Section 4. The Real Sector of the Economy

4.1. Macrostructure of production

4.1.1. Post-crisis dynamics of the Russian economy in 2009-2013

The global economic crisis impacted on the Russian economy in the following areas: (1) there was a sharp drop in prices and in foreign demand for the basic commodities that form the basis of export potential; (2) domestic demand decreased due to falling revenues for the economy and falling population incomes; (3) narrowed supply of imported goods, which form more than one third of domestic market resources; and (4) changes in the direction of investments, with a sharp drop in the domestic investment in capital assets and an intensive outflow of capital abroad.

Analysis of the dynamics of the national economic indicators shows that the gradual decline in the pace of economic growth was followed by increasing disparities in production, consumption and finance, as well as by reduced innovation activity by manufacturers, strengthening of the problems connected with imbalances in the technical and technological characteristics of the fixed assets, and investment in capital assets and in basic economic activities. Expansion of demand from domestic consumers was supported by an increase in wages significantly above increasing productivity. Growth of investment in capital assets did not result in a corresponding increase in output per worker or per unit invested. (*Table 1*). Development based on the extensive use of the principal factors which increase production costs and a high proportion of imports in the domestic market resources have reduced the competitive ability of the Russian economic as well as the dynamics of growth.

Prior to the crisis in 2008 the Russian economy was characterised by a simultaneous expansion of external and domestic demand, with the cumulative effect of the internal factors, regulating the level of business activity offsetting the impact on economic growth of the weakening external demand. The reasons for the far-reaching extent and prolonged reaction to the global crisis of 2008-2009 had an inner nature. In the acute phase of the crisis in 2009 the decrease in domestic demand was deeper, so the recovery process took almost two years, while, in 2010, external demand exceeded the pre-crisis index of 2008 (*Fig. 1*).

Table 1

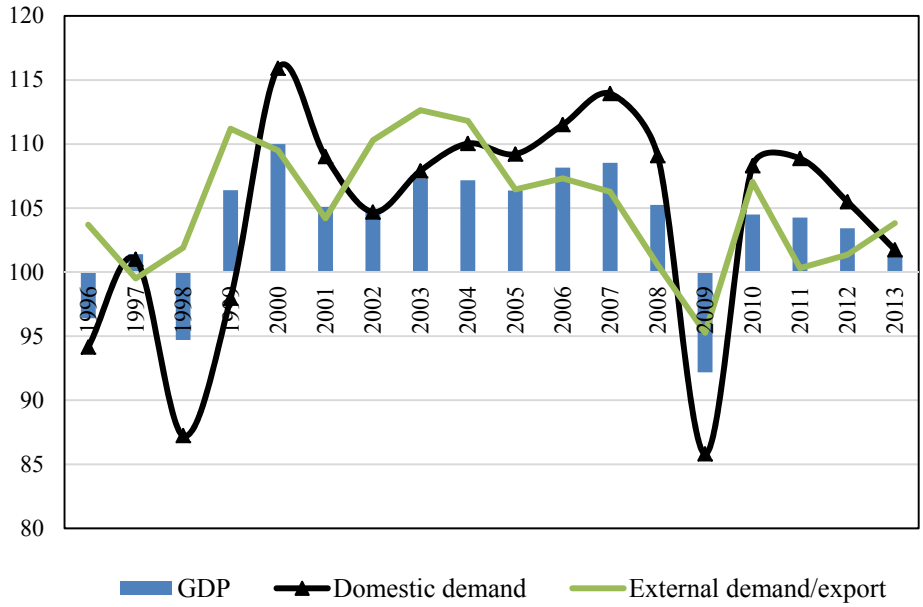
Main macroeconomic indicators of social and economic development in 2008-2012 as % of the previous year

	2008	2009	2010	2011	2012	2013
1	2	3	4	5	6	7
GDP	105.2	92.2	104.5	104.3	103.4	101.3
Industrial production index	100.6	90.7	107.3	105	103.4	100.4
Mining and quarrying	100.4	99.4	103.8	101.8	101	101.1

Cont'd

1	2	3	4	5	6	7
Manufacturing industries	100.5	84.8	110.6	108	105.1	100.5
Agricultural production	110.8	101.4	88.5	123.0	95.2	106.2
Investments in capital assets	109.9	84.3	106.0	110.8	106.6	99.7
Retail trade turnover	113.7	94.9	106.5	107.1	106.3	103.9
Fee-based services to citizens	104.3	97.5	101.5	103.0	103.7	102.1
Exports	134.6	63.7	132.1	131.3	102.7	98.8
Imports	129.4	63.7	133.6	129.7	105.4	102.6
End of year consumer price index	113.3	108.8	108.8	106.1	106.6	106.8
End of year producer price index	93.0	113.9	116.7	112.0	105.1	103.4
Real disposable incomes	102.4	103.0	105.9	100.5	104.6	103.3
Real accrued salary	111.5	96.5	105.2	102.8	108.4	105.2
Level of general unemployment, in %	6.2	8.3	7.3	6.5	5.5	5.5

Source: Federal State Statistics Service.

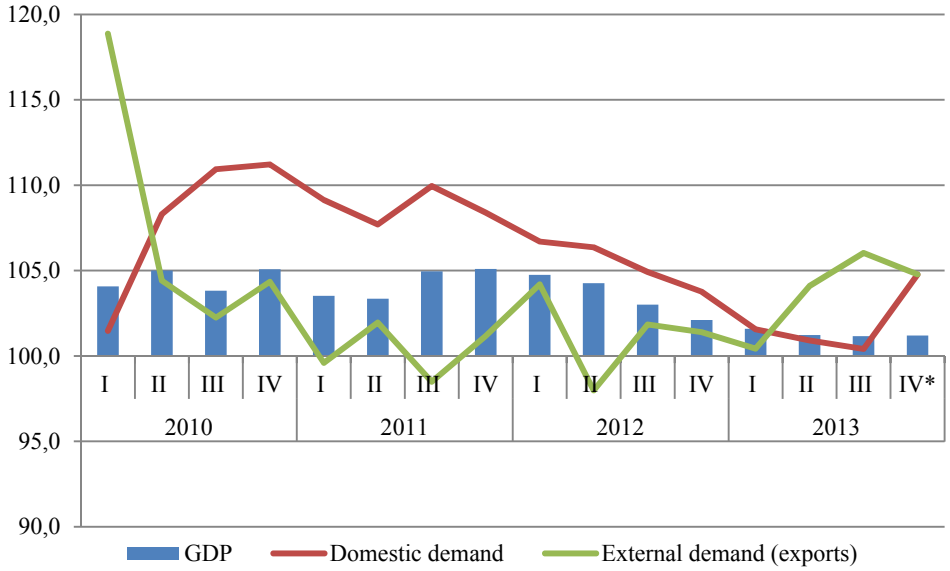


Source: Federal State Statistics Service.

Fig. 1. The changing of dynamics of the GDP components of domestic and external demand in 1996-2013, as % of previous period

Differences in the rates of recovery of individual components of the aggregate demand determined the features of the functioning of the economy in 2011-2013. While the results from the last four years indicate accelerated growth in domestic demand relative to GDP and external demand, the quarterly dynamics shows how these changes altered and constrained the development of the Russian economy (*Fig. 2*). The overall cause of stagnation in the Russian economy in 2013 was a slowdown in the growth of domestic demand in the third quarter of 2011. A further factor in the reduction in growth of GDP was the decrease in export dynamics from the second quarter of 2010 until the first quarter of 2013. Despite the increase in external demand from the second quarter of 2013 in relation to the corresponding period of the previous year, this failed to stimulate the rate of GDP growth, since the dynamics of domestic demand weakened sharply in 2013, and, in fact, it was only the export of goods and services which helped to preserve the positive nature of the GDP dynamics, albeit, weakly. In 2013 the

growth in domestic demand was 1.7% while that of external demand was 3.8%, against 5.5% and 1.4%, respectively, in 2012.



Source: Federal State Statistics Service.

Fig. 2. Changing dynamics of GDP components of domestic and external demand in 2010-2013, as % of the corresponding quarters of the previous year

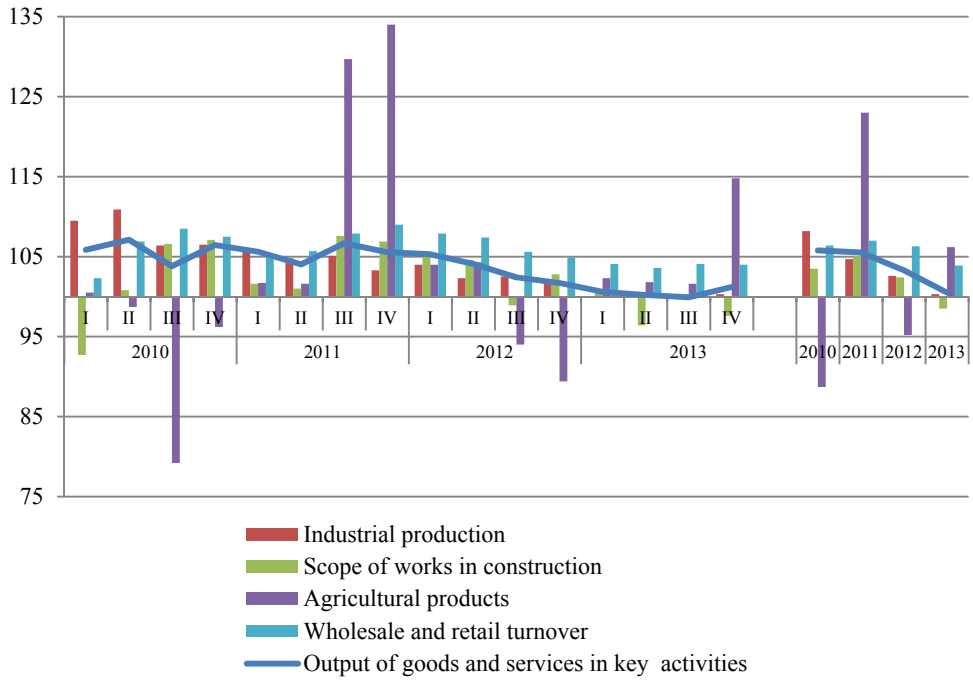
Compared with 2012, the 2013 index of output goods and services for key economic activities was 100.5%. In 2013 the volume of industrial production increased by only 0.4% on the previous year. During Q2 and Q3 of 2013 negative annual and quarterly growth rates were recorded in relation to the corresponding periods of the previous year in manufacturing activities orientated mainly towards the domestic market. December 2013 was only the third time within the year that there was growth in manufacturing output (1.6% on an annualised basis) but this suspended the downturn of the IV quarter and stabilised the growth for the year at around the level seen in 2012. Weak growth in mining activity amid unfavourable weather forecasts for the winter of 2013-2014 started to influence industrial dynamics from Q2 of 2013, mainly due to increased demand in the domestic market and from traditional importing-countries as the heating season approached. In 2013 the index of physical production volume in the mining sector was 101.2% of the previous year.

This extremely negative influence on the macroeconomic situation in the Russian economy had a slowdown effect on business activity in construction and the investment complex from Q4 of 2011, so that by 2013 the volume of construction works began to decline. In Q2 and Q3 of 2013 the fall in investments in capital assets reached 1.4%, while, for the whole year it was 0.3% in relation to the corresponding period of 2012, with the volume of construction works being reduced by 1.5% in annual terms.

Other fields of the real sector of the economy also negatively influenced the dynamics of the overall national economy. Low industrial growth and in the consumer and investment markets, a stagnation of demand for transport services, as well as the slowing down of growth in communications services to 4.5% in 2013, against 5.6% in the previous year could all be noted.

There was also slowing of consumer demand and wholesale turnover. The growth of retail turnover in the last three years reached its peak in Q4 of 2011 but steadily slowed during 2012-2013 yet still remained the main driver of economic growth (*Fig. 3*). In 2013, retail turnover increased by 3.9% having increased by 6.4% in the previous year, while the wholesale trade had increased by 0.9% and 3.4% respectively.

Despite the downward trend, sales in in 2013 were some of the steadiest against the risks in the economic development sectors.



Source: Federal State Statistics Service.

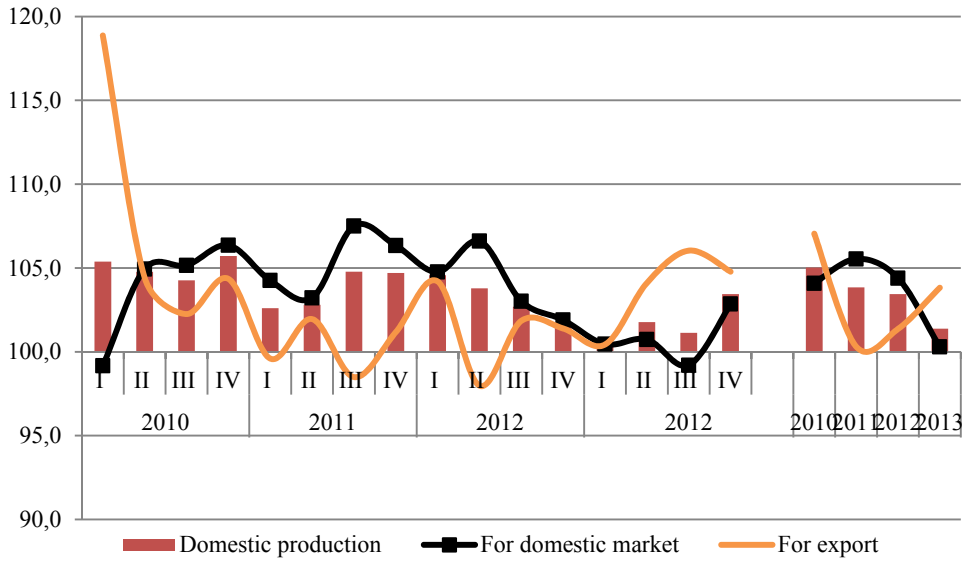
Fig. 3. Indices of output of goods and services in key economic activities for 2010-2013, as % of the corresponding period of the previous year

A positive factor maintaining the positive growth of GDP in 2013 was an increase in agricultural production by 6.2% compared with 2012. As a result this sector managed to reach the level of 2011.

The dynamics of the domestic market were defined by the ratio of growth of domestic production for domestic consumption and external markets, on the one hand, and the dynamics and structure of imports, on the other. The post-crisis recovery of domestic production for the domestic market was extremely slow, though its fall during the acute phase of the crisis in 2009 was not as abrupt as the fall in imports. The sharp drop in domestic production was due both to the low competitiveness of domestically-produced goods and services compared to imported ones, and to the low efficiency of production in the non-tradable goods and services sector compared to the export oriented sector of the economy.

The level of external demand for minerals and raw materials is of fundamental importance for the Russian economy as is the direction of use of the income from foreign trade. An increase of income concentration in the manufacturing sector oriented towards exports puts pressure to on the domestic market. If we consider that the rapid growth of the export sector of the economy in 2010 determined the strength of recovery of domestic production for the

domestic market, then in 2011-2012 even the acceleration of the average annual growth of domestic production, up to 5.0%, was not enough to prevent the consequences of a slowdown in export growth to 0.8%. In 2013 the situation was compounded when the pace of domestic production slowed to 0.3% against 4.4% of a year earlier, while exports fell to 98.8% of those of the previous year.

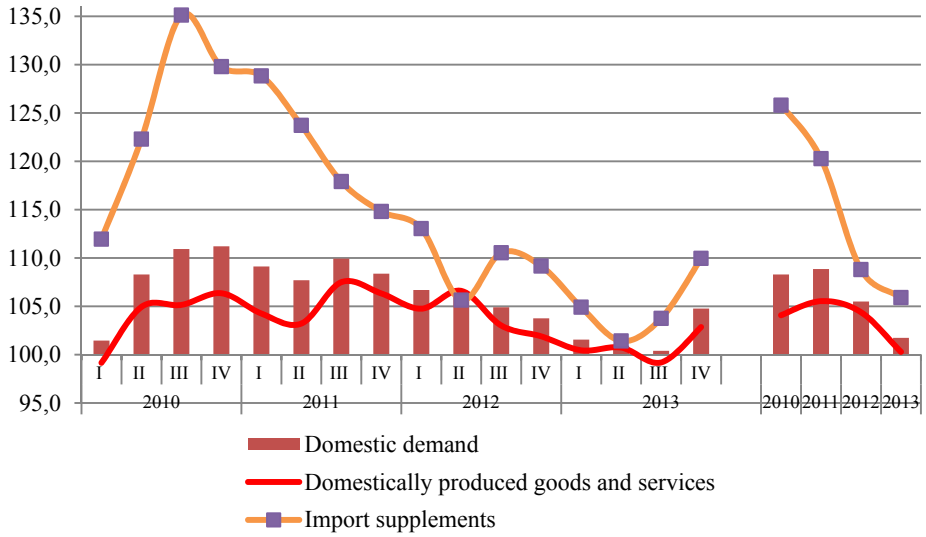


Source: Federal State Statistics Service.

Fig. 4. Domestic production dynamics in 2010–2013, as % of the corresponding quarter of the previous year

While noting the importance of the domestic market dynamics, as the dominant factor in the development of the Russian economy in 2010-2013, one must take account of the details affecting the domestic market resources. The starting conditions of the recovery were characterised by the quantum index of the volume of basic manufacturing activities within the economy having fallen by 9.8% in 2009 compared to the previous year while the import volume had fallen by 30.4%. This massive decline in imports in 2009 determined the structural changes of the domestic market; i.e. with decreased consumer demand and incomes and the weakening of the ruble, there was a transient increase in the share of domestically manufactured goods (*Fig. 5*). However, given that the Russian economy had, for the previous ten years, been operating under accelerated growth of imports relative to domestic production, during the recovery from the crisis the structure of domestic market resources in 2010 was repeating the structure of the 2007 pre-crisis level. Later, in 2011-2013 the domestic market resource structure changed (for the worse) due to an increase in the share of imported goods in domestic market resources from 24.9% to 26.7%. In 2013, the share of imported capital goods accounted for 6.2% of investments and 44% of the retail trade commodity resources.

In the absence of reserves of competitive capacity, import substitution in 2010-2012 concentrated in the manufacturing sector with a high proportion of industrial assembly. This determined the change in proportions between the imports of investment and intermediate goods. In particular, the increase in the share of intermediate consumption goods stimulated the recovery of the assembly machine industry from the crisis, but at the same time reflected the inadequate localisation of production of the main components.



Source: Federal State Statistics Service.

Fig. 5. Dynamics of domestic demand components in 2010–2013, in % to correspondingh quarter of the previous year

Table 2

Structure of imports by functional nature of utilisation (balance of payments methodology) % of total

	Goods		
	Consumer	**Investment**	**Intermediary**
2006	46.2	17.0	36.8
2007	44.4	18.9	36.7
2008	41.8	23.8	34.4
2009	44.3	19.7	36.0
2010	40.7	19.5	39.8
2011	36.6	21.4	42.0
2012	38.1	24.9	37.0
2013	37.6	24.3	38.0

Source: Federal State Statistics Service.

The increasing share in the import structure of investment and intermediate goods in 2010-2012 with a decrease in the share of consumer goods was qualitatively new process for the Russian economy. Ceteris paribus, the dynamic growth in imports was to promote the change in the competitive environment, where the further development of the real sector in this situation would depend on the intensity of investment in fixed assets, focused on the modernisation and diversification of production. However, the high share of imports in the retail trade and in the volume of investments in fixed assets increased the dependence of the gross resources balance of the economy on changes in the external economic situation. In 2013, a fall in investments in fixed assets led to a simultaneous decrease in demand for domestic and imported capital goods and increased the development of negative tendencies in the domestic market.

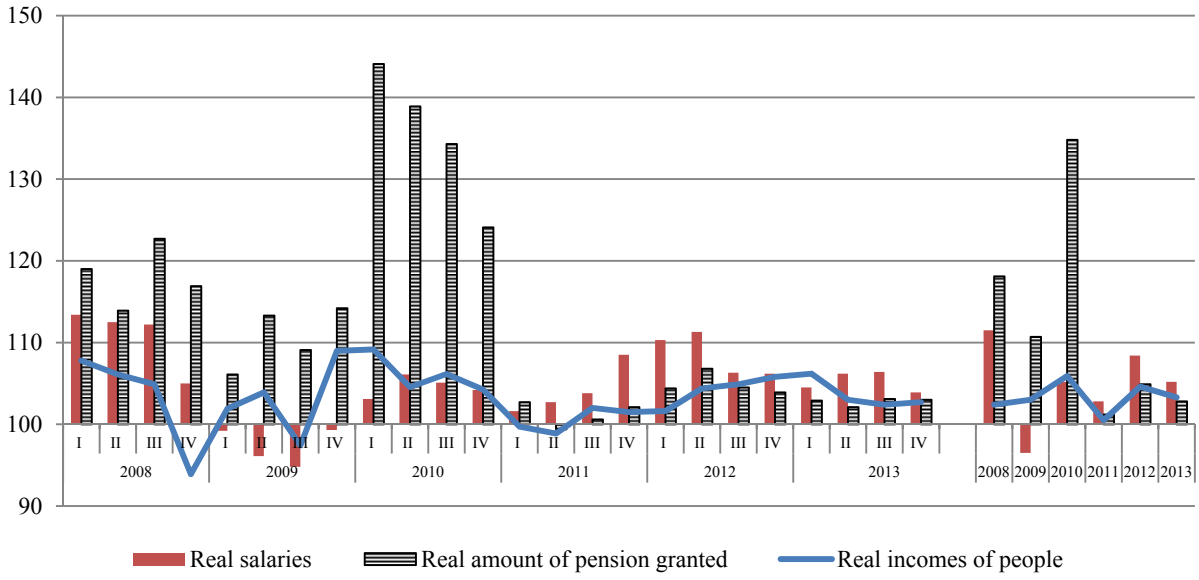
4.1.2. Main features of GDP use in 2009–2013

The model of recovery from the crisis in 2008 which was adopted was primarily focused on the implementation of state social guarantees and obligations. In order to maintain the

standard of living and social stability, governance costs in 2009 rose to 20.8% of GDP; and, in the period 2010-2013, remained above the pre-crisis level.

In 2009-2013, the growth rate of real income and real wages remained stable and positive; which represented a crucial difference from the situation of recovery from the consequences of the 1998 crisis.

The structure of real incomes in 2009-2010 changed under the influence of the advanced growth of real pensions by 1.5 times compared to the pre-crisis levels in 2008 with the recovery of real wages. In 2010, the share of social benefits in the monetary income of the population was 17.7% having increased by 6.1 percentage points compared to 2007 with a decrease in the share of wages by 2.3 percentage points, and of the income from property and business by 3.2 percentage points. In the period of 2011-2013 the situation changed and an acceleration in the growth of real wages could be noted, including an increase in the level of wages in the budget sector of the economy. For pensions, this growth was much slower than in the period of 2009-2010. In 2013, the growth in real household disposable incomes compared to 2010 was 8.6%, while of real wages, 17.2%, and of real pensions, 9.1%. The share of wages in 2013 amounted to 65.9% of cash earnings; and social benefits to, 18.4% (+0.7 percentage points compared to the indices of 2010) with a further decrease in the contribution of income from property and entrepreneurship.



Source: Federal State Statistics Service.

Fig. 6. Dynamics of real incomes in 2008–2013, as % of the relevant period of previous year

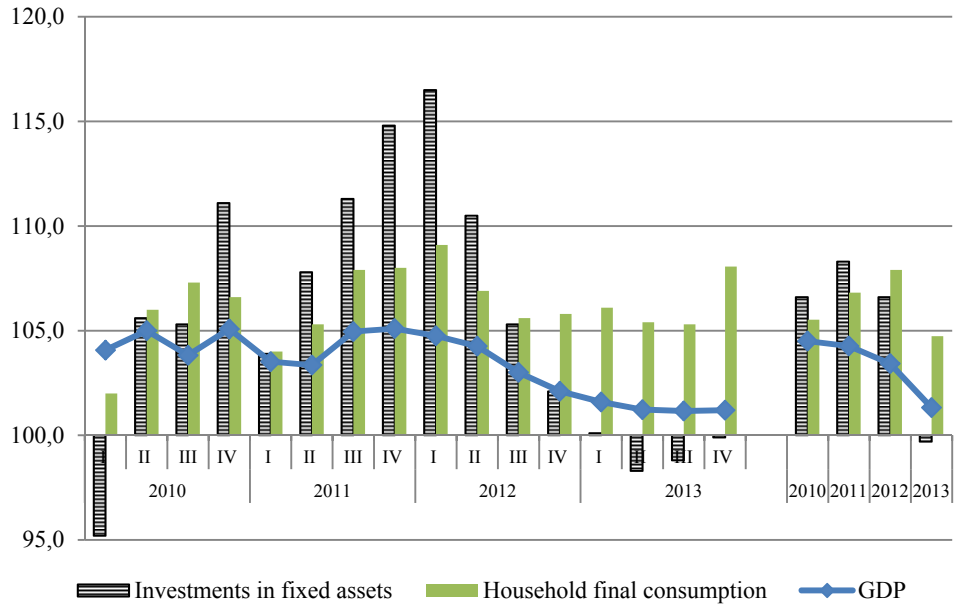
Income growth was one of the key factors in maintaining the positive dynamics of the domestic market. In 2010, household final consumption reached the pre-crisis level of 2008, and average annual growth in 2011-2012 reached 107.3%. However, in the second half of 2012 a slowdown became apparent, and in 2013 there was further slowdown of household final consumption expenditure to 104.7% compared to the previous year. While, in 2010-2012, the domestic market had operated with simultaneous expansion of investment and consumer demand, in 2013 household final consumption became the exclusive factor

maintaining the domestic market and positive GDP growth. The share of final consumption in 2013 reached 71.6% of GDP and was the highest for the last fourteen years, except for in the acute phase of the crisis in 2009.

Table 3

Structure of utilised GDP in 2008–2013, in actual prices, % of total

	2007	2008	2009	2010	2011	2012	2013
Gross Domestic Product	100	100	100	100	100	100	100
Including:							
Expenditure on the final consumption	66.1	66.7	75.4	70.2	67.4	69.5	71.6
Households	48.2	48.4	54.1	51.0	48.9	49.9	51.7
Public Administration	17.3	17.8	20.8	18.7	18.2	19.2	19.5
Non-Profit Organisations servicing households	0.6	0.5	0.6	0.5	0.4	0.4	0.4
Gross Savings	24.2	25.5	18.9	22.6	25.1	24.6	23.2
Gross Investment in Fixed Assets	21.0	22.3	22.0	21.6	21.5	22.0	21.5
Change in Inventories Stock	3.2	3.2	-3.1	1.0	3.7	2.6	1.8
Net Export	8.6	9.2	7.4	8.1	8.6	7.4	5.6
Statistical Discrepancy	1.1	–1.5	–1.8	–0.9	–1.2	–1.5	–0.4



Source: Federal State Statistics Service.

