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R95 **Russian Economy in 2018. Trends and Outlooks. (Issue 40)** / [V. Mau at al; ed. Editors – Alexei Kudrin, doctor of sciences (economics), Alexander Radygin, doctor of sciences (economics), doctor of sciences Sergey Sinelnikov-Murylev, doctor of sciences (economics)]; Moscow: Gaidar Institute Publishers 2019. – 616 pp. – ISBN 978-5-93255-556-9

The review “Russian Economy. Trends and Outlooks” has been published by the Gaidar Institute since 1991. This is the 40th issue. This publication provides a detailed analysis of main trends in Russian economy, global trends in social and economic development. The paper 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: the socio-political issues and challenges; 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.

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4.1. The dynamics and pattern of Russia's economic growth in 2018¹

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

In 2016–2018, the economic situation was characterized by the gradual recovery of GDP positive dynamics with GDP growth rates increasing from 100.3 percent in 2016 to 101.6 percent and 102.3 percent in 2017 and 2018, respectively. The GDP real volume surpassed by 1.6 percentage point the indicator of 2014, having compensated the crisis decrease seen in 2015.

Unlike the conditions of the previous two years, the nature of development of the economy in 2017-2018 was determined by simultaneous growth in demand on the international and domestic markets. With a relatively favorable foreign economic situation and sustainable positive dynamics, in 2018 exports amounted to 119.4 percent (as per the methods of the system of national accounts (SNA)) as compared to 2014. With the speed-up of the growth rates of the volume of exports to 6.3 percent, in 2018 the contribution of net exports to GDP increased to 3.5 percent against the indicator of 2.8 percent a year before in comparable prices (10.0 percent against 5.3 percent in current prices). Growth in net exports had a considerable effect on the dynamics and pattern of formation of GDP and compensated the weakening of domestic market dynamics (*Fig. 1*).

The gradual recovery of domestic demand was a prerequisite for overcoming the recession. However, the upward trend of formation of the internal market's development resources was unstable. In 2017, a short-lived upsurge in the growth rates of imports to 117.4 percent as compared to the previous year became the factor behind the speed-up of the dynamics of the consumer and investment markets. It is noteworthy that growth in imports gave an additional impetus to growth in output of domestic goods for the internal market. In 2017, the positive dynamics of domestic demand were influenced considerably by changes in the pattern of imports on the back of advanced growth in imports of intermediary and investment-purpose goods. The recovery of the trend of the advanced growth in imports as compared to domestic demand reflected the gradual

¹ This section was written by O. Izryadnova, Gaidar Institute, RANEPA.

depletion of the potential of the rouble's depreciation and the effect of import substitution. Basically, the economy reproduced the situation which was typical of the 1999–2012 period when insufficient output volumes of domestic goods, both of intermediate and ultimate demand were made up for by import goods supplies.

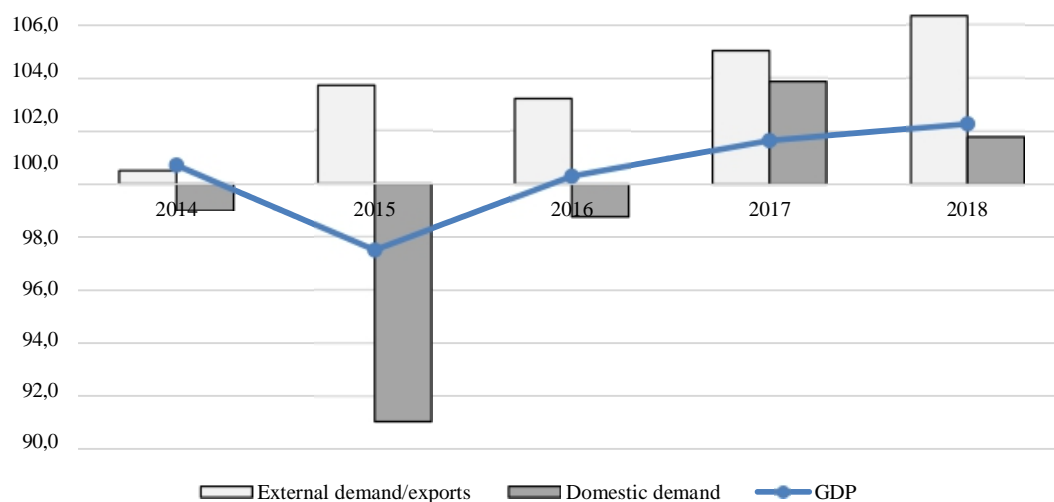


Fig. 1. GDP dynamics by the component of domestic and external demand 2014–2018, % on the previous year

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

In 2017–2018, growth in the share of imports of intermediate consumption goods reflected the insufficient level of the main production output. Growth in investment goods was further restrained by toughening of conditions of borrowing on the international capital market and introduction of sanctions and limitations on deliveries of individual types of technological equipment required for implementation of infrastructure projects and investment plans in mining and manufacturing industries. In 2018, with the existing dynamics and the pattern of the Russian machine-building industry, the reduction of the share of imports of investment-purpose goods had a negative effect on the processes of technological renewal and modernization of the economy (Table 1).

Table 1

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

	Goods		
	consumer	investment	intermediate
2014	36.1	24.5	39.4
2015	36.4	23.2	40.4
2016	35.6	26.5	37.9
2017	33.6	27.5	38.9
2018	33.2	25.4	41.4

Source: The Rosstat.

The slowdown of the growth rates of imports to 103.8 percent as compared to the previous year and the reduction of their contribution to gross resources led to the slowdown of the domestic market dynamics. With the change in market factors, in 2018 the growth rates of expansion of the domestic market slowed down to 1.8 percent against 3.9 percent a year before (*Fig. 2*).

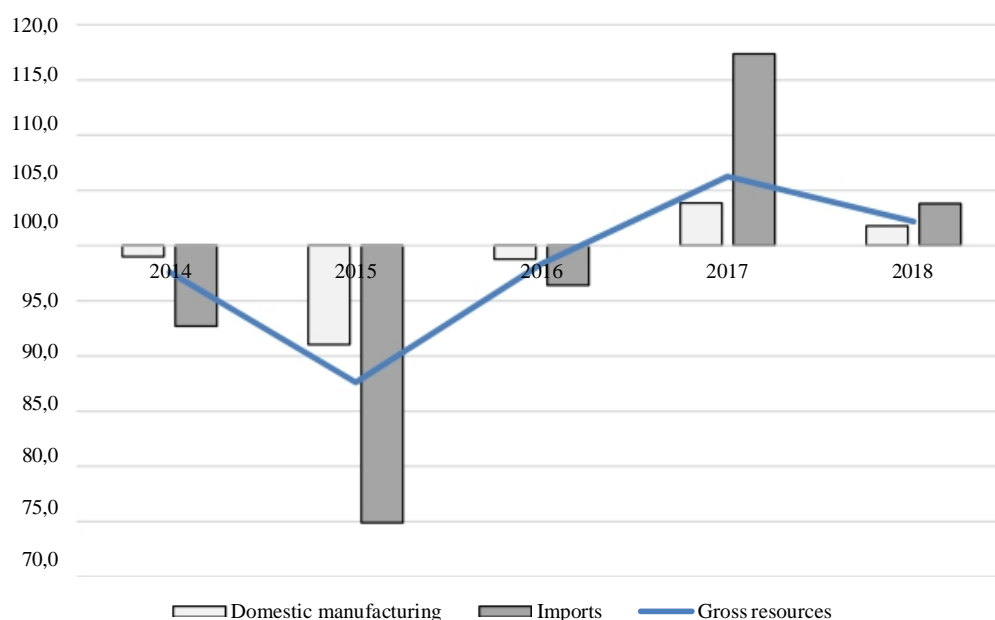


Fig. 2. The dynamics of domestic demand by the component in 2014 – 2018, % on the previous year

