumes and growing exports of petroleum products due to increasing production and exports of fuel oil were phased out by trends which show contraction of production and export of fuel oil and as a result contraction of the oil refined volumes and petroleum products exports. Meanwhile, depth of the oil refining increased notably.

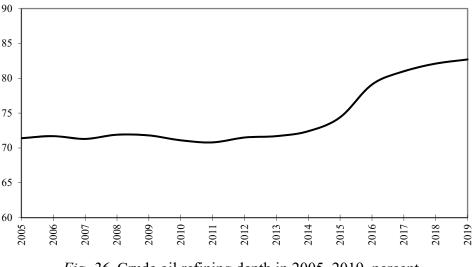


Fig. 26. Crude oil refining depth in 2005–2019, percent

Sources: Ministry of Energy of Russia, Rosstat.

¹ See Yu. Bobylev. Tax Maneuver in Oil Industry. Russian Economic Developments. 2015. No. 8, pp. 45–49.

4.5.3. Dynamic and structure of oil and gas export

In 2019, the total Russia's exports of crude oil and petroleum products constituted 409.7 million tons, up by 6.7 percent against 2014 or by 0.1 percent against 2018. This index is close to an all-time high achieved in 2015 (411.8 million t). The share of net exports of crude oil and petroleum products in 2019 came to 73.1 percent (*Table 21*). It should be noted that 2015–2019 saw a notable growth of 19.7 percent of crude oil exports spurred by the tax maneuver and 13.3 percent decline in exports of petroleum products mainly owing to a steep fall of the fuel oil exports (by 34.7 percent). As a result, the share of crude oil in total oil exports went up from 57.5 percent in 2014 to 65.2 percent in 2019, and that of petroleum products – declined from 42.5 to 34.8 percent. Meanwhile, exports of diesel fuel and motor gasoline went up. The share of exports in diesel fuel production in 2019 made up 65.6 percent, and in motor gasoline production – 13 percent. The share of fuel oil in petroleum products exports declined from 52.9 percent in 2014 to 39.9 percent in 2019.

Table 21

Ratio of production, consumption and exports of crude oil and natural
gas in 2010–2019

	2010	2014	2015	2016	2017	2018	2019
		Crude oi	l, mn t				
Production	505.1	526.7	534.0	547.6	546.8	556.0	560.8
Exports, total	250.4	223.4	244.5	254.8	252.6	260.2	267.5
Exports to - non-CIS countries	223.9	199.3	221.6	236.2	234.5	241.7	249.1
Exports to CIS countries	26.5	24.1	22.9	18.6	18.1	18.5	18.3
Net exports	249.3	222.6	241.6	254.0	252.0	259.7	267.5
Domestic consumption	125.9	141.3	122.2	138.3	147.1	146.7	151.1
Net exports as percent of production	49.4	42.3	45.2	46.4	46.1	46.7	47.7
	Р	etroleum pro	ducts, mn t				
Export	132.2	164.8	171.5	156.0	148.4	150.1	142.8
Net export	129.9	162.8	170.2	155.3	147.7	149.6	142.2
	Crude oi	l and petrole	um products	, mn t			
Net exports of crude oil and petroleum products	379.2	385.4	411.8	409.3	399.7	409.3	409.7
Net exports of crude oil and petroleum products as percent of crude oil production	75.1	73.2	77.1	74.7	73.1	73.6	73.1
	Natu	ral gas, billio	on cubic mete	rs			
Production	665.5	654.2	645.9	652.6	704.1	741.1	758.1
Exports	177.8	172.6	185.5	198.7	210.2	220.6	219.9
Net exports	173.5	165.5	178.4	189.8	201.4	211.2	210.8
Domestic consumption	492.0	488.7	467.5	462.8	502.7	529.9	547.3
Net exports in percent to production	26.1	25.3	27.6	29.1	28.6	28.5	27.8

Sources: Rosstat, Russian Ministry of Energy, Federal Customs Service, own calculations.

Analysis of Russia's crude oil exports over the course of a long period demonstrates a marked increase in the export-led component of oil industry. The share of net exports of crude oil and petroleum products in crude oil production went up from 47.7 percent in 1990 to 73.1 percent 2019. This, however, is due not only to the increase in absolute volumes of exports but to a crucial contraction of domestic oil consumption against the Soviet period on the back of the market reform of the Russian economy and more efficient oil consumption and the replacement of petroleum products (fuel oil) by natural gas.

Exports of natural gas in 2019 amounted to 219.9 billion cubic meters and was close to the previous year's level of 220.6 billion cubic meters, which was an all-time high. The share of net exports in the natural gas production in 2019 constituted 27.8 percent. We should note a

spike in exports of liquefied natural gas which over the recent years surged by over 3-fold: from 21.4 million cubic meters in 2015 to 65.4 million cubic meters in 2019.

Owing to the plunge of global prices on crude oil and natural gas, the share of oil and gas sector products in Russian exports amounts to over a half (*Table 22*). In 2019, the oil and gas sector accounts for 56.0 percent of Russia's exports. The oil sector accounts for the major part of exports. Nevertheless, its proportion in the Russia's exports over recent years declined from 54.2 percent in 2014 to 44.3 percent in 2019. The share of the natural gas sector in the Russia's exports amounted to 11.7 percent. Furthermore, the proportion of the liquefied gas went up (from 0.9 percent in 2017 to 1.9 percent in 2019).

Table 22

	Exports in 2017, billion USD	In percent to total volume of Russia's exports	Exports in 2018, billion USD	In percent to total volume of Russia's exports	Exports in 2019, billion USD	In percent to total volume of Russia's exports
Oil and gas sector, total	192.87	53.7	261.5	57.9	237.9	56.0
Crude oil and petroleum products	151.55	42.2	207.1	45.8	188.3	44.3
Crude oil	93.31	26.0	129.0	28.5	121.4	28.6
Petroleum products	58.24	16.2	78.1	17.3	66.9	15.8
Natural gas	38.15	10.6	49.1	10.9	41.6	9.8
Liquefied natural gas	3.17	0.9	5.3	1.2	7.9	1.9

Cost and share of export of oil and gas sector products in Russian exports in 2017–2019

Sources: Federal Customs Service, own calculations.

4.5.4. Dynamic of domestic prices on energy products

The pricing mechanism for crude oil and petroleum products on the Russian domestic market is based on equal-netback pricing, that is, prices are equal to the world price less export duty and transportation costs. On the back of this, domestic prices on crude oil and petroleum products in dollar terms actually follow the world market prices (*Table 23, Fig. 27*). Having said that, there is still a wide gap between world and domestic oil prices due to the export duty. Along with this, a convergence of international and domestic prices is observed owing to a lower rate of export duty envisaged as part of the tax maneuver. In 2014, the domestic oil price (the producers' price) came to 42 percent of the global price (Urals crude price on the European

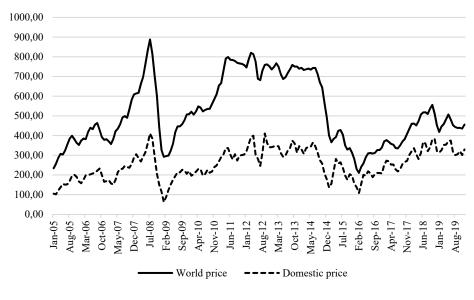
Table 23

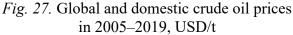
Domestic prices on crude oil, petroleum products and natural gas in dollar terms in 2010–2019 (average producers' prices at year-end, USD/ton)

	2010	2013	2014	2015	2016	2017	2018	2019
Crude oil	248.2	346.1	178.9	156.7	207.8	302.4	320.8	329.1
Motor gasoline	547.9	614.4	372.3	301.8	380.3	460.0	423.3	393.2
Diesel fuel	536.1	698.0	419.3	349.4	421.3	515.2	550.7	540.1
Fuel oil	246.3	235.8	128.7	49.5	129.7	166.1	186.0	116.1
Gas, USD/thousand cubic m	20.5	39.8	29.1	24.5	23.6	34.2	28.9	27.7

Source: own calculations based on data released by Rosstat.

market), while in 2018 - 66 percent, and in 2019 - 71 percent.





Sources: Rosstat, own calculations.

End-user (consumer) prices on motor gasoline (*Table 24* are set on net-back prices taking into account indirect taxes (excises, VAT) and markup. Russia regarding the share of indirect tax burden in the final motor gasoline price ranks in the middle between leading EU countries where this share is the highest (65 percent) and the USA where it is relatively low (20 percent).¹ With lower non-tax gasoline prices and such level of tax burden the consumer prices on motor gasoline in Russia are approaching the US prices, but remain significantly lower than in other developed countries. According to our calculations, in 2020 the consumer price on motor gasoline in Russia came to the level of the USA 100 percent, Canada – 75 percent, Japan – 49 percent and regarding the average level of leading EU-5 – 45 percent (*Table 25*).

Table 24

Consumer prices on motor gasoline in Russia 2014–2018, RUB/liter (in January y-o-y)

					• /			
		2014	2015	2016	2017	2018	2019	2020
	Regular unleaded gasoline	29.53	32.35	33.86	35.57	38.12	41.87	42.46
	Premium 95 octane and plus	32.64	35.16	36.81	38.69	41.05	45.14	45.85
0	D							

Source: Rosstat.

Accordingly, in the wake of the tax maneuver the relative level of end-user prices on motor gasoline in Russia went up insignificantly. The effective system of export duties and the level of tax burden on petroleum products in Russia ensures lower price level on motor gasoline on domestic market in comparison with the majority of developed countries. At the same time, prices on motor gasoline in Russia have arrived at the USA level which boasts of a lower tax burden on petroleum products.

¹ See Yu. Bobylev. Gasoline prices in Russia and other countries: comparative analysis. Russian Economic Developments. 2016, No. 10, pp. 28–31.

Table 25

	2014,	2020,
	January	January
USA	95.8	100.1
Canada	72.9	75.2
Japan	55.0	48.8
Germany	44.4	46.6
Great Britain	43.3	43.8
France	45.3	42.5
Italy	39.5	41.2
Spain	48.7	49.5
EU-5	44.1	44.7

Consumer prices on motor gasoline in Russia relative to other countries, percent

Source: own calculations of data released by OECD/IEA and Rosstat.

Domestic prices on the natural gas are under the state regulation. In order to ensure competitiveness of the national economy, the government maintains significantly lower level of domestic prices on gas compared to the world gas prices. Meanwhile, owing to a regulated increase of the domestic gas prices and a significant decrease of the world prices on natural gas there is a gradual convergence of domestic and world gas prices. In 2019, domestic gas price (corporate consumers' price less indirect taxes) averaged 36 percent of the export price on Russian gas in 2018 – 31 percent).

4.5.5. Prospects for development of the Russian oil industry

Russia disposes of the vast oil reserves, which are enough to maintain high levels of crude oil extraction and exports for many years to come. There is a substantial potential for crude oil extraction owing to both undeveloped deposits in the developed areas and oilfields in the new producing areas. At the same time, there is a rather significant potential for additional extraction on already producing oilfields thanks to an in-depth development, and ramping up the oil recovery index. Moreover, Russia disposes of extensive currently undeveloped unconventional oil reserves including shale oil. Russia's oil refining potential is high and ramping up the refining depth rate to the level of industrial states allows to satisfy domestic need in motor fuel amid relatively lower volumes of oil consumption.

Global demand for oil will allow Russia to retain and even to increase current volumes of crude oil exports, first of all, by increasing shipments to China and other countries of Asia. In the context of low crude oil prices, options for the development of new oilfields and unconventional reserves will be significantly restricted in Russia because investment in the cost demanding projects will be unprofitable. Against this backdrop enforced technological sanctions against Russia, which ban exports to Russia of equipment and technologies for the development of deposits located on the Arctic shelf, deep-water oil fields and shale oil deposits will negatively affect the oil industry development.

There is a significant uncertainty regarding the world crude oil prices in 2020 due to the effect of such factors as coronavirus pandemic, economic recession, oil demand plunge, decline of shale oil production in the US as well as behavior of major oil producing stakeholders and first of all Saudi Arabia. In Q2–Q4 2020 the most feasible projection of the crude oil price to stay in the range of USD15–40 per barrel. That said, in Q2 2020, the oil prices may stay in the range of USD15–25 per barrel. Renewal of negotiations within OPEC+ and conclusion of a new deal on the production cut would have triggered stabilization and rise of the world oil prices in H2 2020.

In this context, the backbone of the further development of the Russian oil sector should become the conventional oil reserves on land. Having said that, particular significance will have deepened development of the producing fields, raising the oil refining rate. Capacities for additional crude oil output will depend on the technological progress in the sector, development of import substitution technologies, ramping up the oil recovery rate and development of unconventional reserves including shale oil deposits.

The future economic policy regarding the oil industry aimed at the creation of necessary conditions for its further development and at the government obtaining oil-related fiscal revenues should include the implementation of the following measures:

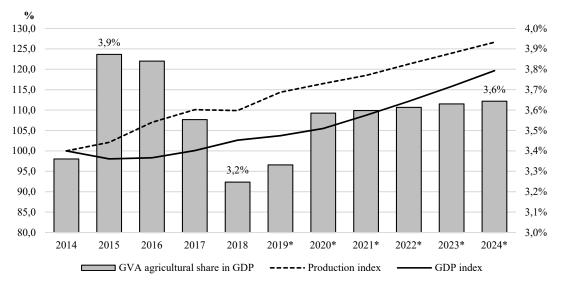
- continuation of the tax system reform: raising the MET role, reduce and abolish export duty on crude and petroleum products. This will contribute to a more efficient tax system structure, reduce subsidization of the refining sector, provide incentives for its further modernization, stepping up the oil refining depth; decrease subsidization by Russia of EAEU members; strengthen incentives for raising energy efficiency;
- expand the application of the additional profits tax on the new deposits with a progressive tax rate depending of the profitability of deposits development. This tax will ensure a wider differentiation of tax burden depending on the production conditions, complete resource rent extraction to the state and create favorable conditions for investment into the oil production, including the development of high-cost deposits;
- continuation of the tax burden differentiation policy applied to the producing oil fields: putting in place reduced MET rates and export duty for high-cost deposits. Reduction of tax burden on extensively depleted deposits: additional reduction of the MET rate for such deposits will provide incentives for their deep development, raising the oil extraction index;
- development of small and medium-sized companies: development of corresponding organizational and legal regime including a significant reduction of administrative barriers to entry for the development of mineral resource blocks. This will contribute to the deep development of producing oil fields, development of small-scale and low-income deposits and hard-to-recover reserves. It seems expedient to renew cooperation with OPEC+ and rearrange coordination of activities regarding oil production with OPEC members and other oil producing countries in an effort to maintain an acceptable level of world crude oil prices.

4.6. Agricultural sector¹

4.6.1. Estimates of agricultural contribution to dynamics of national economy

Sustainable positive dynamics of agricultural production allowed agrarians, economists and politicians to talk about the industry not only as an instrument for ensuring food security, but also as a driver of economic growth. The inclusion of gross value added (GVA) data in the target indicators of the Government Program of Agriculture Development and Regulation of Markets for Agricultural Products, Raw Materials and Foodstuffs (hereinafter referred to as the Government Program) proved this thesis in practice.

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At the same time, over recent years, growth of agricultural production is accompanied by reduction of agricultural share in the national economy (*Fig. 28*).

Fig. 28. Actual and forecast share of agriculture in the national economy of Russia¹

Source: 2014–2018 – Rosstat data, *2020–2024 – own calculations based on Government Program of Agriculture Development and baseline version of the Forecast of social and economic development of the Russian Federation up to 2024.

Despite the increase in gross agricultural output (the main element of gross output under section A of OKVED 2) by 14.3% in 2019 compared to 2014, which is greater than GDP growth, the industry share in the national economy in current prices reduced from 3.4% of GDP in 2014 to 3.3% in 2019, peaking to 3.9% in 2015. The main factor of its reduction were lower growth rates of prices for agricultural products compared to products representing other sectors of economy. The share of agriculture in GDP in prices of 2016 fluctuated slightly at the level of 3.6–3.8% in 2014–2019.

The growth rate of agricultural GVA (7.8% in 2019 compared to 2014 in constant prices) exceeded the GDP growth rate (4.0%), but was evidently lower than the growth rate of gross output (14.6%) due to a change of its structure, i.e. an increase in the share of intermediate consumption in gross output (50.1% in 2019 compared to 47.0% in 2014 in constant prices).

Shifts in the structure of gross output were determined mainly by changes in the production of agricultural products as such (about 80% of the total increase in the share of intermediate consumption in this industry) and not related to redistribution of production between agriculture and forestry, fish farming and fishing.

The increase in the share of intermediate consumption in gross agricultural output is generated by both technological changes in households and peasant (farm) households (the "Households" sector, about 2/3 of the total increase), and a shift of production to agricultural organizations (sector of Non-financial corporations", about 1/3 of the total increase).

These processes stem from industrialization of agriculture, accompanied by growth of labor productivity, release of working hands and the flow of added value to other sectors (production of fertilizers, oil products, etc.), which reduces the growth of added value in agriculture.

¹ Section A OKVED 2 "Agriculture, forestry, hunting, fisheries and fish farming".

The dynamics of gross added value produced in agriculture, indicates a failure in reaching target indicators of the Government Program both in 2018 (-5.9%) and in 2019 (-5.7%). In addition, we believe that the level of 3.55–3.65% of GDP planned for 2020–2024 (according to estimates of the basic version of the Forecast of socio-economic development of the Russian Federation for the period until 2024) might not be achievable taking into consideration that target growth rate of agricultural production in 2020–2024. (10.7% by 2019), lags behind the scenario of GDP growth (15.4%), and having in mind current structural tendencies (suggesting reduction in the share of added value in the gross agricultural output).

4.6.2. Dynamics of production, consumption, food export port substitution

In 2019, crop production increased in all major groups, excluding potatoes, compared to the previous year. Growth amounted to more than 2% even for vegetables, which are still largely produced at households.

Despite the fact that Russia is mainly proud of its success in grain production, its growth in 2019 was insignificant against the last pre-reform five-year period of 1986–1990, whereas growth was by far higher for other essential products. In other words, transformation of the structure of production and its adaptation to the market is going on: production of export crops or those crops improving the pattern of consumption is increasing (*Table 26*).

Table 26

Indicators	At the average for 1986–1990	2015	2016	2017	2018	2019*	2019 in %against 2018	2019 in % against average for 1986–1990
Grain	104.3	104.7	120.7	135.5	113.3	121.2	107.0	116.2
including wheat	43.5	61.8	73.3	86.0	72.1	74.5	103.3	171.3
Corn	3.3	13.1	15.3	13.2	11.4	14.3	125.4	433.3
Sugar beet	33.2	39.0	51.3	51.9	42.1	54.4	129.2	163.9
Sunflower	3.1	9.3	11.0	10.5	12.8	15.4	120.3	496.8
Soya	0.6	2.7	3.1	3.6	4.0	4.3**	107.5	716.7
Potatoes	35.9	25.4	22.5	21.7	22.4	22.1	98.7	61.6
Vegetables and gourds	11.2	13.2	13.2	13.6	13.7	14.1	102.9	125.9
Fruits and berries	3.3	2.7	3.1	2.7	3.3	No data	No data	No data

Crop production, millions of tons

*Data as of March,1, 2020.

**Data prior to adjustment. No adjusted data for 2019 available at the time of review.

Source: Rosstat statistical data "Gross output of agricultural crop by categories of households at all standards households". URL: https://gks.ru/storage/mediabank/vall-19.rar; URL: https://www.gks.ru/storage/mediabank/vall-19.rar; URL: https://www.gks.ru/storage/mediabank/vall-19.rar; VRL: https://www.gks.ru/storage/mediabank/vall-19.ra

The increase in livestock is negligible (*Table 27*). The reason for that is that domestic demand for meat and egg has been satisfied while meat and egg export not established and respectively insignificant. Besides, beef and pork to a lesser extent, is not competitive at world market price and, if the domestic market was open, then it is not competitive also there, although the growth in production and low consumer demand limits domestic prices, thereby increasing the competitiveness of these products.

Production of milk is actively supported by governmental subsidies, however, growth of production in agricultural organizations (AO) and peasant (farm) households (PFH) hardly compensates its decline at households. Only reduction of consumer purchasing power allows to allocate milk surplus for potential export. RF Ministry of Agriculture is working out programs for promotion of milk export to China. However, its price remains non-competitive

at the international market and export is restricted. Egg has been competitive for a long period of time, however, its export is still insignificant, less 2% of production. However, it grows fast: if egg export amounted to almost 480 million eggs in 2012, in 2018 it was already 770 million.

Table 27

Indicators	average for 1986–1990	2015	2016	2017	2018	2019 (estimates)*	2019 against 2018, %
Meat and poultry, thousands of tons of live weight at slaughter	9671	95.9	9853	10319	10629	10826	101.8
Milk, millions of tons	54.2	29.9	29.8	30.2	30.6	31.1	101.6
Egg, billions	47.9	42.5	43.5	44.8	44.9	44.8	99.8

Livestock	production
LIVESIUCK	production

Source: Rosstat.

The revival of domestic food consumer demand could be observed since June 2017. However, only in October 2019, volume of foodstuffs retail purchases exceeded the rate of 2015, but still it was very far from rates of 2012, 2013 and 2014. Thus, in December 2019, according to Rosstat, consumers bought 8% less (in comparable prices) than in December 2012. The good news is that throughout 2019 foodstuffs purchases were stable at 92–94% compared to respective months of 2012 (*Fig. 29*). In 2018, rates of purchases at 92% decreased from October 2018 to the end of the year (to 90%).

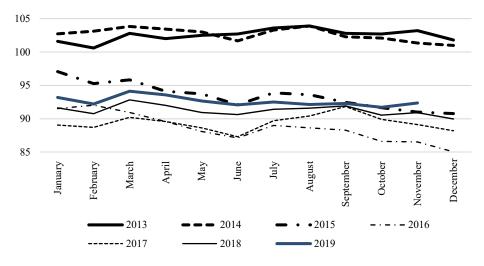


Fig. 29. Retail foodstuffs purchases, % against respective month of 2012

Source: calculations based on Rosstat data.

Poor growth in demand since 2017 impacted the dynamics of food imports according to the annual data shown on *Fig. 30*. In 2019, imports slightly increased while exports modestly decreased against 2018. However, even with these changes, it is clear that Russia is moving forward to become a net exporter of food despite the fact that from 2016, the share of imported foodstuffs in commodity resources of retail trade is not declining anymore, which was the case in 2013–2016 (*Table 28*).

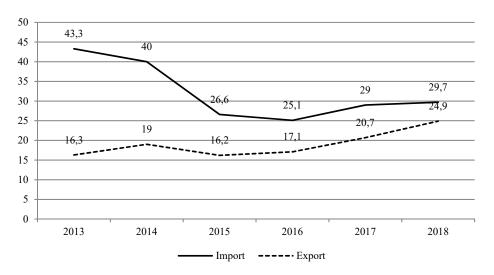


Fig. 30. Export and import of agricultural and food products (1–24 FEACN), billions of USD

Source: RF Federal Customs Service.

Table 28

Share of imported goods in food commodity resources, %

		,		
	QI	QII	QIII	QIV
2013	36	35	35	36
2014	36	33	32	36
2015	29	26	27	30
2016	24	22	22	24
2017	23	21	22	25
2018	25	22	22	25
2019	25	24	24	*

* No data for QIV 2019 available at the time of this review. Source: EMISS. URL: https://www.fedstat.ru/indicator/37164

Source: EMISS. OKL: https://www.ledstat.ru/indicator/5/104

4.6.3. Government support of agriculture

Government Program of Agriculture Development and Regulation of Markets for Agricultural Products, Raw Materials and Foodstuffs is a principal document, shaping agrarian policy, in particular, priorities, directions and supportive measures. In 2019, another, 15th edition of the Government Program came into force (changes introduced by Decree of the RF Government No. 98 of February 8, 2019). By this Decree, the Government Program has been officially extended until 2025, and the phrase related to the period of its validity was excluded from the title. Thus, the Government Program has finally lost the properties of the medium-term planning tool, which provides for the stability of goals, directions, structure, funding throughout the entire period of its implementation, acquiring, in fact, an unlimited duration (it is possible to endlessly extend the implementation period).

According to Article 10 of the Federal Law of December 29, 2006 №264-ΦZ (amended as on December 25, 2018) "On Development of Agriculture", the National Report on the

implementation and results of the Government program¹ envisages the review of its implementation only "for the previous year and only if it has been completed, thus, for the whole period of its implementation." In other words, the Law suggested an annual review of the current situation with a full review of the selected strategy of agriculture development to be made every 5 years (initial validity period of the 1st Government Program). It is anticipated to introduce significant amendments into the Government Program, if required, specifically at the close of mid-term period based on results of the performed review. This was an example of achieving a combination of stability vital for business, and flexibility necessary to manage the industry.

At present, the Government Program has been extended to 2025 and, respectively, the review of agricultural policy for the period of 2013–2020 (valid until renewal), clearly reflected in the Government Program, will not be included in the National Report for 2020.

It remains unclear whether goals declared in the Government Program for this period have been achieved and priorities and support mechanisms correctly chosen. The review of the current situation, included for the time being in the annual National Reports, is certainly important, but only as a stage in assessing the achievement of medium-term goals. This aspect of review under National Annual Reports is not available now.

At present, the Government Program and the National Report reflect the actual state of affairs, meaning the current short-term mode of management, while 15 amendments of the Government Program over 7 years, including those that significantly changed its structure, directions and funding, serve as confirmation.

In addition, parameters of financial support for the Government Program and its projects for 2022–2025 are indicative in the Government Program Passport with notes that they will be "clarified after approval of the Federal Law on federal budget for the next financial year and the planning period."². There are no restrictions on the amount of funding adjustments, that is, they can be substantial.

Thus, for instance, according to the Government Program Passport "Comprehensive development of rural areas" (this direction was included in the Government Program of Agriculture Development and Regulation of Markets for Agricultural Products, Raw Materials and Foodstuffs and in 2019 was spun off into a separate Government Program with financing due to start on January 1, 2020), the funding is planned out of the federal budget in the amount of RUB 79.2 billion in 2020, RUB 160.6 billion in 2021, RUB 193.1 billion in 2022³. However, according to Federal Law of December 2, 2019 № 380-FZ, it is planned to allocate only RUB 35.95 billion in 2020, RUB 34.4 billion in 2021 and RUB 34.98 billion in 2022, in other words, funding envisaged for 2022 is 5.5 times less compared to Government Program Passport.

This situation is far from normal, since such a reduction requires a radical review of all target indicators, and most likely, of the structure and goals of the Government Program already approved by RF Government Decree dated May 31, 2019 No. 696 (as amended on October 17, 2019).

The overall funding of the Government Program for the Development of Agriculture and the Regulation of Agricultural Products, Raw Materials and Foodstuffs also undergoes significant changes depending on the wording and calculation methods (*Table 29, Fig. 31*).

¹ Principal analytical document on implementation of goals, tasks, indicators of Government Program at fixed funding. Approved by RF Government, forwarded to RF Federal Assembly.

² Decree of RF Government of July 2012 № 717 (as amended on February 8, 2019).

³ Decree of RF Government of May 31, 2019 № 696 (as amended on October 17, 2019).

Scheduled funding for implementation of Government Program as in its different amended versions, RUB billion

	2019	2018	2019		
Sources of funding	C RECOVERNMENT NOLAGE AT		5 (Decree of RF Government of ary 8, 2019 № 98)		
Federal budget	242.43	242.0	303.62		
Consolidated budgets of RF subjects	42.77	45.0	21.33		
Off- budget sources	11.98	878.7	468.79		
Total	297.2	1165.6	793.74		

Source: Decree of RF Government № 717 (as amended by Decrees of RF Government №1443 of November 30, 2018 and № 98 of February 8, 2019)

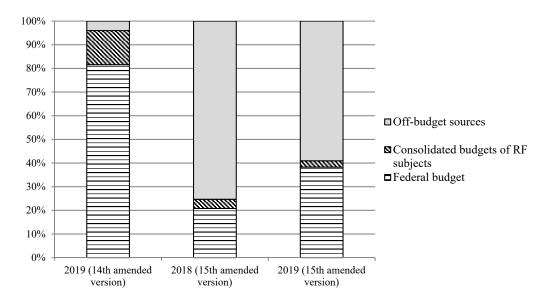


Fig. 31. Framework of scheduled level of funding for implementation of Government Program as in its different versions including off-budget sources

Source: Decree of RF Government \mathbb{N}_{2} 717 (as amended by Decrees of RF Government \mathbb{N}_{2} 1443 of November 30, 2018 and \mathbb{N}_{2} 98 of February 8, 2019)

Sharp increase of the off-budget funding sources in different versions of the Government Program could be explained by the fact that earlier (version 14) this particular article included only relevant data on the Federal Targeted Program (FTP) "Sustainable Development of Agricultural Lands" and "Development of Amelioration of Agricultural Lands in Russia."

It should be noted that financing pattern of these Federal Targeted Programs (FTP) was reviewed in the National Reports for the respective year taking into account the off-budget sources. All business and individual investments subject to the provision of governmental support were included there after methodology has been changed in the 15th amended version.

As a result, total funding of the Government Program in 2018 should have amounted to a record RUB 1 trillion 166 billion according to the Government Program Passport (15th amended version), when the off-budget funds, i.e. own finances of agribusiness and rural residents, were the major source of agricultural funding as shown at *Fig. 31* and *Table 29*.

In 2018, they should have amounted to 75% of the total funding of the Government Program and 59% in 2019. The role of the federal budget was restricted to 21% in 2018 while regional budgets settled with only 4% of total planned funding.

It was to be expected that the focus in examining the implementation of the Government Program will accordingly switch in the 2018 National Report to the main source of funding, that is, the dynamics of the off-budget funds. The actual execution of planned off-budget revenues, as well as the reasons for their planned rapid reduction in 2019 compared to 2018 became evident (according to the Government Program Passport from RUB 879 billion to RUB 469 billion).

In other words, if we consider that one of the budgetary funding goals is to promote the flow of investments to agriculture, it appears that taking into account the scheduled increase of the budgetary funding allocated from treasuries at all levels by 13% in 2019 compared to 2018 (15th amended version of the Government Program), the decline in the off-budget funds, as the source of funding the development of this sector, has been officially planned by 1.9 times.

However, there are no answers to these questions in the National Report for the respective year, which is the principal official document monitoring the Government Program implementation in 2018. It examines the implementation of resourcing for the Government Program exclusively from the federal budget.

The role played by the off-budget funds as well as regional budgets in providing financing for the Government Program is not estimated in general, likewise in the context of projects, subprograms, and measures, with the exception of their traditional inclusion in the FTP review "Sustainable Development of Agricultural Lands" and "Development of Amelioration of the Agricultural Lands in Russia." At the same time, the amount of the off-budget funds for these FTPs amounted to only RUB 13.4 billion in 2018, i.e. 1.5% of their total planned amount of funds.

There is no evaluation of what happened to 98.5% of planned off-budget funds in 2018. Alterations in the pattern of indicators, methodology of their calculation should be justified by practical need. Based on the content of the National Report for 2018, there was no need to change methodology.

The authorities consider even further funding out of the federal budget as the main driver for development of agricultural sector. As seen from *Table 29*, federal budget funding expects a significant growth (by 30%) (by 25% compared to the plan of 2018 according to the 15th amended version of the Government Program) with a two-fold planned reduction in the share of regional budgets.

Thus, growth of strain on federal budget has been planned for 2019. This can be partly explained by the fact that loan debts on loans granted on terms of interest rate reimbursement, financed, inter alia, from regional budgets, reduce, with an increase in loans received under new rules, i.e. at a reduced rate not exceeding 5%. Incomes lost by banks on these loans in the amount not exceeding the key rate, will be compensated only out of the federal budget.

In 2018, actual funding of the Government Program from the federal budget amounted to RUB 249.5 billion, i.e. the scheduled increase in funding for 2019 compared to the previous year, will amount 21.7% according to the latest 15th current version of the Government Program. Based on open sources, it was not possible to identify the relevant data on full funding of the Government Program from regional budgets in 2018.

Taking into consideration the "Information on local budget expenditures from the budget of RF subject with subsidies and other inter-budget transfers making up the source of financial

support"¹ for 2018 and 2019, one can only identify the role of federal and regional budgets in financing subsidies and grants transferred directly to agricultural producers (*Table 30*).

Table 30

Subsidies and other intergovernmental transfers forwarded to agricultural producers, billions of Rubles

V	T-4-1	Including from		Size of funding including budget of
Year	Total	Federal budget	Regional budget	RF subject, %
2018	170.58	140.53	30.05	17.62
2019	152.32	126.91	25.41	16.7
2019 against 2018, %	89.3	90.3	84.5	

Source: Information on local budget expenditures from the budget of RF subject with subsidies and other interbudget transfers making up the source of financial support (final forms for 2018; 2019) URL: http://mcx.ru/activity/state-support/funding/.

Thus, in 2018, only 56% of the actual funds allocated from the federal budget were meant for subsidies and other payments forwarded straightforward to agricultural producers. The remaining funds were channeled to maintain the administrative staff of the RF Ministry of Agriculture, subordinate institutions, compensations to banks that granted preferential lending to agricultural producers, manufacturers of agricultural machinery selling it at a discount, and other budget recipients.

Consequently, *Tables 29–30* show that a significant reduction in subsidies and other direct payments to agricultural producers was scheduled in 2019 compared to 2018, despite the plan to increase federal funds intended for implementation of the Government Program on the whole, to RUB 303.6 billion. Another reason for that is the growth of preferential loans suggesting transfer of compensation to credit institutions rather than to agricultural producers.

As also seen from *Tables 29–30*, actual regional funding of the Government Program measures for 2019 exceeded the planned level of regional funding by RUB 4.1 billion according to the Government Program Passport (15th amended version).

Table 31 shows actual funding of the Government Program directions in 2018^2 and funding for 2019 in accordance with the Federal Law of November 29, $2018 \mathbb{N} 459 \oplus \mathbb{Z}$ "On Federal budget for 2019 and for the planning period of 2020 and 202." Funding was subjected to alterations throughout 2019, and cash execution will be known after completion of the accounting period.

Table 31

Funding of the Government Program of Agriculture Development and Regulation of Markets for Agricultural Products, Raw Materials and Foodstuffs in 2018 (cash execution including funding from reserve fund of the RF Government) and 2019 (planned cash allocation from federal budget), billions of Rubles

	2018, actual		2019, plan		2019	
Program directions of the Government Program	Billions of rubles	% of total	Billions of rubles	% of total	against 2018, %	
1	2	3	4	5	6	
Government Program, total	249.504	100.0	303.62	100.0	121.7	
Direction Development of AIC Sectors	172.57	69.17	228.92	75.40	132.7	
Federal Project Establishment of Support System for Farmers and Development of Agricultural Cooperation	-	0.00	7.7	2.43		
Federal Project Export of AIC products	1.431	0.57	38.81	12.78	2712.1	

¹URL: http://mcx.ru/activity/state-support/funding/.

² Within 2019.

., 1

					Cont'd
1	2	3	4	5	6
Departmental Project Technological Modernization of the AIC	14.00	5.61	8.00	2.63	57.1
Measure Promotion of farming equipment renovation	10.00	4.01	8.00	2.63	80.0
Departmental Project Development of AIC Sectors Ensuring Accelerated Import Substitution of Main Types of Agricultural Products, Raw Materials and Foodstuffs	64.095	25.69	59.93	19.74	93.5
Measure Non-targeted Support of Agricultural Producers in Their Crop Production	16.305	6.53	11.34	3.74	69.5
Measure Increasing Productivity in Dairy Farming	7.962	3.19	7.96	2.62	100.0
Measure Aid in Achieving Regional Program Development Targets in AIC ("Single Subsidy")	39.827	15.96	40.62	13.38	102.0
Departmental Project Promotion of Investment Activity in Agroindustrial Complex	93.045	37.29	114.81	37.81	123.4
Measure Support of Investment Lending to AIC- subsidies to compensate for interest payment on investment loans issued to AIC	46.868	18.78	41.57	13.69	88.7
Measure Support of Preferential Lending to AIC Organizations	32.648	13.09	73.14	24.09	224.0
Measure Compensation for direct costs incurred for construction and modernization of AIC facilities	13.529	5.42	0.10	0.03	0.7
Direction Ensuring Development of AIC Sectors ¹	7693	30.83	74.70	24.60	97.1
Measure Management of Government Program Implementation by Executive Administration	18.271	7.32	1.17	0.39	6.4
All-Russia Production Center Implementation of veterinarian and phytosanitary surveillance	12.231	4.90	12.46	4.10	101.9
Subprogram Ensuring General Conditions for Functioning of AIC Sectors	17.211	6.90	29.90	9.85	173.7
Subprogram Development of Amelioration of Agricultural Lands in Russia	11.225	4.50	13.28	4.37	118.3
Subprogram Scientific and Technological Backing for Development of Sectors of AIC	0.616	0.25	0.48	0.16	77.9
Subprogram Sustainable Development of Agricultural Lands	17.046	6.83	17.42	5.74	102.2

Source: Federal Law of November 29, 2018 № 459-FZ "On Federal budget for 2019 and planning period of 2020 and 2021"; information of RF Ministry of Agriculture.

As seen from *Table 31*, fundamental changes took place in the pattern and funding of the Government Program. The direction "Development of AIC sectors" intensified mainly due to a sharp increase in funding of the Federal project "Export of AIC products" from inconsiderable for this direction RUB 1.4 billion up to RUB 38.8 billion. A closer look, however, shows that growth happened mainly due to measures of capitalization increase of RF Agricultural Bank included in the project in the amount of RUB 15 billion, preferential lending to agricultural producers and processing industries in the amount of RUB 17.7 billion as well as amelioration measures worth RUB 2.04 billion (*Table 32*).

Long since 2006, Government has been regularly recapitalizing the RF Agricultural Bank as part of the priority National Project "Development of the AIC". In the past, recapitalization of the RF Agricultural Bank was included in the direction of support "Improving financial stability of small businesses in rural areas" and stimulated by the necessity to develop a regional banking branch network to cooperate with small AIC businesses. This segment was not very attractive to banks, and, moreover, branches of other banks were not present in every rural area, therefore, the assistance of the Government seemed justified.