Fig. 7. Dynamics of household final consumption and the investments in fixed assets in 2010–2013, as % of the relevant period of the previous year

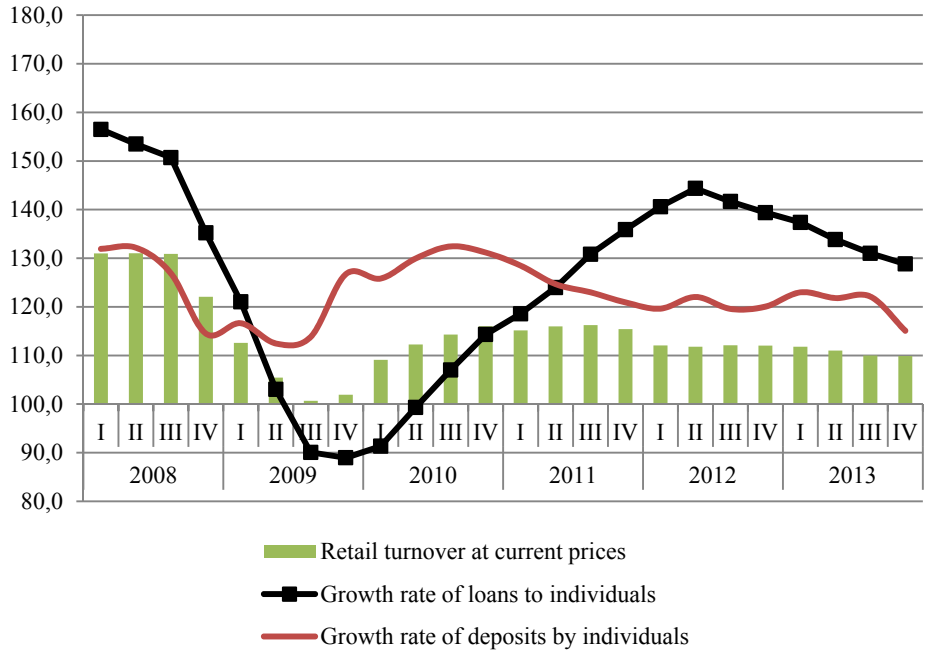
In 2013, retail trade turnover showed a slowdown caused by a general decline in economic growth and a narrowing of the retail credit market. However, the main factor slowing the turnover of the retail trade was a decrease in the growth of incomes of the population compared to 2012. Real incomes for 2013 increased by 3.3% which was 1.3 percentage points lower than for the growth of the same indicator in 2012.

By the end of 2013 retail trade turnover had increased by 3.9% compared to 2012 when the index had been 4.6% compared with the year earlier. This included food products (2.5% against 3.6%); and non-food products (5.0% vs. 8.6%). It should be noted that the slowdown in retail turnover was not accompanied by a significant change in the pattern of consumer behavior; the share of savings income of the population remained at 10% - the level of the

previous year. The major changes were not changes in savings but in the proportions of foreign currency purchased and an increase of cash on hand of the population in favour of the latter. Typical of 2013 was the fact that, along with a slowdown in sales in the non-food sector, the structure of household consumption expenditure changed, with the proportion of food products significantly decreasing. Thus, in times of financial instability, the public does not always reduce their expenses, but begins to make purchases more efficiently.

In 2013, against the background of an apparent deterioration in the economic dynamics, and in an effort to minimise social risks, the public was rather reluctant to purchase many types of services. From the 2013 results we can see that the volume of paid services to the population increased by only 2.1%, against 3.7% of the year before. In the structure of paid services to the population the public utilities and transport and communications services continued to dominate. The negative impact on the level of demand helped prices and tariffs; the consumer price index for services in January-December 2013 compared with January-December 2012 amounted to 108.1%, against 105.4%. As a result, in 2013, in the structure of population income to the share of paid services was 14.8%, that is, 0.4 percentage points lower than in 2012. The then current trends in the Russian economy had an impact on the development of most types of paid services for the population.

The market dynamics for household services were determined by the gradual expansion of demand for the services of qualified professionals. In 2013 the entire volume of household services increased by 5.9%. The share of household services in the structure of the paid services market sector was about 10%. The most succinct sectors were those for two types of service: the maintenance and repair of vehicles, machinery and equipment; and for the repairs and construction of housing and other buildings, amounting to 60.8% of the total volume.



Source: Federal State Statistics Service.

Fig. 8. Volumes and dynamics of loans to the public; and of deposits in 2008–2013, as % of the relevant quarter of the previous year

Demand from the public was supported by the growth of consumer and mortgage lending. Slight weakening in the growth of household deposits was observed only in the acute phase of the crisis. The peak of population credit activity fell towards Q4 of 2009; followed by rapid increase until Q2 of 2012 with a gradual slowdown in growth in subsequent periods. Despite the decreasing lending activity, the nature of income use in 2013 was affected by problems with loan repayments, resulting in a slowdown in savings and in expenditure for current consumption.

The structure of GDP use was determined by the changing proportions between final consumption and gross savings. Comparative analysis of the GDP dynamics by end-use components illustrates the decline in the share of gross savings and net exports. Influenced by a sharp drop in the share of gross income in the economy, in 2013, the share of gross savings in the GDP dropped to 28.4%, against 32.6% in 2011, while the share of fixed asset investments remained at the average of the period 2010-2013 and amounted to 19.8% of GDP.

The capital account balance of payments illustrates the asymmetry of saving resources and the use of savings for investment purposes. Characteristic of the Russian investment model are significant amounts of savings, where the problem is not in finding resources but in the efficient transformation of them into capital investments. Please, note that analysis of the capital transactions account shows that, over the last decade, the Russian economy is a net creditor. In 2013, net capital outflows amounted to $62.7bn and $8.1bn.

Table 4

Key indicators of the investment potential in the period 2008–2013, as % of GDP

	2008	2009	2010	2011	2012	2013
GDP	100.0	100.0	100.0	100.0	100.0	100.0
Gross savings	33.3	24.6	29.8	32.6	30.5	28.4
Gross capital formation	25.5	18.9	22.6	25.1	24.6	23.2
Of which						
Gross formation of fixed capital	22.3	22.0	21.6	21.5	22.0	21.5
Changes in stock inventories	3.2	-3.1	1.0	3.7	2.6	1.8
Investments in fixed assets	21.3	20.6	19.8	19.4	20.3	19.8
Reserve fund	9.8	4.7	1.7	1.5	3	4.3
National Welfare Fund	6.3	7.1	5.8	5	4.3	4.3
Deposits by individuals	14.3	19.3	21.2	21.3	22.8	24.7

Source: Federal State Statistics Service.

4.1.3. Changes in structure of GDP by sources of income

The low competitiveness of the Russian economy is due to the persistence of high costs for the production of goods and services. Analysis of the goods and services account balance of payments shows that for the period of 2001-2011 the share of intermediate consumption averaged 41.8% of the gross economic resources, with limiting deviations from the mean, of +1.1% in 2009 and -1.8% in 2002. Thus, the share of value added at basic prices changed very insignificantly as was determined by the retention of a high material intensity of production. The structure of production costs and of services costs illustrates the increase in the share of material costs at the expense of raw materials and the fuel and energy component. Changes in final demand had a determining influence on the dynamics of the volume of gross output for all types of business activity. Changes in the structure of gross value added production for the whole period of 2009-2013 were determined by the decrease in the share of industry with an increase in the contribution of trade, construction, the financial sectors of the economy, and the real estate market. It should be noted that the post-crisis economic

developments in the implementation of anti-crisis measures to maintain social and strategic industries generally contributed to a mirroring of the proportions typical of 2007 which then became one of the factors slowing economic growth in 2011-2013.

Another factor determining the increase of production costs was the increasing cost of labour. The dynamics of the domestic market of 2009-2013 were based on a redistribution of income from business to the population. The share of wages in GDP in 2013 increased to 52.0% as against 50.5% in 2012. It should be noted that, after 2008, the manufacturing business sector already faced restrictions on the further increase in expenditure on wages as a result of the sharp slowdown in growth of production and productivity. Before the crisis of 2008 there had been the possibility for correcting the dynamics of wage costs due to changes in the price and tariff policy. However, in 2011-2013 the use of this factor was limited by the narrowing of effective demand in the domestic market.

Table 5

Structure of GDP formation by income sources in 2007–2012, % of total, at current prices

	2007	2008	2009	2010	2011	2012	2013
Gross Domestic Product	100	100	100	100	100	100	100
Including:							
Compensation of employees, including hidden wages and mixed income	46.7	47.4	52.6	49.6	49.7	50.5	52.0
Net taxes on production and imports	19.2	20.0	16.6	17.8	19.5	19.9	19.2
Gross economy income and gross mixed income	34.1	32.6	30.8	32.6	30.8	29.6	28.8

Source: Federal State Statistics Service.

Opportunities for further growth in labour costs have become quite rigidly limited by changes in the competitive environment in the commodity markets due to increased pressure from imports and a decrease in the financial performance of businesses and organisations. In 2012-2013, profitability in the economy remained below pre-crisis levels. With an overall downward trend in domestic effective demand, restrained business pricing policies did not lead to an increase in output or an increase in production costs, due to the increased cost of fuel and electricity which provoked a decrease in the financial performance of their activities.

Moreover, the reduction in the financial performance of businesses and organisations in 2013 increased their current restrictions on financing and investment activities. Reduction in the net financial result of the economy led to a critical slowing in earnings growth at the disposal of enterprises, amounting to 4.7% in the first nine months of 2013 versus the 26.3% of a year earlier. Between January - September 2013, the net financial result for the whole economy grew by 83.3% from a year earlier: including in mining, by 96.9%; in manufacturing industries, by 68.3%; in the production and distribution of electricity, gas and water, by 74.5% and in transport, by 83.3%. In general, the economy return on items sold in January-November of 2013 amounted to 7.7% and was 2.3 percentage points lower than the previous year. The deterioration in financial performance relative to the previous year can be explained by cost inflation. In manufacturing activity during January-September of 2013, the proportion of loss-making enterprises increased to 29.7%, which was 2.3 percentage points greater than the previous year. The most significant influences were the fall in the net financial result, lower profitability in the engineering industry and in the production of construction materials due to reduced demand from the construction industry. In January-September 2013 the producer price index in the manufacturing sector amounted to 103.1% (104.2% in the

previous year), with the rate of price growth in the mining sector at a level of 11.9% (24.4%); in the production and distribution of electricity, gas and water it was 9.8% (7.2%).

In the production of fuel and energy minerals a decrease in profitability was amplified due to the shift of production to regions with more complex and costly conditions for fossil fuel extraction.

Table 6

Return on sold goods, products and services; and return on assets of businesses by type of economic activity for January-September 2012–2013, in %

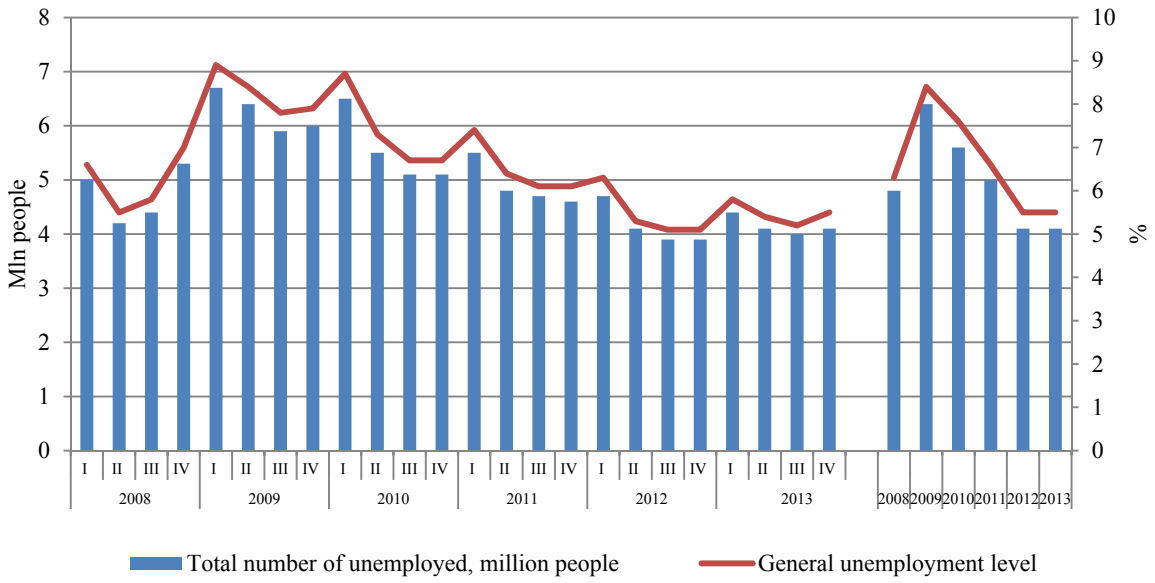
	Profitability of			
	Sold goods, products and services		Assets	
	2012	2013	2012	2013
Total	**9,7**	**7,7**	**6,8**	**5,0**
Including:				
Agriculture	11,7	6,3	4,8	2,5
Fishing, fish farming	21,4	21,5	18,7	15,1
Mining operations	31,0	25,1	15,3	12,7
Including:				
Production of fuel and energy resources	28,8	24,1	15,2	13,1
Manufacturing	11,0	9,5	8,1	4,9
Of which:				
Food production	11,1	10,1	6,8	6,1
Textile and clothing industry	12,3	7,1	5,0	3,5
Production of leather, leather goods and footwear	8,1	6,2	3,9	1,8
Wood processing and production	5,3	8,1	2,1	1,8
Pulp and paper production;	10,5	9,0	6,7	3,7
Production of coke and refined petroleum	11,3	9,6	12,7	6,0
Chemical production	22,9	16,7	15,8	7,5
Manufacture of rubber and plastic products	9,1	8,7	8,3	6,0
Non-metallic mineral products	12,4	9,8	6,5	3,6
Metallurgical production and manufacture of finished metal products	11,8	9,9	7,8	4,9
Machinery and equipment	7,7	7,5	4,5	3,5
Manufacture of electrical, electronic and optical equipment	8,1	8,9	6,0	5,6
Transport vehicles and equipment	6,0	5,8	2,7	2,3
Production and distribution of electricity, gas and water	4,7	4,7	2,1	1,3
Construction	3,8	3,5	1,7	1
Wholesale and retail trade	8,2	7,1	7,9	7,2
Hotels and restaurants	8,4	6,7	5,6	4,2
Transport and communication	12,2	9,9	5,7	4,1
Of which:				
Railway transport activity	3,5	1,4	2,7	0,7
Road-transport activity	–0,8	–4,7	1,7	0,2
Transport via pipelines	14,9	13,3	6,6	5,7
Communications	26,7	26,0	8,3	8,4

Source: Federal State Statistics Service.

Low efficiency in the use of production factors is one of the main reasons for the sharp slowdown in economic growth and the reduction in the competitiveness of the Russian economy. In the short-term, changes in economy income and in inflation will be completely determined by the dynamics of growth in labour productivity and by the efficiency of investments. Given the dynamics of the fixed capital investments, demographic factors, labour efficiency, and fixed asset, energy output ratio, the growth potential of the Russian economy is between 1.5 - 2.0%. The problem of limited growth potential can be solved by the active implementation of structural reforms.

4.1.4. Key trends and changes in the efficiency of use of labour resources

For the last fifteen years the average annual numbers of employees has grown weakly to maintain a reasonably stable trend towards a higher level of economic activity within the population, and a reduction in the total of the registered unemployed. The crisis of 2008-2009 had no negative impact on the labour market as a result of the implementation of a set of measures to maintain the standard of living and to help the employment figures. The anti-crisis measures adopted helped to avoid negative trends in the labour market. Although the unemployment rate rose to 8.3% in 2009, in 2010 there was, however, a recorded steady decline in the number of unemployed. The number of the economically active and of employed members of the population in 2013 averaged 75.5 million and 71.4 million respectively, which corresponds broadly to the parameters of 2012. The unemployment rate for 2012-2013 remained at 5.5% (using ILO methodology); although in the second half of 2013 the decline in unemployment halted. In 2013 the average number of people employed in the economy had recovered almost to the pre-crisis level of 2008, while the overall unemployment rate fell to a historic low for the entire observation period since 1990.



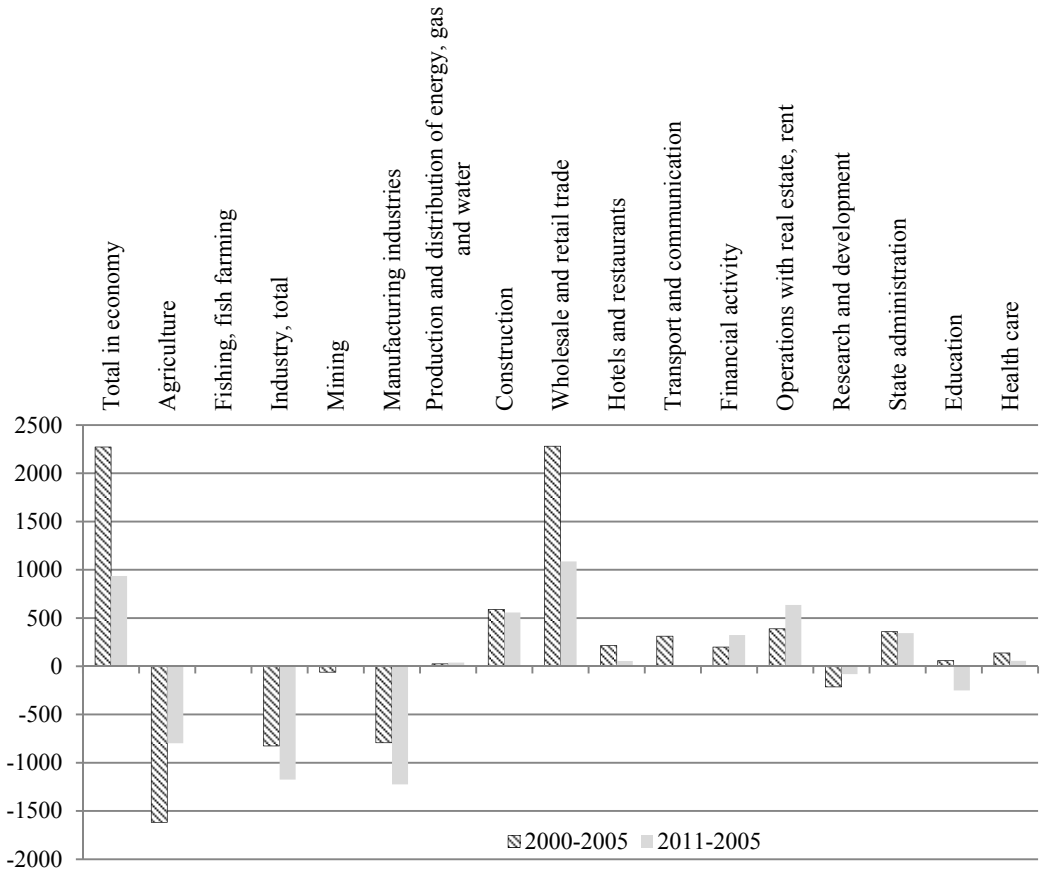
Source: Federal State Statistics Service.

Fig. 9. Total number of unemployed in 2008–2013, million people

On average, in 2013, employment offices reported 15% fewer unemployed people than in 2012. Throughout 2013 the number of vacancies listed by employment offices exceeded the number of registered unemployed. However, employers' requirements for workers had started to decline in June 2013. At the end of December 2013, the data bank of the employment services indicated that there were 1.4 million job vacancies. The tension coefficient, based on 100 reported vacancies, decreased from 91.3 persons in late December 2012 to 56.5 persons in June 2013 and rose to 76.1 persons at the end of December 2013.

A characteristic feature of the Russian economy at the moment is a further reduction in the average number of employees in industry and agriculture, with an expansion in demand for workers in trade, construction, finance, and public administration. Alarmingly there is also a

reduction in the numbers employed in science and education, as well as weak demand for health care staff.



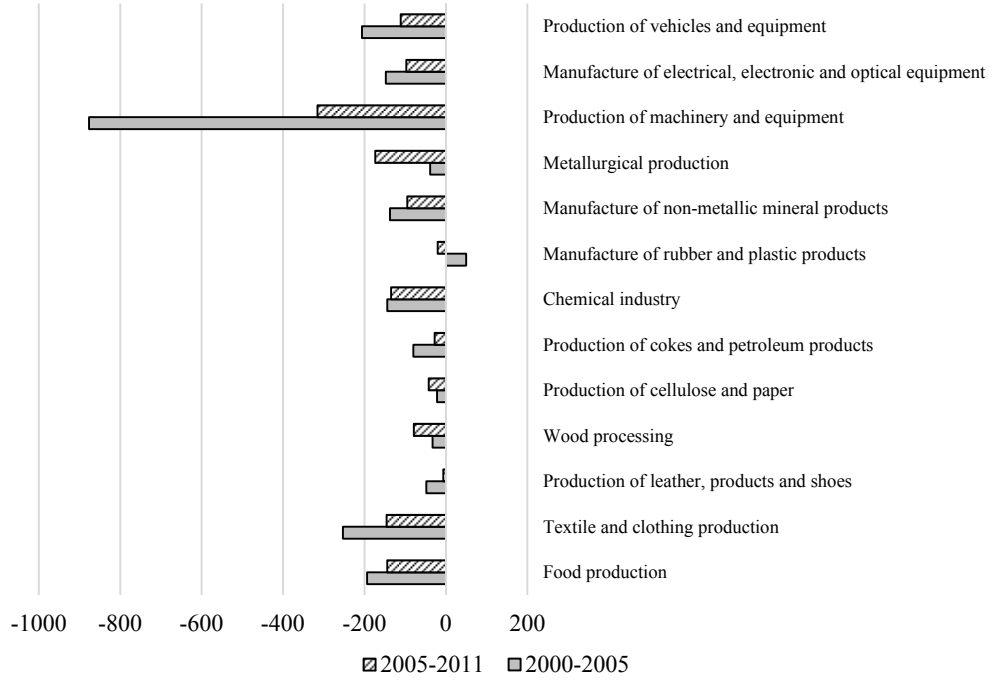
Source: Federal State Statistics Service.

Fig. 10. Change in employment by type of economic activity in the periods 2000–2005 and 2005–2011, (thousands of employees)

The number employed in industry has declined the most rapidly, especially in manufacturing industry. The structure of employment in the manufacturing industries has been determined by the dynamic reduction of employment in the engineering and consumer sectors.

It should be noted that the high level of differentiation of wages by type of economic activity had a significant effect on the change in employment by type of economic activity.

Wages in manufacturing industry remain below the average for the economy with the most significant gap in the consumer complex sector. In 2012, only the wage levels in the machine-building complex approached the economy average and exceeded the general wage-level in manufacturing industry. For the past fifteen years the leading wages in the economy have been for the extractive industries, the production of petroleum products, and the financial sector. In recent years, a reduction in the wage gap in the R&D sector has been recorded. In education and health care the level of pay is below average for the economy. In 2011-2013, with the increase in the level of public sector wages, this sector saw an increased inflow of staff.



Source: Federal State Statistics Service.

Fig. 11. Change in employment numbers in the manufacturing industries in 2000–2005 and 2005–2011, (thousands of employees)

Since 2003, a weakening trend in the growth of labour productivity has been reported with a reduction of return on investment in fixed capital and fixed assets.

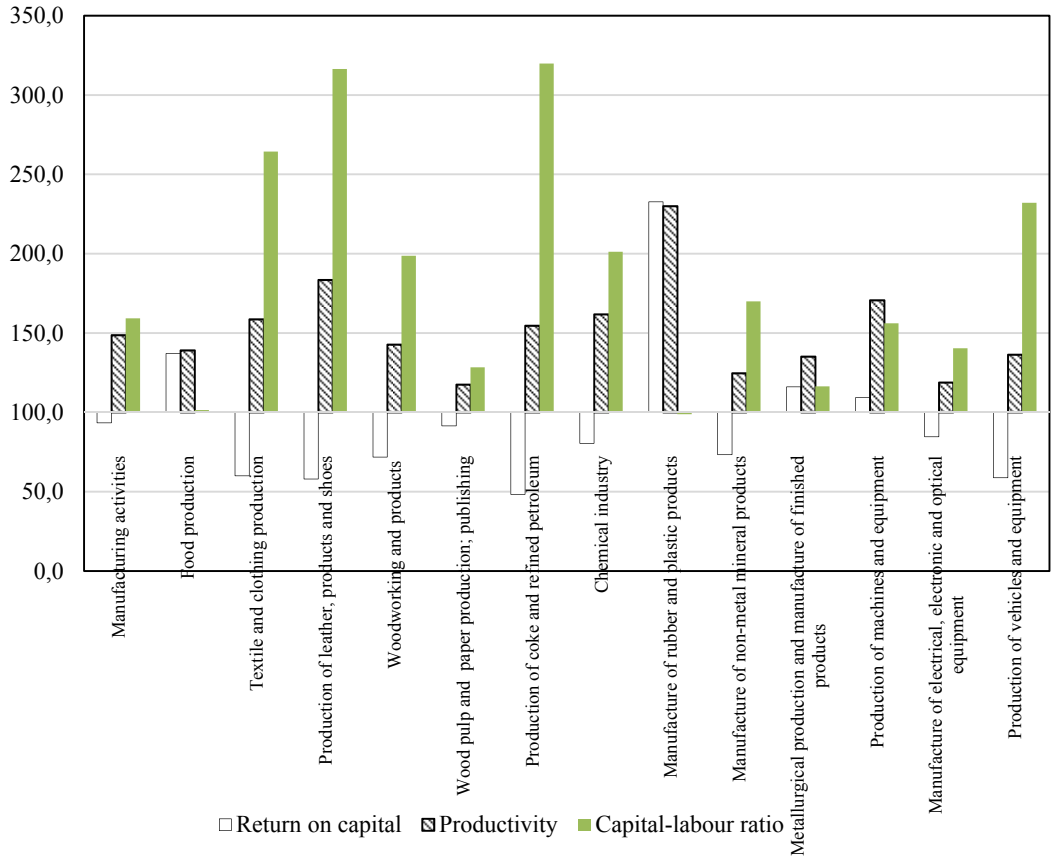
Table 7

Dynamics of growth in labour productivity by type of business activity in 2003–2012, as % of the previous year

	2003	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013***
Economy in general	107.0	106.5	105.5	107.5	107.5	104.8	95.9	103.2	103.8	103.1	101.0
Of which:											
Agriculture, hunting and forestry	105.6	102.9	101.8	104.3	105.0	110.0	104.6	88.3	115.1	98.1	104.2
Fishing, and fish farming	102.1	104.3	96.5	101.6	103.2	95.4	106.3	97.0	103.5	103.1	105.0
Manufacturing	108.8	109.8	106.0	108.5	108.4	102.6	95.9	105.2	104.7	103.6	101.7
Production and distribution of electricity, gas and water	103.7	100.7	103.7	101.9	97.5	102.1	96.3	103.0	100.3	99.7	98.0
Construction	105.3	106.8	105.9	115.8	112.8	109.1	94.4	99.6	102.2	99.6	94.8
Wholesale and retail trade	109.8	110.5	105.1	110.8	104.8	108.1	99.0	103.6	102.1	105.2	102.4
Hotels and Restaurants	100.3	103.1	108.5	109.2	108.0	109.2	86.7	101.7	99.5	101.8	100.0
Transport and communication	107.5	108.7	102.1	110.7	107.5	106.4	95.4	103.2	105.5	100.8	98.1
Real estate, renting and service activities	102.5	101.3	112.4	106.2	117.1	107.5	97.5	104.0	102.7	101.7	95.3
For reference: Dynamics of return on investments in fixed assets	95.4	94.3	95.9	92.7	88.5	95.8	109.3	98.6	96.4	97,07	98.4

*Preliminary evaluation.
Source: Federal State Statistics Service.

Labour productivity is quite significantly differentiated by economic activity. With high rates of workforce turnover (hiring and firing) jobs turnover (elimination of old jobs and the creation of new) characterising their update remains rather low. This turnover is supported predominantly by the closing of jobs at existing enterprises rather than job creation.



Source: Federal State Statistics Service.