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

It is worth mentioning the specifics of formation of resources of the domestic consumer market. In 2018, the indicator of imports was equal to 88.0 percent as compared to 2014 (as per the methods of the SNA); this factor determined the domestic market's structural changes. The reduction of the consumer demand due to falling households' incomes and weakening of the national currency resulted in growth of up to 65 percent in the share of domestic goods in the retail trade, including growth of 77 percent in nonfood market's resources in 2017. In 2018, in the pattern of the retail market's commodity resources the share of domestic goods in commodity resources was equal to 64 percent (*Table 2*).

In 2018, the unit weight of goods and services for the domestic market in the overall volume of domestic manufacturing of goods and services decreased by 1.0 percentage point as compared to the previous year.

Advanced growth in exports promoted the contribution of mining industries to the dynamics of the gross value added and reflected higher mineral dependence of the Russian economy. It is to be noted that in the pattern of exports the share of high-processed goods of ultimate demand was shrinking.

Table 2

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

	Commodity resources of retail trade	Including commodities		Share of import food products in commodity resources of retail trade in food products
		Domestic goods	Import goods	
2014	100	58	42	34
2015	100	62	38	28
2016	100	62	38	35
2017	100	65	35	35
2018	100	64	36	36

Source: The Rosstat.

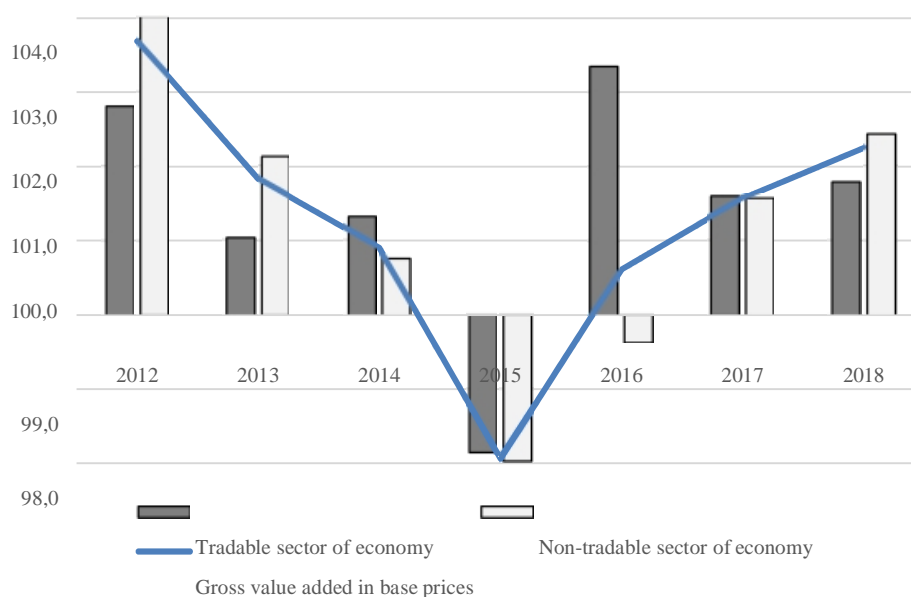


Fig. 3. The dynamics of the gross value added in the tradable and non-tradable sectors of the economy in 2016–2018, % on the previous year

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

In 2017–2018, recovery of the positive dynamics of the Russian economy was determined by the fact that recession was overcome virtually in all the baseline types of economic activities with simultaneous growth both in the tradable and non-tradable sectors of the economy (Fig. 3). However, the effect of the crisis phenomena of 2013–2017 was explicitly seen in the specifics of embarking on the trajectory of growth in 2018 in the manufacturing industries, the building industry, trade and transport. In 2018, economic growth dynamics were determined by an increase in the gross value added in the industry (2.3 percent), trade (2.2 percent), transport and storage (2.9 percent) and financial and insurance business (6.3 percent). In 2018, only the trade with the index of 94.2 percent failed to attain the level of 2014. In addition, in 2018 for the first time in the past five years the contribution of the agriculture to the gross value added decreased (Fig. 4).

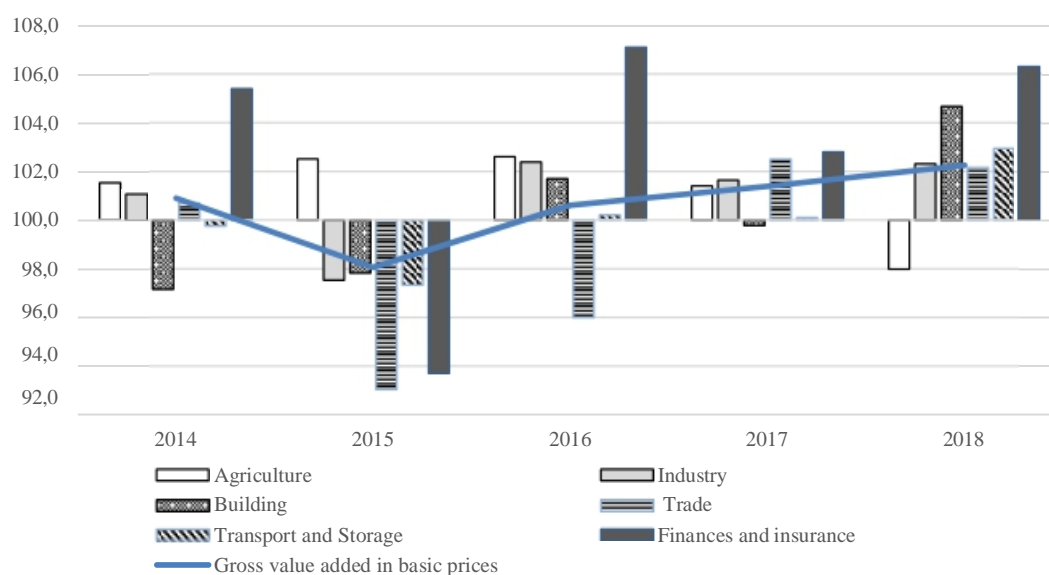


Fig. 4. The dynamics of the baseline types of economic activities in 2016–2018, % on the previous year

Source: The Rosstat.

