

**GAIDAR INSTITUTE FOR ECONOMIC POLICY**

**RUSSIAN ECONOMY IN 2017  
TRENDS AND OUTLOOKS**

**Gaidar Institute Publishers  
Moscow / 2018**

УДК 338.1(470+571)"2017"(063)  
ББК 65.9(2Рос)я46

**RUSSIAN ECONOMY IN 2017. TRENDS AND OUTLOOKS** / [Alexander Abramov etc.; Doctor of sciences (economics) Sergey Sinelnikov-Murylev (editor-in-chief), Doctor of sciences (economics) Alexander Radygin]; Gaidar Institute for Economic Policy. – Moscow: Gaidar Institute Publishers, 2018. – 544 p. – ISBN 978-5-93255-530-9.

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, RANEPА.

УДК 338.1(470+571)"2017"(063)  
ББК 65.9(2Рос)я46

ISBN 978-5-93255-530-9

□ Gaidar Institute, 2018

## **4.5. Fixed investment<sup>1</sup>**

### 4.5.1. Investment resources

The macroeconomic aspect of the investment model is determined by dynamics and structure of major indexes of the real sector and by monetary and financial markets as well as by characteristics of reproduction and usage of principal factors of production economy wide by types of economic activity. This allows not only to assess the investment potential of the economy from the point of view of mobilization of internal development reserves but also to reveal constraints and possibilities for raising the investment attractiveness for the Russian and foreign capital. Institutional environment, norms and rules of regulation the investment activity, development of financial and credit system, risks of changes in social and political, economic, infrastructure and organization and managerial factors represent another feature of the investment model. The investment model being a complex system includes a third aspect – mechanism of interaction of different subjects of the investment process (state sector, corporate sector, households, foreign investors) and investment decision making by economic entities. One should also take into consideration specific features of the investment model depending on time-frame. In short-term perspective, economic growth can be determined by a system of non-capital intensive development factors, in particular, decline in inflation, reduction of costs, and shutdown of inefficient products. In medium- and long-term perspective, the role of investments notably increases due to the need to resolve deep structural issues of modernization of production and raising competitiveness of the economy.

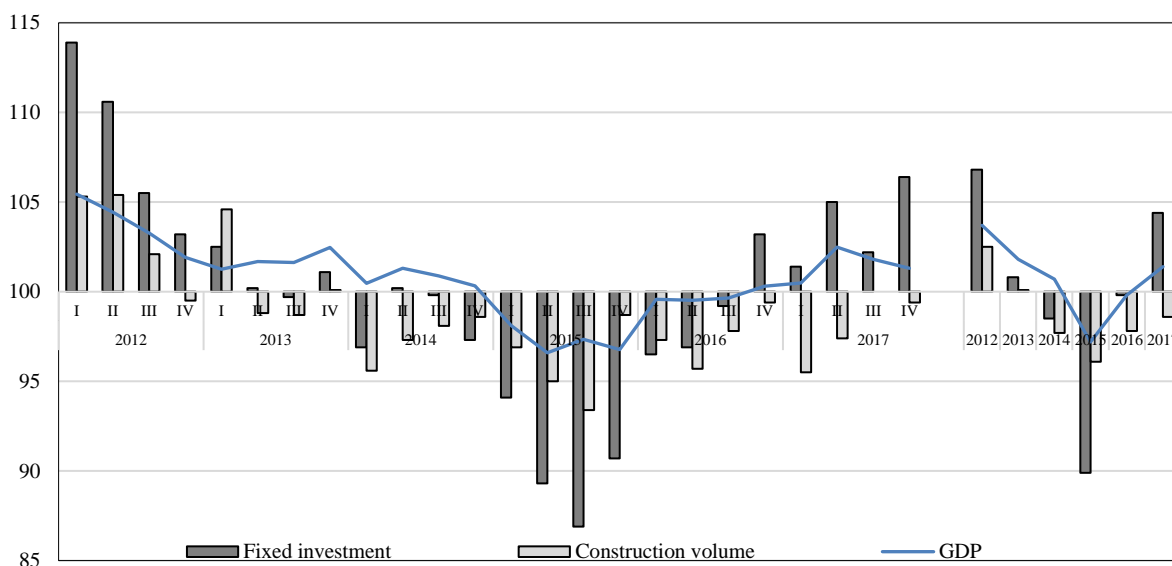
Instability of macroeconomic situation over a prolonged period of time (2013–2016) has determine the development of the investment/construction complex in 2017. The former was due to impact of both accumulated over that period issues linked to the renewal of fixed capital stock and market factors. Renewal of investment flows into the fixed assets seen in 2010 to the pre-crisis level and the outstripping growth of investment demand against the GDP dynamics growth seen in 2011–2012 was not accompanied both by an increase in return on investment and labor and by significant changes in the investment structure and by type of business activity, which has resulted in conservation of structural disproportions and dynamics slowdown. The investment crisis of 2013–2016 has taken a protracted nature whose evolvement was aggravated by the changes in availability of resources on the global capital market, structure of capital formation for the gross national savings, movement of capital goods and investments in the wake of sanctions, and downbeat investment plans of Russian and foreign investors on the domestic market. It should be noted that in the acute phase of the investment crisis (Q4 2014–Q4 2015) downbeat of business plans was determined both by a surge of the key rate and by price hike on the investment goods. Dynamics of the investment plans seen in 2016 was mixed amid adaptation of the economy to changed macroeconomic conditions and access to the world capital market. From Q4 2016 onwards, upward trend of investment demand was observed on the back of the adaptation of the investment/construction complex to perform amid sanctions.

