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TRENDS AND OUTLOOKS**

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The review “Russian economy in 2017. Trends and outlooks” has been published by the Gaidar Institute since 1991. 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 services; institutional changes. The paper employs a huge mass of statistical data that forms the basis of original computation and numerous charts confirming the conclusions.

Reviewers:

Lev Yakobson, Doctor of sciences (economics), professor, first pro-rector, NRU-HSE;

Alexey Vedev, Doctor of sciences (economics), Head of Structural Research Laboratory, RANEPA.

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□ **Gaidar Institute,**

4.1. The macrostructure of production¹

4.1.1. The dynamics of the Russian economy in 2017: internal and external demand

The economic situation in 2017 was characterized by a gradual recovery of positive dynamics. GDP in 2017 constituted RUB 92.08 trillion up 1.5 percent compared to the previous year.

First signs of business revival were observed in H2 2016 driven by price growth on hydrocarbons and strengthening of the ruble affected the dynamic and structure of the external trade turnover and domestic production. However, instability of factors both stimulating and curbing economic development provoked changes of quarter-by-quarter GDP dynamics.

Year-on-year and quarter-on-quarter dynamics of macroeconomic indicators for 2016–2017 demonstrate gradual relaxation of the recession depth with regards to all major macroeconomic parameters brought about by a notable drop in the rate of inflation, changes in the structure of production costs resulting from the ruble's depreciation, and renewal of the external trade turnover growth. The share of net exports in GDP in current prices in H1 2017 rose to 6.6 percent, and at the year-end constituted 5.5 percent up 0.2 percentage point against last year.

Amid relatively favorable changes in external economic conditions, renewal of the domestic demand was the main prerequisite for meeting biennial recession. The structure of home demand seen in 2017 was characterized by growing volume of fixed investment and their increased contribution to GDP dynamics. In 2017, fixed investment increment constituted 4.4 percent, household final consumption expenditure up 3.4 percent during 2017. However, one should bear in mind that the dynamics of these indicators was markedly affected by recession in the construction/investment complex and shrinkage of consumer markets during previous three years. In 2017, household final consumption expenditure came to 92.8 percent, fixed investment–92.3 percent, and GDP–99.5 percent against 2013.

Behind the renewal of the Russian economy upward dynamics in 2017 was overcoming of economic recession practically in all basic types of economic activity. In comparison with 2016, increment of gross value added in industrial production constituted 0.8 percent, commerce – 3.1 percent, and transportation – 3.7 percent. In 2017, agricultural contribution to gross value added rose amid production growth by 1.2 percent compared to the previous year.

Against the backdrop of gradual improvement of the investment climate the snail-paced adaptation of the construction complex to the changes in process, market structure of investment goods and against the background of borrowing on domestic and external capital markets was negatively affecting economic recovery. The factors behind the restriction of demand on construction works and services were retention of high bank interest rates, decline of both

¹ This section is written by Olga Izryadnova, the Gaidar Institute, IAES RANEPА.

economic efficiency and profits of enterprises and organizations, contraction of the households' investment activity on the housing construction market amid decrease of personal income. Construction scope of works in 2017 constituted 98.8 percent of the same indicator of the previous year and 90.5 percent of the 2013 level when stagnation of business activity in the construction/investment complex was observed (*Table 1*).

Table 1

Characteristics of main economic development factors in 2016–2017, as percent to the same period of previous year

	2016	Quarter				2017	Quarter			
		I	II	III	IV		I	II	III	IV
GDP	99.8	98.8	99.4	99.6	99.3	101.5	100.5	102.5	101.8	101.3
External factors										
External trade turnover (calculated by the balance of payments methodology)	88.6	73.1	81.5	96.1	104.5	125.3	132.5	125.3	119.8	123.4
exports	82.5	67.1	74.2	90.1	101.9	125.3	136.5	123.4	118.8	124.2
imports	99.2	85.3	95.6	105.6	108.7	124.1	126.1	128.3	121.2	122.1
balance	60.8	48.8	50.6	64.0	91.1	127.8	154.1	113.3	121.2	128.4
Oil prices, USD/barrel	44.05	31.12	39.14	43.14	50.08	54.39	54.12	50.25	51.74	61.47
Official RUB/USD exchange rate, as of period's end	60.66	67.61	64.26	63.16	60.66	57.06	56.38	59.09	58.02	57.06
Internal factors										
Investment in fixed assets	99.8	96.5	96.9	99.2	103.2	104.4	101.4	105.0	102.2	106.4
Consumer demand										
Turnover of retail trade	95.4	95.0	95.1	96.1	95.4	101.2	98.4	101.0	102.1	103.0
Paid services rendered to population	99.7	99.8	99.5	100.0	100.3	100.2	100.2	100.6	100.2	100.4
Output of goods and services, by basic type of economic activity	100.5	100.3	100.3	100.6	100.8	101.4	100.6	103.8	102.1	99.5
Industry	101.3	101.1	101.5	101.0	101.7	101.0	100.1	103.8	101.4	98.3
Agriculture	104.8	103.6	103.3	105.6	105.0	102.4	100.9	100.1	105.4	99.8
Construction	97.8	97.3	95.7	97.8	99.4	98.6	95.5	97.4	100.0	99.4
Transport	101.8	101.5	101.0	102.8	101.7	105.4	105.3	109.3	105.5	101.8
Social parameters										
Real disposable income	94.2	96.7	94.6	93.1	93.4	98.3	99.4	97.1	98.2	98.7
Real charged wage	100.8	99.4	100.3	101.2	101.8	103.4	101.8	103.4	103.1	105.2
Real size of allotted pension	96.6	97.2	95.6	96.2	97.1	103.6	112.0	99.9	100.7	101.6
Labor market										
Number of employed	100.1	99.8	100.0	100.2	100.4	99.0	99.7	99.1	99.0	99.4
Unemployment rate	5.5	5.9	5.7	5.3	5.4	5.2	5.6	5.2	5.0	5.1
<i>For reference</i>										
Consumer Price Index (relative to December of previous year)	105.4	102.1	103.3	104.1	105.1	102.5	101.0	102.3	101.7	102.5
Price index on investment goods	103.2	99.8	102.3	103.7	103.2	103.0	99.1	101.2	103.0	103.1
Key rate (as of period's end) percent		11.00	11.0	10.5	10.0	7.75	9.75	9.0	8.5	7.75
Labor productivity	99.7	99.0	99.4	99.4	98.9	102.8	100.8	103.4	102.6	101.2

Source: Rosstat.