Fig. 12. Labor productivity and return on capital in manufacturing industries in 2012, as % compared to 2005

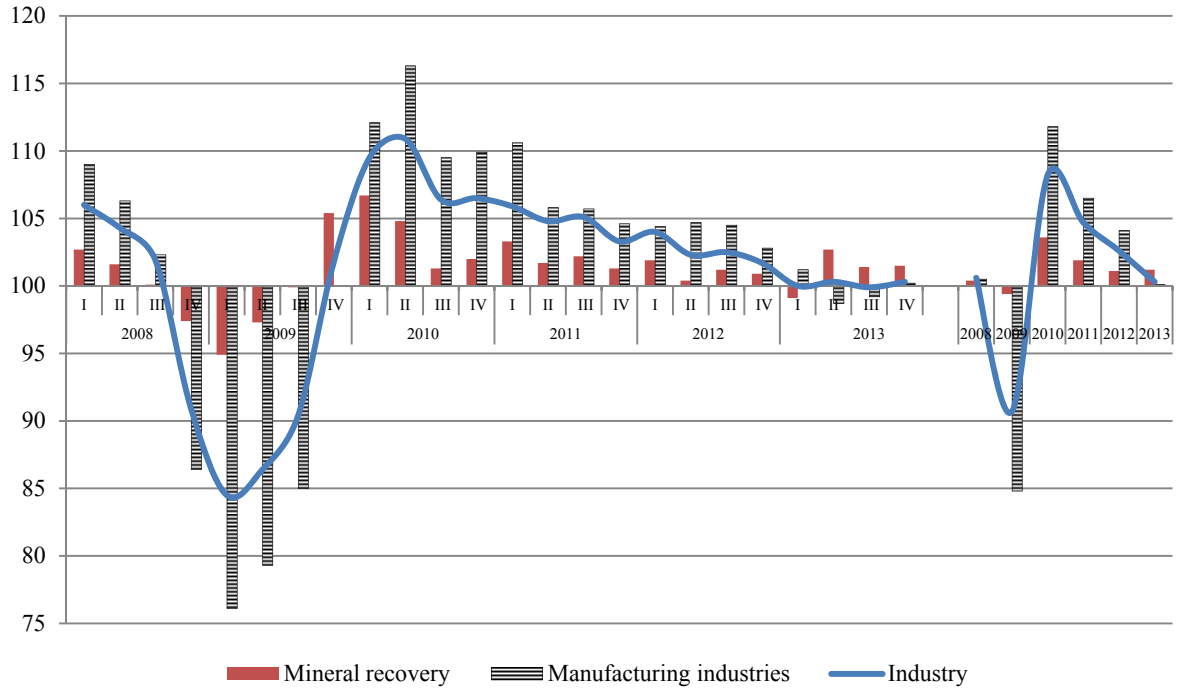
Higher-than-anticipated growth of investment in fixed assets compared with the dynamics of entire output during the period of 2005-2012 and an increase in capital costs per unit of labour did not lead to a corresponding change in labour productivity and, ultimately, increased the tendency to lower the output per unit of capital. Thus, we can assume that irrational investment policy led to a decrease in production efficiency factors and had a negative impact on financial performance.

4.1.5. Dynamics and structure of production by type of economic activity

When analysing the trends and factors in industrial post-crisis recovery several stages can be highlighted:

– Restoration of the positive dynamics of industrial growth in Q1 and Q2 of 2010 versus the corresponding period of the previous year, in the light of a dynamic growth of manufacturing activities until March 2011;

- Weakening of the dynamics of industrial development in the second half of 2010 with a sharp slowdown in mining;
- A slowdown in manufacturing production from Q2 of 2011 until Q4 of 2012;
- Stagnation of industrial production in Q1 of 2013 under the influence of the reduction of mining and slight growth of manufacturing;
- Decline in manufacturing volumes in Q2-Q3 of 2013 and in the production and distribution of electricity, gas and water relative to the same period of the previous year, compensated by positive dynamics in the mining sector;
- Stabilisation of manufacturing activity in Q4 of 2013 with amplification of the downturn in the production and distribution of electricity, gas and water relative to the corresponding period of the previous year.



Source: Federal State Statistics Service.

Fig. 13. Dynamics of industry in 2008–2013, as % of the corresponding period of the previous year

The Russian industry crisis of 2008-2009 was characterised by a deep recession in the manufacturing sector with relatively restrained cuts in the production of fuel and energy mineral extraction. If the slowdown in extractive industries under conditions of the crisis of 2008-2009 can be explained by short-term factors within the international raw materials markets, the sluggish dynamics of domestic production for domestic consumption and the growth of imports can be linked to domestic problems. The nature of the manifestation of the crisis by type of economic activity indicates a lack of domestic business restructuring aimed at creating new competitive markets for domestic products. Once the protection of the domestic markets associated with the undervalued exchange rate began to weaken, it became clear that no positive changes in the competitive environment had occurred. The Russian

economy resumed the proportions of production and imports typical of the period before the financial crisis of 2008-2009.

Furthermore, in 2009-2013 we can observe increasing gaps in the growth of industrial product prices by type of economic activity, as well as in the prices and tariffs for products from the natural monopolies.

The industry output to growth pattern in 2010-2011 was accompanied by an increase in the impact of the extractive industries with only restrained development of the manufacturing industries. It should be noted, that overcoming the crisis was determined by factors within the external economic environment which resulted in advancing growth of the extractive industries compared with manufacturing.

In general, the structure of industrial recovery in 2009-2012 showed a recurrence of patterns from the post-crisis development of 1998-2000, when growth began in the manufacture of food products, mining, and the manufacturing industries associated with the processing of hydrocarbons and other mineral resources, and then spread to other industrial economic activities.

Having achieved pre-crisis levels, starting from the second half of 2012 the Russian economy began to show signs of slowing growth. This situation was greatly influenced by the inherent limitations associated with the fact that the structure of the economy had not change significantly, and that the potential impact of the factors contributing to growth proved to be virtually exhausted. Starting with Q2 of 2013 a drop in output volumes was recorded for the manufacturing industries.

The dynamics of the manufacturing industries are quite significantly differentiated by type of economic activity, with the greatest effect shown by the ratio of rates of production of capital and consumer goods. Slow recovery in investment demand determined the features seen in the operation of the engineering complex.

Table 8

Indices of production for the main types of manufacturing industries in 2008–2013, as % of the previous year

	2008	2009	2010	2011	2012	2013
Manufacturing industries,	100.5	84.8	111.8	106.5	104.1	100.1
Including:						
Production of foods, including beverages and tobacco	101.9	99.4	105.4	101	105.1	102.3
Textile and clothing industry	94.6	83.8	112.1	102.6	98	104.9
Production of leather, leather products and footwear	99.7	99.9	118.7	108.6	89.9	94.7
Processing of wood and of manufacture of wood products	99.9	79.3	111.4	104	103.3	101.4
Pulp and paper industry; publishing and printing	100.3	85.7	105.9	101.8	102.1	94.8
Production of coke and refined petroleum	102.8	99.4	105	102.9	102.2	102.0
Chemical production	95.4	93.1	114.6	105.2	101.3	104.9
Manufacture of rubber and plastic products	122.8	87.4	121.5	113.1	107.4	105.2
Non-metallic mineral products	97.1	72.5	110.7	109.3	105.6	100.3
Metallurgical production and manufacture of finished metal products	97.8	85.3	112.4	102.9	104.5	97.7
Engineering industries	98	66.2	122.3	114.5	107.5	96.8
Machinery and equipment	99.5	68.5	112.2	109.5	100.4	92.4
Manufacture of electrical, electronic and optical equipment	92.6	67.8	122.8	105.1	104.3	97.2
Transport vehicles and equipment	100.4	62.8	132.2	124.6	112.7	100.9
Other industries	98.3	79.3	117.7	104.5	99.1	95.8

Source: Federal State Statistics Service.

In the acute phase of the crisis in 2009, production volumes in the engineering complex amounted to 2/3 of the 2008 level. The features of the post-crisis recovery of the engineering

industry were determined by forward growth in the manufacture of vehicles and equipment as a result of state support and stimulation of demand. Despite the dynamic development of vehicle manufacturing the engineering industry, in general, did not reach the pre-crisis level and in 2012 it was 97.7% against the index of 2008.

For the past five years the dynamics of production engineering has been highly volatile. If, in 2010, the highest growth rates for these activities were determined by the low base of the previous year, then the braking dynamics in 2011-2013 were due to the weakening of domestic demand for capital goods. In 2013, the complex of engineering industries illustrated exceptionally low rates throughout the year; and as a result, recorded a decline in output by 3.2% compared with the previous year. By the end of 2013 the production of machinery and equipment amounted to 92.4% of the previous year's indicator while the production of electrical, electronic and optical equipment was 97.2% and production of vehicles was at 100.9%.

Low investment activity determined the instability in dynamics and the on-going crisis in steel manufacturing and the manufacture of finished metal products (97.7% compared with 2012), as well as in the production of construction materials (100.3%). In addition, a significant impact on the dynamics of output had reduced the demand and prices for key products in non-ferrous metallurgy.

Compared with the pre-crisis period, in 2009-2013 for the consumer complex of manufacturing industries, there were faster growth rates in food production and the production of leather, leather goods and footwear, however in textile and clothing production the crisis remained. In the last four years of the production of consumer goods, stable positive dynamics have been recorded only in the food industry.

In the period 2010-2013, there was steady growth in the intermediate goods sector in the production of rubber and plastic products, chemical production and the production of coke and refined petroleum due to a simultaneous increase in demand in both the domestic and foreign markets for the products of this industry sector.

In general, the Russian economy, in 2013, has overcome the consequences of the crisis; however, the unstable dynamics of the main macroeconomic indicators and the slow recovery of the construction and investment sectors have become the factors limiting the development of the Russian economy in the short term. The dependence on global prices for commodity exports, low domestic demand and the sluggish development of domestic manufacturers in promising consumer markets, investment and in intermediate goods, together with a weak financial system have continued to be the dominating factors.

4.2. Russian industrial enterprises in 2013

The section is prepared using data of monthly business surveys conducted by the Gaidar Institute for Economic Policy (IEP) among managers of industrial enterprises since September 1992. The surveys are based on the European harmonized methodology and encompass the entire territory of the Russian Federation. The size of the panel is about 1000 enterprises that employ over 13% of the total number of employed in industry. The panel is biased towards large enterprises in each of the selected branches. The rate of response to questionnaires ranges from 70% to 75%.

The business survey questionnaire contains quite a small number of questions (not more than 15-20). They are of qualitative rather than quantitative nature. The simple formulation of questions and answers allows the respondents to fill in the forms quickly and without consulting any documentation. It's essential that the respondent at each enterprise is an

executive of the highest level possible who is fully aware of the situation at the enterprise and is directly involved in its management.

When analyzing the results of business surveys a specific derivative indicator is used which is termed "balance". The balance is calculated as the difference between the percentage of respondents who answered "will grow" (or "above normal") and the percentage of respondents who answered "will decrease" (or "below normal"). The resulting difference allows to present the distribution of answers to each question by one figure with "+" or "-" sign.

The balance is interpreted as the first derivative or the rate of the process. If the balance of responses to the question about expected change in prices has the "+" sign, it means that in the near future average prices will grow (e.g. the prevailing number of enterprises reported their intention to raise prices). For instance, the increase of balance from +10% to +17% over a month implies that average prices in industry will grow at a higher rate as the prevalence of enterprises anticipating their growth became more convincing. A negative balance is the sign of future reduction of average prices (more enterprises intend to cut their prices). The changing of the balance from -5% to -12% is interpreted as greater intensity (rate) of price decline.

4.2.1. Russian industry: from stagnation to …?

The official statistical data on the performance of Russian industry in 2013 has been a matter of heated debates about the current situation in and development prospects of this sector of economy. The key point at issue is whether Russian industry is still experiencing stagnation (the fact of which is by now admitted by most experts and officials) or has proceeded into the recession phase. Therefore the IEP's Industrial Optimism Index (IEP IOI)[1] introduced in 2008 as an indicator of operational monitoring continues to preserve its relevance in the current situation of lingering stagnation in Russian industry and ambiguity of official statistics. It's the latter circumstance that has revived interest in this aggregate indicator basing upon a representative set of initial indices (estimates of the actual dynamics of demand, finished goods stocks, current sales and output projections of enterprises). It helps to assess the performance and prospects of Russian industry the way enterprise managers see them. The constantly being improved system of IEP's business survey indicators provides an opportunity to understand what is actually constraining the growth of output and investments at this particular moment rather than in the previous years.

IEP IOI shows that enterprises' assessments of the last 6 months of 2013 were better than those of the start of the year (*Fig. 14*). The index basically managed to remain in the positive area albeit with a minimal surplus over the zero level. The key positive drivers of situation at enterprises (but not in ministries!) were output projections (after the adjustment for seasonality their values remained positive and at the end of the year were even growing),

[1] The index is calculated as the simple average of balances - differences in responses to four questions from the IEP's business questionnaire:
1. Actual change of demand, balance = % growth – % decrease;
2. Assessment of demand, balance = % above normal + % normal – % below normal;
3. Assessment of finished goods stocks, balance = % above normal – % below normal;
4. Output projections, balance = % growth – % decrease.
Balances of responses to the 1st and the 4th questions are adjusted for the seasonal and calendar factors.
The index can range from -100 to +100. A positive value of the index implies the prevalence of positive estimates. A negative value of the index means that negative estimates prevail. Lowering of the index value is the sign of deteriorating situation while its growth – the sign of ameliorating situation.

estimates of finished goods stocks (this indicator displayed minimal surplus after surging in June) and the actual change of demand (despite the revealed decrease of sales, the latter was smoother and less intense than in 2012 and early 2013).

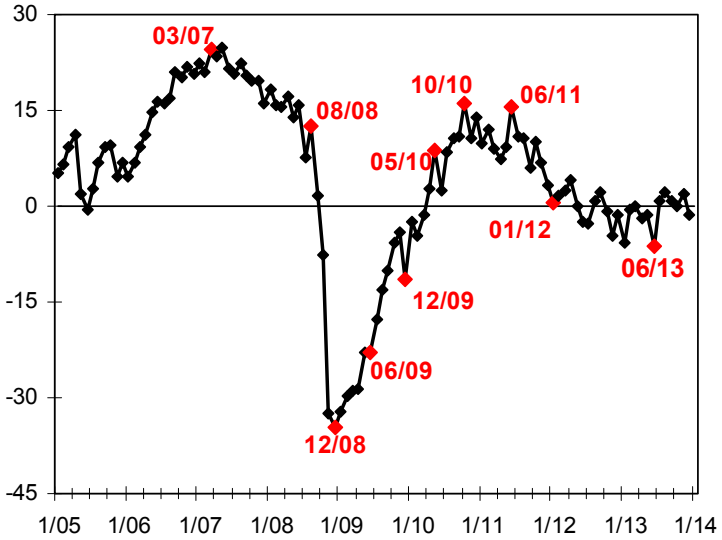


Fig. 14. IEP's Industrial Optimism Index, 2005-2013

But in general the surveyed enterprises found that the situation in 2013 was worse than in 2010-2012. The maximum post-crisis value of IEP IOI annual average was recorded in 2011 when it reached 9.25 points. Then the indicator fell to zero in 2012 and down to -0.97 points in 2013. So, the basic decline of optimism in Russian industry took place in 2012 and more exactly – in its first half. Last year the changes in situation were minimal (according to business estimates) the only noteworthy development being the official admission of the fact of stagnation: first it was attributed to "our partners in the West", then its domestic origin was also mentioned and official forecasts repeatedly experienced downward corrections. Against this background the projections of enterprises as to the demand, output and employment in early 2014 looked more "patriotic". The highest optimism continued to be observed in business assessments of the expected growth of output; in November-December the trend was supported by improving projections for the number of employed. The balance of demand projections remained positive but regrettably was not as high and sustainable as that for the projected output.

The start of 2013 was traditional. The actual dynamics of demand for industrial output suffered a traditional sharp drop observed in recent years. Meantime, demand projections (that soared in January similarly following the tradition) showed that industry still cherished hopes for the revival of sales. Output projections also demonstrated high optimism of business expectations the feasibility of which still seemed questionable to enterprises themselves. Doubts of producers about the possibility of demand and output growth were reflected in their estimates of finished goods stocks: the balance of this indicator showed an increase of stocks' surplus up to the 40-month maximum.

The investment outcomes of 2012 and the initial plans for 2013 did not promise the desired growth of investments in production. 56% of enterprises were in general satisfied with their total amount in 2012. It was the best result for the whole 18-year (!) period of monitoring. It looked quite logical taking into account another IEP's survey indicator – the estimate of

"sufficiency/surplus" of investments relative to the expected growth of demand for output. 63% of enterprises estimated the past year investments as "sufficient" (taking into account realistic rather than official forecasts). The latter percentage has also become a record (an absolute maximum) of the multi-year monitoring. Respectively, the share of "non-sufficient" responses fell down to an absolute minimum.

Upon completion of January that was difficult for the economy and statistical recording, the surveys registered a clear growth of sales and output that still failed to reduce high surplus of finished goods stocks and to prevent the decrease of optimism in demand, output and employment projections. Price policies of enterprises were usual for the first months of the year: the most intense rise of prices in January and its slowdown in February. However, price projections of industry were more moderate as compared with the respective months of previous years.

In March the system of indicators of IEP's business surveys reflected the worsening of situation in Russian industry. Enterprises started to loose confidence in the correctness of their production and marketing policies and attempted to more accurately coordinate their output with the dynamics of demand. The demand for industrial products failed to uphold the high results of February and demonstrated the lowering of growth rates as judged from both the initial data and the data adjusted for seasonality (*Fig. 15*). In March the survey data on the dynamics of output showed that production growth slowed down to zero. The growth of factory prices actually stopped with its rate falling by 10 points.

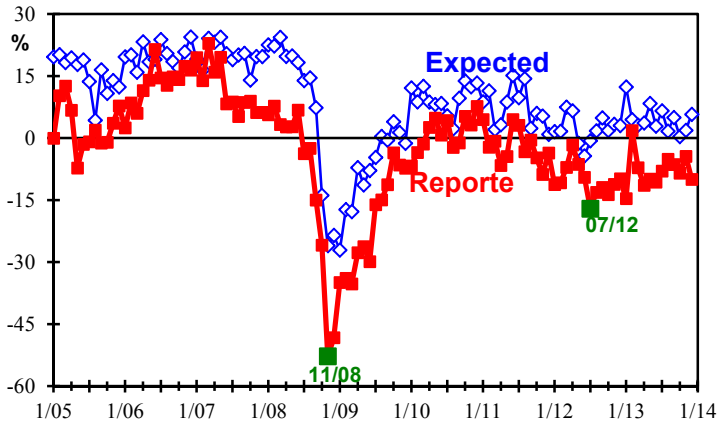


Fig. 15. Change of solvent demand adjusted for seasonality
(balance = % growth - % decrease)

In general the first quarter of 2013 displayed such a high level of correspondence between changes in output and demand that had never been observed in Russian industry either after the IV quarter of 2008 or before that crisis period. However, this correspondence between changes in output and demand was largely attributable to "no change" responses the coincidence of which in the I quarter of 2013 reached almost a historical maximum. Another indicator of the examined quarter also looked abnormal. The share of enterprises where the actual change of output went ahead of the change of demand for their produce fell to the minimum level since 1995 (i.e. to actually the historical bottom). The percentage of such producers in Russian industry became as low as 18% while at the end of 2008 – the beginning of 2009 it reached 20% and 25%, respectively. In other words, in 2013 Russian industry was forced to follow trends in demand for its output almost as strictly as in the crisis period and to

minimize the freedom of action despite the wish to be ahead of demand and produce to stock in the hope that in the following months the demand would grow and enable them to sell the accumulated stocks.

Smaller demand in April increased the share of surplus stocks of finished goods, slowed down production and made enterprises refrain from raising prices both in the current and the following months. In these conditions output projections started to loose optimism after the traditional maximum at the beginning of the year. In 2013 their coincidence with demand projections increased and reached 78% (in the previous year it equaled 69%). Such a high result is not a frequent event for surveys (usually it's registered in the critical periods for Russian industry) – a greater coincidence of output and demand projections was observed only in November-December 2008. So, in the I quarter of 2013 Russian industry was certainly in a difficult situation but planned to mitigate the severity of a possible crisis by at least minimizing the surplus of finished goods stocks.

"Insufficient demand" remained the basic impediment to the growth of output in Russian industry (*Fig. 16*). In the II quarter of 2013 60% of enterprises pointed to its hindering effect. At the peak of the recent crisis (I quarter 2009) demand held back production at 69% of enterprises; the 1998 maximum was 66% and an absolute record over the 20-year period of monitoring was registered in the II quarter of 1994 and amounted to 84%. From the start of 2011 the negative impact of demand on industrial production was gradually increasing. At the end of 2008 the situation developed in quite a different way: then demand grew by 37 points over three quarters. The catastrophic circumstances of 2008 precluded the government from taking preventive measures in order to encourage demand for the domestic produce. In 2012-2013 the situation was different: both demand and output underwent small but clearly negative changes. Potentially this gives the government enough time not only for the working out and implementation of anti-crisis measures but also for the analysis of their impact. So far, the efficiency of these measures can be assessed from the fact that no catastrophic developments under the 2008 scenario have taken place in Russian industry. But the lack of reversal in economic trends, the shifting of blame to "our partners in the West" and the demand that the RF Central Bank should engage in combating the imminent crisis evidences that the set of habitual anti-crisis measures fails to ensure the desired effect and is close to exhaustion while new ideas are formulated and implemented with difficulty.

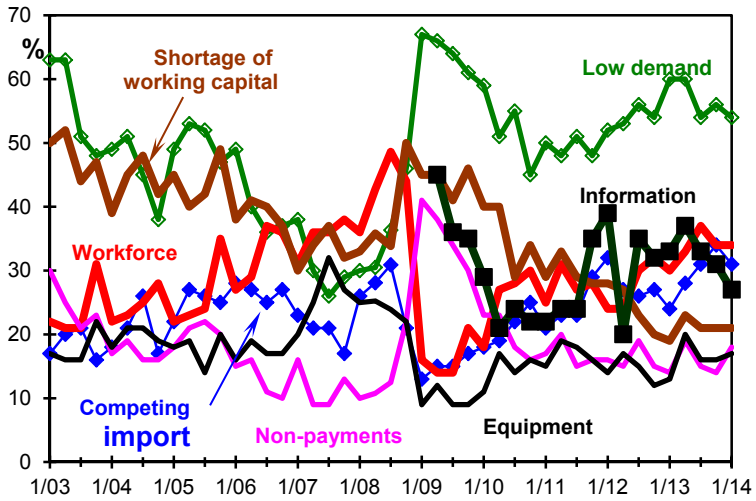


Fig. 16. Impediments to industrial growth, 2003–2013

The latter thesis is directly supported by the upsurge in mentioning the factor of "uncertainty of the current economic situation and its further development" by enterprises. In April 2013 its hindering effect grew up to 37% and had a purely economic background as different from the upsurge in late 2011 – early 2012 when it was triggered by pre-election – election – post-election campaign. As a result this factor has reinforced its second position in the rating of impediments to industrial growth (as assessed by business).

The third and the fourth positions (mentioning in 33% and 28% of responses, respectively) are occupied by the "shortage of skilled labour" and "competing import". While the former of the above factors has been long and continuously (for the fourth quarter in turn with the same result) hindering growth in Russian industry (but is far from its historical maximum), the latter increased by 4 points over the quarter and approached its absolute maximum. As a result business and authorities seem to have got one more headache. Meantime, positive emotions due to low unemployment even in the situation of stagnation are leveled down by mass workforce problems in industry that will inevitably aggravate in case even a slow economic growth begins.

Next positions in the rating of Russian industry's problems belong to "low export demand" (22%, the lowering by 9 points over the quarter, the best result over 6 quarters), "shortage of working capital" (23%, almost an absolute minimum) and "shortage of equipment" (20%, an increase by 7 points over the quarter, the worst result from the start of 2008 crisis).

The rating of impediments to industrial growth (let's point out – as assessed by enterprises) ends with "problems associated with crediting industry". For already 9 (!) quarters in turn it has been considered a hindrance to production by only 3-4% of enterprises. The interest rate on credits (one of the components of their availability) is mentioned as a hindrance by 7% of respondents.

The drop of sales and growth of finished goods' surplus stocks that continued in May forced enterprises to further hold back production, lower prices, cut personnel and be very cautious in their investment plans. Meantime, price policies of enterprises demonstrated industry's attempts to revive sluggish demand for its output.

The growth of output that was registered by surveys in June became a problem for Russian industry in the situation of contracting demand. It resulted in a sharp increase of dissatisfaction with sales and further building of surplus stocks of finished goods (*Fig. 17*), made enterprises revise downwards their demand projections and output and employment plans for July-August.

In July the continuing drop of demand, mass use of price factor for supporting sales, plans for curtailing investments and ongoing dismissals of workers combined with minimal growth of output, sharp positive adjustment of finished goods stocks assessments and strengthening optimism of output projections. Indeed, judging by August data these projections came true supported by positive dynamics of demand and the consequent growth of prices. However, enterprises were not sure of the preservation of these trends in the following months and didn't plan to increase investments.

The changes of demand and output in September discouraged enterprises, pulled down the indicators of demand sufficiency and increased the surplus of finished goods stocks. At the same time industry continued to raise prices which hardly encouraged demand. The ongoing outflow of workers from enterprises resulted in the deficit of personnel even in the conditions of stagnation.

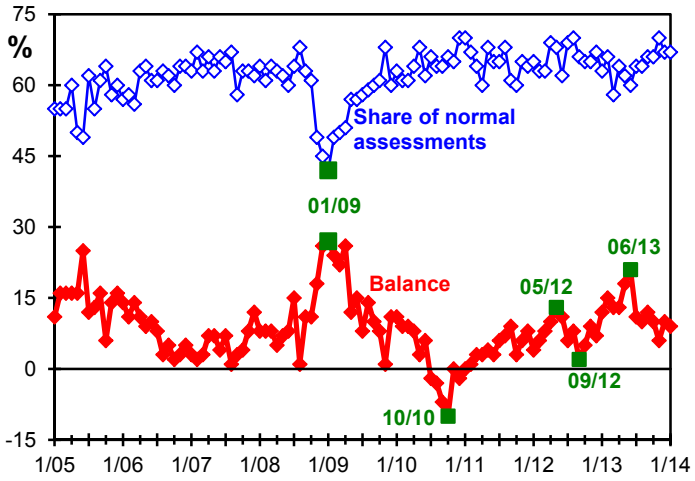


Fig. 17. Assessment of finished goods stocks
(balance = % above normal – % below normal)

October failed to improve trends in either demand or output in Russian industry. This further stirred dissatisfaction with the current volumes of sales and made business refrain from raising prices in the hope to revive sales. The continuing drain of labour from enterprises, the worsening projections for the number of employed and steadily negative investment plans completed the gloomy picture of the start of IV quarter 2013.

According to the survey data in November Russian industry probably attempted to break away from stagnation. However, the acceleration of production growth and the rising optimism of output projections were then supported only by assessments of finished goods stocks. Meantime the dynamics of demand for the industrial produce didn't demonstrate any principal improvements relative to October (as judged from both initial and seasonality-adjusted data).

At the end of 2013 the demand for industrial products underwent dramatic negative changes. The initial data displayed the highest rate of December sales drop over the 5 recent years. After the adjustment for seasonality, the December rate of demand decrease was one of the worst over the last 18 months. However, such dynamics of sales is becoming habitual for the Russian industry. On the contrary, demand projections demonstrated unusual growth by the end of the year. In the previous post-crisis years the balance of December sales projections either continued falling or remained at the worst level registered in November.

In December the industry resolved to scale down factory prices after their growth in August-September and stabilization in October-November. But the rate of this reduction (-5 points) was the lowest as compared with the respective months of 2011-2012. The December balance was also below that of June 2013 when prices fell at the rate of -9 points. Such a "weak" indicator of enterprises' price policies at the end of the year was most likely attributable to the intensive growth of costs that was observed in the same period.