---

<sup>1</sup> This section is written by Olga Izryadnova, the Gaidar Institute, IAES-RANEPA.

Moreover, in 2016, the decline in interests rates to 10.5 percent (July 14) and then to 10.0 percent (September 19) enabled the investment-construction complex to slow the fall rate and to recover some, albeit meager, growth in fixed investment in Q4 2016.

In 2017, the last four-year trend changed—fixed investment were growing at the rates outstripping the GDP growth dynamics and the households’ final consumption expenditure. Amid stable positive quarter dynamics increment of fixed investments in 2017 constituted 4.4 percent, meanwhile GDP grew at 1.5 percent against the previous year (*Fig. 39*).



*Fig. 39.* Dynamics of GDP, fixed investment and construction volume in 2012–2017, in percent to the corresponding period of the previous year

Source: Rosstat.

Reduction of capital outflows, renewal of direct foreign investments growth in the Russian economy, as well as changes in the terms of borrowing on the domestic market amid reduction of the key rate positively affected financial conditions of investment plans in 2016–2017. In Q2 2017, in the wake of the interest rates decrease the investment\construction complex (amid total deferred demand) renewed an upward trend of the investments in fixed assets and stabilization of construction volumes and commissioning new housing against the same indexes of the previous year. As year-end results as a whole demonstrate that in the context of absence of necessary construction backlogs and current use of investment the dynamics of construction volumes including housing construction remained in the red and would determined the performance of the construction complex in early 2018 (*Table 19*).

Over a prolonged period, the investment model had such specific feature as significant volumes and high gross savings rate amid low level of their transformation into fixed investments. Unpredictable development of economic situation in 2014-2015 enhanced net private capital outflow, mounting risks, and downgraded sovereign ratings affected foreign investors’ plans. With the imposition of sanctions and restricted access to the global capital markets, there was a simultaneous contraction of direct investments into the Russian economy and fall of revenues proceeding from the foreign investment activity. On the back of changes in the macroeconomic situation seen in 2016-2017, there was an inflow of direct investments

in the Russian economy, which for the first time since 2012 exceeded Russian foreign investments (*Fig. 40*).