The factors behind the negligible slide in GDP in 2016 were the reduction in the rate of decrease of domestic demand and the retention of net exports (calculated by the SNA methodology) in the positive territory and provided added momentum for the GDP growth in 2017.

The distinctive features of the macroeconomic situation in 2017 were determined by the unidirectional positive dynamics of external and home demand. 2014–2015 saw around 10 percent decrease of domestic demand against 2013 that was a turning point in the three-year trend of domestic market performance. Unprecedented shrinkage in domestic demand seen in 2015–2016, which was not offset by the exports dynamic, remained the principal factor behind the decrease in the rate of development of the Russian economy in this period. Adaptation of

the Russian economy to new realities was accompanied by a gradual renewal of the positive dynamic of domestic demand thus markedly determining the prospects for the Russian economy in 2017. To note, in Q1 2017, GDP positive dynamic was maintained by external demand dynamic growth and in Q2 2017 domestic demand growth was outstripping external demand growth. However, H2 2017 reported gradual decrease of domestic demand growth, which was accompanied by slowdown of domestic output and imports (*Fig. 1*).

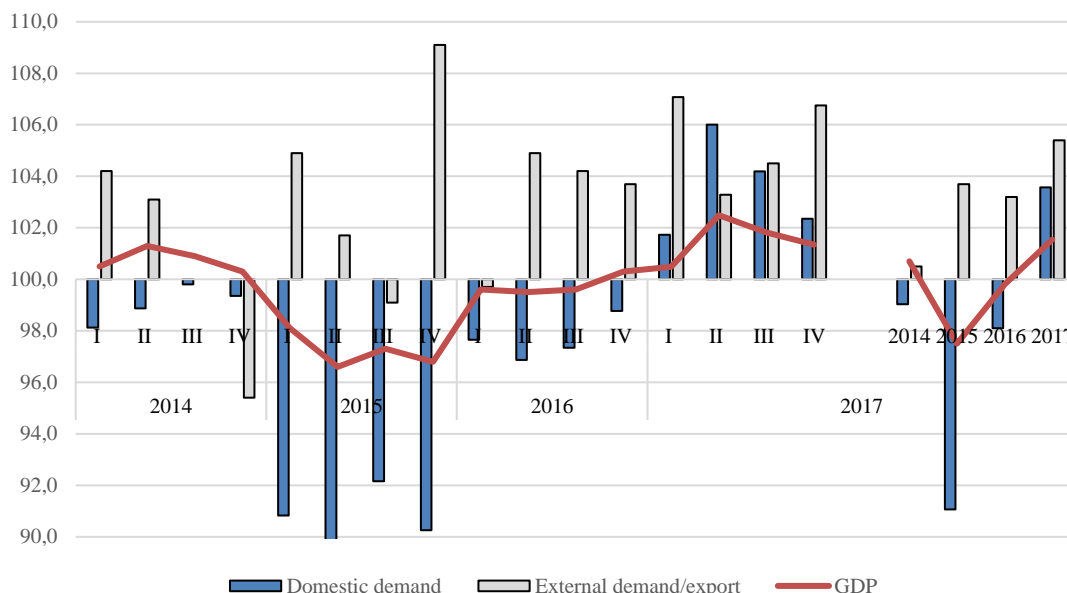


Fig. 1. GDP dynamics by component of domestic and external demand in 2012–2017, as percent to the corresponding period of the previous year

Source: based on data released by Rosstat.

Simultaneous growth in the investment and consumer markets was another significant feature of 2017. Investment bust in fixed capital at its lowest point was passed in Q2-Q3 2015 and during entire 2016, improved situation on the capital market was observed. Growth in investments in fixed capital by 4.4 percent against that a year earlier was reported in 2017 for the first time after twelve quarters of contraction. Investment activity peaked in Q2 2017. It was hard to expect significant changes in the GDP structure by components amid retention of investment share in fixed capital practically at the previous year level.

The consumer market had been very slowly recovering from the consequences of the acute crisis of 2015–2016. In 2017, personal real disposable income dropped by 1.7 percent versus 5.8 percent in 2016 and dynamic of the household final consumption expenditure went into positive territory after the two-year fall (*Fig. 2*).

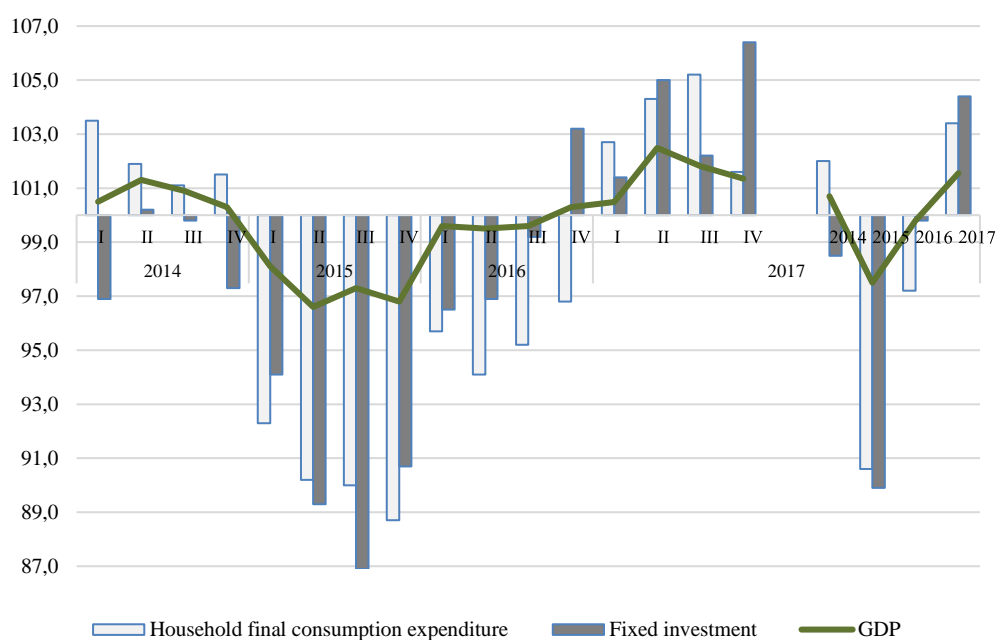


Fig. 2. The dynamics of investment and consumer demand 2014–2017, as percent to the corresponding period of the previous year

Source: based on data released by Rosstat.