The terms of crediting Russian industry in the IV quarter of 2013 remained stable and were considered acceptable by 72% of enterprises. The value of this indicator (assessment of credit availability) established back in the middle of 2010 and with minimal fluctuations both up and down rests at this level for already 3.5 years coinciding with the respective assessments of the first half of 2008 (*Fig. 18*).

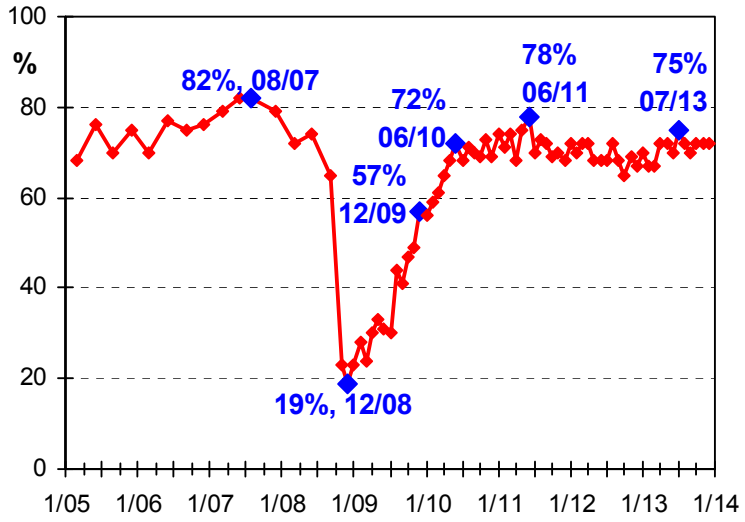


Fig. 18. Share of enterprises assessing credit availability as "above normal" + "normal"

The average minimal interest rate on credits in rubles fell from 13.0% per annum in the I quarter to 12.5% in the IV quarter of 2013. The reduction was observed in all branches but the banking system's priorities didn't change. The lowest rates were available for metallurgy and chemical industry, in the second echelon followed machine building and food industry while construction materials and consumer goods industries could borrow only at maximum rates. The quite logical dependence of interest rate on factory size preserved: while credits to enterprises with over 1000 employees were offered at 10.5% per annum, for small- and medium-size businesses the rate was as large as 14.3%.

However, one fourth of Russian industrial enterprises do not use credits preferring to live on their own funds. Last year this indicator was record for the three post-crisis years when enterprises were asked this question. In 2009 18% of them reported having no credits, in 2012 – 23%, in 2013 – 24%. The main direction of credit utilization was the replenishment of working capital as followed from responses of over one half of enterprises in 2012-2013 and 68% of them in 2009. Before the crisis of late 2008 62-70% of industrial enterprises borrowed funds for these purposes. The data was supported by monitoring of impediments to output growth: in 2013 the hindering effect of shortage of working capital fell to the historical minimum (21%). The second most important field of credit utilization was the expansion of production. In the two recent years slightly over one third of enterprises (35%) took credits for these purposes. Earlier this indicator was as high as 46% in 2008 and amounted to 36% in 2005-2007. 23% of enterprises borrowed money for re-equipping production facilities in 2013.

The lack of positive trends in indicators of Russian industry's performance and a clear growth of pessimism in declarations and forecasts of authorities made us resume at the end of 2013 the monitoring of business assessments as regards the probability of the second wave of the crisis in the sector. In November 31% of enterprises thought that this probability "grew" while 32% found that it "didn't change". In January 2013 the proportion between these responses was principally different: 12% – "grew", 42% – "didn't change". So, over the past year the probability of a new crisis (as assessed by top managers of industrial enterprises) increased by 20 points. At the same time the share of "no answer" responses (i.e. the share of

respondents finding it difficult to estimate the dynamics of pre-crisis developments) fell from 43% to 35%. On the one hand, it spoke of the growing concern of industrial enterprises about this problem while on the other hand it showed that one third of them continued to feel "uncertainty about the current economic situation and its further development". The latter quote is an exact option of response to the question about impediments to industrial growth. In October 2013 31% of enterprises pointed to this factor.

In November 2013 the most notable increase of respondents anticipating the second wave of the crisis was observed in consumer goods and construction materials industries – the respective share there was as high as 41% of enterprises (*Fig. 19*). Taking into account the share of respondents that didn't see any changes in the probability of the crisis, an ultimate leader was consumer goods industry where only 10% of enterprises didn't find that the second wave of the crisis was coming closer (in construction materials industry the respective share was 18%). In the second echelon were ferrous metallurgy and machine building (in both of them 34% of respondents estimated the probability of the crisis as growing). But the above shares were opposed by large segments in these industries that did not notice any changes (40% and 34%, respectively). The proportion of growing crisis expectations was even smaller in timber processing (28%), food industry (26%) and chemical industry (23%). These moderate (as compared with other industries) percentages were coupled with a notable share of "no change" responses: 18, 24 and 39%, respectively. Meantime, the most "positive" expectations as regards the second wave of the crisis were demonstrated by non-ferrous metallurgy: 11% - "growth", 43% - "no change" and 12% - "decrease".

If examined by positions of responding managers, the biggest growth of crisis moods was registered among enterprise directors (46% - "growth of crisis probability", 17% - "no change"). On the contrary, their deputies demonstrated an increase of positive (for the current historical moment) assessments (25% - "growth", 43% - "no change"). Heads of economic divisions displayed almost a zero balance of crisis expectations (35% - "growth", 33% - "no change").

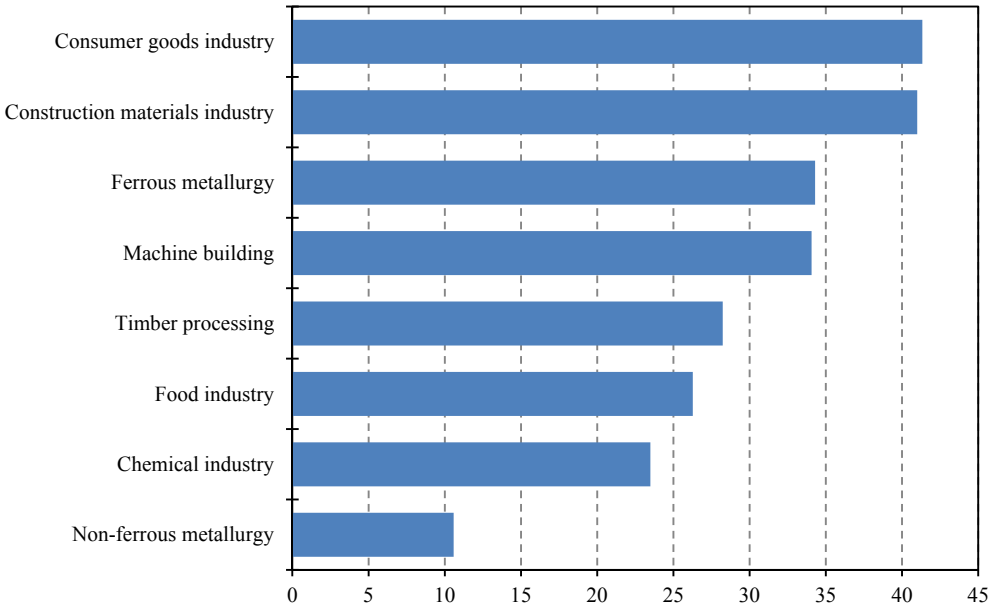


Fig. 19. Rating of industries by the assessed growth of probability of the second wave of the crisis (November 2013, %)

4.2.2. Workforce problems of the Russian industry

In 2013 Russian industry continued to lose workers. According to the data of IEP surveys last year the average annual rate of dismissals there reached -8 balance points – the maximum level since 2010. In the crisis 2009 business let this indicator drop down to -23 points despite the resistance of authorities at all levels. Only in March 2010 surveys registered the first increase of industrial employment after the crisis. This process went on till August 2010 with intensity ranging from +3 to +8 points. Then the recruitment in industry at large stopped but no massive lay-offs were registered either. 2011 began with the most sizable (by post-crisis criteria) hiring of workers – in March its rate reached +15 points. But already in May it stopped and by the end of the year gave way to the reduction of personnel at the rate of -11 points. However, the outcome of 2011 was not so dramatic: enterprises managed to balance the number of hired and dismissed workers with just -1 point result. 2012 turned out to be much worse: the annual balance fell down to -5 points, the rate of recruitment at the beginning of the year increased only up to +8 points while the rate of dismissals at its end reached -12 points. In 2013 industry failed to achieve a positive balance of employment change in any of the months. In February-April when enterprises used to increase the number of employed, the balance was up to only -4 points, i.e. dismissals prevailed over hiring of personnel in industry. In the next months the indicator remained in a narrow interval between -6 and -8 points implying a stable rate of lay-offs as different from previous years when the outflow of workers from enterprises accelerated at the end of the year. So, throughout 2013 industry displayed a flatter dynamics of the number of employed as compared with the previous years (*Fig. 20*).

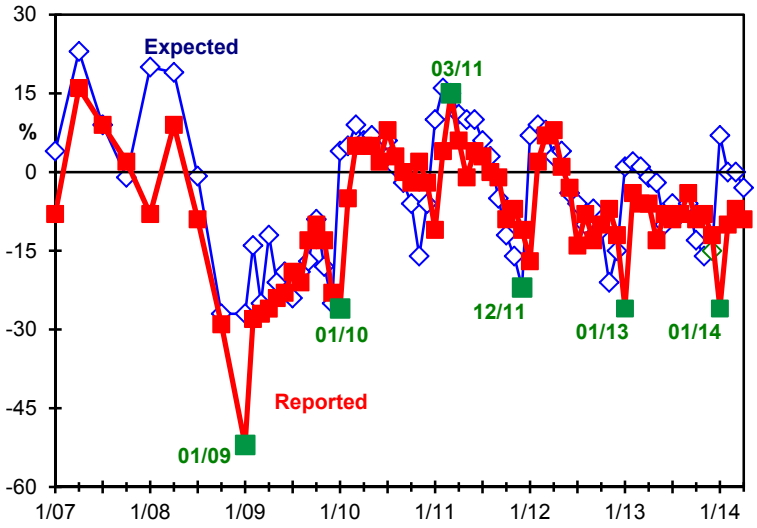


Fig. 20. Actual and projected changes of employment
(balance = % growth - % reduction)

Projections for the number of employed in 2013 also demonstrated greater stability as compared with the first post-crisis years. In the first quarters of 2010-2012 industry displayed the most optimistic employment change projections – then the balance rose up to +9 points in 2010 and 2012 and even up to +12 points in 2011. But by the year end it fell down to -22..-16 points. In 2013 this indicator managed to grow to only +2 points in the first quarter, i.e.

didn't differ much from zero, and in November-December was down to only -13 points. Even the latter value was most likely attributable to the declaration of the head of the government who stated that authorities wouldn't fight with lay-offs in case of the second wave of the crisis. Within 4 months before that the balance of employment change projections was relatively stable ranging from -9 to -6 points. So, industry has come to terms with its workforce problems and does not even project to cope with them.

The data about actual dismissals of workers from industrial enterprises and the prevalence of negative employment change projections among their managers could be due to deliberate policies for optimizing the number of employed in the situation of stagnation and the absence of hopes for recovery in the foreseeable future. But three indirect circumstances make one doubt such an explanation.

The first is that the actual employment demonstrates more sizable reductions as compared with those projected (expected) by enterprises. Indeed, the average annual balance of actual employment changes in 2013 reached -8 points while the balance of projections – only -3 points. The statement is supported by the comparison of actual employment changes with the respective projections at micro-level. In 2013 expectations of 15% of enterprises were more optimistic than the actual changes of the number of employed in the same month. The opposite situation (i.e. more pessimistic expectations as compared with actual changes) was registered at 12% of enterprises. So, industry more often hoped for the improvement of employment dynamics than expected its deterioration from the actual level preceding these projections. The maximum prevalence of improvement projections over deterioration projections was registered in 2008. Then positive changes were observed at 19% of enterprises versus negative changes at 10% of them. But in all the surveyed years an absolute majority of enterprises projected preservation of the actual trends. The share of such responses ranged from 70% to 75%.

The second circumstance bases upon the estimates of workforce sufficiency in Russian industry. The question about sufficiency of workers at a particular enterprise (introduced in IEP's business survey questionnaires back in 1996) allows to get direct estimates thereof. Annual averages show that throughout all the years of monitoring the most part of Russian industrial enterprises considered the available number of workers to be sufficient for meeting the expected growth of demand. The historical maximum of this indicator was registered in 2012 when the share of such responses reached 77%. In 2013 it fell down to 73% but remained within the interval habitual for the post-crisis period. Among the rest of enterprises the prevailing estimate throughout the post-crisis period was "below sufficient". In 2013 the share of such responses amounted to 16% – the 5-year maximum. As a result, the balance of estimates of workforce sufficiency (traditionally examined by surveys) was negative albeit not so impressive as in 2006-2008 (*Fig. 21*).

In 2013 the shortage of workforce was most acute in consumer goods industry where as of the end of the year one third of enterprises reported that the number of workers was insufficient relative to the demand projections and the balance of estimates was as low as -24 points. Still, that was not the worst post-crisis result of the sector – in 2010 the share of such responses reached 46%. So, the consumer goods industry managed to reduce the deficit of labour. However, at least initially, it was most likely achieved not by means of recruitment but owing to the revision of demand and output projections. While in 2010 the shortage of personnel was accompanied by hiring of workers (the balance of employment change was positive) and resulted in the decrease of respective indicator from -39 to -28 points, in 2011

there began lay-offs that nevertheless did not reverse the contraction of shortage down to -18 balance points. In 2013 the intensity of labour loss in the sector increased even more (up to - 13 points) and its outcome was the deterioration of workforce sufficiency down to -24 points. The extent of labour drain in the past year seems to have surpassed the negative adjustment of demand and output projections and presently the sector experiences shortage of workers even for maintaining the shrinking volumes of output.

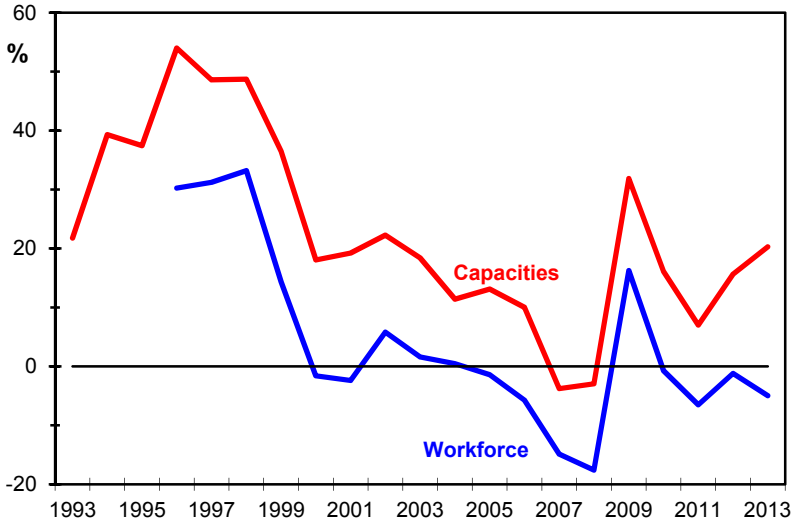


Fig. 21. Average annual balances of capacity and workforce estimates in 1993-2013

Three branches rank second by the shortage of workforce: non-ferrous metallurgy, machine building and food industry where the balance of estimates amounts to -10 points. They also lost workers in 2013 but at different rates: while in metallurgy and machine building the intensity of the process was -6 and -7 points, in food industry – only -2 points. This proportion between estimates of workforce sufficiency and lay-offs can be inter alia due to different prospects of the sectors.

Other branches in 2013 estimated the number of their workers as excessive. The biggest surplus was registered in construction materials industry (+14 points) and ferrous metallurgy (+10 points), the smallest – in chemical industry (+2 points). The workforce situation in these branches was also aggravated by the practice of dismissing workers only at the end of the year. However, the extent of such dismissals (either voluntary or forced) seems to be insufficient as there remained excessive employees.

The third circumstance comes out of the analysis of workforce sufficiency estimates and plans (projections) of enterprises as regards correcting of employment deviations from the "normal" number of employed for this particular enterprise. One should keep in mind that enterprises are free in their estimates of workforce sufficiency, i.e. nothing prevents them from answering that the actual number of workers is excessive ("above sufficient") or vice versa insufficient ("below sufficient"). Meantime in their employment adjustment plans managers have to take into account the actual situation at the labour market, i.e. the actual ability of enterprises to dismiss excessive workers or hire new ones. Calculations show that in 2013 the ability of industry to correct deviations from the desired level of employment at least

at the level of projections fell to a 15-year minimum. Only 58% of enterprises had plans envisaging lay-offs in case of excessive employment, the preservation of personnel in case of ideal number of workers or their recruitment in case of shortage. The historically greatest ability of industry to provide an adequate response to workforce imbalances was registered in 2010 and amounted to 68%. So, over the 3 recent years the tackling of personnel problems has become a more difficult task for enterprises. And it has turned out that the cause thereof is by no means their inability to dismiss surplus workers due to the pressure of authorities. In 2013 26% of enterprises projected such changes in the number of employed that could result in an increase, preservation or appearance of workforce shortage in industry. This is a historical maximum for this indicator. A similar level of projections implying growing shortage of workers was observed in 2008 when the Russian economy and industry were maximally overheated. At the same period the share of projected changes in employment that could result in an increase, preservation or appearance of workforce surpluses was only 15% – a historical minimum for this indicator. The latter's maximum value (30%) was registered in 1997. At present the share of projections implying growth of workforce surpluses in industry is only 16% and as a result 2013 ranks second among all the 18 years of monitoring this indicator. However, similar results were registered in 2011-2012 proving the minimal pressure of authorities on industry in the 3 recent years with the aim to prevent sizable lay-offs in the situation of stagnation. The latter was proclaimed by the head of the Russian government in autumn 2013.

The detailed (per quarter) analysis of 2013 data shows the weakening of industry's ability to correct the workforce imbalances. While at the beginning of the year 61-62% of enterprises were ready to solve their staff problems, in its second half the respective share fell down to 54% – a minimum for the recent 15 years. At the end of 2013 one third of enterprises had plans (projections) of employment change pointing to the growing shortage of labour in industry. The value of this indicator was most close to an absolute maximum over the whole 18-year period of monitoring employment estimates that was registered in October 2008 (42%). At the beginning of 2008 only 18-19% of industrial enterprises were unable to cope with the deficit of workforce.

On the contrary, the expectation of problems with surplus employment at the end of 2013 reduced and was as small as 13%. This is not the lowest level of this indicator implying that there still exists a potential for lay-offs in industry. In October 2011 the projections for preservation of workforce excessiveness fell down to 7% which was most likely due to the forthcoming federal elections (let's note that already in January 2012, i.e. soon after the elections to the State Duma, the industry's inability to cope with surplus employment returned to 15-20% habitual for that period). In October 2008 this indicator equaled 8% conditioned by the highest point of pre-crisis over-heating of the economy. In 1996-2013 there were no other periods demonstrating a clear inability of industry to cope with excessive employment.

So, industry is rather losing workers than dismissing them on its own initiative. This conclusion is supported by the direct data on the workers' reasons for leaving.

According to the data of 2012 and 2013 surveys workers more often leave industrial enterprises voluntarily than are dismissed by administrations. In 2012 the proportion was 65% versus 27%, in 2013 – 76% versus 30%. So, 3/4 of Russian industrial enterprises are losing workers by no means of their own will and this fact explains quite a natural in such situation insufficiency of labour in industry. Therefore, the thesis about the need to dismiss "extra" workers in case of the possible second wave of the crisis requires a serious revision. Most

likely it shouldn't be applied to the major part of industrial enterprises that as it is do not have extra workers relative "to the expected changes of demand". But the obtained data evidences aggravation of problems faced by employers and authorities rather than their alleviation. These conclusions base upon analysis of the reasons for leaving in 2012 and 2013.

The leader among reasons for leaving is "low wages" (*Fig. 22*). For the second year in turn this factor is mentioned by 47% of enterprises. The composition of branches most intensely losing workers due to this reason hasn't changed: non-ferrous metallurgy, food industry, timber processing and construction materials industry. In machine building the loss of workers due to low wages remains at the level of 55%. The contribution of this factor is the lowest in ferrous metallurgy. Nevertheless, in recent time 63-66% of industrial enterprises find the level of wages paid to be normal. This raises doubts about the alleviation of low wages' negative impact on staff problems of enterprises.

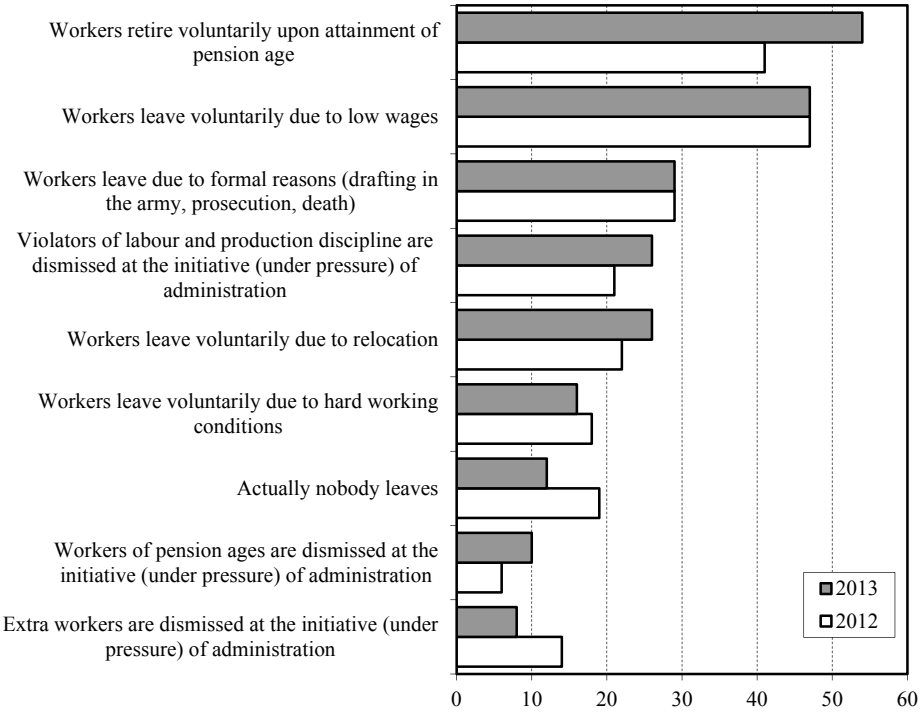


Fig. 22. Actual reasons of workforce drain from industrial enterprises, %

However, in 2013 enterprises faced one more problem that was probably more serious and long-lasting than insufficient wages. The "voluntary retirement of workers of pension ages" has climbed to the first place among reasons for leaving in industry. This fact is the outcome of conjunction of multiple developments in our recent history. The start of economic reforms resulted in the lowering of birth rates in the country and the reduction of the number of graduates from secondary schools in recent years. Drawbacks in the policy of after-school education conditioned creation of such a big number of tertiary institutions that actually any school graduate can find one corresponding to his level of knowledge. On the contrary, the number of vocational secondary institutions shrank as well as the efforts of state to fill them with school graduates. All this resulted in smaller inflow of young people to worker vacancies in industry. Enterprises had to do their best to keep workers of elder ages from retirement. But the objective process of aging that is not responsive to any economic policy tools started to

inconvertibly curtail the number of elderly workers in our industry. In 2013 already 57% of enterprises realized this fact. The growing outflow of pension-age workers was registered in all branches except consumer goods industry (there the share of such quits slightly reduced from 53% to 51%) and food industry (down to 24% from 28%). The biggest growth of voluntary retirements of pensioners was observed in chemical industry (up to 53% from 22%) and ferrous metallurgy (up to 87% from 60%).

The third cause of voluntary quits – "hard working conditions" – retained its importance at the same level both in industry at large and in most branches.

The number of "dismissed at the initiative of administration" grew as well. Similar to the previous year, employers mostly prefer to fire violators of labour and production discipline. At present 26% of enterprises resort to this practice (in 2012 - 21%), most often in ferrous metallurgy (50% of enterprises), consumer materials industry (33%) and machine building (31%). On the contrary, food industry demonstrates steadily low rates of dismissing discipline violators (15%). As compared with 2012, the lay-offs of pension-age workers at the initiative of administration grew as well (from 6% to 10%) but the moderate scale of this practice is obvious. The detailed analysis showed that in 2013 the only contributor to the growth of forced lay-offs of pensioners was ferrous metallurgy. While in 2012 only 8% of enterprises reported such cases (and it was not the highest result as compared with other sectors), in 2013 the respective indicator grew up to 40% – well above other branches where it ranged from 2% to 7%. The persisting low demand for metals makes enterprises of the sector resort to all means of reducing costs that are possible in the current economic situation in Russia. Prioritizing current problems they probably undermine their future development.

The dismissal of "extra" (according to the employers' opinion) workers remained in the last place among reasons for leaving having lost several percent points over the year. This fact seems quite logical taking into account the shortage of labour in industry that increased in 2013. Currently only 8% of enterprises dismiss workers for that reason. This indicator could be lower if not for ferrous metallurgy and food industry. In the former the share of enterprises laying off extra workers remained at the level of 20% while in the latter the frequency of applying this tool for reducing costs increased (although the growth was not significant – up to 7% from 5%). On the contrary, the scale of such dismissals in other industries diminished.

The performance of Russian industrial enterprises suffering from the shortage of labour and losing it due to demographical reasons is also aggravated by apparent problems with recruiting new, especially skilled workers. The finding of such workers on the market still remains the most difficult task. Only 37% of enterprises state that "there are no special problems with hiring skilled workers, i.e. we find and hire them when it's necessary". The probability of finding and hiring other categories of personnel in industry is higher: in 2013 40% of enterprises easily found heads of production and other units, 47% - engineers and office workers, 71% - non-skilled personnel. However, as different from 2012 the situation on the market of skilled labour seems to have changed for the better for employers. First, enterprises got more opportunities to solve their personnel problems by hiring skilled workers (in 2012 only 29% of enterprises could do that). It should be noted, however, that similar improvements took place in respect of other mentioned categories of staff. Second, in 2013 only 5% of enterprises retained the reserve of necessary skilled labour. In 2012 17% of enterprises had such a "reserve". The lowering of staff reserves was also registered for other categories of workers but it didn't exceed several percent points. Meantime, the overall capability of relatively problem-less replenishment of workforce in industry (labour market +

own reserve) remained approximately the same: 42% of enterprises in 2013 versus 46% in 2012. So, the re-ranking of potential sources of skilled labour took place in 2013: henceforth employers will search for such workers "out of gate" rather than "in gate". This can be assessed as a negative circumstance since it implies greater risk for enterprises to face difficulties in hiring workers in case of industrial recovery and feverish demand for labour from businesses already having experience of operation under deficit of skilled personnel. A positive side of the new situation is the lowering of employers' expenditures on maintaining excessive workforce on the staff.

The problems that industrial enterprises encounter in search for skilled workers remained the same. As assessed by enterprises, in 2013 low wages ranked first in the rating of hindrances to recruitment. The frequency of mentioning this factor remained at the same level – 36%. Nearly similar "popularity" in industry had the problem of general shortage of labour supply in the region – it was named by 34% of enterprises (in 2012 – 37%). To the second place they put the dismantling of the system of vocational secondary education. 26% of enterprises (in 2012 – 22%) found that the number of specialists trained by educational institutions was insufficient and 24% of them complained about the quality of graduates' training (in 2012 – 22%). At the third place business self-critically preserved hard working conditions. This factor was again mentioned by 14% of enterprises. 9% of respondents (in 2012 – 6%) considered work in industry to be generally non-appealing ("jobseekers do not apply to our enterprise").

