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The review "Russian Economy. Trends and Outlooks" has been published by the Gaidar Institute since 1991. This is the 43th issue. This publication provides a detailed analysis of the most significant trends in the Russian economy, global trends in the social and economic development. The work contains 6 big sections that highlight different aspects of Russia's economic development, which allow to monitor all angles of ongoing events over a prolonged period: global economic and political challenges and national responses, economic growth and economic crisis; the monetary and budget spheres; financial markets and institutions; the real sector; social sphere; institutional changes. The work is based on an extensive array of statistical data that forms the basis of original computation and numerous charts confirming the conclusions.

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4.1. Dynamics and structure of GDP and investments in Russia in 20211

4.1.1. Demand and supply

The economic situation in 2021 demonstrated recovery of both demand and supply in domestic and foreign markets after the pandemic crisis of 2020. The positive dynamics were supported by a simultaneous recovery of domestic consumer and investment demand and by increased contribution of net exports to the economic growth.

GDP in 2021 rose by 1.9% compared to the pre-crisis level of 2019 and increased by 4.7% compared to 2020, showing growth acceleration to 7.2% in Q 2 and 3 and to 6.9% in Q 4 2021 compared to the corresponding periods of the previous year.

The change in the structure of provision and use of resources in 2020—2021 was marked by a shift in priorities towards supporting the domestic market. According to preliminary estimates, consumer demand in 2021 increased by 9.6% and investment demand by 7.7% compared to the previous year. Moreover, the rate of production recovery (supply) was inferior to that of demand. The output of goods and services by basic types of economic activity increased by 6.2% in 2021 with the aggregate demand growing by 7.5% (*Table 1*).

Economic recovery has been significantly influenced by the starting conditions for recovery from the 2020 pandemic recession, characterized by a sharp fall in services and a decline, albeit less profound, in the goods sector. Other challenges were associated with volatile global hydrocarbon market, reduced external trade and disruptions in value added chains. In addition, longer than anticipated internal and external health constraints at the beginning of the pandemic increased the differentiated functioning of various economic activities.

As the economy emerged from the crisis, it became fundamentally important to assess adequately the gaps in demand, production and potential ability

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Table 1

GDP dynamics: internal factors, % to corresponding period of the previous year

	2019			2020			2021					
	Year	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	
GDP	102.0	97.3	101.4	92.2	96.5	98.2	104.7	99.7	110.5	104.0	105.0	
Investment in fixed assets	102.1	99.5	104.2	95.4	94.9	103.0	107.7	103.3	111.0	107.9	107.6	
Consumer demand	103.2	91.4	102.2	78.3	90.9	94.3	109.5	97.8	127.4	109.5	107.1	
Output of goods and services by basic economic activity	102.0	97.6	102.9	91.8	97.1	98.9	106.2	100.1	113.3	105.0	106.7	
Industry	103.4	97.9	103.2	93.8	95.7	99.2	105.3	98.6	109.6	106.0	107.1	
Mining and quarrying	103.4	93.5	101.2	91.3	88.8	92.7	104.8	93.0	107.5	109.0	110.5	
Manufacturing industry	103.6	101.3	106.2	95.3	100.5	103.3	105.0	100.7	110.8	103.6	105.2	
Electricity, gas and steam supply	99.2	97.6	96.4	96.2	97.0	100.2	106.8	108.3	107.0	107.8	104.5	
Agriculture	104.3	101.3	102.8	102.9	103.0	96.8	99.1	100.0	99.70	96.2	106.7	
Construction	102.1	100.7	102.6	95.8	100.9	103.0	106.0	102.9	110.6	103.7	106.4	
Transport	100.7	95.3	96.1	91.8	94.8	98.3	105.3	100.5	110.1	106.8	104.1	
Retail turnover	101.9	96.8	104.9	84.9	99.2	98.3	107.3	98.6	123.6	105.5	104.3	
Food market	101.8	98.4	104.2	93.7	98.4	97.6	102.2	96.5	107.4	102.5	102.5	
Non-food market	102.0	95.4	105.6	76.7	100.1	99.1	112.3	100.8	142.4	108.2	106.0	
Paid services to population	100.5	85.2	100.4	65.4	85.5	89.6	114.1	94.0	148.9	114.0	110.5	
Passenger turnover	107.3	54.8	95.3	21.2	55.6	54.3	139.6	66.4	350.0	148.9	149.5	

Source: Rosstat.

of Russian business to respond to changes in domestic and foreign market environment. Differences in production technologies, structure of intermediate and final consumption of resources, volume of value added, branching and length of production chains have become significant factors both in speed of specific types of economic activities to the pathway of post-pandemic development, and in establishing measures of targeted support for specific types of economic activities. The specifics of overcoming the effects of the 2020 pandemic crisis consisted of faster growth in manufacturing, construction and services, whereas the usual pattern of recovery from the financial and economic crises consisted of faster growth in extractive industries and an increase in raw material exports.

Supply recovery was differentiated quite substantially by type and by economic activity, depending on the structure of gross resource influenced by changes in the national currency exchange rate, different flow rates of domestic demand,

exports and imports, pricing policies of domestic producers, cost dynamics and efficiency.