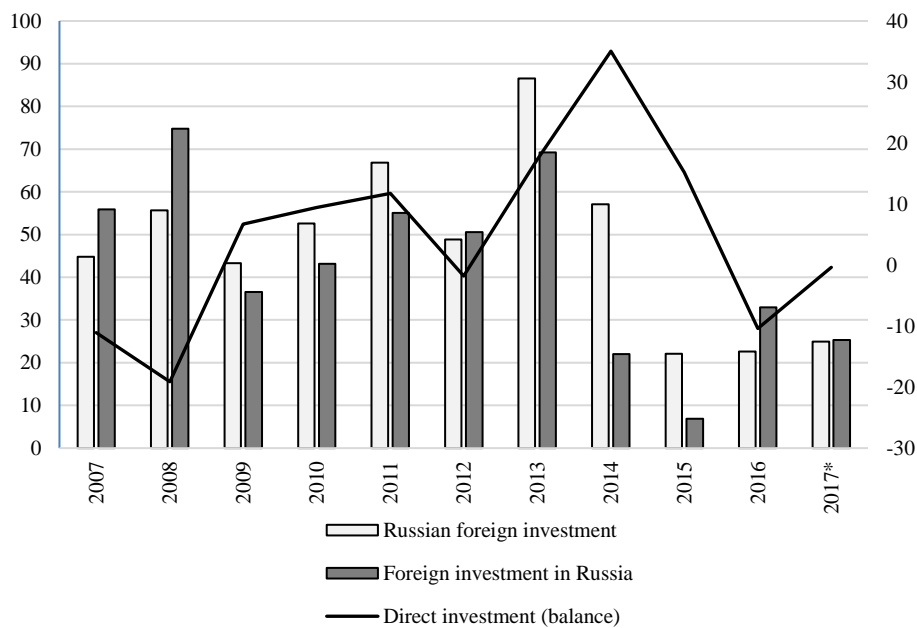
Table 19

**Financial environment for investment in 2010–2017**

	2012	2013	2014	2015	2016	2017
Refinancing rate (year-end), percent	8,25	8,25				
Key interest rate (year-end), percent	-	5,50	17,00	11,0	10,0	7,75
Bank of Russia international reserves (year-end), USD bn.	537,6	509,6	385,5	368,0	376,3	432,1
Net capital inflows (-) / outflows (+) in private sector, USD bn	53,9	60,3	152,1	58,1	19,8	31,3
Price indices, percent change, Dec to Dec	50,6	69,2	22,0	6,9	32,5	25,3*
Consumer prices for goods and services						
Industrial producer prices	106,6	106,5	111,4	112,9	105,4	102,5
Composite price index for imported investment goods	105,1	103,7	105,9	112,4	107,5	108,4
Including	106,9	104,9	107,2	110,3	103,2	103,1
producer prices for construction products						
machinery and equipment	108,3	104,3	104,6	104,1	106,6	104,9
USD/RUB official exchange rate (year-end), RUB/USD.	103,9	103,1	112,3	120,1	97,8	101,1
Net capital inflows (-) / outflows (+) in private sector, USD bn	30,37	32,73	56,26	72,88	60,66	57,60

\* Data for January-September 2017

Source: Rosstat.



\* January-September 2017

*Fig. 40.* Direct foreign investment into the Russian Federation in 2007–2017, balance of payments, USD billion.

Sources: Rosstat, Bank of Russia.

The formation of the savings model determined potential resources of the investment plans in 2013–2017. Amid high interest rates, the share of attracted by the credit institutions corporate resources constituted 19.0 percent of GDP and households' deposits – to 28.2 percent of GDP in 2016 against 14.8 and 23.2 percent, respectively in 2013. In 2016–2017, in the context of declined inflationary pressure and changes in terms of lending, dynamics of corporate deposits somewhat slowed and their share in GDP fell to 19.2 percent which was dictated by the need

to resolve issues related to the renewal of fixed assets. Upward trend of gross savings share resulting from changes in the ruble exchange rate was observed. Growth in the share of revenue and other mixed income in GDP amid current correlation between interest rates and inflation as a whole for the period had no significant effect on investment decisions. Tightening on budgetary constraints led to a reduction of financing share in state investments in 2017 to 2.1 percent of GDP including budget-funded investment – to 1.1 percent of GDP (*Table 20*).

*Table 20*

**Key features of investment resources in 2012–2017, as percent of GDP**

	2012	2013	2014	2015	2016	2017
Gross savings	31.2	28.5	28.6	29.9	29.0	29.8
Gross fixed capital formation	18.5	18.4	17.6	16.7	17.2	17.3
Fixed investment	41.3	40.0	38.9	42.0	41.2	41.5
Gross profit and other mixed income	35.8	33.4	33.8	32.3	32.8	33.3
Consolidated budget revenues	2.5	2.6	2.2	2.3	2.2	2.1
Budget-funded investment	1.4	1.4	1.2	1.4	1.2	1.1
Including federal budget-funded investment	20.9	23.2	23.4	27.8	28.2	28.2
Financial assets growth and real estate purchase	14.1	14.8	21.5	22.8	19.0	19.4

*Source:* Rosstat.