The dynamics of domestic market was determined both by competitiveness of domestic goods and services compared to their imported analogues by price parameters and by a fall of production efficiency in non-tradable goods and services sectors compared to export oriented tradable sector of the economy. As a result, in 2016, domestic production of goods and services for the Russian domestic market dropped by 4.3 percent on the previous year. As a result, the pace of production of goods and services for the domestic market decreased by 4.3 percent compared to 2014. Simultaneous contraction of demand on domestic and imported capital goods seen in 2014–2016 contributed to negative trends on the domestic market. The proportion of imports of goods for intermediate consumption reflected insufficient local content of main production. Growth of investment goods imports reflected increased need for renewal of upgrade and modernization of export oriented and import substitution productions. A number of additional difficulties emerged due to tightening on the global credit market, the anti-Russian sanctions and the restrictions on imports of some types of technological equipment necessary for implementing the investment plans of mineral extracting and processing enterprises, as well as infrastructure projects. Easing of imports contraction in comparison with exports contraction (according to balance of payments methodology) observed in 2016 positive affected GDP dynamics.

In Q2 2017, there was for the first time since 2014 domestic production growth of goods and services for the home market in comparison with the corresponding period of the previous year. However, on the whole for 2017-year end results, it remained in although small but negative territory.

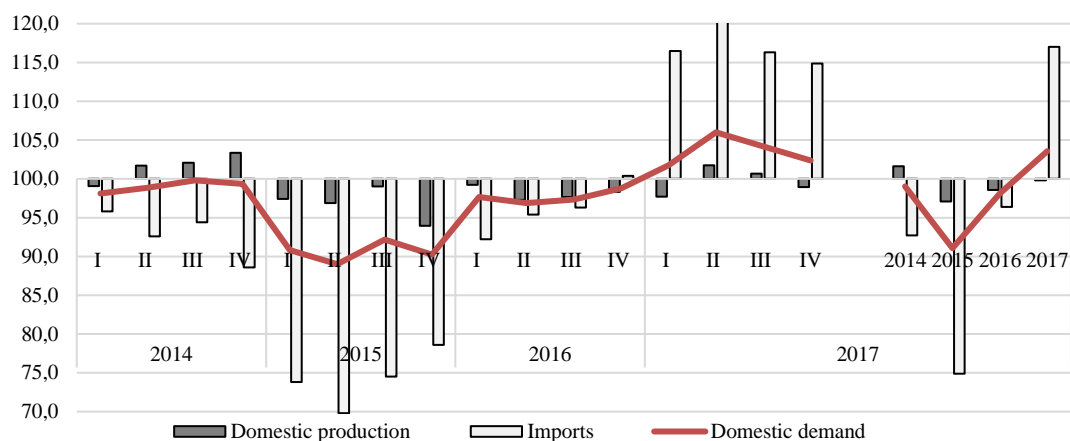


Fig. 3. Dynamics of domestic demand by components in 2014–2017, as percent to the corresponding period of the previous year

Source: based on data released by Rosstat.

To note, change in the structure of imports due to a reduction of deliveries of consumer and intermediary goods and growth of capital goods imports markedly affected positive dynamics of domestic demand in 2017 (Table 2). This fact gave the domestic investment market a boost and provided an additional momentum to overcome the recession of domestic production.

Table 2

Structure of imports by function type (calculated by the balance of payments methodology, percent)

	Goods		
	consumer	investment	intermediate
2012	38.1	24.9	37.0
2013	37.6	24.3	38.0
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
Q1	36.8	22.8	40.4
Q2	32.0	27.8	40.2
Q3	32.6	29.0	37.4
Q4	33.6	27.5	38.9

Source: Rosstat.

One can not assess growth of capital goods imports conclusively. Amid unquestionably positive impact of imports on investment demand dynamic and on production incentives oriented towards foreign capital goods and components, renewal of the outstripping growth of imports versus exports and home demand reflected gradual depletion of the ruble's devaluation properties and the effect of import substitution. Essentially, the economy was facing the situation characteristic of 1999–2012 when insufficient production of domestic capital goods were supplemented by imports of capital goods.

By underscoring the importance of domestic demand dynamics as a major factor of the Russian economy development, one should note features of capital formation for the home consumer market. A large scale drop in imports observed in 2015–2017 determined structural changes in the domestic market: amid the contraction of consumer demand owing to a reduction of household income and ruble's depreciation, the proportion of domestically produced goods in retail trade commodity resources increased to 65 percent in 2017, and to 77 percent in the

commodity resources of retail trade in food products. This trend was sustained by the resumption of the positive dynamics of production in the consumer sector of the economy. (Table 3).

Table 3

**Structure of retail trade commodity resources in actual prices
(in actual prices), percent**

	Retail trade commodity resources	Including commodities		Share of food imports in commodity resources of retail trade in food products
		produced domestically	imported	
2012	100	56	44	34
2013	100	56	44	36
2014	100	58	42	34
2015	100	62	38	28
2016	100	62	38	23
2017	100	65	35	23
Q1	100	64	36	24
Q2	100	67	33	22
Q3	100	65	35	22
Q4	100	63	33	22

Source: Rosstat.

On the whole in 2017, the dynamics and structure of domestic production of goods and services was determined by a shift towards increasing the output of goods and services for the external market (Fig. 4). In 2017, the share of goods and services for the domestic market constituted 72.9 percent of the total domestic production against 74.0 percent in 2016 and 76.1 percent in 2014. Increased share of goods for export was accompanied by a reduction of proportion of high-order goods, which strengthened resource dependence of the Russian economy.

