

GAIDAR INSTITUTE FOR ECONOMIC POLICY

RUSSIAN ECONOMY IN 2022

TRENDS AND OUTLOOKS

(Issue 44)

**Gaidar Institute Publishers
Moscow / 2023**

UDC 338.1(470+571)"2022"
BBC 65.9(2Poc)"

R95 Russian Economy in 2022. Trends and outlooks. (Issue 44) / [V. Mau et al; scientific editing by Kudrin A.L., Doctor of sciences (economics), Radygin A.D., Doctor of sciences (economics), Sinelnikov-Murylev S.G., Doctor of sciences (economics)]; Gaidar Institute. – Moscow: Gaidar Institute Publishers, 2023. – 521 pp.: illust.

ISBN 978-5-93255-665-8

The review “Russian Economy. Trends and Outlooks” has been published by the Gaidar Institute since 1991. This is the 44th issue. This publication provides a detailed analysis of main trends in Russian economy, global trends in social and economic development. The paper contains 5 big sections that highlight different aspects of Russia’s economic development, which allow to monitor all angles of ongoing events over a prolonged period: the monetary and budget spheres; financial markets and institutions; the real sector; social sphere; institutional changes. The paper employs a huge mass of statistical data that forms the basis of original computation and numerous charts confirming the conclusions.

Reviewer:

Spartak A.N., Doctor of sciences (economics), Corresponding Member of RAS, Professor, Director of JSC VNIKI, honored scientist

UDC 338.1(470+571)"2022"
BBC 65.9(2Poc)"

ISBN 978-5-93255-665-8

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Dynamics and structure of GDP and investments in Russia in 2022 ¹

3.1.1. Demand and supply: adjusting to new realia

The 2022 economic dynamic was characterized by extreme volatility. The situation was shaped by the continuing trends, on the one hand, of economic recovery after the coronavirus pandemic and, on the other hand, the creation of new mechanisms to support, adapt and reduce the impact of sanctions restrictions in relation to the real and financial sectors of the domestic economy throughout the year.²

The profiles of the economic development in early 2022 were defined by: continuation of the imbalance of the growing demand and limited changes in the supply at high differentiation of the growth rates by types of economic activities and segments of the internal and external markets; intensification of the inflationary pressure on incomes and consumer behavior of the population; structural transformation of prices and production costs.³ The starting position for 2022 was driven by the output growth by the basic types of economic activities by 5.9% according to the results of 2021, the final demand of the households increasing by 10.0% and the investment demand — by 7.6%. Domestic demand was propped up by raising the scale of foreign trade turnover: the increase in the contribution of net exports in 2021 came to 9.3% of GDP, including exports - 30.2% and imports — 20.9% (by the SNA methodology in current prices).

Changes in the internal and external environment determined the acceleration of inflation to 8.4% against 4.9% a year earlier and its increase in February 2022 up to 9.2% in annual terms. Regulation of inflation by instruments of monetary

1 Author: *Olga Izryadnova*, Head of Structural Policy Department of the Gaidar Institute; Leading Researcher, IAES RANEPA.

2 *Mau V.A.* Economic policy in times of the pandemic: The experience of 2021-2022 // *Voprosy Ekonomiki*. 2022.No. 3. Pp. 5–28.

3 *Drobyshevsky S.M., Pavlov P.N.* Structure of GDP growth rates in Russia up to 2024 // *Voprosy Ekonomiki*. 2022. No. 3. Pp. 29–51.

policy was accompanied by an increase in the key rate of the Bank of Russia from 4.5% per annum (March 22, 2021) to 8.5% (December 20, 2021) and 9.5% (February 14, 2022).

The change of political and economic environment at the end of February 2022 and the introduction of unprecedented in scale sanctions against the Russian Federation, limiting the access of the Russian business to the world markets of goods, services and technologies, resulted in the breach of established scheme of the domestic economy post-pandemic recovery. Under hard pressure of external factors on the financial sector and destabilization of the domestic market, raising of the key rate to 20% per annum (February 28, 2022) and implementation of exchange regulation measures made it possible in March 2022 to check inflation at 16.7% per annum and the nominal ruble exchange rate at 84.09 rubles/dollar.

The effect of the sanctions on the real sector of the economy turned out to be extended in time, and the situation in March remained in the context of positive values: in March 2022 the gross output by the basic types of economic activities made 101.6% versus March of the previous year (Q1 2022 — 104.5% versus Q1 2021), the minerals production growing by 6.6% (7.3%), in construction — by 5.9% (4.5%) and transport cargo turnover — by 3.6% (4.2%). With the acceleration of inflation, the rush of January-February has been replaced by the slowdown of retail trade turnover in March to 102.0% and wholesale trade — to 99.5% in annual terms. The negative point for the first time since November 2020 was the drop of the manufacturing industries output in March 2022 by 0.7% in annual terms, though the growth of the production in January-February ensured the continuation of the quarter upward trend at the level of 104.5% versus the corresponding period of 2021.

According to the results of Q1 2022 as compared to the corresponding period of the previous year, GDP went up by 3.5%, final consumption of households — by 4.5% and investment in fixed assets — by 13.8%. In the current foreign economic environment, the contribution of the net exports to the cost structure of GDP (according to the SNA methodology) at the level of 19.2% in current prices (8.0% in comparable prices) that was exceptionally high for the period of 20-year observations, had a positive impact.

Since April 2022, there has been an intensification of the negative influence of the sanctions restrictions on the economic dynamics: the output by the basic kinds of economic activities in Q2 made 96.3% of the similar period level of the previous year. The most acute reaction to the changes of the political and economic environment was observed in the manufacturing sector due to the severe violations of the trade and economic and transport-logistic relations: in June 2022 the output of the manufacturing industries dropped by 4.8% versus June of the previous year, while the wholesale trade turnover dropped by 18.2% and transport freight turnover — by 5.8%. The weakening of the dynamics from 103.9% in Q1 2022 to 103.6% in the Q2 against the corresponding figures of the previous year was demonstrated by the construction industry with an increase in prices for construction materials, growing cost of credits and unstable demand at the mortgage market. The situation was aggravated by a 9.8% contraction of

the consumer market with 2.1% contraction of the real money income and 5.4% contraction of the real wages compared to Q2 2021.