The structure of industrial recovery was determined by the continued outperformance of manufacturing, electricity and water supply relative to the dynamics of mineral extraction. The 5.0% growth of manufacturing in 2021 and 6.8% growth of electricity, gas and steam supply created opportunities to significantly exceed the pre-crisis figures for 2019. In mining production, despite accelerating growth to 104.8% in 2021, given the previous year's low base, output remained 2.0% below the pre-pandemic level for 2019. A 6.0% increase in construction activity relative to 2020 contributed positively to the acceleration in annual and quarterly trends. The mild sanitary and epidemiological restrictions in construction and active government action to maintain the capacity of the construction industry as one of the conditions for economic recovery have defined a specific feature of the post-pandemic recovery and avoided a recession in this type of economic activity.

In the difficult weather conditions of the previous year, for the first time in five years, one of the factors slowing down production of goods for domestic and foreign markets was the drop in agricultural production to 99.1% compared to 2020.

Simultaneously with the recovery of positive trends in goods production, the transport and logistics complex (107.8% by 2020), information and communication services (108.1%) and financial services (109.2%) were on the rise. Russia's transcontinental railway became more attractive for transit traffic and an alternative to maritime freight transport. Although the balance of international trade in services remained low, telecommunication, computer and information services showed confident growth.

The recovery of services was more dynamic relative to the goods sector. With accumulated delayed household demand, retail turnover increased by 7.3% in 2021 and the non-food market grew by 12.3%, resulting in an excess of 3.9% and 7.1% over pre-pandemic levels respectively, while the food market has stabilized. The changing structure of household demand in 2021 along with the accumulated scale of involuntary private savings was accompanied in 2021 by a dynamic quarterly growth of the paid services market, but the negative effects of the previous year's severe decline in demand, especially in activities such as transport, recreational and tourism services, remained in the economy.

In 2021, the dynamics of recovery processes were significantly influenced by domestic resource generated from domestic and imported goods along with demand outpacing supply, and by changes in prices. Adaptation of Russian producers to shrinking domestic market and the ruble depreciation followed the path of both concentrating activities in production replacing more expensive imports in the domestic market, including due to disruption of transport, logistics and production chains, and building the export capacity of manufacturing to fill market niches that experience the most severe restrictions of cross-border interaction in a pandemic.

Practical implementation of these trends was supported, on the one hand, by systematic anti-crisis government measures aimed to assist economy and, on the other hand, by inertial developments towards a gradual recovery of activity in the global goods market as from H2 2020.

Rising prices and demand for almost all raw materials, easing of restrictions on oil production under the OPEC+ accompanied the global economic recovery, having a special meaning for Russian exports of mineral products dominating the total value of commodity exports.

At the end of 2021, the value of foreign trade turnover rose by 39.3% compared to the previous year and was 18.5% higher than in the pre-pandemic period of 2019. The recovery of positive dynamics of foreign trade turnover in 2021 was marked by outpacing growth of exports (148.2% by 2020) compared to imports (126.8%) (*Table 2*). The contribution of net merchandise exports to the value structure of GDP (by SNA methodology) increased from 5.2% in 2020 to 9.6% in 2021.

Table 2
GDP dynamics: external factors, % to the corresponding period of the previous year

	2019			2020					2021		
	Year	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4
GDP	102.0	97.3	101.4	92.2	96.5	98.2	104.7	99.3	110.5	104.3	106.9
Foreign trade tu	rnover										
As per methodo	logy of	national	accour	its (201	6 prices)					
Total	101.8	92.1	99.4	89.4	86.1	94.0	109.3	97.7	111.3	112.6	114.5
Exports	100.7	95.9	97.6	100.1	91.9	93.5	103.2	97.6	97.3	107.4	111.2
Imports	103.1	87.8	101.8	77.4	80.1	94.5	116.7	97.9	131.9	118.8	118.0
As per methodo	logy of	national	accour	its (curr	ent pric	es)					
Total	97.4	85.1	91.9	76.1	82.7	89.4	139.3	108.7	153.9	151.3	145.0
Exports	94.6	79.4	87.0	69.4	76.5	84.2	148.2	104.4	163.2	168.2	161.6
Imports	102.3	94.4	100.9	87.0	92.3	97.6	126.8	115.4	141.6	129.3	122.5

Source: Rosstat; CB RF.

Positive factors for the economic recovery were, firstly, a faster growth of non-energy exports, secondly, an acceleration of exports of high-tech goods and, thirdly, a change in the structure of non-energy exports in favor of products with a high share of value added.

In December 2021 vs December 2020, the growth rate of non-resource exports amounted to 129.6%, including 162.9% for middle-value added goods and 120.2% for high value added goods, while exports of high technology goods increased by 29.3% on a year earlier. Although exports of high-tech goods have been growing at a faster rate than imports in recent years (128.0%), the Russian economy remains a net importer of this commodity group. High-tech products accounted for 73.4% of total Russian imports in 2021, while the share of this product group in exports was 22.7%.

The outstripping growth of imports relative to domestic production and an increase in the share of imports in the gross resource mix to 21.4% (+0.9 p.p. by 2020) has partially mitigated the impact of the supply-demand gap.