In 2017–2018, structural changes in the industry were determined by the growing role of the primary sector of the economy and the related infrastructure. In 2018, the production of primary products increased by 4.1 percent, including crude oil (1.7 percent), natural gas (16.5 percent), metal ore (4.6 percent) and services related to production of primary products (13.7 percent) as compared to the previous year (*Fig. 5*).

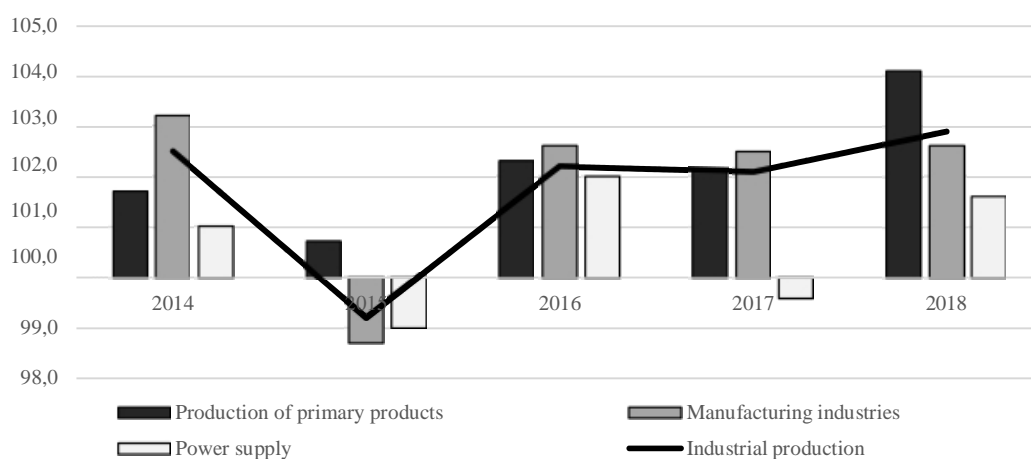


Fig. 5. The dynamics of industrial production by the type of economic activities in 2016–2018, % on the previous year

Source: The Rosstat.

In manufacturing, the indicators of 2018 were characterized by sustainable positive quarterly dynamics with the output growth rates amounting to 2.6 percent.

In 2017–2018, the structural specifics of manufacturing was determined by chemical complex growth on the back of an increase in the output of products, which were competitive both on the international and domestic markets with growth in state and private investments in development of new capacities and modernization of production. With advanced growth in the volume of exports, in the past three years the timber industry saw high dynamics of development. The production of medicines was characterized by exceedingly high growth rates and active import substitution in the period from 2015. Growth in the iron and steel industry was facilitated by the positive situation on global metal markets, as well as growth in demand in related investment and building activities (*Table 3*).

In the past two years, the market of the machine-building industry's products which is traditionally oriented to the receptive internal market saw sustainable growth dynamics. Growth in the machine-building industry was determined by growth in the number of state orders and direct subsidies, as well as recovery of demand on motor vehicles and defense products. In 2017–2018, a line of support of the machine-building industry was growth in the share of export-oriented industries. However, the existing extent of integration of Russian manufacturers into international production chains and sales and service networks abroad limited the competitive positions of Russian-made products on global markets.

On the domestic market, low demand on capital goods with prevailing crisis phenomena in the building and investment complex was still a factor of restraint.

The upward dynamics of the output of consumer products was determined by the expansion of the niches for domestic products on the internal market with the reduction of import deliveries due to depreciation of the rouble's exchange rate.

In 2017–2018, the index of production by the high-tech manufacturing type of activities entered the area of positive values.

Table 3

**The indices of production by the main type of manufacturing
in 2016–2017, % on the previous year**

	2014	2015	2016	2017	2018
1	2	3	4	5	6
Manufacturing	103.2	98.7	102.6	102.5	102.6
Production of food products	104.9	103.1	105.6	104.2	104.9
Production of beverages	94.4	99.2	106.6	99.4	102.6
Production of tobacco articles	91.1	96.8	97.3	74.8	103.8
Production of textile articles	97.0	100.6	107.5	108.5	103.6
Production of leather and leather articles	95.9	91.8	106.7	104.2	96.3
Wood-processing and manufacturing of wood articles	96.4	95.9	108.3	103.9	110.6
Production of paper and paper articles	103.4	101.6	100.4	106.9	112.6
Printing and copying of data carriers	95.1	90.9	86.8	97.2	112.5
Production of charred coal and petrochemicals	106.1	100.9	96.8	101.1	101.8
Production of chemical agents and chemical products	102.3	105.8	110.9	105.1	102.7
Production of medicines and materials	94.6	108.5	127.5	112.7	108.2
Production of rubber and plastic articles	109.7	98.0	105.5	103.8	102.4
Production of other nonmetal mineral products	101.1	93.9	98.1	111.2	104.4

Cont'd

1	2	3	4	5	6
Metallurgical production	107.2	104.0	99.7	100.1	101.7
Manufacturing of fabricated-metal end products, except for machines and equipment	104.5	103.5	112.7	103.4	101.3
Manufacturing of computers and electronic and optical products	108.9	106.1	108.5	98.3	98.5
Manufacturing of electrical equipment	97.9	90.5	108.1	104.7	102.9
Manufacturing of machines and equipment which are not included in other groups	92.1	95.3	101.5	106.8	99.4
Manufacturing of motor transport vehicles, trailers and semitrailers	88.7	76.9	105.8	114.5	113.3
Manufacturing of other transport vehicles and equipment	116.2	105.4	108.1	106.3	97.8
Furniture making	99.8	92.8	70.9	108.8	105.5
Manufacturing of other end products	105.1	90.1	77.7	110.3	111.2
Repair and assembly of machines and equipment	94.4	94.3	98.8	92.1	98.0

Source: The Rosstat.

4.1.2. Utilization of GDP: consumer and investment demand

The specifics of 2017–2018 were the recovery of growth in ultimate consumption after two decades of its shrinkage. In 2018, with GDP growth of 2.3 percent households' ultimate consumption and investments in capital assets increased by 2.2 percent and 4.3 percent respectively as compared to the previous year (*Fig. 6*). However, in 2018 the indices of the situation on the consumer and investment markets turned out to be lower than in 2014.