The adverse impact of external and internal factors determined 4.1% contraction of GDP in Q2 2022 in annual terms, 5.5% contraction of household final consumption and 13.8% contraction of gross savings as a result of inventory rundown. Although the contribution of net exports to GDP remained at a high level of 16.1% (5.9% in comparable prices) under the current structure of demand and prices, sanctions on financial transactions and the system of cross-border payments narrowed down the possibilities for transferring net income from foreign trade activities to support the domestic market. In the real sector, the sanctions significantly hampered international logistics, imports of high-tech goods and services, and Russian exports. The simultaneous drop in imports and the suspension/exit of foreign companies from the Russian market significantly complicated the situation in industries with a high level of dependence on imported intermediate and final goods, technologies and services.

Russian business, which had already accumulated some experience in resisting the 2014 restrictions and coronavirus lockdowns, reacted quickly enough to the disruption of production and technological, trade and transport-logistics chains and actively refocused on forming ties with new business partners in loyal markets for goods and services: in H1 2022, the value of exports of goods and services went up by 41.9% while imports dropped by 6.7% against the figures recorded the year before. With varying rates of change in foreign trade parameters, net exports in H1 2022 amounted to \$170.9 bn, 2.8 times higher than in the previous year. It should be noted that the damping effect on the output dynamics by types of economic activities was exerted by the anticipatory accumulation of imported and domestically produced material stocks in Q1 2022, which somewhat diminished the negative effect of the import reduction in Q2 by nearly 23.4% against the corresponding index of the previous year (*Table 1*).

The starting positions of H2 2022 formed the conditions for easing of monetary regulation, currency control, repatriation of proceeds and capital flows, and increased credit activity of non-financial corporations. The drop in GDP weakened to 3.7% in Q3 and stabilized in Q4 at a level close to that recorded a year earlier.

In Q3 2022, the differentiation of rates by basic type of economic activity intensified - the positive contribution of agriculture (+12.7% by Q3 2021) and construction (+5.2%) increased. In contrast, the indicators of infrastructure in this period illustrated the deepening of the decline in wholesale trade (-22.6%), freight transport turnover (-5.5%), with significant changes in the transport and logistics chains, the level of buyers' solvency and transaction costs.

The contraction of the retail trade turnover by 9.4% versus Q3 2021 was driven by the change in the consumer behavior with the decrease in the real disposable cash income by 3.1% and the inflationary pressure at the level of 14.3%.

The analysis of the quarter-by-quarter dynamics by types of economic activities in July-September of the last year showed the deceleration of the recession in the industry. In Q3 2022, the recession in annual terms was weakening to -1.8% in the manufacturing industries.

Table 1

Dynamics of main macroeconomic indicators in 2021–2022, in % on corresponding period of the previous year

	2021					2022				
	Year	Quarters				Year	Quarters			
		I	II	III	IV		I	II	III	IV
Domestic environment: production										
GDP	105.6	99.7	110.5	104.0	105.0	97.9	103.5	95.9	96.3	99.9
Output of goods and services by basic economic activity	105.9	100.1	113.1	104.7	106.1	98.7	104.5	96.3	97.3	96.9
Industry	106.4	99.7	111.1	107.1	107.9	99.4	105.1	97.4	98.8	97.0
Agriculture	99.6	100.3	100.1	94.6	107.1	110.2	105.4	108.4	112.7	109.4
Construction	107.0	104.4	111.0	104.0	108.2	105.2	103.9	103.6	105.2	106.9
Transport	105.6	100.5	110.2	107.0	104.8	97.4	104.2	97.0	94.6	94.4
Retail turnover	107.8	99.2	124.3	105.9	104.7	93.3	103.5	90.2	90.6	90.5
Paid services to population	116.7	96.8	153.2	116.4	112.6	103.2	107.8	100.0	101.3	101.6
Wholesale turnover	105.9	104.9	116.9	102.0	102.1	88.5	103.3	84.8	77.6	81.0
External environment										
Balance of foreign trade	221.9	93.4	238.2	314.2	319.9	166.0	307.7	263.9	138.4	73.8
Export of goods and services	144.2	101.6	158.5	163.0	158.5	114.2	160.4	127.6	104.0	84.6
Import of goods and services	124.6	104.6	140.9	132.5	123.0	91.0	112.6	76.6	87.5	90.9
Ruble exchange rate (Average for period) Rb/USD	73.6	74.34	74.2	73.47	72.59	67.5	84.73	66.01	59.40	62.3
Urals price, USD/bbl.	69.1	60.0	67.2	71.2	78.2	77.5	90.5	80.6	76.2	63.2

Sources: Rosstat, CBR.

The formation of new directions of exports of fuel and energy products was the basis of stabilization in the extraction of minerals. Production of oil and natural gas in this period dropped relative to the corresponding indicator of the previous year by 0.1%, but high fossil fuels prices supported the export component and domestic demand. Despite the strengthening of the sanctions restrictions on transportation and supplies to the traditional destinations, the overall dynamics of exports in value terms, taking into account the specifics of the commodity structure, in Q3 2022 remained in the positive area with a slowdown to 104.0%

against the exceptionally high level of the indicators of the corresponding period of the previous year.

The import downturn slowdown was driven by adjustment to the new outline of foreign economic relations: in Q3 2022, the import decline dropped to 12.5% against 23.4% in Q2 2022 against the figures registered a year earlier. Growth of the ruble real effective exchange rate by 23.6% in Q2 2022 and by 39.7% in Q3 as against December 2021 contributed to increase in the value of imports by quarters of 2022. In a situation where all the characteristics of foreign trade have changed, according to the balance of payments, the net export (balance) of goods and services fell from \$91.8 bn in Q2 this year to \$65.6bn in Q3, however, it was by 38.4% higher than in the same period of last year.