The simultaneous growth of output in the tradable (100.9 percent against 2016) and non-tradable (101.9 percent) sectors of the economy was a positive factor for the renewal of the domestic market positive development in 2017 (Fig. 5). However, contribution of the socially oriented types of economic activity in 2017 contracted compared to the previous year amid increased importance of the commerce-transport and financial infrastructures.

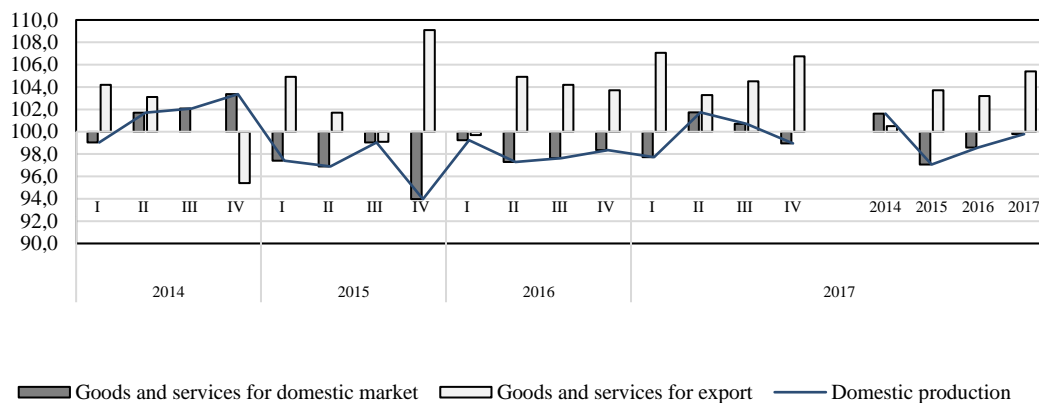


Fig. 4. The dynamics of domestic production of goods and services, by component in 2014–2017, as percent to the corresponding period of the previous year

Source: based on data released by Rosstat.

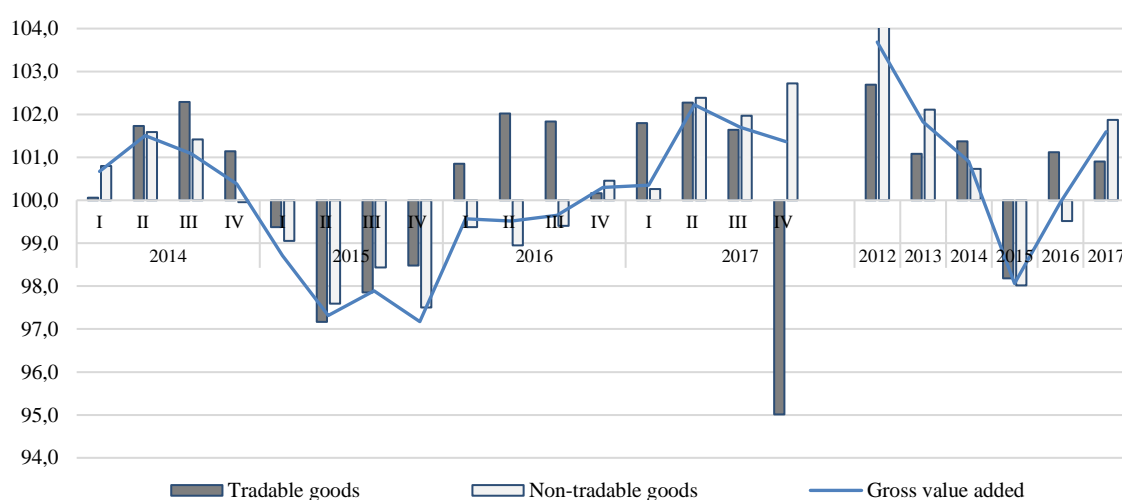


Fig. 5. Dynamics of gross value added in tradable and non-tradable sectors of the economy in 2012–2017, as percent to the corresponding period of the previous year

Source: Rosstat.

4.1.2. The expenditure components of GDP in 2014–2017: consumer and investment demand

The structure of expenditure-based GDP is determined by the ratio between final consumption and gross capital formation. In 2016–2017, there was a decline in the share and pace of final consumption, which was caused in the main by a notable drop in household final consumption expenditure. In 2017, the dynamics of the expenditure components of GDP are indicative of an increase in the share of gross capital formation due to the growth of stocks and the reduction in the share of net exports (*Table 4*).

Table 4

The structure of expenditure-based GDP in actual prices in 2012–2017, percent

	2012	2013	2014	2015	2016	2017
Gross domestic product	100.0	100.0	100.0	100.0	100.0	100.0
including:						
Final consumption expenditure	68.8	71.5	71.4	70.1	71.6	70.4
household	50.6	52.6	53.1	52.0	52.8	52.2
state government	17.8	18.5	17.9	17.7	18.5	17.8
non-profit organizations rendering services to households	0.4	0.4	0.4	0.4	0.3	0.4
Gross capital formation	24.5	23.1	22.2	21.9	23.1	24.1
gross accumulation of fixed assets	21.5	21.8	21.2	20.3	21.6	21.8
changes in circulating tangible assets resources	3.0	1.4	1.0	1.6	1.5	2.3
Net exports	6.7	5.4	6.4	8.0	5.3	5.5

Source: Rosstat.

One of the distinctive features of the Russian economy in 2015–2017 was a more pronounced drop in household final consumption expenditure than that demonstrated by Russia's GDP and investments in fixed capital. While in the period 2010–2014 the main factor sustaining the positive trend in the development of the Russian economy was growth in per-capita consumption, in 2015–2017 the drop in the real personal income resulted in an almost 8.9 percent shrinkage in household final consumption expenditure relative to 2014.