One more direction of IEP's annual monitoring allows to estimate the impact of staff scarcity that was not an infrequent guest in Russian industry even in the period of 2012-2013 stagnation. The long-standing and informal relations with respondents create conditions for receiving direct answers to direct questions including the ones about possible effects of skilled labour shortage in Russian industry.

The deteriorating quality of manufactured products remains the most important sequence of personnel (and first of all skilled workers') shortage. In 2013 37% of enterprises (the same percentage as in the previous year) admitted the fact of this most negative outcome of staff scarcity. Also no changes took place in the composition of branches suffering most from the deteriorating quality of output. In the first place remains machine building where 53% of enterprises admitted the fact (in 2012 – 46%), then follow consumer goods industry (in 2013 – 41%, in 2012 – 31%), food industry (in 2013 – 38%, in 2012 – 41%), timber processing (in 2013 – 38%, in 2012 – 39%) and ferrous metallurgy (in 2013 – 31%, in 2012 – 42%). So, direct estimates of producers paint a highly gloomy picture of the vanishing competitiveness of the sector that should have become a locomotive of Russian economy's modernization. The admission of this fact is hindered by two circumstances: first, by the difficulty of measuring these processes using instruments of traditional statistics and, second, by the utter responsibility for them of authorities the policies of which in the sphere of vocational education have led to such a deplorable result.

The second place among actual aftereffects of staff scarcity continues to belong to the inability to increase output even in case of available orders. About one third of industrial enterprises consistently point to this hindrance to recovery from lingering stagnation. This figure is supported by another indicator of business surveys – the rating of impediments to output growth in industry in which the same share (about one third) of enterprises named shortage of personnel. In 2013 the hindering effect of this factor was the greatest in machine building (46% of enterprises mentioned it against 42% in 2012), consumer goods industry

(43% against 40% in 2012), non-ferrous metallurgy (39% against 18% in 2012) and chemical industry (34% against 23% in 2012). At another pole of this personnel-stagnation rating was ferrous metallurgy where only 10% of enterprises couldn't increase output due to the shortage of labour.

In 2013 an absolute reduction of output due to the insufficiency of workers was registered at 22% of enterprises thus retaining the third place in the general industrial rating of staff scarcity impacts. The leader in decreasing output due this reason was consumer goods industry (49% of enterprises against 51% in 2012). In the second place with a large gap were machine building (32% against 28% in 2012) and timber processing (30% against 23% in 2012).

The "wage response" to the shortage of workers in industry was in the fourth place in 2013. Within two years the application of this tool for fighting deficit of workforce grew from 11% to 19%. Enterprises are forced to increase workers' remuneration even despite stagnation in order not to be left without personnel in the situation of continuous labour drain, the main cause of which according to their own estimates are low wages.

4.2.3. Investment problems of Russian industry

Investment activity that according to the data of official reports has been fading quarter by quarter may eventually spring a very unpleasant surprise in the nearest future. Therefore the analysis of factors hindering growth of investments in Russian industry is of immediate importance.

Usually IEP collects survey data on hindrances to investments in the I quarter when industry is actively developing investment programs for the new year. The set of factors that could be considered hindrances to investments is based on the recommendations of harmonized European survey program and remains unchanged since 1996. It includes: shortage of own funds, high interest rate on credits, difficulties with receiving long-term credits, high prices for construction and installation works and equipment, low profitability of investments and surplus of existing facilities. The latest regular survey was conducted in January 2013. But as the problem of investments' slow down was becoming more and more serious each month, a non-planned survey was made in September 2013. It carried on the traditional multi-year monitoring of hindrances to investments and produced the following results (*Fig. 23*):

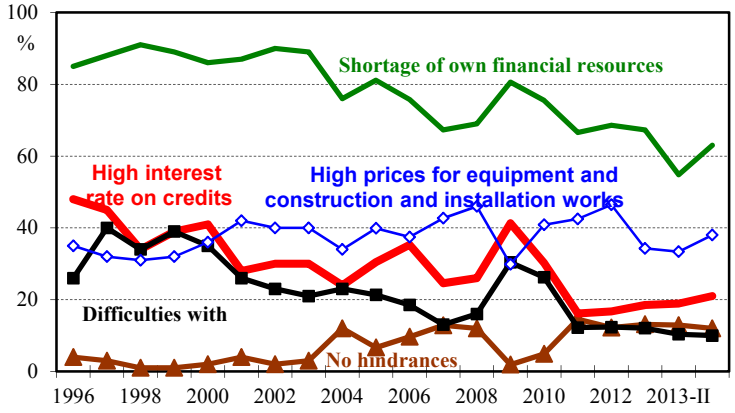


Fig. 23. Hindrances to investments in Russian industry

The results of the second survey in general supported the figures of January survey except for the first (most frequently mentioned) factor in the rating of hindrances – the shortage of own financial resources. The mentioning of this hindrance by enterprises fell by 12 percent points down to 55%. It implies that only slightly over one half of industrial enterprises suffer from the shortage of own funds for investments. The maximum level of this indicator amounted to 90% and was registered at the beginning of 1998, 2002 and 2003. The result of monitoring this deterrent seems to be quite logical taking into account at least two circumstances. First, according to estimates of the Development Center the amount of "surplus" funds on accounts of enterprises continues growing. Second, according to data of IEP surveys the actual (as different from reported) financial and economic performance of Russian industrial enterprises in 2012-2013 was not getting worse – only 13% of enterprises assessed it as unsatisfactory. For reference – in 2009 the share of such assessments was as high as 32%, in the best post-crisis 2007 – 10%. Meantime, enterprises' projections as regards the change of their performance in 2013 were even several percent points better than in 2012.

In 2013 the highest sufficiency of own funds for investment projects was registered in ferrous metallurgy (where 59% of enterprises did not consider their shortage to be a hindrance for investments), food industry (56%) and electrical power industry (51%). It's worth noting that the frequency of complaints about high interest rate on credits was the lowest in the same sectors (15%, 14% and 11%, respectively). The deterring effect of insufficient own funds quite predictably diminished with the growth of unit size: while small and medium enterprises mentioned this factor in 72% of responses, very large ones did it in 59% thereof.

The second (albeit, most popular with officials and experts) problem of the sources of finance is high interest rate on credits. But beginning from 2011 it actually worried only 16-19% of industrial enterprises and in 2013 slid down to the 4th place (19%) in the rating of traditional hindrances being monitored since 1996. Complaints about interest rate are mostly heard from enterprises in chemical industry (28%) and construction materials industry (25%). As one could expect, its negative effect on investment activity reduces with the growth of enterprise size.

Difficulties with receiving long-term credits in 2013 were also minimal over the whole period of monitoring. At present they are experienced by only 10% of industrial enterprises. In the 1990's this hindrance was mentioned by 40% of respondents, in 2009 – by 30%. These difficulties are most often encountered in chemical industry (21%) and electric power industry (15%) which can be due to different understanding of "long term" by enterprises of the named sectors and their creditors.

So, business assessments prove that financial constraints to investments in 2013 and especially at its end were minimal over the whole period of monitoring. The accumulation of own funds by enterprises even in the situation of stagnation and the softening of credit terms by banks even in case of long-term lending extend the financial basis for potential investments in Russian industry. These results and apparent conclusions make one switch attention to other factors hindering investment activities of Russian industrial enterprises.

The negative effect of high prices for construction and installation works in 2013 was also minimal for the period of monitoring: they were mentioned by only 33% of enterprises. It was certainly a consequence of stronger competition between builders and producers of equipment for performing the shrinking volumes of construction works and machinery supplies. This indicator was slightly lower only at the end of 1990's and in 2009 that was a crisis year for investments. The negative effect of prices reached its peak in the pre-crisis 2008 and at the

beginning of 2012 when the combination of investment plans and investment opportunities permitted service suppliers to raise prices. So, in 2013 the price factor was also at the most comfortable level for investors (certainly relative to other periods and by Russian standards). It can be excluded from the list of potential barriers to investments.

On the contrary, the negative effect of low profitability of investments in 2013 reached its maximum. In the situation of decelerating price growth that got increasingly widespread in industry 20-25% of enterprises could not ensure acceptable rate of return on investments even despite consistent efforts to reduce costs. The most affected were enterprises in ferrous metallurgy (30% of them) and machine building (25%). Meantime enterprises in electrical power industry (even after the announcement about possible freezing of their tariffs) showed the least concern about low profitability of investments (8%).

In 2013 the hindering effect of surplus capacities on investment activity in industry was also record high. At present 10% of enterprises directly admit that they have so many idle machines and equipment that their modernization or increase of fleet makes no sense. Meantime in 2012 the proportion of such statements was only 3% - almost the same as in the favourable for Russian industry 2005-2006 and 2008. So, by this indicator 2013 was the worst year for launching investments. But not in all sectors. The counter-investment surplus of capacities was the biggest in ferrous metallurgy (32% of enterprises in the sector admitted the fact) and food industry (14%). At the same time in chemical industry and timber processing this factor was a hindrance for only 2% of enterprises.

In general the analysis of traditional factors considered to be hindrances to investments has not revealed a principal deterioration of current terms for investing in modernization and expansion of capacities. Rather the opposite is true since the mentioning of most widespread deterrents has become less frequent and the factors whose impact is growing rank last in the rating of hindrances (as assessed by enterprises) and cannot sufficiently explain the increasingly apparent reluctance of industrial enterprises to invest in production. Due to this some additional factors reflecting the specifics of the current period of national economic development were included in the September survey. The results showed that new constraints (some of which had informal nature) well complemented the traditional list of factors and took the third, the fourth and the fifth places in the rating (*Fig. 24*).

It has turned out that the most widespread hindrance among the ones newly included in the IEP's monitoring is the uncertainty about prompt recovery of the Russian economy. 22% of enterprises mentioned this factor thus attaching to it the same importance as to low profitability of investments and high interest rate on credits. Let's note that the survey was conducted in September, i.e. before the public admission of problems in Russian economy by the head of the government and declaration of his intention to take control over their solution. It is logical to suggest that if the survey was done after the proclamation of these estimates and plans, the above hindrance would have gained several more points.

Meantime uncertainty about prompt recovery of the world economy cherished by all Russian officials as the cause of our problems is admitted as such by only 8% of industrial enterprises.

The detailed analysis shows that the strongest dependence of investment intentions on the prospects of Russian economy is currently observed in ferrous metallurgy where 39% of enterprises point to this factor. Moreover, this cause ranks first in the sector by 10 points surpassing the most widespread deterrent to the investment process in Russian industry, i.e. the shortage of own funds. In other branches the impact of uncertainty about prompt recovery

of the Russian economy on investments is much smaller – the place of this factor in their ratings is far from the top. In non-ferrous metallurgy and consumer goods industry it is mentioned by slightly over 1/4 of enterprises, in machine building – by slightly over 1/5 of them, in construction materials industry – by 12%. The lowest dependence of investment plans thereon is registered in food industry. It seems quite natural as the country's population constantly needs feedstuffs and so the industry has to maintain production and investments at a certain (at least minimal) level irrespective of the phase of economic cycle.

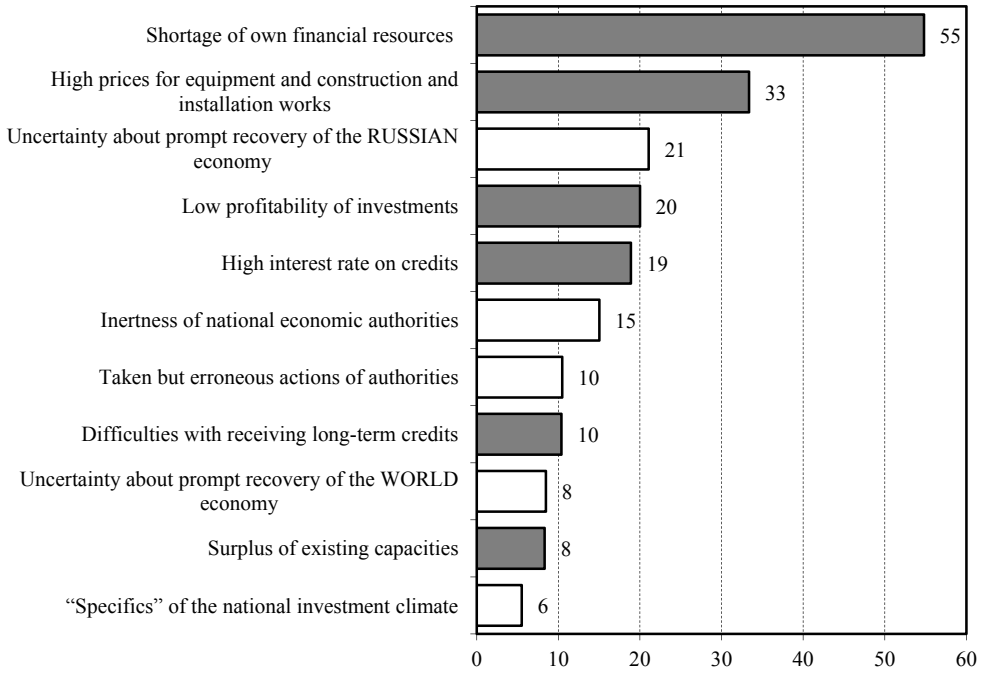


Fig. 24. Structure of hindrances to investments as assessed by Russian industrial enterprises in September 2013 (traditionally monitored factors – grey color, newly monitored factors – white color)

The negative effect of uncertainty about prompt recovery of the world economy on investment processes is also generated primarily in ferrous metallurgy where 27% of enterprises admit this fact (the second place in the sector's rating of hindrances). In other branches this factor is mentioned by 8% or 7% of enterprises at the most (timber processing and machine building, respectively). So, the attributing of problems with investments in Russian industry to the difficult economic situation in partner countries would be amazing for the absolute majority of domestic enterprises.

The fourth place in the current industry's rating of hindrances to investments belongs to inertness of national authorities. It's logical to suggest that these assessments primarily relate to the lack of feasible plans for recovery from the lingering stagnation which is the main cause of investments' slow down. There was enough time from 2011 (i.e. the moment of the first outburst of concerns (expectations) about the second wave of the crisis) to work out such measures. The actions taken by authorities were either inappropriate or the support of Russian industry was not their primary target. It's worth noting that the assessment of authorities' inertness varies greatly by sectors. The most displeased with economic authorities are timber processing (27% of enterprises), consumer goods industry (23%) and construction materials

industry (22%). Meantime in ferrous metallurgy only 1% of enterprises think that authorities are not doing anything in this field. The latter fact can be attributed to strong lobbying capabilities of the largest producers in the sector. This thesis is supported by assessments of authorities' actions depending on the size of enterprise: while small enterprises point to their inertness in 37% of responses, for medium enterprises the respective share is already 18% and for large ones – only 13%.

Erroneous actions taken by authorities in order to overcome the slow down of investments were mentioned by 10% of enterprises participating in the September survey. This result can be interpreted as quite acceptable since 90% of the authorities' endeavors have found support of business. However, in one branch the official anti-crisis (in the part pertaining to investments) actions were assessed as erroneous by a high share of respondents – 27% of enterprises in food industry pointed to this fact. In other sectors the share of such responses was about 10% and in chemical industry and non-ferrous metallurgy even smaller – below 1%.

4.2.4. Precautions of industrial enterprises against the second wave of the crisis

The Rosstat data on dynamics of industrial production in 2013 showed that month by month the crisis was approaching or that at least there were no signs of overcoming stagnation and shifting to sustainable growth. These circumstances made us resume the analysis of anti-crisis measures actually implemented (as opposed to projected) in Russian industry. For the first time enterprises were asked this question in 2012, for the second time – in 2013. The comparison of results of these two successive surveys leads to the following conclusions.

As compared with 2012, in 2013 industry was forced to more widely resort to anti-crisis measures. In some cases the increase ranged from 1 to 3 percent points while in other it actually doubled. And only in two cases enterprises reported a decrease of precautionary preparations by 1 and 4 percent points (*Fig. 25*).

"Accurate" price policies became the leader in 2013. Earlier it ranked second but sluggish demand forced enterprises to use price factor more actively in order to win the competition for consumers and to prevent a crisis drop of sales. As a result the anticipation of the second wave of the crisis currently influences price policies of over one third of industrial enterprises. The most wide-scale anti-crisis adjustments of prices were registered in ferrous metallurgy where 71% of enterprises reported resorting to it (in non-ferrous metallurgy – only 3%), timber processing (45%) and consumer goods industry (43%).

The search for more cost-efficient suppliers (i.e. the reduction of costs) has preserved its popularity with Russian industry at the level of 33%. And here again an absolute leader is ferrous metallurgy (71%). Other industries apply this measure in at least twice smaller proportion of cases and in food industry only 15% of enterprises resort to it.

The minimization of finished goods stocks was the only measure the use of which in industry reduced as compared with the 2012 survey. But it fell by only 4 percent points leaving this tool at the third place (although in company with other measures the popularity of which grew up to 24%). The weakening of importance attached by enterprises to anti-crisis stock management probably became one of the reasons of record high surplus of finished goods stocks in the first half of 2013. And the highest frequency of applying measures for minimization of stocks was again registered in ferrous metallurgy. On the other pole were

non-ferrous metallurgy and food industry that actually did not use this tool in fighting (pre)crisis developments.

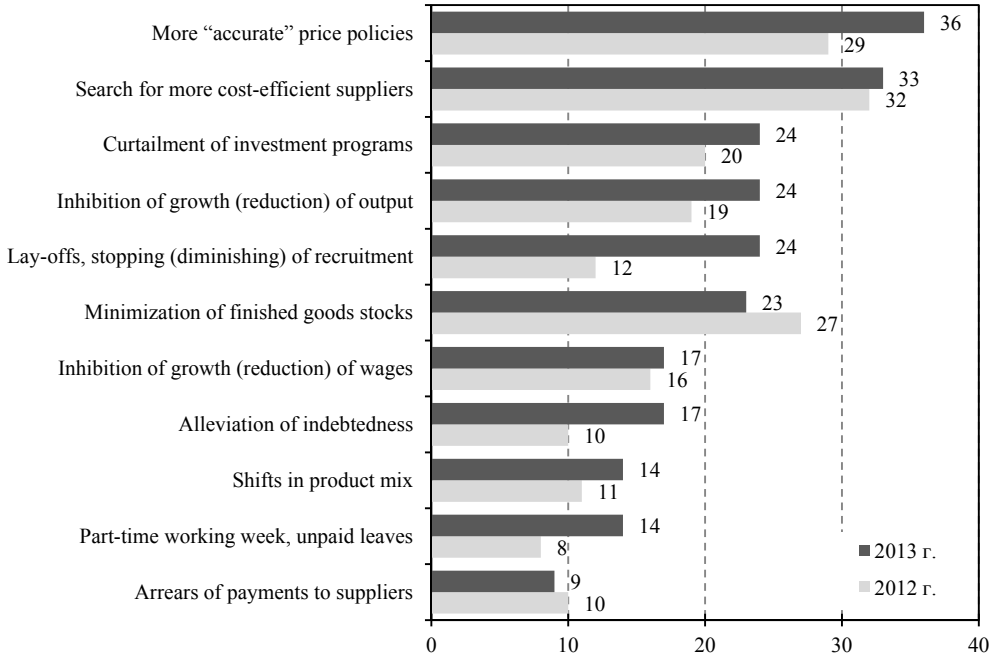


Fig. 25. Actual taking of precautions against the second wave of the crisis in Russian industry, as % of respondents

The extent of use by industry of a whole set of measures expanded from the former 12-20% of enterprises to 24%. The biggest increase was registered in the application of anti-crisis adjustment of the number of employed. While in 2012 only 12% of enterprises resorted to lay-offs, stopping or diminishing of recruitment, a year later such actions were taken twice more frequently. The leader was the same – ferrous metallurgy where 34% of enterprises reported having made pre-crisis adjustment of personnel. However, in this case other industries did not lag far behind the leader: in machine building 32% of enterprises adjusted the number of employed, in non-ferrous metallurgy – 30%. But the initiative here seemed to belong to workers voluntarily leaving enterprises rather than to employers.

The popularity of one more anti-crisis HR measure increased greatly in 2013. The shortening of working week and sending of workers to unpaid leaves was used in industry almost twice as often as a year earlier. An absolute leader here was machine building where this tool was applied by 27% of enterprises, then followed non-ferrous metallurgy (14%) and consumer goods industry (11%). Meantime the incidence of direct inhibition of growth (reduction) of wages in industry remained the same. This measure was most frequently applied in timber processing (24% of enterprises), consumer goods industry (21%) and machine building (21%).

In 2013 one fourth of Russian industrial enterprises curtailed investments as a precaution against resumption (aggravation) of crisis. The impact of crisis expectations on investment activities was the greatest in metallurgy (as followed from reports of 54% of enterprises in ferrous metallurgy and 35% of enterprises in non-ferrous metallurgy), machine building (24%) and timber processing (23%).

The volumes of output also became more affected by possible crisis developments. In 2013 this fact was admitted by 24% of enterprises against 19% in 2012. The strongest impact of crisis anticipations on output was observed in ferrous metallurgy (where it was admitted by 46% of enterprises), timber processing (26%), machine building and consumer goods industry (25% each). The possibility of the crisis had absolutely no effect on production in food industry.

At the beginning of 2013 the alleviation of indebtedness climbed to the fourth place in the general rating of industry's precautions against a possible aggravation of crisis developments. Such actions were taken by 17% of enterprises. They were most popular in ferrous metallurgy (reported by 50% of enterprises in the sector), timber processing, consumer goods industry (18% each) and machine building (15%).

4.2.5. Estimate of industry's demand for anti-crisis measures to be taken by the government

The program of crisis monitoring launched several years ago by the Gaidar Institute for Economic Policy and based on business surveys allows to assess the practical efficiency of anti-crisis measures taken by the government as early as at the design stage.

Summarizing the results of three recent years of monitoring, an absolute leadership belongs to three well-known measures of support to the real sector of economy: constraining of increase of tariffs by natural monopolies, alleviation of tax burden and fostering of demand for industry's output (*Fig. 26*).

According to business assessments, the growth of tariffs is the most persistent crisis-provoking measure. In 2011-2013 on the average 65% of respondents pointed to the possibility of industrial recovery in case of constraining their increase. No other anti-crisis measure was so popular with industrial enterprises. In 2013 2/3 of them could have ensured so much needed increase of industrial output if the state listened to appeals to constrain the growth of tariffs.

So, the state that created and nurtured monopolies now has to engage in a severe battle with them in the hope to revive the rest of the economy and industry in particular. The repercussions of this struggle could be traced in speeches of the country's top officials before the decision on freezing tariffs was taken in autumn 2013 and after that – in plans of monopolies to cut investments. But even before the decision was taken business seemed to have made its own attempts to diminish the negative impact of state monopolies on industrial performance. Russian Railways have officially admitted the decrease of carried volumes. Given the lack of data on transportation by trucks, this admission allows to suggest that enterprises are starting to decline services of the monopolist in favour of more competitive and flexible motor transport when it's possible.

In 2011-2013 "alleviation of tax burden" ranked second in the rating of measures most needed for the recovery of industry. The maximum demand and hope for state assistance in this field was registered in 2012 when 73% of enterprises were ready to respond to such a gesture by increasing output. The 2012 result was all the more unique as a year before (in 2011) tax breaks could have helped only 44% of producers. In their anti-crisis policies enterprises focused on lowering costs and expected the same from the state. But these expectations were never to come true while the directions and efficiency of state expenditures probably left business astonished and discontent. In 2013 the industry's demand for revision

of taxes averaged 68% and was the highest in food industry, timber processing (80% each), machine building (78%) and consumer goods industry (76%).

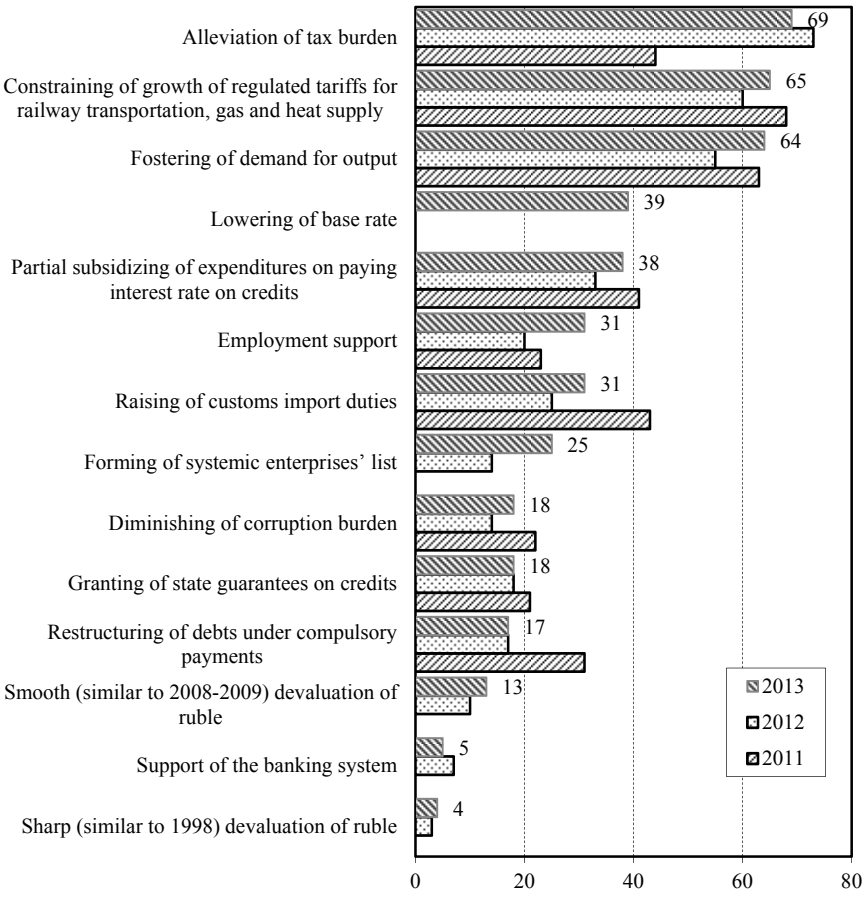


Fig. 26. Rating of desirable anti-crisis measures to be taken by the government (as assessed by Russian industrial enterprises, %)

The fostering of demand for output is regarded as necessary by 63% of enterprises and differs greatly by sectors. While in ferrous metallurgy and machine building it is awaited by 74% of producers, in food industry the respective share is only 37%, in non-ferrous metallurgy – 34%.

Possible government actions in the sphere of lending to the real sector of economy form the second echelon in the rating of anti-crisis measures. The novelty of 2013 is that "the lowering of base rate at which banks receive money from the RF Central Bank for crediting enterprises" has got support of 38% of producers and clearly lags behind the leaders. Although easy to implement, this measure so far gets stuck on an apparent reluctance of the Bank of Russia to assume the responsibility for possible and unpredictable inflationary after-effects of such actions. Besides, between the RF Central Bank and enterprises there are commercial banks supposed to transfer cheaper funds to enterprises. Meantime, the experience of 2008-2009 shows that these institutions may actually ignore the instructions of economic authorities as regards the crediting of real sector. With respect to the current situation this implies low probability of reduction of market rates at which credits will be offered to the most part of industrial enterprises.

Enterprises find that they can get an equal but real benefit from partial subsidizing of expenditures on paying interest rate on credits. The expediency of this measure in the course of 2008-2009 crisis was admitted by 20% of producers. The growth of its popularity in 2011-2013 may be due to the hope that the priority will be given to this form of credit support instead of the then used pumping of cash into the banking system coupled with appeals not to curtail crediting of the real sector. At present the latter actions seem reasonable to only 4% of enterprises.