The situation in Q4, taking into account the different speed of adjustment of certain sectors of the economy, was influenced by positive results in construction and agriculture. The dynamics of exports of goods and services in Q4 shifted to the area of negative values (-15.4% against 2021). On the whole in 2022, the contribution of net exports (in current prices according to the SNA methodology) to GDP was 12.8%, against 5.1% in the acute phase of the Coronavirus pandemic in 2020 and 6.4% in the crisis situation in 2014. The balance of payments estimates that the value of exports of goods and services in 2022 came to \$628.1 bn (114.1% over the 2021 figure) and imports were \$345.8 bn (91.0%). The share of exports in the value structure of GDP in 2022 is 28.0%, and that of imports — 15.2%, a decline of 2.2 and 5.7 p.p., respectively, vis-à-vis the previous year.

Enhancement of dynamics differentiation by segments of the domestic market was apparent against the backdrop of the annual trend to reduce the scale of imports and to reduce their contribution to the gross resources in the economy. Final consumption in 2022 decreased by 0.6%, including households one by 1.8%, while the investment market showed an expansion of 4.6% (*Table 2*).

Table 2

Dynamics and structure of use of GDP use in 2019–2022

	As % of total, In current prices					% on previous year, In comparable prices				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
GDP	100	100	100	100	100	102.8	102.2	97.3	105.6	97.9
including:										
Final consumption expenditure	68.1	69.7	71.5	67.3	65.0	103.5	103.4	96.1	108.0	99.4
Gross savings	21.8	22.6	23.4	23.4	22.2	98.4	102.3	95.7	114.2	96.8
– gross fixed capital formation	20.6	20.9	21.5	19.9	20.6	100.6	101.0	96.0	109.1	105.2
– changes in inventories	1.2	1.7	1.9	3.5	1.6	n/a	n/a	n/a	n/a	n/a
Net exports	10.1	7.7	5.1	9.3	12.8	n/a	n/a	n/a	n/a	n/a
– export	30.8	28.5	25.5	30.2	28.0	105.6	100.7	95.8	103.3	n/a
– import	20.7	20.8	20.4	20.9	15.2	102.7	103.1	88.1	119.1	n/a

Source: Rosstat.

The drop in the industrial production in 2022 by 0.4% with the increase in minerals extraction by 0.8%, stabilization of the electric energy supply and the decrease in the manufacturing production output by 1.3% versus the previous year determined the structural changes in the internal market, generation of export and demand for imported goods and services.

The most significant contribution into the dynamics was made by the types of activity oriented mainly to the internal market.

In the consumer complex, the decline in domestic production and imports led to 6.6% slowdown in retail market turnover, including the food market by 1.5% and non-food market by 11.1%.

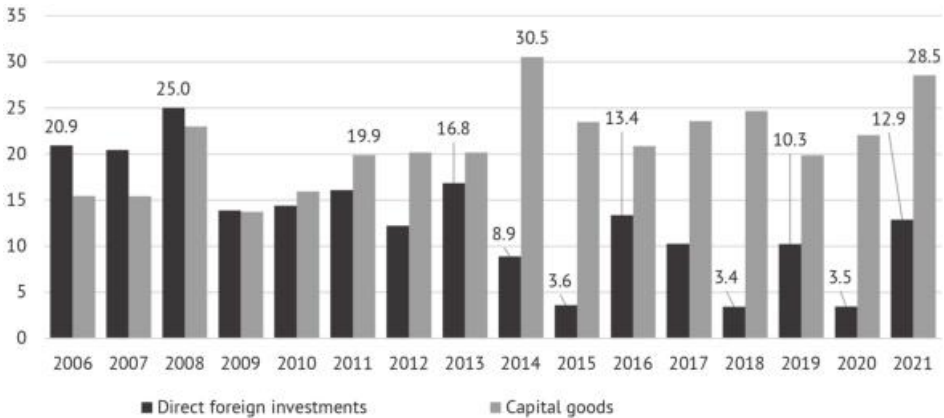
The agricultural growth was translated into productivity progress in the food industry (by 0.5% by 2021); in light industry the dynamics (-2.0%) was significantly influenced by the decline in imports, which account for almost 20% of intermediate consumption of the consumer production complex, as well as disruption of supplies from related industries. Besides, the risks of weakening of the domestic consumer demand increased, with real wages and real incomes falling by 1.0% in 2022 and inflationary pressure intensifying by the end of the year. Rather stable position in the domestic market in the difficult situation of 2022 was preserved by the production of drugs, which remained outside the zone of strict restrictions on trade in chemical and biological substances and had a certain potential for development due to the domestic production base of chemical products and substances. When assessing the state of drugs production, it should be noted that the exit of some foreign companies operating in the Russian market from investment in scientific and clinical research required the actualization of the domestic pharmaceutical market development program, taking into account the new realities of inter-country cooperation and domestic potential.

The nature of functioning of the metallurgical complex was driven by a change in the structure and volume of external demand with the reorientation of product flows to the markets of loyal partners and satisfaction of the domestic market demand for construction materials: production of finished metal products in 2022 went up by 7.0% and was supported by government measures to stimulate purchases with a response of producers to a temporary price restraint. This fact became especially important for the production of construction materials and the introduction of new technologies in construction.

The disruption and rupture of production, technological and trade chains under sanctions has complicated the functioning of export-oriented production of the timber and chemical complexes both due to the cut in supplies to foreign markets and the reduction in opportunities to purchase imported materials and reagents.

Scaling back of import of the investment goods and the components for the high- and medium-tech productions had an extremely painful effect on the dynamics of the machine-building complex, the drop in the production in which in 2022 came to 8.6% and in the fourth quarter it was at the critical level of 88.4% versus the corresponding period of the previous year.

It should also be noted that after the 2008 financial crisis, there was a change in the trend: foreign investments were replaced by imports of investment goods (*Fig. 1*).



Note. At the time of writing this material, data for 2022 was unavailable.

Fig. 1. Ratio between direct foreign investments and imports of capital goods to investments in fixed capital in Russian economy in 2006–2021, %

Sources: Rosstat, CBR.