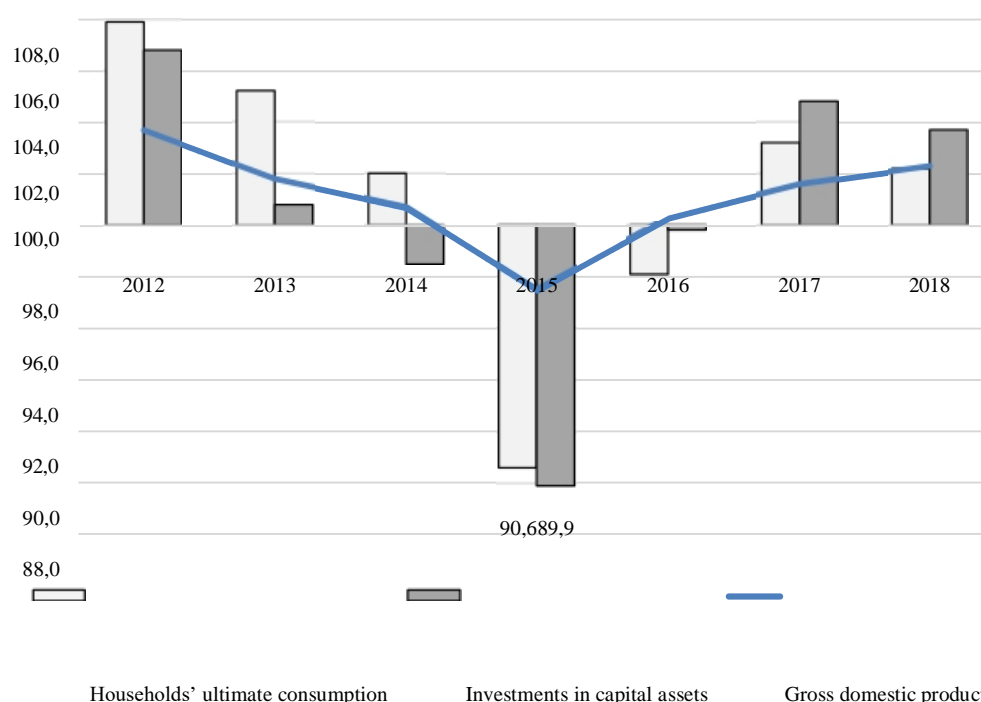


Fig. 6. The dynamics of GDP by the component of households' ultimate consumption and investments in capital assets in 2014–2018, % on the previous year

Source: The Rosstat.

It is worth mentioning that the restraint dynamics of households' cash incomes had a considerable effect on the consumer market. After the 2015 crisis, the formation of the pattern of households' cash incomes was influenced by advanced growth in labor remuneration as compared to social payments and other sources of income. The dominating factor of the model of formation of households' incomes was the expansion of the gap in the dynamics of the real size of pensions and wages. If in 2015 the average size of the accrued pensions amounted to 35.2 percent of the average amount of the accrued wages, in 2018 it fell to 30.8 percent.

In 2015, a dramatic drop in real wages and salaries hit households hard, though the effect of that processes was somewhat smoothed over by households' financial assets saved in 2010–2014. With the rates of inflation slowing down in the period from 2017, there is an explicit trend of stabilization of households' real disposable cash incomes which in 2018 were equal to 99.8 percent (with a lump-sum payment to pensioners taken into account), including 97.6 percent and 106.8 percent of the real size of granted pensions and real accrued wages and salaries, respectively, compared with the indicator of the previous year. Despite the weak dynamics of incomes in 2018, real wages exceeded by the mere 0.8 percent the indicator of 2014 with the real size of the granted pensions being reduced by 6.0 percent (*Fig. 7*).

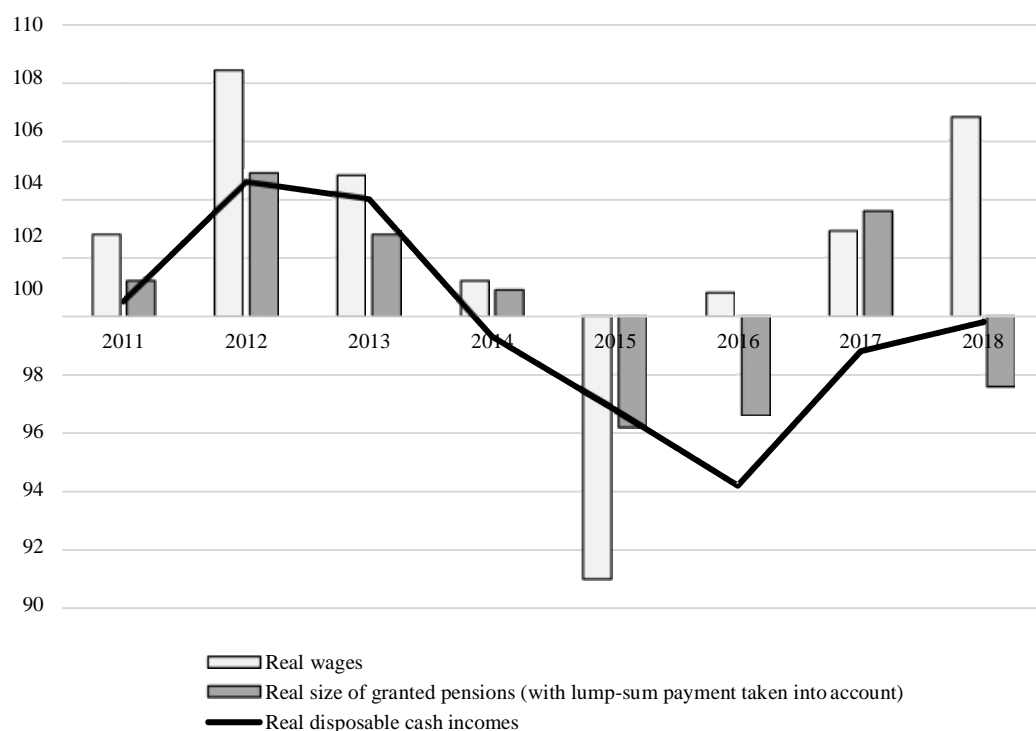


Fig. 7. The dynamics of real monthly average wages and the real size of granted pensions in 2011–2018, % on the previous year

Source: The Rosstat.

In 2018, households' disposable cash incomes in real terms amounted to RUB 57,520.9 billion; households spent RUB 56.625.2 billion on purchasing of goods and services, growth in households' savings was equal to RUB 6,371.0 billion, a 13.9 percent decrease as compared with the previous year.

With the speed-up of growth rates of nominal monthly average wages, in 2018 the share of wages in households' cash incomes rose to 66.2 percent, a 0.8 percentage point increase as compared with the relevant indicator of 2015 when the minimum growth in wages and salaries was registered during twenty years of observations. The share of social payments in households' incomes increased to 19.4 percent, with the average size of the granted pensions amounting to 30.8 percent relative to the average size of the accrued wages with the indicator of 35.2 percent in 2015. Weak dynamics of households' business and investment activities were behind the reduction of their contribution to households' cash incomes to 12.4 percent against 14.2 percent in 2014 (*Table 4*).