¹ No such subprogram in 2018. The table shows a summary of articles included in the 2019 subprogram for comparison purposes. In 2018, the direction included eventual measures not indicated in the table describing measure for support of information resources and monitoring of agricultural land – a total of RUB 332 thousand.

Details of export support measures reflected in the Government Program of Agriculture Development and Regulation of Markets for Agricultural Products, Raw Materials and Foodstuffs in 2018 (actual) and 2019 (funding planned from federal budget), billions of Rubles

		Indicators	
Measures	Billions of Rubles	%	
2019			
Federal project "Export of AIC products"	38.81	12.78	
Implementation of Amelioration of Agricultural Lands	2.04	0.67	
Government Support aimed at Promotion of AIC Production	0.05	0.02	
Government Support aimed to reduce costs of transportation of Agricultural and Food Products	1.28	0.42	
Capital contribution to Russian Agricultural Bank shareholding company	15.00	4.94	
Compensation of lost incomes to Russian credit institutions on loans issued at reduced rate to agricultural producers, organizations and individual entrepreneurs involved in production, initial and (or) further (industrial) processing of agricultural products and sale at discounted rate ¹	17.73	5.84	
Implementation of National project "International cooperation and export"	2.71	0.89	
2018			
Priority project "Export of AIC products"	1.43	0.57	
Measure "Establishment of a system promoting and supporting export of Russian AIC Production to International Markets	0.846	0.34	
Measure "Assistance to Rosselkhoznadzor aimed at greater access of Russian AIC production to international markets"	0.481	0.19	
Measure "Establishing and running the Analysis Center for export of AIC production and studies of potential international target markets"	0.1	0.04	

Source: Federal Law of November 29, 2018 № 459-FZ "On federal budget for 2019 and planning period of 2020 2021"; RF Ministry of Agriculture.

Nowadays, "Pochta-Bank" rapidly occupies this niche. Although the capital contribution to RF Agricultural Bank accounts for almost 40% of the total allocated funding under Federal Export Support Project (*Table 32*), no special connection between RF Agricultural Bank and achievement of target indicators related to this project was found based on open documents. There is no reference to RF Agricultural Bank either in the current version of the Government Program, or in the Passport of the Federal Project "Export of AIC Production" (approved by minutes of the National project "International Cooperation and Export" committee meeting of December 14, 2018 No. 5), or in the Passport of the National Project "International Cooperation and Export."

Furthermore, the RF Agricultural Bank is not an exclusive authorized bank providing preferential lending to agricultural producers who have concluded agreements on competitiveness improvement (i.e. potential exporters). Nine more banks apart from those selected by tender, are included in the list of too-big-to-fail credit institutions granting preferential lending. However, no recapitalization was envisaged for them.

The other two most significant export support measures involve mechanisms that are already present in the Government Program: "Support of preferential lending to AIC agricultural organizations" and the subprogram "Development of Amelioration of Agricultural Lands in Russia". The difference is that governmental support related to these measures is linked with certain criteria of the project "Export of AIC Production", aimed ultimately at export growth.

In the mean time, it is prohibited to receive funds profiting both from the program "Support of preferential lending" and SEC (SEC – agricultural consumer cooperatives). According to analysts, it deters potential borrowers, as many of them have already taken preferential credits

¹ Those concluded agreement on improvement of competitiveness (SEC)

and now scared to borrow SEC loans, though double financing is prohibited only with regard to the same facilities, but not the same borrowers. Although, the amount of RUB 17.73 billion was originally envisaged for preferential SEC lending by Federal Law "On Federal budget for 2019 and Planning Period of 2020 and 2021", the total amount of subsidies made up a total of RUB 2.02 billion largely intended for development of processing, (RUB 1.9 billion) according to the Preferential Loan Plan for 2019 dated September 13, 2019. Thus, the demand for preferential SEC loans wad greatly overestimated when originally planned.

According to the WTO Agreement on Agriculture, "*export subsidies refers to subsidies contingent upon export performance*."¹ Having joined the WTO, Russia took the responsibility against such subsidies. At the same time, the "exported amount of AIC products (in physical terms) based on new commodity stock, obtained at agricultural lands, ameliorated lands put into use, and mobilized agricultural lands, in the year following the one when the subsidy was granted", was approved as indicator to assess the effectiveness of subsidies for ameliorated agricultural lands under the project "Export of AIC products."².

Even without this indicator, the very appropriation and allocation of preferential lending, amelioration subsidies and reduction of transportation costs in relation of the project "Export of Agricultural Products" clearly signals their link with export development, in other words, it exposes the country to risks of litigation against WTO and EAEU partners.

The mechanism aimed to improve the access to loans remained the main tool of the federal budget support in 2019, i.e. funding of the departmental project "Promotion of investment Activities in AIC" increased by 23%, reaching RUB 114.8 billion or 37% of the total governmental funding. Moreover, taking into account a similar mechanism for supporting preferential SEC lending and recapitalization of the RF Agricultural Bank, it reached RUB 147 billion vs 48.6% respectively.

Herewith, the amount of only RUB 13.75 billion subsidies (not counting SEC) was spent for new loans in 2019 according to the List of Borrowers who benefited from positive decision of the RF Ministry of Agriculture taken in the period of January 23 – November 25, 2019, to include them in the Borrowers' Register. Fixed capital assets compensate previously taken loans. However, funding of a measure promoting investment but not entailing long-term government obligations, i.e. compensation for the direct costs incurred for construction and modernization of AIC facilities in 2019, has been virtually halted.

Since 2019, this form of compensation cannot be used for implementation of the most demanded goals: construction and modernization of greenhouse facilities. It became possible, nevertheless, to receive it for establishment and (or) modernization of flax mills, hemp processing enterprises, breeding and seed-growing centers in crop production, poultry farming (Decree of the Government of the Russian Federation of November 24, 2018 No. 1413).

It is planned to reduce subsidies to agricultural machinery manufacturers selling it to agricultural producers at discounted rate by 20% from RUB 10 to 8 billion, which can also be negatively assessed, given the high wear and tear of machinery in the agricultural industry and the relevance of this measure. According to the official website of the RF Ministry of Agriculture, the entire limit of subsidies was entirely approved as of October 3, 2019.³

¹ Article 1 Part I WTO Agreement on Agriculture.

² Annex №10 of the Government Program of Agriculture Development and Regulation of Markets for Agricultural Products, Raw Materials and Foodstuffs for 2013–2020 " (as amended of February 8, 2019).

³ URL: http://mcx.ru/activity/state-support/measures/machinery-subsidy/summarnyy-obem-subsidiy/.

Federal funding of the main measure of the relevant support for crop production, that is, the untargeted support, decreased from RUB 16.3 (relevant for 2018) to RUB 11.3 billion (plan for 2019). In 2018, the initially allocated limits of federal funding grew from RUB 11.3 to 16.3 billion proving high demand in subsidy. Funding of this measure from regional budgets amounted to RUB 4.5 billion in 2018; respective planned limits for 2019 equal RUB 3.6 billion.

In 2019, a new restriction was added to the Regulations of subsidies' allocation aimed at untargeted support (Annex No 7 to Government Program), namely, to obtain the subsidy, it is required to use seeds of agricultural crops, varieties or hybrids included in the Government Register of State-permitted cultivars approved for specific regions, and also provided that the varietal and sowing qualities of such seeds comply with GOST R52325-2005. Agricultural producers negatively assess this restriction. Thus, regional AKKORs argue that "the majority of small and medium-sized agricultural enterprises do not have documents confirming the use of these varieties, and, therefore, cannot rely on hectare subsidies"¹.

Since 2019, calculation of untargeted support in terms of subsidies per hectare of cropped land under cereals, grain legumes and fodder crops (hereinafter referred to as untargeted support in crop production) is linked with the indicator of agricultural insurance. It is planned that part of the subsidy (15% of the total amount of untargeted support in crop production), calculated with due regard to intensity of crop area insurance for each region, will "give priority to agricultural producers for the insured cultivated area."² Accordingly, if the region refuses agricultural insurance, the total limit of subsidies will be reduced by 15%. Previously, regions demonstrating the highest positive financial and economic results of agricultural producers in crop production, taking into account the soil fertility indicator of the RF subject, were not eligible to receive the hectare untargeted support.

As from 2019, they are eligible to receive a part of subsidy allocated according to the intensity of crop lands' insurance. RF Ministry of Agriculture approves list of these regions on an annual basis. In 2019, these regions were as follows: Belgorod, Voronezh, Kursk, Lipetsk, Tambov and Rostov, Krasnodar and Stavropol.

Subsidies earmarked for boosting productivity in dairy farming remained as in the previous year, meaning actual reduction of support in view of inflation. The increase of funding of an important measure "Aid in Achieving Regional Program Development Targets in AIC" ("Single Subsidy") is also lower than envisaged inflation. In 2019, allocation of a separate limit is planned for planting vineyards as well as for government backed agricultural insurance within the frame of this subsidy.

In 2019, Federal project "Establishment of a support system for farmers and development of rural cooperation" was launched. The purpose of the project, designed for 2019–2024, is to "ensure, at least, 126 000 new people involved in small and medium-sized agricultural enterprises by 2024, setting up and developing small and medium-sized AIC enterprises including peasant (farm) households (PFHs) and agricultural consumer cooperatives (SECs)."³ The following measures are: "Agrostartap" grants awarded on a competitive basis for setting up and developing PFH; reimbursement of partial costs to agricultural consumer cooperatives according to respective directions and subject to conditions regulated by Decree of the RF Government No. 476 of April 20, 2019; reimbursement of up to 70% of costs associated with

¹URL: https://agrobook.ru/blog/user/aleksandra-koreneva/fermery-70-hozyaystv-ne-smogut-poluchit-v-etom-godu-pogektarnuyu.

² Decree of RF Government of July 14, 2012 № 717 (amended as of February 8, 2019).

³ Ibid.

the implementation of current activities to the centers of competence in the field of agricultural cooperation and support of farmers.¹

Planned funding of the project amounted to RUB 7.37 billion from the federal budget in 2019. Planned transfers to agricultural producers (SECs, PFHs) paid from federal budget equaled to RUB 5.35 billion against RUB 294.3 million from regional budgets², thus, level of co-funding to agricultural producers from regional budgets was very low, 5.2% in regard of this project.

PFHs and agricultural consumer cooperatives (SECs) are also eligible for support within "Single Subsidy". PFHs can receive it mainly under support measures for new farmers; development of family cattle farms; SECs can get grants for development of material/technical logistics. In 2018, PFHs received he amount of RUB 10.86 billion under these directions including RUB 8.45 billion from the federal budget, SECs received RUB 4.02 billion including RUB 2.65 billion from the federal budget with a total of RUB 14.88 billion from treasuries at all levels. In 2019, the amount of RUB 14.45 billion. Thus, we can assume that while maintaining the level of PFHs and SECs support under directions of "Single Subsidy" in 2019, it is planned to increase support to PFHs and SECs by RUB 5.35 billion through the federal project. Cash execution will be adjusted upon assessment of the year results.

Thus, in 2019, there was an increased focus shown by authorities towards support for exports, small business forms, followed by shaping these directions into federal projects and increase in funding. The tendency to predominant support of agriculture through access to preferential loans maintained, the transition from direct subsidies granted to agricultural producers to subsidizing organizations providing resources for agriculture on favorable terms, is still in progress (banks, Rosagroleasing, manufacturers of machinery, Russian Railways, OJSC, insurance companies, etc.)

As from 2020, it is planned to significantly change the regulations of subsidies' allocation and distribution aimed at support of certain branches of crop production, livestock breeding and agricultural insurance, introducing compensating and promoting parts of subsidies. The changes relate to untargeted support and subsidies aimed at increase of productivity in dairy farming and directions of single subsidy.

4.6.4. New challenges of 2020

The year 2020 began with two cataclysms, which inevitably affected the food market in Russia: the spread of coronavirus pandemic in Russia and a sharp Ruble devaluation in February-March.

Potential restriction on free movement in the city under quarantine, risks of shutting down production facilities and shops due to workers' illnesses, as well as psychological fears amid restrictions of cargo traffic, caused speculative demand for cheap and long-stored products.

Moreover, Russia is a real net exporter of these products, including cereals, flour, salt, pasta. The following recommendations could be suggested to the Government in order to reduce speculative demand:

¹ Decree of RF Government of April 20, 2019 № 476.

² Information on local budget expenditures from the budget of RF subject with subsidies and other inter-budget transfers making up the source of financial support (final forms for 2018); form as of November 28, 2019) URL: http://mcx.ru/activity/state-support/funding/.

- conducting an information campaign aimed at raising awareness of agricultural producers, food producers, retailers, market analysts that the country has stocks of these products, resources sufficient to meet current demand, explaining reasons for empty shelves in supermarkets;
- nullification of import duties on foodstuffs;
- waiving of food embargo, introduced in 2014. Imports will be insignificant due to Ruble devaluation;
- waiving of trade control, which can regulate demand at short-term by raising food prices in order to reduce speculations.

These recommendations were largely discussed by the Government in March 2020.

After another Ruble devaluation in 2020, domestic prices for almost all agricultural products fell below global level. A risk of their export emerged to the detriment of domestic market. The Government began to consider ways of its protection.

In this context, one should bear in mind that up to date, numerous studies exist, estimating consequences related to protection of domestic market in the post-Soviet territory. They prove that restrictions strongly disrupt operations of grain markets and counteract the mobilization of production and export potentials of countries introducing them. They are always discriminatory against farmers, while benefits to consumers are not evident. This is also true with regard to other products.

The best solution to ensure economic and physical access to foodstuffs when Ruble devalues, would be to support people, so that they can buy food that is of no shortage at the global market at higher prices, rather than introduce restrictions for producers, i.e. ban on exports, introduction of export quotas or export duties. Taking into account that support of consumers' purchasing power announced by the Presidents of the Russian Federation, will be limited in Russia, the Government considers ways to limit export of products as a measure stabilizing prices at the domestic market.

A ban should not be imposed as a measure to regulate the market of export-oriented products, since the volume of domestic production can satisfy all domestic needs. Quota introduction is a corrupt measure that redistributes the benefits of high export prices in favor of traders who own export terminals.

Use of export duties could be effective when they are refunded or redistributed in favor of food producers, who experience export restrictions. To do this, we need a mechanism for consolidation of export duties on agricultural goods and raw materials, as well as a mechanism for refund of duties retained in favor of producers whose products were under export restriction duties.

In this context, introduction of export duties should be well determined and enshrined in the Federal Law. According to Article 8 of the Federal Law "On the Principles of State Regulation of Trade in the Russian Federation", the RF Government can approve prices limits for socially important goods if the increase in retail prices for certain types of socially important food essentials equals 30% and over within 30 calendar days in a row nationwide. Regulation can be introduced for a period of 90 days.

It would be logical to assume that regulation of raw materials markets required for food essential can be introduced after regulation of retail prices will have come into force.

Restriction of retail prices was not the case in Russia yet, while export restrictions have been introduced more than once.

Restriction of grain prices gives benefits to producers of livestock products, which can be exported even in the absence of food surpluses determined according to their quantity by recommended consumption standards. In this situation, it is impractical to introduce restrictions that discriminate manufacturers of one product and bring advantages to others.

It would be appropriate to reduce VAT on food, taking into consideration shrinkage of the population purchasing power.

Most suppliers of agricultural products intended for processing do not pay VAT, however, VAT is included in the price of food sales. This is resulted either in losses incurred by participants of the following sectors of food supply chain, which will be then passed on to consumers, while their income drop, or in discrimination of agricultural producers when their products have to be sold at reduced price to processing companies or exporters.

4.7. The transport complex¹

The transport complex and its development, in particular the development of transport infrastructure, is one of the most important factors of economic growth. Investments in infrastructure invariably have a huge impact on long-term economic growth. A lack of proper infrastructure development can give rise to bottlenecks, imbalances and a significant increase in the cost of doing business.²

The transport and logistics complex and related activities play a significant role in the functioning of Russia's national economy. According to data released by Rosstat, the transport industry's share in GDP in 2017 and 2018 was 7.0% and 6.5%, respectively, and at year-end 2019, it was 6.6%.

According to the estimates released by the RF Ministry of Economic Development, from 2016 onwards the transport sector has been making a positive input into GDP growth: 0.09 percentage points in 2016, 0.01 percentage points in 2017, and 0.19 percentage points in 2018; in Q1 and Q2 2019, 0.21 and 0.19 percentage points, respectively; and by year-end 2019, the annual input of the transport industry into GDP growth is forecast be 0.12 percentage points. Through the existing inter-industry links, the transport complex influences almost every sector of the national economy.

Below, we consider in more detail the main trends of 2019 and the previous years observed in Russia's transport industry.

4.7.1. The general structure of transport activities in 2019

Freight transport

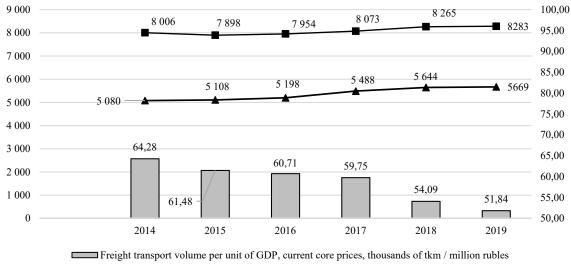
One of the key indicators of the transport system's activity is freight transportation intensity³ – the index of freight transport volume per unit of GDP, which measures the 'transport load' on the economy. A lower freight transportation intensity indicates a relatively more efficient use of transport. In most countries with market economies, this figure has been

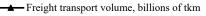
¹ This section was written by *Borzykh K.A.*, junior researcher at the Laboratory for Infrastructural and Spatial Studies, ISMI RANEPA; *Ponomarev Yu.Yu.*, Candidate of Economic Sciences, Head of the Laboratory for Infrastructural and Spatial Studies, ISMI RANEPA, Senior Researcher at the Center for Real Sector of the Gaidar Institute.

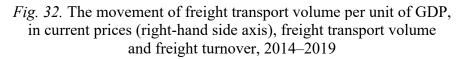
² Idrisov, G.I., Ponomarev, Y.Yu. Infrastructure mortgage in Russia: opportunities and prospects // Voprosy Ekonomiki. 2019. No 2. P. 114–133.

³ The sum of shipment transports, calculated by multiplying the shipment weight by the distance traveled.

declining over the past decades, reflecting the relative cost reduction of transport services.¹ For Russia, a similar trend has been noted (*Fig. 32*), although the freight transportation intensity index of the Russian economy is still quite high and stays above the corresponding indices of other large countries with comparable average distances traveled by freight transport (the USA, China, Germany, Canada).² At the same time, freight transportation intensity decline has been occurring alongside both an increasing freight volume carried by all types of transport and an increasing freight turnover.







Source: Rosstat; own calculations.

The largest share in freight volume by transport mode (less pipeline transport) is taken up by railway transport. Thus, in 2019, railway freight volume per unit of GDP in current prices amounted to 23.800 tkm / million rubles (vs 25,000 tkm / million rubles in 2018).

Overall in recent years, the freight transport structure has undergone no significant changes: rail and pipeline transport still prevail in terms of freight volume, but road transport tops the list in terms of freight physical volume (*Fig. 33* and *36*).

A steady increase in freight turnover was observed practically every year over the period from 2009 to 2019. The leading role of pipeline and rail transport (*Fig. 33*) can be explained by the fact that the spatial profile of long-distance transport services (for example, the significant share of transportation of raw materials from remote deposits to their processing and consumption points) has changed only slightly compared with the other transport modes. Road transport, which is characterized by a more diversified structure (automotive vehicles of small,

¹ Speranza M.G. Trends in transportation and logistics // European Journal of Operational Research. 2018. Vol. 264. No. 3. P. 830–836.

² Integrated transport system. M.: CSR, 2018.

medium, or heavy capacity, etc.),¹ is mainly used for carrying cargo over relatively shorter distances, including 'door-to-door' delivery, i.e. for short-distance transportation, where it has competitive advantages over other modes of transport.² Over the past year, road freight transport turnover gained 5.8%, increasing from 259 billion tkm in 2018 to 274 billion tkm in 2019.

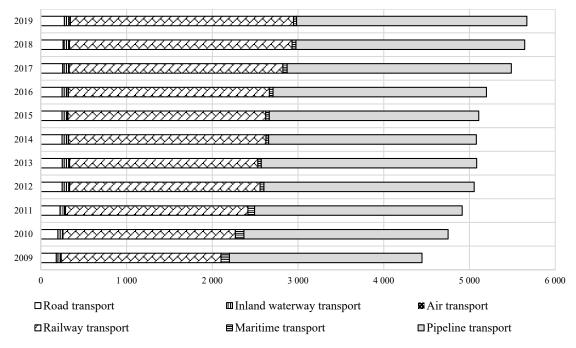


Fig. 33. Freight turnover structure by transport mode (billion tkm), 2009–2019

Source: Rosstat; own calculations.

The market for commercial road transport has been demonstrating a growing demand for transportation services on the part of the retail sector. Thus, in particular, a number of large retail companies (for example, X5 Retail Group) have launched an expansion across Russia's regions, opening their outlets in some hard-to-reach and remote places, thus requiring efficient logistics and supply chains stretched over a vast territory.³ In addition, distribution networks have displayed a tendency to increase the number of their distribution centers⁴ in order to centralize supplies and reduce the length of the transport leg, and in doing so boost their turnover rate (the number of deliveries per day), thus also creating additional demand for transport services.

Air freight is on the decline. Thus, while the freight turnover of Russian airlines in 2018 amounted to 7.8 billion tkm, in 2019 it shrank to 7.4 billion tkm (by 5.4%). The commercial freight load is also falling (by 1.4 percentage points). Overall in the civil aviation industry, the

¹ Analytical Center for the Government of the Russian Federation. Dynamics of freight transportation in Russia. Bulletin on Socioeconomic Crisis in Russia, 2015 (December). (In Russian). URL: http://ac.gov.ru/files/publication/a/7400.pdf.

² Integrated transport system. M.: CSR, 2018.

³ Piatyorochka goes to the taiga // Retail.ru. URL: https://www.retail.ru/cases/pyaterochka-idet-v-taygu/_

⁴ Sereda, D. Logistics in retail trade: how the federal networks are consolidating Russia anew. URL: https://www.lobanov-logist.ru/library/358/63667/.

freight and mail transportation volume fell by 2.4%.¹ There has been a decline in international air freight traffic, in particular between Russia and foreign countries outside the CIS.² The other factors that impose constraints on the industry's activity are the rising fuel prices and its sensitivity to forex rate fluctuations.

Maritime transport accounts for about 1% of total freight turnover. In 2019, sea freight shipping also displayed negative dynamics, dipping by 19.5% relative to 2018 (up to 23 million t). However, maritime transport competes with the other modes of transport in the export sector: thus, in 2018, 12.2% of the total volume of exports was carried by sea (vs 12% in 2017). This is 5 percentage points more than that carried by rail.³ In 2019, that ratio, with some minor changes, remained basically the same.

The largest share in the structure of maritime freight turnover by type of route and destination is taken up by cabotage,⁴ followed by exports (*Fig. 34*). The share of cabotage over the last two years (2017–2019) nearly doubled. The share of cargo turnover between foreign ports (BFP) decreased from 31% in 2017 to 12% in 2019. The share of imports has been steadily low, amounting to 1% of total maritime freight turnover in 2019.

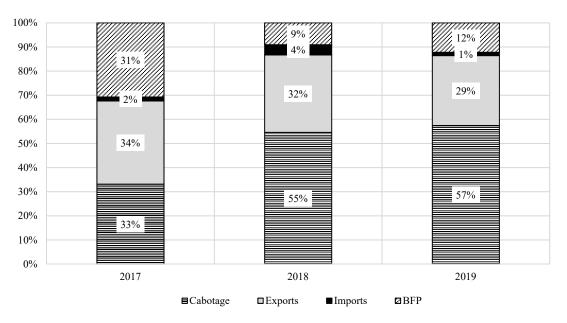


Fig. 34. Maritime freight turnover structure, by type of route, 2017–2019, %

Source: EMISS; own calculations.

¹ Freight and mail transportation. RF Ministry of Transport; Federal Agency for Air Transport. URL: https://www.favt.ru/dejatelnost-vozdushnye-perevozki-perevozki-gruzov-i-pochty/.

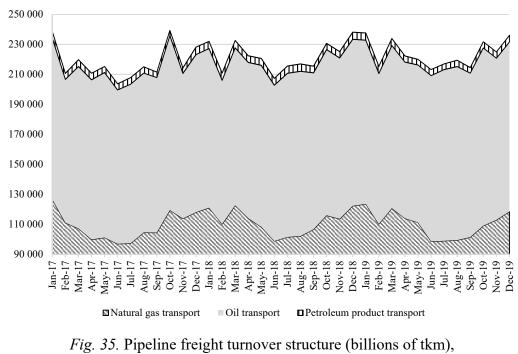
² Main production indicators of civil aviation. RF Ministry of Transport; Federal Agency for Air Transport. URL: https://www.favt.ru/dejatelnost-vozdushnye-perevozki-osnovnye-proizvodstvennye-pokazateli-ga/.

³ Freight transportation in Russia: An overview of current statistics. Bulletins on Current Trends in the Russian Economy, 2019. (September). Analytical Center for the Government of the Russian Federation. URL: http://ac.gov.ru/files/publication/a/24196.pdf.

⁴ Domestic cargo transportation by maritime vessels between Russia's ports.

In 2019, Russia's inland waterway transport turnover decreased only slightly: by 0.28% on 2018, and by 1.9% on 2017. Inland freight turnover, which takes up the biggest share (48%) in the freight volume carried by water transport, lost 2.7% on the previous year.

Unlike all the other modes of transport, pipe carriers are highly specialized, and are designed primarily for the transportation of hydrocarbon raw materials. In 2019, the total pipeline transport turnover reached 2,686.1 billion tkm, which is 0.7% above the 2018 index, and 2.7% above the 2017 index. At the same time, the year-end results of 2019 demonstrate a plunge, on 2018, of pipeline freight turnover by 8% for oil and petroleum products, and by 1.4% for natural gas.



2017-2019

Source: EMISS; own calculations.

If the operation of the transport complex is to be considered in terms of freight volume, in general one can point to the same trends as can be observed in the movement pattern of freight turnover, because over the past year the transport network's spatial structure underwent only some minor changes. In 2019, the total freight volume¹ increased by 0.2% on the previous year, to 8,283 million t (*Fig. 36*). The cumulative freight volume increase over the period 2009–2019 amounts to 11%.² The largest share in the freight transportation structure is taken up by road transport: 69% of the total freight volume in 2019, which is 2 percentage points higher than in 2018. Railway transport accounts for 15.5%, pipeline transport for 14%, and the other modes of transport for less than 1.5%. In 2019, the volume of transport operations displayed the following trend: relative to the previous year, there was an increase in the volume of freight

¹ Without taking account of distances.

² Freight transportation in Russia: An overview of current statistics. Bulletins on Current Trends in the Russian Economy, 2019. (September). Analytical Center for the Government of the Russian Federation. URL: http://ac.gov.ru/files/publication/a/24196.pdf.

carried by road (+3%), while the corresponding indices for the other modes of transport declined. In 2019, the fright volume carried by inland waterway transport lost 15%, and that carried by maritime transport lost 19.6%. The railway and air freight volumes likewise declined, by 9.3% and 7.7%, respectively.

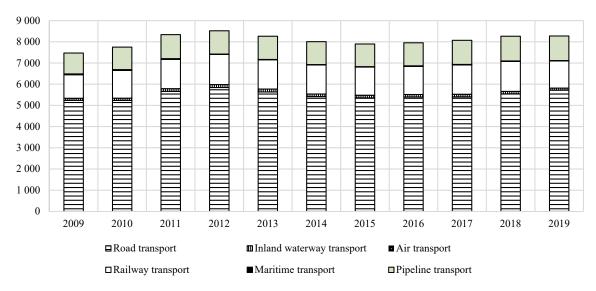


Fig. 36. The modal split of freight transport (in million t), 2009-2019

Source: Rosstat; own calculations.

As demonstrated by current data,¹ in 2019, the turnover of organizations operating in the transport and logistics complex and related activities amounted to RUB 13,188.6 billion. More than half of that index is accounted for by land and pipeline transport (RUB 7,120.2 billion), including the value volume of freight carried by rail (estimated at RUB 2,144.5 billion).

The overall movement and changes in the modal split of freight transport were also influenced by freight tariffs (*Fig. 37*). A general increase in the level of freight tariffs has been observed since 2011, and it continued throughout 2019. The highest volatility was demonstrated by the pipeline transport tariffs. Meanwhile, the growth rate of tariffs imposed on road freight transportation and railway freight transportation has been on the decrease since 2015, but its upward movement was more rapid in the latter case than in the former. The overall level of freight transportation tariffs amounted to 101.5% (in December 2019 relative to December 2018), i.e. it was below both that of the consumer price index (103.0%) and the consumer price index for services (103.8%).

Overall in 2019, the transport complex showed a positive trend in terms of its operation volume. According to the year-end results of 2019, the increase in freight turnover amounted to 0.5%, that of passenger turnover² – to 5.8%. The industry's development was facilitated by the growing demand for transport services, in particular for freight transportation. In 2019, the transport system operation volume by mode of transport did not undergo any significant changes relative to the previous years.

¹ The turnover of organizations, by type of activity (full range of organizations). URL: https://gks.ru/folder/14036. ² By main type of public transport, less underground transport systems, taxis, tramways and trolleybuses (no recent data available).

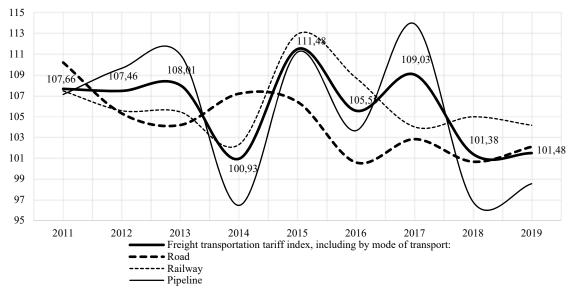


Fig. 37. The movement of freight tariffs, December relative to December of the previous year, %

Source: EMISS; own calculations.

Passenger transport

Over the previous years (except the period 2015-2016), there was a fairly steady increase in passenger turnover. The biggest share in total passenger turnover is taken up by land transport (*Fig. 38*). More particularly, this is railway transport (about 20%) and the various types of urban public transport: buses and coaches, the underground, tramways, and trolleybuses (in equal measure), i.e. those modes of transport that prevail in the intra-regional/inter-city transport (323 billion passenger-km in 2019); over the period 2009–2019, its share increased 2.8 times.

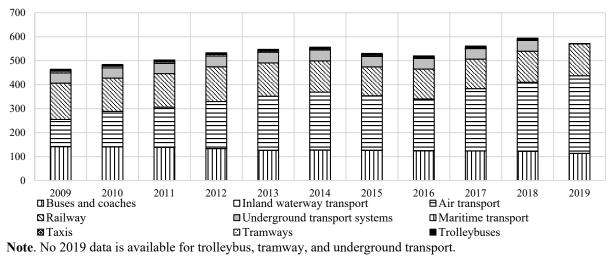


Fig. 38. The modal split of passenger traffic (billion pkm), 2009–2019

Source: EMISS; own calculations.

Over the period 2009–2019, the modal split of passenger air traffic underwent a number of changes (*Fig. 39*). More particularly, in 2009–2013 the passenger turnover index for international routes was growing at a faster pace than that for domestic flights, thus increasing its share in the total passenger turnover; later on, in 2014–2015, its growth rate declined. From 2015, the gap between domestic and international flights in the total passenger turnover was contracting; when cleared of seasonal fluctuations, the domestic and international passenger turnover on domestic routes in the total passenger turnover amounted to 42%. However, in the category of non-scheduled flights,¹ international routes were clearly predominant, with a large margin, in terms of passenger turnover: over the entire period 2009–2019, the share of domestic passenger turnover index in that segment did not exceed 15.5%.

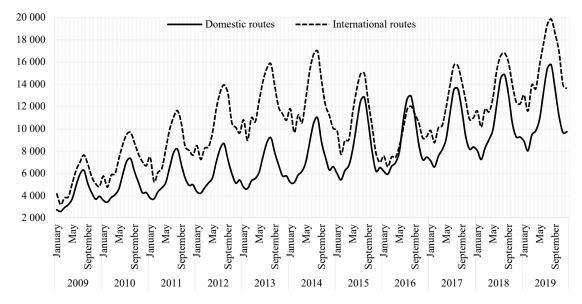


Fig. 39. The movement of air transport passenger turnover (million pkm), 2009–2019

Source: EMISS; own calculations.

In the structure of maritime transport passenger turnover, the biggest share (94.6% in January – December 2019) is taken up by cabotage, including commuter routes; the remainder is represented by international routes. Overall, passenger turnover displays a downward trend, having plunged by 41% (from 47.6 million passenger-miles in 2016 to 28 million in 2019).

By type of inland waterway transport route, the highest index is demonstrated by transit passenger turnover on the routes across several subjects of the Russian Federation and the tourist routes taking more than 24 hours (*Fig. 40*). Next comes the index of local passenger turnover (within the borders of one subject of the Russian Federation). The number of passengers carried displayed a downward trend in 2019 (10 million) relative to 2018 (12 million).

¹ Transportation on an irregular basis: charter flights, custom flights, special flights, tourist routes that are not reflected in regular flights. See *The global competitiveness report 2018* // World Economic Forum. URL: http:// reports.weforum.org/global-competitiveness-report-2018/competitiveness-rankings/#series=GCI4.A.02.

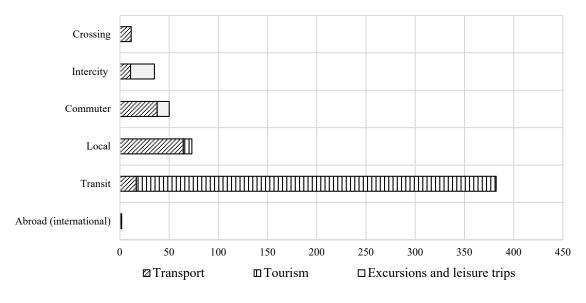


Fig. 40. The inland waterway passenger turnover structure, by type of route (million pkm), January – December 2019

Source: Unified Interdepartmental Information Statistics System (EMISS); own calculations.

In general, there was a decrease in the share of freight and passengers carried by inland waterway vessels in the total volume of transport services provided by all modes of transport.

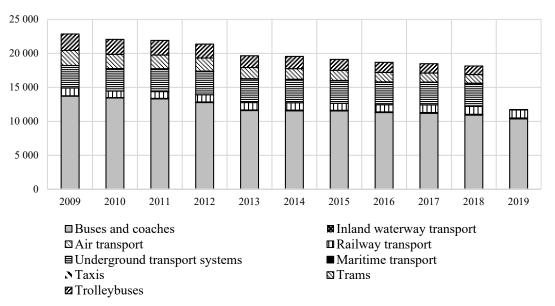
At the same time, there has been a downward trend in the nominal volume of passenger transport services (*Fig. 41*), as well as a shrinkage in the corresponding indices for trolleybus, tramway, and bus and coach services, which could be caused by the rising tariffs for passenger transport services that were moving ahead of the growth rate of personal disposable income, as well as by the gradually increasing motorization rate¹ in this country. According to data released by the RF Ministry of Transport, the growth of passenger transport tariffs in September 2019 relative to December 2018 amounted to 107.1%. According to the period-end results of the first 9 months of 2019, the steepest price increase was noted for air transport services (17%). The prices for the services of railway, urban electricity-powered and automobile transport gained 3.0%, 3.9%, and 4.4%, respectively.²

In the passenger turnover structure, bus and coach services prevail, having carried in 2019 a total of 10.3 billion passengers.³ Next come underground transport systems (more than 3 billion passengers in 2018), while tramway and trolleybus services taken together account for about 2.5 billion passengers (2018). At the same time, the annual passenger turnover of railways in 2019 remained virtually unchanged relative to 2009, and even displayed a slight upward trend in 2015–2019.

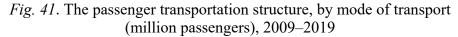
¹ The motorization rate is the number of passenger vehicles per 1,000 people (Rosstat).

² Statistics Bulletin 'Transport of Russia'. January – September 2019. RF Ministry of Transport. URL: https://www.mintrans.ru/ministry/results/180/documents.

³ Without taking account of distances.



Note. No 2019 data was available for trolleybus, tramway, and underground transport at the moment of writing this section.



Source: EMISS; own calculations.

The number of flight departures doubled, from 593,000 in 2009 to 1.1 million in 2019. For domestic routes, the growth rate was 89.7%, for international routes, 85.7%. The number of passengers carried on domestic routes increased 3-fold, that on international routes, 2.6 times. The air transportation market supply in 2019 became redundant:¹ as demonstrated by the period-end results of the first 5 months of 2019, the seat occupancy index of Russia's five biggest airlines fell by 0.1-2.4%.² However, overall by year-end 2019, this index demonstrated a slight positive dynamics, increasing from 83.8% in 2018 to 83.9% in 2019. In particular, an increase in the seat occupancy index on the international routes between Russia and foreign countries outside of the CIS amounted to +0.3 percentage points, while an opposite trend was noted for the international routes between Russia and the CIS members (-0.3 percentage points) and domestic routes (-0.2 percentage points).³

The transport sector and related activities are characterized by the high depreciation rates of their fixed assets (55.7%), which is above the nationwide average depreciation rate of fixed assets by 9.1 percentage points. More particularly, as of 2018, the road passenger transport and inland waterway transport sectors, as well as those of road freight transport and pipeline transport, are those that are most in need of renovating their fixed assets.

¹ Saveliev says there is excess supply in the air transportation market of the RF // RIA News. URL: https://ria.ru/20190625/1555914146.html.

² Passenger seat occupancy is going down // Kommersant. URL: https://www.kommersant.ru/doc/4018376_

³ Passenger transportation. RF Ministry of Transport; Federal Agency for Air Transport. URL: https://www.favt.ru/dejatelnost-vozdushnye-perevozki-perevozki-passazhirov/.

According to the Global Competitiveness Rankings 2019, in terms of transport infrastructure development, Russia is ranked 49th out of 141 countries.¹ Russia lags farthest behind the topmost countries by its road network development and quality of roads indexes, ranking 65th and 99th respectively (*Table 33*).