While analyzing the dynamics and the structure of capital formation available for investments, it is paramount to estimate the households' investment potential. In the context of current households' income dynamics seen in recent ten years, there was an increase in retail deposits kept in depository institutions as well as growing volume and increment rate of financial assets in the households' income. In 2014–2017, amid changing dynamics of the nominal and real households' income and decrease in thrift propensity, the households' role in capital formation for investment purposes declined. In 2010, the households accounted for 46.8 percent against 36.1 percent in 2013, and 27.8 percent in 2016 of the total volume of funds available for investment across institutional investors. Changes in the structure of capital formation across institutional investors was determined by the increasing role of non-financial corporations and state administration.

During number of years, high crude oil prices maintained relatively high level of foreign and domestic investment in Russia. Rapid growth of domestic income to a certain extent offset institutional weaknesses of the economy, in other words, the market expansion rates and profits growth dampened risks proceeding from underdevelopment of institutions.

#### 4.5.2. Fixed investment financing by source and by type of ownership

In 2013–2017, own capital of enterprises and institutions remained the principal source for finding investments. In 2017, investments funded by own capital accounted for 52.1 percent of the total fixed investments. At the same time, the financial results obtained by enterprises and institutions as a whole in economy dropped by 6.8 percent compared to 2016 and bank interest rates decreased from 10 to 7.75 percent, which led to growing activity on the credit market.

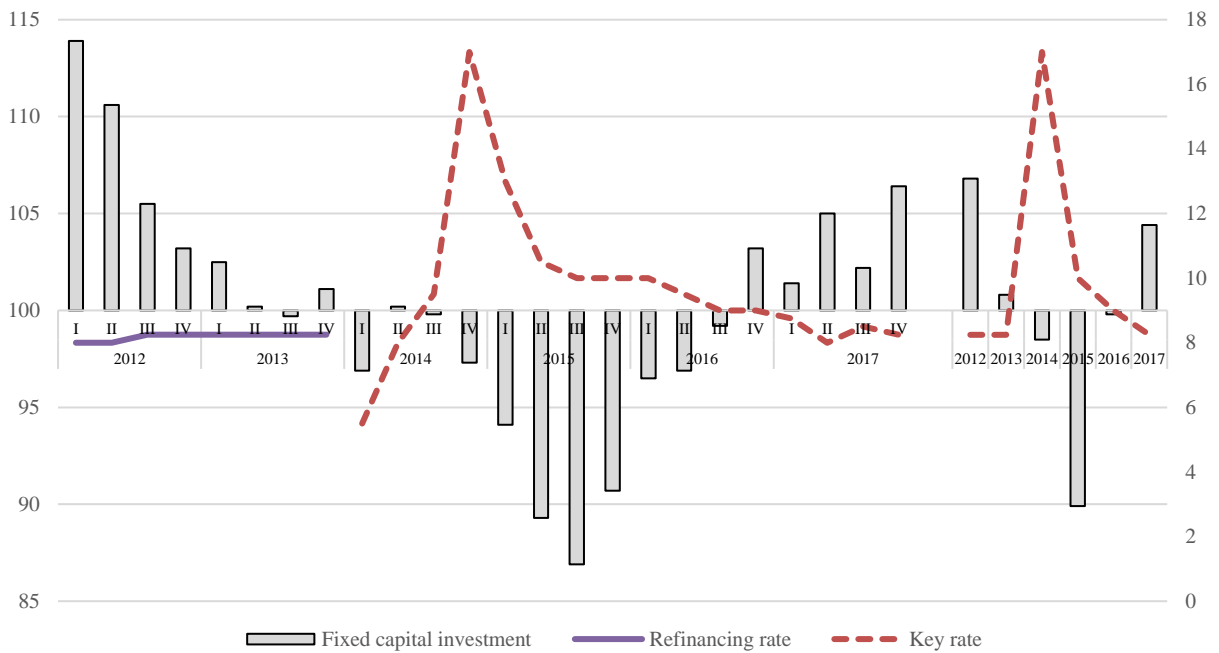


Fig. 41. Fixed investment dynamics and change of key rate in 2012–2017 гг., in percent

Source: Rosstat.

It is hard to assess straightforwardly the extent of bank participation in financing investment programs. 2017 by contrast with the previous year, saw an increment in foreign banks loans, which totally offset the net reduction of Russian banks' investment and loans issued by other institutions in the capital formation available for investment in Russian economy. The share of Russian bank loans in the structure of funding sources for fixed investments in 2017 constituted 5.5 percent and was at all-time low for last 15 years.