The structure of imports by function was marked by a gradual increase in the share of investment goods, which makes it possible to balance the standard structure of domestic investments in fixed capital at the expense of imported machinery, equipment and technological complexes. The import of investment goods and high-tech products is a significant factor in the dynamics of investment in fixed capital, intensification of production modernization processes and implementation of the best available technologies.

A rise in the share of capital goods to 29.0% (+4.1 p. p. by 2020) in imports in 2021 had a positive effect on the dynamics of manufacturing industries, particularly the machine-building and chemical-pharmaceutical facilities based on the widespread use of foreign equipment and technology (*Table 3*). The attraction of foreign direct investment into the national economy, thus creating efficient jobs and contributing to changing the competitive environment, follows the same direction and is more productive generally, however, in recent years there has been a sharp slowdown in the activity of foreign direct investors in the Russian market.

By the end of 2021, foreign direct investment in the Russian economy amounted to \$30.4 bn compared to \$9.5bn in 2020. Despite the recovery of business and investment activity in the Russian market, there was an increase in net capital outflow to \$72.0bn in 2021 against \$50.4bn in the previous year.

Table 3

Imports by function and foreign trade of high-tech products in 2019—2021

	Structure of	imports by fu	inctional use	High-tech products							
	of	goods, % of to	otal	USI) bn.	share in total volume, %					
	Consumer	Investment	Provisional	Exports	Imports	Exports	Imports				
2019	33.8	24.4	41.8	74.7	183.3	11.1	72.0				
2020	32.6	24.9	42.5	86.7	174.1	26.1	72.4				
2021	31.3	29.0	39.7	112.0	223.1	22.7	73.4				
Q1	33.2	25.4	41.4	20.5	47.2	22.0	73.1				
Q2	30.3	31.6	38.1	27.0	56.3	23.4	73.9				
Q3	31.2	30.5	38.3	30.8	57.9	22.9	74.3				
Q4	30.9	28.2	40.9	33.7	61.7	22.0	72.3				

Source: Rosstat.

The share of imported goods in the commodity composition of retail trade in 2021 remained at the level of the previous year and amounted to 39.0% with the current dynamics of consumer-oriented industries.

The increased inflationary pressure determined a shift in consumption from services to goods with a sharp rise in the price of food products amid the influence of changes in domestic and foreign market environment. Despite the measures trends and outlooks

taken to regulate the prices of socially important commodity groups and certain foodstuffs, the food price index reached 110.6% in 2021 evidencing the highest level in five years.

In the non-food market, the 8.6% increase in prices, together with a marginal increase in domestic production and imports, was due to the pent-up demand accumulated over the two years of pandemic (*Table 4*).

Table 4

Price index in 2015–2021, December vs December of the previous year, %

	2015	2016	2017	2018	2019	2020	2021
Consumer prices	112.9	105.4	102.5	104.3	103.0	104.9	108.4
Foodstuffs	124.0	104.6	101.1	104.7	102.6	106.7	110.6
Non-foods	113.7	106.5	102.8	104.1	103.0	104.8	108.6
Services	110.2	104.9	104.4	103.9	103.8	102.7	105.0
Manufacturing prices							
Industrial goods	112.1	107.5	108.4	111.7	95.7	103.6	128.5
Mining operations	111.0	108.5	123.9	120.7	90.8	96.7	159.2
Manufacturing	113.2	107.6	104.2	110.3	96.6	106.0	125.3
Agricultural products	108.5	101.8	92.2	112.9	95.5	113.1	113.6
Investment goods	110.3	103.2	103.1	107.3	105.1	104.8	107.8
Freight traffic	111.5	106.6	109.4	101.4	101.5	105.2	104.8
Change in the dollar-ruble exchange rate	129.5	83.2	95.0	120.6	89.1	119.3	100.6

Source: Rosstat.

Despite the measures taken to regulate the prices of socially important commodity groups, the food price index reached 110.6% in 2021 and was at its highest level in five years. Growth in prices in the non-food market by 8.4% was provoked by delayed demand accumulated over two years of pandemic amid the restrained increase of domestic production and imports.

The rise in producer prices for industrial goods was mainly driven by higher prices in the mining and manufacturing industries for the production of construction materials in the metal, timber and construction sectors. In December 2021, the price index in manufacturing industry was 125.3% and in construction industry 107.8% against December of the previous year.

Profitability throughout the economy as of January-September 2021 amounted to 14.5% and went up by 4.6 p.p. vs the indicator of the year before. Growth in the financial results in the mining industries was marked by changes in the global prices for fuel and energy, mineral and raw material products and the volumes of their production. Active government implementation of measures to support mortgage lending resulted in growth in the efficiency of the financial, credit and insurance markets for real estate transactions (*Table 5*).

Table 5 Profitability of goods, products, works and services sold by economic activities in 2019—2021, %

	2019	2020	2021
Economy, total	11.4	9.9	14.5
Agriculture, hunting and forestry	18.6	22.9	28.9
Mining and quarrying	29,6	23,0	37,3
Manufacturing industries	12.1	12.2	16.7
Electricity, gas and steam supply, air conditioning	9.2	8.4	
Construction	7.0	8.1	7.1
Wholesale and retail trade	6.4	5.1	8.8
Hotels and catering	5.9	-0.9	5.1
Transport and storage	8.7	3.4	8.0
Information and communication	16.0	12.8	13.6
Financial and insurance	11.8	34.7	29.9
Real estate	13.7	24.3	28.9
Public administration and military security; social security	15.2	19.3	4.9
Education	6.7	9.5	5.6
Health care and provision of social services	9.8	9.9	14.7

Source: Rosstat.