Both household final consumption expenditure and the retail market were at their lowest points in Q4 2015. As the rate of inflation decreased from 12.9 percent to 5.4 percent over the course of 2016 and 2.5 percent in 2017, the rate of decline in consumer demand gradually diminished. In 2016, household final consumption contracted by 5.0% on 2015, while the turnover of retail trade and the market of paid services rendered to the population declined by 5.2% and 0.3% respectively relative to the previous year. In 2017, growth rates of household final consumption expenditure stepped in the positive territory (3.4 percent against the previous year) (Fig. 6).

An analysis of the dynamics of consumer prices and consumer demand indicates that the population responded to high inflation and changes in the magnitude and structure of prices in 2014-2016 by drastically curbing the consumer demand for non-food products and paid services, and by gradually reducing the consumer demand for food products. As the population became to be better adapted to the new market situation, and the pressure of deferred consumer demand became stronger, the quarterly indices of 2017 gradually began to demonstrate less prominent downward trends in the turnover of retail trade. The accumulated growth potential of consumer prices amid the drop in the real income of the population became a factor restraining the dynamics of the consumer market (Fig. 7).

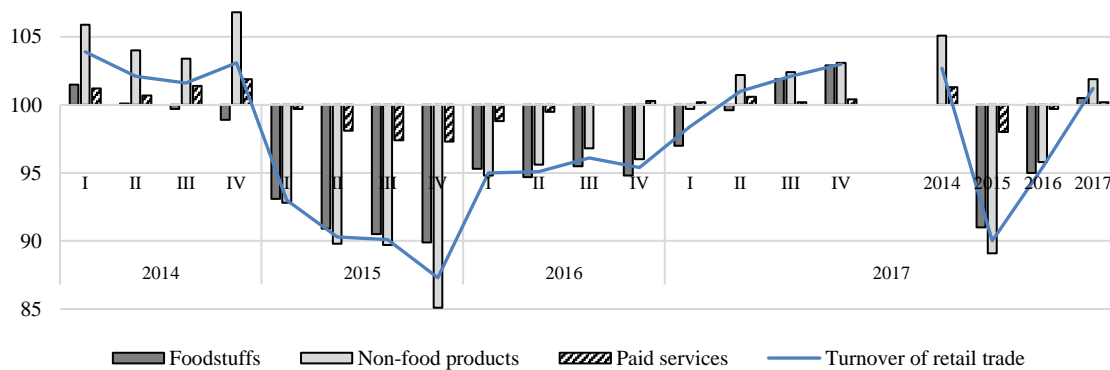


Fig. 6. The dynamics of household final consumption in 2014–2017, as percent to the corresponding period of the previous year

Source: Rosstat.

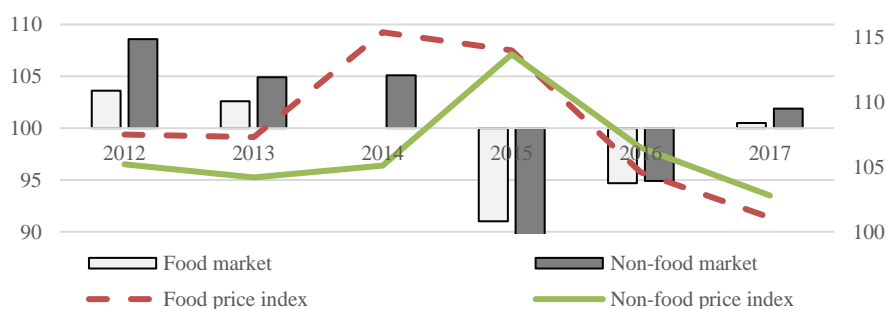


Fig. 7. The dynamics of the turnover of retail trade and consumer prices in 2012–2017, as percent of the previous year

Source: Rosstat.

The change in the level and structure of prices made a considerable impact on the dynamics and composition of household consumption expenditure. As the growth in nominal income of the population was weak, purchases of food and articles of prime necessity accounted for the major part of household consumption expenditure. In 2016–2017, there was an increase in the proportion of food products including beverages and tobacco products in the structure of retail trade turnover. The crisis had a number of consequences, including the narrowing range of available goods, the decline in delivery orders for many expensive commodities, and the withdrawal from the market of quite a few suppliers and manufacturers. The drop in demand affected not only the relatively hi-tech consumer market segments (computers; consumer electronic products; communications equipment), but also the food market segments oriented to the high-income strata of the population.

In 2017, cash personal income constituted RUB 55,447.8 billion up 2.5 percent in comparison with the corresponding period of the previous year. Personal consumption of goods and services in 2017 up 5.1 percent in comparison with the previous year and constituted RUB 41,569.5 billion and personal savings down 12.8 percent. Personal income spending is differentiated by years. In 2015-2016, against the background of high deposit interest rates, continuing interest in purchasing property personal savings behavior dominated. However, two-year trend of falling living standard indicators was telling on the change in household consumer behavior. In 2016-2017, amid a weak growth of nominal personal cash income, there was a further change in proportion of personal income spending. Amid simultaneous decline in inflation, bank interest rates and personal income reported in 2017, there was a trend change – personal spending registered increased share of expenses on purchases of goods amid contraction of savings proportion in personal income to 8.1 percent against 11.2 percent in 2016.

In 2015-2016, while savings displayed an overall downward trend, there were some structural shifts resulting from an increased share of property acquisition expenditure at the level of 2.9 percent of total personal spending when they peaked 4.5 percent in 2014. In 2017, further growth of spending on current consumption amid simultaneous demand growth on consumer loans was observed in the structure of personal spending despite significant decline of inflation rates. Reduction of bank interest rates on mortgages against the backdrop of extended supply on the housing market in a wide price bracket affected personal savings behavior from H2 2017. This fact triggered growth of spending on housing and created preconditions for the development of this trend in the coming year.

Renewed trend towards growing share in gross capital formation as a percentage of GDP hitting 28.9 percent positively affected macroeconomic outlook of the last year (*Table 5*). The share of gross capital formation amid changes in its structure due to increased savings in stockbuilding hit 24.0 percent of GDP in 2017. However, proportion of capital formation in fixed capital remained at average levels of 2013-2014. A distinctive feature of Russia's investment model is the substantial share of savings, where a notable portion is not transformed into investments in fixed capital. In 2017, the index of investments in fixed capital as a percentage of GDP constituted 17.3% up 0.1 percentage point against indicator of the previous year.