Budget funds as a source of fixed investment financing changed. In 2017, budget funds as a source of investment financing represented 16.3 percent of total fixed investment in the economy. The transformation of the 2016–2017 structure of budget-funded investment was driven by an increase in volumes and in the share of Russian subjects' budgets, thus compensating for the decline in the scale of federal budget-funded investment. The dynamics and the structure of state investment was formed according to the priorities in up-grading and development of strategically important facilities, realization of investment projects aimed at the implementation of the state of the art technologies for manufacturing competitive import substitution products as well as development of transportation and energy infrastructure. In 2017, the federal budget accounted for 2.1 percent of the total fixed investment including the federal budget accounted for 1.1 percent compared to 2.6 percent and 1.4 percent, respectively in 2013.

Institutional investors with state participation represented in 2017 other sources of capital formation for investment purposes and accounted for 12.0 percent in total investments following the four-year compression of their share and scale in investment plans.

The redistribution of investment funds by types of fixed assets was accompanied by a reduction of attracted funds from institutions and households for cost-sharing construction projects. Investment in real estate business in 2017 contracted by 4.1 percent compared to the previous year. One should pay attention to the structural financing features stemming from a

reduction of volumes and share of households' funds in the cost-sharing housing construction in the analysis of changes in absolute volumes of investment in housing construction in 2015–2017. At 2017-year end, the share of individual investors in cost-sharing housing construction projects constituted 2.0% of total fixed investment and shrank by 0.3 percentage point compared to the previous year (*Table 21*). Individual developers commissioned 32.7 million square meters in comparison with 31.6 million square meters of total floorage a year earlier. In the context of general downward trend in personal income and contraction of saving ratio the development of new programs designed by banking authorities aimed at a reduction of bank interest rates on housing mortgage shapes the investment plans and on the back of this one can expect positive shifts on the mortgage market in the coming year.

*Table 21*

**Fixed investment structure by source of financing (excluding small businesses and investment volumes unobservable by statistical methods), as percent to total**

	2012	2013	2014	2015	2016	2017
Fixed investment total	100	100	100	100	100	100
Including by source of financing:						
own capital	44.5	45.2	45.7	50.2	51.0	52.1
fundraising	55.5	54.8	54.3	49.8	49.0	47.9
of which:						
bank loans	8.4	10.0	10.6	8.1	10.4	10.9
Russian bank loans	7.2	8.9	8.0	6.4	7.5	5.5
including foreign bank loans	1.2	1.1	2.6	1.7	2.9	5.4
fundraising from other organizations	6.1	6.2	6.4	6.7	6.0	5.1
inward foreign investments		0.8	0.9	1.1	0.8	0.7
budget funds	17.9	19.0	17.0	18.3	16.4	16.3
including:						
federal budget funds	9.7	10.0	9.0	11.3	9.3	8.2
subjects of Russia budget funds	7.1	7.5	6.5	5.7	6.0	6.8
off-budget funds	1.1	1.5	1.5	1.3	1.1	1.3
money generated from investment in shared participation in construction projects (legal entities and individuals)	0.4	0.3	0.2	0.3	0.2	0.2
including individuals	2.7	2.9	3.5	3.2	3.0	2.7
other	2.1	2.3	2.7	2.4	2.3	2.0
Fixed investment total	20.0	15.6	15.7	12.8	12.0	12.2

Source: Rosstat.

The national investment strategy of 2009–2016 rested on the acknowledgment that large businesses are major contributors to the national modernization and global competitiveness. To trigger the investment process, the state, first, was actively involved in developing the Russian corporate sector, focusing on the establishment, optimization and structural evolution, as well as improving competitiveness, of large companies. The state over the last few years was actively involved in the establishment of state-owned holding companies in aerospace and shipbuilding industries, railway and oil sectors. The investment crisis which engulfed state-owned enterprises turned into a protracted one and reflected their low efficiency. The fall of state corporations' investment in 2015 by 16.0 percent as compared with the previous year determined their weak investment efforts in 2016–2017. Complexity of the investment process management system revealed the issues of the investment climate improvement and strengthening of effort aimed at optimization of the institutional structure, reduction of the state participation in the economy and implementation of privatization plans. Second, the state participated in the investment process as a proactive member and source of funding being a part of public private partnership.