4.1.2. GDP generation by source of income: wages, employment, labor productivity

The government's measures to support enterprises and organizations focused to maintain employment and wages while reducing the tax burden have significantly decreased the impact of administrative restrictions on economic activity and on nominal wages, ultimately resulting in changes in labor costs and profitability of production.

The share of wages in GDP in Q2 2020 at 52.3% is the highest value in the observation period since 2013. The redistribution of income between households and businesses allowed to avoid shocks in the labor market and social unhappiness over a short period of time.

However, the ratio of actual hours worked and full-time employment associated with economic recovery and gradual refusal of flexible working hours resulted in the need to adjust labor costs according to productivity, qualification requirements and skills, which has changed the proportions of GDP income and labor demand. In 2021 the share of wages dropped to 41.1% of GDP (-5.1 p.p. by 2020) while the gross income of the economy increased to 48.3% of GDP — the highest level in a decade (*Table 6*).

With the recovery of business activity, the change in the structure of cash income was determined by growth in the share of labor income to 63.5% in 2021, including income from entrepreneurial activity to 5.9%. The government measures

Table 6

Structure of GDP by revenue source in 2019—2021, % of total

	2019	(Quarte	rs 2020)	2021	Quarters 2021			
	2019	I	II	III	IV	2021	I	II	III	IV
Gross domestic product	100	100	100	100	100	100	100	100	100	100
Including:										
Salaries of employees (including hidden income)	44.1	49.6	52.3	44.9	43.0	41.1	47.9	44.9	39.8	34.6
Net taxes on production and imports	11.1	11.3	10.9	10.1	11.4	10.6	12.3	10.9	10.6	9.2
Gross profit of economy and gross mixed income	44.8	39.1	36.8	45.0	45.6	48.3	39.8	44.2	49.6	56.1

Source: Rosstat.

to support the unemployed, families with children, people with disabilities, and working pensioners have had a significant impact on the volume and share of social payments in the income structure, but when the economic dynamics become positive the contribution of social payments in the income structure of households dropped to 20.8% in 2021 against 21.5% in 2020 (*Table 7*). The average monthly nominal wage rose by 9.7% in 2021 and the average amount of granted pensions rose by 11.2%.

 ${\it Table~7}$ Structure of cash income generated in 2020—2021, % of total

	Total			Includin	g		
	Cash income	Incomes from entrepreneurial activity	Labor wage	Employees' wages as part of labor wage	Social payments	Real estate incomes	Other cash incomes
2020	100	5.2	57.5	42.1	21.5	5.8	10.0
Q1	100	5.9	62.2	45.4	21.7	4.9	5.3
Q2	100	4.0	59.3	45.5	21.6	5.1	10.0
Q3	100	5.6	56.3	41.3	22.7	6.1	9.3
Q4	100	5.4	53.6	37.7	20.2	6.8	14.0
2021	100	5.9	57.6	41.7	20.8	5.2	10.6
Q1	100	5.9	64.3	47.2	20.9	4.3	4.6
Q2	100	5.7	58.5	44.1	23.4	4.3	11.1
Q3	100	6.1	55.7	38.9	23.1	5.2	9.6
Q4	100	5.8	53.9	38.3	18.8	6.4	15.1

Source: Rosstat.

Taking into consideration the current structure of economic and household income and the increasing role of labor income, a set of measures aimed at reducing unemployment risks was an unconditional priority in 2021. By the end of 2021, the unemployment rate had fallen to a record low of 4.3% since 2017 due to creation of new jobs. In 2021, the load per 100 job applications to the

employment services was roughly in line with the pre-pandemic level of 2019 accompanied by a dynamic growth in job vacancies.

The economic recovery in 2021, marked by high inflation, followed a path of falling unemployment, restrained wage growth and sluggish productivity dynamics. Measures to support output by keeping jobs at pre-crisis levels resulted in higher business costs and an inflationary spiral.

The demand surge observed in 2021 resulted in record capacity utilization rates on the one hand and, on the other hand, exacerbated labor shortages. This has increased the demands on monetary policy as a tool for managing aggregate demand.

4.1.3. Use of GDP: household final consumption expenditure

The coronavirus pandemic increased the impact of structural imbalances, but in contrast to previous critical situations, the economic situation in 2020—2021 was marked by a subdued drop in consumption along with systematic support measures for households and businesses.

Growth in public expenditure on final consumption played a key role in maintaining social confidence and reducing tensions at the labor market. Increasing the share of public expenditure on individual and public consumption to 20.1% of the GDP in 2020 against the multi-year average of 18.2% of GDP has mitigated the shock of changes in real income dynamics and guaranteed the fulfilment of social obligations.

Existing and new programs based on information systems infrastructure and payment mechanisms have increased the coverage of social support measures, and although the intensity of public expenditure on final consumption has weakened somewhat in 2021, this has been mitigated by growth in real household incomes (*Table 8*).