The road quality index, on which the ranking is based, is composed of the index of average speed on the roads connecting the 10 largest cities where at least 15% of the country's population resides, and 'road connectivity'.

Table 33

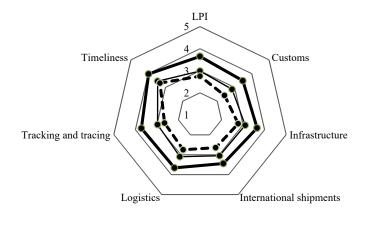
Index components	Russia's ranking in 2018/2019	Index components	Russia's ranking in 2018/2019	
Infrastructure (overall)	51/50	Transport infrastructure	52/49	
Efficiency of train services	15/17	Efficiency of air transport services	52/52	
Efficiency of seaport services	45/47	Road connectivity	38/41	
Road connectivity:		Airport connectivity	18/18	
Waterway infrastructure	53/51	Air transport	23/24	
Quality of roads infrastructure	104/99	Roads	65/65	
Railways	47/49	Railroad density	69/69	
Water transport	48/42			

Russia in the Global Competitiveness Rankings

Source: Global Competitiveness Report 2018; 2019.

According to the rankings based on the Logistics Performance Index (LPI), Russia in 2018 was in 75th place, and by infrastructure development (which is one of the components of the LPI index), it ranked 61st.²

By looking at Russia's world rankings according to these indicators, we can conclude that, as far as infrastructure is concerned, even with due regard for the geographical characteristics of its territory, this country is lagging far behind both the developed and developing countries that have a similar economic development level (*Fig. 42*).



High Income OECD countries 2018 — Europe and Central Asia, 2018 – • Russia 2018

Fig. 42. Russia's logistics performance rankings, 2018

Source: World Bank. URL: https://lpi.worldbank.org/international/aggregated-ranking.

¹ Global Competitiveness Report 2019. World Economic Forum. URL: http://reports.weforum.org/global-competitiveness-report-2019/competitiveness-rankings/#series=GCI4.A.02.

² Aggregated LPI 2012-2018 // World Bank. URL: https://lpi.worldbank.org/international/aggregated-ranking.

As before, the principal infrastructural constraints in this country at present are those that have to do with poor connectivity of its domestic routes (insufficient density of the road network, significant regional imbalances, the star configuration of the road network, overloading on many roads), low connectivity with foreign markets (out of all the regions, these issues are felt most strongly in the South of Russia and in the Russian Far East,¹ where there are many bottlenecks on the roads running along the Pacific coast and the railway approaches to the ports situated in the Azov-Black Sea basin), low security, poor integration of advanced technologies in the development of the transport industry, and organizational difficulties in developing the existing infrastructure.

All these constraints have been decidedly shaping the movement patterns of passenger and cargo turnover over recent years. The progress of Russia's transport complex in 2009–2019 did not demonstrate any cardinal shifts that could translate into a significant improvement in the situation in that industry.

An analysis of the specific development trends displayed by each mode of transport can help clarify the dynamics of the entire industry, as well as the transport and logistics complex as a whole. Having analyzed the more general movement patterns of transport service indicators, we are proceeding to consider in more detail each mode of transport from the point of view of the key factors of supply of and demand for transport services – the state of transport infrastructure, rolling stock, and vehicle fleets.

4.7.2. The state of the transport infrastructure, rolling stock, and vehicle fleet specific to each mode of transport

Road transport

Due to its relatively low fixed costs and high variable (operating) costs per km, road transport is the most efficient method of traveling over small and medium distances.² Road transport prevails in the overall structure of freight and passenger transportation services because of its higher accessibility for customers and the huge fleet of vehicles currently possessed by the transport complex. At the beginning of 2019, Russia's automotive fleet consisted of 84% of passenger cars (43.5 million units), 8% of light commercial vehicles, and 8% of freight vehicles.³ Over H1 2019, it further increased by more than 1%, and thus amounted to 52.4 million units.⁴

The passenger transportation industry has been demonstrating positive dynamics, in particular an improving availability of transport services for the individual customers: the urban transport fleet has increased, including by adding more energy-efficient buses powered by natural gas instead of motor fuel. However, the road transport fleet as a whole is characterized by the highest current amortization rate compared with the other modes of transport: as of year-end 2017, about half of the fleet of passenger cars and buses had been in operation for more than 10 years. If we look at the age structure of the fleet, 61% of trucks had been in use for

¹ Integrated transport system. M.: CSR, 2018. URL: https://www.csr.ru/wp-content/uploads/2018/05/Report-Traffic-Infrastructure-2.0.pdf.

² Ibid.

³ Experts counted the number of automobiles in Russia // The Russian Newspaper. URL: https://rg.ru/2019/02/14/eksperty-podschitali-kolichestvo-avtomobilej-v-rossii.html.

⁴ The Russian automobile fleet exceeded 52 million units. URL: https://www.autostat.ru/news/40983/.

more than 10 years.¹ In 2019, the average age of an automotive vehicle was 13.4 years, and the age of 35% of the fleet was over 15 years.²

As for the public motor road infrastructure, the previously established development priorities remained relevant in 2019 as well: that of expanding the road network and improving its quality in order to make it consistent with the existing norms, and to implement state-of-the art technologies and standards. Quite often, the star configuration of the existing road network (instead of matrix grid) is pointed out as one of the manifestations of insufficient road connectivity across this country's territory; if we add here the geographical features of Russia, the lengthy journeys along its roads translate into high mileage on the odometer. The currently existing highway network in Russia (in particular, the federal highways) is structured in such a way that the traffic flows are centered mostly around the Moscow agglomeration, and to a lesser extent around the St. Petersburg agglomeration, thus causing an overload of the Moscow transport hub, while the horizontal connections between regions are for the most part underdeveloped.

As of year-end 2018, the total length of public roads of federal, regional or inter-municipal and local importance was more than 1.5 million km, of which 965,000 km were roads of local importance, 510,000 km were roads of regional and inter-municipal importance, and 54,000 km were roads of federal importance. As far as their structure is concerned, after 2012 there has been a steady increase in the length of roads of local importance, and in 2017–2018, the total length of federal highways grew by 2,000 km. It should also be noted that the total length of paved roads was also increasing over the period 2012–2018 (*Fig. 43*).

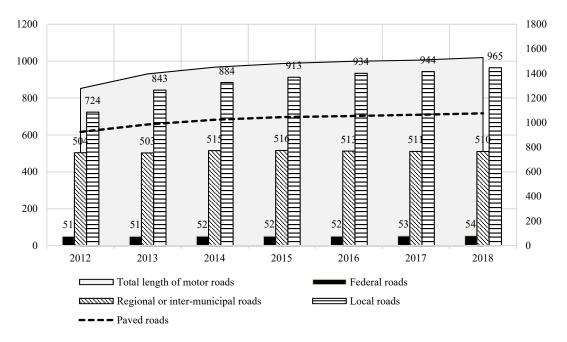


Fig. 43. The length of public motor roads (thousand km), 2012–2018

Source: Rosstat; own calculations.

¹ Transport in Russia. M.: Rosstat, 2018.

² Since the beginning of this year, Russia's automobile fleet increased to 52.4 million cars // RIA News. URL: https://ria.ru/20190919/1558863271.html.

As of 2019, the share of motorways and expressways in Russia accounted for less than $0.5\%^1$ of the paved road network's total length. Besides, there exist regional misbalances in the level of its development. Because of the absence of paved roads in some areas, more than 10% of this country's population in spring and autumn are cut off from transport communications. The roads serving more than 30% of localities, whose combined population amounts to almost 500,000 people, are not connected with paved roads.

As of year-beginning 2019, the share of motor roads of regional importance that meet regulatory requirements amounted to 42.4% (a decline of 2 percentage points since 2007), while the corresponding indicator for the urban agglomeration road network also amounted to 42%. According to Rosavtodor's plans, by year-end 2019, the share of roads of regional importance complying with the established norms was to increase to 44.1%, that of the urban agglomeration road network – to 46%, and the length of roads – to 218,000 km.²

According to the data released by the Association of Road Design and Survey Organizations, in 2015, only 53.5% of the total length of federal roads that carry more than 40% of freight traffic, including international and inter-regional, was suitable for vehicles with an axial load of 10 metric tons or more, and only 8.8%, for vehicles with an axial load of 11.5 metric tons.³ In 2018, the roads of regional, inter-municipal, and federal importance suitable for the passage of heavy trucks belonging to these categories accounted for 29.9% and 0.4%, respectively, of the total length of motor roads.

As before, the existing administrative barriers, including pressure from supervisory bodies and excessive bureaucracy, create obstacles in the way of innovative solutions, the use of modern materials and structures, and the selection of highly-performing contractors through tenders for the implementation of building construction projects.⁴

One of the main reasons for traffic congestion on many motor roads of federal and regional importance has become the gap between supply and demand in transport services sector. The demand for road infrastructure services is growing rapidly due to swift motorization⁵ and increasing population mobility, as well as to the ever-increasing volume of freight transported by road,⁶ and is surpassing the pace of growth of the infrastructure that is necessary to satisfy it (*Fig. 44*). The upward trend displayed by the motorization rate also continued in 2019.

¹ Own estimations based on open data released by State Corporation *Avtodor* and Rosstat as of year-beginning 2019.

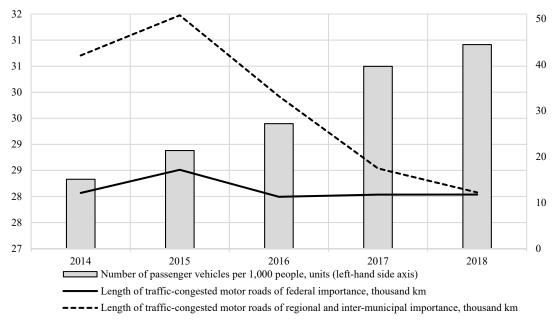
² The contracting of roadwork projects must be completed by the regions by March 1. RF Ministry of Transport's Press Center. URL: https://mintrans.ru/press-center/news/9406.

³ Proposals (draft) on the execution of the instruction of the RF President of the Russian Federation issued following the Meeting of the State Council Presidium on improving Russia's road network, 2015. Association of Road Design and Survey Organizations. URL: http://rodosnpp.ru/media/rodos/documents/ 2015/perepiska/dr org/ 120215 -19.pdf.

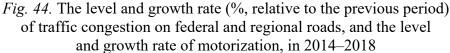
⁴ Transcript of the meeting of the State Council on road network development and road safety. URL: http://kremlin.ru/events/president/news/60825.

 $^{^{5}}$ According to data released by Rosstat and the RF Ministry of Transport, alongside an increase, over the period 1998–2008, of the length of public roads by 15%, the car fleet gained almost 75%. Later on, in 2008–2018, the growth of the car fleet and the motorization rate (vehicles per 1000 people) became somewhat slower. Growth over that decade amounted to 23% (for all types of motor vehicles, including trucks, buses and coaches, trolleybuses, and passenger cars) and 46%, respectively. It should be noted, however, that in general over the period 1995-2007, population mobility on non-urban routes declined by 60% – mainly due to a reduction in travel related to leisure and tourism.

⁶ The increase in the volume of motor freight traffic in 2008 relative to 2000 amounted to 17.3%, while the increase in freight turnover amounted to 41.2%. The total amount of freight transported by motor vehicles in 2008 was 6.9 billion tons, while the volume of freight turnover amounted to 216 billion tkm.



According to various estimates, the passenger car fleet at year-beginning 2020 amounted to 44.5 million units.



Source: Rosstat.

In this connection, it should be noted that the steadily growing demand for transport infrastructure services has not led to a significant improvement in the state of the road network.

Over the period from 2014 to 2018, the length of lighting lines on roads of federal importance and civil engineering works increased from 6,000 to 9.600 km. At the same time, to date, the level of illumination of (federal) motor roads remains extremely low.¹ However, a positive trend has been observed in length of repaired roads. In 2019, the total length of repaired paved roads of regional and inter-municipal importance stood at 14.600 km, thus doubling the corresponding indicator for 2015. A significant growth was noted in the index of major repairs of motor roads of regional and inter-municipal importance: 1,185 km in 2019 against 401 km in 2018; however, this indicator is below that of the total length of federal roads that underwent major repairs (1,811 km in 2019).

Within the framework of the National Project *Safe and High-Quality Roads*² for 2018–2024, it is planned to upgrade the road networks in major cities and metropolitan areas, thus bringing them into conformity with the established norms and increasing their safety level. The measures designed to improve the road system performance indicators of the 38 largest urban agglomerations situated in 36 subjects of the Russian Federation were launched in 2017–2018,

¹ Transcript of the meeting of the State Council on road network development and road safety. URL: http://kremlin.ru/events/president/news/60825.

² By way of implementing the Executive Order of the President 'On National Goals and Strategic Objectives of the Russian Federation through to 2024'.

in the course of implementation of the Priority Project *Safe and High-Quality Roads*. The number of subjects involved in implementing the current national project has increased to 83 (including 104 city agglomerations). Based on the implemented national project's results, by 2024, the relative share of regional roads consistent with the established norms is expected to increase to 50.9% (vs 41% at year-end 2018¹), the number of traffic accident hotspots is expected to decrease by half relative to 2017, while the share of traffic-congested federal and regional motorways is also anticipated to decline.² According to recent data, there is a positive trend in the share of federal roads that meet regulatory requirements, from 53% in 2012 to 83% at year-end 2018.

The motor road sector is also positively influenced by the measures designed to expand the road network, including the construction and putting in operation of expressways, to improve the road surface quality, and to eliminate the existing traffic bottlenecks. Another project, to be implemented over the next few years, is the Comprehensive Plan for the Modernization and Expansion of Trunk Infrastructure for the Period until 2024, approved in 2018; the plan outlines the measures designed to improve economic connectivity across the territory of the Russian Federation through the expansion and modernization of all modes of transport. According to the Comprehensive Plan, by 2024, the construction of 300 km of motorways and expressways is to be completed, while the share of roads operating without overload will be increased from 26.9% to 67%. It is also planned to build international (high-speed) transport corridors (Europe – Western China, West – East, North – South) as part of one of the priority directions in the transport system development (integration into the global transport space and the realization of this country's transit potential).³

Railway transport

The relatively low variable (operating) costs per km (and high fixed costs) make railway transport a very cost-effective and competitive method of carrying high-tonnage goods and passengers over long distances, as evidenced by the high share of railway transport in this country's freight and passenger turnover.

The main limitations of the railway infrastructure are the existence of bottlenecks in some parts of the railway system; the long length of tracks and delays in their scheduled repairs; the absence of high-speed railway lines; and the low density of the railway network in Siberia and the Far East.

The density index of the railway network over the period 2000–2018 remained virtually unchanged. Besides, in a number of regions (the Altai Republic, the Republic of Tyva, Kamchatka Krai, Magadan Oblast, as well as the Nenets Autonomous Okrug and the Chukotka Autonomous Okrug) there is no railway network at all, which increases the load on other modes of transport (road transport for short and medium trips, and air for long trips) and reduces the overall transport infrastructure availability for the population and the economy.

As of year-end 2019, the length of railways operated by *Russian Railways* OJSC (and its subsidiaries) amounted to 85.600 km, while the length of electrified railway lines was 43,800 km. At present, the company handles 46% of Russia's total freight turnover (including pipeline

¹ Data released by EMISS; own calculations.

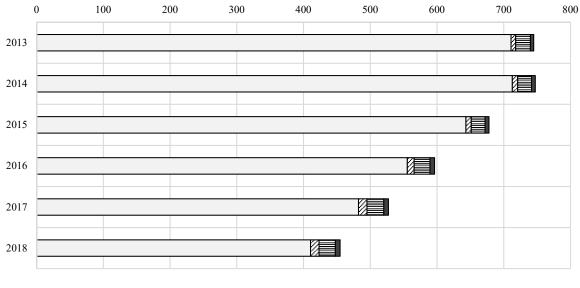
² Implementation of the National Project Safe and High-Quality Roads. URL: https://bkdrf.ru/massmedia_

³ Directive of the RF Government No 2101-r dated September 30, 2018 (as amended on August 17, 2019) 'On approving the comprehensive plan for the modernization and expansion of trunk infrastructure for the period until 2024'.

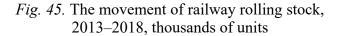
transport), and 26.4% of passenger turnover.¹ As part of its railway infrastructure development in 2019, the company put into operation 422.7 km of railways, and more than 400 km of railway lines and station tracks were electrified.²

Since 2013, the structure of rolling stock in the railway sector has undergone some changes (*Fig. 45*): there was a reduction in the number of freight cars and a simultaneous increase in locomotives, passenger railcars, and electric railcars.

The introduction of more stringent rolling stock technical condition requirements, in particular the shortening of the service life of freight cars, has led to a shrinkage in the rolling stock available in the freight transportation market. As of December 2019, railroad freight rates rose 4.2% relative to December 2018; as of June 2019, these rates rose 4.7% relative to June 2018; and as of December 2018, they rose 5% relative to December 2017. At present, there has been an increase in the output of the domestic-market-oriented railway engineering sector³ and in the volume of railway cars purchased in order to boost the output of rail supply enterprises.⁴



□Freight cars □Locomotives ■Passenger railcars ■Electric railcars



Source: EMISS; own calculations.

¹ Russian Railways OJSC. URL: https://www.rzd.ru/static/public/ru?STRUCTURE_ID=628.

² Press center of *Russian Railways* OJSC. URL:

 $http://press.rzd.ru/news/public/ru?STRUCTURE_ID=654\&layer_id=4069\&refererLayerId=4067\&refererPageId=704\&id=95113.$

³ Freight cars face a peak in demand. Institute of Natural Monopolies Research (IPEM). URL: http://ipem.ru/news/publications/1845.html, http://ipem.ru/news/ipem/1829.html.

⁴ Khusainov, F. They wanted to do better: why freight cars are again in short supply on the market // RBC. URL: https://www.rbc.ru/opinions/economics/26/10/2017/59f1e87a9a79470d83fc12b5

The current depreciation rate of fixed assets in the rail transport sector is 60%;¹ more particularly, in 2018, depreciation of railroad track superstructure was 40–50%, that of rolling stock, 50–60%, including freight cars (60%), passenger cars (50 %), and electric locomotives (40%).² According to data released by the Self-regulated Organization 'Association Promzheldortrans', in 2017 the average service life of locomotives in the non-public railway transport sector was 33 years, and its wear rate was over 90%. The situation in 2019 demonstrated no fundamental improvement.

The demand for passenger rail transport services has been boosted by the implementation of new infrastructure projects. In particular, there has been an increase in the passenger turnover on the Moscow Central Ring railroad: as of September 2019, the average daily passenger turnover on that line exceeded 500,000, a number that is 75% greater than the average daily passenger turnover in 2016.³ The number of passengers carried by *Sapsan Fast Train* between Moscow and St. Petersburg in February 2019 jumped 8.7% relative to February 2018. The opening of the new 19-km-long railroad track section over the Crimean Bridge and the launch of direct railway service connecting the Crimea with mainland Russia has had a positive impact on passenger traffic, and after the start of freight traffic (scheduled for June 2020), a similar impact is expected on freight turnover. In addition, *Russian Railways* OJSC is planning to boost the demand for passenger transport services through non-price factors.

Several railway development projects are currently underway, including the construction of the Eurasia high-speed freight and passenger rail corridor within the framework of the priority project aimed at developing integration and transit potential. *Russian Railways* OJSC is also implementing the following infrastructure projects:⁴ railway infrastructure modernization along the Baikal-Amur and Trans-Siberian lines in order to boost their throughput of trains and carrying capacities (2013–2020); railway infrastructure development and renewal along the approaches to the ports in the Azov-Black Sea basin (2014–2020) and the Northwest basin (2015–2025). Besides, we should note the implementation of investment programs aimed at developing the Moscow transport hub (2012–2024) and strengthening railway infrastructure in the framework of the Northern Latitudinal Railway project (2018–2022).

Air Transport

In spite of its competition with road and rail transport, the share of air transport in total passenger turnover is steadily on the rise. However, the air industry is still experiencing certain problems, in the form of a shrinking number of airports, fluctuating fuel prices and forex rates, and a shortage of funding needed for providing the subsidized regional and local transport services.

¹ On approving the Transport Strategy of the Russian Federation for the period until 2030 (as amended on May 12, 2018) // Electronic fund of legal and regulatory-technical documentation. RF Government. URL: http://docs.cntd.ru/document/902132678.

² *Menshikov, V.V., Eliseev, Yu.P.* The role and place of various modes of transport in military evacuation (railway transport)// Science and Military Security (In Russian). 2018. No 1(12). P. 90–94.

³ Moscow City Mayor's official website. URL: https://www.mos.ru/news/item/61893073/.

⁴ Information disclosure form for investment programs (on draft investment programs) and reports on their implementation. URL: http://www.rzd.ru/openinfo/public/ru?STRUCTURE_ID=5131.

Some airports need to be reconstructed; about a half of all airfields in the Far East does not have paved strips, and so cannot receive large aircraft; and the wear and tear of airport infrastructure is 80%.¹

The aircraft fleet is being updated: aircraft with a high degree of wear are written off, and new ones are purchased. In the civil aviation sector, the aircraft fleet has shrunk by 23% since 2009, and its structure has also changed. More particularly, An-2 and Tu-134 aircraft were discarded (their number declining from 129 in Q1 2009 to 9 at the end of Q4 2019); as well as Tu-154M, to be replaced by A319, A320, A321, and Boeing 737-800 (the number of the latter increasing from 8 in 2009 to 145 at year-end 2019). There is a discussion underway concerning the possibility of replacing the written-off obsolete aircraft with modern airliners.² One of the available options could be Russian medium-haul passenger airliner MS-21, to be put in operation in 2021.

One of the goals outlined in Executive Order of the President No. 204 dated May 7, 2018 is to increase the share of domestic scheduled flights bypassing the Moscow Aviation Hub, to 50% by 2024. One of the measures designed to alleviate the achievement of that goal is the adoption of a law whereby a zero VAT rate should be applied on the flights bypassing Moscow on their way to the Far Eastern Federal District, Simferopol, and Kaliningrad. It is expected that this measure will help increase the passenger turnover on domestic routes to 38.1%; previously, this tax regime was applied to only 20.5% of the total passenger turnover on Russia's domestic airlines.³ In its turn, this will not only boost the development of regional and local air transportation markets, but also the availability and quality of commercial passenger transportation services in accordance with the established social standards. The constraining factor could become the rising tariffs for air transport services due to the high price elasticity of demand.

Maritime transport

The maritime transport industry has a strategic importance because it services foreign trade, in particular export raw materials transshipments. The industry is also exceptionally important for several geographically remote areas (with low transport accessibility levels and/or severe climatic conditions), for example the Far East and the Arctic zone. In 2019, the Russian seaport industry consisted of more than 900 complexes in 60 ports with the total cargo handling capacity of over 1 billion tons.⁴

In 2019, the fleet of marine vessels totaled 2,700 units, with gross tonnage of 7.8 million gross register tons and passenger capacity of 6 thousand seats. By its age structure, the maritime transport fleet can be characterized by a high wear rate: 46% of it are vessels aged 30 years or more, and 20% - 26-30 years. Those aged 0 to 20 years make up only a quarter of the total fleet. The renewal of the fleet by adding more energy-efficient and eco-friendly ships with a

¹ The RF Ministry of Transport will prepare a program for developing airports in the Far East to the value of RUB 100 billion. // Vedomosti. URL: https://www.vedomosti.ru/business/news/2018/04/27/768071-mintrans-podgotovit-programmu-razvitiya-aeroportov-dalnego-vostoka-na-100-mlrd-rublei.

² A contract is signed for creating an airplane to replace the An-2 // RIA Novosti. URL: https://ria.ru/20191017/1559873875.html.

³ Regional vector. RF Deputy Minister of Transport Alexander Yurchik on the key issues of national civil aviation. RF Ministry of Transport. URL: https://www.mintrans.ru/eye/press-center/interviews/492.

⁴ At the conference 'Seaports are this country's economic development driver', the industry's key issues were discussed. RF Ministry of Transport. URL: https://mintrans.ru/press-center/news/9337_

higher cargo capacity will boost the total turnover volume and reduce the per unit freight transportation costs.¹

As far as infrastructural transformations are concerned, the maritime transport industry attracts substantial private investments in port infrastructure. The main investment goals are to develop and increase the existing seaport capacities for the transshipment of domestic goods by domestic ports, to ensure comprehensive development of Russia's Arctic region, etc. Among the major ongoing infrastructure projects in the maritime transport sector we may point out the construction of the port infrastructure facilities of Sabetta seaport (Yamalo-Nenets Autonomous Okrug),² the reconstruction of hydraulic structures at Magadan seaport,³ the construction of a coastal and marine infrastructure complex at Gelendzhik seaport,⁴ and the construction of an international sea terminal at Pionersky (Kaliningrad Oblast).⁵ A separate mention should be made of the development of the Northern Sea Route and a unified national transport system in the Arctic zone.

Inland Waterway Transport

As of year-beginning 2019, the total length of federal inland waterways was 101,500 km, of which 50,000 km are waterways with guaranteed dimensions of the shipway.⁶ It should be noted that from 1990 onwards, the length of the routes with standardized shipway dimensions shrank by 30% due to the reduction of deep water zones and their traffic capacities resulting from insufficient funding of the waterway infrastructure,⁷ and from 2014, the total length of inland waterways has also been on the decline.

The volume of cargo handled by inland water transport has been decreasing since 2011. In 2019, this indicator lost 31% relative to 2011, and 8.5% relative to 2017. As for the index of cargo volume delivered by inland water transport to the Far North and the localities of an equal status, it has remained sufficiently stable.

As before, a serious problem is the wear rate of material and technical means, which for inland water transport amounts to 66%.⁸ At the end of 2017, the age of more than 55% of passenger carriers and more than 85% of cargo carriers was over 30 years⁹ (*Fig. 46*).

As of year-end 2019, the fleet of inland waterway vessels in good condition amounted to 11,700 self-propelled and 5,300 non-self-propelled vessels; since 2009, their number had decreased by 17.4% and 34%, respectively. A twofold decrease is observed in the fleet of towboats and self-propelled dry bulk carriers. The fleet of combination cargo/passenger carriers, on the contrary, increased by 66% to 2,300 units. Out of all modes of transport, it is

³ Completed on June 30, 2018.

⁹ As of March 22, 2019.

¹ The special role of maritime transport // Sea News of Russia (Morvesti.ru). URL: http://www.morvesti.ru/analitics/detail.php?ID=68603.

² The project was launched in December 2017 in the framework of Yamal LNG.

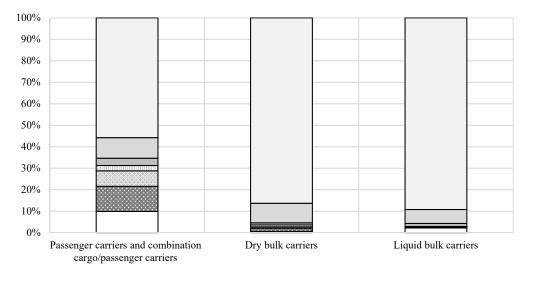
⁴ The project implementation timeframe: 2018–2022.

⁵ The construction project's deadline has been moved to 2020.

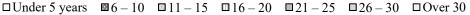
⁶ RF Ministry of Transport; Federal Agency for Air Transport. URL: http://www.morflot.ru/deyatelnost/ napravleniya_deyatelnosti/rechnoy_flot/vvt.html.

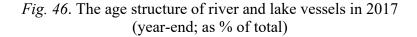
⁷ The RF Ministry of Transport: the length of RF inland waterways shrunk by 30% over 25 years. TASS. URL: https://tass.ru/transport/3458217.

⁸ On approving the Transport Strategy of the Russian Federation for the Period until 2030 (as amended on May 12, 2018). // Electronic fund of legal and regulatory-technical documentation. RF Government. URL: http://docs.cntd.ru/document/902132678.



inland waterway vessels in operation that display the highest degree of physical and technological obsolescence.





Source: Rosstat.

In order to increase the competitiveness of inland waterway transport, along with improving its fleet's age structure, it is necessary also to equip it with hi-tech and more economical vessels. It is expected that after the most worn-out vessels, in particular river-sea navigation oil tankers, are written off, the supply of such services will shrink, thus pushing up the shipment tariffs by 2022.¹ The construction of passenger carrier fleet is sustained, among other things, by the development of domestic tourism and cruise market growth. Thus, since 2017, two Russian shipbuilding enterprises – Krasnoye Sormovo Shipyard PJSC and Lotos Shipbuilding Plant OJSC – have been constructing river-sea passenger vessels;² the first launches took place in 2019.

Among other things, a serious problem is associated with the safety issues resulting from the deterioration of navigation hydraulic structures, in particular, the high rates of wear and tear of port infrastructure, berthing facilities, and transshipment complexes. Most of the hydraulic structures on the inland waterways of the Moscow region have been in operation for 50–70 years.³ The estimated service life of many of the structures operated by Moscow Canal FSBI and belonging to hazard classes I and II (extremely high and high hazard), is 100 years, provided

¹ The bark is still afloat. The fleet of river vessels must be renewed // The Russian Newspaper. URL: https://rg.ru/2018/04/16/park-rechnyh-sudov-neobhodimo-obnovliat.html.

² *Tsvetkov, Yu.* The river transport development is the state strategic goal // Sea News of Russia (Morvesti.ru). 2019. No 2. URL: http://www.morvesti.ru/interview/detail.php?ID=77280.

³ Government Program 'Inland Waterway Transport', Subprogram 'Public Transport'. URL: http://vestnik.mos.ru/files/other/pril/2011/51/408PP/Podprogramma-Obwestvennyj-transport-Vnutrennij-vodnyjtransport.doc.

that the hydraulic units are duly repaired in accordance with the established technical schedules.¹

In order to expand the inland waterway transport operations, it will be necessary to modernize the water infrastructure facilities, to increase waterway dimensions, and to carry out additional works involving their deepening, dredging, trawling, and expansion of the existing bottlenecks. The following major inland waterway transport infrastructure projects can be noted, their goal being the elimination of bottlenecks and other infrastructural constraints: the construction of the Bagaevsky hydroelectric complex on the Don River (2018–2020) and the low-pressure waterworks facility in Nizhny Novgorod (2019–2020). These infrastructure projects, once completed, will improve the competitiveness and efficiency of inland waterway and create some additional cargo flows, thereby reducing the load on the other modes of transport during the navigation period.

Pipeline transport

The pipeline transport routes are very lengthy, which is explained by the specificity of products that have to be transported from remote production sites and fields to their consumption points. As of 2018, the total length of the trunk lines amounted to 249,800 km, these being in the main natural gas pipelines (179,300 km). The length of crude oil and petroleum product pipelines amounted to 53,400 km and 17,100 km (21.4% and 6.8% of total length), respectively.

Pipeline transport is also characterized by a high degree of depreciation of fixed assets. According to the Pipe Industry Development Fund (PIDF), the age of more than 20% of trunk pipelines and about 40% of oil production pipelines exceeds 30 years, while their trouble-free service life is 15 years.²

Meanwhile, a number of major infrastructure projects are being implemented in the pipeline industry, in particular the construction of Nord Stream 2 and Turkish Stream, to be put in operation in 2020 (however, the launch of these two gas pipelines may be delayed due to the foreign economic sanctions). In 2019, the Power of Siberia gas pipeline was brought into operation, which will ensure further development of the domestic gas transmission system and its access to new markets.

* * *

The state of the transport complex is closely associated with the economic indicators, as well as the general situation in the country. The developments in the Russian and global economy in Q1 2020, in particular the volatile behavior of the oil market (in response to the breakdown of the OPEC+ agreement and the effects of several other factors) and the plunge of oil prices coupled with the ruble weakening, put the national economy under pressure, which also influenced the performance indices of the transport complex. However, the spread of coronavirus infection produced some very significant negative effects, which required some

¹ Report 'On complying with the set of mandatory requirements and conditions, their content in the normative legal acts regulating the inland waterway transport activity in Q1 2017', prepared by the Central Administration for State River Supervision of the Federal Service for Supervision of Transport (Rostransnadzor).

² The Pipe Industry development Fund called for an accelerated renewal of worn pipelines to prevent an environmental disaster. URL: http://frtp.ru/2018/04/19/frtp-vystupil-za-uskorenie-obnovlenija-iznoshennyh-truboprovodov-dlja-predotvrashhenija-jekologicheskoj-katastrofy/.

decisive restrictive measures (closure of the country's external borders and cancellation of foreign flights, limitations imposed on domestic flights, the launch of a long holiday from March 30, the enforcement of a 'self-isolation' regime in several regions of the country, and some other measures). All these developments negatively affected the activities in the transport sector, which thus became one of those sectors of the Russian economy that suffered most.¹

The government support of the industry, a gradual economic recovery after the coronavirus epidemic recedes and the restrictive measures are lifted, as well as the implementation of national projects in the transport sector, ² should all translate into a positive impact on the transport complex in 2020. However, overall, one can hardly expect an upward trend to be demonstrated by its indicators compared with those of the previous year.

4.8. Small and medium-sized entrepreneurship in Russia and regions in 2019–2020³

Government funding of the respective activities of small and medium-sized enterprises (SME)⁴ under the national project "Small and medium-sized entrepreneurship and support of entrepreneurial initiatives" increased in 2018-2020. However, in 2019, the number of SMEs subjects decreased by 118 thousand compared to 2018, and the number of people employed in the sector fell to 18.8 million, i.e. decreased by almost half a million people (the goal of the national project for 2024 is 25 million people). The share of the SME sector in GDP decreased to 20 percent in 2018 (the goal of the national project for 2024 is 32.5 percent). Generally, negative trends in the development of the sector, associated with an increase in the VAT rate, the introduction of online cash registers and almost zero growth in household incomes were observed in Russia in 2019. In 2020, near-zero economic growth and the coronavirus pandemic, which has already led to a significant drop in demand, especially in the restaurant business, tourism and entertainment, will negatively affect the development of the SME sector. A more significant reduction in performance of the sector's activity is expected compared to 2019. However, the conditions for the development of entrepreneurship and, accordingly, the indicated trends vary significantly across Russia's regions.

Consideration of these differences can contribute to a conduct a more well-balanced entrepreneurial policy. A large differentiation of Russian regions in geography, population density, level of economic development and digitalization affects the development of entrepreneurship. Regions vary according to the level of entrepreneurial activity, the number of firms and the density of their distribution, industry specialization, the size of firms and the

¹ Mishustin named the industries affected by coronavirus // RBC. URL: https://www.rbc.ru/business/ 30/03/2020/5e819d039a7947925edc003a.

² Bringing both the federal and regional road networks into conformity with the established norms, improving the safety and quality of transport services and infrastructure, eliminating the transport system's bottlenecks in the framework of the National Project *Safe and High-Quality Roads*. As part of the transport-targeting section of the Comprehensive Plan for the Modernization and Expansion of Trunk Infrastructure for the Period until 2024, major federal infrastructure projects with state participation are being implemented.

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⁴ Maria Antonova, Vera Barinova, Vladimir Gromov, Stepan Zemtsov, Alexander Krasnoselskykh, Nikolay Milogolov, Aleksandra Potapova, Yulia Tsareva. Development of small and medium-sized entrepreneurship in Russia in the context of national project implementation. M.: Publishing House "Delo" RANEPA, 2020.

number of relationships, different patterns of interaction with authorities, suppliers and partners, investors and consumers.¹

Various territories of the world, practicing their own ways to develop entrepreneurship, became known as entrepreneurial ecosystems², featured by analogy with natural ecosystems by a certain environment and interconnections. Moreover, these regional differences can persist for decades, and conditions in one region can have a significant impact on other regions.³ Some regions that pursued policies aimed at improving the business environment have reached a higher level of regional development.⁴ Generally, more developed ecosystems of entrepreneurship are more resilient to crises.

4.8.1. The main development trends and barriers in Russia's SME sector in 2019-2020

The 2020 coronavirus pandemic negatively affects the economic situation worldwide, and tendencies observed of the onset of the global economic crisis. In Russia, the introduction of recommendations on quarantine compliance along with the Ruble depreciation caused a sharp decline in demand for offline services, resulted in reduction of revenues primarily for SMEs. At present, statistics on the number of firms does not yet reflect the negative consequences of the pandemic, but restaurants⁵, fitness clubs, beauty salons, tourism industry enterprises⁶, and event agencies⁷, go massively bankrupt and close down.

Those businesses that failed to timely switch to the online provision of goods and services or their business model exclusively related to the provision of personal services, now face the risk of bankruptcy. According to surveys of the Chamber of Commerce and Industry (CCI)⁸, every third enterprise in the SME sector may close by June. In fact, one can talk about zeroing the efforts of the authorities to develop small and medium-sized enterprises and improve the business climate in previous years, if emergency support measures left unchanged.

¹ Stepan Zemtsov, V. Baburin Entrerpreneurial ecosystems in the regions of Russia//Regional research. 2019. № 2. P. 4–14.

² Entrepreneurial ecosystem is a system of interaction of firms, consumers, supplyers and other business agents shaped at a particular territory based on certain patterns (*Mooer J.F.* The death of competition: Leadership and strategy in the age of business ecosystem. NY: HarperCollins, 1996).

³ Stepan Zemtsov, Yulia Tsareva. Entrepreneurial activity in Russia's regions: how spatial and temporary effects determine development of small business//Journal of the New Economic Association. 2018. T. 1. № 37. C. 145–165; *Fritsch M., Wyrwich M.* The long persistence of regional levels of entrepreneurship: Germany, 1925–2005 // Regional Studies. 2014. Vol. 48. No. 6. P. 955–973.

⁴ Stepan Zemtsov, Yuri Smelov. Factors of regional development in Russia: geography, human capital or regions policy // Journal of the New Economic Association. 2018. No. 4 (40). pp. 84–108.

⁵ Anastasia Tatulova. A few weeks left: how coronavirus kills small business in Russia //Forbes. March 23, 2020. URL: https://yandex.ru/turbo?text=https%3A%2F%2Fwww.forbes.ru%2Fkarera-i-svoy-biznes%2F395715-nam-ostalos-neskolko-nedel-kak-koronavirus-ubivaet-malyy-biznes-v-rossii.