In 2011-2017, privately owned enterprises, foreign-owned enterprises and joint ventures preserved positive nominal volumes of fixed investment which partly offset instability of investment activity of state and municipal enterprises.

Analysis of capital formation for fixed investment by type of ownership in 2017 shows that the private sector continued contributing positively to the investment process amid reduced contribution of public and mixed ownership and investment by state-owned corporations. (Table 22).

Table 22

**Fixed investment indices in current prices by type of ownership, in current prices, as percent to the previous year**

	2011	2012	2013	2014	2015	2016	2017*
Fixed investment – total	120.6	114.0	106.9	103.4	100.0	106.1	106.6
public	118.1	113.6	109.5	89.4	99.2	109.1	105.3
federal	119.1	106.7	103.1	94.9	105.0	99.3	101.7
Subjects of Federation	115.2	129.5	119.2	82.2	90.4	126.2	110.3
municipal	117.7	116.8	114.4	100.8	88.8	97.6	98.7
Russian mixed ownership	192.0	115.8	83.7	106.3	84.3	101.3	104.4
state-owned corporations	162.6	117.4	108.4	103.9	84.0	103.5	96.0
private	114.8	106.7	113.6	108.0	100.9	104.3	116.5
foreign and mixed Russian/foreign ownership	106.1	144.7	98.3	100.9	113.0	114.7	103.0

\* less small businesses and investment volumes unobserved by direct statistical methods.

Source: Rosstat.

4.5.3. Use of investment by areas of activity: reproductive structure

Prolonged investment pause determined the increased effect of limiting factors of fixed assets on the economic growth dynamics.

In 2015–2016, amid sharp fixed investment contraction, fewer enterprises and institutions designed long-term plans for high-productivity job creation, implementation of new production technologies and raising environmental characteristics of production. The fixed investment downturn and reduction in commissioned fixed assets seen in 2013–2017 was attended by decline of renovation rates and growing share of used-up fixed assets. Lack of their timely renovation resulted in extended timeline for use of inefficient machinery and equipment. For example, according to sample survey of the investment activity of organizations, in 2016 (corresponding data for 2017 will appear solely in 2018) retirement of obsolete machinery, equipment, and means of transport due large scale of depreciation was reported by 58 percent of organizations meanwhile merely 9 percent reported the reason for their retirement – economic inefficiency of their use. Around 60 percent of organizations carried out reconstruction and upgrade of fixed assets in 2016. This investment strategy resulted in the total depreciation and increased level of wear of fixed assets. The low volume of fixed assets disposal resulted in a high level of wear and the age structure of fixed assets. To note, on the back of the implementation of projects aimed at upgrade, reconstruction and technical retooling of production there appeared an interest in complex renovation of fixed assets including procurement of technological lines, use of electronics and computer technologies and mechanical and automation equipment for engineers and managers and development of communications, which fully corresponded long-term targets to raise effectiveness and competitiveness of production.

Possibilities for stepping up processes of modernization, reconstruction and renewal of productive facilities remained dependent on the level of development and state the investment/construction complex production facilities. Russia’s machine-building complex has

long been developing at a slower pace than fixed investment dynamics (Fig. 42). The lack of domestically produced investment goods was offset by imports of machinery and equipment. Although its importance estimated in shares to the total fixed investment volume and to investment in machinery and equipment was gradually falling in the economy as a whole.

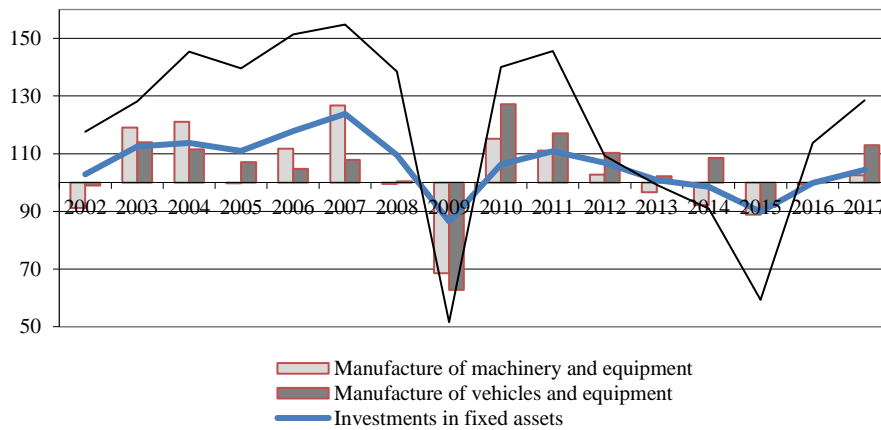


Fig. 42. Dynamics of domestic production of machine-building complex, imports of machinery and equipment and fixed investment in 2002–2017, as percent to the previous year

Source: Rosstat.