 $Table\ 8$ Dynamics and structure of final consumption expenditure in 2019–2021

	2019			2020			2021					
	2019	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	
% of previous year/quarter												
Gross domestic product	102.0	97.3	101.4	92.2	96.5	98.2	104.7	99.3	110.5	104.3	106.9	
Final consumption expenditure	102.9	95.1	102.6	85.4	94.4	96.8	107.1	98.1	118.8	107.3	109.1	
— households	103.2		102.2	78.3	90.9	94.3	109.6				114.8	
public administration	102.		9 103. of total	6 104.			1 101.1	100.3	101.0	100.0	95.2	
Gross domestic product	100	100	100	100	100	100	100	100	100	100	100	
Final consumption expenditure	69.7	71.2	77.4	70.5	70.1	66.3	69.7	75.9	69.0	65.0	64.0	
1												
— households	51.2	50.7	54.9	46.4	49.3	47.5	49.7	53.4	49.1	47.4	49.8	
— public administration	18.1	20.1	22.0	23.5	20.3	18.5	17.8	22.0	19.5	17.2	14.0	

Source: Rosstat.

As a result of the recovery in economic activity, household incomes and wages showed an increase in 2021 compared to the previous year. The main driver of wage growth was the recovery of activity in the sectors of social service infrastructure, which suffered the greatest losses during the pandemic (trade, catering, hospitality, cultural and leisure activities and construction). In 2021, real disposable incomes rose by 3.1% and real wages by 2.9% compared to the previous year.

The reaction of households to changes in incomes during 2020—2021 was highly heterogeneous. While in Q2 2020 expenditures for purchasing goods dropped by 26.7% and payments for services by 31.4% compared to the indicators of the year before, and their share in total expenditures of household by the end of this period corresponded to the lowest level since 2013, during 2021, household reacted to the increase in consumer prices and increased inflation expectations by a surge of activity in the goods market. The share of current consumption expenditure in 2021 in the household income was 80.3%, 4.7 p.p. higher than a year earlier (*Table 9*).

 $Table\ 9$ Structure of household income aimed at current expenditure and savings in 2019—2021, % of total

	2019			2020					2021		
	2019	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4
Incomes, total	100	100	100	100	100	100	100	100	100	100	100
Current expenditures	80.8	75.6	87	66.9	80.3	70.2	80.3	87.7	80.7	81.4	74.2
Purchase of goods	59.8	58.7	64.9	53.4	63.1	54.5	61.5	67.1	61.7	62.2	56.9
Payment of services	18.0	15.,9	19.9	12.9	16.4	15.1	17.5	19.7	17.9	17.7	15.6
Mandatory payments and fees	15.3	15.3	15.3	14.2	15.9	15.5	15.3	15.3	15.1	14.9	15.8
Savings	3.9	9.1	-2.3	18.9	3.8	14.3	4.4	-3.0	4.2	3.7	10.0
Deposits, securities, purchase of real estate, changes in outstanding loans and accounts receivable of individual entrepreneurs	3.4	4.4	-2.8	6.9	1.5	10.1	5.8	-2.7	7.8	5.6	10.3
In cash, on hand	0.5	4.5	2.4	8.3	4.1	3.3	0.9	2.2	0.5	1.0	0.4

Source: Rosstat.

Throughout 2020—2021, the household saving behavior has changed. In 2020, changes in household consumption were reflected in an indicator of the increased propensity to save, due to both forced savings with a decline in domestic market supply and an increased interest in purchasing real estate under the implementation of state-sponsored concessional mortgage lending programs.

Increased expectations of rising inflation and mortgage interest rates motivated investment activity at the real estate market and in 2021 the increase in mortgage loans to 4.4% of GDP and 8.2% of disposable income was a significant factor in the acceleration of housing construction in 2021 (*Table 10*).

Table 10

Household investment potential and activity, 2015–2021

	2015	2016	2017	2018	2019	2020	2021			
	%	GDP								
Deposits of individuals	27.9	28.3	28.3	27.4	27.7	30.6	26.6			
Loans granted to individuals	12.9	12.6	13.3	14.3	16.1	18.7	19.2			
including housing mortgages	1.4	1.7	2.2	2.9	2.7	4.2	4.4			
% of household cash incomes										
Deposits of individuals	43.7	44.5	46.2	48.5	48.7	51.8	49.6			
Loans granted to individuals	10.9	19.9	21.7	25.4	28.4	31.9	35.9			
including housing mortgages	2.2	2.73	3.6	5.2	4.6	6.9	8.2			
%	of banki	ng sector	assets							
Deposits of individuals	30.0	32.7	33.3	33.0	34.4	31.6	28.4			
Loans granted to individuals	13.8	14.6	15.6	17.3	19.9	19.3	20.8			
including housing mortgages	1.5	2.0	2.6	3.5	3.2	4.1	4.7			
For reference: weighted average interest	12.89	11.56	9.79	9.66	9.05	7.36	7.81			
rate	12.09	11.50	9.19	9.00	9.03	7.30	7.01			
Prices index at real estate market, %										
of the previous year										
Primary real estate market	99.7	99.6	101.0	106.3	108.0	112.0	126,1*			
Secondary real estate market	96.8	97.0	98.4	104.1	103.8	109.5	117.2*			

* Q4 2021 vs Q4 2020.