Table 4

The pattern of households' cash incomes in 2014–2018, % against the total

	2014	2015	2016	2017	2018
Total cash incomes	100	100	100	100	100
Wages, including shadow ones	65.8	65.6	64.6	65.4	66.2
Social payments	18.0	18.3	19.1	19.6	19.4
Revenues from entrepreneurial activities	8.4	7.9	7.8	7.6	7.5
Property related incomes	5.8	6.2	6.5	5.4	4.9
Other incomes	2.0	2.0	2.0	2.0	2.0

Source: The Rosstat.

The dynamics and the pattern of households' cash incomes were characterized by the growing social and economic differentiation and inequality in distribution of households' incomes and wages. High inequality in distribution of incomes and wages was a factor of restraint of economic growth rates. In 2018, the income concentration factor was equal to 0.410 and the R/P10% ratio of 15.3-fold. With the existing level of wages and salaries, in 2018 the number of the employed at entities with the labor remuneration below the minimum subsistence level amounted to over 2 million people (3.1 percent of the employed in the economy or 5.2 percent of workers of entities). The share of workers with a low level of wages and salaries amid the growing demographic burden on the working population had a considerable effect on the level of poverty. In 2018 (January-September), the number of the population with incomes below the minimum subsistence level amounted to 19.6 million persons (13.3 percent of the total number of the population), which factor undoubtedly affected households' consumer activities.

The existing high inequality stimulates demand on qualitative changes in the population's social security infrastructure. Minimum wages, labor benefits and social security payments were the instruments of the policy of effective support of workers in the low segment of the scale of distribution of wages, reduction of the scope of poverty and inequality, establishment of inclusive labor markets, formation of stable consumer demand and, eventually, facilitation of more sustainable economic growth.

In 2017–2018, households’ consumer activities were formed amid slowdown of the rates of inflation and reduction of interest rates. As the population got adapted to those conditions of the consumer market and increased pressure of deferred demand, quarterly dynamics pointed to the consumer market’s gradual recovery. A change of trend as regards households’ incomes with the growing share of expenditures on purchasing of goods was accompanied by growth in demand on consumer loans. In 2018, consumer behavior was determined by upward trends of consumer prices to 104.3 percent, including prices of food products to 4.7 percent (+3.5 percentage point as compared to 2017) and non-food products to 104.1 percent (+1.3 percentage point) (*Fig. 8*).

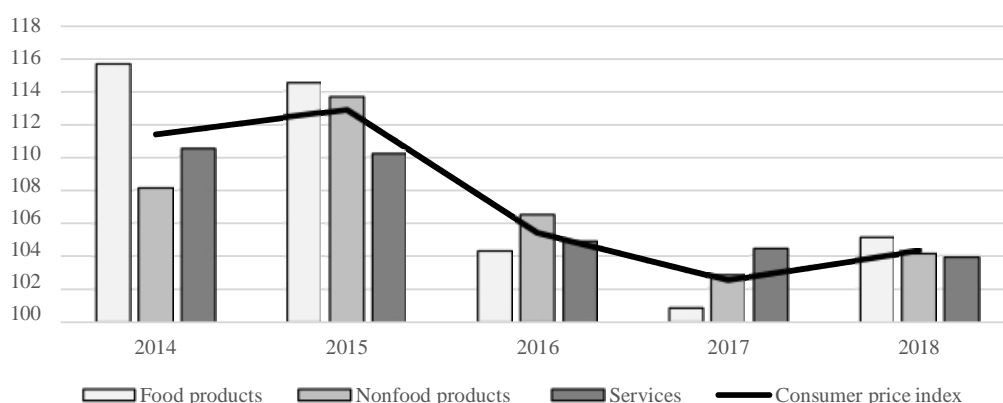


Fig. 8. The dynamics of consumer prices by the market segment in 2015-2018, on December of the previous year

Source: The Rosstat.

In 2018, there was growth in the volume of the food market (1.7 percent), nonfood market (3.4 percent), paid services to households (2.5 percent) and public catering (3.7 percent) as compared to the previous year’s indicators (*Fig. 9*).

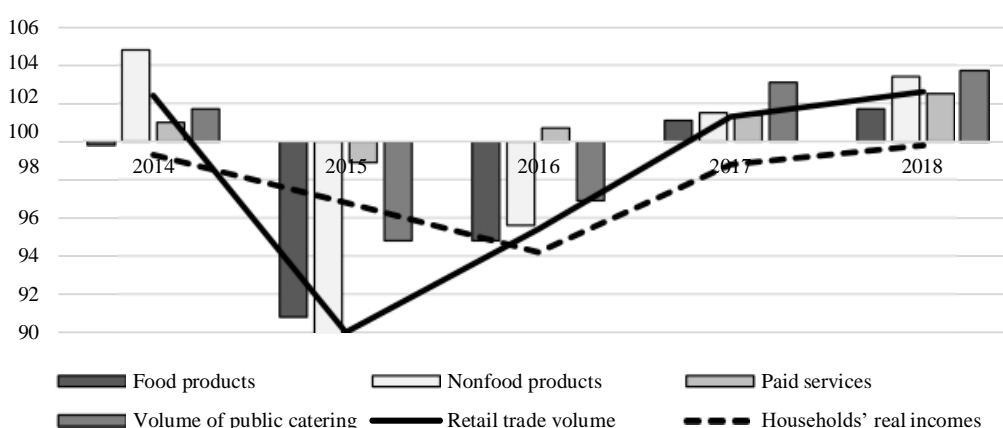


Fig. 9. The dynamics of the food market in 2015–2018, % on the previous year

Source: The Rosstat.

In H2 2017, households' saving behavior was influenced by reduction of interest rates on mortgage loans amid growing market supply of housing of a broad price range. This factor determined a somewhat increase in the share of expenditures on purchasing of the real estate and created the prerequisites for further promotion of this trend in 2018. It is to be noted that growth in households' debt load was accompanied by reduction of the share of savings and slowdown of growth in households' bank deposits, which situation under certain circumstances may create problems related to fulfillment by households of their debt obligations to banks (*Fig. 10*).