An analysis of Russia's capital account shows that the Russian economy has been in a net creditor position for quite a long time. In 2014, capital outflow from Russia hit its 20-year high of USD 153.0 billion. In 2016 and in 2017, net capital outflow from Russia dipped to USD 19.8 billion and USD 31.1 billion, respectively mainly due to banking sector transactions.

Table 5

**The main indicators of the investment potential of the Russian economy
in the period 2014–2017, as percent of GDP**

	2014	2015	2016	2017
Gross savings	28.6	29.9	29.0	29.8
Gross accumulation of fixed assets	21.2	20.3	21.4	21.7
Deposits made by individuals, as of year-end	23.4	27.9	28.3	28.3
Size of Reserve Fund, as of year-end	5.9	4.2	1.1	0
Size of National Wealth Fund, as of end of year	5.3	6.1	4.7	3.9
Investment in fixed assets	17.6	17.5	17.2	17.3

Source: Rosstat.

4.1.3. Changes in the GDP structure by income source

In the wake of falling rates of economic growth seen in 2014–2017, producer price policy was adjusted, which determined features of financial results from economic activity and profitability indicators. In January–September 2017, production profitability down 0,1 percentage point in comparison with 2016 (Table 6).

Table 6

**Profitability from sold goods, products, works, and services by types
of economic activity in 2012–2017, percent**

	2012	2013	2014	2015	2016	2017
Total in the economy	8,6	7,0	7,3	9,3	7,6	7,5
Agriculture, hunting and forestry	10,7	5,2	17,4	21,3	15,7	17,3
Fishery and fish-breeding	16,2	16,5	28,6	49,4	54,5	49,9
Mineral extraction	28,0	22,1	19,2	26,8	26,2	25,9
Processing industries	10,7	8,8	9,9	12,4	10,1	11,5
Production and distribution of electric energy, gas and water	3,9	4,4	3,7	5,5	7,1	н/д
Building construction	5,0	8,3	3,4	5,4	5,5	7,2
Wholesale and retail trade	6,7	6,5	6,1	7,1	4,8	4,6
Hotels and restaurants	5,9	6,0	4,4	5,8	4,9	7,0
Transport and communications	11,1	9,7	8,4	10,6	10,1	9,7
of these: communications	0,8	0,5	1,5	0,5	1,6	н/д
Financial activity	10,6	10,4	10,7	9,7	15,6	15,5
Real estate transactions, property lease and services	8,3	7,8	10,3	11,7	0,2	1,6
Government administration and military defense; social insurance	2,5	11,8	2,3	6,2	3,1	5,0
Education	6,6	4,8	6,2	7,0	7,0	10,4

Source: Rosstat.

Over the period 2014–2017, the movement of profitability indices and the financial result achieved by enterprises and organizations (balance of profits and losses) was strongly influenced by changes in producer pricing policies.

In 2016, producers responded to the persistent domestic demand shrinkage trend by restraining the growth of prices for their products. However, the year 2017 saw a somewhat increase of industrial producers' price rates due to the growing price index for mining and quarrying by 23.9 percent compared to December 2016. Outstripping price growth observed in the mining sector, in raw materials processing and electricity production can result in price adjustment in processing sector in the coming year.

Table 7

Price and tariff indexes in 2010–2017, December-on-December

	2014	2015	2016	2017
The consumer price index	111.4	112.9	105.4	102.5
The producer price index for industrial goods, including	105.9	110.7	107.4	108.4
<i>The price index for mining</i>	98.4	109.8	108.5	123.9
The price index for manufacturing	108.5	111.2	107.6	104.2
The price index for producers of agricultural products	114.1	108.5	101.8	92.2
The composite index for construction material prices	107.2	110.3	103.2	103.1
The index of motor freight tariffs	100.9	111.5	105.6	109.0

Source: Rosstat.

The years 2016–2017 saw a shift in the income structure from its corporate towards personal component. In 2017, the share of wages in GDP amounted to 47.8%, rising 1.60 percentage points above the corresponding index for 2015. The proportion of total income in GDP shrank in 2016–2017 in comparison with the previous year although remained above its 2013–2014 indicators. Growth of enterprises' costs led to a reduction of profitability in economy as a whole in 2016 by 1.2 percentage points relative to 2015. In 2017, decelerated trend towards growth of prices and labor costs resulted in growing share of gross income and gross mixed incomes in GDP to 41.5 percent of GDP (*Table 8*).

Table 8

GDP structure by income sources in 2011–2017, as percent to total in current prices

	2011	2012	2013	2014	2015	2016	2017
Gross domestic product	100	100	100	100	100	100	100
Including:							
Wages of hired labor, including hidden remuneration and mixed incomes	43.8	44.3	46.2	47.2	46.2	47.9	47.8
Net taxes on production and imports	14.4	14.3	13.8	13.9	11.2	11.0	10.7
Gross profit in the economy and gross mixed incomes	41.8	41.4	40.0	38.9	41.9	41.1	41.5

Source: Rosstat.

The accelerated wage growth trend relative to that of labor productivity renewed from 2016. In the context of accumulated capital and increased level of capital-labor ratio the efficiency of labor service and fixed capital went on the rise. Miniscule dynamics of labor productivity remains one of major constraints for transition to sustainable growth (*Table 9*).

Table 9

Indices of the use of main production factors in 2011–2017, as percent relative to previous year

	2011	2012	2013	2014	2015	2016	2017
Labor productivity	103.8	103.3	102.2	100.7	97.8	99.8	101.8
Capital-labor ratio	103.0	103.6	105.2	104.0	103.8	104.0	105.0
Fixed-asset turnover ratio	100.7	99.9	96.7	97.0	93.3	95.1	97.0

Source: Rosstat.