Source: CB RF.

4.1.4. Investment in fixed assets

Structural features

Specific features of the economic activities in 2020 related to structural changes in the domestic market, a decline in GDP, a reduction in fixed capital investment (although insignificant), and stabilization of the volume of construction works, determined the starting conditions for the next year. In 2021, the acceleration of GDP dynamics was supported by a faster growth of fixed capital investments compared to final consumption and a positive dynamic in construction compared to 2020 indicators (*Table 11*).

 $Table\ 11$ Dynamics of investment and construction business in 2019–2021, % of the respective period of the previous year

	2019			2020			2021						
	Year	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4		
GDP	102.0	97.3	101.4	92.2	96.5	98.2	104.7	99.3	110.5	104.3	106.9		
Investment in fixed assets	102.1	99.5	104.2	95.4	94.9	103.0	107.6	103.3	111.0	107.9	107.6		
Construction	102.1	100.7	102.6	95.8	100.9	103.0	106.0	102.9	110.6	103.7	106.4		
Commissioning of living space	102.1	100.2	104.0	83.0	107.7	102.2	112.7	115.2	147.2	129.0	88.7		

Source: Rosstat.

The recovery growth was accompanied by growth of revenues of enterprises and organizations under the influence of the output growth and financial support

of systemic enterprises. The balanced financial result of large enterprises and organizations in the economy as a whole in 2021 was 2.6 times higher and almost fully covered the losses of the previous year.

The share of gross profit and mixed incomes of enterprises and organizations increased in the income structure of GDP. The share of gross fixed capital in GDP in 2021 remained close to that of the previous year, however, growth in the level of transformation of gross savings into fixed capital investment became a special feature. The dynamics and structure of the investment and construction activity in recent years were shaped in the environment of tougher competition in the global markets, restrictions on the movement of investment imported goods, changes in the ruble exchange rate versus foreign currencies. However, in spite of external pressures, government measures and the active use of financial and monetary policy instruments have helped to mitigate the impact of the adverse environment.

Growth in domestic business investment activity in 2021 was supported by the attraction of foreign direct investment into the Russian economy. In 2021, the inflow of foreign direct investment into the Russian economy exceeded the previous year's volume by \$30.4bn. (*Table 12*).

Table 12 Key parameters of the investment funds sources in 2015—2021, % of GDP

	2015	2016	2017	2018	2019	2020	2021
		% GD	P				
Gross savings	24.6	24.2	26.6	33.2	31.2	31.6	32.1
Gross accumulation	20.6	21.9	22.0	20.6	20.9	21.6	20.0
Gross profit and other mixed income	41.1	40.8	41.3	43.6	44.8	43.8	48.3
Consolidated budget revenues	32.3	32.9	33.8	35.8	36.2	35.6	36.8
National Wealth Fund	6.1	4.7	3.6	3.7	7.2	11.7	11.7
Budgeted funds for investments	2,3	2.2	2.2	2.0	2.2	2.7	2.4
including funds from federal budget	1.4	1.2	1.1	1.0	1.0	1.2	1.1
Loans granted to:							
Corporate clients	42.1	38.4	36.8	36.6	35.7	41.7	39.7
Individuals	12.9	12.6	13.3	14.3	16.1	18.7	19.2
Deposits:							
Corporate clients	32.6	28.4	27.0	27.0	25.8	22.70	22.8
Individuals	27.8	27.9	28.3	27.4	27.7	30.6	26.5
	В	illions of	dollars				
Foreign direct investment in Russian economy	6.9	32.5	28.6	8.8	32.0	9.5	39.8
Russia's direct investment abroad	22.1	22.3	36.8	31.4	21.9	5.8	62.5
Private sector financial transactions (net lending (+)/borrowing (-))	57.1	18.5	24.1	65.5	22.6	50.4	72.0

Source: Rosstat; CB RF.

Own funds of enterprises and organizations played the main role in financing investment: in 2021, the share of investment from organizations' own funds was 56.6% of total investment in fixed assets. The maintenance of a high share of own funds in the sources of financing was supported by high dynamics of the financial results of enterprises, profitability of production and assets.

The share of Russian banks' loans in the volume of investment resources was 9.8% in 2021 (-0.1 p.p. versus the previous year). The reduction in the share of Russian banks in the structure of capital investment funding sources was compensated for by the increase in the share of foreign banks' loans to 1.9% of investments from abroad.

The share of budget financing in the structure of capital investment rose to 19.2% in 2020 in the acute phase of the pandemic crisis, reversing its decline to 17.8% in 2021, but remaining above the average values of the past decade (*Table 13*).