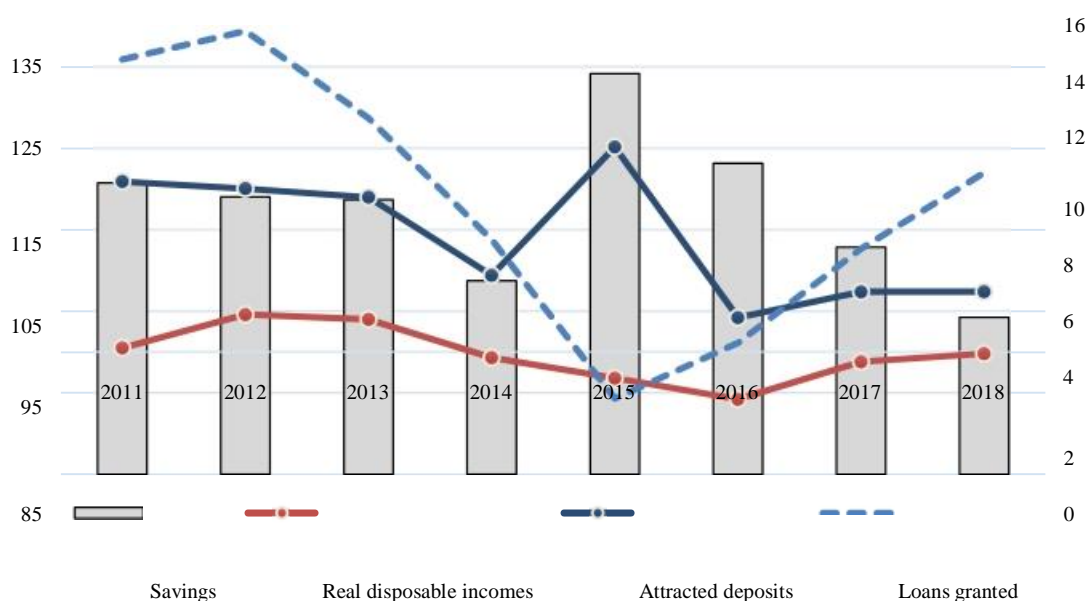


Fig. 10. The share of savings in households' incomes (%) and dynamics of deposits and loans to households in 2011–2018, % on the previous year

Source: The Rosstat.

4.1.3. Changes in the pattern of formation of GDP by the source of revenues

In 2014–2018, price changes determined the dynamics of financial results of economic activities and profitability ratios. In 2018, industries' profitability increased by 4.8 percentage point as compared to the relevant period of 2017 (*Table 5*).

Table 5

Profitability of sold goods, products, jobs and services by the type of economic activities in 2017–2018, %

	2017	2018
1	2	3
Total in economy	7,5	12,3
Agriculture, hunting and forestry	17,3	20,2
Production of minerals	25,9	33,6
Manufacturing	11,5	12,8

Cont'd

1	2	3
Power-, gas- and steam-supply and air conditioning	8,3	8,8
Building	7,2	6,1
Wholesale and retail trade	4,6	7,3
Hotels and restaurants	7,0	7,1
Transportation and storage	9,7	8,8
Information and communications	7,0	14,6
Financial and insurance activities	0,4	11,2
Real-estate operations, leasing and rendering of services	15,5	15,9
Public administration and military security; social security	1,6	2,4
Education	5,0	4,2
Healthcare and provision of social services	10,4	10,4

Source: The Rosstat.

In 2017–2018, the level of profitability of production and the dynamics of the balanced financial result were largely determined by manufacturers' pricing policy. In 2018, manufacturers' response to the trend of revival of internal demand was the speed-up of growth rates of prices both in the industry and building. Advanced growth in prices in the mining industry and primary product refining industries led to adjustment of prices in manufacturing (*Table 6*).

Table 6

Price indices and schedules in 2014–2018, December on December

	2014	2015	2016	2017	2018
Consumer price index	111.4	112.9	105.4	102.5	104.3
Manufacturer price index, including:	105.9	110.7	107.4	108.4	111.7
mining	98.4	109.8	108.5	123.9	120.7
manufacturing	108.5	111.2	107.6	104.2	110.3
Agricultural producer price index	114.1	108.5	101.8	92.2	112.9
Overall index of building material prices	107.2	110.3	103.2	103.1	107.3
Index of cargo transportation tariffs	100.9	111.5	105.6	109.0	100.9

Source: The Rosstat.

In 2017–2018, the redistribution of revenues in favor of enterprises sped up. In 2018, the share of labor remuneration in GDP fell to 45.7 percent against 47.1 percent a year before (*Table 7*).

Table 7

**The pattern of formation of GDP by the source of revenues
in 2014–2017, % against the total, in current prices**

	2014	2015	2016	2017	2018
Gross domestic product	100	100	100	100	100
Including:					
Labor remuneration of hired workers, including shadow wages and mixed incomes	47.2	46.5	47.3	47.1	45.7
Net taxes on manufacturing and imports	13.9	11.2	11.0	10.8	11.4
Gross profit in economy and gross mixed income	38.9	42.3	41.7	42.1	42.9

Source: The Rosstat.

A change in the share of labor remuneration in GDP is normally acyclic: it increases in the period of recession and decreases during the recovery as a result of changes in the paid employment and the level of wages and salaries or under the simultaneous effect of them both. In 2016–2017, a short-term trend of growth in the share of wages and

salaries was behind weak dynamics of reduction of demand on the workforce relative to a decrease in output amid the acute phase of the crisis and restrained growth in demand on workforce as compared to the dynamics of output in the period of the economic upturn. It is to be noted that the indicators of price adjustment of the cost of the workforce made it possible to regulate the quantitative parameters of modification of the rates of employment and unemployment, as well as the ratio of wages by the type of economic activities.

The well-paid types of economic activities – mining, production of petrochemicals, pipeline and air transportation and financial activities – have retained the leading positions, but the excess of nominal wages over the nationwide average indicator decreased somewhat in 2018. The lowest wages (64 percent of the nationwide average indicator) were still in the agrarian sector.

The shrinkage of internal consumer and investment demand slowed down growth in wages in building and trade with a simultaneous reduction of employment in these types of business activities.

The differentiation in the level of labor remuneration by the type of economic activities was particularly explicit as regards the form of ownership. In the economy as a whole, the nongovernment sector saw a higher level of labor remuneration as compared to state-owned entities. In 2011–2018, the narrowing of the gap in the size of accrued average wages in entities of different forms of ownership illustrates high rationality of the labor remuneration policy in the nongovernment sector by means of regulation of the number of the employed. Owing to a higher level of labor remuneration, state-owned entities were oriented at preserving employment conditions, generally, in problem regions, single-industry cities, as well as at large enterprises which were of priority to the national economy, which situation could not, but restrain restructuring processes on the labor market.

A substantial diversification of wages was registered by the level of education and the type of activities. The situation where workers with a higher education degree were paid much higher wages as compared to those with a lower level of education is typical virtually of all the types of economic activities. By the type of economic activities, type of occupation and the level of education, average wages in the industry, financial sector and R&D surpassed by large average indicators across the economy. In such socially important types of activities as education and healthcare, average wages were still below the average nationwide indicators.

The extent and nature of changes in average accrued wages are influenced by the age and gender composition of the employment. Low wages as a transition stage are of less concern to young people under the age of 30 years old in the context of motivation to promotion of their status as regards education, skills and social and financial standing. In 2013–2018, the higher level of average wages by the type of occupation was observed with active age groups (25–49 year old) with the record of service of 5–20 years. With higher age and longer record of service, the dynamics of changes in average accrued wages slowed down in the economy as a whole.

Gender parameters were the factor, which had a considerable effect on the value and dynamics of the labor remuneration fund and the level of average accrued wages. The general trend of reduction of the level of employment of women in the economy was accompanied by a gradual shrinkage of the gap in labor remuneration on the basis of gender and the type of economic activities. In 2018, women accounted for 53.8 percent in the total number of workers (-0.7 percent as compared to 2013), while the ratio of women's wages to those of men was equal to 72.6 percent (+2.6 percent on 2013).