The Russian economy's recent development patterns reflect its shrinking development potential, which has become manifest in the high intensity of the use of production capacities, absence of large-scale investment projects, and low unemployment rate. Besides, the situation has been further complicated by the long-term upward trend displayed by the growth rate of production costs, which has been pushed up by the tariff policies of infrastructure provider monopolies and the accelerated wage growth relative to labor productivity. Low production efficiency remains one of the main factors that push down industry productivity and the low competitive capacity of Russia's domestic products in the domestic and foreign markets. Over the period 2010–2013, productivity decline was demonstrated by practically all major types of

economic activity. Amid projected contraction of the labor force, labor productivity becomes the main factor for production growth of goods and services. According to short-term forecast, the shortage of skilled labor and rather slow rate of technical and technological upgrade of production will affect the labor productivity dynamics.

The changes in the structure of costs and the balance of profits and losses were strongly influenced by the highly differentiated wage indices by type of economic activity. In the medium-term implementation of social commitments and the ratio of targeted groups' wages, in particular, employed in the budgetary sphere will affect wage dynamics. The highest wages, for fifteen years in a row, have been observed in mining industries, the production of oil and petroleum products, and the financial sector. Manufacturing industries have demonstrated a continuing trend towards employment restructuring through cutting non-productive jobs. As a result, labor productivity in manufacturing industries has been growing at a rate that is higher than Russia's average, but wages, as before, have also been rising at an accelerated rate. In the wake of wage growth rates being close to labor productivity growth there will be no pressure on inflation.

As wage is the major personal income component, the employment issue is one of the priority factors shaping consumer behavior. In face of the plummeting economic growth rate, the distinctive feature of 2017 was an exceptionally low unemployment rate (calculated by the ILO methodology) of 5.2 percent. The total number of officially registered unemployed persons declined to 85.3 percent relative to 2016, and amounted to 0.9 million persons.

The employer demand for workforce registered by state employment agencies has remained above its last year's level; the tension coefficient (the number of registered unemployed individuals per 100 job vacancies) at the close of 2016 constituted 64.3 persons vs. 86.8 a year earlier. While the labor turnover index (the number of hired vs. dismissed employees) is high, the turnover of jobs (liquidation of old jobs and creation of new ones) as a measure of job renewal has remained rather low. The turnover level is sustained predominantly by the liquidation of jobs by actively operating companies, and not by the creation of new jobs.

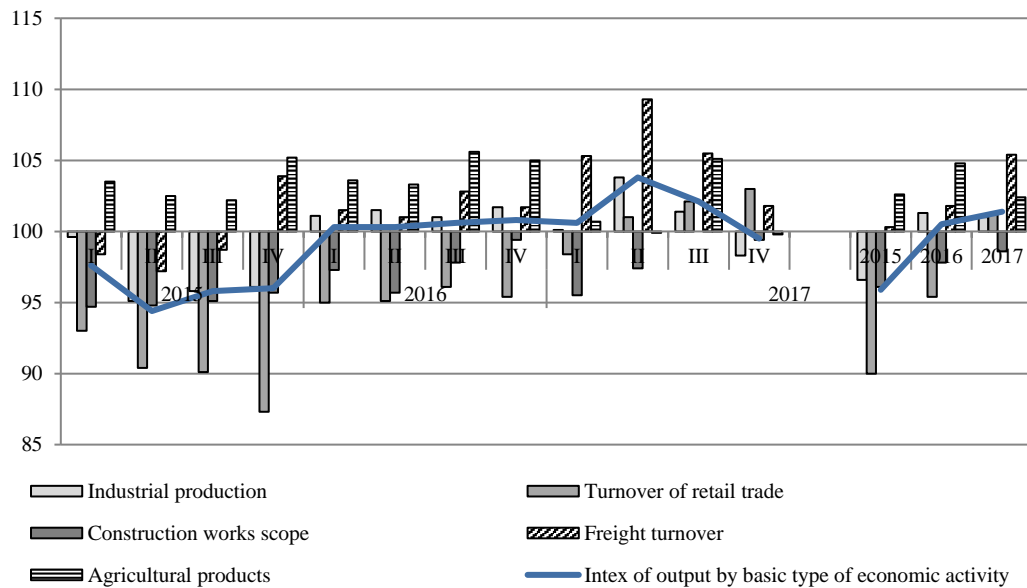
Besides, the Russian labor market adapts to crisis conditions not through increasing the unemployment rate, but by relying on flexible remuneration schemes. Due to the underdeveloped contractual recruitment system in the sphere of labor relations and the low unemployment benefits, people prefer to stay employed during a crisis and work for a lower wage, or to work fewer hours.

In the current situation, the weak response of the labor market, including unemployment index, to unfavorable economic developments can likewise be explained by the employer policy aimed at keeping their qualified workforce, which is becoming cheaper in real terms, in expectation of future revival of economic activity. Besides, the factor that exerted downward pressure on unemployment rate growth was the supply deficit in the labor market determined by demographic factors and the outflow of migrants, whose earnings significantly plummeted due to the ruble's weakening.

The less than efficient use of production factors has remained one of the main reasons behind the dramatic slowdown in the pace of economic growth and the generally declining competitive capacity of the Russian economy as a whole. In the short run, the behavior of incomes and inflation will depend solely on the growth rate of labor productivity and return on investment - that is, total factor productivity.

4.1.4. The dynamics and structure of production by type of economic activity

The year-on-year decline in the volume of industrial output, by major type of economic activity, has been observed since 2015. Decrease of the physical quantity of output by basic types of economic activity compared to the previous year was observed in 2015. The already unstable economic development pattern has been further destabilized by the declining investment activity, turnover of retail trade, and industrial production indices. In Q2 2016, after a five-quarter-long plunge, the index of industrial production demonstrated slight growth. The economic situation in 2017 as a year earlier was positively influenced by industrial production (101.0 percent relative to 2016), agricultural produce (102.4 percent), and transport services (105.8 percent). From Q2 2017, growth of retail trade commenced (*Fig. 8*).



Source: Rosstat.