Table 13

Structure of investments in fixed capital by sources of financing (excluding small businesses and informal activity parameters) in 2018—2021, % of total

	2018	2019	2020	2021
Investment in fixed assets, total	100	100	100	100
Own funds	53.0	55.0	55.2	56.6
Borrowings	47.0	45.0	44.8	43.5
including:				
Banking loans	11.2	9.8	9.9	9.8
Russian banks loans	6.8	7.8	8.1	7.9
Foreign banks loans	4.4	2.0	1.8	1.9
Borrowings from other organizations	4.3	4.8	4.9	4.6
Investment from abroad	0.6	0.4	0.3	0.4
Budget funds	15.3	16.2	19.1	17.8
Of which:				
Federal budget	7.6	7.6	8.7	7.7
Budgets of subjects of Russian Federation	6.6	7.4	9.2	8.9
Local budgets	1.1	1.2	1.2	1.2
Extrabudgetary funds	0.2	0.2	0.2	0.2
Funds received for shared participation in construction (organizations and households)	3.5	4.3	3.3	2.1
Including public funds	2.5	3.2	2.6	1.7
Other	11.9	9.3	7.1	8.6

Source: Rosstat.

The nature of investment activity in 2021 was influenced by changes in financial and credit conditions. In 2021, the key rate was changed 7 times upwards from 4.5% to 8.5% per annum.

After a period of temporary forced demand suppression, disruption in production and transport-logistics supply chains, the situation in the construction and investment environment was challenged in 2021 by increasing inflationary

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pressure amid dynamic growth in the price of construction materials and rising costs of construction and installation works and equipment (*Table 14*).

Moreover, the construction and investment businesses were negatively affected by the rising cost of supply of investment goods under a high dependence of investment activity on imports of capital goods. Imports of investment goods amounted to 7.1% of GDP in 2021 and grew at a faster rate than public capital investments.

 $\it Table~14$ Investment activity in 2019–2021 (financial conditions), %

	2019	2020	2021
Key rate (as of end of December)	6.25	4.25	8.5
Price indexes against December of previous year			
Goods manufacturers	95.7	103.6	128.5
for investment products	105.1	104.8	107.8
Including:			
Construction products	105.0	102.9	111.3
Purchase of machinery and equipment	107.1	109.3	104.6

Source: Rosstat; CB RF.

The contribution of Russian companies increased in the structure of investment by form of ownership as well as the role of the state as a subject of the investment process. The share of state-owned investments in 2021 was 21.3%, mainly due to a reduction in the share of foreign and joint Russian and foreign ownership (Table 15).

Table 15
Structure of investments in fixed capital by form of ownership in 2017—2021, at current prices

	For full range of businesses			Excluding small businesses and informal activity parameters		
	2017	2018	2019	2020	2020	2021
Investment in fixed assets, total	100	100	100	100	100	100
Including by form of ownership						
Russian	83.8	85.1	85.6	88.0	84.1	83.4
State	14.4	14.8	15.6	17.1	22.7	21.3
Municipal	2.5	2.3	2.7	2.9	3.6	3.5
Private	58.1	58.9	59.9	61.9	49.7	51.6
Mixed Russian	7.5	7.9	6.4	5.1	6.9	5.7
State corporations	1.2	1.2	1.0	0.9	1.1	1.3
Foreign	7.4	6.6	7.0	5.2	6.9	6.8
Joint Russian and foreign	8.8	8.3	7.4	6.8	9.0	9.8

Source: Rosstat.

Investment in fixed assets by type of fixed asset and type of activity

In 2021, the structure of investments by types of fixed assets was shaped under the influence of the operational response to the current situation on the capital goods market along with the acceleration of construction works. Changes in the structure by types of fixed assets showed a tendency towards growth in the share of expenditure on machinery, equipment and vehicles.

Growth in the share of investments in information, computer and telecommunication equipment was also positive providing conditions for an operational solution to accelerate the dynamics of digitalization (*Table 16*).

Table 16

Structure of investments in fixed capital by types of major funds 2019—2021,
% of total (excluding small businesses and informal activity parameters)

	2019	2020	2021
Investment in fixed assets, total	100	100	100
Including:			
Residential buildings and premises	5.5	5.9	6.0
Buildings (except for residential) and facilities	44.5	43.2	43.7
Expenditures for land improvement	0.1	0.1	0.1
machinery, equipment, vehicles	38.5	38.3	37.7
Including information, computer, telecommunication (ICT) equipment	4.0	4.7	4.3
Intellectual property	4.3	5.3	5.8
Other	7.2	7.2	6.7

Source: Rosstat

Growth in the volume of investments in fixed assets was determined by the combined effect of the accelerated growth rates of the domestic investment productions and the increased contribution of imported capital goods in the structure of investment resources up to 39.9% in fixed assets investment in 2021 versus 34.9% a year earlier.

A positive trend in the dynamics of investment in fixed capital in 2021 was the increase in capital investment in the machine-building sector and in the production of construction materials (Fig. 1).

The changes in the structure of investments by types of activities were determined by the outstripping dynamics of investment in manufacturing (108.0% by 2020), construction (117.8%), trade (129.8%), transportation and storage (113.5%), cultural and recreational activities (116.4%).

The structural change in mining industries in 2021 was driven by investment growth of 2.6%, but this did not buy in to the 3.1% fall of the previous year. An alarming factor in 2021 was a 4.0% fall in investment in production of crude oil and natural gas against a growth rate of 102.0% in the previous year.