⁶ *Akhmedjanova R*. Recreation in the Era of Cotonavirus // Forbes. March 22, 2020. URL: https://www.forbes.ru/obshchestvo/395709-otdyh-epohi-koronavirusa-kakie-putevki-teper-predlagayut-rossiyanam.

⁷ Gaisina I., Melnikova K., Peshkova H. We have simply collapsed: entertainment industry can lose up to RUB 20 billion due to the ban of mass events in Moscow // Forbes. March 12, 2020. URL: https://www.forbes.ru/karera-i-svoy-biznes/394785-my-prosto-ruhnuli-industriya-razvlecheniy-mozhet-poteryat-do-20-mlrd

⁸ Ageeva O. CCI warned about the rusk of ruin of 3 million of businesses due to coronavirus //RBC. URL: https://www.rbc.ru/economics/21/03/2020/5e7490569a7947467949c77d 21,03,2020.

Russia was annually improving its position in the Doing Business ranking, rising from the 124th place in 2010 to 28th place in 2019¹, potentially indicating an improvement in formal conditions for doing business. However, the ranking does not fully account the conditions for SMEs activities, and calculations made only for Moscow and St. Petersburg, where doing business is apparently more lucrative due to concentration of solvent demand compared to most of regions.

In 2019, according to the all-Russia survey of small companies by Rosstat², there was a slight reduction of barriers hindering the development of SMEs, especially compared to the crisis year 2015 (*Fig. 47*). Among the restrictions on small business activities in the manufacturing industry, the most significant were insufficient financial resources and a high interest of banking loans (60 percent of respondents), insufficient demand in the domestic market (55 percent) and high taxation (56 percent). Therewith, the latter barrier was the second most significant restriction for the surveyed companies in connection with an increase in the VAT rate at the beginning of 2019 and the general introduction of online cash registers.

Far less respondents noted insufficient funds in 2019 compared to 71 percent in 2015. Indeed, according to the Central Bank³, the rate on long-term loans granted to SMEs has been annually reduced from 17.8% in 2015 to 10.8 percent in 2019. Generally, this has been driven by a general reduction in rates; establishing a system of guarantees and introducing interest rate subsidizing programs for small businesses could play a certain positive role. Low demand remains in the domestic market due to a nearly zero growth in the consumer market (household incomes)

It is highly likely that increasing importance of such barriers as insufficient demand and the uncertainty of the economic situation will be observed at the beginning of 2020. Many enterprises will also experience a shortage of financial resources: actually, there is already a cash gap caused by a drastic decrease in demand while maintaining current employment, rental, loan and other payments. In 2019, lending to small businesses grew at a record pace compared to 2013, which could also negatively affect the economic situation in the SME sector in 2020⁴.

In 2019, 9 percent of respondents did not report any restrictions hindering the development of their enterprises; there were 5% of them in a crisis period of 2015–2016, and this can be interpreted as an indicator of improvement for small business. The same goes for Rosstat positive dynamics in the index of small business confidence and RSBI business activity⁵. However, it is fair to assume that dynamics of main indicators of small and medium-sized entrepreneurship business development will be negative in 2020.

Administrative pressure on small businesses has somewhat decreased due to a reduction in the total number of business inspections⁶ and a moratorium has been introduced on planned inspections of SMEs with an option to be extended in connection with the pandemic⁷. However,

¹ Doing Business. URL: https://www.doingbusiness.org/.

² Main indicators of small business activity. URL: https://www.gks.ru/folder/14036.

³ Bank of Russia. URL: https://cbr.ru/statistics/pdko/sors/.

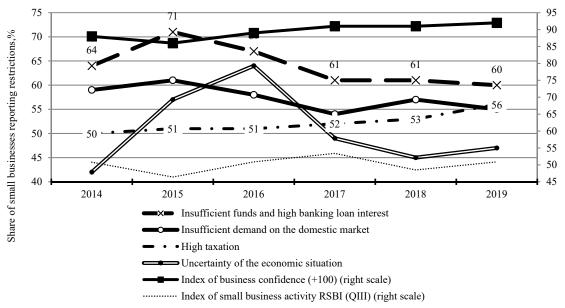
⁴ Banks issued the record for 5 years amount of business loans. URL: https://www.vedomosti.ru/finance/articles/2020/02/26/823922-banki-rekordnuyu.

⁵ Index OPORY RSBI. URL: https://opora.ru/projects/indeks-opory-rsbi/.

⁶ Antonova M.P., Barinova V.A., Gromov V.V., Zemtsov S.P., Krasnoselskikh A.N., Milogolov N.S., Potapova A.A., *Tsareva Yu.V.* The development of small and medium-sized entrepreneurship in Russia in context of national project implementation. Moscow, Delo Publishing House RANEPA, 2020.

⁷ Putin supported ban on scheduled inspections of small and medium businesses. URL: https://www.kommersant.ru/doc/4302091.

the tax control was equally strengthened resulted from introducing the online cash registers, combatting of the Federal Tax Service of Russia against shell companies and illegal business "fragmentation" aimed at avoiding taxation. At the same time, the number of shell companies fell in Russia to record low values¹ – 7.3 percent of the total number of legal entities (309 thousand).



Note. Left scale: share of small manufacturing businesses reporting any specific restrictive factor in QIII, yearly, percent.

Fig. 47. Estimation of business environment in Russia

In addition, FTS of Russia every year deletes firms failing to provide reporting from the list of registered ones, and around 90% of all liquidated legal entities were closed by the decision of tax authorities. In 2020, a significant rise of bankruptcies and shutdowns is expected. Moreover, check on enterprises may even be toughened in order to avoid massive lay off².

Overall strengthening of control in 2018–2019 could result in a reduction in the number of SME subjects in 2019 by 118 thousand units. Meanwhile, the number of individual entrepreneurs was growing. This may be due to the intention of small businesses to reduce their costs by using tax incentives and transferring individual employees to IP status. In Russia, a considerable part of those employed that might relate to the SME sector, is in the shade. Therefore, in 2019, an experimental introduction of such a special tax regime as PIT, was conducted in Moscow, the Moscow Region, Republic Tatarstan, and the Kaluga Region; there are plans to spill over this regime to every region³ from July 1, 2020. The number of registered self-employed reached only 330 thousand people in 2019⁴. In the meantime, employment in the

¹ URL: https://www.rbc.ru/economics/26/06/2018/5b30fcab9a7947e36cf7a7b3.

² Mikhail Mishustin warned against inadmissibility of job cuts in pretense of coronavirus situation. URL: https://www.kommersant.ru/doc/4298985.

³ Ministry of Finance of Russia plans to spill over a special tax regime for self-employed across the whole country from July 1, 2020. URL: https://www.minfin.ru/ru/press-center/?id_4=36837-minfin_rossii_planiruet_s_1_iyulya_2020_goda_rasprostranit_spetsialnyi_nalogovyi_rezhim_dlya_samozanyatykh_na_vsyu_stranu.

⁴ Over 330 thousand people registered status of self-employed in Russia. URL: https://tass.ru/ekonomika/7406941.

informal sector is still growing from 14.3 million people in 2017 to 15.3 million in 2019 (21.3 percent of the total number of those employed)¹. A number of employees in the SME sector decreased in 2019 compared to 2017–2018 by 0.5 million people (from 19.3 million to 18.8 million people), notably, due to reduction of a number of SME employees, which can be indicative of tax optimization. Modest growth in household incomes in 2019 as well as reduction in incomes early 2020 will result in further decrease of SME employment, largely associated with trade and services. The key SME sectors include wholesale and retail trade (60.4 percent of the total turnover), manufacturing (10.4 percent), construction (7.5 percent). The turnover structure of SME subjects over the last few years has not experienced major changes: the share of trade and refurbishment slightly reduced with manufacturing and internet services slightly growing. It is likely that in 2020 these trends will continue. Delivery services, various internet services, information technologies, distance education, telemedicine are developing.

The SME share in the GDP fell from 21.9 percent in 2017 to 20 percent in 2018. The turnover of SME sector has been generally growing in real terms since 2014, however, its significant reduction is expected in 2020. The turnover of medium-sized enterprises in 2017–2018 was lower than the level of 2015–2016. The ratio of the SME sector vs GDP grew from 2015 to 2017 (from 61 to 75 percent), but in 2018 there was a decrease to 72 percent, which most likely decreased in 2019 and will continue to decline in 2020. According to Rosstat, the number of small and medium-sized exporting enterprises grew by 3.4 times over 2018². The share of SMEs in the non-resource sector also grew in 2018 amounting to 8.71 percent. However, the number of annually established startups decreases: 12.2 thousand startups were set up in 2018, being 4.6 thousand less than in 2017³.

4.8.2. Geography and dynamics of SME subjects activity indicators

Spatial distribution of SME subjects

The geography of small and medium-sized enterprises in Russia has been developing over the last 30 years with stable institutional, sectoral and other regional specific features created during this period. The differences in the density of small businesses and involvement of the population in entrepreneurial activity are quite large. Actually, one can talk about different types of entrepreneurial ecosystems. It is important that changes in macroeconomic and other pstterns result in a different response of the SME sector in different regions. For example, the establishment of new enterprises under introduction of federal initiatives aimed to simplify business processes grows differentially in the regions depending on the quality of institutions, density of small firms, etc.⁴.

Such major urban agglomerations as Moscow, St. Petersburg, Novosibirsk as well as port regions, i.e. Krasnodar krai and Kaliningrad regions, demonstrate the highest density of SME

¹ Rosstat informed about growth of informal employment in Russia. URL: https://www.rbc.ru/economics/05/09/2019/5d6e74fb9a794709eeba4f8c.

² EMISS. Number of small and medium-sized enterprises involved in export business. URL: https://fedstat.ru/indicator/54389.

³ Vera Barinova, Stepan Zemtsov, Vladimir Zinov, Vera Kidyaeva, Alexander Krasnoselskykh, Natalia Kurakova, Roza Semenova, Ivan Fedotov, S.Khalimova, Rustam Khafizov, Yulia Tsareva. National report "Highly technological business in Russia's regions". 2020 / edited by Stepan Zemtsov. M.:RANEPA; AIRR, 2020.

⁴ Yakovlev E., Zhuravskaya E. The unequal enforcement of liberalization: evidence from Russia's reform of business regulation // Journal of the European Economic Association. 2013. Vol. 11. No. 4. P. 808–838.

subjects per capita. The highest relative growth rate in the number of SME subjects was observed in 2019 in these particular regions or close to them, i.e. Moscow, Leningrad, Samara, Sverdlovsk Tyumen regions, Republic of Tatarstan, St. Petersburg, Krasnodar krai. Large consumer markets and, as a result, higher demand for SME products, higher need for a variety of goods, developed infrastructure (advanced transport network, enhanced logistics, access to facilities and equipment, a higher number of development institutions) are the strengths of major urban agglomerations. Moreover, population density positively correlates with the intensity of social ties, thus, allowing to share experience and get additional economic benefits, and negatively correlates with the fear of failure in starting a business.

Regions having an access to the sea and, accordingly, to trade routes, demonstrate a higher potential for the development of international trade, access to new foreign markets and the development of small and medium-sized business sector in tourism and transport.

A favorable investment climate resulted from political, legal, social and economic patterns, also stimulates business activity in the region. According to Agency for Strategic Initiatives rating, the best investment climate is in Kaluga, Tyumen, Voronezh, Ivanovo, Rostov regions, Krasnodar krai, Republic of Tatarstan, Moscow and St. Petersburg.

Republic of Crimea and the federal city Sevastopol demonstrate the density of entrepreneurial activity above average, explained by a great number of touristic businesses and guest houses present there. Last but not the least, the free trade zone rule is implemented in these regions¹, when enterprises pay a reduced profit tax of 2 percent, exempt from property tax for a long period of time after being registered, pay insurance premium at 7.6 percent rate instead of 30%.

In 2019, the number of SME subjects most critically reduced in Yaroslavl and Magadan regions, in the Republics of Chechnya, Komi, Mari El, Adygea, Altay and the city of Moscow. In our opinion, the decrease in the underdeveloped southern and northern regions is due to the departure of small firms in the shadow sector under the continuing decline in household incomes since 2014 and introduction of online cash registers. Evidently, the introduction of online cash registers could have a more detrimental effect on less developed and remote settlements. Less developed regions with the higher share of trade in the SME structure, suffered more after raising of the VAT rate. This reduction in Moscow and the Yaroslavl region could also be associated with the effect of the FIFA World Cup, when many enterprises closed immediately after the tournament ended.

The SME sector can suffer the most in regions with a developed entertainment sector and restaurant business. These types of businesses are traditionally concentrated in large agglomerations, especially in the regions, where large sporting events were envisaged and postponed indefinitely. Particular construction projects have been frozen, and the housing and apartments renovation market is unlikely to reach the level of 2019. The touristic sector and the relative small business in Krasnodar krai, Republic of Crimea, Kaliningrad Region, Republic of Tatarstan, St. Petersburg, Yaroslavl Region, will suffer significantly.

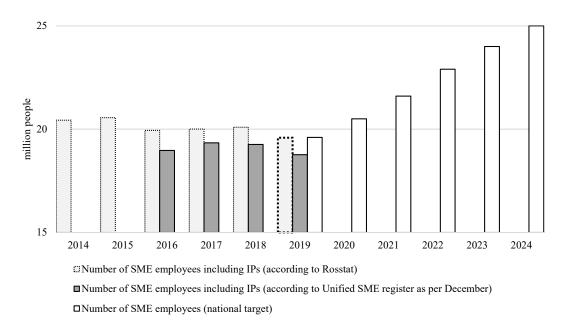
Quarantine measures imposed in foreign countries cause difficulties for small business in the bordering regions, i.e. Kaliningrad, Amur regions, Primorsky krai. This will result in reduction of a number of SME subjects. The shrinking rate will be lower in the less developed regions with a high share of agricultural business, i.e. Tambov, Lipetsk, Voronezh, Saratov regions, Altay krai. Foodstuffs are in demand under crisis and pandemic. The level of

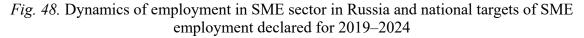
¹ Federal law «On development of the Republic of Crimea and the federal city Sevastopol and free trade zone in the Republic of Crimea and the federal city Sevastopol" of November 29, 2014 № 377-FZ.

digitalization services is nevertheless higher in major agglomerations, there are more opportunities for distant work and, consequently, more opportunities to adapt to crisis, which is already the reality for many firms, transitioning to providing services in the online format, and distant employment.

Geography and dynamics of employment in SME sector

The National project suggests an annual growth of employment in the SME sector by 900 thousand people in 2019–2024 (*Fig. 48*). Taking into consideration the reduction of labor force in Russia against stable dynamics of employment in the SME sector over the last years and reduction of employment in the sector in 2019 by half a million people, this scenario could be called optimistic¹. Keeping the current value of the labor force in Russia at 76 million people, an increase in the number of employees by 20 percent (by 5–6 million people) over 5 years means an increase in the share of employees in SMEs from 24–26 to 32–34 percent. However, in times of crisis and according to business request to reduce their costs, the employment in the sector will most likely decline in 2020 more rapidly than in the economy as a whole. It is expected that control over budgetary organizations and large enterprises will be tougher.





Source: Rosstat; Unified SME register²; passport of the national project³.

¹ More modest rates conveyed in The "The development strategy of small and medium-sized entrepreneurship in Russia up to 2030"; actual target value of 2030 transferred to 2024. See: *Vera Barinova, Stepan Zemtsov, Vladimir Kotsyubinsky, Alexander Krasnoselskih, Yulia Tsareva.* Implementation of development strategy of small and medium-sized entrepreneurship in Russia//Russia economic development. 2018. Vol. 25. № 11. P. 36–45.

² Unified register of small and medium-sized entrepreneurship subjects. FTS. URL: https://rmsp. nalog.ru/index.html.

³ Passport of the national project "Small and medium-sized entrepreneurship and support of individual entrepreneurial incentive". URL: http://government.ru/info/35563/.

Employment in SME sector is highly concentrated, i.e. over 45.2 percent of those employed is centralized in major Russia's regions. For comparison, only 39 percent of total employment in Russia is concentrated in 10 major regions. The share of SME employees against the total number of employed in 2019 is the highest (over 30 percent) in large urban agglomerations with developed spheres of trade and services, i.e. St. Petersburg, Moscow, Novosibirsk, Sverdlovsk regions and close to a major market of Moscow (Kostroma and Ryazan regions) and in port regions (Kaliningrad and Sakhalin regions). This indicator is the lowest, less than 4%, at Chukotka, Kabardino-Balkar Republic, Republic of Chechnya, Republic of Dagestan, Republic of Ingushetia, where the share of informal sector is higher, and small and medium-sized businesses registered less frequently and less commonly officially register their employees. Slight reduction in the concentration of SME employment can be expected in 2020 in major centers.

The number of SME employees increased in 2019 only in eight Russia's regions: Republic of Ingushetia, Chukotka and Nenets Autonomous Okrugs, Republic of Dagestan, Republic of Crimea, Republic of Tuva, Republic of Chechnya and Moscow region. Growth of employment in the regions of North Caucasus and Far North can be explained by low base effect, free trade zone in the Republic of Crimea and by favorable institutional conditions for opening firms in Moscow region. Most of all, employment declined in a number of large-urban northern regions (Murmansk, Arkhangelsk regions, the Komi Republic), as well as in the sparsely populated Non-Black Soil zone region (Yaroslavl, Novgorod and Pskov regions), which may partly be due to the introduction of online cash registers and the inability to use them in remote and rural settlements. In addition, the increase in costs associated with the VAT rate growth for businesses in these settlements could prove to be unbearable.

To secure the increase of the number of employees in the SME sector, many entrepreneurs should first thing come out of the shadows and the self-employed legalize. The *Table 34* shows the potential number of self-employed in each region. Nationwide, there are more than 8.5 million unregistered self-employed, provided that all employees of the informal sector could be referred to this work status with the exception of already registered individual entrepreneurs. Moreover, more than a third of potential self-employed are located in the 10 largest regions with the highest share falling for underdeveloped regions with unfavorable institutional conditions.

In 2020, despite the expansion of the experiment on introduction of business income tax for all regions, the share of employees in the informal sector should increase.

Table 34

Region	Employed in informal sector, percent to total number of employed population	Employed in informal sector, thousands of people	Employed in informal sector excluding individual entrepreneurs, thousands of people		
1	2	3	4		
Russian Federation	20.1	14193.9	8915.8		
	Leaders by number of employe	es in informal sector excluding	IPs		
Republic of Dagestan	56.9	610.8	583		
Krasnodar region	29.9	762.8	503.9		
Rostov region	29.1	559.5	344.6		
Republic of Bashkortostan	24.6	417.8	301.2		
Republic of Chechnya	65	328	297		
Stavropol region	30.9	374.1	270		
Nizhny Novgorod region	18.4	299.4	232		
Republic of Crimea	35.7	295.1	204.4		
St. Petersburg	12.4	389.3	198.6		
Republic of Tatarstan	17	324.4	184.5		

Employment in informal sector in Russia's regions

		- -	00111 0
1	2	3	4
	Leaders by employme	nt rate in the informal sector	
Republic of Ingushetia	50.2	88.5	71
Kabardino-Balkar Republic	44.9	160	140.7
Republic of North Ossetia - Alanya	37.8	107.7	94.2
Altay Republic	37.5	30.7	23.5
Sevastopol	33.1	59.3	39.2
Republic of Kalmykia	33	36.1	25.7
Ivanovo region	31.1	139.4	88.4
Penza region	30.8	183.4	118.9
Republic of Khakassia	30.2	70	38.9
Republic of Adygea	30.2	45.2	30.6

Cont'd

Source: own calculations based on Rosstat data.

Geography and dynamics of the SME non-resource exports

The volume of non-resource exports of the SME subjects in Russia accounted for nearly USD 14.1 billion or 7.2 percent of the aggregated non-resource exports in 2017¹. In 2018, the volume of non-resource exports of the SME subjects increased by 45% compared to the previous year constituting USD 20.6 billion or 8.7 percent of the aggregated exports this year. The share of non-resource SME exports increased in the total SME exports volume: from 85 percent in 2017 to 87 percent in 2018. Only 2.6 percent of the total volume of the SME non-resource exports falls for individual entrepreneurs.

The increase of the SME exports share in the total volume of non-resource exports to 8.8 percent by 2019 and to 10 percent by 2024, foreseen under project, is feasible provided major enterprises reduce exports in the new environment. Amid falling consumer demand within the country, some successful small and medium-sized businesses will increase export deliveries benefiting from Ruble depreciation and, accordingly, a relative decrease in the cost of production in foreign markets. Therewith, small firms may be more adapted to changing environment due to the production and export of piece products and the ability to take into account the needs of specific consumers.

Additional measures aimed to support exports, can contribute to survival of the most competitive companies in the SME sector.

During 2018, the leaders in the absolute volume of non-resource SME exports were the largest agglomerations of Russia with concentration of processing enterprises (Moscow, St. Petersburg), agricultural and farming centers (Rostov region, Krasnodar Krai), forestry and wood processing centers (Irkutsk region, Krasnoyarsk krai) and centers of marine industries and marine farming (Sakhalin region, Primorsky Krai).

The share of the SME sector in the region's non-resource exports accounts for more than 50% in economically underdeveloped regions specializing in agriculture (Republic of Tuva, Altai Krai, Republic of Adygea, Republic of Karachay-Cherkessia, Republic of Chechnya). In the remote regions there are no large non-resource companies due to the increased costs of transporting raw materials and finished products, therefore, the share of SME exporters is also high in the Yamalo-Nenets, Chukotka Autonomous Okrugs, Tomsk Region and Zabaykalsky

¹ Russia FTS and FCS data were used. Note that it is impossible to receive quality regional statistics as the region, where the firm has been officially registered, is reflected in the customs declaration as exporting region rather than the region where this firm conducts their activity (around 20 percent of SMEs registered in Moscow and St. Petersburg in Russia).

krai (*Table 35*). Less than 2 percent of this share is concentrated in the regions with high volume of the non-resource metallurgic production (Vologda, Lipetsk, Kemerovo regions), and chemistry (Tula, Tyumen regions), associated with the activities of the respective largest enterprises in these regions.

Table 35

Leading regions according to absolute value of SME non-resource exports (legal entities and individual entrepreneurs) in 2018

Leading regions according to absolute volume of SME exports	Non-resource SME exports, USD, million	Regional share in the total volume of non- resource SME exports in Russia, percent to total	Growth in 2018 against 2017, %
Moscow	3 859.00	25.20	34.30
Rostov region	944,1	11,20	143,90
Irkutsk region	911.4	3.70	-15.70
St.Petersburg	821.4	5.40	34.80
Krasnoyarsk krai	671.1	4.50	36.40
Primorsky krai	668.1	3.90	21.30
Krasnodar krai	469.7	6.00	164.20
Moscow region	353.3	2.70	56.00
Sakhalin region	225.7	2.10	91.00

Source: own calculations based on FTS¹, FCS² data.

4.8.3. Recommendations for entrepreneurial policy in Russia

Modern measures to support entrepreneurial sector can be split into short term and long term. Short-term measures introduced in many countries, including Russia³, are designed to ease the negative effects of the pandemic. Among these measures, the following is suggested: deferrals of payments on taxes and social contributions, on leasing of facilities owned by the state, support of consumer demand by issuing subsidies to vulnerable groups of the population, deferral of payments on loans, introducing a moratorium on bankruptcy⁴. Measures of higher value are being developed in Russia for enterprises in the transport industry and tourism, however, it will be necessary to introduce subsequent particular measures for creative industries closely related to the entertainment sector.

Anti-crisis supportive measures are also being developed in certain regions having financial, administrative and other resources for their implementation. The city of Moscow was one of the first to start collecting proposals for supportive measures and provided small and mediumsized businesses with certain relaxation options⁵. Among these measures are: expanding soft loan programs and guarantee support for SME lending, deferral of payment of rent for SME subjects, renting the state or municipal property, moratorium on SME inspections, including on-site tax inspections (except for issues that pose risks to human life and health).

¹ Federal Tax Service. URL: http://nalog.ru.

² Federal Customs Service of the Russian Federation. URL: http://customs.ru/.

³ Rescue of entrepreneurs: supportive measures introduced by governments of European countries, the USA and Russia amid crisis. URL: https://vc.ru/finance/114412-spasenie-predprinimateley-kakie-mery-pomoshchi-vvodyat-pravitelstva-stran-evropy-ssha-i-rossii-v-usloviyah-krizisa.

⁴ Draft bill № 931192-7 "On amendments to particular legislative acts of the Russian Federation on prevention and control of emergencies". URL: https://sozd.duma.gov.ru/bill/931192-7#bh_note.

⁵ Moscow will strengthen SME support under economic instability/RIA Novosti. March 18, 2020 URL: https://ria.ru/20200318/1568799432.html.

However, introduced and declared measures are evidently not sufficient to mitigate the negative crisis impact taking into consideration strong decline in demand. The option to introduce tax holidays up until quarterly deferral of tax payment¹ is under discussion.

Long term supportive measures should be focused on reducing the impact of potentially protracted crisis and adaptation to new environment (support of changes in the SME sector pattern towards increase of the internet-economy share, support of enterprises digital transformation, providing incentives to access foreign markets). Significant differences between regional entrepreneurial systems require, on the one hand, to make adjustments to the federal policy of entrepreneurship, while, on the other hand, allow to use strengths and weaknesses of the regions, their specialization and economic/geographic conditions for more effective long term development of the SME sector in Russia.

The support of "gazelles", product, fast – growing companies related to medium-sized businesses, often innovative, is relevant amid the changed environment for regions, leading in the development of entrepreneurship (Moscow, St. Petersburg, Republic of Tatarstan, Samara, Novosibirsk regions). Appropriate measures are needed to automate and digitalize production in order to increase the competitiveness and demand for products on the way to economic recovery. Moreover, special measures are needed to accelerate and nurture suppliers, to develop venture capital and increase funding for related grants aimed at research and development in cooperation with universities. "Gazelles" are interested in establishing channels for exporting products, which is relevant against Ruble depreciation and a decrease in domestic demand. It is worth to reconsider the role of universities in order to create points of growth in the anti-crisis period and incorporate them into the ecosystem as main agents of change and a generator of innovation and startups².

It is reasonable to strengthen cooperation with enterprises and their suppliers, intermediaries, financial institutions, NGOs, development institutions and public companies, international companies and information agencies, auditing and consultancy firms, for regions known for developed small and medium-sized productions (Kaluga, Vladimir, Yaroslavl, Ryazan, Lipetsk, Tomsk regions) aimed to establish and develop clusters. Such a mechanism as increase of support to those companies operating at technological parks, technopolises, accelerators, industrial parks, can be effective³.

Measures to initiate mass entrepreneurship and to legalize informal employment are needed in the lagging regions with ecosystems of entrepreneurship being not so successful and negative dynamics of entrepreneurship development. This may include measures to reduce the tax burden (for example, the abolition of tax payments for self-employed in rural areas) and consulting support. For regions specializing in agriculture, measures for agricultural cooperation are important. For single-industry towns, measures aimed at direct support of mass entrepreneurship are also relevant (for example, grants for starting a business).

¹ *Elena Bazanova, Svetlana Yastrebova, Anna Chervonnaya.* The Government prepare plan to support economy due to coronavirus//Vedomosti. March 15, 2020. URL: https://www.vedomosti.ru/economics/articles/2020/03/15/825250-plan-zaschiti.

² Vera Barinova, Stepan Zemtsov, Vladimir Zinov, Vera Kidyaeva, Alexander Krasnoselskykh, Natalia Kurakova., Roza Semenova, Ivan Fedotov, S.Khalimova, Rustam Khafizov, Yulia Tsareva. National report "Highly technological business in Russia's regions". 2020 / edited by Stepan Zemtsov. M.:RANEPA; AIRR, 2020.

³Maria Antonova, Vera Barinova, Vladimir Gromov, Stepan Zemtsov, Alexander Krasnoselskykh, Nikolay Milogolov, Aleksandra Potapova, Yulia Tsareva. Development of small and medium-sized entrepreneurship in Russia in the context of national project implementation. M.: Publishing House "Delo" RANEPA, 2020.

In remote regions having adverse business environment, the main focus should be on reducing costs. The state should promote (subsidize, if necessary) the introduction of new technologies, the expansion of renewable wind and solar energy. For remote regions of the Far East, such measures as export stimulation, improvement of customs procedures and infrastructure, and transport benefits, are important.

In many respects, the survival of small business in 2020 will depend on the timeliness and effectiveness of government support measures, however, its subsequent development is impossible without a radical change in business policy, implying the above-described shift in sectoral and territorial emphasis. In the future, support for SMEs should move away from direct financial measures to create comfortable platform for the sustainable growth of small and medium-sized firms.

This includes institutional reforms, expansion of soft services, building-up incentives for interaction with other economic agents (large business, universities, etc.), stimulation of entrepreneurial incentive, especially in innovative sectors of the economy. A similar approach can be called ecosystemic.

4.9. The foreign trade¹

4.9.1. The State of the global economy and trade

Amid prolonged trade tensions, high political uncertainties and the COVID-19 pandemic, the global growth outlook has become much worse. In the past year, in global economic growth rates there was a dramatic slowdown both of international trade flows and global production activities. The growing tariffs and rapid changes in the trade policy led to the decline of business confidence and, consequently, restrained investment growth in most regions. Sluggish demand affected global prices of primary products, particularly, crude oil and commercial metals.

The outbreak of the coronavirus COVID-19 in Europe which started in March 2020 has brought about a dramatic drop in prices on the world's major markets and a downturn in expectations of global economic growth in 2020. As of mid-March 2020, the assessments by the world's main international financial institutions (the IMF, the World Bank and the OECD) of global economic growth have not been adjusted yet. The most relevant ones are shown below. However, S&P, one of the world's three largest rating agencies reported that global recession was expected as early as 2020² with GDP growth rates falling to 1.0–1.5 percent. It is to be noted that for Russia, as an oil-exporting country, the main risk factor is a decrease in demand on energy commodities in developed economies. An additional factor of uncertainty is the prospect of an agreement to be reached on the reduction of oil production within the framework of the OPEC+. Without any agreement, the Brent oil price fell to USD 30 a barrel, the minimum price since the beginning of 2016. Further dynamics of oil prices will depend on the success of negotiations and the extent of the pandemic's effect on the global economy.

Monetary easing measures, including cuts in the US Federal Reserve's and leading central banks' key interest rates did not stop the downturn on the world's largest stock markets. A number of countries, including Russia, already declared that they would allocate additional

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² URL: https://www.spglobal.com/ratings/en/research/articles/200317-economic-research-covid-19-macroeconomic-update-the-global-recession-is-here-and-now-11392265.

budget funds to stimulate the economy. At the same time, restrictions on international flights and organization of mass events had undoubtedly a substantial negative effect.

In the IMF's World Economic Outlook¹ (WEO) January issue, it was stated that owing to unexpected negative changes in the economic activity in some countries with emerging markets the global economic growth outlook in the next two years were revised. The assessment of global economic growth rates in 2019 was revised downwards by 0.1 percentage point to 2.9 percent as compared with the October forecast. This index value was the record-low since the global financial crisis and can be explained by growth in trade barriers, growing uncertainties in trade and geopolitics, specific factors creating macroeconomic difficulties in a number of countries with emerging markets, as well as structural conditions, such as low growth rates of productivity and the aging of the population in countries with developed economies. The IMF estimates USD 700 billion worth of losses or 0.8 percent of global GDP to be sustained because of protectionist practices pursued by individual countries and international trade and economic frictions before 2020.

In future, a moderate speed-up of the growth rates is expected while average growth in global gross product is forecasted at the level of 3.3 percent and 3.4 percent in 2020 and 2021, respectively, a decrease of 0.1 and 0.2 percentage point, respectively, as compared with the October issue of the report.

As per the IMF's assessment, as of year-end 2019 global growth in international trade slowed down to the past ten years' record-low: the volume of global trade in goods and services increased by the mere 1 percent. In 2019, a dramatic drop in international trade growth in goods was mainly justified by a decrease in demand in imports to China and other countries with emerging market economies. This reflects largely trade tensions' impact on the region's vast cross-border production chains and the slowdown of internal demand in China. In the US, growth in imports slowed down, too, because the increased tariffs facilitated a two-digit reduction of imports of goods from China during the year. Amid weak business sentiments, slowdown of capital expenditures, as well as setbacks in the motor industry, the euro-zone saw a decrease in demand in imports.

Among other regions, the impact of trade tensions on imports growth was made worse due to country and regional factors. For large exporters of goods, including a few countries of Africa, Western Asia and Latin America, growth in imports remained weak because the depreciation of prices of primary products kept putting pressure on domestic investment activities. In Latin America, deepening of the economic crisis in Argentina led to a drop in demand on imports on the back of a dramatic reduction of capital expenditures. The slowdown of economic growth in India and other large countries of South Asia resulted in decreased demand in imports of goods.

It was expected that growth in the global economy in 2020–2021 would be accompanied by the expansion of global trade volumes (though a more restrained one than it was forecasted in October) owing to growth in internal demand and investments (*Table 36*).

According to the economic forecast of the Organization for Economic Cooperation and Development (OECD), presented in November 2019², trade conflicts, weak investments into business and prevailing political uncertainties made a pressure on the global economy and increased the risk of long-term stagnation. Global GDP growth was expected to amount to

¹ URL: https://www.imf.org/en/Publications/WEO/Issues/2020/01/20/weo-update-january2020.

² The official website of the OECD. URL: https://www.oecd.org/economy/economic-outlook-weak-trade-and-investment-threaten-long-term-growth.htm.

2.9 percent in 2019 – the record-low annual index value after the financial crisis – and remain at the level 2.9–3.0 percent in 2020 and 2021. Presenting the forecast in Paris, Lawrence Bun, the OECD's Chief Economist said: "It would be a mistake to consider these changes as temporary factors which can be removed by means of the monetary and fiscal policy: they are of a structural nature. Without coordination in trade and global taxation and clear-cut political lines for the energy transit, the uncertainties will still pose a threat and cause damage to growth outlook."¹

Table 36

(growth rates, voor the previous year)										
	2011	2012	2013	2014	2015	2016	2017	2018	IMF forecast* (January 2020)	
									2019	2020
Volume of global GDP	4.3	3.5	3.5	3.6	3.5	3.3	3.8	3.6	2.9	3.3
Countries with developed economies	1.7	1.2	1.4	2.1	2.3	1.7	2.5	2.2	1.7	1.6
United States	1.6	2.2	1.8	2.5	2.9	1.6	2.4	2.9	2.3	2.0
Euro-zone	1.6	-0.9	-0.2	1.4	2.1	1.9	2.5	1.9	1.2	1.3
Germany	3.7	0.7	0.6	2.2	1.5	2.2	2.5	1.5	0.5	1.1
France	2.2	0.3	0.6	1.0	1.0	1.1	2.3	1.7	1.3	1.3
UK	1.6	1.4	2.0	2.9	2.3	1.8	1.7	1.3	1.3	1.4
Countries with emerging markets and developing countries	6.2	5.1	4.7	4.6	4.0	4.3	4.7	4.5	3.7	4.4
Russia	4.3	3.4	1.3	0.6	-3.7	-0.2	1.5	2.3	1.1	1.9
Developing countries of Asia	7.8	6.7	6.6	6.8	6.6	6.4	6.5	6.4	5.6	5.8
China	9.3	7.7	7.7	7.3	6.6	6.7	6.9	6.6	6.1	6.0
India	6.3	4.7	5.0	7.3	7.6	7.1	6.7	6.8	4.8	5.8
Latin America and Carribeans	4.6	2.9	2.7	1.3	0.0	-0.9	1.3	1.1	0.1	1.6
Brazil	2.7	1.0	2.5	0.1	-3.8	-3.6	1.4	1.3	1.2	2.2
Mexico	4.0	4.0	1.1	2.1	2.5	2.3	2.2	2.1	0.0	1.0
Volume of international trade in goods and services	6.1	2.9	3.0	3.3	2.6	2.2	5.2	3.7	1.0	2.9
Countries with developed economies	5.7	2.0	2.4	3.4	3.6	1.8	4.4	3.2	1.3	2.2
Countries with emerging markets and developing countries	6.8	4.6	4.4	2.9	1.3	3.0	6.9	4.6	0.4	4.2

Dynamics of global GDP and international trade (growth rates, % on the previous year)

* The IMF forecast as of January 2020.

Source: The IMF's data. URL: https://www.imf.org/en/Publications/WEO/Issues/2020/01/20/weo-update-january2020.

Late in 2019, global problems were supplemented by the outbreak of the coronavirus (COVID-19), which complicated the already difficult situation in the global economy. In China, the measures aimed at stopping the spread of the virus included the quarantine and wide-spread restrictions on the mobility of the workforce, which led to unplanned delays in the renewal of work of factories after the Lunar New Year holidays and dramatic reduction of numerous types of activities in the services sector. The abovementioned measures caused a substantial reduction of output volumes. The subsequent outbreaks of the infection in other countries led to the same restrictions as the quarantine and closure of the borders.

These developments' negative consequences, including the direct disruption of global supply chains, a decline of final demand on import goods and services and shrinkage of

¹ The official website of the OECD. URL: https://www.oecd.org/economy/economic-outlook-weak-trade-and-investment-threaten-long-term-growth.htm.

international tourism and business travelling are substantial. Risk aversion increased on the financial markets: the yield on 10-year US Treasury bonds fell to the record-low, share prices fell dramatically and prices of primary products depreciated. As a result, in February 2020 the OECD revised downward its forecast of global economic growth in 2020.¹

Proceeding from the assumption that epidemic's peaks in China in Q1 2020 and outbreaks of the infection in other countries will turn out to be moderate, global growth may fall by about 0.5 percentage point in 2020 as compared with the economic forecast in November 2019 (to 2.4 percent), while in Q1 2020 growth may be negative. A more extended outbreak of the coronavirus which is spreading widely in the Asian-Pacific Region, Europe and North America will reduce substantially the outlook of global economic growth. In this case, global growth may fell to 1.5 percent in 2020, which is twice as little than before the outbreak of COVID-19.

The outlook for China has been revised substantially: in 2020 growth rates decline to 4.9 percent, while in 2021 recover to 6.4 percent, because output volumes gradually return to the levels forecasted before the outbreak of the coronavirus.