The third echelon of anti-crisis (growth promoting) measures includes government actions targeted at the support of employment and raising of customs duties on imported products. At the current historical stage mechanisms and directions of possible steps at the labour market can differ from the ones taken in 2009-2010. Then the number of employed in industry was excessive due to the sharp production drop and constraining of lay-offs by authorities. Now the situation is different: there is not enough workforce for a moderate and even zero production growth, workers are leaving industry on a massive scale and enterprises project further reduction of personnel. It's time for authorities to think not about the prevention of lay-offs and aggravation of social tension but about attraction of workers to industry that has got depleted inter alia due to the growth of wages in the budgetary sector.

In 2013 the negative impact of imports on Russian industry became rather strong depriving domestic producers of a growing share of the market. The current pre-crisis level of this factor's importance increased the demand for state protection against imports 1.5 fold as compared with previous years.

In 2013 the need for target support of systemic enterprises in Russian industry grew up to 25% from 14% a year before. But these measures have not been so far included in the list of proclaimed actions to be taken by authorities thus undermining hopes for personal treatment by the state that are cherished by about one third of enterprises in machine building and consumer goods industry.

The possible (already underway?) devaluation of ruble considered by economists to be an efficient measure for protecting domestic producers actually rounds out the rating of measures targeted at the stimulation of economy (as assessed by industry). Only 12% of enterprises now speak for a smooth devaluation of national currency. In consumer goods industry that is traditionally most affected by import supplies the devaluation of ruble can help only 7% of enterprises. The cheapening of own output relative to imported commodities seems to be less important than the rise of prices for imported equipment.

Summing up the results of multi-year monitoring of efficiency assessments relating to potential anti-crisis (growth promoting) measures to be taken by the Russian government, the following conclusions can be made:

First, to the opinion of industrial enterprises the currently debated, implemented or earlier applied economic policy measures differ greatly by their efficiency. It would be very irrational to ignore this difference.

Second, the box of most efficient measures is stable, time-proven and largely adopted by authorities. There is little left to do – to ensure their implementation both by overcoming the resistance of monopolies and by suppressing own ambitions.

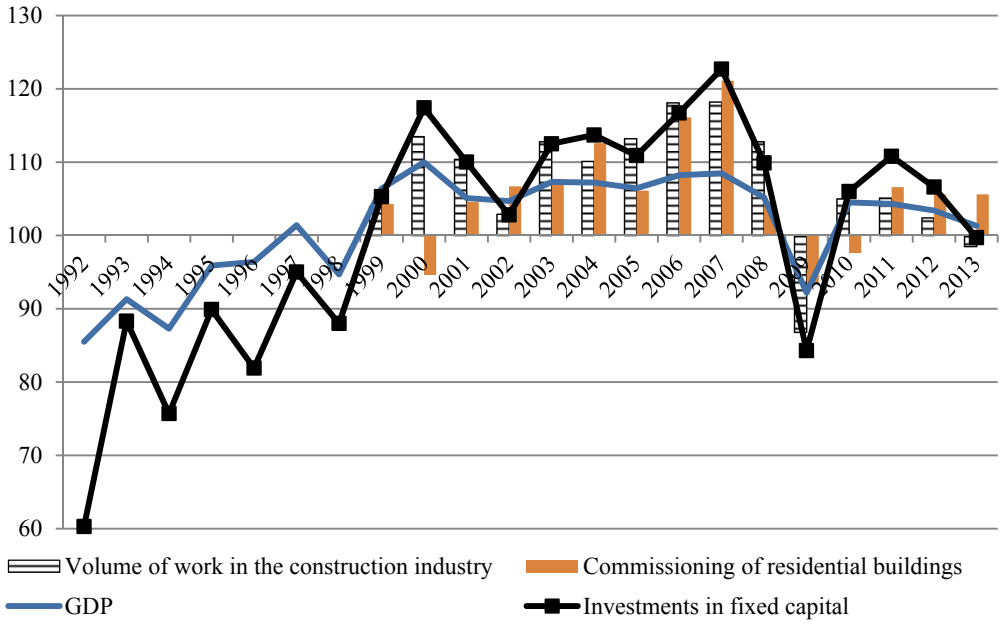
Third, the novelties of 2013 (the lowering of base rate, infrastructural projects) may have unpredictable or remote effects while the GDP growth rates need to be accelerated here and now.

4.3. Investment activity

4.3.1. Internal domestic investments in fixed capital

Conditions and factors activities investment activities in 2009-2013

Transformational changes that have been taking place in the Russian economy over the past 15 years have had a substantial impact on the structural characteristics of the investment process. Comparative analysis of economic development between in 1999 and 2013 allows the identification of common and specific conditions, factors and risks, depending on the investment potential, demand for investment resources and the motivation for investment activities. In 2013, Russia's GDP increased 1.87 times, and investments in fixed capital by 2.89 times compared with 1999. The dynamics of the investment activities during the period under study were not uniform and were determined by the influence of changes in world market conditions, on the one hand, and the level of activity of Russian enterprises in the internal market, on the other (*Fig. 27*).



Source: Federal State Statistics Service (Rosstat).

Fig. 27. Dynamics of investments in fixed capital in 1992-2013, as % of the previous year,

When the level of potential investment demand in the domestic market was high, stabilisation of the share in the GDP of expenditure for investment purposes reflected the lack of mechanisms to transform savings into investments, which ultimately resulted in restraining of economic development. Development based on extensive use of primary factors, systematic growth of production costs and a high proportion of imports in domestic market resources led to low competitiveness of the Russian economy.

Under the influence of a sharp decline in income from foreign trade the share of gross saving in GDP in 2013 fell to 24.6% and exceeded the 1998 figure, which had been the minimum for the whole 20-year observation period, by less than 1%. It should be noted that, in the period from 2009 to 2013, despite the sharp decline in income, the anti-crisis measures

taken helped to keep the share of investment in fixed capital at an average level of 19.9% of GDP. This was achieved by increasing the average ratio of transforming savings into investments to 73.7% during 2009-2013, in comparison with 53.8% for the previous 8 years. However, due to the undeveloped financial market, inter-industry floating of income and savings was not provided, in particular, between those of exporters, and the sectors serving domestic demand. The savings rate significantly exceeded the accumulation rate and the share of investments in fixed capital in GDP, with the Russian economy acting only as a net lender.

Table 9

Capital transactions account, based on current prices, RUR bn

	2008	2009	2010	2011	2012	2013*
Gross savings — total	12,459.5	7,810.7	12,201.64	16,495.63	17,729.92	18,661.5
Gross accumulation of fixed capital	9,200.8	8,535.7	10,014.4	11,950.5	13,603.7	14,316.4
Changes in inventories	1,325.3	–1,190.9	458.3	2,032.2	1,626.4	1,168
Net lending (+), net borrowing (-)	1,933.4	465.9	1,728.936	2,512.927	2,499.816	3,177.1
For reference: investment in fixed capital	8,781.6	7,976.0	9,152.1	10,776.8	12,568.8	13,255.5

*) preliminary data,
Source: Federal State Statistics Service (Rosstat).

The phenomenon of the Russian economy is that the growth of export earnings and a relative increase in the lending and investment attractiveness of the country has increased the transformation of capital into reserves. In 2004, in order to reduce the risks of adverse international economic conditions, and as an instrument to sterilise excess money supply in circulation, the Stabilization Fund had begun to form, and in 2008 it was transformed into the Reserve Fund and the National Welfare Fund (*Table 10*)

Table 10

Monetary values of the Reserve Fund and the National Welfare Fund in 2008-2013, (end of year)

	Reserve Fund	National Welfare Fund	Reserve Fund	National Welfare Fund
	RUR bn		as % of GDP	
2008	4,027.64	2,584.49	9.8	6.3
2009	1,830.51	2,769.02	4.7	7.1
2010	755.21	2,695.52	1.7	5.8
2011	811.52	2,794.43	1.5	5.0
2012	1,885.68	2,690.63	4.0	4.0
2013	2,859.72	2,900.64	4.3	4.3

Source: Federal State Statistics Service (Rosstat).

Due to the fact that just before the crisis, the aggregate volume of the Reserve Fund and National Welfare Fund had reached 16.1% of GDP, the implementation of an anti-crisis programme in 2009-2010 became possible. Not only did the accumulated volume of funds contribute to reduction of the negative effects of the crisis in the financial and real sectors of the economy, but it also ensured the implementation of state social obligations and stimulated growth of the economy and investment activities. In 2013 active discussions around the problem of the use of the National Welfare Fund to finance major infrastructure investment projects began.

The dynamics of GDP in the short term are more closely associated with such growth factors as inflation, surplus (deficit) of the state budget, the quality of the institutional environment and the restructuring of enterprises and companies in order to reduce costs, excessive labour forces and energy consumption as well as to close down inefficient industries.

In the context of the medium- and long-term development of the Russian Federation the role of investment activities increased dramatically in response to the need to address the problem of deep structural and reproduction imbalances, high energy production, inefficient location of enterprises, insufficient use of material and labour resources and a high proportion of non-competitive goods. At the corporate level, the need for solid investments is associated with a transition to strategic development, including the transition to new products, markets, management techniques and new patterns of corporate control.

Main trends in the financing of investment activities in 2009-2013

The principal aspect of economic development in the period 2009-2012 was the shift toward the increased funding of investments in fixed capital from the own funds of enterprises and organisations, whilst reducing the participation of borrowed funds. The proportion of these own funds in the financing of investments in fixed capital rose to 46.1% in 2013, as compared to 41.0% in 2010. The structure of use of equity funds of enterprises in investment activities closely corresponded with their financial condition. In 2013, the proportion of gross profits in GDP dropped to 28.8% in comparison with 29.6% in 2012, and 32.6% in 2010. The net financial results of enterprises and organisations in 2013 amounted to 87.2% of the same indicator in 2012, while the proportion of profitable enterprises declined by almost 1% compared to the previous year. Furthermore, in 2013, in line with the trend for a reduction in the rate of return existing over the previous decade, the share of profit in investment resources decreased, giving way to other sources.

Table 11

Monetary and financial resources of investment activities in 2008-2012

	2008	2009	2010	2011	2012	2013
Income of consolidated budget, RUR bn	16,003.9	13,599.7	16,031.9	20,853.7	23,435.1	24,082.4
Gross profit in the economy, including gross mixed income, RUR bn	13,498.7	11,921.1	15,093.7	17,172.5	18,255.3	19,142.1
Net financial result, RUR bn	3,801.2	4,431.6	6,330.6	7,252.7	7,716.5	6,650.5
Share of profit-making organisations, in %	71.7	68.0	70.1	71.9	74.1	73.2
Increase in financial assets of the population and real estate acquisition, RUR bn	2323	4,923	6,719	5,785	5,852	6,250.6*
Average per capita income (per month), RUR	14,940.6	16,838.3	18,958	20,780	22,880	25,522
Loans, deposits and other invested assets, provided by organisations, individuals and credit institutions, RUR bn	19,362.5	19,179.6	21,537.3	27,911.6	32,886.9	38,767.9

*) preliminary estimates.
Source: Federal State Statistics Service (Rosstat).

The main reduction of investments in respect of sources of funding was due to the sharp decline in finance for investment provided by parent entities – large holding companies, joint stock companies and financial-industrial groups with state participation. The proportion of investments of such controlling entities in the structure of funding sources had fallen to 12.6% in 2013, compared to 16.8% in 2012 and 19.0% in 2011.

Table 12

Structure of investments in fixed capital by sources of funding (excluding small businesses and investments, which cannot be observed by statistical methods), % of total for 2007-2013

	2007	2008	2009	2010	2011	2012	2013
1	2	3	4	5	6	7	8
Investments in fixed capital — total	100	100	100	100	100	100	100
including by sources of financing:							

Cont'd

1	2	3	4	5	6	7	8
own funds	40.4	39.5	37.1	41.0	41.9	44.5	46.1
borrowed funds	59.6	60.5	62.9	59.0	58.1	54.6	53.9
of which:							
bank loans	10.4	11.8	10.3	9.0	8.6	8.4	9.3
including loans from foreign banks	1.7	3.0	3.2	2.3	1.8	1.2	0.9
borrowings from other organisations	7.1	6.2	7.4	6.1	5.8	6.1	6.2
budgetary funds	21.5	20.9	21.9	19.5	19.2	17.9	18.8
including:							
federal budgetary funds	8.3	8.0	11.5	10.0	10.1	9.7	9.8
budgetary funds of constituent entities of the Russian Federation	11.7	11.3	9.2	8.2	7.9	7.1	7.7
non-budgetary funds	0.4	0.3	0.3	0.3	0.2	0.4	0.3
funds raised in connection with participation interest in construction (organisations and individuals)	3.7	3.5	2.6	2.2	2.0	2.7	3.0
including: population funds	1.5	1.9	1.3	1.2	1.3	1.3	2.3
other	16.4	17.7	20.4	21.9	22.3	20.0	16.3
including:							
funds of controlling entities	11.3	13.8	15.9	18.0	19.0	16.8	12.6
funds from the issue of corporate bonds	0.1	0.1	0.1	0.01	0.01	0.04	0.1
funds from isse of shares	1.8	0.8	1.0	1.4	1.0	1.0	1.0
Out of the total volume of fixed capital investment from abroad	5.4	4.3	4.3	3.8	3.1	3.0	2.2

Source: Federal State Statistics Service (Rosstat).

The change in volume and proportion of borrowed funds in these sources was accompanied by a change in their structure. The proportion of budgetary sources for financing investments in fixed capital in 2010-2013 was generally at a level of 18.9% and remained below pre-crisis levels, however, the proportions of funds used, according to budget system levels, did change (*Table 13*). The implementation of the programme of anti-crisis measures in 2009-2010 was accompanied by an increase in the financing of investment activities from the federal budget, and this compensated for the reduction of expenditure on investment objectives of subjects of the Russian Federation. State investments from the federal budget were implemented through the Investment Fund, the Federal Targeted Investment Programme (FTIP) and Federal Target Programme (FTP). Over the next three years state participation in financing investment activities was decreasing. In 2013, the share of budgetary funds to finance investments in fixed capital amounted to 2.68% of GDP, including, by means of the federal budget: 1.40% of GDP. In 2013, we noted a decline in spending on the Federal Targeted Investment Programme to 1.06% of GDP in comparison with an average over the previous two years of 1.43%. In absolute terms, the budgetary funds provided in 2013 to finance investments in fixed capital increased by RUR 86.0bn compared with the previous year, and amounted to RUR 1,790.1bn. It should be noted that, unlike 2010-2012, the greatest growth, RUR 62bn, was associated with increased investments of subjects of the Russian Federation in the budget investment programmes.

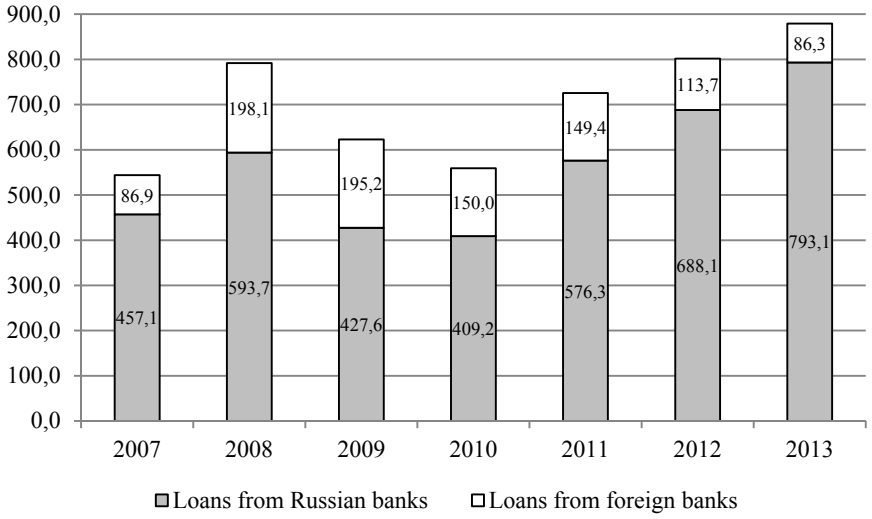
Table 13

The share of expenditure on fixed capital investments in 2007-2013, % of GDP

	2007	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Budgetary funds — total	3.37	3.40	3.41	2.80	2.91	2.76	2.68
including:							
from federal budget	1.30	1.30	1.78	1.43	1.54	1.49	1.40
from budgets of the constituent entities of the Russian Federation	1.84	1.84	1.42	1.17	1.20	1.09	1.10
Federal Targeted Investment Programme — total	1.41	1.02	1.28	1.23	1.40	1.45	1.06
including:							
programme part	0.88	0.70	0.77	0.71	0.93	0.97	0.76
non-programme part	0.32	0.38	0.53	0.31	0.51	0.48	0.30

Source: Federal State Statistics Service (Rosstat); http://faip.economy.gov.ru .

The general trend is towards a greater participation of the banking sector in financing investment activities during the post-crisis period, but the figure for this is still below the pre-crisis level of 2007-2008. (*Table 12*). In 2013, the share of bank loans in the structure of funding sources was 9.3% having increased by 0.9% compared with the previous year. Changes in the structure of bank lending in the last three years are defined by the increasing volume and share of loans from Russian banks, which replaced loans from foreign banks. Compared to 2012, the loans from Russian banks increased by RUR 105.0bn, whilst loans from foreign banks decreased by RUR 27.4bn. (*Fig. 28*).



Source: Federal State Statistics Service.

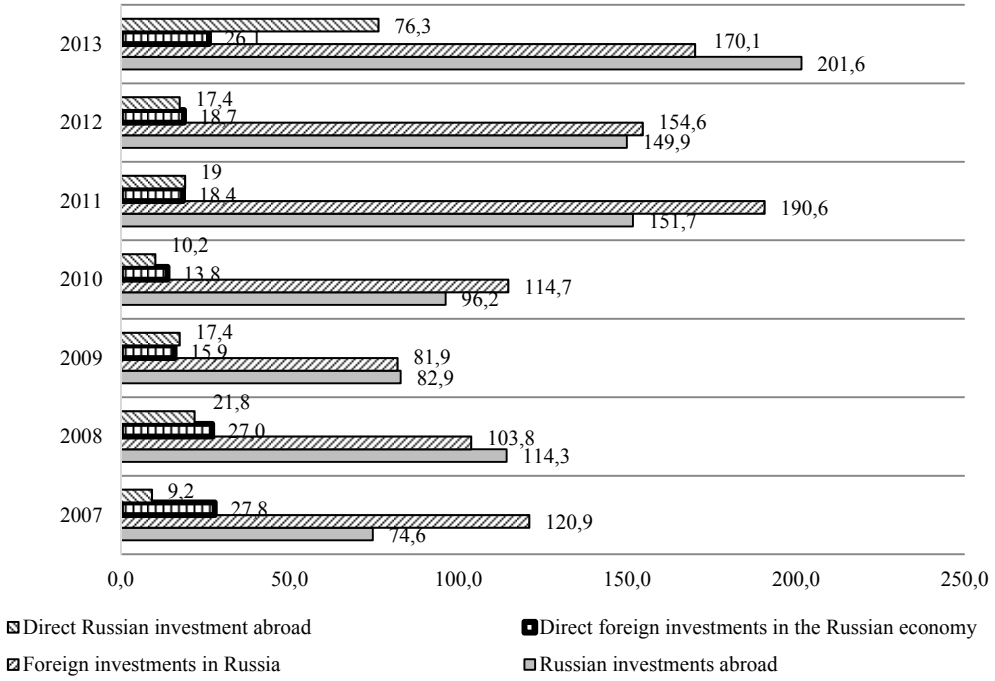
Fig. 28. Bank loans to finance investments in fixed capital in 2007-2013, Rb bn

The crisis of 2008 was characterised by even more rapidly falling rates of foreign investments into the Russian economy compared with the dynamics of domestic investment activities. The decline in foreign loans, while reducing the extent of foreign direct investments, has led to a steady fall in the share of total investments coming from abroad and in the structure of investments in fixed capital to its lowest level for the last 13 years – 2.2% in 2013, even though the volume of direct foreign investments into the Russian economy in 2013 had risen by nearly 40% over the previous year. The change in dynamics of the investment activities of Russian and foreign capital in Russia took place against a background of a sharp increase in net capital outflow. In 2011, the volume of capital exports reached $81.4bn, which roughly corresponded to the sum of the previous two years. In 2012-2013 net capital outflow was in the range of $54.6-60bn per year.

In 2013, the total volume of Russian investments abroad exceeded the volume of foreign investments in Russia by $31.5bn (*Fig. 29*).

When analysing the sources of financing for investments in fixed assets, it should be noted that, in 2009, there was a turning point in the trend for residential construction. In 2010, after a steady increase in housing construction between 2001and 2008, the commissioning of residential buildings decreased by 8.9%, moreover, the commissioning of residential buildings paid for by the public and with borrowed funds decreased by 6.9% compared with the pre-crisis level of 2008. The situation changed in the third quarter of 2011, when the commissioning of residential buildings increased. As a result, by the end of 2011 the growth in terms of commissioning of residential buildings was 6.6%, for 2012 and in 2013 was 5.6%

in comparison with the previous year. The proportion of individual house construction to overall residential construction in 2013 reached 43.8%, exceeding the pre-crisis level of 2008 by 1.1%.

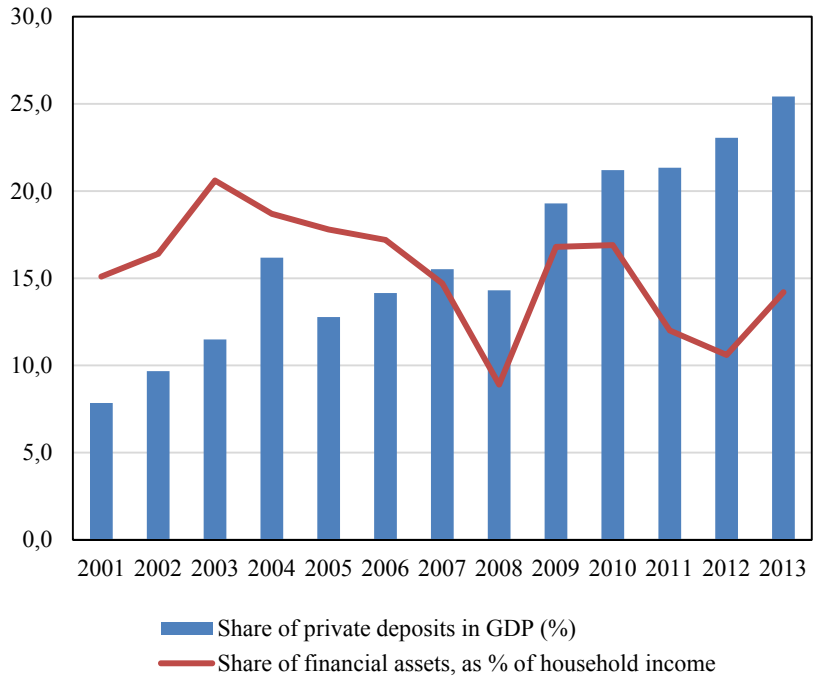


Source: Federal State Statistics Service (Rosstat).

Fig. 29. Volumes of Russian investments abroad and foreign investment into the Russian economy in 2007-2013, in $ bn

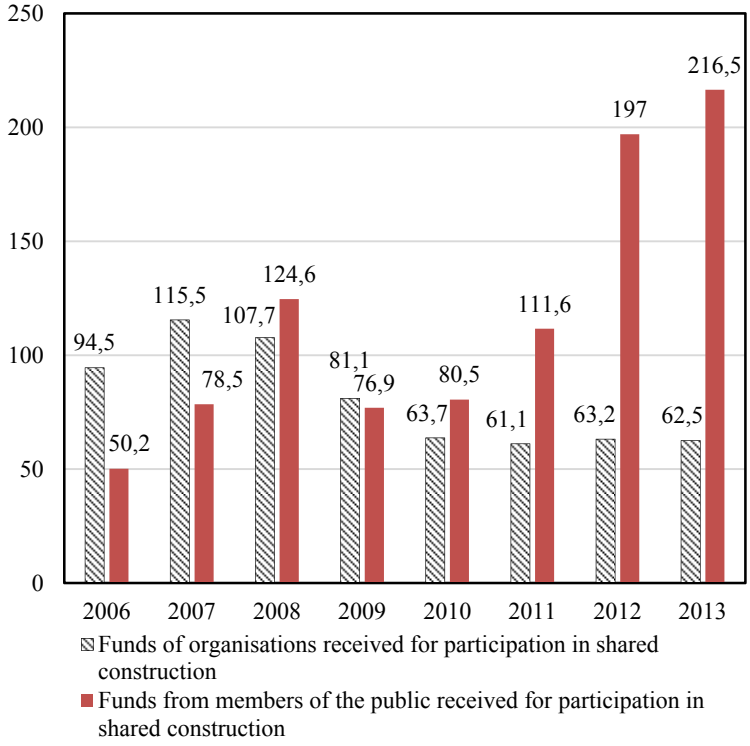
When analysing the dynamics and structure of sources of funding for investment, it is necessary to assess the investment potential of the population. As a result of the population's income growth over the past 10 years, both the volume of investments (deposits) from individuals in financial and credit organisations increased as did the volumes and share of financial asset in the growth of total income. It should be noted, however, that the growth of household savings and the increase in the proportion of savings in income was accompanied by the growth of organised forms of savings, and led to greater participation of households in the formation of investment resources. In 2008, the potential investment resources of households accounted for 14.3%, while in 2012 it was 23.1%, and in 2013, 25.4% of GDP (*Fig. 30*).

The investment activity of the population in 2010-2013 was supported by a growth in demand for loans at lower interest rates. Funds from the public received for use in shared construction have steadily increased over the last three years, and have compensated for the weakening investment activities of organisations (*Fig. 30*). The public remains active in the real estate market. The share of expenditures on the acquisition of real estate in 2013 amounted to 4.4% of household income, while the total amount of funds used to purchase real estate increased by 1.54 times in comparison with 2008.



Source: Federal State Statistics Service (Rosstat).

Fig. 30. Private investments (deposits) in financial and credit organisations and financial assets of the population in the period 2001-2013



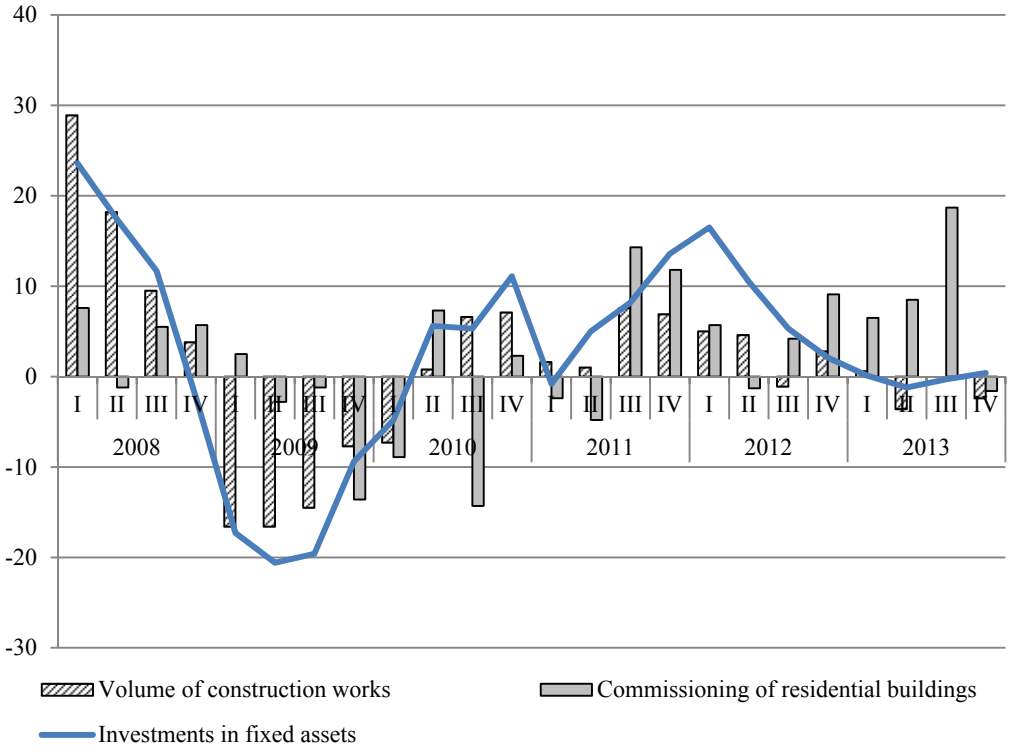
Source: Federal State Statistics Service (Rosstat).