In the complicated geopolitical situation, it allowed to maintain the participation both at the market of high-tech foreign goods and in the scientific-technological exchange, as well as to compensate for the pent-up internal demand amid the weak dynamics of the domestic production of investment goods. However, the development of this trend stepped up dependence on foreign partners and created potential threats to technological sovereignty. Average annual volumes of direct investment over the period of 2014–2021 were less than 2/5 of the corresponding figure of the recovery development of 2009–2013 and 1/4 of the maximum pre-crisis figure of 2008. The 2022 situation was aggravated by the intensification of capital outflows to the tune of \$223 bn versus \$74.2 bn a year earlier.¹

The most sharp reaction to the suspension/exit from the market of large foreign companies and the disruption of production and technological chains was registered in the production of motor vehicles, the drop of which in 2022 amounted to 44.7% against the previous year.² Readjustment to new markets of suppliers, components and model lines of goods took a long time, and only in August–October the production rates against the previous month of 2022 reached the positive values.

Difficulties in the production of electrical equipment (96.3% against 2021) are also related to the traditional orientation of business partnerships to large foreign companies of unfriendly states, which, when abandoning production and trade

¹ The medium-term forecast of the Bank of Russia following the meeting of the Board of Directors on the key rate on February 10, 2023 URL: https://www.cbr.ru/collection/collection/file/43735/forecast_230210.pdf

² Assessment of Russia’s dependence on imports of intermediate products. Series of reports on economic research. No. 106. December 2022. URL: https://www.cbr.ru/Content/Document/File/144138/wp_106.pdf

interactions with them, hindered the recovery of the output of these products, despite the production capacity created in the industry in recent years.

The diversified system of production, technological and trade-logistical interactions of domestic production of computer and electronic equipment in the foreign market determined the conditions for their fairly rapid adjustment to the sanctions restrictions, in particular due to mechanisms of parallel imports, strengthening of traditional partnerships in loyal markets. In 2022, the production of computer and electronic equipment went up by 1.7% relative to the previous year, but the instability of quarterly and monthly dynamics requires a cautious attitude to the assessment of this indicator.

The dynamics of machinery and equipment production, which was actively supported by the state purchases, remained in the field of positive values according to the results of the year. However, violation of intra- and inter-branch connections of machine-building production, difficulties with service maintenance of imported equipment and shortage of qualified personnel resulted in high fluctuations of monthly dynamics. The same reasons explain the drop in the production of other types of transport and repair of machinery and equipment. The unbalanced movement of stocks, high differentiation in capacity utilization, reduced supplies of imported materials, components and finished products, reaching over 40% of intermediate demand (as of 2019) had a negative impact on both the machine-building complex itself and the related economic activities (*Table 3*).

Table 3

**Dynamics of production by extraction and manufacturing sectors
of economic activity in 2021 and 2022, in % to corresponding quarter
of the previous year**

	2021					2022				
	Year	Quarters				Year	Quarters			
		I	II	III	IV		I	II	III	IV
Extraction of mineral resources	104.2	92.9	107.5	108.7	108.5	100.8	107.4	98.9	100.1	97.5
Production of crude oil and natural gas	102.6	90.6	105.4	107.8	108.4	100.7	107.5	98.0	100.0	97.5
Manufacturing activity	107.4	102.7	113.6	105.7	107.9	98.7	104.9	96.1	98.2	96.6
Consumer complex:										
– food industry	104.6	100.6	103.5	104.9	106.3	100.5	104.0	99.1	98.8	100.6
– textile, clothing and footwear industry	111.6	104.3	118.3	101.1	102.2	98.0	98.9	93.9	97.8	101.0
Timber processing complex	108.7	102.3	114.9	108.6	109.3	96.3	106.1	96.5	93.1	90.4
Chemical complex	108.7	110.9	109.1	104.5	105.4	98.5	105.9	98.5	98.3	92.8
Petrochemical complex	103.6	93.4	108.5	105.1	108.7	99.6	103.0	94.6	100.8	100.1
Building complex	109.3	97.7	113.8	107.1	109.7	101.1	111.0	101.8	98.0	92.0

	2021					2022				
	Year	Quarters				Year	Quarters			
		I	II	III	IV		I	II	III	IV
Metallurgical complex	104.1	95.7	108.3	101.1	103.3	101.1	106.0	96.1	103.4	99.8
Machine building complex	111.8	112.7	128.1	103.0	104.7	91.4	102.8	89.7	87.6	88.4

Source: Rosstat.

The reduction and radical changes in the movement of commodity flows in the domestic and foreign markets have exacerbated the problems of insufficient development of transportation and logistics infrastructure and financial and insurance services. The growth of costs for transportation and logistics, disruption of the rhythm of cargo delivery have become critical factors in adjusting the economy to the new realities of inter-regional domestic and foreign trade and production relations. In 2022, the turnover of freight transportation declined by 2.6%, wholesale trade — by 11.5%, and the contribution of financial and insurance activities decreased to 4.7% of GDP against 5.3% of GDP a year earlier. This has determined the intensification of government policy on infrastructure development: transportation, logistics facilities located in the vicinity of transportation hubs, as well as expanding opportunities for multimodal transportation, especially in the eastern direction.

The economy's adjustment to the new price proportions in the domestic market and to the ruble exchange rate was accompanied by a change in the structure of GDP by income as a result of a decrease in its share of payments to 39.6% of GDP and net taxes on imports and production to 8.2% against 40.1% and 10.0% respectively a year earlier. The economy's gross profits and gross mixed income in the GDP structure rose to its highest level in the past decade of 52.2% in 2022. This being said, it should be noted that the adaptive mechanisms of business regulation and fulfillment of social obligations allowed to maintain stability in the labor market with a decrease in the general unemployment rate from 4.1% in Q1 to 3.7% in Q4 (Table 4).

Table 4

Structure of GDP by revenue source in 2021–2022, % to GDP

	2021					2022				
	Year	Quarters				Year	Quarters			
		I	II	III	IV		I	II	III	IV
GDP										
Compensation of employees	40.1	46.9	43.6	39.0	37.6	39.6	41.7	42.1	39.7	35.9
Net taxes on production and imports	10.0	11.9	10.6	10.0	10.1	8.2	11.1	5.6	7.8	8.4
Gross profit of economy and gross mixed income	49.93	41.2	45.8	51.0	52.3	52.2	47.3	52.3	52.5	55.7

Source: Rosstat.