The negative effect of the epidemic on the financial markets and tourism, as well as the breakdown of supply chains were the factors behind the downward revision of the outlook for all G20 economies in 2020, particularly those which were related closely to China, that is, Japan, Korea and Australia.

As expected, in 2020 the US economy will grow by 1.9 percent (2 percent according to the previous forecast), while in 2021, by 2.1 percent instead of 2 percent predicted in November.

The forecast for the euro-zone in the current year was revised downwards to 0.8 percent from 1.1 percent, while in 2021 it was left at the level of 1.2 percent.

As the impact of the coronavirus gets weaker and output is gradually restored in countries exposed to the risk more than others, GDP global growth will recover to 3.3 percent in 2021.

Also, according to the data of the OECD², the international trade in the G20's goods (in US Dollars with seasonal fluctuations taken into account) retained its downturn trend during 2019 approaching the two-year minimums. So, in Q3 2019 as compared with Q2 2019 global exports fell by 0.7 percent, while imports, by 0.9 percent, which situation reflects partially a decrease of nearly 20 percent in prices of oil and the depreciation of the exchange rate of main currencies against the US Dollar. In Q4 2019, the international trade in goods kept shrinking. As compared with Q3 2019, exports decreased by 0.1 percent, while imports, by 1.3 percent.

In Q4 2019, among G20 North American countries, Mexico was the worst hit; its exports and imports fell by 3.4 percent and 3.2 percent, respectively. Canada saw a decrease of 1.6 percent and 1.8 percent, respectively, while the US, a decrease of 0.6 percent and 3.2 percent, respectively.

The main G20 European countries fared a little better: exports increased in France (by 1.1 percent), Italy (1.0 percent) and insignificantly in Germany (0.2 percent). Imports fell in France and Italy (0.8 percent and 2.3 percent, respectively), but increased again somewhat in Germany (by 0.2 percent). On the back of strong appreciation of the exchange rate of the pound sterling against the US Dollar, in Q4 2019 exports and imports in the UK rose by 2.4 percent and 1.1 percent, respectively, on the previous quarter.

¹ The official site of the OECD. OECD Interim Economic Assessment. Coronavirus: the world economy at risk. URL: http://www.oecd.org/economic-outlook/#resources.

² The official website of the OECD. URL: https://www.oecd.org/newsroom/international-trade-statistics-trends-in-third-quarter-2019.htm

In Asia, the Japanese-Korean trade dispute squeezes the international trade with exports and imports falling dramatically in both the countries: in Japan – by 3.4 percent and 3.6 percent, respectively, while in Korea – by 2.6 percent and 2.4 percent, respectively. In the past two years, Korea's exports and imports decreased by 12.3 percent and 8.0 percent, respectively.

In China, exports and imports increased by 0.4 percent and 2.8 percent, respectively. In India, exports increased by 2.8 percent, while imports fell, by 4.4 percent. In Indonesia, exports remained unchanged, while imports grew by 2.6 percent.

In South America, Argentina's exports rose by 6.2 percent, while imports decreased dramatically by 9.9 percent. Imports fell substantially (8.1 percent) in Brazil, while exports decreased by 1.5 percent.

Considerable disruptions in Asian supply chains related to the outbreak of COVID-19 are evidence of the fact that negative dynamics remained in Q1 2020, too.

In February 2020, the World Trade Organization published the regular Indicator of the World Trade Growth Rates (WTOI)¹, which provides the online information on the trajectory of the global trade. The latest value of the Indicator (95.5 points) is lower than the previous one (96.6 points) registered in November 2019; this index indicates that the global trade growth rates continued to slow down early in 2020. The decrease in the WTOI in the past few months was related to a further drop in the indices of container shipping (94.8) and agricultural primary products (90.9), as well as the stagnation of the output index and the index of car manufacturing (100.0). At the same time, it seems that the decrease in the index of export orders (98.5) and electronic components (92.8) stabilized, while air service weak indicators hit the bottom in 2019. However, the efficiency of recovery of these components of the Index will depend on the extent of effect of COVID-19 and the length of the period of recovery of the global economy.

In H1 2019, global trade growth slowed down with annual growth in trade in goods falling to 0.6 percent from 2.4 percent in H2 2018 owing to growing trade tensions. In response to slower than expected growth rates, on October 1, 2019 the WTO Secretariat revised downwards its forecasts of global trade growth in 2019 and 2020 to 1.2 percent and 2.7 percent, respectively (as compared with the estimates of 2.6 percent and 3.0 percent, respectively, made last April). In H1, economic growth slowed down in major economies partially because of prevailing trade tensions and partially because of cyclic and structural factors. Growth in global real GDP is estimated at 2.3 percent.

4.9.2. The Russian foreign trade situation: prices

of main commodities of Russian exports and imports

In the October Commodity Market Outlook,² The World Bank states that in Q3 2019 prices of nearly 60 percent of primary products fell because of growing concerns over the global economic growth slowdown. It was a noticeable turn as compared with the World Bank's April Report when a series of shocks related to primary products led to growth in prices of numerous commodities, including oil. The worsening current macroeconomic situation, including the dramatic slowdown of manufacturing and trade in goods affected largely demand in goods.

In Q1 2019, there was monthly growth in prices of oil, but after it reached the peak value of USD 71.7 a barrel in April the dynamics changed for the downturn. The price reduction was justified by growing concerns over the decline of global demand on the back of aggravation of

¹ The official website of the WTO. URL: https://www.wto.org/english/news_e/news20_e/wtoi_17feb20_e.pdf.

² The official website of the World Bank. URL: https://www.vsemirnyjbank.org/ru/news/press-release/2019/10/29/commodity-prices-revised-down-as-global-growth-weakens-and-supplies-remain-ample.

trade relations between the US and China, the world's largest oil consumers. A drop in prices was prevented by the over-fulfillment of OPEC+ agreements and the continued reduction of oil production in Iran and Venezuela.

In Q3 2019, prices of energy commodities fell by more than 8 percent on Q2 2019. Crude oil cost on average USD 60 a barrel, a decrease of 8.2 percent as compared with Q2 2019. A drop in prices took place despite an attack on the oil infrastructure of Saudi Arabia; it was the largest upsurge of oil prices within one day since 1988 (when the Brent oil started to be traded on futures markets). On September 13, 2019, the price of Europe Brent Spot was equal to USD 61.25 a barrel, while on September 16, to USD 68.42 a barrel. However, in subsequent days after Saudi Arabia resumed successfully oil production to the normal level, prices fell again. Late in September, concerns over the slowdown of the global economy triggered by weak macroeconomic data and the ongoing trade dispute between the US and China reduced the global demand outlook and pushed oil prices downwards.

Late in 2019, the cost of the OPEC's base basket amounted to USD 66.48 a barrel, the highest monthly value since May 2019. At the end of the year, oil prices grew owing to the improvement of the fundamental indicators of the oil market, including ongoing efforts to stabilize the market carried out within the frameworks of the Declaration on Cooperation with the OPEC+ Countries, as well as easing of trade tensions between the US and China.

In December 2019, prices of ICE Brent oil rose by 5 percent to USD 65.85 a barrel as compared with the previous month, while those of NYMEX WTI oil, by 4.8 percent, to USD 59.80 a barrel. In addition, late in 2019 Brent oil cost 23 percent above the level seen at the end of 2018, while NYMEX WTI oil prices appreciated by 34 percent. However, in 2019 as compared with 2018 average annual oil prices depreciated: ICE Brent oil prices fell by 9.9 percent to USD 64.03 a barrel, while NYMEX WTI oil prices, by 12 percent to USD 57.1 a barrel. At year-end 2019, the average price of Urals oil decreased by 9.17 percent to USD 63.59 a barrel as compared with 2018 when it cost USD 70.01 a barrel. Last December, the average price of Urals oil was equal to USD 64.47 a barrel, an increase of 11 percent on December 2018.

According to the forecast of the US Energy Information Administration (EIA), the slate oil boom facilitated growth in production of natural gas in the United States; in 2019 slate oil production increased by 10 percent after growth of 12 percent in 2018. However, despite sustainable demand on clearer fuel, rapid growth in supplies kept pushing prices downward. If in 2018 an average annual spot price of natural gas increased by 6.6 percent as compared with 2017 (from USD 2.96 per million British thermal units (MBTU) in 2017 to USD 3.16 per MBTU in 2018), in 2019 the price fell by 18.7 percent as compared with 2018.

In December, prices of natural gas at Europe's largest terminal – Title Transfer Facility (TTF) – in the Netherlands fell by 10.3 percent to USD 4.62 per MBTU. The prices were influenced considerably by abnormally warm weather in December. In addition, the announcement of the deal between Russia and Ukraine on the transit of natural gas to Europe removed a substantial source of uncertainty on the market. Also, prices of natural gas were under pressure on the part of growth in liquefied natural gas supplies from the US. The US Energy Information Administration (EIA) forecasts that US natural gas exports will surpass natural gas imports on average by 7.3 billion cubic feet a day and 8.9 billion cubic feet a day in 2020 and 2021, respectively.¹ Growth in US net exports is mainly justified by growth in exports

¹ The official website of the EIA. URL: https://www.eia.gov/todayinenergy/detail.php?id=42575.

of liquefied natural gas and pipelined gas exports to Mexico. In 2019, net exports of natural gas more than doubled as compared with 2018 and the EIA expected it to double again by 2021 as compared with 2019.

The Gazprom was confronted with a dramatic drop in gas prices on the European market. According to the data of the reporting for nine months of 2019¹, in Q3 2019 the average sale price of thousand cubic meters of fuel to the EU was equal to USD 169.8. As compared with Q2 2019 (USD 205.1) Russian gas prices depreciated by 17.2 percent, while as compared with Q3 2019 prices collapsed by 32 percent. So, in Q3 2019 the price of Russian gas in Europe fell to the level seen in 2004 when the average price of thousand cubic meters of fuel amounted to USD 137.7, but in 2005 it increased to over USD 190 per thousand cubic meters following the upsurge in oil prices.

Unlike the European market, Japanese contract prices of liquefied natural gas were declining at a slower rate (*Table 37*).

Table 37

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Oil (Brent), USD / barrel	61.86	79.64	110.9	111.97	108.86	98.94	52.37	44.05	54.39	71.07	64.03
Natural gas (USA), USD/ MBTU	3.95	4.39	4.00	2.75	3.72	4.37	2.61	2.49	2.96	3.16	2.57
Natural gas, European market, USD/MBTU	8.71	8.29	10.52	11.47	11.79	10.05	6.82	4.56	5.72	7.68	4.8
Liquefied natural gas (Japan), USD/MBTU	8.94	10.85	14.66	16.55	15.96	16.04	10.93	7.37	8.61	10.67	10.57
Coal (Australia), USD per ton	71.84	98.97	121.45	96.36	84.56	70.13	58.94	66.12	88.52	107.02	77.89
Copper, USD per ton	5 149	7534	8 828	7 962	7 332.1	6 863.4	5 510.5	4 867.9	6 169.9	6 529.8	6 010.1
Aluminum, USD per ton	1 665	2 173	2 401	2 023.3	1 846.7	1 867.4	1 664.7	1 604.2	1 967.7	2 108.5	1 794.5
Nickel, USD per ton	14 655	21 809	22 910	17 557	1 5032	16 893	11 863	9 595.2	10 409	13 114	13 914

Annual average global prices

Source: calculations based on the data of the World Bank.

Coal prices kept depreciating on the back of ample supply. In the report of the International Energy Agency $(IEA)^2$, it was stated that in 2019 the quantity of coal consumed in the world, particularly, in countries with developed economies decreased. For example, in the US the coal consumption fell by 17 percent in Q2 2019 on Q2 2018 after a 6 percent decrease last year. It is too early to speak about the overall downturn trend in coal consumption because in some big economies, such as China, the consumption quantity of coal and other fossil fuel sources is just growing.

In December 2019, the energy commodities price index rose by 3.1 percent as compared with November 2019. Overall, in 2019 the energy commodities price index fell by 12.7 percent.

In 2020, prices of energy commodities are expected to depreciate further. According to the World Bank's forecast, prices of non-energy commodities will go down by 5 percent in 2019. The outlook of prices of primary products, particularly, oil and metals are vulnerable to a more significant than expected slowdown of the global economy, especially, in countries with transition economies.

¹ The official website of the PAO Gazprom. URL: https://www.gazprom.ru/f/posts/77/885487/gazprom-ifrs-3q2019-management-report-ru.pdf.

² The official website of the IEA. URL: / https://www.iea.org/reports/coal-2019.

In 2020, oil prices are forecasted to decrease to USD 58 a barrel, a decrease of USD 7 a barrel as compared with the previous forecast. The downward revision of the outlook reflects weaker prospects of global growth and, consequently, the demand on oil. As regards supply, though growth in oil production in the US was inconsiderable, it is expected to increase substantially by 2020 as new pipelines are put into operation. The forecast suggests the reduction of oil production by the OPEC and its partners will continue in 2020, as well. If economic growth decreases further, demand in oil may become substantially weak. On the contrary, the attack on Saudi Arabia's oil refinery facilities is a reminder of the fact that geopolitical developments still entail a serious risk.

The World Bank revised downwards its forecast for the outlook of prices of natural gas and coal in 2020. Prices of natural gas are expected to stabilize, while those of coal, to decrease. The slowdown of the global economic growth rates is likely to lead to the reduction of consumption of both the commodities, particularly, with the industrial sector slowing down. However, the outlook for natural gas is somewhat better than that for coal because it is expected that a switchover to natural gas in power generation will continue, particularly, in countries with developed economies. In addition, it is expected that in 2020 growth in production of natural gas, particularly in the US, will be weaker due to the slowdown of the rates of new drilling.

In December 2019, the index of prices of non-energy commodities rose by 1.9 percent on the previous month as a result of inconsiderable growth in the index of prices of base metals and substantial growth in agricultural products. In 2019, the price index of non-energy commodities fell 4.1 percent year on year.

In Q3 2019, most non-energy goods depreciated. In Q3 2019, the World Bank's index of prices of metals and minerals declined by 1.8 percent on Q2 2019 after growth observed during two quarters. This decrease was a reflection of the slowdown of global manufacturing activities, protracted standstill in trade negotiations between China and the United States and smoothing of concerns over supplies of some metals.

Within a year, prices of nonferrous metals were generally depreciating, except for nickel which demonstrated growth of 6.1 percent at year-end because of the closure of exports of nickel ore supplies from Indonesia and substantial reduction of metal stocks at the LME.

In Q3 2019, prices of nickel appreciated by 27.8 percent mainly on the back of unexpected changes in Indonesia's policy. In August, the Indonesian authorities declared that the total ban on exports of nickel ore would come into effect in January 2020 – two years ahead of the schedule. A series of natural disasters in the Sulawesi and Halmahera – Indonesia's key nickel-producing regions – made problems related to supply of raw materials worse. China, the world's largest producer of stainless steel depended largely on exports of Indonesian ore for production of nickel cast iron (NPI). The ban which was imposed ahead of the time intensified concerns over supplies because the production of minerals by other producers, such as the Philippines and New Caledonia failed increasingly to ensure the required level of minerals. The NPI's efforts to increase stockpiles ahead of the ban cause concern. According to forecasts, prices of nickel will appreciate by 4.5 percent in 2020 after growth of 6.1 percent in 2019.

In Q3 2019, prices of aluminum depreciated by 1.7 percent as compared with Q2 2019, that is, a decrease for five quarters in a row. Concerns over supplies of alumina subsided because the world's largest alumina refinery Alunorte in Brazil resumed operations in May after a 14 - month long shutdown in compliance with the court ruling. Due to weak global demand on cars, prices of aluminum sank. However, production of aluminum and melting capacities in China

increased as environment restrictions were less severe than expected. It is forecasted that in 2020 prices of aluminum will fall by 1.7 percent after a decrease of 14.9 percent in 2019 which reflects lower prices of alumina and high excess capacity in China.

In Q3, 2019, prices of copper fell by 5.1 percent on Q2 2019 after a decrease of 1.8 percent in Q2 2019 on Q1 2019. Prices started to depreciate in May when the United States increased further its tariffs on Chinese exports which situation provoked retaliatory measures on the part of China. Manufacturing in China, which accounted for 50 percent of the global consumption of copper slowed down because metalintensive industries (for example, building, power industry and transport) remained weak. Sluggish demand abundantly compensated recent stoppages at the Chilean mine Chukikamata (a two-week long strike of workers and suspension of production of minerals) and the Indonesian mine Grasberg (a working switchover from open mining to underground extraction). As a result, in 2019 copper depreciated by 8.0 percent as compared with 2018. As per the World Bank's forecasts, in 2020 copper prices will appreciate moderately by nearly 2.3 percent because the Chinese government steps up measures to motivate the economy because of the global economic slump and trade war with the US.

According to the World Bank's forecast, in 2020 metal prices will keep falling as the slowdown of global demand exerts high pressure on the market. The highest risk is the global growth slowdown – which is more substantial than expected – especially in China.

Prices of precious metals appreciated in response to trade tensions and easing of the monetary policy in countries with developed economies.

In Q3 2019, most agricultural commodities depreciated because manufacturing expectations were revised upwards and global stockpiles of main grain crops, particularly rice and wheat, remained at the level of multiyear heights. An exception was soya beans, prices of which appreciated on the back of the news that China resumed purchases of harvest in the US. Earlier, owing to trade tensions China switched over its purchases of soya from the US to alternative suppliers and substitute goods (*Fig. 49*).

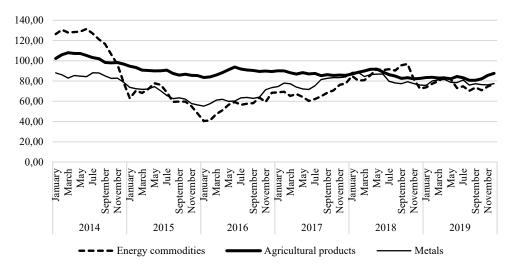


Fig. 49. The World Bank's price indices of primary products (2010 = 100 percent)

Source: URL: http://www.worldbank.org/en/research/commodity-markets#1.

In Q 4 2019, food priced appreciated considerably in the world, having achieved the recordhigh level in the past two years on the back of growth in international prices of meat and vegetable oils. The average value of the FAO Food Price Index (FFPI)¹, which reflects on a monthly basis changes in international prices of the main types of food products amounted to 177.2 points in November, an increase of 2.7 percent and 9.5 percent as compared with the October index and the index of the relevant period of the previous year, respectively.

In December 2019, the average value of the FFPI was equal to 181.7 points, a 2.5 percent increase as compared with the November index, that is, growth continued for three months in a row. Owing to dramatic appreciation of prices of vegetable oils, sugar and dairy products, the index hit the maximum level since December 2014. At the same time, at year-end 2019 the average overall value of the FFPI was equal to 171.5 points, an increase of 1.8 percent as compared with 2018, but it was much lower (by 58 points or 25 percent) relative to the peak level of 230 points in 2011.

According to the World Bank's forecasts, in 2020 average prices of food products will remain unchanged. It is expected that the recent natural disasters, such as drought in Australia, will lead to a decrease in grain yield in some regions. However, as grain stocks remain at comfortable levels, such developments are expected to have a limited effect on international grain prices. However, food prices still tend to appreciate in specific regions, particularly, in developing countries.

In 2019, the Bloomberg Commodity Index (BCOM) which includes 22 types of commodities fluctuated in the range of 75 points to 85 points. Having amounted on April 10, 2019 to the year's high of 83.06 points, on August 7, 2019 the BCOM declined to the year's low of 75.97 points, which is evidence of the remaining prevalence of low prices on commodity markets.

4.9.3. The main indicators of the Russian foreign trade

In 2017 and 2018, the Russian trade turnover recovered after a considerable reduction in 2015–2016. In 2019, recovery growth stopped and Russia's foreign trade turnover fell by 2.7 percent to USD 672.8 billion as compared with 2018. It happened on the back of depreciation of global prices of fuel and energy commodities whose supplies accounted for 62 percent and 39 percent of Russian exports and the trade turnover, respectively. The value of exports of these commodities decreased by 8.8 percent with growth in the volume of supplies of liquefied natural gas and stable volumes of supplies of oil, petrochemicals, natural gas and coal. In 2019, the value of exports of other commodities and imports underwent insignificant changes: a decrease of 1.4 percent and growth of 2.2 percent, respectively.

The foreign trade turnover with far abroad countries decreased by 3.3 percent to USD 588.9 billion, while with the CIS states increased by 1.1 percent to USD 83.9 billion.

In 2019, the value of exports of goods abroad fell by 5.5 percent to USD 418.8 billion as compared with the relevant index in 2018, while the value of imports of goods from abroad rose by 2.2 percent to USD 254.1 billion. The existing dynamics of exports and imports led to a substantial reduction of the positive trade balance, which declined by 15.3 percent to USD 164.7 billion (*Fig. 50*).

¹ The official website of the Food and Agriculture Organization of the United Nations. URL: http://www.fao.org/worldfoodsituation/foodpricesindex/ru/

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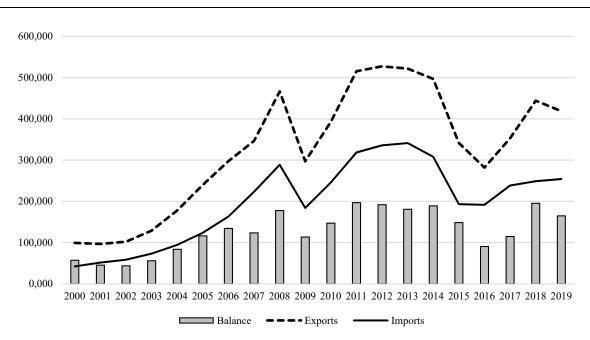


Fig. 50. The main indices of the Russian foreign trade in goods (billion US Dollars)

Source: The Central Bank of the Russian Federation.

Russian exports' negative dynamics is justified both by a decrease in average export prices and shrinkage of volumes of goods exported abroad: in Q3 2019 the index of average export prices and the index of the volume of exports amounted to 96.7 percent and 98.3 percent, respectively. Growth in the value of imports was determined mainly by growth in volumes: in Q3 2019 the index of average import prices amounted to 97.2 percent and the index of the volume of goods supplied to Russia, to 103.6 percent (*Table 38*).

Table 38

	1	-					•						,
EEU's	Name of	Average price index						Volume index					
customs commodi ty code	commodity	Exports		Imports			Exports			Imports			
	group	Q1	Q2	Q3	Q1	Q2	Q3	Q1	Q2	Q3	Q1	Q2	Q3
1	2	3	4	5	6	7	8	9	10	11	12	13	14
01–24	Food products and agricultural primary products (except for textile)	107.8	105.1	100.2	96.5	99.4	97.9	84.2	86.8	100.8	98.9	96.8	106.9
25–26	Mineral products	93.5	95.2	95.6	109.6	102.1	101.6	102.8	94.0	92.6	92.8	96.0	96.4
27	Fuel and energy commodities	93.3	95.0	95.8	97.2	95.0	98.2	102.7	93.5	92.0	106.0	117.7	88.5
28-40	Chemical products, raw rubber	100.0	97.2	95.6	98.6	98.3	95.8	93.0	94.9	119.0	100.4	101.6	117.7
41-43	Rawhide, furs and articles made thereof	98.8	86.6	106.9	93.5	89.2	91.9	78.9	99.0	62.3	86.3	92.5	129.2

The indices of average prices and volumes of the commodity pattern of exports and imports of the Russian Federation in 2019 (% on the relevant quarter of 2018)

												0	Cont'd
1	2	3	4	5	6	7	8	9	10	11	12	13	14
44-49	Timber and pulp and paper products	88.2	87.5	93.5	96.7	95.0	94.2	106.0	105.9	103.1	95.7	96.8	102.5
50–67	Textile, textile goods and footwear	91.7	97.3	95.2	99.8	97.1	94.5	123.6	91.6	124.7	104.8	99.8	109.7
72–83	Metals and fabricated metal products	94.0	95.4	94.3	97.6	93.1	93.7	102.0	86.0	98.6	98.3	109.7	112.5
84–90	Machinery, equipment and transport vehicles	97.6	106.2	105.6	99.3	100.3	98.5	72.2	102.1	108.7	96.8	97.9	97.1
68–70 91–97	Other goods	99.6	97.5	95.1	95.2	98.4	99.0	166.5	80.8	152.6	120.5	93.9	84.3

Source: The data of the Federal Customs Service of the Russian Federation.

The Pattern and Dynamics of Exports

After exports' insignificant growth in value terms in February-April 2019, they started to decline. If in Q1 2019 imports of goods increased by 1 percent relative to the same period of the previous year, they fell by 6.5 percent, 7.7 percent and 8.6 percent in Q2 2019, Q3 2019 and Q4 2019, respectively. Overall, in 2019 the value of exports of goods decreased by 5.5 percent to USD 418.8 billion as compared with the relevant index in 2018. Supplies of goods to far abroad countries and the CIS declined by 6.2 percent and 0.4 percent, respectively (*Table 39*).

Table 39

	_	•									
2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
466.3	297.2	392.7	515.4	527.4	521.8	496.8	341.4	281.7	353.5	444.0	418.8
397.7	252.0	333.6	436.7	443.8	443.8	428.1	292.1	241.7	303.4	387.7	362.5
Growth rates, % on the previous year											
105.8	105.0	96.8	97.0	110.0	97.8	99.9	104.9	109.0	103.5	104.7	98.7
119.7	110.9	137.4	76.4	119.8	132.9	101.6	95.7	58.1	76.9	120.2	92.8
	466.3 397.7 105.8	466.3 297.2 397.7 252.0 105.8 105.0	466.3 297.2 392.7 397.7 252.0 333.6 105.8 105.0 96.8	466.3 297.2 392.7 515.4 397.7 252.0 333.6 436.7 Growth ra 105.8 105.0 96.8 97.0	466.3 297.2 392.7 515.4 527.4 397.7 252.0 333.6 436.7 443.8 Growth rates, % on 105.8 105.0 96.8 97.0 110.0	466.3 297.2 392.7 515.4 527.4 521.8 397.7 252.0 333.6 436.7 443.8 443.8 Growth rates, % on the previ 105.8 105.0 96.8 97.0 110.0 97.8	466.3 297.2 392.7 515.4 527.4 521.8 496.8 397.7 252.0 333.6 436.7 443.8 443.8 428.1 Growth rates, % on the previous year 105.8 105.0 96.8 97.0 110.0 97.8 99.9	466.3 297.2 392.7 515.4 527.4 521.8 496.8 341.4 397.7 252.0 333.6 436.7 443.8 443.8 428.1 292.1 Growth rates, % on the previous year 105.8 105.0 96.8 97.0 110.0 97.8 99.9 104.9	466.3 297.2 392.7 515.4 527.4 521.8 496.8 341.4 281.7 397.7 252.0 333.6 436.7 443.8 443.8 428.1 292.1 241.7 Growth rates, % on the previous year 105.8 105.0 96.8 97.0 110.0 97.8 99.9 104.9 109.0	466.3 297.2 392.7 515.4 527.4 521.8 496.8 341.4 281.7 353.5 397.7 252.0 333.6 436.7 443.8 443.8 428.1 292.1 241.7 303.4 Growth rates, % on the previous year 105.8 105.0 96.8 97.0 110.0 97.8 99.9 104.9 109.0 103.5	466.3 297.2 392.7 515.4 527.4 521.8 496.8 341.4 281.7 353.5 444.0 397.7 252.0 333.6 436.7 443.8 443.8 428.1 292.1 241.7 303.4 387.7 Growth rates, % on the previous year 105.8 105.0 96.8 97.0 110.0 97.8 99.9 104.9 109.0 103.5 104.7

Dynamics of Russian exports

Source: The Central Bank of the Russian Federation.

The main factor behind the shrinkage of Russian exports is the depreciation of prices of energy commodities. In 2019, the average contractual price of crude oil, petrochemicals and natural gas fell by 8.3 percent, 10 percent and 15 percent, respectively, as compared with 2018.

Despite the aggravation of competition on the global market amid stagnating demand, reduction of supply volumes within the frameworks of the Declaration on Cooperation with the OPEC+ and direct opposition on the part of a number of countries, the volume of exports of crude oil and petrochemicals remained at the level of the previous year (410 million tons). Exports of petrochemicals declined, while exports of crude oil increased. So, in 2019 the volume of exports of Russian crude oil reached a historic high of 267.5 million tons, having increased by 2.7 percent or 7 million ton as compared with 2018. However, in 2019 on the back of depreciation of contract prices the value of exports of Russian oil fell by 6 percent as compared with 2018.

In 2019, Russia exported 47.7 percent of produced oil, the maximum value in the past eight years (in 2004 the share of exports in production exceeded 56 percent). In 2019, the unit weight of crude oil exports in the overall volume of Russian exports and exports of fuel and energy

commodities amounted to 28.6 percent and 46.3 percent, respectively (28.7 percent and 45.0 percent, respectively, in 2018).

In 2019, exports of petrochemicals amounted to 142.8 million tons, a decrease of 5 percent or 7 million tons as compared with 2018. This is the minimum index value since 2013; the maximum (171.7 million tons) was achieved in 2015. In the past few years, Russia exported about 55 percent of its petrochemicals.

In 2019, the volume of exports of natural gas amounted to 219.9 billion cubic meters, that is, it remained at the level of the previous year (-0.3 percent). Exports of liquefied natural gas kept growing at a high rate. In 2019, the export volume of liquefied natural gas increased by 78 percent to 65.4 million cubic meters. In 2019, the revenues from exports of liquefied natural gas strank by 15.3 percent to USD 41.6 billion. According to the data of Russia's export center (REC)¹, at year-end 2019 the total volume of non-oil and gas exports amounted to USD 54.5 billion, an increase of 0.2 percent on the previous year's relevant index which was the record-high as regards the volume of non-oil and gas exports in Russia's recent history. It is to be noted that this increase in non-oil and gas exports is mainly related to a large deal on the sale of monetary gold to the UK, which fact should be regarded as modification of the pattern of Russia's gold and foreign exchange reserves and not as a build-up of exports. The share of non-oil and gas exports in the overall Russian exports rose to 36.5 percent against 34.3 percent in 2018 because of depreciation of prices of fuel commodities, the main portion of Russian exports.

As per the REC's estimate, in 2019 the volume of non-oil and gas exports increased by 2.7 percent. Growth in the volume index was observed in most sectors of non-oil and gas exports, except for exports of grain and fish abroad, a decrease of 27.6 percent and 4.1 percent, respectively, owing to a high base in 2018.

In 2019, the commodity pattern of exports did not virtually change as compared with the previous year: the share of fuel and energy commodities declined by 1.6 percentage points. The share of metals and fabricated metal products decreased by 1 percentage point. The share of food products increased by 0.3 percentage point, while that of precious stones, precious metals and articles made thereof, to 3.6 percent (2.2 percent in 2018) (*Fig. 51*).

The value of exports decreased virtually across all positions of the expanded range of products, except for precious stones, precious metals and articles made thereof (51.1 percent), textile, textile goods and footwear (13.5 percent) and other goods (19.2 percent).

In 2019, exports of precious stones, precious metals and articles made thereof amounted to USD 15.26 billion, which is a new historic high. The previous record of the year 2013 was surpassed by nearly USD 1 billion. This position's main export commodity was gold whose exports exceeded 8.1-fold the relevant index value seen in 2018. Almost the entire volume of gold was exported to the UK. In volume terms, exports of Russian gold to the UK increased 11-fold from 10.4 tons to 113.5 tons. The record-high index of gold exports to the UK can be explained by concerns over the Brexit, as well as global upturn trends in demand on gold and the traditional role of the UK as a center of trade in and safekeeping of gold. In addition to gold, Russia sold to the UK twice as much platinum (USD 936 million) and 2.5 times as much silver (USD 100 million).

¹ The official website of the REC. URL: https://www.exportcenter.ru/press_center/news/obemy-nesyrevogo-neenergeticheskogo-eksporta-vyrosli-v-2019-godu/.

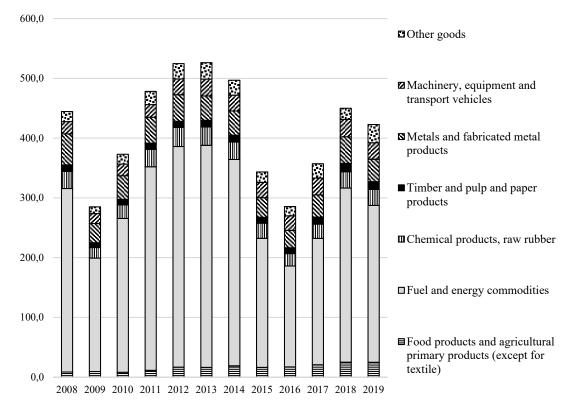


Fig. 51. Dynamics of Russian exports by the commodity (billion USD)

Source: The Federal Customs Service of the Russian Federation.

In 2019, exports of textile, textile goods and foot wear amounted to USD 1.36 billion, the best result since 1993 (without the USD inflation taken into account); growth was observed for three years in a row. Commodities of this group are supplied mainly to CIS countries.

Despite a 0.5 percent decrease in the value of exports of food products and agricultural primary products, plenty of goods in this group demonstrated high results. There was a 74.8 percent growth in exports of living trees and other plants; bulbs, roots and other similar parts of plants; cut flowers and decorative plants; a 45.2 percent growth in exports of meat and food meat by-products; a 32.5 percent growth in exports of oil seeds and horticultural products; medical plants and plants cultivated for technical purposes; straw and fodder; a 28.7 percent growth in exports of fats, butter and vegetable oils; ready edible fats; a 23.6 percent growth in exports of sugar and sugar confectionery.

Exports of machinery and equipment decreased by 4.7 percent with the value of exports of electric equipment and overland transport, except for railway transport, increasing by 12.4 percent and 9.8 percent, respectively. Exports of the Russian car industry increased substantially: car sales grew by 23.6 percent and sales of trucks, by 6.8 percent. Export supplies go mainly to CIS countries – the Republic of Belarus, Kazakhstan and Uzbekistan.

The Pattern and Dynamics of Imports

In 2019, Russian imports increased by 2.2 percent to USD 254.1 billion as compared with 2018. USD 226.5 billion worth of goods was bought in far-abroad countries, a 1.9 percent increase on the relevant index in 2018, while USD 27.6 billion worth of goods was imported from the CIS countries, an increase of 4.4 percent as compared with 2018 (*Table 40*).

Table 40

			e e				•					
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Imports, billion USD	288.7	183.9	245.7	318.6	335.8	341.3	307.9	193.0	191.5	238.1	249.1	254.1
Including												
To far-abroad countries	253.8	162.7	213.2	273.8	288.4	295.0	271.9	170.6	170.8	212.8	222.5	226.5
				Gro	wth rates,	% on pre	vious year	:				
Volume index	122.4	130.1	127.1	113.5	63.3	135.4	122.2	105.1	97.8	96.6	102.0	100.5
Price index	106.5	105.5	107.6	117.8	99.1	101.6	109.1	97.3	102.5	99.8	102.6	104.9
с т 1	$\alpha \rightarrow 1$											

Dynamics of Russian imports (billion USD)

Source: The Central Bank of the Russian Federation; the Ministry of Economic Development of the Russian Federation.

In Q3 and Q4 2018, as well as in Q1 and Q2 2019, exports were falling, while in Q3 2019 there was growth driven by the revival of domestic demand and appreciation of the ruble's real effective exchange rate, which rose in the currency basket by 1.7 percent and 8.4 percent in December 2019 and over the entire 2019, respectively. Early in October, wages of public sector employees were indexed against the rate of inflation. Growth in real wages with the slowdown of the rate of inflation facilitated consumer demand dynamics.

Growth in the value of imports was observed virtually across all positions of the expanded commodity range, except for positions "timber and pulp and paper products" (imports decreased by 5.5 percent) and "machinery, equipment and transport vehicles" (a decrease of 0.1 percent).

In the imports commodity pattern, machinery and equipment still account for the largest unit weight whose share was equal to 46.2 percent in 2019 (47.3 percent in 2018).

It is to be noted that in the past few months of 2019 upturn dynamics of imports were driven mainly by positive dynamics of purchases of chemical products: growth of 9.6 percent in 2019 as compared with 2018. Purchases of pharmaceutical products grew at advanced rates: in 2019 imports of pharmaceuticals increased by 33 percent as compared with 2018. It is more likely related to the fact that from January 1, 2020 the mandatory marking of pharmaceuticals was planned to be started and pharmaceutical companies sought to buy pharmaceutical products in advance. The deadline for introduction of mandatory marking was postponed till July 1, 2020.

Owing to growth in utilization by Russian agrarian enterprises of mineral fertilizers, their purchases from abroad increased by 12.1 percent. Growth in domestic consumption was facilitated by increased business solvency of agrarians amid a favorable situation on agricultural commodities markets, as well as state policy measures taken to support the agriculture. The main volume of mineral fertilizers is bought in the Republic of Belarus and Kazakhstan.

In 2019, imports of food products and agricultural primary products increased by 0.7 percent as compared with 2018. In the past few years, the share of this commodity group in the overall volume of Russian exports was shrinking. If early in the 2000s, it amounted to over 20 percent, at year-end 2019 in hit the record-low (12.2 percent) over the entire period of observations (*Fig. 52*).

Imports of precious stones, precious metals and articles made thereof increased substantially. In 2019, USD 1,066 million worth of valuables was imported to the Russian Federation, a 40 percent increase relative to the index of 2018. During the past three years, China used to be the leader as regards imports of precious stones, precious metals and articles made thereof to Russia.

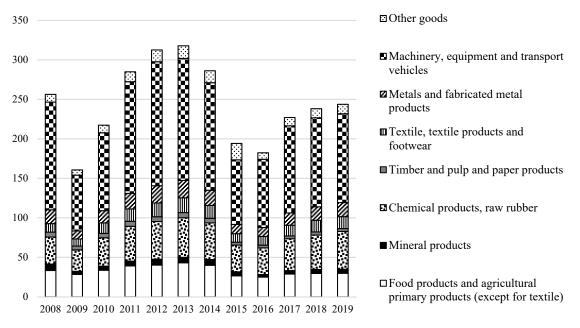


Fig. 52. Dynamics of Russian imports by the commodity (billion USD)

Source: The Federal Customs Service.