Fig. 31. Funds received for participation in shared construction in 2006-2013, Rb bn

Investments in fixed capital by types of fixed asset and economic activity

The crisis of 2008-2009 radically changed the situation in the investment sphere. In 2009, there was a decrease in the rate of actual volume of investments in fixed assets by 15.7%, which significantly exceeded the decrease in output in basic economic activities (by 9.8%) compared with the previous year. The peak of the investment crisis passed in the first half of 2009, and, since the third quarter, there was a tendency towards a weakening of the decline of investments in fixed assets. However, by 2012, investments in fixed assets exceeded that of 2008 (by 3.2%). The dynamics of business activity in 2012 were extremely diverse, and after the investment growth in the first half of the year, its pace in the third and fourth quarters sharply decreased (*Fig. 32*).

In 2013, the downward trend of investments in fixed assets was quite predictable and was determined by the extremely low level of business activity in the second half of 2012. The stabilisation of investments in fixed capital in the first quarter of 2013, at the level of the previous year, gave way to a decline by 1.2% in the second quarter and by 0.3% in the third quarter (in comparison to the corresponding quarters of 2012). At the end of 2013, investments in fixed assets were at 99.8%, and the volume of works in the construction industry at 98.5% of those of the previous year.



Source: Federal State Statistics Service (Rosstat).

Fig. 32. Dynamics of investments in fixed assets in 2008-2013, as % of the corresponding quarter of the previous year

The dynamics of investment into fixed capital varies between large and small enterprises. While the total volume of investments in fixed assets in 2013 was reduced by 0.2 % in

comparison with the previous year, the investment in fixed capital by the large and medium-sized enterprise sectors decreased by 5.6% (*Table 14*).

Table 14

Growth in the volume of investments in fixed capital in 2009-2013, as % of the previous year

	2009	2010	2011	2012	2013
Investments in fixed capital (for the full range of organisations, including adjustments for investments not observable by direct statistical methods)	84.3	106.0	108.3	106.6	99.8
Large and medium-sized organisations (investments in fixed assets, not including small businesses and investments, not observable by direct statistical methods)	82.56.7	105.1	110.4	100.7	94.4

Source: Federal State Statistics Service (Rosstat).

In 2013, the changes in the structure of investments in fixed assets, by type of economic activity, were determined by the sharp decline in construction and investment activity in the production and transportation sectors, the combined share of which accounted for nearly 70% of investments in the economy. Investments in transportation made up 88.5% of that in 2012, due, on one hand, to the completion of major investment projects in pipeline transport, and, on the other, to a reduction of investment in railway transport with the reduction in volume of freight turnover, and reduced financial performance.

Table 15

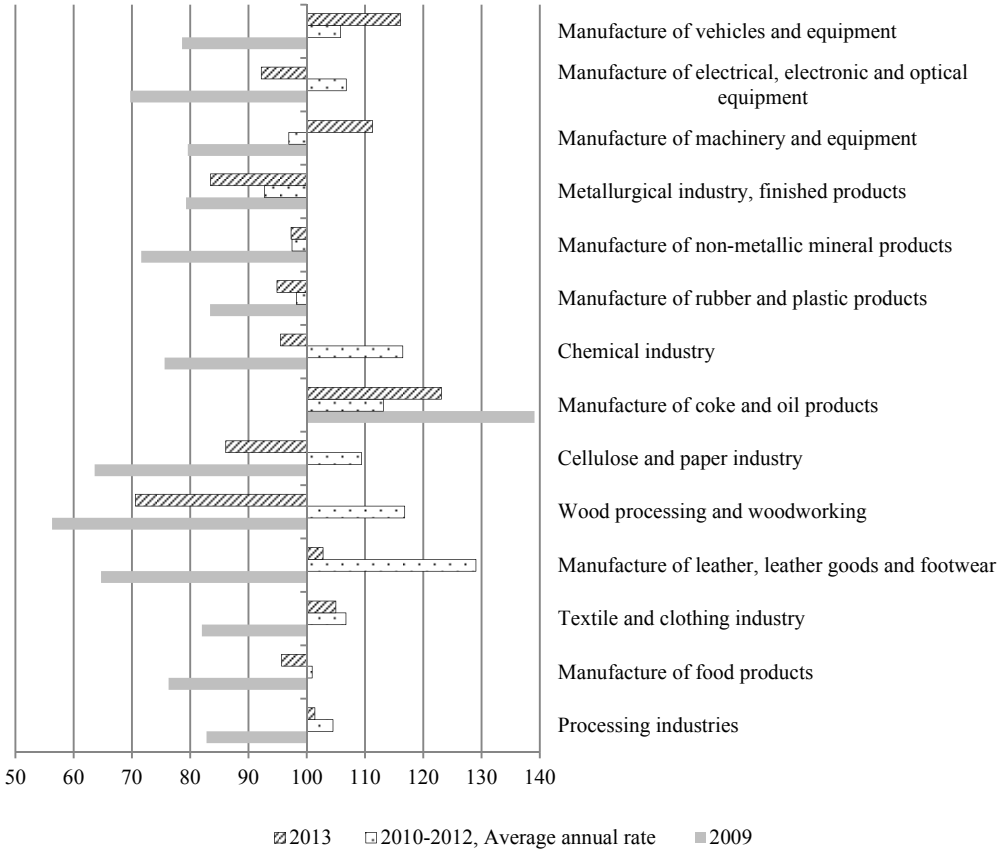
Investments in fixed capital (excluding small businesses and investments, not observable by direct statistical methods) in 2008-2013, as % of the previous year

	2008	2009	2010	2011	2012	2013
Total	109.9	84.3	106.0	108.3	106.6	99.8
agriculture	98.8	78.1	89.1	114.6	92.8	96.0
fishing, fish breeding	88.1	88.1	108.8	137.4	127.4	77.4
production sector	109.9	90.7	106.1	110.9	107.4	96.8
mining	106.5	89.9	106.6	113.8	111.8	93.6
processing industries	112.5	82.8	101.5	105.3	106.7	101.4
production and distribution of electricity, gas and water	111.6	108.9	112.5	114.7	101.7	95.8
construction	126.2	69.9	110.9	90.6	79.9	84.0
wholesale and retail	93.1	79.2	120.2	90.0	107.1	103.1
hotels and restaurants						
transport and communications	116.1	103.5	102.4	118.3	98.4	88.5
financial activity	94.9	99.7	112.9	136.8	111.4	80.8
real estate operations,	109.5	73.7	125.4	91.9	100.8	104.4
public administration	118.3	134.8	115.2	112.4	98.7	93.7
education	108.6	93.0	84.9	122.0	85.2	77.9
health and social services	102.5	79.4	109.7	113.0	93.6	98.8
provision of other services	108.1	83.8	103.6	103.5	111.8	75.0

Source: Federal State Statistics Service (Rosstat).

In the production sector, investment in fixed assets accounted for 96.8% of the 2012 value. One peculiar feature of the investment process in 2013 manifested itself in the maintenance of the positive dynamics of investments in fixed assert in the manufacturing sector (101.4% compared with 2012) while there was a decrease of investment activities in mining (93.6%) and in the production and distribution of electricity, gas and water (95.8%) (*Table 15*). In 2013, growth of investments in the fixed assets for vehicle production (116.1%), the manufacture of machinery and equipment (111.3%) and the manufacture of coke and oil products (123.1%) outstripped the average level for manufacturing. In line with the established model of reproduction of fixed asset investment demand, mining production in

2013 exceeded the pre-crisis level of 2008 by 14.1%. In manufacturing, instability and the reduction of investment in fixed assets over the previous five years (*Fig. 33*) were the consequences of the acute investment crisis of 2008, as well as a lack of motivation to modernise production. In general, in manufacturing, investments in fixed assets in 2013 remained 4.2% below the pre-crisis level, with the exception of oil refining, the chemical industry and production of vehicles that made up almost half of the manufacturing investment demand.



Source: Federal State Statistics Service (Rosstat).

Fig. 33. Growth rate of fixed asset investments in the manufacturing industry in 2009-2013, as % of the previous year

In 2013, the structure of investments by type of fixed assets was transformed by means of increasing the volume and the share of investments in the construction of housing units, as well as machinery, equipment and vehicles whilst reducing the share of investments in non-residential buildings (*Table 16*). In the previous four years, there had been a gradual increase in the share of investment in the acquisition of domestic machines and equipment in the total volume of investments in fixed assets. In 2013, the share of imported machinery, equipment and vehicles in the total volume of investment in machinery, equipment, vehicles amounted to 16.1%. The growth of investment in imports compared to the dynamics of investment in fixed assets continued the trend of recent years and attests to the lack of development of the domestic production of capital goods.

Table 16

Structure of fixed asset investments by types of assets in 2009-2013 (excluding small businesses and informal activity performance)

	billion rubles					As % of the total				
	2009	**2010**	**2011**	**2012**	**2013**	**2009**	**2010**	**2011**	**2012**	**2013**
Investments in fixed assets	5,769.8	6,625	8445.2	8,446.2	9,493.4	100	100	100	100	100
including: housing	346.2	384.3	396.9	439.2	550.6	6	5.8	4.7	5.2	5.8
buildings (other than residential) and facilities	3,219.5	3,610.6	4,577.3	4,417.4	4,840.8	55.8	54.5	54.2	52.3	51
machinery, equipment, vehicles	1,800.2	2,179.6	2,896.7	3,006.8	3,366.5	31.2	32.9	34.3	35.6	35.5
of which:										
acquisition of domestically produced machinery, equipment and vehicles	1,427.5	1,787.3	2,357.9	2,519.7	2,825.2	24.7	27.0	27.9	29.8	29.8
acquisition of imported machinery, equipment and vehicles	372.6	392.3	538.8	487.1	541.3	6.5	5.9	6.4	5.8	5.7
Other	409.7	450.5	574.3	582.8	735.5	7.1	6.8	6.8	6.9	7.7

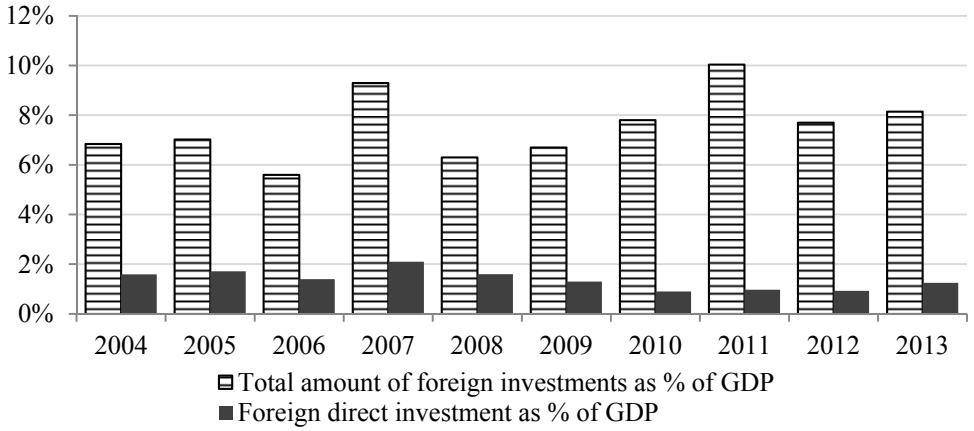
Source: Federal State Statistics Service (Rosstat).

The particular feature of the post-crisis development of the construction and investment complex manifests itself in the faster growth of investments in housing in 2012-2013 compared to the overall dynamics of investments in fixed assets and the construction of non-residential buildings. Positive dynamics of commissioning residential buildings were recorded in the second half of 2011 and evidenced some improvement of the situation with financing. In 2013, organisations of all types of ownership commissioned 69.4m sq m of residential space, which is 5.60% more than in the previous year. It should be noted, however, that the substantial gap which exists between the rates of putting buildings into service and the scope of construction work results from a reduction of required capacity, which will very probably lead to a further decline in the construction industry at the beginning of 2014.

4.3.2. Foreign investments

2013 was characterised by the increased activity of foreign investors in the Russian Federation in comparison with the previous year. Foreign investments into the Russian economy increased in 2013 by 10.1% compared to the $170.2bn in 2012. In the form of the income of foreign investors transferred abroad, as well as from the payment of interest for using credits and paying off loans, $127.2bn was withdrawn in 2013, or 74.7% of the volume of foreign investment during this period (in 2012 it was 88.3%). Compared to 2012, capital outflow in these areas decreased by 6.9%. In 2013, Russia's investments abroad reached $201.6bn, which is 34.5% higher than in 2012 and constitutes 118.5% of the investments in the Russian economy (in 2012 it was 97.0%).

The level of foreign investments in the Russian economy has grown from 7.7% of GDP in 2012, to 8.1% of GDP in 2013 (*Fig. 34*).



Source: Federal State Statistics Service (Rosstat).

Fig. 34. The level of foreign investment in the Russian economy in 2004-2013, as % of GDP

The dynamics of foreign investment in the Russian economy are shown in *Table 17*.

Table 17

Dynamics of foreign investments in the Russian economy[1]

	In millions of dollars				As % of the previous year			
	Total	**Direct**	**Portfolio**	**Other**	**Total**	**Direct**	**Portfolio**	**Other**
2008	103,769	27,027	1,415	75,327	85.8	97.2	33.7	84.7
2009	81,927	15,906	882	65,139	79.0	58.9	62.3	86.5
2010	114,746	13,810	1,076	99,860	140.1	86.8	121.9	153.3
2011	190,643	18,415	805	171,423	166.1	133.3	74.9	171.7
2012	154,570	18,666	1,816	134,088	81.1	101.4	2.3 times	78.2
2013	170,180	26,118	1,092	142,970	110.1	139.9	60.1	106.6

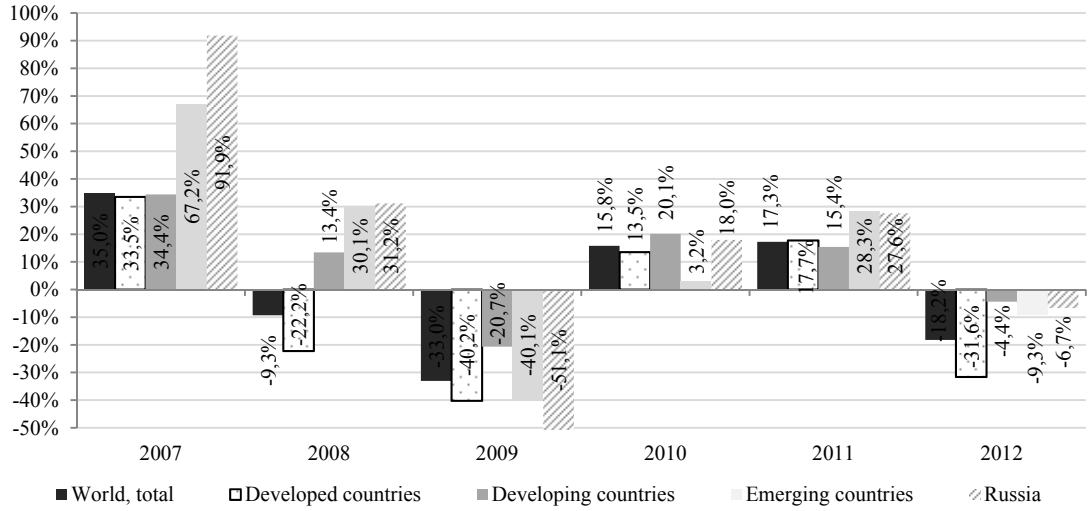
Source: Federal State Statistics Service.

In 2013, the total volume of foreign investments in the Russian economy increased due to the growth of the basic components – direct and other investments.

The main volume of direct investments fell within equity payments and loans from foreign co-owners of organisations. Following the results of 2013 the first grew by 7.9% to $10.0bn, while the latter increased in 1.9 times to $14.6bn. Thus, the share of loans from foreign co-owners in the structure of foreign direct investments in Russia rose from 41.1% in 2012 to 55.8% in 2013, and the share of equity payments decreased from 49.5% to 38.2%.

According to the report on investment activities by the UN Conference on Trade and Development (UNCTAD, World Investment Report 2013), published in June, 2013,and based on the volume of foreign direct investments in 2012, the Russian Federation reached ninth place in the world (according to verified data it was ninth in 2011; eighth in 2010 and sixth in 2009-2008). According to this report, in 2012, Russia accounted for 3.8% of world foreign direct investments (2011 – 3.3%, 2010 – 3.1%, 2009 – 3.0%, 2008 – 4.1%) and 6.5% of foreign direct investments into developing countries and countries with economies in transition (2011 – 6.6%, 2010 – 6.1%, 2009 – 6.1%, 2008 – 9.5%).

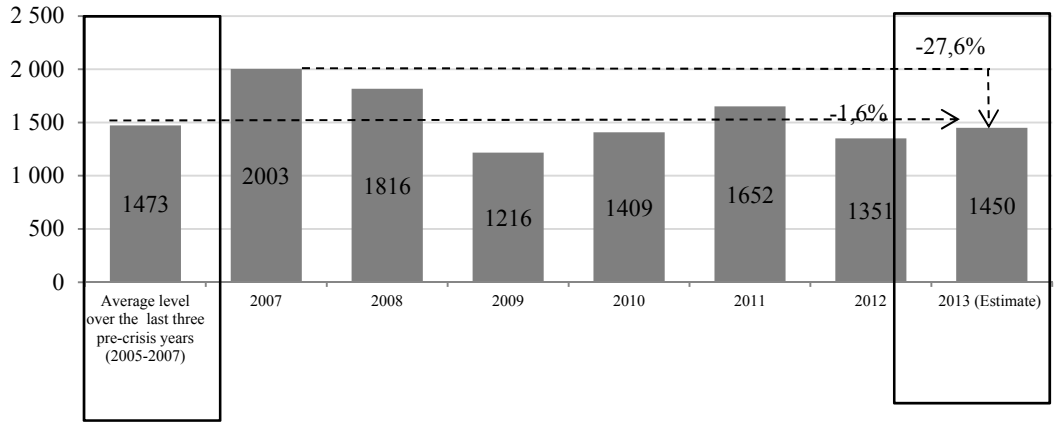
[1] Direct investments – investments in real assets, acquisition of a controlling interest or stock of shares, which gives the right to participate in management; portfolio investments – investments in securities aimed at generating income; other investments – investments made on a return basis (loans from international financial organisations, trade credits, etc.).



Source : UNCTAD, World Investment Report, June 26, 2013.

Fig. 35. Change (increase (+), decrease (-)) of the inflow of direct foreign investments in 2007-2012 compared with the previous year

According to the published UNCTAD report, total global foreign direct investment in 2012 was below the peak level of 2007. (*Fig. 35* and *36*). According to preliminary estimates, total direct foreign investments could reach $1.45 trillion, in 2013, and in 2014 this amount will grow to $1.6 trillion, reach $1.8 trillion in 2015. This scenario is possible assuming the absence of serious problems in the world economy.



Source : UNCTAD, World Investment Report, June 26, 2013.

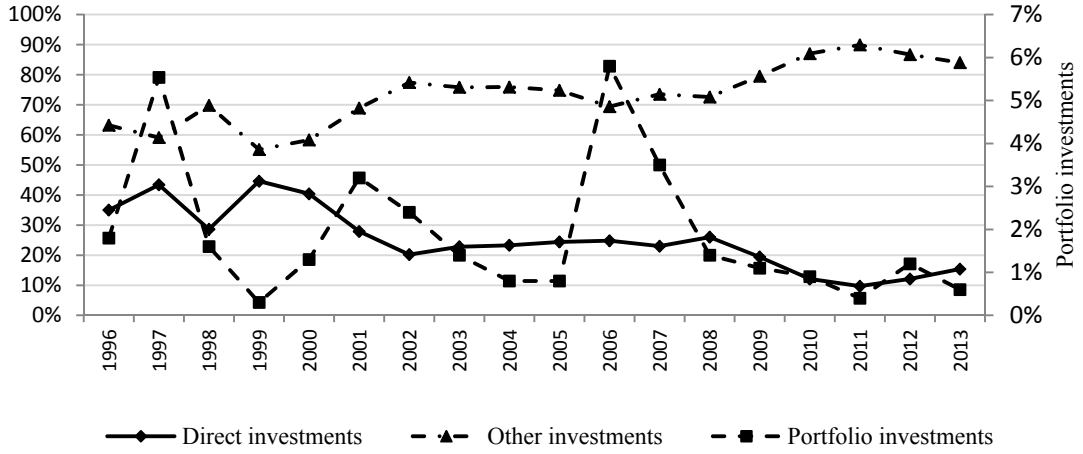
Fig. 36. Inflows of direct foreign investment in the world, billions of dollars

In the segment of portfolio investments in the Russian economy in 2013 there was a reduction in investments compared to 2012, by 39.9%. Moreover, their structure experienced a reduction of component investment in stocks and shares to 41.6% and, consequently, a reduction of its share from 84.4% in 2012 to 82.0% in 2013.

The proportion of trade credits in the structure of other investments fell from 20.9% in 2012 to 19.1% in 2013. According to their terms of attraction of financial resources, the share of loans with maturity more than 6 months increased in 2013 to 64.6% compared to 39.5% in

2012. The share of loans provided for a period of less than 6 months, in 2013, fell to 15.1% (in 2012 it was 33.2%).

Compared with the previous year, in 2013, the structure of foreign investments in the Russian economy changed (*Fig. 37*).



Source: Federal State Statistics Service.

Fig. 37. The structure of foreign investment into the Russian economy, 1996-2013

In 2013, the concentration of foreign investment in industry, commerce and finance remained the same, with these spheres of Russian economy accounting for 90.5% of the total volume of foreign investment into the Russian Federation (in 2012 it was 89.3%). Investor interest in the industrial and trade sectors increased amid the further decline of investments in transport and communications, real estate transactions and investments in financial activity.

The distribution of foreign investments in key sectors of the Russian economy is shown in *Table 18*.

Table 18

Sectoral structure of foreign investment in the Russian economy in 2011-2013

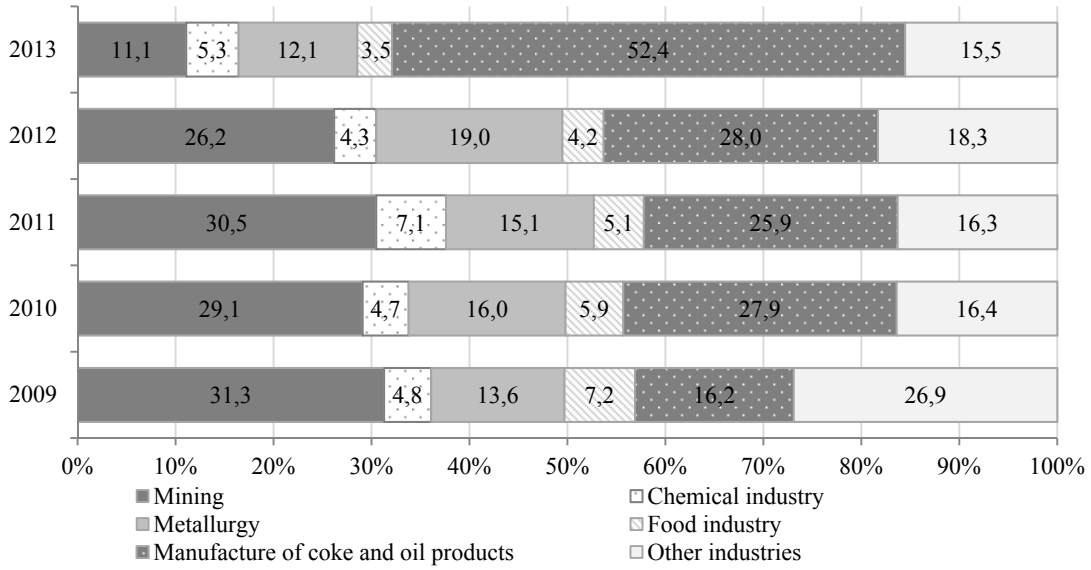
	Millions of dollars			Change as % of the previous year			As % of the total		
	2011	2012	2013	2011	2012	2013	2011	2012	2013
Industry	61,145	69,201	102,849	128.6	113.2	148.6	32.1	44.8	60.4
Transport and communications	5,943	4,622	4,759	90.4	77.8	103.0	3.1	3.0	2.8
Wholesale and retail; repair of motor vehicles, motorcycles, personal and household goods	24,456	25,379	31,030	183.4	103.8	122.3	12.8	16.4	18.2
Real estate transactions, renting and provision of services	9,237	10,035	9,717	125.8	108.6	96.8	4.8	6.5	5.7
Financial activity	86,885	43,395	20,121	229.2	49.9	46.4	45.6	28.1	11.8
Other industries	2,977	1,938	1,704	148.1	65.1	87.9	1.6	1.2	1.0

Source: Federal State Statistics Service (Rosstat).

In 2013, the leading growth sector within the structure of foreign investments in the production sector (*Fig. 38*) was the processing industry when compared with 2012, as investments in the processing industries rose by 82.4% (while in 2012, the growth was

19.8%). Foreign investments in the mining sector fell by 37.1% (in 2012, the reduction amounted to 2.6%).

In manufacturing industry, in 2013, investments in the production of coke and oil products increased by 2.8 times while in the steel industry they decreased by 5.1%, amounting to $53.9bn and $12.5bn respectively (in 2012, investments in the manufacture of coke and oil products rose by 22.4%, while in the metallurgical industry they increased by 42.2%). As compared to 2012, foreign investments in the chemical and food industries increased in 2013 by 84.7% and 25.8%, respectively to $5.5bn and $3.6bn (in 2012, there was a decline in these industries by 31.8% and 6.6%).



Source: Federal State Statistics Service (Rosstat).

Fig. 38. The structure of foreign investments in industry in 2009-2013

In comparison with 2012, direct and other investments in industry in 2013 grew, by 18.5% and 55.8% respectively (in 2012, direct investments in industry increased by 1.0%, with 'other investments' growing by 14.3%). Portfolio investments in industry fell by 56.0% (in 2012, they had increased 2.2 times). Thus, the share of 'other investments' in industry rose from 84.3% in 2012 to 88.3% in 2013, whilst that of portfolio investments decreased from 1.8% to 0.5% and the share of direct investment over the period decreased from 14.0% to 11.1%.

There were changes in the structure of foreign investments by type of industrial economic activity. In the mining sector, direct investments declined, in 2013, by 5.3% to $3.3bn. Despite the decline, their share of total investments in this industry grew to 29.3% (in 2012 it was 19.4%). In 2013, the share of other investments in mining, which decreased by 8.1% and amounted to $44.7bn had dropped to 70.5% (in 2012 it was 80.2%).