If the change in net taxes on production and imports was influenced by the reduction of the scale of foreign supplies, the dynamics of gross profit was driven by the transfer of growing production costs and transportation costs to prices with the persisting imbalance of supply and demand.

In H1 2022, producer prices for industrial goods increased by 25.6% in annual terms this year (by 36.1% in mining, 23.0% in manufacturing) and by 15.6% in construction.

Prompt measures to support backbone enterprises, import/import substitution of common and critical goods and technologies, permission for parallel imports, and the formation of alternative transportation and logistics routes relieved acute tension in the domestic market. Sufficiently rapid easing of inflationary pressure and the formation of a weak monthly deflationary wave in H2 2022 allowed four times in Q2 to reduce the key rate — from 17.0% per annum (11.04.2022) to 9.5% (14.06.2022), twice in Q3 — to 7.5% per annum (19.09.2022) and keep it at this level until the end of the year (*Table 5*).

Table 5

**Financial conditions: key rate and price index in 2021—2022,
% to the corresponding period of the previous year
(annual data on December previous year)**

	2021					2022				
	Year	I	II	III	IV	Year	I	II	III	IV
Key rate (quarter-end), % per annum	—	4.5	5.50	6.75	8.50	—	20.0	9.5	7.5	7.5
Consumer prices	108.4	102.1	102.0	101.1	102.9	111.9	110.0	101.3	99.1	101.3
Producer prices										
Industrial goods	128.5	110.8	108.2	103.1	104.0	96.7	110.2	95.0	96.0	96.3
Extraction of mineral resources	159.2	125.0	110.1	103.1	112.2	84.7	123.3	80.0	92.6	92.7
Manufacturing	123.5	108.1	109.2	102.6	102.0	99.1	106.9	100.4	95.5	96.6
Agricultural products	113.5	106.2	100.9	100.9	105.0	95.8	102.5	99.1	96.7	97.6
Capital goods	108.8	101.1	102.0	102.6	102.1	114.7	108.9	102.9	101.1	101.3

Sources: Rosstat, CBR.

Decline in inflation, key rate and implementation of the anti-sanction fiscal policy supported the domestic market. The level of economic activity achieved in 2022 determined the starting conditions for the next year, but it is necessary to take into account the continuing risks of changes in the value of Russian exports and redistribution of profits in the economy through tax channels, as well as the influence of exchange rate policy on the dynamics of imports of critical technologies and goods.

3.1.2. Domestic market: consumption and households' income

In 2022, the dynamics of social parameters was characterized by a restrained decline in household consumption with the implementation of an expanded package of systemic measures to support the population. The increase in government spending on final consumption played a key role in mitigating the shocks of the inflationary wave, reducing tensions in the labor market and maintaining social stability of the population. At the end of 2022, real disposable incomes of the population, real wages and real size of assigned pensions decreased by 1.0%. In 2022, final consumption expenditures were 3.2% higher than in pre-pandemic 2019, including households by 1.6% and public administration by 7.8% (Table 6).

Table 6

Dynamics and structure of expenditure on final consumption in 2018–2022

	In % of total, In current prices					In % to the previous year, In comparable prices				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
GDP	100	100	100	100	100	102.8	102.2	97.3	105.6	97.9
Including final consumption	68.1	69.7	71.5	67.3	65.0	103.5	103.4	96.1	108.0	99.4
– households	50.0	51.2	50.8	49.2	46.9	104.3	103.8	94.1	110.0	98.2
– public administration	17.7	18.1	20.1	17.5	17.6	101.3	102.4	101.9	102.9	102.8

Source: Rosstat.

When analyzing the dynamics and structure of the population's income, one should take into account the problems accumulated over the last decade of slowing down the indicators of living standards that were partially solved by indexation of wages in the public sector, increasing the minimum wage and social benefits. The simultaneous increase in wages and the expansion of social guarantees has determined the conditions for reducing the share of the population with incomes below the poverty line in the total population from 12.3% in 2019 to 11.0% in 2021 and 10.5% in 2022.

In the structure of the population's income in nominal terms, the change in the share of remuneration of labor compared to 2020 was compensated by increased contribution of social payments relative to the pre-demand year 2019. The dynamics of income from entrepreneurial activity was influenced by changes in the competitive environment in the domestic market and the appearance of new niches for economic activity of domestic businesses of various institutional structures. The decline in property income was partly due to the weakening activity of the population in the securities and real estate market (Table 7).

Table 7

Structure of cash income generation in 2019–2022, in % of total

	Total	Including					
	Cash income	Incomes from entrepreneurial activity	Labor wage	Employees' wages as part of labor wage	Social payments	Real estate incomes	Other cash incomes
2019	100	5.9	57.3	—	18.8	5.1	12.9
2020	100	5.2	57.2	42.1	21.4	5.8	10.4
2021	100	5.5	57.3	41.9	20.6	5.7	10.9
2022	100	6.2	57.2	41.7	20.7	5.0	10.9
Q1	100	6.5	66.2	48.7	20.5	4.5	2.3
Q2	100	6.0	56.5	42.0	21.2	4.3	12.0
Q3	100	6.4	54.6	38.5	21.7	5.1	12.2
Q4	100	5.8	53.9	39.4	19.7	5.9	14.7

Source: Rosstat.

The reaction of the population to changes in income levels throughout 2022 was extremely heterogeneous. In the context of high uncertainty in Q1 2022, the current spending hit 92.7% of the population's income, while savings dropped to 8.1% due to the reduction in deposits, transactions in the securities and real estate markets, the growth of debt on loans and increased demand for cash. However, the population reacted to the changes in the conditions of the monetary regulation in Q2 2022 by the renewal of the saving model of the consumer behavior. The investment potential of the households was formed while the trend for the increase in the share of deposits in the incomes of the population and in the GDP remained flat. According to the results of the year, the share of savings in incomes of the population increased to 7.3% against 4.3% a year earlier (Table 8).