However, at year-end 2019 Armenia became the leader which supplied to the Russian Federation USD 140.9 million worth of valuables, while China, only USD 61.8 million worth of valuables. Armenia supplies mainly scrap precious metals to Russia (USD 95.9 million worth) and diamonds (USD 33.2 million worth). In 2019, top five suppliers of valuables were Italy, the UK and Germany.

Within 10 months, there was growth in imports of fresh and frozen meat (50.1 percent), butter (47.5 percent), cheese and cottage cheese (15.3 percent) as compared with the corresponding period of the previous year.

4.9.4. The geographic pattern of the Russian foreign trade

In the geographic pattern of the Russian foreign trade, the trend of growth in the APEC's share in the Russian foreign trade volume continued: in 2019 it rose to 31.8 percent against 31 percent in 2018. At the same time, the share of the CIS increased somewhat from 11.8 percent to 12.1 percent. The share of the EU decreased from 42.8 percent in 2018 to 41.7 percent in 2019 (*Fig. 53*).

The European Union is still the main trade partner of the Russian Federation. In 2019, The Russian foreign trade turnover with EU countries decreased by 5.6 percent with Russian exports and Russian imports falling in value terms by 7.8 percent and 0.8 percent, respectively. It is to be noted that the reduction of Russian foreign trade turnover was observed with all countries, except for Austria, Ireland, Spain, Latvia, the Netherlands, Slovakia and Croatia. The trade turnover with the UK increased by 25.6 percent.

Russia's foreign trade turnover with the APEC countries declined by 0.5 percent. At the same time, there was growth in the foreign trade turnover with China (2.5percent), Australia (4.6 percent), the USA (4.9 percent) and Canada (32.2 percent). The trade turnover with Vietnam and Singapore declined by 19.1 percent and 21.1 percent, respectively.

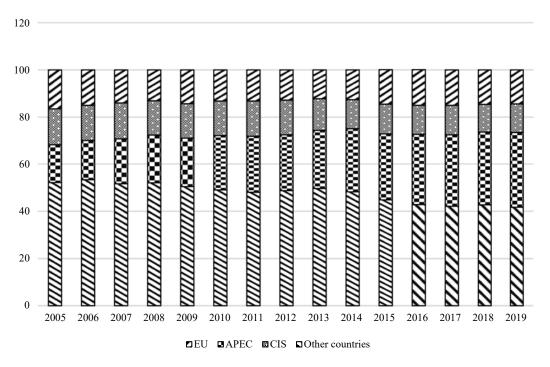


Fig. 53. The geographic pattern of the Russian foreign trade (%)

Source: The Federal Customs Service of the Russian Federation.

Russia's turnover with the Commonwealth of Independent States decreased by 1.3 percent mainly because of the shrinking trade turnover with Ukraine: exports of Russian goods to Ukraine fell by 30.5 percent, while imports of Ukrainian goods to the Russian federation, by 11.5 percent. Russia's trade turnover with Belarus and Kirgizia fell by 3.1 percent and 1.2 percent, respectively. Trade relations with other CIS countries kept restoring.

Among Russia's main trade partners, China has been the leader since 2010; its share in Russia's foreign trade turnover increased to 16.6 percent in 2019 (15.7 percent in 2018). For two years in a raw, the Russian Federation had external surplus: USD 2.7 billion in 2019 (USD 3.8 billion in 2018).

4.9.5. The Russian foreign trade regulation ¹

Tariff regulation

Export customs duties

In 2019, the rates of export customs duties on oil and petrochemicals were calculated in compliance with the methods approved by Resolution No.276 of March 29, 2013 of the Government of the Russian Federation "On Calculation of the Rates of Export Customs Duties on Crude Oil and Individual Categories of Products Made of Oil."

From 2019, the final stage of the tax maneuver in the oil industry started in Russia. The rate of the export duty on oil would be gradually decreasing (down to zero) with simultaneous growth in the rate of the severance tax (*Table 41*).

¹ In preparing this Chapter, materials of the information and legal website GRANAT.RU were used.

Table 41

		Petrochemicals					
	Oil	Light oil	Dark oil products				
January 1	89.0	26.7	89.0				
February 1	80.7	24.2	80.7				
March 1	91.2	27.3	91.2				
April 1	97.4	29.2	97.4				
May 1	104.6	31.3	104.6				
June 1	110.4	33.1	110.4				
July 1	100.3	30.0	100.3				
August 1	94.1	28.2	94.1				
September 1	90.7	27.2	90.7				
October 1	87.2	26.1	87.2				
November 1	88.3	26.4	88.3				
December 1	90.5	27.1	90.5				

The rates of export duties on oil and petrochemicals in 2019 (USD per ton)

Source: The Resolution of the Government of the Russian Federation; information of the Ministry of Economic Development of the Russian Federation.

Imports customs duties

In compliance with the obligations of the Russian Federation within the frameworks of the WTO, by Decision No.59 of May 28, 2019 of the Eurasian Economic Commission some FEACN positions and the rates of the single customs tariff (SCT) of the Eurasian Economic Union were changed in respect of individual types of goods from September 1, 2019. The rates of import customs duties of the single customs tariff (SCT) of the Eurasian Economic Union are subject to reduction in respect of 135 tariff lines. In respect of 111 tariff lines (individual types of motor transport vehicles and aircraft), the rates were reduced from September 1, 2019, while in respect of 24 tariff lines (fresh, refrigerated and frozen pork), from January 1, 2020. So, the final stage of reduction of duty rates in compliance with Russia's WTO obligations was carried out.

For new cars, the reduction of ad valorem customs duties amounted on average 2 percentage point (from 17 percent to 15 percent), while the specific component shrank on average by euro 0.05 per 1 cm³ of the engine capacity. In respect of second-hand cars, the ad valorem portion of customs duty decreased by 5 percentage point (from 22 percent to 17 percent), while the reduction of the specific component was equal to euro 0.06 per 1 cm³ of the engine capacity. The reduction affected only cars because as regards trucks the transition period in conformity with Russia's obligations to the WTO was over as early as 2017. At present, customs duties in the range of 0–15 percent are in effect in respect of trucks.

According to the data of the Avtostat think tank, despite the reduction of customs duties within the frameworks of the WTO, in the past ten years the volume of imports of second-hand cars in Russia has been falling. If in 2009 imports of such cars amounted to about 500,000 cars, at present they are equal to nearly 50,000 cars and, primarily, in the Far East. It is noteworthy that nearly half of them are specified in documents as dismantled auto parts. Overall, in the first seven months of 2019 the market of second-hand cars amounted to 866,100 cars, a decrease of 1.3 percent as compared with the relevant index of the previous year (877,900 cars).

Tariff rate quotas

By Resolution No. 1134 of August 31, 2019 of the Government of the Russian Federation "On Introduction of Temporary Quantitative Restrictions on Exports of Waste and Ferrous Scrap Outside the Russian Federation to Countries which are not Member-States of the Eurasian Economic Union", quotas on exports of waste and ferrous scrap to countries which were not member-states of the Eurasian Economic Union were introduced from September 1 till the end of 2019. This quota, equal to just over 1 million tons, will be distributed between exporters of scrap metal on the basis of the volume of their exports of scrap metal in 2016–2018 and with the specific of the export region taken into account. One-time licenses will be issued for quota-based exports of scrap metal. The term of the license is set from the day of its actual issue (but not earlier than September 1, 2019).

By Resolution No.1169 of September 7, 2019 of the Government of the Russian Federation on "Introduction of Changes in the Rates of Export Customs Duties on Goods Exported from the Russian Federation Beyond the Territory of Member-States of the Agreement on the Customs Union", the rate of export customs duty was increased to 13 percent within the quota on the Far Eastern timber.

Non-Tariff Regulation

On November 21, 2019, the WTO issued its report on the G20's¹ trade measures taken by the G20 countries in the period of from May 16, 2019 to October 15, 2019. During that period, new trade limitations and growing trade tensions kept increasing uncertainties over the international trade and global economy. During that period, the G20 countries introduced 28 new trade restrictions, that is, mainly increased tariffs, bans on imports and toughening of customs procedures in respect of imports.

It was specified in the report that the volume of the global trade turnover affected by restrictive measures increased by 37 percent (from USD 335,900 billion to USD 460,400 billion).

According to the WTO' findings, all protectionist measures introduced since 2009 affected 8.8 percent of the G20 states' imports. Late in 2018, by estimates, USD 1.3 trillion worth of imports of goods were affected by limitations introduced by the G20 countries in the past ten years, with the G20 states' overall imports amounting to USD 15.1 trillion. As of the end of October 2019, import limitation measured affected USD 1.6 trillion worth of trade, that is, the number of limitations on imports kept growing.

The initiation of antidumping investigations is still the most widely used trade instrument of legal protection which accounts for over 4/5 of all initiations. According to the latest data (January – June 2019), there is growth of 46 percent in the number of antidumping investigations initiated by the G20 countries as compared with the previous six months (July – December 2018). In the past period, the G20 countries initiated 82 antidumping investigations as compared with 56 investigations in the previous six months.

However, in July 2018 – June 2019 as compared with July 2017 – June 2018 the overall level of initiations decreased substantially (from 202 to 138). Such a reduction can be explained by a decrease in the number of investigations initiated by Australia, Argentina, Brazil, India, Indonesia, Canada, China, Mexico, the Russian Federation, Turkey and the United States as compared with July 2017 – June 2018. In the same period, there was growth in the number of investigations initiated by the European Union (from 8 to 11), the Republic of Korea (from 6 to 7) and Saudi Arabia (from 3 to 5).

Metal products accounted for the largest share (about 25–50 percent) of antidumping investigations. In H2 2017, this sector accounted for 22 initiatives, while in H1 2018, for 28; as in H2 2018, the number of initiations fell to 24 in H1 2019. Steel products (Chapter 72 and

¹ The official website of the World Trade Organization. URL: https://www.wto.org/english/news_e/news19_e/trdev_21nov19_e.htm

Chapter 73 of the Harmonized Commodity Description and Coding System) accounted for most investigations (76 out of 102). In many cases, one importing member of the G20 initiated investigations in respect of one and the same steel product simultaneously from different sources: 7 steel products accounted for 30 investigations in these periods. China is still the main target of antidumping investigations in respect of metal products: in the period between July 2018 and June 2019 17 investigations were carried out in respect of Chinese products, then follows the Republic of Korea with 4 initiations and Turkey and Chinese Taipei with 3 initiations each. The US initiated 12 investigations in this sector in July 2018- June 2019 followed by India with 10 initiations and Canada with 8 initiations.

Though antidumping investigations do not necessarily lead to introduction of antidumping measures, growth in the number of initiated investigations can be the evidence of possible growth in the number of applied measures. It is to be noted that both the number of initiated investigations and the number of measures introduced by the economies of the G20 countries decreased from July 2017 – June 2018 to July 2018 – June 2019 from 202 to 138 and from 166 to 121, respectively.

The volume of trade influenced by the G20's liberalization measures fell from USD 379 billion to USD 93 billion. During the period under review, the G20 countries approved 36 new measures aimed at facilitating trade, including cancelation or reduction of import tariffs and export duties. Liberalization related to the expansion in 2015 of the range of goods covered by the WTO Agreement on Information Technologies paved the way to simplification of trade procedures.

Russian goods encounter growing protectionist barriers with each year. As per the data of the Restrictive Measures Register¹, as of December 1, 2018 170 measures limiting Russian goods' access to foreign markets were identified. They are mostly antidumping duties which accounted for 28.2 percent of the total number of the introduced measures; sanitary and phytosanitary (SPS) measures and special protective duties accounted for 18.2 percent and 12.4 percent, respectively (*Table 42*).

Table 42

Restrictive measure	2014	2015	2016	2017	2018	2019
Antidumping duty	40	39	40	43	48	50
Special protective duty	9	15	17	13	21	26
Compensatory duty	-	1	1	1	1	1
TBT measures	9	9	10	15	14	17
SPS measures	3	7	11	17	31	38
Quotas (including tariff quotas)	2	3	3	3	6	4
Discriminating excises	5	4	5	7	5	4
Bans on imports	4	3	4	6	8	9
Threats to introduce measures	5	5	5	8	7	7
Other non-tariff measures	25	24	29	30	29	36
Total	102	110	125	143	170	192

Market protective measures applied by third countries in respect of goods from the Russian Federation

Source: Restrictive Measures Register as of December 1 of the relevant year.

As of 2020, in respect of Russian goods 15 investigations, including 6 antidumping ones, 9 special protective ones, including 2 investigations for national security reasons, 6 revisions of antidumping measures, as well as 2 agreements on suspension of antidumping investigations in the USA (in respect of uranium products and heavy-gage steel) are being carried out.

¹ URL: http://www.ved.gov.ru/mdb/information/database/.

Within the framework of the sanctions policy of the EU, the US, Japan, Ukraine, Switzerland, Norway, Australia, Iceland, Liechtenstein, Montenegro and Albania, the above countries introduced a ban on imports of goods originating from the Crimea and the city of Sevastopol.

In addition, sanctions because of the developments in the Crimea and in the east of Ukraine were introduced against a number of Russian entities and persons by the European Union, the US, Canada, Japan, Ukraine, Switzerland, Norway, Australia, New Zealand, Iceland, Liechtenstein, Montenegro and Albania.

Domestic market protective measures

Application of protective measures in the Eurasian Economic Union is regulated by Articles 48–50 of the Agreement of May 29, 2014 on the Eurasian Economic Union and the Protocol on Application of Special Protective Antidumping and Compensatory Measures against Third Countries (Annex No. 8 to the Agreement on the Eurasian Economic Union). At present, 19 measures aimed at protecting the domestic market are in effect in the EEU (*Table 43*).

Table 43

Position No	Goods	Type of measure	Exporter-country	Expiry date
AD-1	Some types of steel pipes	Antidumping	Ukraine	01.06.2021
AD-8	Polymer coated rolled metal products	Antidumping	China	22.01.2023
AD-11	Cold-deformed weldless stainless steel pipes	Antidumping	China, Malaysia	10.12.2023
AD-7	Forged steel rolls for rolling mills	Antidumping	Ukraine	25.02.2020
AD-15	Citric acid	Antidumping	China	09.04.2020
AD-14	Rust-resisting steel kitchen and table-ware	Antidumping	China	18.06.2020
AD-16	Steel weldless pipes used for drilling and operation of oil and gas wells	Antidumping	China	22.09.2020
AD-17	Tracked bulldozers	Antidumping	China	11.12.2020
AD-18	Truck tires	Antidumping	China	17.12.2020
AD-19	Steel all-rolled wheels	Antidumping	Ukraine	21.01.2021
AD-21	Stainless steel pipes	Antidumping	Ukraine	25.02.2021
AD-13	Wire rods	Antidumping	Ukraine	29.04.2021
AD-20	Ferrosilicon manganese	Antidumping	Ukraine	27.10.2021
AD-22	Angle iron	Antidumping	Ukraine	02.07.2022
AD-3	Rolling bearings	Antidumping	China	20.08.2023
AD-9	Graphitized electrodes	Antidumping	India	24.09.2023
AD-24	Cast-aluminium wheels	Antidumping	China	27.04.2024
AD-23	Weedkillers	Antidumping	EU	19.07.2024
SG-10	Some types of rolled metal products	Special protective	All	30.11.2020

The EEU's domestic market protective measures

Source: URL: http://www.eurasiancommission.org/ru/act/trade/podm/mery/Pages/default.aspx.

On December 3, 2019, the Board of the Eurasian Economic Commission (EEC) introduced antidumping duties on zinc-coated rolled products from China and Ukraine and weldless pipes from China. By Resolution No.209 of the Board of the Eurasian Economic Commission (EEC), antidumping duties in the range of 12.69 percent to 23.9 percent of the customs value were introduced for five years in respect of zinc-coated rolled products from China and Ukraine. The Decision will become effective 30 calendar days after the day of its official publication.

By Resolution No.218 of the Board of the Eurasian Economic Commission (EEC), an antidumping duty of 15.5 percent of the customs value was introduced for five years in respect of weldless circular cross-section pipes imported from China to the Eurasian Economic Union. The Decision will become effective on February 1, 2020.¹

¹ The official website of the Eurasian Economic Commission. URL: http://www.eurasiancommission. org/ru/nae/news/Pages/03-12-2019-2.aspx.

Technical regulation

At its meeting on December 3, 2019, the Board of the Eurasian Economic Commission (EEC) introduced a number of changes into the Program of Development of Interstate Standards to the Union's Technical Regulations "On Safety of Toys". These changes envisage the development of seven interstate standards based on the ISO international standards (the International Organization for Standardization), IEC standards (International Electrotechnical Commission) and EN (European norms). Also, it is planned to develop the new interstate standard – "the Guidelines for Age Determination" – in which recommended criteria for determination of the minimum age of a child whom the toy is meant for are to be specified.

The Board of the Eurasian Economic Commission (EEC) updated the lists of standards to the Union's technical regulations "On the Safety of Small Vessels". The list includes interstate standards developed in compliance with the Program of Development of Interstate Standards instead of previous ISO standards.

Changes were introduced into the form of single veterinary health certificates on controlled goods imported to the EEU from third countries. There is no need now to prove that imported animals are not genetically related with the livestock from countries with unfavorable spongiform encephalopathy situation. The update of the form of the veterinary health certificate will facilitate trade in goods liable to veterinary control (supervision) and harmonization of the EEU's regulatory statutory acts with international recommendations. The earlier issued veterinary certificates are valid till December 1, 2020.

Bans and import limitations

By the Executive Order of June 24, 2019 of the President of the Russian Federation "On Extension of Individual Special Economic Measures to Ensure Security of the Russian Federation", retaliatory restrictive measures against the European Union in terms of a ban on imports to Russia of some types of agricultural products, primary products and food products from countries which introduced sanctions against Russia were extended till December 31, 2020.

4.10. Russia's participation in the WTO disputes¹

The trade dispute settlement mechanism is applied by the WTO under the Understanding on Rules and Procedures Governing the Settlement of Disputes (DSU).² Russia, as a member of the WTO, enjoys the right to protect her trade interests by means of this instrument. The dispute settlement procedure applied by the WTO consists of five main successive stages:

- *bilateral consultations* (within 60 days from the moment of filing a request for consultations);
- *establishment of a panel* at the request of any of the parties to a dispute and appointment of panel experts to examine the facts of the case (within 45 days of the request to establish a panel);

¹ This section was written by: *Baeva M.A.*, researcher at the RANEPA Center for International Trade Research, and *Knobel A.Yu.*, Candidate of science (Economics), Director of the RANEPA Center for International Trade Research, Director of the Institute for International Economics and Finance of the RFTA.

² URL: https://www.wto.org/english/tratop_e/dispu_e.htm.

- panel examination (within 6–9 months after its establishment), presentation of its report to the Dispute Settlement Body (DSB), and issuance of recommendations by the DSB (approximately 60 days from the moment of report presentation by the panel);
- case examination by the Appellate Body (AB), if one of the parties chooses to appeal against the panel report (60–90 days from the moment of filing an appeal), adoption of the report by the Appellate Body of the DSB, and issuance by the DSB of its recommendation to the parties (30 days from the moment of presentation of the Appellate Body's report);
- *control, by the DSB,* of the implementation of its recommendations (not later than 15–18 months after the adoption by the DSB of a report presented by a panel or the Appellate Body).

Russia has been actively participating in the dispute settlement system handled by the WTO. As of the year-end of 2019, Russia had been involved in a total of 96 disputes: in 8 disputes as a complainant, in 9 disputes as a respondent, and in 79 disputes as a third party. In 2019, Russia became a party to 13 new trade disputes in the framework of the WTO: in one as a complainant, and in 12 – in the role of a third party. In 2019, two disputes that Russia was a main party to (DS493 (complainant), DS512 (respondent)) underwent their key stages – Russia won both these disputes over Ukraine (see *Table A-1 in the Annex*).

In the majority of cases Russia is either a complainant or respondent in the WTO disputes with the EU, Ukraine, and the USA. As a complainant, Russia is concerned in the main with anti-dumping investigations and anti-dumping measures, in particular in metallurgy and the chemical industry. Complaints against Russia in the framework of the WTO are filed by its members with respect to the following issues: technical barriers to trade; sanitary and phytosanitary measures; anti-dumping measures; investment measures influencing trade; tariffs; transit restrictions.

As a third party, Russia usually joins the disputes that focus on the products of metallurgy, agriculture, the food industry, the automotive and aircraft industries, as well as renewable energy sources, and lumber and wood products. Special focus is made on those disputes that address anti-dumping investigations and the resulting anti-dumping measures, and also subsidies and countervailing measures. Russia's participation as a third party is usually motivated not only by a strong trade-related interest, but also by the need to gain practical experience of participating in disputes addressing specific themes (in particular, anti-dumping, countervailing and safeguard measures, and underlying investigations), a systemic interest in the procedures governed by the norms and rules of the WTO, and sometimes Russia sides with the respondent (as a rule, with respect to issues of human and animal health protection).

We believe that special emphasis should be put on the crisis of the multilateral trade system (MTS), primarily the WTO, which has been apparent for years. The mechanism for resolving trade disputes by the WTO is still plagued by serious problems. These problems are as follows: first, the extremely slow pace of the dispute settlement process; failure to comply with the time limit recommended for the completion of one or other stage of dispute settlement; second, the member selection crisis of the WTO Appellate Body, whose resolution has been repeatedly blocked by the USA, which has led to an effective paralysis of the WTO Appellate Body. As of the end of 2019, the WTO Appellate Body had had 10 appeals submitted thereto. By then, the second terms for two of the remaining three members had expired (in 2018 and 2019), and thus, in late 2019, the WTO Appellate body was reduced to just one member (from China), whose term will expire on 30 November 2020. The USA has long been blocking the replacement of any of the members of the WTO Appellate Body and rejected numerous

proposals to launch the selection process to fill the remaining vacancies (thus putting the WTO dispute settlement system in a complicated situation where the WTO Appellate Body had to effectively suspend its activities), on the pretext that the WTO dispute settlement system, including the WTO Appellate Body, is in dire need of a cardinal reform. According to the USA, the WTO Appellate Body has persistently overreached and failed to comply with the WTO rules, 'has altered WTO Members' rights and obligations through erroneous interpretations of WTO agreements', and failed to comply with the established timeframe for considering an appeal.¹ As a result of the suspension of the WTO Appellate Body's activities, the WTO dispute settlement mechanism has been put at risk of losing its ability to assess the activities of panels, while parties to disputes will become unable to appeal against their decisions. This state of affairs could give rise to a situation where WTO members will be increasingly resorting to trade protection and refraining from complying with the DSB's decisions, while their opponents, in their turn, will undertake retaliatory measures. Many WTO members are in agreement on the need to reform the WTO. Russia not only opposes any violation of WTO rules and regulations, but also proclaims her devotion to the multilateral system and adherence to the principle of its strengthening and reforming.

Some countries are engaged in trade negotiations or have already concluded bilateral agreements that will enable them to efficiently operate within the framework of the WTO. Thus, such negotiations are currently taking place between Russia and the EU.²

The WTO dispute settlement mechanism remains an important instrument for combating protectionist measures. So far, slightly more than half of all disputes have been settled in one or other way, but they by no means always result in the measures at issue being abolished. Sometimes, the outcome of a dispute is such that no further action is required from the respondent, or a complainant requests that retaliatory measures should be imposed if the respondent fails to comply with the DSB's recommendations.

As a rule, a dispute handled by the WTO centers around certain claims, some of which can be upheld by the DSB, while others be denied. The measures may be either specific (e.g., an anti-dumping measure imposed on a certain product) or systemic (e.g., a specific practice of enforcing anti-dumping measures). And this should be taken into consideration when assessing the victory or defeat of parties in a dispute.

There have already been some occasions when Russia had to make her measures consistent with WTO norms and rules – for example, in the dispute, initiated by the EU concerning the tariff treatment of certain agricultural and manufacturing products, when Russia applied ad valorem duty rates in excess of the bound rates set at the time of her accession to the WTO (DS485).

There still remain some serious problems that have to do with the WTO trade dispute settlement mechanism (lengthy procedure, absence of any compensation mechanism that could be applied during the period preceding the issuance of a panel ruling, the crisis currently being experienced by the WTO Appellate Body, etc.). Some members (including Russia and the EU) are negotiating or already actually signing bilateral dispute settlement agreements in the framework of the WTO. Besides, some alternative methods of settling trade disputes are being discussed.

¹ For more details on the crisis of the WTO Appellate Body, see Monitoring of Relevant Events in International Trade. 2019. No 43 (February). URL: https://www.vavt-imef.ru/wp-content/uploads/2020/02/Monitoring 43.pdf.

² URL: https://tass.ru/ekonomika/7073958.

The cases when the decisions and recommendations of the DSB are not complied with by complainants (particularly the USA) are becoming increasingly frequent, and so the number of requests filed by complainants to the effect that concessions and other obligations to a respondent should be suspended has also been increasing.

4.10.1. The progress, in 2019, of the trade disputes handled by the WTO where Russia has acted as complainant

In 2019, Russia filed one new complaint with the DSB – against the USA concerning antidumping measures on carbon-quality steel from Russia (DS586).¹

DS493: Ukraine – Anti-dumping measures on ammonium nitrate (Russia)

On May 7, 2015, Russia filed with the WTO a request for consultations with Ukraine in respect of the Ukrainian anti-dumping measures on ammonium nitrate imports from Russia.² In summer 2018, the panel presented its report whereby it was established that Ukraine had conducted anti-dumping investigations in violation of WTO norms and rules: Ukraine rejected the information of producers on electric energy prices in Russia, using instead price information from third countries (i.e., resorted to 'energy cost adjustments'). The fact that the panel's decision in that dispute was in favor of Russia has created an important precedent for the other similar disputes between Russia and the EU concerning 'energy cost adjustments' (DS474, DS494 and DS521).

On 23 August 23, 2018, Ukraine appealed to the WTO Appellate Body certain issues of law and legal interpretations in the panel report, and on September 12, 2019 the Appellate Body report, where the panel findings were upheld, was circulated to Members. On September 30, 2019, the DSB adopted the Appellate Body report and panel report, issuing recommendations that Ukraine's measures should be made consistent with the norms and rules of the WTO. On October 28, 2019, Ukraine informed the DSB that it intended to implement the DSB's recommendations and rulings in that dispute, and that it would need a reasonable period of time to be determined through binding arbitration pursuant to Article 21.3(c) of the DSU (Surveillance of Implementation of Recommendations and Rulings).

DS521: EU – Anti-dumping measures on certain cold-rolled flat steel products from Russia (Russia)

On January 27, 2017, Russia requested consultations with the EU concerning anti-dumping measures imposed by the EU on Russian imports of certain cold-rolled flat steel products.³ This is an example of Russia disputing the practice of 'energy cost adjustments' in the course of antidumping investigations when the information of Russian producers is replaced by price information from third countries, in spite of the fact that the EU has recognized Russia's status as a market economy.

On March 13, 2019, Russia requested the establishment of a panel, and on April 26, 2019 such a panel was set up. China, India, Japan, the Republic of Korea, Saudi Arabia, Ukraine and the USA joined the dispute as third parties, some of them siding with the complainant, while the others (e.g., Ukraine, which had had a similar dispute with Russia concerning 'energy cost

¹ URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds586_e.htm.

² URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds493_e.htm.

³ URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds521_e.htm.

adjustments' (DS493), which Russia won in late September 2019) – with the respondent. As of late 2019, the dispute undergoes the stage of panel expert appointment.

DS554: USA – Certain measures on steel and aluminum products (Russia)

On June 29, 2018, Russia filed with the DSB a request for consultations with the USA concerning the protective measures on steel and aluminum products imposed in spring 2018.¹ Russia claimed that the USA acted contrary to the WTO's principle of the MFN, introduced restrictions other than duties, taxes or other charges, made effective through quotas, on the importation of products, failed to produce reasoned conclusions and properly substantiate safeguard measures, failed to give notice in writing to the WTO in advance, and failed to afford an opportunity for consultations; besides, the USA acted inconsistently with the Agreement on Safeguards, because the measures were introduced without a preliminary investigation and a published reports on its results and conclusions.² The USA claimed that the disputed measures are not safeguards, citing the national security exceptions in Article XXI of the GATT 1994.

In 2017, 13% of Russian steel and aluminum exports went to the USA, while Russia's share in US imports was 32%.³ Disputes on similar issues were initiated against the USA by China (DS544), India (DS547), the EU (DS548), Canada (DS550), Mexico (DS551), Norway (DS552), Switzerland (DS556), and Turkey (DS564), and Russia joined most of them as a third party (more on this will be said later).

On November 21, 2018, a panel was established, which began the examination process in late January 2019. The panel expects to issue its final report no earlier than autumn 2020.

DS586: USA – Anti-dumping measures on carbon-quality steel from Russia (Russia)

On July 5, 2019, Russia filed with the DSB a request for consultations with the USA regarding the anti-dumping measures imposed by the USA on Russian hot-rolled flat-rolled carbon-quality steel products. Russia claimed that the US measures were inconsistent with the Anti-Dumping Agreement because the USA:⁴

- failed to determine an individual dumping margin for each known exporter or producer concerned of the product under investigation and instead relied on 'all others' rate;
- failed to calculate the costs of production of the product under consideration;
- failed to properly review the need for continued imposition of the anti-dumping duties and to terminate the duties that were not necessary to offset dumping;
- extended the measures at issue relying on flawed dumping margins and on erroneous likelihood of recurrence or continuation of dumping determinations;
- refused to rely on information provided by Russian exporters, whereas the conditions to resort to facts available were not met.

The measure at issue had been imposed from July 12, 1999. After adjustment, over the period from September 16, 2016 through September 15, 2021, an anti-dumping duty rate of 73.59% should have been applied to PAO Severstal, and 184.56% to the other Russian exporters;

¹ URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds554_e.htm.

² For further details, see Monitoring of Relevant Events in International Trade. 2018. No 15 (July). URL: http://www.vavt.ru/materials/site/ff38dff389dbda77432582db00452f9e/\$file/Monitoring_15.pdf.

³ UN COMTRADE database. URL: http://comtrade.un.org/.

⁴ URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds586_e.htm.

however, from January 5, 2017 the same anti-dumping duty rate of 184.56% has been established for all Russian companies.¹

4.10.2. The progress, in 2019, of the trade disputes handled by the WTO where Russia has acted as respondent

No new complaints against Russia were filed with the DSB in 2019.

DS512: Russia – Measures concerning traffic in transit (Ukraine)

On September 14, 2016, Ukraine filed with the DSB a request for consultations with Russia regarding alleged multiple restrictions on traffic in transit from Ukraine through RF territory to third countries (countries in Central/Eastern Asia and the Caucasus).² In summer 2016, Russia introduced requirements that all international cargo transit by road and rail from the territory of Ukraine destined for the Republic of Kazakhstan or the Kyrgyz Republic, through the territory of the Russian Federation, be carried out exclusively from the Belarus-Russia border, and comply with a number of additional conditions related to identification seals and registration cards at specific border control points, the application of special identification means (seals), including those functioning on the basis of the technology of global satellite navigation system GLONASS, and the use of certain registration cards for drivers when entering and leaving the RF territory. Additionally, Russia imposed a ban on all road and rail transit of goods which were subject to non-zero import duties according to the Common Customs Tariff of the EEU, as well as of goods falling under the import ban.³

Ukraine claimed that the measures at issue were introduced by Russia since the application of the EU – Ukraine Deep and Comprehensive Free Trade Area (from January 1,2016); those measures were inconsistent with the WTO provisions on freedom of transit because, by imposing a ban on transit of certain goods, Russia denied freedom of transit through its territory via the routes most convenient for international transit, for traffic in transit from the territory of Ukraine, and because it made distinctions based on the place of origin, departure, entry, exit or destination. Russia failed to accord to traffic in transit from the territory of Ukraine treatment no less favorable than the treatment accorded to traffic in transit from any third country. Ukraine complained that the relevant normative legal acts concerning the measures at issue had not been published promptly in such a manner as to enable the Ukrainian Government and traders to become acquainted with them. Ukraine believed that those measures were inconsistent with the WTO provisions on general elimination of quantitative restrictions, as well as the Protocol on the Accession of the Russian Federation to the WTO. According to Ukraine, after the measures that restricted traffic in transit had been introduced, the volume of trade between Ukraine and countries in Central/Eastern Asia and the Caucasus over the period of January - June 2016 shank by 35.1% relative to the corresponding period of 2015.

On February 9, 2017, Ukraine requested the establishment of a panel. At its meeting on March 21, 2017, the DSB set up such a panel. The panel examination started from November 17,

¹ Monitoring of Relevant Events in International Trade. 2019. No 35 (September). URL: https://www.vavt-imef.ru/wp-content/uploads/2019/09/Monitoring_35.pdf.

² URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds512_e.htm.

³ Executive Order of the President of the Russian Federation No. 1 dated January 1, 2016 'On measures to ensure economic security and national interests of the Russian Federation in international cargo transit from the territory of Ukraine to the territory of the Republic of Kazakhstan through the territory of the Russian Federation', with corresponding amendments.

2017, and on April 5, 2019, the panel report was circulated, where the panel upheld Russia's position.¹ Russia asserted that the measures were among those that it considered necessary for the protection of its essential security interests, which it took in response to the emergency in international relations that occurred in 2014, and which presented threats to Russia's essential security interests. Russia therefore invoked the provisions of Article XXI(b)(iii) ('Security Exceptions') of the GATT 1994.

The panel found that WTO panels have jurisdiction to review aspects of a Member's invocation of Article XXI(b)(iii), and that Russia had met the requirements for invoking Article XXI(b)(iii) in relation to the measures at issue. Based on the particular circumstances affecting relations between Russia and Ukraine, the panel determined from the evidence before it that the situation between Ukraine and Russia since 2014 was an 'emergency in international relations'. The panel also determined that the challenged transit bans and restrictions were taken in 2014 and 2016, and therefore were 'taken in time of' this 2014 emergency.

The panel found that 'essential security interests' could be generally understood as referring to those interests relating to the quintessential functions of the state. The panel observed that the specific interests at issue will depend on the particular situation and perceptions of the state in question and can be expected to vary with changing circumstances. For these reasons, the panel held that it is left in general to every Member to define what it considers to be its essential security interests, and that it was for a Member itself to decide on the 'necessity' of its actions for the protection of its essential security interests.

The panel considered that the 2014 emergency said to threaten Russia's essential security interests was very close to the 'hard core' of war or armed conflict. In these circumstances, the panel was satisfied of the veracity of Russia's designation of its essential security interests, upheld Russia's right for exception from the rules of the WTO, and did not consider it necessary to address Ukraine's claims of violation. An appeal against the panel ruling was not filed. Over the course of the dispute settlement procedure, Russia was extending the period of restrictions by means of repeatedly issued executive orders of the President. From July 1, 2019, Executive Orders No 1 of the President, dated January 1, 2016 was no longer in force,² and traffic in transit from Ukraine through Russian territory was permitted on condition that goods be shipped by automobile or railway transport with special identification means (seals) functioning on the basis of the technology of global satellite navigation system GLONASS.³ So, the WTO does not consider national security issues. However, a panel may assess, on receiving a corresponding request, the lawfulness of a member of the WTO invoking a security exception. The panel ruling has established a precedent for interpreting Article XXI ('Security Exceptions') of the GATT 1994, which does not prevent members of the WTO from taking any action 'for the protection of its essential security interests... in time of war or other emergency in international relations'; previously, no such interpretation had ever been referred to.

According to Maxim Oreshkin, Russia's then Minister for Economic Development, the panel ruling in the dispute initiated by Ukraine against Russia is very important, among other things, from the point of view of settling Russia's trade disputes with the USA, the latter having raised the duties on steel and aluminum products, citing the provisions of Article XXI of the GATT. In June 2018, several countries, Russia including (DS554), filed their requests for consultations

¹ Monitoring of Relevant Events in International Trade. 2019. No 27 (April) URL: http://www.vavt.ru/materials/site/658fe4e4867c8bb7432583d90027106f/\$file/Monitoring_27.pdf.

² URL: http://docs.cntd.ru/document/420327325.

³ URL: http://docs.cntd.ru/document/564085014.

with the DSB. The Minister also noted that Russia's victory in this dispute is of high systemic importance for the future reform of the WTO.¹

DS566: Russia – Additional duties on certain products from the United States (USA)

On August 27, 2018, the USA filed with the DSB a request for consultations with Russia concerning the introduction of import tariffs on some types of products manufactured in the USA.² The USA argued that these measures were inconsistent with WTO norms and rules, because Russia did not impose the additional duties measure on like products originating in the territory of any other WTO member, and also granted the USA a less favorable regime than that set out in Russia's schedule of concession. In accordance with RF Government Decree No. 788 dated July 6, 2018, from August 2018 onwards Russia raised the rates of import customs duties on forklift trucks and other trucks equipped with lifting or loading-unloading devices, graders, tamping machines, tools for cutting optical fiber, etc. The new customs duty rates amount to 25, 30 and 40 percent of customs value, depending on product type. According to the RF Ministry of Economic Development, Russia was acting in the framework of the Agreement on Safeguards, having introduced those measures by way of compensating for the injury resulting from the US safeguard measures against the importation of steel and aluminum products from other countries, Russia including. The USA noted that these were not safeguard measures, and so did not fell within the scope of the Agreement on Safeguards. Similar requests were filed by the USA against Canada (DS557), China (DS558), the EU (DS559), Mexico (DS560), Turkey (DS561), and India (DS585), and Russia joined those disputes as a third party. The said countries raised their customs tariffs on certain US products in response to the safeguard measures introduced by the USA against steel and aluminum imports. Previously, these measures imposed by the USA had already been disputed with the WTO by some countries, Russia including (DS554) (see the section on the trade disputes here Russia has acted as complainant).³

On November 22, 2018, the USA filed a request for the establishment of a panel, which was set up accordingly on December 18, 2018. From late January 2019, the panel examination was launched, and the panel expects to issue its final report in H2 2020.