The investment/construction activity in 2016–2017 was characterized by a stronger fall of both construction scope of work and commissioning of housing floor space against fixed investment dynamics. Construction scope of work in 2017 constituted 98.6 percent and commissioning of housing floor space – 97.6 percent compared to the previous year (Fig. 43).

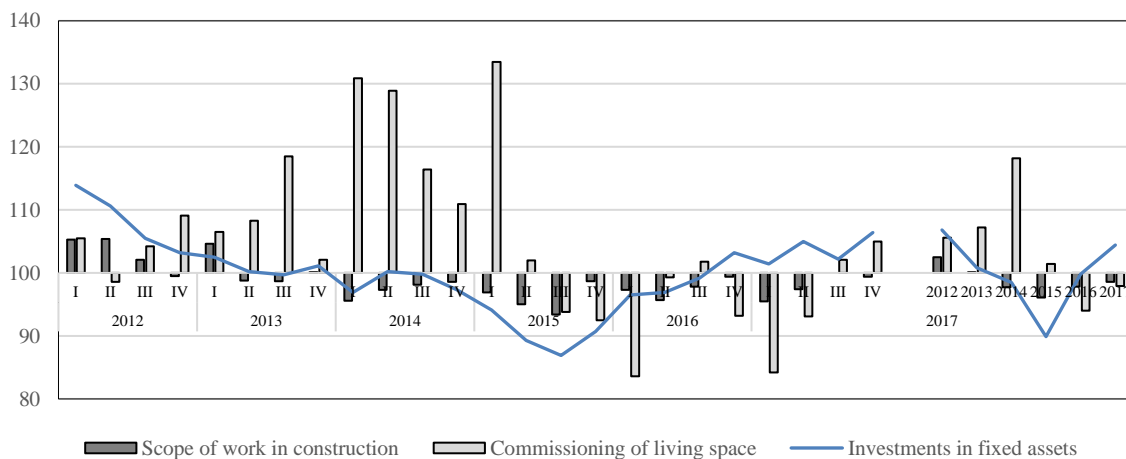


Fig. 43. Dynamics of construction scope of work and commissioning of housing floor space and fixed investment in 2012–2017, as percent to the corresponding period of the previous year

Source: Rosstat.

The fixed investment structure boasted of increased investment share in construction of industrial buildings amid contraction of investment on housing construction (Table 23).

**Structure of fixed investment by types of fixed assets in 2013–2017,  
as percent to total**

	Total enterprises				Less small businesses and informal sector	
	2013	2014	2015	2016	2016	2017
Investment in fixed assets	100	100	100	100	100	100
including:						
Housing	12.5	14.5	15.6	15.4	5.7	4.8
Buildings (less residential) and facilities	41.5	40.8	43.7	45.2	51.8	51.1
Machinery, equipment and means of transport	38.8	36.3	31.5	30.6	33.1	33.8
Of which information, computer and telecommunication equipment						
Intellectual property assets					2.9	3.9
Other	7.2	8.4	9.2	8.8	7.1	5.7

Source: Rosstat.

Growing share of investment in non-residential structures was determined by growing scope of work and commissioning of industrial and agricultural facilities amid contraction of scope of construction work in administrative, commercial and social spheres. Growing commissioned number of industrial buildings conditions change in the investment technological structure and determines growth of costs on machinery and equipment. However, comparison of domestic manufacture of equipment, imports of investment goods and fixed investment demonstrate that in the context of current dynamics of the machine-building complex and on-going sanctions on imports of certain types of equipment and machinery breakdown of technological structure balance and technological structure of investment becomes one of the major constraints.

At 2017-year end, simultaneous recovery of positive dynamics of investment goods imports and output of domestic machinery and equipment removed tensions in the investment/construction sphere.

Efficiency of capital flows for the renewal of fixed capital remains an issue for the investment activity. In the context of declared tasks aimed at increasing competitiveness a high degree of deterioration and obsolescence of fixed assets, an adverse age composition of the machinery fleet and equipment amid downward fixed investment trend as a whole and especially in active part represent a rather tough economic growth constraint.