Table 8

Structure of household income aimed at current expenditure and savings, 2019–2021, in % of total

	2019	2020	2021, quarters				2022, quarters					
	Year	Year	Year	I	II	III	IV	Year	I	II	III	IV
Incomes, total	100	100	100	100	100	100	100	100	100	100	100	100
Consumer expenditure Including:	80.9	75.7	80.2	87.6	80.5	81.7	73.8	77.7	92.7	76.2	77.9	68.8
— purchase of goods	59.6	58.4	61.1	66.8	61.6	61.9	56.2	59.1	70.6	58.4	58.8	52.0
— payment of services	18.3	16.3	17.8	19.9	17.9	17.7	16.3	17.5	20.9	17.0	17.9	15.5
Mandatory payments and contributions	15.2	15.2	15.5	15.4	15.5	15.1	15.9	15.0	15.4	13.7	15.5	15.5
Savings growth, total	3.9	9.1	4.3	-3.0	4.0	3.2	10.3	7.3	-8.1	10.1	6.6	15.7

	2019	2020	2021, quarters				2022, quarters					
	Year	Year	Year	I	II	III	IV	Year	I	II	III	IV
growth (+), decline (-) savings in deposits, securities, real estate, debt on loans and in accounts of individual entrepreneurs	3.4	4.6	3.4	-5.2	3.6	2.3	10.0	5.5	-12.8	12.8	5.1	11.9
growth/decline of cash on hand	0.5	4.5	0.9	2.2	0.4	0.9	0.3	1.8	4.7	-2.7	1.5	3.8

Source: Rosstat.

However, the trend towards an increase in investment activity at the real estate market, despite the prolongation and expansion of mortgage lending programs, including concessional lending, did not get momentum in H1 2022. In 2022, in the context of weakening dynamics of cash income, there was a slowdown of lending activity, including in the mortgage market. The share of loans in personal income dropped by 0.9 p.p., including mortgage loans — by 2.0 p.p. (Table 9).

Table 9

Households investment potential and activity in 2015–2022

	2015	2016	2017	2018	2019	2020	2021	2022*
in % to GDP								
Deposits of individuals	27.9	28.3	28.3	27.4	27.7	30.6	26.5	27.1
Loans granted to individuals	12.9	12.6	13.3	14.3	16.1	18.7	18.5	18.1
Including housing mortgages	1.4	1.7	2.2	2.9	2.7	4.1	4.2	3.2
in % to households cash income								
Deposits of individuals	43.7	44.5	46.2	48.5	48.7	51.8	49.6	51.9
Loans granted to individuals	10.9	19.9	21.7	25.4	28.4	31.6	35.6	34.7
Including housing mortgages	2.2	2.73	3.6	5.2	4.7	7.0	8.1	6.1

* Preliminary data.

Source: CBR.

Under a favorable development and the formation of attractive financial instruments, accumulated funds of the population in liquid form will return to the real estate market and become a significant factor in the implementation of investment programs, including housing construction.

3.1.3. Investment and construction complex: structural features 2022

The dynamics and structure of the investment and construction activity in 2020—2022 was formed in the context of restrictions on the capital and capital goods movement, transformation of the production and technological interactions, changes in the ruble exchange rate versus foreign currencies. Despite the pressure of external factors, the government measures aimed at the support of the internal demand and the active use of the instruments of financial and credit regulation

allowed to dampen the influence of the unfavorable environment on the dynamics of the investment in fixed assets.

A slight decline in investment in fixed assets during the acute pandemic period of 2020 (-0.5% on the previous year) and a dynamic recovery of business activity in the construction and investment complex in 2021 (+8.6%) determined the basic conditions for the dynamics of investment in fixed assets.

In 2022, macroeconomic situation was driven by the continued contribution of the investment demand into the dynamics of the domestic market while the measures aimed at the decrease of the risks of the financial instability were implemented. Overall, the rate of investment in fixed capital in 2022 was 104.6%, in construction — 105.2%, with GDP at 98.3% and the final consumption of households — 97.6% relative to the figures of the year before.

The dynamic development of housing construction and social infrastructure facilities was a feature of the Russian economy in 2019—2022. The share of investments in the construction of residential buildings was 12.1% of the volume of investments in fixed assets. Residential space commissioning in 2022 was at an all-time high of 102.7 million square meters, an increase of 11.0% over the previous year. The total residential floor area in houses built by individual developers was 57.2 million square meters, or 55.7% of the total housing commissioned in 2022 (*Table 10*).

Table 10

**Dynamics of investment and construction complex in 2019–2022,
in % to the corresponding period of the previous year**

	2019	2020	2021	2022	Quarters			
					I	II	III	IV
GDP	102.2	97.3	105.6	97.9	103.5	95.9	96.3	99.9
Investment in fixed assets	102.1	99.9	108.6	104.6	113.8	103.3	102.3	103.3
Construction	102.1	102.1	107.0	105.2	103.9	103.6	106.9	100.3
Commissioning of living space	106.2	100.2	112.7	111.0	164.6	124.8	101.7	76.8

Source: Rosstat.

The dynamics of investment in fixed assets throughout 2022 was extremely unstable. In Q1 2022, taking into account the fulfillment of obligations under the previously concluded construction contracts, the growth of investments in fixed assets by 13.8% hit the maximum quarterly values for the last years. The investment activity in Q2—Q4 was considerably supported by the dynamic expansion of public investments in the priority projects, which compensated for the restraint of the private sector in the environment of the risks of the sanctions pressure on the earlier concluded investment contracts and import of capital goods.

In 2022, the proportion of investments in the objects of state property increased to 16.9% (+0.7 p.p. as compared vs. 2021 and +2.1 p.p. vs. 2018) in the structure of investments in fixed assets with the outpacing dynamics of the

investment support of the federal property structures. In 2022, investments in fixed assets of the private Russian property increased by 4.0 p.p. as compared to the previous year, but ceded leadership in the dynamics of investment activity to the economic subjects of the federal property. In 2022, structural changes by institutional investors were driven by the drop of investments in the structures with various forms of foreign ownership by 16.2% (in actual prices), including the decrease in their proportion in the structure of investments by 3.5 p.p. as compared to the previous year (*Table 11*).