4.10.3. The progress, in 2019, of the trade disputes handled by the WTO where Russia has acted as third party

From the moment of its accession to the WTO, Russia has already participated in 79 disputes as a third party. About 30% of these disputes have already been settled; in 35% of disputes, the main dispute settlement procedures have been completed; and in 4% of disputes, the DSB ruled in favor of the respondent (DS458, DS467, DS487). The classification of the main themes of disputes where Russia claimed its status of a third party is presented in the Annex (*Table A-2*). The following themes are singled out: a ban or restrictions on imports; safeguard investigations and measures (anti-dumping or countervailing measures and safeguards); restrictions on exports; intellectual property rights; subsidies (including those related to tax exemptions and other preferential treatments); tariffs and tariff-rate quotas; and economic sanctions. Overall,

¹ Monitoring of Relevant Events in International Trade. 2019. No 27 (April). URL: http://www.vavt.ru/materials/site/658fe4e4867c8bb7432583d90027106f/\$file/Monitoring_27.pdf.

² URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds566_e.htm.

³ Monitoring of Relevant Events in International Trade No 16 (September) 2018. URL: http://www.vavt.ru/materials/site/e8f1eec062f6adde43258306004d0d6f/\$file/Monitoring_16.pdf.

Russia has joined the following trade disputes initiated by the USA (15 out of 79 disputes), China (9 disputes), the EU (8 disputes), and Japan (7 disputes). EC (6 disputes), as well as Canada and the Republic of Korea (4 disputes each); and those initiated against the USA (25 disputes), China (11 disputes), the EU (8 disputes), Australia and Canada (4 disputes each). Russia's role as a third party is usually motivated not only by a significant trade-related interest, but also by practical considerations related to certain specific issues and by systemic considerations that have to do with the implementation of certain norms and rules of the WTO. It sometimes so happens that formally different disputes that have been initiated by different complainants focus on one and the same measure imposed by the respondent (later, we are going to discuss some 'unique cases' – these are 56 out of 79 disputes). As far as the products at issue are concerned, Russia has joined, most frequently, the disputes that have to do with measures addressing agriculture and the food industry (13 out of the 56 'unique cases'), metallurgy (11), machine-building (6), and the chemical industry and renewable energy sources (4 cases each).

As far as the agreements covering the disputes where Russia acted as a third party are concerned (one dispute is usually covered by several agreements), their by-theme distribution is shown in *Fig. 54* (only 'unique' disputes were selected – that is, the duplication of those measures that gave rise to several disputes was removed). The majority of these disputes have to do with the GATT, the Anti-Dumping Agreement, and the Agreement on Subsidies and Countervailing Measures (ASCM). Besides, Russia's concerns also targeted inconsistencies with the Agreement Establishing the WTO and the Agreement on Safeguards.

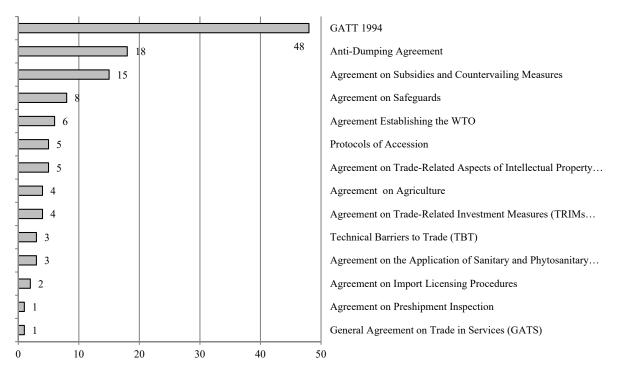


Fig. 54. The themes of WTO disputes where Russia acted as a third party

Source: own compilation based on data published on the WTO's official website: URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds462_e.htm.

First of all, let us review the changes that occurred over the past year in the 22 unique disputes that Russia had joined as a third party prior to 2019.

DS437: United States – Countervailing duty measures on certain products from China

In late May 2012,¹ China initiated a dispute against the USA regarding the countervailing measures that affected Chinese products. China claimed that it encountered various difficulties when trying to access the results of investigations by USA that had served as the grounds for US countervailing measures against China. China cited approximately 20 such investigations conducted by the USA and targeting in the main the products of metallurgy and the steel industry (for example, tubes and pipes, steel wheels, steel wire, etc.). China believed that the USA acted on an incorrect allegation that state-owned enterprises were 'public bodies' that were conferring countervailable subsidies through their sales of inputs to downstream producers. Besides, China pointed out that the US Department of Commerce (USDOC) initiated its investigation based on erroneous findings, in particular it failed to provide sufficient evidence that the subsidy would be specific for a given enterprise or industry. Also, the USDOC improperly calculated the alleged amount of benefit based on the prevailing market conditions in China. China won the dispute - it was recommended that the measures at issue should be made properly consistent by April 1, 2016. From late July 2016, the panel examined the implementation, by the respondent, of the DSB's recommendations, and issued its report in late March 2018. The USA and China both appealed against the panel ruling. On July 16, 2019 the WTO Appellate Body circulated its report, where it generally upheld the panel findings. The Appellate Body found that the panel correctly assessed the scope of the measures falling within its terms of reference in these proceedings. The Appellate Body upheld the panel's conclusions that Article 1.1(a)(1) (Definition of a Subsidy) of the Agreement on Subsidies and Countervailing Measures (SCM Agreement) does not prescribe a connection of a particular degree or nature that must necessarily be established between an identified government function and the particular financial contribution at issue. The Appellate Body also upheld the panel's finding that the USDOC's public body determinations at issue were not based on an improper legal standard.

The Appellate Body upheld the panel's finding that Article 14(d) (Calculation of the Amount of a Subsidy in Terms of the Benefit to the Recipient) of the SCM Agreement does not limit the possibility of resorting to out-of-country prices to the situation in which the government effectively determines the price at which the good is sold.

The Appellate Body found that there may be different ways of demonstrating that prices were actually distorted, including a quantitative assessment, price comparison methodology, a counterfactual, or a qualitative analysis. While evidence of direct impact of government intervention on prices may make a finding of price distortion likely, evidence of indirect impact may also be relevant. At the same time, establishing a nexus between such indirect impact of government intervention and price distortion may require more detailed analysis and explanation. Independently of the method chosen by the investigating authority, it had to adequately take into account the arguments and evidence supplied by the petitioners and respondents, together with all other information on the record, so that its determination of how prices in the specific markets at issue were in fact distorted as a result of government

¹ URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds437_e.htm.

intervention be based on positive evidence. The WTO Appellate Body considered that the panel's reasoning was consonant with its interpretation of Article 14(d).

The Appellate Body found that the United States had not established that the panel erred in its interpretation and application of Article 14(d) of the SCM Agreement in finding that the USDOC had failed to explain, in the OCTG, Solar Panels, Pressure Pipe, and Line Pipe Section 129 proceedings, how government intervention in the market resulted in domestic prices for the inputs at issue deviating from a market-determined price.

The WTO Appellate Body ruled that, in its reasoning, the panel rightly contrasted the USDOC's failure to explain 'systematic activity ... regarding the existence of an unwritten subsidy program' with information before the USDOC merely indicating 'repeated transactions'. The Appellate Body upheld the panel's finding that the United States acted inconsistently with Article 2.1(c) of the SCM Agreement in 11 proceedings at issue in this dispute. In mid-August 2019, the DSB adopted the Appellate Body report and the panel report, as upheld by the Appellate Body.

On October 17, 2019 China requested the authorization of the DSB to suspend concessions or other obligations pursuant to Article 22.2 of the DSU on the grounds that the USA had failed to comply with the DSB's recommendations and rulings within the reasonable period of time provided in agreed procedures under Articles 21 (Surveillance of Implementation of Recommendations and Rulings) and 22 (Compensation and the Suspension of Concessions) of the DSU (sequencing agreement). On October 25, 2019, the USA informed the DSB that it objected to China's proposed level of suspension of concessions. At the DSB meeting on October 28, 2019, the matter was referred to arbitration pursuant to Article 22.6 of the DSU.

Russia's concerns associated with this dispute can be explained not only by the significant commercial interests (trade in the products of metallurgy and steelmaking), but also the need to gain practical experience of participating in disputed regarding subsidies and countervailing measures (including during the stages of panel examination and control, by the DSB, of compliance with its recommendations) and to study the legal enforcement practices of the WTO with regard to subsidies (in particular, *prohibited subsidies*); this matter interests Russia from the point of view of supporting domestic producers in compliance with the norms and rules of the WTO. Also of interest are the WTO Appellate Body's conclusions concerning the USDOC's public body determinations and the USDOC's failure to explain 'systematic activity ... regarding the existence of an unwritten subsidy program' when determining the specificity of *subsidies*.

DS471: USA – Certain methodologies and their application to anti-dumping proceedings involving China (China)

In late 2013, China filed with DSB a request for consultations with the USA regarding the 'zeroing' methodology¹ that the USA used in its anti-dumping investigations (as a basis for its request, China included a total of 25 different products from China).² China claimed that the methodology was inconsistent with the Anti-Dumping Agreement in that it incorrectly determined the fact and evidence of dumping and led to incorrect calculation and levying of anti-dumping duties. The panel upheld nearly all of the claims presented by China. In May

¹ A weighted average export price that was above or equal to a weighted average normal value was treated as zero, thus being disregarded when determining a margin of dumping for the product as a whole, and so the margin was inflated.

² URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds471_e.htm.

2017, the DSB, having adopted the Appellate Body's report, recommended that the USA should make its measures properly consistent by August 22, 2018.

On 9 September 2018, China requested DSB authorization to suspend concessions or other obligations to the United States with respect to trade in goods in the amount of USD 7.043 billion, arguing that this was equivalent to the level of nullification or impairment caused by the USA' failure to implement the DSB recommendations and rulings. The USA informed the DSB that it objected to China's proposed level of suspension of concessions. In late September 2018, the matter raised by the USA was referred to arbitration; the arbitrator was composed by the original panel members. In early November 2019, the decision by the arbitrator was used to Members. It was determined that the level of nullification or impairment was USD 3.579 billion. The arbitrator concluded that, in accordance with Article 22.4 of the DSU (Compensation and the Suspension of Concessions), China may request authorization from the DSB to suspend concessions or other obligations at a level not exceeding USD 3.579 billion annually.¹

Anti-dumping investigations and anti-dumping measures are at issue in the majority of disputes initiated by Russia, thus underlining Russia's systemic interest in such matters. In April 2017, the USA initiated an anti-dumping investigation against imports of hot-rolled bars originating in Russia. Therefore, the anti-dumping investigation methodologies applied by the USA are causing concern for Russia – thus, in July 2019 Russia filed with the DSB a complaint against the anti-dumping measures imposed by the USA on the hot-rolled flat-rolled carbon-quality steel products supplied by Russian companies (DS586).

DS472, DS497: Brazil – Certain measures concerning taxation and charges (EU, Japan)

In 2013, the EU² and in 2015, Japan³ filed with the DSB a request for consultations with Brazil regarding the provision of government subsidies. According to the complainants, by means of establishing certain government programs in the automotive and electronics sectors, Brazil provided preferences and support to domestic producers and exporters (in particular, tax advantages conditioned to the use of domestic intermediate goods and export contingent subsidies), which was inconsistent with one of the core principles maintained by the WTO – that of 'national treatment'. Overall, the panel upheld the complainants' claims to Brazil and recognized the measures at issue to be inconsistent with the WTO norms. The panel determined that the discriminatory aspects of the government programs could indeed conduce to the establishment of competitive and sustainable domestic industry capable of supplying the domestic market. However, Brazil did not demonstrate that such measures were indeed necessary for capacity-building of suppliers, because imports were not taken into consideration. The panel concluded that the alternative approaches (such as non-discriminatory subsidies or lowered trade barriers for imports of digital television transmitters) suggested by the complainant were not inconsistent with the WTO norms and were more compatible with the declared goals.

In autumn 2017, Brazil and the EU appealed against the panel ruling. On December 13, 2018, the AB presented its report. The WTO Appellate Body agreed with the panel's conclusions that the government tax incentive programs for the automotive and electronics sectors were discriminatory in some of their aspects and inconsistent with the GATT 1994 and

¹ URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds471_e.htm.

² URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds472_e.htm.

³ URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds497_e.htm.

the TRIMs Agreement. The Appellate Body concluded that none of the measures at issue in the dispute could be justified within the meaning of Article III:8 (b) of the GATT 1994 (National Treatment on Internal Taxation and Regulation). The Appellate Body reversed the panel's findings that the tax suspensions granted to registered or accredited companies under the government programs constituted financial contributions in the form of export subsidies. As for the import substituting subsidies, the Appellate Body upheld the panel findings for some programs, while reversing the findings for other programs. The Appellate Body reversed the panel's conclusions that Brazil withdrew the prohibited subsidies found to exist within 90 days because the underlying reasoning was not related to the specific circumstances of this case.

At its meeting in early January 2019, the DSB adopted the Appellate Body report and the panel reports, as modified by the Appellate Body report. On February 20, 2019, the EU and Brazil informed the DSB that they were conducting consultations with respect to the reasonable period of time within which Brazil should comply with the DSB's recommendations and rulings. On May 10, 2019, the EU and Brazil informed the DSB that they had agreed that the reasonable period of time for Brazil to implement the DSB's recommendations and rulings would be 11 months and 20 days, set to expire on 31 December 2019. In their communication, the EU and Brazil noted that with regard to the subsidies that were found to be prohibited, they had agreed that the time-period within which such measures must be withdrawn would be five months and 10 days. This time-period expired on 21 June 2019.

This dispute is of interest to Russia from the point of view of taxation practices and the settlement of disputes arising in this connection. The participation in this dispute is also important for Russia in the context of providing support to domestic producers and granting subsidies in compliance with the norms and rules of the WTO, with correct understanding of the issue of prohibited subsidies.

DS484: Indonesia – Measures concerning the importation of chicken meat and chicken products (Brazil)

In October 2014, Brazil filed with the DSB a request for consultations with Indonesia concerning the restrictive administrative procedures and measures on the importation of chicken meat and chicken products to the Indonesian poultry market.¹ Brazil complained of the non-approval, by Indonesia, of the provided health certificate; of the imposition of a non-automatic import licensing regime to Brazilian imports; of the requirement of a prior recommendation from the Indonesian Ministry of Agriculture for the product imports at issue, the imposition of transit restrictions, etc. On November 17, 2017, the DSB adopted the panel report and issued recommendations that Indonesia should bring its measures into conformity with its WTO obligations. In June 2019, Brazil requested the establishment of a compliance panel. The DSB agreed to refer the matter to the original panel. Australia, Canada, China, the EU, India, Japan, Korea, New Zealand, Norway, Russia, Saudi Arabia, and the USA reserved their third-party rights.

Russia does not export chicken meat and chicken product to Indonesia, probably because of the restrictions on imports imposed by Indonesia, and so their removal or adjustment can result in new contracts for supplies of the products at issue. Russia's participation in this dispute was motivated by an interest in SPS and TBT measures implemented in proper conformity with the norms and rules of the WTO and the practices of settling such disputes.

¹ URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds484_e.htm.

DS488: USA – Anti-dumping measures on certain oil country tubular goods from Korea (Republic of Korea)

In late 2014, the Republic of Korea filed a request with the DSB for consultations with the USA regarding anti-dumping measures. The Republic of Korea claimed that the anti-dumping measures on oil country tubular goods and the underlying investigation by the USA were inconsistent with the WTO norms. In November 2017, the panel presented its report, where it rejected 7 out of 8 Korea's claims, and agreed that the USA had indeed failed to use actual data of the Korean respondents to determine their constructed value (CV) profit rate. The panel rejected the requests with respect to consistency with the norms and provisions of the WTO of US laws on normal value and export price calculation, procedural acts, and public notification procedures. On January 12, 2018, the DSB adopted the panel report. On February 9, 2018, the USA informed the DSB of its intention to implement the DSB's recommendations and rulings and that it would need a reasonable period of time to do so. The reasonable period of time was set to expire on January 12, 2019, and then was extended until July 12, 2019.

On July 29, 2019, the Republic of Korea requested the authorization of the DSB to suspend concessions or other obligations pursuant to Article 22.2 of the DSU (Compensation and the Suspension of Concessions) on the grounds that the USA had failed to comply with the DSB's recommendations and rulings within the reasonable period of time. On August 8, 2019, the USA objected to Korea's proposed level of suspension of concessions pursuant to Article 22.6 of the DSU (Compensation and the Suspension of Concessions). On August 9, 2019, the matter was referred to arbitration pursuant to Article 22.2 of the DSU (Compensation and the Suspension of Concessions).

The dispute has to do with the issues of anti-dumping investigation methodologies, and so it is of systemic importance for Russia. The relative share of products at issue in Russia's exports to the USA is 35 percent, and in total imports into the USA – 4 percent.¹

DS490, DS496: Indonesia – Safeguards on certain iron or steel products (Chinese Taipei, Viet Nam)

In 2015, Chinese Taipei² and Viet Nam³ filed a request with the DSB for consultations with Indonesia concerning the safeguard measures on imports of certain flat-rolled product of iron or non-alloy steel that the complainants claimed were inconsistent with the WTO norms. Indonesia provided no reasoned and adequate explanation concerning investigated imports and failed to properly demonstrate how increased imports could cause or threaten to cause serious injury to the domestic industry, and also failed to provide an opportunity for consultations. The measures imposed by Indonesia were inconsistent with the general principle of MFN, because they were applied only to products originating in certain countries, and Indonesia excluded from the said measures 120 developing countries, Russia including. On August 18, 2017, the panel presented its report, whereby it ruled that the measures at issue did not qualify as safeguards, and recommended that they should be made consistent with the MFN. In autumn 2017, each of the parties filed an appellee's submission. The WTO Appellate Body in its report, presented in mid-August 2018, agreed with the panel findings. The parties agreed that Indonesia would bring its measures into conformity with its obligations by March 27, 2019. On April 15, 2019

¹ UN COMTRADE database, URL: http://comtrade.un.org/

² URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds490_e.htm.

³ URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds496_e.htm.

Indonesia informed the DSB that it had adopted a regulation, removing the safeguard measure challenged in this dispute, which it considered ensured full implementation of the DSB recommendations and rulings in this dispute.

For Russia, the relevant aspects of the dispute were the practices of settling matters related to safeguards and conducting an investigation thereof. Russia's interest in such a dispute could be indirectly stirred by the anti-dumping measures introduced by Indonesia over the period from December 27, 2013 through December 26, 2018 against imports of hot-rolled flat products of steel originating in Russia (the import duties for some companies were as high as 20 percent). In March 2019, the period for introducing the anti-dumping measures on certain flat-rolled product of iron or non-alloy steel originating in Russia was extended for 5 more years – from April 2, 2019 through April 1, 2024.

DS492: EU – Measures affecting tariff concessions on certain poultry meat products (China)

In April 2015, China filed a request with the DSB for consultations with the EU, because the EU undertook tariff modification negotiations with Thailand and Brazil concerning certain poultry meat products, in which these two countries have a significant vested interest, while China was denied an opportunity for such negotiations. The tariff rate quotas were almost entirely reserved for Brazil and/or Thailand, and out-of-quota bound rates were significantly in excess of the pre-modification bound rates. In March 2017, the panel presented its report, where the complainant's claims were upheld only with regard to 2 out of 10 tariff quotas at issue. The panel found that the EU's allocation of TRQ shares among the supplying countries was inconsistent with the requirements of the GATT 1994, and upheld China's claim that its increased ability to export poultry products to the EU following the relaxation of the SPS measures in July 2008 was a 'special factor' that had to be taken into account by the EU when determining which countries had a 'substantial interest' in supplying the products concerned, or when determining the TRQ shares to be allocated to the category of 'all other' countries that were not recognized as substantial suppliers (including China). All the other claims presented by China were rejected. The DSB recommended the EU to bring its measures into conformity with the WTO norms within a reasonable period of time.

On May 30, 2019, the EU and China informed the DSB that they had reached a mutually agreed solution, which was that the EU should grant market access to three poultry meat products supplied by China, in the form of tariff quotas.

The dispute is interesting from the point of view of changes in the list of bound rates of tariffs, understanding of the negotiating procedure, etc. The EU has also introduced a tariff rate quota for Russia, but it is quite low (about 30,000 t of poultry meat products).¹

DS495: Republic of Korea – Import bans, and testing and certification requirements for radionuclides (Japan)

In May 2015, Japan filed with the DSB a request for consultations with the Republic of Korea regarding the measures adopted by the latter subsequent to the accident at the Fukushima Daiichi nuclear power plant: import bans on certain food products; additional testing and certification requirements regarding the presence of certain radionuclides; and a number of alleged omissions concerning transparency obligations. On February 22, 2018, the panel

¹ Overview of existing restrictions on access of Russian products to foreign markets. URL: http://www.ved.gov.ru/rus_export/partners_search/torg_exp/

presented its report, where the claims of neither of the parties were upheld in full. It was found that the Korean measures were generally consistent with the WTO norms, but that they were more trade-restrictive than required; besides, it was found that Korea failed to comply with its transparency obligations with respect to the publication of all the measures.

In April 2018, the parties appealed and cross-appealed the panel decisions, and a year later the WTO Appellate Body issued its report whereby it concluded that the panel had overstepped its powers, and thus reversed some of its findings. In particular, the panel concluded that the Korean measures were inconsistent with Article 5.6 of the SPS Agreement (Assessment of Risk and Determination of the Appropriate Level of Sanitary or Phytosanitary Protection) because they were 'more trade-restrictive than required'. The WTO Appellate Body concluded that, having identified all elements of Korea's appropriate level of protection (ALOP), the panel erred by not accounting for all of these elements in its assessment, and its analysis of the alternative measure proposed by Japan effectively focused only on the quantitative element.

The Appellate Body found that the panel erred in its interpretation of Article 2.3 of the SPS Agreement (Basic Rights and Obligations) by considering that relevant 'conditions' under this provision may be exclusively limited to 'the risk present in products', to the exclusion of other conditions, including territorial conditions that may not yet have manifested in products but are relevant in light of the regulatory objective and specific SPS risks at issue. The Appellate Body thus reversed the panel findings under Article 2.3. In light of the reversal, the Appellate Body did not consider it necessary to address Korea's additional claims of error regarding arbitrary or unjustifiable discrimination, and whether Korea's measures constitute disguised restrictions on international trade.

The Appellate Body noted that, before the panel, Japan had not made a claim of inconsistency under Article 5.7 (Assessment of Risk and Determination of the Appropriate Level of Sanitary or Phytosanitary Protection), and that Korea did not invoke Article 5.7 as a defense, so the AB considered that, by making these findings under Article 5.7, the panel exceeded its mandate, and for this reason, the Appellate Body declared the panel's findings under Article 5.7 moot and of no legal effect.

The Appellate Body modified the panel's finding concerning publication obligations, and found instead that whether a publication under Annex B(1) of the SPS Agreement (Transparency Of Sanitary And Phytosanitary Regulations) needs to include the "specific principles and methods" may only be determined with reference to the specific circumstances of each case, such as the nature of the SPS regulation at issue, the products covered, and the nature of the SPS risks involved. The Appellate Body agreed with the panel that the press release at issue did not include the full product coverage of the measure. The Appellate Body reversed the panel findings, pointing out that the panel erred in its interpretation and application of Annex B(3) (Enquiry Points) in finding that Korea acted inconsistently with this provision because its SPS enquiry point provided an incomplete response to one request for information by Japan and failed to respond to another. The Appellate Body considered that a single failure of an enquiry point to respond would not automatically result in an inconsistency with Annex B(3).

In general upholding the panel findings at issue, the Appellate Body found that the panel did not err in declining to presume that Japanese products and Korean domestic products are "like", is spite of some questions as to whether a procedure under Annex C(1)(a) of the SPS Agreement (Control, Inspection and Approval Procedures) is at all capable of distinguishing between products based exclusively on their origin. At its meeting on April 26, 2019, the DSB adopted the Appellate Body report and the panel report, as modified by the Appellate Body report. In early June 2019, Korea informed the DSB that it had completed the implementation of the recommendations and rulings of the DSB in this dispute as of May 30, 2019 by way of re-publishing the details of the relevant measures.

Russia, in addition to the interest in the procedural aspects of the dispute settlement practices concerning the introduction of measures in the sanitary and phytosanitary field in accordance with WTO norms and rules, has also a direct interest in such matters. The reason for this interest is that, after the accident at the Fukushima Daiichi nuclear power plant in 2011, Russia also imposed a ban on fish imports from Japan, which was lifted by the Federal Service for Veterinary and Phytosanitary Surveillance of Russia only as late as summer 2015.

DS510: USA – Certain measures relating to the renewable energy sector (India)

In 2016, India filed with the DSB a request for consultations with the USA regarding certain measures of the USA relating to domestic content requirements and subsidies instituted by the governments of several US states by way of providing performance-based incentives for the use of domestic components in the renewable energy sector (in particular, a renewable energy cost recovery incentive for customers of light and power businesses for generating electricity from renewable sources, self-generation and hydropower systems, solar photovoltaic (PV) systems), and also tax incentive for ethanol production and tax credit for biodiesel blending and storage, etc.

On June 27, 2019, the panel presented its report, where it was found that all of the measures at issue were inconsistent with Article III:4 of the GATT 1994 because they provided an advantage for the use of domestic products, which amounted to less favorable treatment for like imported products. In mid-August 2019, the USA and India appealed and cross-appealed to the WTO Appellate Body. On October 14, 2019, the Chair of the Appellate Body informed the DSB that it would not be able to circulate a report in this case within the required 90 days, as there was a queue of appeals pending as a result of a crisis in the Appellate Body caused by the persistent blockage, by the USA, of the rotation of its members.¹

The outcome of the dispute, as well as of the similar dispute between the USA and India (DS456),² also joined by Russia, will be relevant for Russia because they offer a potential for increasing the volume of exports of the products at issue to these countries. The relative share of Russian exports of the products at issue to India in Russia's total exports shrank from approximately 8 percent in 2013 to 5 percent in 2016.³ Besides, due to the high importance of the goal of developing alternative energy sources for Russia, it is necessary to give consideration to the use of domestic content in the production process, and also to subsidize production in such a way that would not be inconsistent with the norms and rules of the WTO, because Russia has some similar programs of production localization.

DS511: China – Domestic support for agricultural producers (USA)

In September 2016, the USA requested consultations with China regarding certain measures through which China appeared to provide domestic support in favor of agricultural producers.⁴

¹ For more details on the crisis in the WTO Appellate Body, see Monitoring of Relevant Events in International Trade. 2019. No 43 (February). URL: https://www.vavt-imef.ru/wp-content/uploads/2020/02/Monitoring_43.pdf.

² URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds456_e.htm.

³ UN COMTRADE database, URL: http://comtrade.un.org/.

⁴ URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds511_e.htm.

The USA disputes several normative legal acts adopted by China in 2011–2016 and addressing innovations in agricultural science and technology, the potential for increasing guaranteed supplies of agricultural products, development of agricultural regions, and advancing reform in the grain distribution system. This dispute concerns China's provision of domestic support in the form of market price support (MPS). The central element of this dispute was the calculation of the value of China's market price support (MPS) provided to producers of wheat, rice and corn, etc. According to the USA, China was not in compliance with its obligations under the WTO rules, because the level of domestic support of agricultural producers exceeded the level of obligations assumed by China in the course of its accession to the WTO.

From June 27, 2017, the panel examination was underway, and on February 28, 2019, the panel report was circulated to members. The central element of this dispute was the calculation of the value of China's market price support (MPS) provided to producers of wheat, rice and corn. Under Annex 3 (Domestic support – Calculation of Aggregate Measurement of Support) of the Agreement on Agriculture (AoA), MPS is calculated using a mathematical formula composed of three variables: the applied administered price (AAP), the fixed external reference price (FERP) and the quantity of production eligible to receive the AAP (QEP). The budgetary funding covering the difference between the two prices (shipment and storage costs) are not included in AAP. The panel found that, in China's case, the FERP should be based on years 1996-1998, drawn from Part IV of China's Schedule, rather than the years 1986-1988, set out in paragraph 9 of Annex 3 of the AoA (Domestic support – Calculation of Aggregate Measurement of Support).

For the purposes of the present case, the resulting value of MPS is compared against China's 8.5% *de minimis* commitment. To allow for this comparison, the MPS is expressed as a percentage of the total value of production of the commodity at issue. In the present dispute, if such percentage is greater than China's 8.5% *de minimis* commitment, then China would not be in compliance with its obligations under Articles 6.3 and 3.2 of the AoA. The panel performed the calculation and found that in each of the years 2012-2015, China exceeded its 8.5% *de minimis* level of support for each of these products. The panel then found that because China's level of support exceeded the *de minimis* level, it was also in excess of China's commitment level of 'nil' specified in Section I of Part IV of China's Schedule CLII. On that basis, the panel concluded that China acted inconsistently with its obligations under Articles 3.2 (Incorporation of Concessions and Commitments) and 6.3 (Domestic Support Commitments) of the AoA.

At its meeting on April 26, 2019, the DSB adopted the panel report and recommended that China should make its measures consistent with its WTO obligations. On June 10, 2019, the United States and China informed the DSB that they had agreed that the reasonable period of time for China to implement the DSB's recommendations and rulings would be 11 months and 5 days, set to expire on March 31, 2020.

Russia is interested in this dispute because over the period during which the Chinese normative legal acts designed to support domestic agricultural producers (disputed by the USA) were introduced, the share of products at issue exported from Russia to China in the total volume of Russian exports of these products shrank from 7 percent in 2012 to 0.2 percent in 2016, and the share of rice shrank from 16 to 0.7 percent.¹

¹ UN COMTRADE database. URL: // http://comtrade.un.org/.

DS517: China – Tariff rate quotas for certain agricultural products (USA)

In late 2016, the USA requested consultations with China concerning China's administration of its tariff rate quotas, including those for wheat, some types of rice, and corn.¹ The USA claimed that China acted contrary to its obligations assumed under the Protocol of Accession to the WTO, because its tariff-rate quotas (TRQ) for wheat, rice and corn were not transparent and predictable. The USA believed that China acted inconsistently with some provisions of the GATT 1994 by introducing prohibitions and restrictions on imports other than duties, taxes or other types of levies and failing to provide public notice of quantities permitted to be imported under each TRQ and of changes to these quantities. On February 12, 2018, a panel was established, and on 18 April 18, 2019 it presented its report.

The panel found that China's administration of tariff rate quotas was inconsistent with the obligations to administer them on a transparent, predictable, and fair basis, using clearly specified requirements, and in a manner that would not inhibit the filling of each tariff rate quota.

The Panel rejected some of the USA' claims, in particular with respect to the claim under Article XIII:3(b) of the GATT 1994 (Non-discriminatory Administration of Quantitative Restrictions) because it found that this provision required public notice of the total amounts of tariff rate quotas available for allocation and any changes thereto, not public notice of the total amounts of tariff rate quotas actually allocated and any changes thereto.

In late May 2019, the DSB adopted the panel report and recommended that China should make its measures consistent with its WTO obligations. On July 9, 2019, the USA and China informed the DSB that they had agreed that the reasonable period of time for China to implement the DSB's recommendations and rulings was set to expire on December 31, 2019.

For Russia, the progress of this dispute is of great interest, because the relative share of the products at issue exported from Russia to China in Russia's total exports of these products shrank from 7 percent in 2012 to 0.2 percent in 2016, and that of rice – from 16 to 0.7 percent².

DS523: USA – Countervailing measures on certain pipe and tube products (Turkey)

In March 2017, Turkey filed with the DSB a request for consultations with the USA concerning the countervailing measures imposed by the USA on certain types of pipe and tube products from Turkey.³ Turkey essentially claimed that the measures introduced by the USA appeared to be inconsistent with the Agreement on Subsidies and Countervailing Measures ('SCM Agreement') and the GATT 1994, in particular the USA's determination that certain entities were 'public bodies', and the determination regarding the specificity of a subsidy (a failure to substantiate it on the basis of positive evidence).

On December 18, 2018, the panel report was presented; the panel rejected Turkey's claims concerning public body determinations, and the claims in relation to benefit determination and likelihood-of-injury determinations, but upheld the claims concerning 'specificity determinations' and 'resort to the use of facts available' by the USA.

On January 25, 2019, the USA appealed, and on January 30, 2019, Turkey cross-appealed to the WTO Appellate Body certain issues of law and legal interpretations in the panel report.

¹ URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds517_e.htm.

² UN COMTRADE database, URL: http://comtrade.un.org/.

³ URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds523_e.htm.

On March 25, 2019, the Appellate Body informed the DSB that it would not be able to circulate its report in this appeal by the end of the 60-day period, nor within the 90-day time-frame.

In addition to the practices of imposing countervailing measures and conducting underlying investigation, and the practices of disputing such measures when they are inconsistent with WTO norms, Russia is also interested in the outcome of the dispute from a practical point of view. In 2016, Russian exports of the products at issue to the USA lost almost 60 percent relative to 2015, while the relative share of exports to the USA in Russia's exports shrank from 14 percent in 2015 to 6 percent in 2016.¹

DS524: Costa Rica – Measures concerning the importation of fresh avocados from Mexico (Mexico)

In early March 2017, Mexico filed with the WTO a request for consultations with Costa Rica with respect to certain measures allegedly restricting or prohibiting the importation of fresh avocados for consumption from Mexico.² The process of appointing panel experts took six months, most probably because of the complexity and specificity of the disputed issue. On May 16, 2019, the panel was composed; it expected to issue its final report to the parties by the second half of 2020. Canada, China, the European Union, El Salvador, Honduras, India, Panama, Russia and the USA reserved their third-party rights.

Russia's interest in this dispute was motivated mostly by the practical aspects of participating in disputes focused on SPS measures and the need to systematically study the relevant provisions. Russia is a respondent in a similar dispute initiated by the EU with respect to imports of pork and live pigs (DS475).

DS529: Australia – Anti-dumping measures on a4 copy paper (Indonesia)

In September 2017, Indonesia requested consultations with Australia with respect to its refusal to use the Indonesian exporters' home market price as the normal value of raw material (lumber) and the imposition of an anti-dumping order on A4 copy paper, because it found that a particular market situation existed, and the Government of Indonesia had been implementing policies that increased the supply of timber, which allegedly resulted in lower paper prices due to lower timber prices.³ On July 12, 2018, the panel was composed, and in early December 2019, its report was issued. One of Indonesia's claims in this dispute concerned the second clause of Article 2.2 of the Anti-Dumping Agreement (Determination of Dumping), which provides for the discarding of domestic sales as the basis for normal value when 'because of a particular market situation' to exist in Indonesia's A4 copy paper market because certain alleged government-induced distortions affected Indonesia's pulp and paper industries, and the price of Indonesia's A4 copy paper was lower than regional benchmarks. Indonesia contested Australia's determination of the 'particular market situation' because, in its view, the proper interpretation of that expression necessarily excludes:

- situations where input costs of the product are allegedly distorted;
- situations that affect both domestic market sales and export sales of the product;
- situations arising from government action.

¹ UN COMTRADE database, URL: http://comtrade.un.org/.

² URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds524_e.htm.

³ URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds529_e.htm.

The panel found that none of these situations were necessarily excluded from constituting a 'particular market situation' and, on that basis, concluded that Indonesia did not demonstrate that Australia had acted inconsistently with Article 2.2 when establishing that a 'particular market situation' existed in the Indonesian domestic market for A4 copy paper. In respect of the requirement to examine whether the domestic sales affected by the 'particular market situation' 'permit a proper comparison', the panel concluded that Australia had acted inconsistently with Article 2.2 because it did not conduct the required analysis and disregarded domestic sales of A4 copy paper without properly determining that such sales did 'not permit a proper comparison'. The panel found that Australia was not permitted to disregard the exporter's records of pulp costs because it had not established that the prerequisite express conditions in Article 2.2.1.1 of the Anti-Dumping Agreement were satisfied. The panel also found that a reasoned and adequate explanation was lacking as to why, with regard to the integrated producer's cost of producing pulp internally, the investigating authority did not utilize substitute woodchips costs in conjunction with the other recorded costs of producing pulp internally which were not affected by the particular market situation instead of utilizing substituted pulp costs.

The panel recommended that Australia bring its measure into conformity with its obligations under the Anti-Dumping Agreement but denied Indonesia's request to suggest ways in which Australia could implement the Panel's recommendations.

This complaint by Indonesia resembles Russia's claims to the EU (DS474, DS494 and DS521) and Ukraine (DS493), and this was the reason for Russia to join the dispute as a third party.

DS534: USA – Anti-dumping measures applying differential pricing methodology to softwood lumber from Canada (Canada)

In late November 2018, Canada filed a request for consultations with the USA with respect to the US anti-dumping measures applying the differential pricing methodology to softwood lumber products from Canada.¹ Canada claimed that, in applying the weighted-average-to-transaction (W-T) calculation methodology, the USA improperly aggregated random and unrelated price variations and therefore failed to identify a pattern of export prices, and applied zeroing in its W-T calculation methodology, while zeroing in the W-T methodology did not account for all of the purported pattern transactions in calculating the margin of dumping, and so did not lead to a fair comparison of export prices.

The panel began its examination procedure in late May 2018, and on April 9, 2019 circulated its report to the parties.

With respect to the USDOC's use of zeroing under the challenged W-T methodology, Canada considered such type of zeroing to be inconsistent with Article 2.4.2 (Determination of Dumping), as interpreted in past cases. For its part, the United States considered such type of zeroing to be permissible under the second sentence. The panel agreed with the United States that such type of zeroing is permissible under the second sentence of Article 2.4.2: 'A normal value established on a weighted average basis may be compared to prices of individual export transactions if the authorities find a pattern of export prices which differ significantly among different purchasers, regions or time periods, and if an explanation is provided as to why such differences cannot be taken into account appropriately by the use of a weighted average-to-

¹ URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds534_e.htm.

weighted average or transaction-to-transaction comparison', and thus rejected Canada's claim. In making its finding, the panel noted that the second sentence of Article 2.4.2 would become inutile if zeroing was prohibited under the W-T methodology, as this methodology, which is designed to unmask targeted dumping, would not be able to do so. Taking into account this finding, the panel also rejected Canada's claim under Article 2.4 of the Anti-Dumping Agreement (Determination of Dumping) challenging the use of zeroing under the W-T methodology.

On June 4, 2019, Canada appealed to the WTO Appellate Body certain issues in the panel report. On August 2, 2019, the Chair of the Appellate Body informed the DSB that it would not be able to circulate a report in this case within the required 90 days because it had suspended its activities.