In the Russian economy, changes in macroeconomic conditions affects mainly the indicators of the dynamics of nominal and real wages, rather than the level of employment (in 2018 the rate of unemployment amounted to 4.8 percent). The reaction of the labor market to the changes in the economic situation remains rather weak because the adaptation takes place not through the layoffs of the workforce, but by means of utilization of adaptation mechanism of working hour adjustment, administrative measures and practices of informal labor relations. The indicators of the pricing adjustment of the cost of the workforces permitted to regulate the quantitative parameters of changes in the rates of employment and unemployment, as well as the level and ratio of wages by the type of economic activities. Generally, advanced growth in wages as compared to labor efficiency underpinned domestic demand, but had an unfavorable effect on the dynamics of investment activities and overweighed the positive effect of households' domestic consumption. Amid the slowdown of economic growth rates, there was a specific modification of factors of production in the economy, the gap between growth in wages and labor efficiency became larger and inequality in distribution of wages and incomes increased.

The level and dynamics of wages and the changes in the share of the workforce in GDP have both social and economic consequences. Sustainable growth in wages plays an important role in the overall demand maximization, weak growth limits households' consumption and domestic demand, while high differentiation and inequality in distribution of incomes and wages are interpreted as a factor of restraint of economic growth rates and social well-being. In the social dialogue, it is crucially important to formulate the mechanisms of modification of wages with taking into account changes in labor utilization efficiency and inflationary developments, as well as determination of minimum wages.

Wages-related costs permit to estimate employers' expenditures on utilization of workers' labor, while wages reflect the level and dynamics of workers' purchasing power and serve as indirect indicators of living standards.

The index of the average size of wages is an important component of the information on the labor market because wages are the dominating form of the gainfully employed population's income.

The correlation between nominal, median and minimum wages and the minimum subsistence level demonstrated gradual narrowing of the gap between them and since May 2018 the minimum size of wages has been set at the level of the minimum subsistence level of the working population, which situation is in harmony with global

trends of regulation of the labor remuneration. In 2017, in the Russian economy the ratio of the minimum wages to the median and average wages amounted to 27.5 percent and 20 percent, respectively. These indicators are still rather low, while in most countries the ratio of the minimum wages to median wages and average wages are in the range of 45–60% and 40–55%, respectively (*Table 8*).

Table 8

Average accrued wages, minimum wages, and the minimum subsistence level

	Rub.				%	
	Average nominal wage	Median wage	Minimum monthly wage	Minimum subsistence level	Correlation between minimum monthly wage and indicator of	
					Average wage	Minimum subsistence level
2010	20 952		4 330	6 138	20.7	70.5
2011	23 369	1 604	4 611	6 877	19.7	67.0
2012	26 629		4 611	7 048	17.3	65.4
2013	28 792	21 266	5 205	7 586	18.1	68.6
2014	32 495		5 554	8 683	17.1	64.0
2015	34 030	24 846	5 965	10 455	17.5	57.1
2016	36 709		6 204	10 598	16.9	58.5
2017	39 085	28 343	7 800	10 701	20.0	72.9
2018	43445		11 663	11 663	26.8	100.0

Source: The Rosstat.

In 2009–2014, the average annual growth rates of real wages amounted to 104.5 percent with growth registered across all the aggregate types of economic activities. On the back of a surge of the inflation rate in 2014–2015, real wages fell by 9 percent in 2015; this decrease in wages was compensated by the recovery of the growth trend in 2017–2018. In 2018, real wages rose by 6.8 percent as compared to the relevant period of the previous year.

In 2014–2018, with slowdown of economic dynamics in the Russian economy the advanced growth in real wages pointed to a lack of automatic short-term correlation between wages and labor efficiency. It is to be noted that in 2014–2017 the narrowing of the rates of changes in real wages and the dynamics of labor efficiency was a positive trend (*Table 9*).

Table 9

Labor market indicators in 2010–2017, % on the previous year

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Gross domestic product	104.5	104.3	103.7	101.8	100.7	97.5	99.8	101.5	102.3
Overall labor costs	101.3	100.5	100.4	99.5	99.8	99.0	99.8	100	n/a
Labor efficiency index	103.2	103.8	103.0	102.2	100.7	98.1	99.8	101.5	n/a
Real accrued wages of entities' workers	105.2	102.8	108.4	104.8	101.2	91.0	100.8	102.9	106.8
Average annual number of the employed	100.1	100.2	100.5	99.9	99.9	99.5	99.5	99.7	100.3

Source: The Rosstat.

As seen from the dynamics of labor efficiency in 2014–2018, with the pattern of economic growth being modified labor efficiency was growing at a higher rate in the tradable sector of the economy. Undoubtedly, the positive contribution to the overall economic dynamics was made by the agriculture. Growth in labor efficiency in the agrarian sector facilitated the redistribution of labor resources to the services sector and

determined the modification both of structural parameters of the employment and social parameters with the correlation between nominal wages of workers in the agrarian sector and wages of workers with relevant skill standards in the industry, building, trade and other services taken into account.

The industry saw mixed dynamics. With changes in the level of prices, growth in the cost of borrowings and shortage of investment resources, a decrease in labor efficiency in mining was compensated by additional attraction of the workforce; this factor permitted to underpin positive output dynamics and promote the role of this activity in formation of the gross value added. The manufacturing compensated the reduction of the average annual number of the employed by means of restructuring of production and increasing workers' labor efficiency with growth in the average earned rate; as a result it managed to reduce labor inputs.

With shrinkage of the domestic market of investment goods and services and consumer demand in 2014–2017, labor efficiency in the building industry and retail trade decreased. Despite the more dramatic slowdown of the growth rates of nominal wages in the above sectors as compared to the nationwide level, preservation of jobs became the factor of restraint of social risks on the labor market with the a high share of those types of activities in the economic pattern taken into account (*Table 10*).

Table 10

**Dynamics of labor efficiency by the type of economic activities,
% as compared to the previous year**

	2014	2015	2016	2017
Total	100.7	97.8	99.8	101.5
Agriculture, hunting and forestry	103.3	104.5	103.5	103.8
Mining	102.8	98.3	100.3	100.4
Manufacturing	102.5	97.1	99.3	99.7
Power-, gas- and water-supply	100.2	99.8	100.5	102.2
Building	98.4	100.8	99.9	98.9
Wholesale and retail trade	98.7	93.4	94.4	101.5
Hotels and restaurants	99.8	96.2	94.3	101.7
Transportation and storage	100.4	97.8	99.0	102.2
Real-estate operations	98.6	100.2	100.2	99,6

Source: The Rosstat.