In manufacturing, the pharmaceuticals and medical supplies industry retained the lead in terms of average annual investment activity in 2020—2021, with a growth rate of 111.8% over 2019. The expansion of the pharmaceutical and

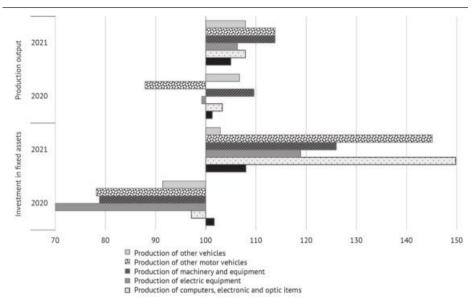


Fig. 1. Investment in fixed capital and output by machine-building activity in 2020—2021, % of previous year

Source:Rosstat

related industries helped to mitigate some of the disruption in production chains to the supply of raw materials, substances and equipment.

Operational management of production has highlighted the need to address the fundamental challenges of innovation in pharmaceutical production, taking into account the conditions for training skilled personnel in drug development, production and distribution and aligning industry priorities with health system development goals.

In 2021, growth of capital investment in the production of construction materials was recorded under the increase in construction and investment activity. Capital investment in metal production increased by 20.2%, production of construction materials grew by 30.3% and by 16.9% in timber industry compared to the previous year.

Investments in food processing (107.3% relative to 2020), textiles (180.0%) were recorded along with increased demand in the consumer market.

Positive developments should be noted in the services sector, such as the outrunning growth of investments in information technology (107.6% by 2020), professional and scientific-technical activities (116.3%).

The slowdown in investment in transport and logistics services is worrisome, especially in the context of plans to modernize and expand trunk infrastructure. Despite an offsetting increase by 13.3% in investment in transport and storage compared to the previous year, the negative effects of the acute 2020 crisis persisted in almost all modes except road transport and warehousing.

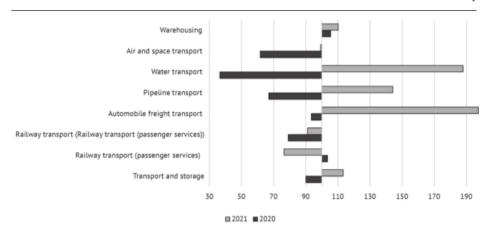


Fig. 2. Dynamics of investment in the fixed assets in transport in 2020–2021, % of the previous year

Source: Rosstat.

The extremely slow recovery of freight and passenger turnover remained a common transport problem in 2021. Efforts to maintain as much as possible the transport investment programs and infrastructure development made it possible to save production links, jobs, incomes both in the industry and in the related sectors, railway engineering, automotive plants and shipbuilding, and the construction industry (*Fig.* 2).

The acceleration in housing construction is due to the increased demand for housing under preferential mortgage programs, attractiveness of housing as a saving amid falling deposit rates, higher inflation expectations and increased volatility of the ruble, and banks' interest in increasing their loan product portfolios.

The increase in the contribution of individual housing construction at the expense of the population/developers and borrowings has compensated for the slowing down trend in the commissioning of apartment housing. A significant increase in the share and dynamics of individual housing commissioning (taking into account changes in statistical methodology) has been recorded since 2020, and in 2021 these figures were 103.0 and 123.1%, respectively.

It has to be noted that in 2021 the acceleration rate of the housing commissioning was due to an increase in the household demand on the one hand and to adaptation of construction companies to new conditions of project financing and cooperative housing using escrow accounts on the other hand (*Table 17*).

Almost a third of residential property is being built using escrow accounts, which has a positive effect on the people confidence to participate in investment projects. Household spending on real estate continued to increase and mortgages with a wide range of lending programs, including concessional lending, remained the growth driver.

Table 17
Volumes and dynamics of residential space commissioning by type of construction in 2014—2021, %

	Commissioning of residential space, million square meters	Inclu	ıding	Rate of residential space commissioning, % to previous period		
	Total	Apartment housing	Individual housing construction (IHC)	Total	Apartment housing	Individual housing construction (IHC)
2014	84.2	48.0	36.2	119.4	120.6	117.9
2015	85.3	50.1	35.2	101.3	104.4	97.2
2016	80.2	48.4	31.8	94.0	96.6	90.3
2017	79.2	46.2	33.0	98.8	95.5	103.8
2018	75.7	43.2	32.4	95.6	93.7	98.2
2019	82.0	43.5	38.5	108.3	100.5	119.2
2020	82.2	42.4	39.8	100.2	97.5	103.4
2021	92.6	43.5	49.1	112.6	102.8	123.1

Source: Rosstat

However, it should be taken into account that rise in real estate prices outpacing consumer prices, longer mortgage terms and higher interest rates resulted on the one hand in an increased debt burden with real housing improvements and, on the other hand, increased investment demand for housing as a means of saving, thus provoking imbalances in the real estate market in the short term. By the end of 2021, the availability to purchase housing up to income has reduced, while real estate prices rose, which determined the dynamics of housing commissioning in apartment buildings and individual construction, as well as the level of participation in cooperative construction. The government's anti-crisis measures in 2020—2021 combined with support for systemic enterprises, continued funding of infrastructure projects and stimulation of demand in the housing market, have supported fixed investment during the acute crisis period and identified the capacity for economic recovery.