Table 11

**Share of investments in fixed capital by form of ownership in 2020–2022,
in actual prices, %**

	Investment in fixed assets			For reference only, in % to GDP		
	2020	2021	2022	2020	2021	2022
Investment in fixed assets	100	100	100	18.9	17.2	18.4
Including:						
Russian ownership	87.4	86.0	90.2	16.6	14.8	16.6
Including:						
State ownership	17.5	16.2	16.9	3.3	2.8	3.1
Federal ownership	8.2	7.5	8.3	1.6	1.3	1.5
Ownership of subjects of the Federation	9.3	8.7	8.6	1.8	1.5	1.6
Municipal ownership	2.9	2.8	2.7	0.5	0.5	0.5
Private ownership	60.4	61.6	65.6	11.4	10.6	12.1
Mixed Russian ownership	5.8	4.4	4.1	1.1	0.8	0.7
State corporations ownership	0.8	1.0	0.9	0.2	0.2	0.2
Foreign ownership, joint Russian and foreign ownership	12.6	14.0	9.8	2.4	2.4	1.8
Foreign ownership	5.7	6.5	3.0	1.1	1.1	0.5

Source: Rosstat.

Financial environment considerably influenced the dynamics of investment activity in 2021—2022. Change in the key rate in 2021 from 4.25% to 8.5% and the surge to 20% in Q1 2022 resulted in the acceleration of price growth for goods and services of the investment purpose to 9.9% per annum in March 2022. The state operational measures of financial support and regulation of the construction and investment activity, such as restructuring of credits for big business,¹ changes in prices of the state contracts due to the increase in the cost of resources, adjustment of concessional mortgage programs,² acceleration of the output of the construction materials into the domestic market,³ reducing the time for approval of territorial planning documents⁴ made it possible to support business activity in the construction sector.

1 RF Government Edict of September 29, 2022 No. 2847-p.

2 RF Government Decree of May 31, 2022 No. 993.

3 RF Government Decree of April 19, 2022 No. 701; RF Government Decree of October 04, 2022 No. 1759.

4 RF Government Decree of October 21, 2022 No. 1878.

Changes in the conditions for financing of investment programs in Q2—Q4 2022 were driven by an increase in the volume and proportion of the budget funds, which enabled to partially compensate the changes in the demand for the bank credits while the interest rates remained high and the dynamics of the use of own funds of enterprises and organizations for the investment purposes weakened. The proportion of own funds of enterprises and organizations in the structure of investments in fixed assets in the economy as a whole made 54.2% in 2022, dropping by 1.8 p.p. vs. the previous year. The state support of the restructuring of credits taken at the floating rate enabled to support the investors and the construction companies, which found themselves in a difficult situation due to the increase in prices and considerable growth of the debt servicing expenses. Compared to 2021, the increase in the share of budget and borrowed funds from other organizations in the sources of funding partially compensated for the weakening dynamics of bank loans and enterprises' own funds (*Table 12*).

Table 12

**Investment in fixed assets by sources of financing
in 2018–2022, in % of total**

	2018	2019	2020	2021	2022
Investment in fixed assets	100.0	100	100	100	100
Own funds	53.0	55.0	55.2	56.0	54.2
Borrowed funds Including:	47.0	45.0	44.8	44.0	45.8
Bank loans	11.2	9.8	9.9	11.0	9.7
Of which:					
Russian banks	6.8	7.8	8.1	9.1	8.4
Foreign banks	4.4	2.0	1.8	1.9	1.3
Borrowings from other organizations	4.3	4.8	4.9	4.5	5.4
Investment from abroad	0.6	0.4	0.3	0.4	0.3
Budget funds	15.3	16.2	19.1	18.3	20.2
Of which:					
Federal budget	7.6	7.6	8.7	8.1	9.6
RF subjects budgets	6.6	7.4	9.2	9.0	9.3
Local budgets	1.1	1.2	1.2	1.2	1.3
State extrabudgetary funds	0.2	0.2	0.2	0.2	0.2
Other	15.4	13.6	10.4	9.6	10.0

Source: Rosstat.

The critical reduction of the raised direct foreign investment in the Russian economy with the weakening dynamics of the supplies of the investment goods, technologies and imported equipment maintenance services against the backdrop of the 2022 geopolitical sanctions and high uncertainty decelerated the economic dynamic.

The movement and structure of the investment and construction activity has been formed in recent years against the backdrop of toughening competition on the world markets, restrictions on the movement of the imported capital goods,

changes in the ruble exchange rate versus foreign currencies. However, despite the pressure of the external factors, the state measures and the active use of the instruments of financial and credit regulation allowed to mitigate the influence of the unfavorable environment.

In this regard, the distribution of risks between the state, private business and the population was of fundamental importance. The state investment policy supported the demand for technological and institutional innovations and, at the same time, determined the correction of mechanisms of attraction of private investors through norms of special investment contracts,¹ agreements on protection and encouragement of capital investments² and formation of the extended package of mortgage programs. Changing the conditions for interaction between the state and private investors has become a significant component of competition on the domestic and foreign markets of capital, goods and services. The model of flexible investment strategic cooperation of business, population and state contributed to the identification of limitations and concretization of measures and instruments of reaching the trajectory of effective growth of investments in fixed assets.

An innovation in strategies and programs for stimulation of investment activity was a shift in the emphasis on the balance of tangible and human resourcing of capital investment, as well as flows of monetary and financial resources. The institutional aspect of the investment policy focused on the formation of the adequate structure and practice of the state regulation and corporate management as well as expansion of participation of development institutions.

Strategic initiatives to create high-tech products are supported by a modified mechanism of special investment contracts, interregional offset contracts (with counter investment commitments under guaranteed purchases); new approaches to import substitution in industry based on large priority projects. Revamping of technological potential of the Russian economy relies on systemic measures of engineering education development and transfer of scientific research results to the real economy, provision of financial resources to fast-growing, high-tech companies.

It is important to expand the norms of the agreement on protection and encouragement of capital investments for projects of innovative nature and the possibility of its use with the forms of investment support mechanisms of territories of advanced development, special economic zones, public-private partnerships and concessions. Harmonization of the principles of activity and accounting of budgetary obligations within the framework of these organizational-legal structures determines the umbrella mechanism of support for private investors.