The analysis of the long-term trends of development of the Russian economy reveals weak sensitivity of the labor market to the changes in the dynamics of macroeconomic indicators. The reaction of the labor market to the crisis situation remained rather weak because adaptation took place not by means of the lay-offs of the workforce, but through the adaptation mechanisms of regulation of working hours, administrative measures and the practice of informal labor relations.

In 2018, the number of workforce amounted to 76.2 million people, including 72.5 million people gainfully employed in the economy and 3.7 million people (4.8 percent) classified as unemployed (as per the methods of the ILO). Despite the slowdown of the rates of economic dynamics in 2015–2018, the rate of unemployment fell to the historic low values. As seen from the comparative analysis of the main indicators of the labor market, with the general downward trend of the share of the able-

bodied population in the total number of the population the dynamics of the number of the workforce and the gainfully employed persons in the economy demonstrated weak growth in 2015–2018, which situation was probably related to the involvement of potential resources of the workforce from among the economically inactive population amid falling living standards (*Fig. 11*).

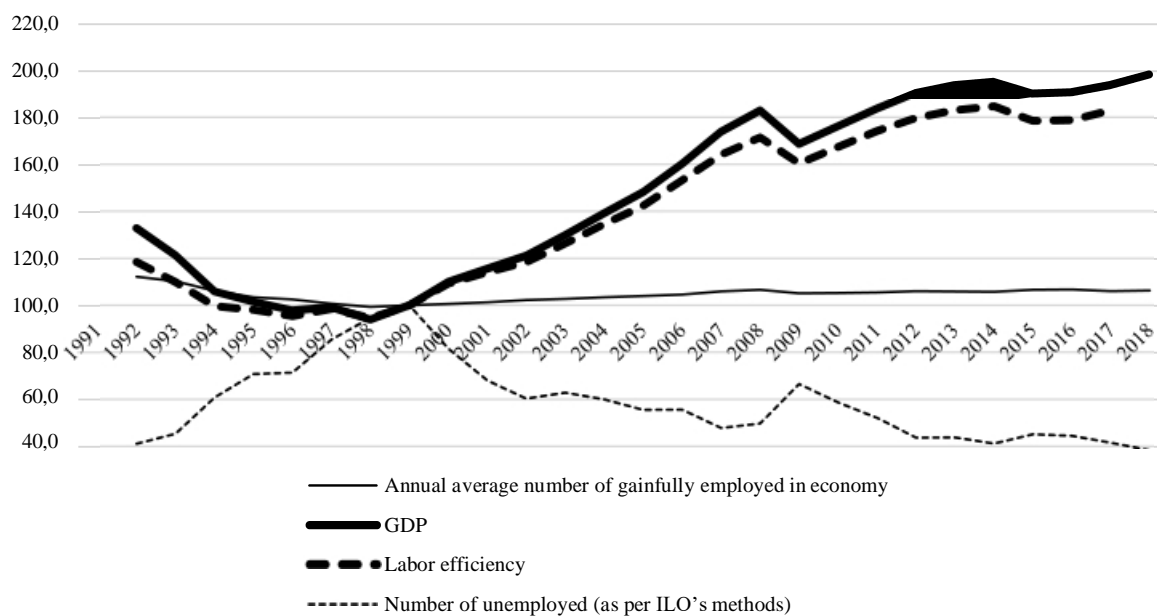


Fig. 11. The dynamics of the number of the gainfully employed in the economy, the unemployed and GDP, % on 1999

Source: The Rosstat.

In the current situation, the weak reaction of the labor market, including its component, such as the unemployment to complicated economic conditions can be explained by the policy of retention of skilled workers amid real depreciation of the workforce and expectations for revival of economic activities in future. In addition, the shortage of labor supply justified by demographic factors and the outflow of migrants whose earnings decreased dramatically due to the depreciation of the rouble had a restraining effect on growth of the rate of unemployment. Employers' need in workers declared by the state employment service remains higher than last year; as of the end of 2018 the tension coefficient per 100 declared vacant jobs amounted to 46.2 persons against 64.3 persons a year before. With high indicators of the turnover of the workforce (hiring and layoffs), the turnover of jobs (liquidation of old jobs and creation of new ones) – as a parameter of their renewal – is still rather low. It is to be noted that the level of the turnover is underpinned mostly by the liquidation of jobs at the existing enterprises, rather than creation of jobs at new ones.

In 2017–2018, nearly 11.2 percent of the number of workers was partially employed. In January–September 2018, the average number of working hours per one worker decreased by 0.5 percent as compared to the relevant index of the previous year with quite a broad range of fluctuations of this indicator across the types of economic activities. In mining, in 2018 the share of part-time workers was equal to 8.3 percent of the average payroll strength, while in manufacturing, to 20.9 percent. The investment crisis in the building industry caused the reduction both of the number of the employed and growth of 18 percent in the number of part-time workers. In the services sector, part-time employment was not quite acute because of restructuring of jobs and support of the budget-funded sector. A high level of part-time employment has an effect of the dynamics of parameters of the rate of unemployment, but at the same time is evidence of the prevailing inefficiency of employment.

In the past 25 years, structural changes in the economy have led to a substantial modification of demand on workforce. With growth in the share of the nontradable sector, the new formats of provision of state, financial, commercial and transport services were accompanied by advanced growth in the workforce engaged in those types of activities. In 2001–2017, the average annual number of the employed in the nontradable sector of the economy increased by nearly one-third and amounted to over three-fourth of the total number of gainfully employed in the economy. Highly restrained changes in healthcare and education were an alarming factor in terms of long-term goals and improvement of households' living standards.

Restructuring of employment was accompanied by the modification of demand on the workforce on the basis of its skills. In the pattern of the gainfully employed population, the share of workers with higher and secondary vocational education increased. In the period of ten years from 2006 to 2017, the share of persons with higher education in the total number of the employed in the economy increased by 6.4 percentage point, having grown at advanced rates as compared to other categories of the employed. The highest level of the employed with higher education and high skills is typical of such types of activities as education, science, finances, state administration and healthcare. These activities see growth in demand on human resources which have received special retraining or advanced training. This factor is going to play an important role in promotion of labor efficiency through more comprehensive utilization of professional skills and competences. Also, it is worth mentioning that the above listed types of activities are characterized by changes in gender parameters of the employment owing to growth in the share of persons of active and creative age (25–49 years old), as well as women with a higher level of education as compared to men.

Amid the complicated economic situation of 2015–2018, the government took a number of important decisions related to regulation and reduction of the labor market's tensions, including: raising of the size of minimum wages and the maximum size of employment benefits; equalization of the rights of the unemployed; formation within the frameworks of the state employment service of the nationwide bank of vacant jobs; changing of the level of labor remuneration in the public sector. A trend of

toughening of state control over compliance with the norms of the labor legislation, in particular, the ones aimed at restructuring of the employment, preservation and efficient utilization of workers' professional skills, introduction of nonstandard working regimes, promotion of workers' social security and upgrading of working conditions received an additional impetus.