#### 4.5.4. Investment financing by types of economic activity

Recovery of the investment activity positive dynamics seen in 2017 was characterized by a simultaneous investment growth in tradable and non-tradable sectors of the economy. Not so deep decrees of fixed investment registered in tradable sector of the economy in 2015 together with a subsequent two-year upward trend resulted in an increase in expenses on the investment activity seen in 2017 by 3.4 percent against 2013, and ensured value added growth by 1.6 percent. Fixed investment in non-tradable sector of the economy in 2017 constituted 86.8 percent against 2013 (*Fig. 44*).

Change in fixed investment scale failed to offset structural imbalance in renewal of fixed assets. In 2017, the trend to fixed investment growth in raw materials production continued (108.6 percent to 2016) mainly by means of investment in fuel and energy complex (114.1 percent). The share of total investment in extraction, refining and transportation in the total fixed investment volume in 2017 moved up to 26.8 percent and by 3.6 percentage points exceeded the previous year level owing to outstripping growth of investment in the pipeline

industry development. Investment in surface and pipeline transport increased 1.3-fold including in the pipeline transport 1.17-fold compared to 2016. This is explained, in particular, by the implementation of large structural projects and orders for their implementation were placed at domestic enterprises.

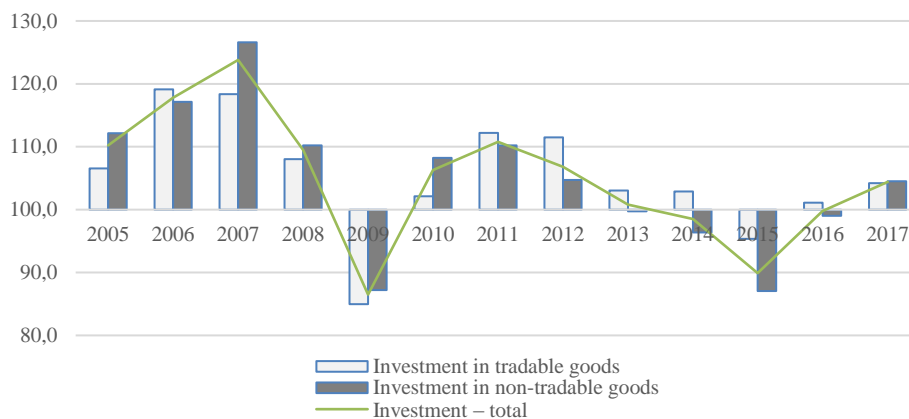


Fig. 44. Fixed investment dynamics of tradable and non-tradable goods in 2003–2017, as percent to previous year

Source: Rosstat.

Structure of fixed investment in industry was determined by an ongoing slump of investment volume in manufacturing. The share of investment in manufacturing in the total volume of fixed assets fell by 0.8 percentage point against 2016, which is due to a contraction of investment in metallurgical and chemical complexes.

Contraction of investment in capital products and construction materials raises risks for the construction/investment complex performance in the long term. Reduction of investment in fixed assets of production of construction materials (82.2 percent to 2016) and in proper construction (96.3 percent) determined low dynamics of construction scope of work and correspondingly assimilation of capital investments. In 2017, the decrease of construction scope of work came to 1.4 percent and commissioning of new housing – 2.1 percent against 2016.

Non-tradable sector of the economy reported an outstripping growth of fixed investment in transport and warehousing (108.8 percent to 2016), in IT development (114.5 percent), in financial and insurance (163.4 percent), sport, culture and recreation (134.0 percent), as well as in the development of health care (112.7 percent). Low investment level in education (93.7 percent), and in R&D (90.8 percent).

Prospects for structural changes and diversification of the economy are determined by resolution of modernization issue amid transition to new technologies and acceleration of development of high-tech manufacturing, which form export potential for goods and service with high value added.

Creation of conditions for transition to sustainable development was linked with the implementation of measures aimed at modernization of industrial potential, expansion of investment and innovation activity and upgrading human capital. Changes in the production structure are possible solely in case of increasing competition, formation of powerful small and medium-size businesses, reduction of institutional barriers, improved mechanisms for attraction

of investment, simplification of doing business procedures, and creation of adequate infrastructure.