Sectoral measures to support investment activity in 2022 were effective in relation to a limited range of activities, the main focus shifted to the identification

1 Federal law "On industrial policy of the Russian Federation" of December 31, 2014 No. 488-FZ (version of October 07, 2022 No. 390-FZ). URL: <http://kremlin.ru/acts/bank/39299>

2 Federal law "On protection and promotion of investment in the Russian Federation" of April 01, 2020 No. 69-FZ (version of June 28, 2022 No. 226-FZ). URL: <http://www.kremlin.ru/acts/bank/45357>

of imbalances in the reformatting of significant projects. In terms of industries, in January-September more than 60% of the investments accounted for the extraction of minerals, projects in the sphere of transportation, storage, energy infrastructure and manufacturing industries. Investments in oil and natural gas extraction surged by 9.0%. While fulfilling the guaranteed obligations under the previously signed contracts for supply and maintenance of the technological equipment and the accumulated material reserves, the exit of foreign investors and the suspension of foreign companies has not yet had a significant impact on the continuation of the previously launched projects. At the same time, there have been adjustments to deadlines due to the postponement of imported equipment supplies or exit from projects of contractors from unfriendly states in the associated petrochemical and oil refining facilities.

Adjustment of investments to the changing movement of technological development, lifted the importance of the factors of transportation and logistics, information and communication, social infrastructure, competences and skills of the labor force.

Regarding transportation and storage, the investments in fixed assets surged by 19.2% in 2022. In the environment of reorientation of the freight flows from the western to the southern and eastern directions, the investments in the development of the port and railway infrastructure gained importance. The investments in the activity of the freight railway transportation soared by 25.6% as compared to 2021. Financing of the Complex plan of modernization and expansion of the trunk infrastructure in 2022 spiked by 24.6% as compared with 2021.

The processing industry demonstrated the decrease in the investment activity by 6.2% versus of the previous year due to the difficulties with the equipment supplies. The factors limiting the dynamics of the investments are the decline in demand for the investments in the export-oriented segment with the sharp reduction of the enterprises' own funds in the sub-products of timber processing, chemistry and metallurgy complexes.

The machine-building complex is in a difficult situation, whose share in the investments in fixed assets on the whole throughout the economy dropped to 2.1% versus 2.8% in 2021. The sharpest drop in financing of investment programs is recorded in the production of motor vehicles – up to 44.2% and energy equipment – up to 80.1% from the level of 2021.

In industries with the potential for import substitution, the impact of investment is usually manifested over a long-term timeframe. Operational short-term measures associated with changes in transportation and logistics links and partnerships with new suppliers affect the indicators of commodity output and are weakly related to investment programs.

The accumulated structural constraints of the investment and construction complex form the increased requirements for the determination of trends in the reproduction of fixed capital and the development of machine-building and associated production of construction materials, as well as the production capacity of construction itself.

In spite of the fact that the majority of basic productions in the last 20 years underwent rather active modernization with the outstripping growth of expenditures on renewal of machinery, equipment and transport vehicles, it should be admitted that in general the condition of fixed assets does not correspond to dynamic changes in demand for new product lines and production technologies. With the changes in the access to the world market of the investment goods, structure and dynamics of prices, exchange rate of the national currency there was a gradual shift in demand to the segment of the domestic investment goods. However, the production possibilities of the Russian machine-building complex did not make it possible to meet the demand for some types of technical means entirely, especially in the branches of industry highly dependent on the foreign technologies and ready-made investment goods, which became a factor slowing down the movement of construction and investment complex. The proportion of the import in the gross fixed assets accumulation on the whole throughout the economy came to 18.7% (2019), while in the machine-building complex it exceeded 55% and in the construction complex — 38.5%.

In 2022, the starting level of the capacity utilization on the whole throughout the economy amounted to 65% and in the export-oriented complex of the manufacturing industries — 80%; in the investment complex this figure was estimated to be approximately 40%. The average rate of fixed assets renewal in the economy being at the level of 8.3% (2021), in the manufacturing industries this figure stood at 9.6%, and in machine-building complex it was in the range of 6.3—12.2% by types of activity with high characteristics of the accumulated capital wear and the share of obsolete fixed assets. In the branches of natural monopolies (electric power and transportation), which account for more than 1/4 of fixed capital stock, the renovation ratios were somewhat lower than the average indicators for the economy, which raised the risks of unbalanced development of the transportation and energy infrastructure with other types of economic activity and regions. Increase in the risks associated with the renewal of capital assets updated the development of the concept of technological development for the period up to 2030, which will determine measures of support for institutions of innovative development and active involvement of private business in the implementation of investment projects aimed at ensuring the development of investment productions.

The gap in material and engineering support of capital investments and construction works in industrial and residential construction violates the rhythm of commissioning and leads to an increase in the volume of unfinished construction (*Table 13*).

Amid the 2022 sanctions, the issues of fulfilling construction plans in both housing and production construction demanded the involvement of idle production capacity of the construction industry, machine-building industries focused on the manufacture of machinery, equipment and technical means for the housing and utilities sector, while forming new channels and alternative foreign suppliers of engineering equipment and materials for construction projects. Reducing the share of machinery and equipment in the type structure of investment in fixed

Table 13

**Structure of investments in fixed capital by types of major funds 2019—2022,
in % of total (excluding small businesses and informal activity parameters)**

	2019	2020	2021	2022
Investment in fixed assets, total	100.0	100.0	100.0	100.0
Including:				
Residential buildings and premises	14.4	14.5	12.9	12.1
Buildings (except for residential) and facilities	38.4	37.5	37.0	40.7
Machinery, equipment, means of transportation	37.0	37.1	39.5	36.4
Intellectual property	3.3	4.0	4.4	4.7
Other	6.9	6.9	6.2	6.1

Source: Rosstat.

capital with changes in the proportions of housing and industrial construction increases the risks of technological modernization programs of the industrial sector and related infrastructure. Creation of conditions for the development of own industrial base of the investment complex will have a multiplicative effect on the processes of economic strengthening and expansion of technological capabilities and creation of new jobs.