Similarly to the dispute between Canada and the USA concerning countervailing measures with respect to softwood lumber products (DS533), Russia's participation in this dispute was determined not only by an interest in the practical aspects of a dispute concerning countervailing measures, but also by significant trade-related interests. The relative share of the USA in Russia's exports of softwood lumber products (FEACN 440910) in 2017 amounted to 7 percent, and their share in US imports was less than 1 percent.¹

DS538: Pakistan – Anti-dumping measures on biaxially oriented polypropylene film from the United Arab Emirates (UAE)

In late January 2018, the UAE filed a request for consultations with Pakistan concerning Pakistan's anti-dumping measures on imports of biaxially oriented polypropylene film from the UAE (BOPP film).² The UAE claimed that the anti-dumping investigation and the following anti-dumping measures were inconsistent with the GATT 1994 and the Anti-Dumping Agreement. For example, there was insufficient accurate and adequate evidence to justify the initiation of the anti-dumping investigation, and the application filed by Pakistan should therefore have been rejected.

From early May 2019, the panel examination was launched, and on October 23, 2019, the panel announced that its final report would be presented not earlier than H2 2020.

Anti-dumping investigations were also initiated by Pakistan against certain Russian companies, but the corresponding measures were not imposed on Russian imports of hot-rolled steel sheets (proceedings started in early April 2009 and ended in late February 2011) and *phthalic anhydride* (proceedings started in mid-February 2016 and ended in mid-December 2017).³

DS541: India – Export related measures (USA)

In March 2018, the USA filed a request for consultations with India concerning certain alleged export subsidy measures that the USA believed to be inconsistent with Articles 3.1(a) and 3.2 (Prohibition) of the Agreement on Subsidies and Countervailing Measures (SCM Agreement). The USA claimed that India provided export subsidies through its Export Oriented Units Scheme and sector specific schemes, including electronics hardware technology parks scheme, the merchandise exports from India scheme, the export promotion capital goods scheme, special economic zones, and a duty-free import for exporters program.

¹ UN COMTRADE database. URL: // http://comtrade.un.org/.

² URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds538_e.htm.

³ URL: http://i-tip.wto.org/goods/

In July 2018, the panel began to examine the case, and presented its report in late October 2019. India argued before the panel that the special and differential treatment provisions of Article 27 of the SCM Agreement (Special and Differential Treatment of Developing Country Members) still excluded it from the application of the prohibition on export subsidies. However, the parties did not dispute that India had graduated from the special and differential treatment provision that it originally fell under, and the panel found that no further transition period under Article 27.2(b) was available to India after graduation: Article 27 therefore no longer excluded India from the application of the prohibition on export subsidies and from the corresponding dispute settlement procedures, laid out in Articles 3 (Prohibition) and 4 (Remedies) of the SCM Agreement, respectively.

India also argued that all the schemes at issue (except for the SEZ Scheme) fell within footnote 1 of the SCM Agreement, which carves out from the definition of a subsidy, under certain conditions, the exemption from or remission of duties or taxes on an exported product. On these grounds, the panel rejected the USA's claims regarding certain challenged customs duty exemptions under DFIS, and regarding the challenged exemption from excise duties under the Export Oriented Units (EOU) /Electronic Hardware Technology Parks (EHTP) /Bio-Technology Parks (BTP) Schemes. However, the panel found that the remaining measures under the four schemes did not meet the conditions of footnote 1, read together with the relevant paragraphs of Annex I (Illustrative List of Export Subsidies) of the SCM Agreement, in particular because of the nature of the goods for which the customs duty exemptions were available and, in the case of exports from India (MEIS), because of the entire design, structure and operation of the measure.

For these measures, and for the exemptions and deductions under the SEZ Scheme, for which footnote 1 was not invoked, the panel then found that the USA had established the existence of a financial contribution (in the form of revenue foregone, in the case of the exemptions and deductions from duties and other taxes, and in the form of a direct transfer of funds, for the provision of scrips under MEIS) through which a benefit was conferred on the recipient. Further, the panel also found that the USA had established that each of those measures was contingent in law upon export performance. The panel therefore concluded that the USA had demonstrated the existence of prohibited export subsidies, inconsistent with Articles 3.1(a) and 3.2 (Prohibition) of the SCM Agreement.

The panel recommended that India withdraw the prohibited subsidies under DFIS within 90 days from adoption of the report; that it withdraw the prohibited subsidies under the EOU/EHTP/BTP Schemes, EPCG Scheme, and MEIS, within 120 days from adoption of the report; and that it withdraw the prohibited subsidies under the SEZ Scheme within 180 days from adoption of the report. On November 19, 2019, India appealed to the Appellate Body certain issues in the panel report.

Probably, Russia joined this dispute not so much because of its trade-related interests (Russia's total exports to India in 2017 amounted to approximately 2 percent of Russia's total exports), as its interest in the practical aspects of various export promotion schemes and their potential *disputability* in the framework of the WTO dispute settlement mechanism.

DS542: China – Certain measures concerning the protection of intellectual property rights (USA)

On March 23, 2018, the USA filed with the DSB a request for consultations with China concerning certain Chinese measures pertaining to the protection of intellectual property rights.

The essence of the USA's claims is that China denied foreign patent holders the ability to enforce their patent rights against a Chinese joint-venture party after a technology transfer contract ended. China also imposed mandatory adverse contract terms that discriminated against and were less favorable for imported foreign technology. Therefore, China deprived foreign intellectual property rights holders of the ability to protect their intellectual property rights in China, as well as to freely negotiate market-based terms in licensing and other technology-related contracts.

From mid-January 2019, the panel examination was launched, but then in early June 2019 the USA filed a request to the panel that the examination should be suspended until December 31, 2019, and China agreed to that request. The panel informed the DSB of its decision to satisfy the request filed by the USA and to suspend the examination procedure. In its communication the panel noted that pursuant to Article 12.12 (Panel Procedures) of the DSU, the authority of the panel should lapse after 12 months of the suspension of its work. On December 23, 2019, the USA requested the panel to further suspend its work until February 29, 2020, and the panel accepted that request.

Russia's participation in this dispute can be explained not only by an interest in analyzing the outcome of the trade war between the USA and China, where Russia has also taken some part (with respect to steel and aluminum), but also by Russia's significant interest in contracts with China that have to do with technologies and the protection of intellectual property rights of Russian suppliers.

DS544, DS547, DS548, DS550, DS551, DS552, DS556, DS564: United States – Certain measures on steel and aluminum products (China, India, EU, Canada, Mexico, Norway, Switzerland, Turkey)

On April 5, 2018, China; on May 18, 2018, India; on June 1, 2018, the EU and Canada; on June 5, 2018, Mexico; on June 12, 2018, Norway; and on August 15, 2018, Turkey filed their requests for consultations with the USA concerning certain measures on steel and aluminum products imposed by the USA. In autumn 2018, the complainants filed a request for the establishment of a panel for examining the disputed issues, and on January 25, 2019 the panel examination was launched; its report is expected to be presented not earlier than autumn 2020.

In late June 2018, Russia also filed a similar complaint with the DSB against the USA concerning the measures at issue (DS554) (see earlier).

DS546: United States – Safeguard measures on imports of large residential washers (Republic of Korea)

In mid-May 2018, the Republic of Korea filed with the DSB a request for consultations with the USA concerning definitive safeguard measures imposed by the United States on imports of large residential washers, which Korea believed to be inconsistent with certain provisions of the Agreement on Safeguards and the GATT 1994, because the USA failed to make a determination regarding the existence of unforeseen developments resulting in increased imports, and the effect of the obligations incurred under the GATT 1994.

In mid-August 2018, Korea filed a request for the establishment of a panel, and it was established on September 26, 2018. On July 1, 2019, the panel examination was launched.

Russia joined this dispute as a third party, because safeguard measures imply protection against all countries, Russia including. Besides, Russia wants to gain some experience in

handling disputes with the USA with respect to safeguards, because Russia itself has initiated a similar dispute (DS554).

DS553: Republic of Korea – Sunset review of anti-dumping duties on stainless steel bars (Japan)

On June 18, 2018, Japan filed with the DSB request for consultations with the Republic of Korea concerning the latter's determination to continue the imposition of anti-dumping duties on stainless steel bars (SSB) from Japan as a conclusion in the third sunset review. Japan believed that the measures at issue were inconsistent with Korea's obligations under certain provisions of the Anti-Dumping Agreement and the GATT 1994 because, in particular but not limited to, Korea failed to properly determine, as the basis to continue the imposition of anti-dumping duties on the imports from Japan, that the expiry of the duties would be likely to lead to continuation or recurrence of injury. Korea failed to demonstrate the nexus between the expiry of the duties and a continuation or recurrence of injury, and to comply with the fundamental requirement that such determination should rest on a sufficient factual basis and reasoned and adequate conclusions.

In late October 2018, a panel was established, but then in late November 2019 its chairperson noted that the panel examination was postponed for shortage of secretariat staff properly qualified to conduct the dispute in question, and so the panel planned to issue its final report in mid-2020

Over the period from October 27, 2008 to April 9, 2015 Korea imposed anti-dumping duties on kraft paper imports by certain Russian companies. Russia's interest in this dispute can be explained by the need to gain practical experience in measures designed to protect the domestic market.

DS557: Canada, DS558: China, DS559: EU, DS560: Mexico, DS561: Turkey, DS585: India, – Additional duties on certain products from the United States (USA)

On July 16, 2018, the USA filed with the DSB requests for consultations with Canada, China, the EU, Mexico, and Turkey, and on July 3, 2019 – with India concerning the imposition of additional duties (that is, increased duties with respect to certain products originating in the USA in response to the imposition, by the USA, of safeguard measures with respect to steel and aluminum products). In late 2018 (in the dispute with India, in September 2019) the USA requested that a panel be composed. At its meeting on January 25, 2019, the DSB established a panel for the disputes against Canada, China, the EU, and Mexico, and on February 28, 2019 - for the dispute against Turkey. The panel reports are expected to be issued in H2 2020. As of the year-end of 2019, the panel appointment process in the dispute against India had not yet been completed. The USA reached mutually agreed solutions with its NAFTA and USMCA partners (the revised version of the latter having not entered into force as of the year-end of 2019) in the framework of its disputes with Canada (DS557) and Mexico (DS560), which consisted on the elimination of their surtaxes on imports of certain products from the USA. In late May 2019, the parties jointly wrote to the panel advising it of their mutually agreed solution.

Besides, the USA also filed a complaint concerning similar measures against Russia (DS566) (see earlier). As of the year-end 2019, the dispute undergoes the panel examination stage, and the panel expects to issue its final report in H2 2020.

DS567: Saudi Arabia – Measures concerning the protection of intellectual property rights (Qatar)

In early October 2018, Qatar filed with the DSB a request for consultations with Saudi Arabia concerning Saudi Arabia's alleged failure to provide adequate protection of intellectual property rights held by or applied for legal entities based in Qatar.

In June 2017, Saudi Arabia imposed a scheme of diplomatic, political, and economic measures against Qatar. Such measures impacted, inter alia, the ability of Qatari nationals to protect intellectual property rights in Saudi Arabia. The multiple Qatari companies severely impacted by these measures included beIN Media Group LLC and affiliates ('beIN'). Saudi Arabia prohibited beIN from broadcasting its content in Saudi Arabia. A circular issued by Saudi Arabia stated that distribution of beIN media content and charging of related fees in Saudi Arabia 'shall result in the imposition of penalties and fines and the loss of the legal right to protect any related intellectual property rights'. Soon thereafter, in early August 2017, a sophisticated broadcast pirate named 'beoutQ' emerged, taking beIN's copyrighted media content (along with beIN's trademarks) without authorization, and making it accessible on beoutO platforms, via the Internet and satellite broadcasting. BeoutO's unauthorized satellite broadcasts were transmitted via satellites of the Saudi-based Arab Satellite Communications Organization ('Arabsat') to beoutQ's subscribers. To enable receipt of the satellite broadcasts, beoutQ (an entity based in Saudi Arabia) was selling set-top decoder boxes throughout Saudi Arabia. As a result, beoutQ's unauthorized Internet and satellite broadcasting of beIN's content became available on a commercial scale. Despite extensive evidence of involvement of Saudi nationals, entities and facilities in the distribution of beoutQ throughout Saudi Arabia (and beyond), the Saudi authorities refused to take any effective action against beoutQ. Instead, the Government of Saudi Arabia (including both the central and municipal governments) supported beoutQ, including by denouncing beIN's requests to investigate and prevent the pirate's unauthorized broadcasts, and by promoting public gatherings with screenings of beoutQ's unauthorized broadcasts. The Saudi authorities' support of beoutQ was also provided in the form of restrictions on, or other acts or omission that frustrated beIN's ability to pursue civil actions before the Saudi courts.

Qatar considered that the measures at issue taken by Saudi Arabia were inconsistent, in particular, with Saudi Arabia's obligations under the WTO covered TRIPS agreements:

- Article 3.1 (National Treatment) and Article 4 (Most-Favored-Nation Treatment), because Saudi Arabia created obstacles for Qatari nationals, which were not faced by Saudi nationals or the nationals of other countries, that hindered or blocked their ability to protect their intellectual property rights (including copyrights, broadcasting rights, trademarks and other forms of intellectual property) in the territory of Saudi Arabia;
- Article 9 (Relation to the Berne Convention), because Saudi Arabia failed to provide authors
 of works (including pre-recorded and live programming) with the exclusive rights of
 authorizing, inter alia, the reproduction, broadcasting, rebroadcasting, public performances
 or public recitation of their works, as required by the Berne Convention for the Protection
 of Literary and Artistic Works (1971), as incorporated into the TRIPS Agreement;¹
- Article 14.3 (Protection of Performers, Producers of Phonograms (Sound Recordings) and Broadcasting Organizations), because Saudi Arabia failed to provide broadcasting

¹ Berne Convention for the Protection of Literary and Artistic Works (1971). URL: https://rupto.ru/ru/documents/bernskaya-konvenciya-ob-ohrane-literaturnyh-i-hudozhestvennyh-proizvedeniy.

organizations (and the owners of copyright in the subject matter of the broadcasts) with the right to prohibit unauthorized fixation, reproduction of fixation, and rebroadcasting by wireless means of broadcasts;

- Article 16.1 (Rights Conferred), because Saudi Arabia failed to provide the owners of registered trademarks (including, in particular, Qatari owners) with the exclusive right to prevent all third parties not having the owner's consent from using identical or similar signs for goods or services which are identical or similar to those in respect of which the trademark is registered;
- Article 41.1 (General Obligations), because by restricting intellectual property right holders (including Qatari rights holders) from pursuing civil actions before Saudi courts (or otherwise frustrating their ability to do so), Saudi Arabia failed to ensure that enforcement procedures against infringement of their intellectual property were available so as to permit effective action against such acts of infringement;
- Article 42 (Fair and Equitable Procedures), because, by preventing intellectual property right holders (including Qatari rights holders) from bringing enforcement procedures against infringement of their intellectual property, Saudi Arabia failed to make available to right holders civil judicial procedures concerning the enforcement of intellectual property rights;
- Article 61 (Criminal Procedures), because Saudi Arabia failed to provide for criminal procedures and penalties to be applied in cases of willful trademark counterfeiting or copyright piracy on a commercial scale.

On October 12, 2018 Russia requested to join the consultations. From February 18, 2019, the panel examination has been underway, and the panel expects to issue its final report in Q1 2020.

In the request to join the consultations in the framework of that dispute, Russia noted its systemic interest therein. Russia is also interested in developing its TV broadcasting network in the region. So, the measures at issue significantly affect Russia's commercial interests. Besides, Russia has also faced some problems that had to do with restrictions imposed on its national TV channel (Russia Today) by some states. Previously, Russia had already joined the dispute initiated by Qatar against the UAE, including with regard to the issue of property rights protection (DS526).

Below we discuss the disputes that were joined by Russia as a third party only in 2019 (two of them have already been described earlier: the USA vs Turkey (DS561) and the USA vs India (DS585) concerning additional duties on certain products).

DS543: USA – Tariff measures on certain goods from China

In April 2018, China filed with the DSB a request for consultations with the USA as a result of the expansion of the extraordinary tariffs (10 or 25 percent additional tariffs, depending on particular products) being imposed on imports of Chinese goods, including machines and electronics (DS543). China claimed that the measures at issue were inconsistent with one of the central principles of the WTO – most-favored-nation treatment (MFN), and with Article 23 (Strengthening of the Multilateral System) of the DSU. In January 2019, a panel was established, on June 3, 2019 it started the examination procedure, and in late September, further to a request from China, a new panelist was appointed.

Beside Russia, their third-party rights in this dispute were reserved by Australia, Brazil, Canada, the European Union, India, Indonesia, Japan, Kazakhstan, the Republic of Korea, New

Zealand, Norway, Singapore, Chinese Taipei, and Ukraine. Some of these countries, as well as Russia and China, initiated disputes with the USA concerning US measures on steel and aluminum products, which the latter claimed were not safeguards and instead explained that their introduction had been motivated solely by national security concerns. It can be assumed that Russia's interest in this dispute has to do with the said claims: in the dispute between China and the USA it sided with the complainant. The dispute initiated by the USA against Turkey concerning the imposition of additional duties by the latter certain products originating in the USA in response to the imposition, by the USA, of safeguard measures with respect to steel and aluminum products (DS561) is similar to the dispute initiated by the USA against Russia concerning the same issue (DS566), and this is the reason why Russia also participates in this one as third party.¹

DS562: USA – Safeguard measure on imports of crystalline silicon photovoltaic products (China)

On August 14, 2018 China filed with the DSB a request for consultations with the USA concerning the definitive safeguard measure (tariff-rate quota for a period of 4 years) imposed by the United States on imports of certain crystalline silicon photovoltaic products, whether or not partially or fully assembled into other products (including, but not limited to, modules, laminates, panels, and building-integrated materials) ('CSPV products'), of which the USA notified the WTO in late January 2018.² Subsequently, on 18 February 2018, USTR established additional procedures for interested parties to request that certain products be excluded from the safeguard measure on CSPV products. As of 8 July 2019, 53 individual exclusion requests were submitted to the United States Trade Representative (USTR); 11 of those requests had been granted, while all other requests were denied.

China considered that the safeguard measure was inconsistent with the GATT 1994 and the Agreement on Safeguards, because the USA:

- failed to establish that the increases in imports were the result of 'unforeseen developments' and were the 'effect of obligations incurred' under the GATT 1994 by the USA;
- failed to establish the required 'causal link' between the increased imports and the serious injury found to exist ;
- failed to ensure that injury caused by other factors was not attributed to increased imports;
- did not provide the interested parties with sufficient opportunities to participate in the investigation.

On July 11, 2019, China filed with the DSB a request for the establishment of a panel. In mid-August 2019 that panel was composed, and the panel examination was launched on October 24, 2019.

Russia's interest in this dispute is motivated primarily by the fact that the measures at issue also affect imports from Russia. Besides, Russia is participating as a main party in two disputes with the USA concerning safeguard measures with respect to steel and aluminum products (DS554 and DS566).

¹ Monitoring of Relevant Events in International Trade. 2019. No 35 (September). URL: https://www.vavt-imef.ru/wp-content/uploads/2019/09/Monitoring_35.pdf.

² URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds562_e.htm.

DS573: Additional duties on imports of air conditioning machines from Thailand (Thailand)

In early December 2018, Thailand filed with the DSB a request for consultations with Turkey concerning the additional duty imposed by Turkey on imports of air-conditioning machines from Thailand in early September 2017 at a rate of 9.27% for 3 years.¹ In imposing this measure, Turkey acted in response to the extension of a safeguard measure adopted by Thailand on imports of non-alloy hot rolled steel flat products in coils and not in coils, which was to be applied for three years, from June 2017 through June 2020. Thailand claimed that Turkey was not an 'affected exporting Member' with a 'substantial interest' in the safeguard measure, and was thus not entitled to suspend the application of concessions or other obligations under the GATT 1994, while the additional duty in any event exceeded what constituted 'substantially equivalent' concessions. Besides, Turkey acted inconsistently with the MFN principle by imposing the additional duty only on air-conditioning machines from Thailand. In mid-February 2019, Thailand filed with the DSB a request for the establishment of a panel, and on April 11, 2019 it was established. The panel examination has been underway since June 28, 2019; the panel report is expected in H1 2020.

Russia's interest in this dispute evidently has to do with other disputes with the USA concerning safeguards and additional duties (DS554 and DS566).

DS576: Qatar – Certain measures concerning goods from the United Arab Emirates (UAE)

On January 28 2019, the UAE filed with the DSB a request for consultations with Qatar concerning measures maintained by Qatar that prohibited sales outlets in Qatar (including distributors, agents, retailers, and pharmacies) from importing, stocking, distributing, marketing or selling goods, medicines, and other products originating in or exported from the UAE. 2 The UAE claimed that the measures at issue were inconsistent with some of the central principles of the WTO - the MFN treatment and the national treatment; besides, the measures were designed to introduce or maintain restrictions other than duties, taxes, or other levies on products imported from the UAE. The measures had not been published promptly in such manner as to enable governments and traders to become acquainted with them. There was also a violation of Article 23 (Strengthening of the Multilateral System) of the DSU, because through the measures Qatar was seeking the redress of an alleged violation of obligations without having recourse to, and abide by, the rules and procedures of the DSU. On April 11, 2019, the UAE filed with the DSB a request for the establishment of a panel, and it was established in late May 2019. On a communication dated August 8, 2019, the UAE requested the Chair of the DSB to circulate a communication where it indicated that it no longer considered it necessary to pursue its complaint in DS576, due to Qatar's public withdrawal of the measures in question, and so there was no need to compose the panel, and the matter was concluded.

Russia's interest in this dispute, beside the intention to strengthen the multilateral trade system, is probably motivated by the launch of a dispute against Ukraine concerning restrictions in respect of trade in Russian goods and services (DS525), which was initiated by Russia on May 19, 2017 and is undergoing the stage of consultations.

¹ URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds573_e.htm.

² URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds576_e.htm.

DS577: USA – Anti-dumping and countervailing duties on ripe olives from Spain (EU)

Russia also joined the dispute against the USA concerning the imposition of countervailing and anti-dumping duties on ripe olives from Spain initiated by the EU in late January 2019.¹ The main claims presented by the EU are as follows: the USA did not prove that the subsidy measures that is was countervailing were in fact specific; the countervailing duties imposed by the USA were in excess of the amount of any subsidy found to exist with respect to ripe olives; the USA did not demonstrate the required causal relationship between subsidized imports and injury to the domestic industry (the same was true for the anti-dumping measures); the calculation of the final subsidy rate for the producer company was erroneous, and so the amount of the countervailing duties imposed was erroneous, inappropriate and excessive; the interested party was not given notice of the information required or ample opportunity to present evidence considered relevant, and the US authorities did not properly satisfy themselves as to the accuracy of the relevant information.

On May 16, 2019, the EU filed with the DSB a request for the establishment of a panel, it was established on June 24, in mid-October the panel experts were appointed, and the panel examination was launched.

Russia's interest in this dispute is motivated primarily by the initiation of another dispute with the USA (described earlier) concerning anti-dumping measures (DS586). Besides, Russia frequently asserts third-party rights in disputes concerning countervailing measures and subsidies.

DS578: Morocco – Definitive anti-dumping measures on school exercise books from Tunisia (Tunisia)

On February 21, 2019, Tunisia filed with the DSB a request for consultations with Morocco concerning definitive anti-dumping duties imposed by Morocco on imports of school exercise books.² This is the second consultations request submitted by Tunisia against Morocco on a similar matter (see DS555, concerning provisional anti-dumping duties imposed by Morocco on imports of school exercise books from Tunisia). On September 19, 2019, Tunisia filed with the DSB a request for the establishment of a panel, which was established on October 28.

The anti-dumping measures were introduced from January 4, 2019. The rates of antidumping duties for companies from Tunisia were as follows:

- for SOTEFI 27.71%;
- for SITPEC 15.69%;
- for other Tunisian exporters -27.71%.

Tunisia claimed that, firstly, the application for the conduct of anti-dumping investigations did not contain sufficient evidence of dumping, injury or a causal link, and secondly, the investigating authority did not conduct a satisfactory examination of the accuracy and adequacy of the evidence of provided in the application, and committed errors leading to the calculation of an artificially high normal value and the resulting duties, which was inconsistent with WTO norms and rules.

Russia's interest in this dispute is motivated primarily by the fact that the bulk of WTO disputes that Russia has been party to have to do with anti-dumping and countervailing

¹ URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds577_e.htm.

² URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds578_e.htm.

measures, and so regards the practical experience of imposing such measures in compliance with the norms and rules of the WTO to be important.

DS579: Brazil, DS580: Australia, DS581: Guatemala – measures concerning sugar and sugarcane (India)

On February 27 2019, Brazil¹ and Australia,² and on March 15, 2019, Guatemala³ filed with the DSB a request for consultations with India concerning domestic support measures allegedly maintained by India in favor of producers of sugarcane and sugar (domestic support measures), as well as all export subsidies that India allegedly provides for sugarcane and sugar (export subsidy measures). On July 11, 2019, Brazil, Australia and Guatemala filed with the DSB requests for the establishment of a panel, it was established in mid-August 2019, and the panel examination started in late October 2019. Australia, as complainant in the framework of these three disputes, presented the longest list of violations allegedly committed by India, and so we will consider in detail Australia's claims.

In the request for the establishment of a panel submitted by Australia, it was noted that India provided domestic support in favor of producers of sugarcane and sugar through a series of measures that included: a system of administered mandatory minimum prices for sugarcane and sugar which operate at the federal level through the 'Fair and Remunerative Price' (FRP) and 'Minimum Selling Price' (MSP) of sugar, and, in the case of certain Indian states, at the state level through the 'State Advised Price' (SAP), as well as through measures maintained at the federal and state levels for sugarcane and sugar which include production-based subsidies, soft loans, subsidies to maintain stocks of sugar, and tax rebates or exemptions. India also maintained export subsidies for sugarcane and sugar, which took the form of subsidies contingent on export through 'Minimum Indicative Export Quotas' (MIEQ) or other sugar export incentives.

Australia considered that India's domestic support was inconsistent with India's obligations under the Agreement on Agriculture, because it exceeded the de minimis level of 10 percent of the value of production. India's export subsidies were inconsistent with the Agreement on Agriculture and were prohibited under the SCM Agreement. India failed to notify any of its annual domestic support for sugarcane and sugar subsequent to 1995-1996, had not submitted an export subsidy notification since 2009-2010, and thereby acted inconsistently with its obligations under the aforesaid Agreements and the GATT 1994.

For Russia, the participation in disputes concerning subsidies is very important, among other things, from the point of view of domestic support measures in compliance with WTO norms and rules.

DS583: Turkey – Certain measures concerning the production, importation and marketing of pharmaceutical products (EU)

On April 2, 2019, the EU filed with the DSB a request for consultations with Turkey regarding various measures concerning the production, importation and marketing of pharmaceutical products. The measures identified by the EU include the following alleged acts: a localization requirement, a technology transfer requirement, an import ban on localized products, and a prioritization measure. The EU claimed that:

¹ URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds579_e.htm.

² URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds580_e.htm.

³ URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds581_e.htm.

1) The localization requirement and the prioritization measure appeared to be inconsistent with Article III:4 of the GATT 1994 ('National Treatment on Internal Taxation and Regulation');

2) The localization requirement, the technology transfer requirement, and the prioritization measure appear to be inconsistent with Articles X:1 and X:3(a) of the GATT 1994 ('Publication and Administration of Trade Regulations);

3) All four categories of challenged measures appear to be inconsistent with Article X:2 of the GATT 1994 ('Publication and Administration of Trade Regulations');

4) The import ban on localized products appears to be inconsistent with Article XI:1 of the GATT 1994 ('General Elimination of Quantitative Restrictions');

5) The localization requirement appears to be inconsistent with Article 2.1 ('National Treatment and Quantitative Restrictions') of the TRIMS Agreement and Article 3.1 (b) ('Prohibition') of the SCM Agreement;

6) The technology transfer requirement appears to be inconsistent with Article 3.1 ('National Treatment'), Article 27.1 ('Patentable Subject Matter'), Article 28.2 ('Rights Conferred'), Article 39.1 и 39.2 ('Protection of Undisclosed Information') of the TRIPS Agreement.

In early August 2019, the EU filed with the DSB a request for the establishment of a panel, which was established in late September. Brazil, Canada, China, India, Indonesia, Japan, Russia, Switzerland, Ukraine and the USA reserved their third-party rights.

Russia's interest in this dispute has probably been motivated both by the importance of the pharmaceuticals market and the need to gain practical experience of participating in disputes concerning localization requirements, which are also applied in Russia's other sectors (for example, in the automotive industry).

Annex

Table A-1

Trade disputes brought to the WTO that Russia has been a party to (complainant or respondent)

Dispute	Claim	Current stage (as of year end 2019)
1	2	3
	As complainant	
DS474: EU – Cost Adjustment Methodologies and Certain Anti-Dumping Measures on Imports from Russia (23.12.2013 ¹)	The EU used 'cost adjustment' methodologies in its anti-dumping investigations and reviews for calculating dumping margins, and while doing so, rejected the cost and price information of Russian producers and exporters. The EU investigated the terms for anti-dumping measures without considering the effect of such rejection of cost and price data on the determination of dumping margins and injury caused by dumped imports.	Appointment of panel experts (22.07.2014)
DS476: EU – Certain Measures Relating to the Energy Sector (30.04.2014)	EU Third Energy Package: producers of natural gas are not allowed to own trunk lines situated in EU territory. The operators controlled by foreign persons must undergo special certification procedure.	Examination by Appellate Body (AB) (21.09.2018)
DS493: Ukraine – Anti- Dumping Measures on Ammonium Nitrate (07.05.2015)	While conducting anti-dumping investigations on imports of ammonium nitrate originating in Russia, Ukraine rejected the information of producers on electric energy prices in Russia, using instead price information from third countries (energy cost adjustments).	Russia's request that the reasonable period of time be determined through binding arbitration (21.11.2019)

¹ The date in brackets is the date on which the Request for Consultations was received.

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1	2	3
DS494: EU – Cost Adjustment Methodologies and Certain Anti-dumping Measures on Imports from Russia (07.05.2015)	While conducting anti-dumping investigations on imports of certain welded and seamless tubes and pipes and ammonium nitrate originating in Russia for calculation of dumping margins, the EU rejects the cost and price information of producers and exporters, using instead price information from third countries (energy cost adjustments).	Panel examination (17.12.2018)
DS521: EU – Anti-Dumping Measures on Certain Cold- Rolled Flat Steel Products from Russia (27.01.2017)	While conducting anti-dumping investigations, the EU rejects the cost and price information of Russian producers, relying instead on unsubstantiated data and incorrect calculations.	Appointment of panel experts (26.04.2019)
DS525: Ukraine – Measures Relating to Trade in Goods and Services (19.05.2017)	Comprehensive complaint against Ukraine's restrictive measures in respect of trade in goods and services originating in Russia.	Consultations (19.05.2017)
DS554: USA – Certain Measures on Steel and Aluminum Products (29.06.2018)	Russia claims that the USA introduced these measures in spring 2018 in violation of provisions of the GATT 1994 and the Agreement on Safeguards. In particular, the USA acted contrary to the WTO's MFN principle by granting to some countries certain advantages and treatments that were denied other countries, introduced restrictions on imports other than duties, taxes or other charges made effective through quotas, failed to properly substantiate its emergency action on imports of particular products, failed to give notice in writing to the parties to the dispute that have a vested interest as exporters of relevant products, and failed to comply with the existing consultation obligations.	Panel examination (25.01.2019)
DS586: Russia – Anti-Dumping Measures on Carbon-Quality Steel from <i>Russia</i> (USA)	Russia claimed that the USA failed to determine an individual dumping margin for each known exporter or producer concerned of the product under investigation, failed to calculate the costs of its production, failed to properly review the need for continued imposition of the anti- dumping duties and to terminate the duties that were not necessary to offset dumping, extended the measures at issue relying on flawed dumping margins and on erroneous likelihood of recurrence or continuation of dumping determinations, and refused to rely on information provided by Russian exporters, whereas the conditions to resort to facts available were not met, and so the US measures were inconsistent with the Anti-Dumping Agreement of the WTO.	Consultations (05.07.2019)
	As respondent	
DS462: Russia – Recycling Fee on Motor Vehicles (EU, 09.07.2013)	Russia imposed a charge ('recycling fee') on imported motor vehicles, while exempting domestic vehicles from that payment, under certain conditions. The 'recycling fee' steeply increases for certain categories of vehicles (new or second-hand ones).	Appointment of panel experts (25.11.2013)
DS463: Russia – Recycling Fee on Motor Vehicles (Japan, 24.07.2013)	Russia imposed additional charge ('recycling fee') on imported motor vehicles, while in actual practice exempting domestic vehicles from that payment, under certain conditions.	Consultations (24.07.2013)
DS475: Russia –f Live Pigs, Pork and Other Pig Products from the EU (EU, 08.04.2014)	The ban on imports of live pigs, pork and other pig products from the EU is a disproportional measure, introduced following several cases of ASF ¹ in wild boar near the border with Belarus, which were promptly controlled. The EU disputes the way Russia treats the regionalization measures against the spread of ASF.	Request for measures, arbitration (03.01.2018). Control of the respondent's compliance with the DSB's recommendations (21.11.2018)
DS479: Russia – Anti-Dumping Duties on Light Commercial Vehicles from Germany and Italy (EU, 21.05.2014)	While conducting anti-dumping investigations on imports and calculating dumping margins on light commercial vehicles, Russia failed to comply with the WTO rules for the determination of the existence of dumping and injury determination, incorrectly defined the domestic industry, and failed to provide all relevant information and explanations.	Respondent complied with the DSB's recommendations (to bring measures in conformity) (20.06.2018)
DS485: Russia – Tariff Treatment of Certain Agricultural and Manufacturing Products - (EU, 31.10.2014)	For paper and paperboard, Russia applied ad valorem duty rates of 15 or 10 percent, thus exceeding the ad valorem bound rate of 5 percent. For certain other goods, in cases where the customs value is below a certain level, duties were levied in excess of the bound rates.	Respondent complied with the DSB's recommendations (08.06.2017)

¹ ASF is African swine fever.

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Cont	a

1	2	3
DS499: Russia – Measures	Russia suspended the conformity assessment certificates issued to	Examination by the
Affecting the Importation of	producers of railway rolling stock, railroad switches, other railroad	Appellate Body
Railway Equipment and Parts	equipment, and parts thereof prior to entry into force of the new	(27.08.2018)
Thereof (Ukraine, 21.10.2015)	Technical Regulations, and rejected new applications for certificates	
	pursuant to the new procedures.	
DS512: Russia – Measures	Russia adopted restrictions on international automobile and railway	Reports have been
Concerning Traffic in Transit	traffic in transit of Ukrainian exports to the Republic of Kazakhstan	received, no further action
(Ukraine, 14.09.2016)	and the Kyrgyz Republic: the international road and railway transit of	is required (26.04.2019)
	goods from Ukraine through the territory of Russia can be carried out	
	only from the territory of the Republic of Belarus, on certain specific	
	conditions. Additional measures include ban of transit of goods	
	affected by the tariffs rates higher than zero, and ban of transit of goods	
	which are under embargo.	
DS532: Russia – Measures	Russia introduced measures affecting traffic in transit of Ukrainian	Consultations
Concerning the Importation and	juice products, beer, beer-based beverages and other alcoholic	(13.10.2017)
Transit of Certain Ukrainian	beverages, confectionery products, wallpaper and similar wall	
Products (Ukraine, 13.10.2017)	coverings to third countries. Exports of these products from Ukraine to	
	Russia were significantly restricted, and some products were banned.	
DS566: Russia – Additional	The USA claimed that these measures were inconsistent with Articles	Panel examination
Duties on Certain Products from	I:1 (General Most-Favored-Nation Treatment), II:1(a), and II:1(b)	(25.01.2019)
the United States (USA,	(Schedules of Concessions) of the GATT 1994, because Russia failed	
27.08.2017)	to extend to products of the USA the treatment granted by Russia with	
	respect to customs duties and charges of any kind imposed on or in	
	connection with the importation of products originating in the territory	
	of other WTO members, and accorded less favorable treatment to	
	products originating in the USA than that provided for in Russia's	
	schedule of concessions. In accordance with RF Government Decree	
	No. 788 dated July 6, 2018, from August 2018 Russia raised the rates	
	of import customs duties on forklift trucks and other trucks equipped	
	with lifting or loading-unloading devices, graders, tamping machines,	
	tools for cutting optical fiber, etc. The new rates amount to 25, 30 and	
	40 percent of customs value, depending on product type.	

Source: Own compilation based on data published on the WTO's official website. URL: https://www.wto.org/ english/tratop_e/dispu_e/dispu_by_country_e.htm.

Table A-2

WTO disputes where Russia has been a third party

Theme	Disputes
1. Ban or restrictions on imports (environmental protection or	DS400, DS401, DS469, DS484, DS495, DS524, DS531, DS537,
other reasons).	DS576
2. Safeguard investigation and measures (antidumping or	DS414, DS437, DS449, DS454, DS468, DS471, DS473, DS480,
countervailing measures and safeguards).	DS488, DS490, DS496, DS513, DS516, DS518, DS523, DS529,
	DS533, DS534, DS536, DS538, DS539, DS544, DS545, DS546,
	DS547, DS548, DS550, DS551, DS552, DS553, DS556, DS562,
	DS564, DS573, DS577, DS578
3. Restrictions on exports.	DS431, DS432, DS433, DS508, DS509, DS541
4. Intellectual property rights.	DS441, DS458, DS467, DS542, DS567
5. Subsidies (including those related to tax exemptions and	DS456, DS472, DS487, DS497, DS489, DS502, DS510, DS511,
other preferential treatments).	DS522, DS579, DS580, DS581, DS583
6. Tariffs and tariff-rate quotas.	DS492, DS517, DS543, DS557, DS558, DS559, DS560, DS561,
	DS585
7. Economic sanctions.	DS526

Source: data derived from: *Baeva M. A.* Russian participation in the WTO trade disputes and dispute settlement // Russian Foreign Economic Journal. 2015. No 3. P. 75–90.