Fig. 8. The dynamics of basic types of economic activity in 2015–2017, as percent to corresponding period of the previous year

Structural changes across the economy in 2016–2017 were determined by the increasing role of the raw materials sector and related infrastructure. In 2017, growth of mineral extraction in annual terms amounted to 2.0 percent. The hydrocarbons output cut agreement with OPEC member states notably affected in H2 2017 the dynamics of the extracting sector quarter-on-quarter 2017. Manufacturing industry indicators were highly unstable in 2017. Contraction in manufacturing sector by 0.8 percent seen in Q1 2017 changed for dynamic growth by 3.2 percent observed in Q2 2017 against corresponding period of 2016. However, it did not represent a turning point in the manufacturing sector. When taken in annual terms, the 2017 output index in manufacturing industries constituted merely 0.2 percent versus 0.5 percent a year earlier (*Fig. 9*).

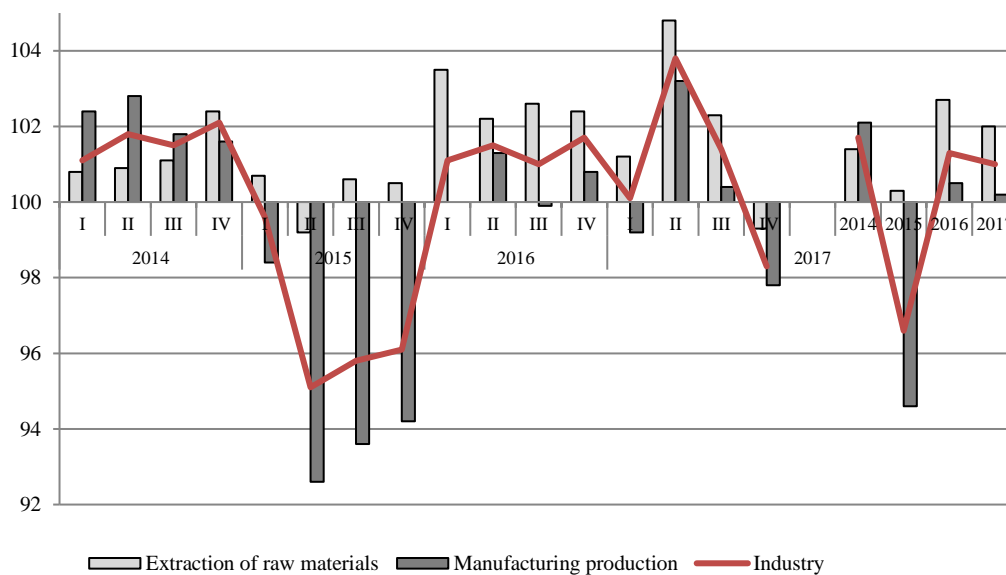


Fig. 9. The pace of industrial production by type of economic activity in 2014–2017, as percent of the corresponding period of the previous year

Source: Rosstat.

The output volume indices in the manufacturing industry are rather significantly diversified by type of economic activity. Manifestation of crisis developments by types of economic activity speak about weakness of proper restructuring processes in the domestic business sector and low motivation to move domestic products to new competitive markets. As before, one of the problems faced by the Russian economy has been the targeted support of certain industries instead of a well-coordinated system of comprehensive measures designed to generally improve the overall conditions for doing business. For example, the potential of the machine building complex was determined by national producers possessing own platforms with high localization level, engineering jurisdictions and intellectual property rights. However, in the current technical level of products and weak international cooperation this fact restricted competitiveness of domestic products both on the home and foreign markets. Development of export oriented productions, foreign distribution and service systems, integration of Russian producers into global lines of production should become one of the ways of supporting machine building complex. This will be a stimulating factor for upgrading main and associated productions.

The dynamics of manufacturing sector in 2017 was determined by the growth in the chemical complex with increased output volume of competitive on external and domestic markets products, which to a large extent was a result of state and private investment growth in creation of new capacities and upgrade of existing ones. Growth in the machine building complex was determined by an increase of state orders and direct subsidies as well as renewal of demand on means of transport. Accelerated dynamics of the consumer market was determined by expanding niches for domestic goods on home market amid reduction of imports. Growth in metallurgical complex was linked with increased demand in the investment/construction complex and positive shifts seen in external environment on metals market.

Along with this production renewal recorded in high and medium-tech components of machine building complex was observed. The index for production of high-tech manufacturing types of activity in 2016 constituted 96.8 percent against the previous year and in 2017 stepped into the positive territory. The share of high-tech and knowledge-based industries in GDP in 2017 constituted 22.1 percent against 20.3 percent in 2012. Production of medicine was growing by exceptionally high rate in 2017. Market of machine building products is traditionally geared towards receptive domestic market (*Table 10*).

Table 10

**The indexes of production by major types of manufacturing industry
in 2016–2017, as percent to the previous year**

	2016	2017
Manufacturing industries	100.5	100.2
Production of foodstuffs	103.1	105.6
Production of beverages	101.3	99.0
Manufacture of textiles	104.6	107.1
Manufacture of clothes	107.1	103.8
Production of leather and leather products	104.4	104.3
Timber and wood products processing	102.8	102.2
Cellulose and paper production	105.1	104.7
Production of coke and petroleum products	98.3	100.6
Chemicals production	106.3	104.3
Production of medicine and materials for medical purposes	107.0	112.3
Manufacture of rubber and plastic products	106.3	104.2
Manufacture of other non-metal mineral products	94.0	102.5
Metallurgical production and	99.0	96.4
Manufacture of finished metal products	101.3	97.3
Manufacture of computers, electronic and optical equipment	100.6	92.7
Manufacture of electrical equipment	100.9	102.8
Manufacture of machinery and equipment	99.3	100.3
Manufacture of means of transport, trailers and semitrailers	100.5	112.9
Manufacture of other means of transport and equipment	104.2	100.6
Manufacture of furniture	97.3	108.7
Manufacture of other finished products	82.4	110.2

Source: Rosstat.

Significant changes are not expected in the industrial production structure in the short-term perspective. The future of economic development is linked with the renewal of the capital goods production, in particular, at the expense of state orders, which will positively tell on the development of machine building and the investment/construction complexes. Stability will remain in export oriented sectors – fuel and energy complex, metallurgy, and chemical production. Implementation of state infrastructure projects will secure demand on construction sector services.

In the medium term, industrial policy is aimed at the change of business environment and creation of conditions for innovation activity including demand incentives for innovations.