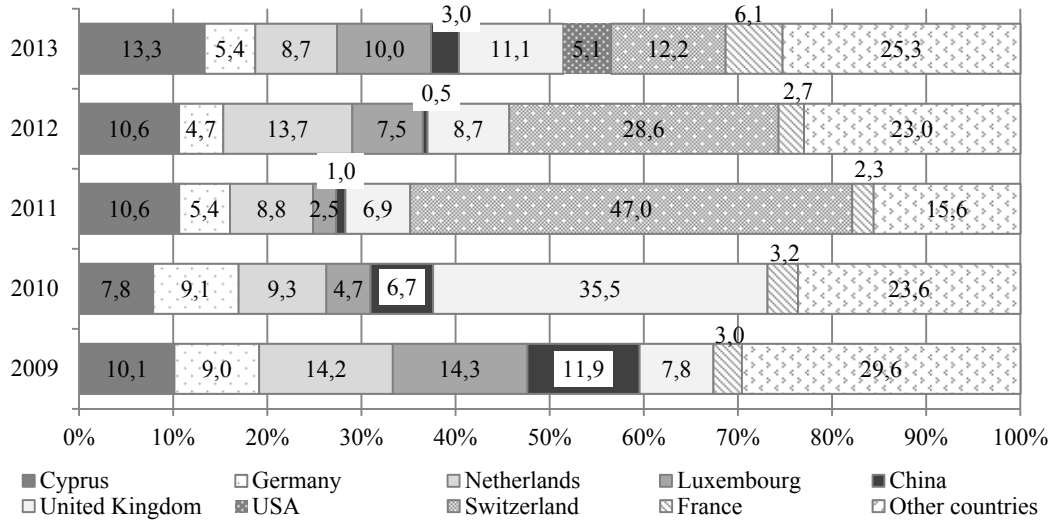
In 2013, the bulk of investment in the processing industry was also attributed to other investments, which, compared with 2012, increased by 91.9%, amounting to a total investment in manufacturing of 90.8% (in 2012 it was 86.3%). Direct foreign investments in the manufacturing sectors increased by 39.4%. In 2013, the share of direct investments in the manufacturing sector amounted to 8.8%, (in 2012, 11.6%). Portfolio investments in

manufacturing decreased 2.9 times, leading to a decrease in their share to 0.4% (in 2012 this was 2.1%).

In the geographical structure of foreign investments in the Russian economy in 2013, we should note the redistribution of countries in the list of major capital exporters to the Russian Federation (*Fig. 39*). In 2013, the largest volume, $22.7bn, was sent from Cyprus, while Russia received more than $20.7bn from Switzerland. The United Kingdom was amongst the top three leaders in terms of the supply of capital to Russia during 2013, its investments amounting to $18.9bn.

According to the 2013 results, for the countries investing in the Russian economy the highest growth in investments are from China, an increase of 6.8 times compared with 2012 (to $5.0bn), from France, an increase of 2.5 times (to $9.7bn) and from Luxembourg, by 47.5% to ($17.0bn).

Compared with 2012, investments from the United Kingdom increased by 39.8%, and from Cyprus and Germany, by 37.8% and 27.1%, respectively. Investments from Switzerland and the Netherlands over the period under review decreased by 53% and 30%, respectively. The differences in the dynamics of investments changed the geographical structure of foreign investments in the Russian economy.



Source: Federal State Statistics Service (Rosstat). Data on investments from the United States in 2009-2012, and from Switzerland in 2009-2010 are included in 'other investments'.

Fig. 39. Geographical structure of foreign investments in the Russian economy in 2009-2013

As of 1 January 2014, the accumulated foreign capital, without taking into account monetary authorities, commercial and savings banks, including ruble-denominated investments converted into US dollars, amounted to $384.1bn, which is 6.0% higher than the level as of 1 January 2013. The direct accumulated investments since the beginning of the year fell by 7.3% and portfolio investments, by 34.7% , while other investments increased by 16.0%.

According to the results of 2013, in terms of the total accumulated foreign investment, the leaders are Cyprus, the Netherlands, Luxembourg, the United Kingdom and China, the total share of these being 64.2%, (in 2012 it was 65.0%). At the same time, the share of the top five investors in the 'other investments' segment is estimated at 67.2%, (in 2012, 69.1%), and in

the structure of direct and portfolio investments: 58.8% and 50.5% (in 2012: 58.9% and 59.5% respectively).

The structure of foreign investments, accumulated as of the end of September 2013, is dominated by 'other investments', accounting for 65.7% (in 2012 it was 60.1%). The same indicator for direct and portfolio foreign investments amounted to 32.8% and 1.5% respectively (in 2012: 37.5% and 2.4%).

4.4. Oil and gas sector in 2013

Oil and gas comprise the main sector of the Russian economy that continues to play a key role in shaping the state budget revenues and the balance of trade. In 2013, against the background of continuing high global prices for oil and gas, petroleum production in Russia reached its highest level since 1990, and the export of oil and petroleum products reached a historic high. However, there was then a slowdown in petroleum production and a worsening of conditions for its production. In 2013, in order to create appropriate conditions for the further development of the oil and gas sector legislative solutions were adopted involving tax incentives for the development of resources where oil recovery was difficult, the differentiation of gas production taxation and the application of a special tax regime for deposits being developed on the continental shelf, together with a liberalisation of the export of liquefied natural gas (LNG).

4.4.1. Dynamics of global oil and gas prices

The situation in the global oil market in 2013 was characterised by the persistence of high oil prices. The average price of Brent crude in 2013 was 108.8 dollars/barrel, while the price of Russian Urals oil was 107.7 dollars/barrel on the global (European) market. (*Table 19, Fig. 40*). The main factors keeping the prices high were the increased demand for oil (*Table 20*) due to the growth of the world economy, primarily the economies of China and other Asian countries, the conservative policy of the OPEC oil-exporting counties in respect of increasing oil extraction, in addition to geopolitical risks. In 2013 the global demand for oil increased by 1.4%, while demand for oil in North America increased by 1.6% and in China by 3.0%. Global oil production rose by 0.7% in 2013. At the same time there was a noticeable growth of oil extraction by countries other than by those of OPEC (by 2.5%) mainly due to increases in oil extraction in the USA and Canada as a result of the development of unconventional oil reserves. Meanwhile the level of oil recovery by countries from OPEC decreased from 31.1m barrels per day in 2012 to 30.4m barrels per day in 2013, i.e. approaching OPEC's quota for oil recovery (30m barrels per day) established officially by OPEC at the end of 2011. As a result, the global oil market has remained broadly balanced.

Table 19

Global oil prices in 2000–2013 dollars/barrel.

	2000	2005	2006	2007	2008	2009	2010
Price of Brent crude, Great Britain	28.5	54.4	65.2	72.5	97.7	61.9	79.6
Price of Urals oil, Russia	26.6	50.8	61.2	69.4	94.5	61.0	78.3

Cont'd

	2011	2012	2013 I qtr.	2013 II qtr.	2013 III qtr.	2013 IV qtr.	2013
Price of Brent crude, Great Britain	111.0	112.0	112.9	103.0	110.1	109.4	108.8
Price of Ural oil, Russia	109.1	110.3	110.8	102.1	109.7	108.2	107.7

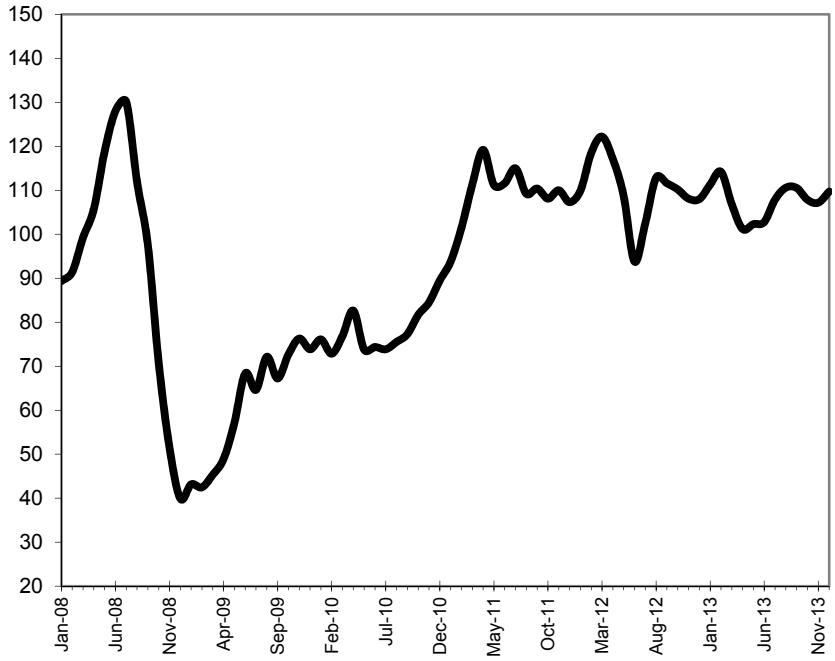
Source: IMF, OECD/IEA.

Table 20

Change in global demand for oil in 2008–2013 as a % of the previous year

	2008	2009	2010	2011	2012	2013
World, total	–0.6	–1.2	3.1	0.9	1.1	1.4
OECD countries	–3.6	–4.2	1.3	–0.8	–1.1	0.2
including: North America	–5.2	–3.7	2.0	–0.3	–1.4	1.6
Europe	–0.6	–4.7	–0.3	–2.3	–3.8	–0.7
Non-OECD counties	3.3	2.5	5.2	3.0	3.6	2.6
including: Asia (except for counties of the Middle East and former USSR)	1.7	4.4	7.9	3.2	3.9	2.6

Source: OECD/IEA.



Source: Russian Ministry of Economic Development.

Fig. 40. Price of Urals oil in 2008–2013 in dollars/barrel

The prices for Russian liquefied natural gas on the European market were also quite high, although lower than in 2012. The price for gas supplied under long-term contracts, is generally determined on the basis of the prices for energy derived from alternatives such as gasoil/diesel and fuel oil, the prices of which depend on the level of global oil prices. As a result, world gas prices follow global oil prices, although with a lag. Prices for Russian gas on the European market reached their highest level in 2008, while they were at their lowest in 2010. Between 2011–2012, with the growth of global oil prices, Russian gas prices on the European market increased considerably (*Table 21*). At the same time there was a changing situation in the European gas market, in particular the growth in gas supply (especially the considerable growth in supply of liquefied natural gas) from other gas producing countries, and the lower level of spot prices compared with the prices of long-term "Gazprom"

contracts. There was a resulting downward pressure on the price of Russian gas which subsequently forced "Gazprom" to reduce its price of gas on the European market.

Table 21

Global prices of oil and natural gas, 2005–2013

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Average price of oil, dollars/barrel	53.4	64.3	71.1	97.0	61.8	79.0	104.0	105.0	104.1
Price of Russian gas on the European market, dollars/thousand m^3	212.9	295.7	293.1	473.0	318.8	296.0	381.5	431.3	402.0

Source: IMF.

4.4.2. Dynamics and structure of production in the oil and gas sector

In 2013 oil production in Russia reached 523.3 million tonnes, its highest level since 1990 (*Table 22, 23*). There had been a positive impact on the dynamics of petroleum production as a result of changes in the tax system and the coming on stream, in recent years, of several large new oil fields in Eastern Siberia (the Vankorskoye, Talakanskoye, Verkhnechonskoye and Tas-Yuryakhskoye fields) and in the northern European part of the country (the Yuzhno-Khylchuyusskoye field, and the Trebs and Titov fields). Also in 2013 the Prirazlomnoye oil field was put into operation in the Pechorskoye Sea and became the first oil field developed on the Russian arctic continental shelf.

As a result of active geological exploration work, the growth in identified oil reserves currently exceeds production. According to the Ministry of Natural Resources of the RF, in 2013 the increase in identified oil reserves in Russia was 688.8 million tonnes (in 2011 – 744.7 million tonnes and in 2012 – 742.7 million tonnes).

At the same time, there has been a significant decrease in the rate of oil recovery in recent years; which is primarily due to an objective worsening of production conditions. A significant proportion of the currently operating deposits are entering the stage of declining production whilst the new fields, are in most cases, characterised by poorer mining, geological and geographical parameters, requiring greater capital, operational and transport expenditure in their development.

As statistics show, the Russian oil industry is approaching the limit of its production capacity. In order to compensate for the decrease in oil recovery at the producing fields it is necessary both to develop new oil fields in regions either lacking, or with only poor infrastructure, and to exploit the lower quality reserves in the more developed regions.

Table 22

Petroleum production and refining in the Russian Federation in 2000–2013

	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013
Oil recovery including gas condensates, millions of tonnes.	323.2	470.0	480,5	491.3	488.5	494.2	505.1	511.4	518.0	523.3
Primary oil refining, millions of tonnes.	173.0	208.0	220.0	229.0	236.3	236.0	249.3	258.0	270.0	278.0
Ratio of oil refining to its recovery, %	53.5	44.3	45.8	46.6	48.4	47.8	49.4	50.4	52.1	53.1
Oil conversion ratio, %	71.0	71.6	71.9	71.7	72.0	71.9	71.1	70.8	71.5	71.4

Source: Federal Statistics Service, Ministry of Energy of the RF.

At the same time in 2013 the rate of growth of oil refining remained higher than that of oil recovery; in general this was due to a rapid growth in exports of petroleum products,

stimulated by the lower export taxes for these compared with those for crude oil. As a result of this higher rate of growth of primary oil refining, the refining to recovery ratio increased from its 2004 value of 42.4% to 53.1% in 2013. However, during the same period the efficiency of oil refining did not increase, and in 2013 remained at 71.4% which corresponded to its 2005 level. The level of oil refining efficiency is currently close to its pre-reform value (in 1990 the oil refining efficiency in Russia was 67%) and is still much lower than in developed countries where the oil refining efficiency reaches 90-95%. In this respect raising the technological level of the oil refining industry is still one of the most pressing issues for the development of the oil sector of Russia's economy.

Table 23

Production of oil, petroleum derivatives and natural gas in 2000–2013, as % of the previous year

	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013
Oil including gas condensate	106.0	102.2	102.1	102.1	99.3	101.2	102.1	100.8	101.3	100.9
Primary oil refining	102.7	106.2	105.7	103.8	103.2	99.6	105.5	103.3	104.9	102.7
Petrol	103.6	104.8	107.4	102.1	101.8	100.5	100.5	102.0	104.3	101.3
Diesel fuel	104.9	108.5	107.0	103.4	104.1	97.7	104.2	100.3	98.7	103.1
Residual fuel oil	98.3	105.8	104.5	105.2	101.9	100.8	108.5	104.6	101.6	103.3
Natural gas	98.5	100.5	102.4	99.2	101.7	87.9	111.4	102.9	97.7	102.1

Source: Federal Statistics Service, Ministry of Energy of the RF.

In 2013 the largest amounts of oil were produced by "Rosneft", "Lukoil", "Surgutneftegas" and "Gazprom". The share of these four companies reached 74.4% of the total oil recovery in the country. The share of medium-sized companies ("Tatneft", "Slavneft", "Bashneft" and "Russneft") accounted for 13.0% of total oil extraction. In 2013 the operators of production sharing agreements produced 2.7% of Russian oil while the share of other manufacturers, including more than 100 small oil-recovery organisations, was 9.1% (*Table 24*).

In 2013 the state-owned oil company "Rosneft", completed its acquisition, of the "TNK-VR" oil company from its owners, the AAR consortium and the British company BP. The total cost of this transaction was $61bn, and was the most significant in the Russian oil and gas sector (previously the most significant one had been the transaction for purchasing 75.5% of "Sibneft" shares by "Gazprom", at a cost of $13.1bn, in 2005).

As a result of the acquisition of "TNK-VR" (including its share in "Slavneft") representing 15.7% of total Russian oil production, "Rosneft" significantly strengthened its position in Russian oil sector and became one of the largest oil companies in the world. In 2013 oil extraction by the company (including its shares in recovery by other organisations) reached 202.4 million tonnes, or 38.7% of Russian oil recovery.

Table 24

Structure of petroleum production in 2008–2013

	Oil recovery, in 2008, m. t.	Share in total recovery, %	Oil recovery, in 2010, m. t.	Share in total recovery, %	Oil recovery, in 2012, m. t.	Share in total recovery, %	Oil recovery, in 2012, m. t.	Share in total recovery, %
1	2	3	4	5	6	7	8	9
Russia, total	488.5	100.0	505.1	100.0	518.0	100.0	523.3	100.0
Rosneft	113.8	23.3	112.4	22.3	117.5	22.7	192.6	36.8
LUKOIL	90.2	18.5	90.1	17.8	84.6	16.3	86.7	16.6
TNK-VR	68.8	14.1	71.7	14.2	72.5	14.0	–	–
Surgutneftegas	61.7	12.6	59.5	11.8	61.4	11.9	61.5	11.8
Gazprom + Gazprom neft	43.4	8.9	43.3	8.6	46.1	8.9	48.5	9.3
including: Gazprom	12.7	2.6	13.5	2.7	14.5	2.8	16.3	3.1

Cont'd

1	2	3	4	5	6	7	8	9
Gazprom neft	30.7	6.3	29.8	5.9	31.6	6.1	32.2	6.2
Tatneft	26.1	5.3	26.1	5.2	26.3	5.1	26.4	5.0
Slavneft	19.6	4.0	18.4	3.6	17.9	3.5	16.8	3.2
Bashneft	11.7	2.4	14.1	2.8	15.4	3.0	16.1	3.1
Russneft	14.2	2.9	13.0	2.6	13.9	2.7	8.8	1.7
NOVATEK	2.7	0.6	3.8	0.8	4.2	0.8	4.3	0.8
Operators of PCA	12.0	2.5	14.4	2.9	14.1	2.7	14.0	2.7
Other operators	24.1	4.9	38.2	7.6	44.1	8.5	47.6	9.1

Source: Ministry of Energy of the RF, estimates were made by the author.

"Gazprom" remains the main producer of natural gas. However its share in total Russian production has significantly decreased in recent years, i.e. from 83.2% in 2008 to 71.5% in 2013. (*Table 25*). At the same time the shares of other manufacturers, i.e. oil companies, "NOVATEK", the PCA operators and others, increased. In general, the share of the independent producers in gas recovery reached 28.5% in 2013, including 7.7% by "NOVATEK", the largest independent producer of gas.

Table 25

Structure of gas production in 2008–2013

	Gas recover in 2008, billion m^3	Share in total recovery, %	Gas recover in 2010, billion m^3	Share in total recovery, %	Gas recover in 2012, billion m^3	Share in total recovery, %	Gas recover in 2013, billion m^3	Share in total recovery, %
Russia, total	664.9	100.0	665.5	100.0	671.5	100.0	684.0	100.0
Gazprom + Gazprom neft	553.1	83.2	513.9	77.2	489.4	72.9	489.1	71.5
including: Gazprom	550.9	82.9	509.0	76.5	478.5	71.3	476.3	69.6
Oil companies	54.8	8.2	66.6	10.0	71.1	10.6	76.8	11.2
NOVATEK	30.8	4.6	37.8	5.7	51.3	7.6	53.0	7.7
Operators of PCA	8.5	1.3	23.3	3.5	26.8	4.0	27.8	4.1
Other manufacturers	17.6	2.6	23.9	3.6	32.9	4.9	37.3	5.5

Source: Ministry of Energy of the RF, estimates were made by the author.

As a result of the acquisition of "TNK-VR" by "Gazprom" the state sector was significantly expanded. The share of state companies in Russian oil production reached 49.0% in 2013 (*Table 26*). It should be noted that in 2003, prior to the acquisition by "Rosneft" and "Gazprom" of the private oil companies "YUKOS" and "Sibneft" and the entry of "Gazprom" into the "Sakhalin-2" project, the share of state companies in Russian oil production was only 7.3%. In 2013 share of state companies in national gas recovery was 79.1%.

Table 26

Share of state companies in oil and gas recovery in Russia in 2013

	Oil recovery, million tonnes	Share in total oil recovery, %	Gas recovery, billion m^3	Share in total gas recovery, %
Rosneft	192.6	36.8	40.6	5.9
Share of Rosneft in recovery by other organisations (Slavneft, Sakhalin-1)	9.8	1.9	2.5	0.4
Rosneft including the share of Rosneft in recovery by other organisations	202.4	38.7	43.1	6.3
Gazprom including Gazprom neft	48.5	9.3	489.1	71.5
Share of Gazprom in recovery by other organisations (Sakhalin-2)	2.7	0.5	8.8	1.3
Gazprom including Gazprom neft and the share of Gazprom in recovery by other organisations	51.2	9.8	497.9	72.8
Zarubezhneft (recovery on Russian territory)	2.8	0.5	0.1	0.0
State companies, total	256.4	49.0	541.1	79.1

Source: Ministry of Energy of the RF, estimates were made by the author.

4.4.3. Dynamics and structure of oil and gas exports

In 2013 a further increase of oil exports together with a growth in oil extraction (*Tables 27, 28*). In 2013 net oil exports reached 383.9 million tonnes (an all-time high). 73.4% of that extracted was exported as crude oil or as petroleum products. The growth of oil exports was achieved due to an increase in the export of petroleum products (by 8.7% compared with 2012), while there was a decrease in the export of crude oil by 1.6% to 45.1% in 2013. Additionally, in 2013 the proportion of residual oil exported was greater than 90%, and of diesel fuel was 59.3%, of their production. In 2013 exports of petrol increased by 33.9% being 11% of production. (This compares with 18.5% in 2005, 8.2% in 2010, 10.6% in 2011; and 8.4% in 2012). At the same time, the import of petroleum products decreased (by 3.6% compared with 2012). The share of imports of petrol from all sources in 2012 was 1.3% (as a compared with an average of 1.5% during 2010-2012). In 2013 the proportion of imports in resources of diesel fuel increased to 0.2% (in 2011 it was 1.1%, and in 2012 – 0.3%).

Table 27

Ratio of production, consumption and export of oil and natural gas in 2000-2013

	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013
Oil, million tonnes										
Production	323.2	470.0	480.5	491.3	488.5	494.2	505.1	511.4	518.0	523,3
Export, total	144.5	252.5	248.4	258.4	243.1	247.4	250.4	244.6	239.9	236,6
Export to countries other than members of CIS	127.6	214.4	211.2	221.3	204.9	210.9	223.9	214.4	211.6	208,0
Export to members of CIS	16.9	38.0	37.3	37.1	38.2	36.5	26.5	30.2	28.4	28,7
Net export	138.7	250.1	246.1	255.7	240.6	245.6	249.3	243.5	239.1	235,8
Domestic consumption	123.0	123.1	131.2	124.1	130.4	125.3	125.9	140.7	142.1	137,5
Net export in % to production	42.9	53.2	51.2	52.0	49.3	49.7	49.4	47.6	46.2	45,1
Petroleum products, million tonnes.										
Export, total	61.9	97.0	103.5	111.8	117.9	124.4	132.2	130.6	138.1	151,4
Export to countries other than members of CIS	58.4	93.1	97.7	105.1	107.6	115.4	126.6	120.0	121.2	141,1
Export to members of CIS	3.5	3.9	5.8	6.7	10.3	9.0	5.6	10.6	16.9	10,3
Net export	61.5	96.8	103.2	111.5	117.5	123.3	129.9	127.2	136.8	150,0
Oil and petroleum products, million tonnes										
Net export of oil and petroleum products	200.2	346.9	349.3	367.2	358.1	368.9	379.2	370.7	375.9	385,8
Net export of oil and petroleum products as % of petroleum production	61.9	73.8	72.7	74.7	73.3	74.6	75.1	72.5	72.6	73,7
Natural gas, billion m^3										
Production	584.2	636.0	656.2	654.1	664.9	596.4	665.5	687.5	671.5	684,0
Export, total	193.8	207.3	202.8	191.9	195.4	168.4	177.8	184.9	178.7	196,4
Export to countries other than members of CIS	133.8	159.8	161.8	154.4	158.4	120.5	107.4	117.0	112.6	138,
Export to members of CIS	60.0	47.5	41.0	37.5	37.0	47.9	70.4	67.9	66.0	58,4
Net export	189.7	199.6	195.3	184.5	187.5	160.1	173.5	179.2	171.6	189,3
Domestic consumption	394.5	436.4	460.9	469.6	477.4	436.3	492.0	508.3	499.9	494,7
Net export as a % of production	32.5	31.4	29.8	28.2	28.2	26.8	26.1	26.1	25.6	27,7

Source: Federal State Statistics Service, Ministry of Energy of the RF, Federal Customs Service; estimations were made by the author.

In 2013 exports of natural gas improved significantly (by 10.6% in comparison with the previous year). The main factor causing the decrease of gas exports in recent years has been a reduction in its supply to Europe where the market has seen a significantly increased proportion of supply from other gas-producing countries. As a result, in comparison with 2006 when the greatest quantity of Russian gas was supplied to Europe, 2012 saw a reduction

in the export of Russian gas to non CIS countries by 30.4%. At the same time the share of net exports of gas produced fell from 31.4% in 2005 to 25.6% in 2012. In 2013, due to a reduction in both own-gas recovery in Europe and the supply of gas from North America, exports of Russian gas reached the 2006 level, and the share of Russian gas on European market, including Turkey, increased from 26% in 2012 to 30.1% in 2013 (according to estimates by "Gazprom"). At the same time net exports showed an increase to 27.9% of gas production.

In order to expand the opportunities for Russian gas exports in 2013 a liberalisation of the export of liquefied natural gas (LNG) was stipulated by Federal Law № 318-FL as of 30.11.2013: "On amendments to articles 13 and 14 of the Federal Law "On the principles of state regulation of foreign trade activity' as well as to articles 1 and 3 of the Federal Law 'On the export of gas"' thus allowing the export of LNG not only by "Gazprom" but also by other Russian producers. There are currently plans for the construction of LNG production facilities by "NOVATEK" (project "Yamal LNG") and "Rosneft". There is the prospect of significantly increased LNG production in Russia in the future and its export to global markets.

Table 28

Dynamics of oil, petroleum products and natural gas export by Russia in 2005–2013 as a % of previous year

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Oil, total	98.4	98.0	104.0	94.0	101.8	101.2	97.6	98.2	98,6
including: to countries other than members of CIS	99.1	98.0	104.8	92.6	102.9	106.1	95.7	98.7	98,3
Petroleum products, total	117.9	106.3	108.0	105.0	105.3	106.2	98.5	104.4	109,6
including: to countries other than members of CIS	119.1	104.5	107.6	102.0	107.1	109.6	94.6	100.8	116,4
Gas, total	103.7	97.6	94.6	101.8	86.2	105.6	104.0	96.6	109,9

Source: Federal State Statistic Service.

Crude oil still dominates in the structure of oil exports at 61.2% of the total exports of oil and petroleum products. The main share of petroleum products being exported is of residual fuel oil and diesel fuel. Most of the energy resources (88% of oil, 94% petroleum products and 71% of gas) were exported beyond the borders of the CIS.

An analysis of the dynamics of Russian oil exports over a long period of time shows a considerable strengthening of the export orientation of oil sector in comparison with the pre-reform period. The share of the net export of oil and petroleum products from petroleum production increased from 47.7% in 1990 to 73.4% in 2013. However, one must take into account that this is connected not only with the absolute export volume but also with a significant decrease in the domestic consumption of oil due to the market transformation of the Russian economy and the replacement of residual fuel oil by natural gas. At the same time it should be mentioned that there was an increase in the proportion of petroleum products in oil exports: increasing from 18.2% in 1990 to 38.8% in 2013. (*Table 29*). Here it is also important to consider that the low efficiency of oil refining in Russia means that the majority of the petroleum products going for export is actually residual fuel oil, which is used in Europe as a raw material for further refining to produce light-petroleum products. In 2013, 55.6% of the total exports of petroleum products was residual fuel oil.

As a result of the physical growth of the export volume of petroleum products and natural gas the proportion of fuel and energy goods in Russian exports reached 70.6% in 2013, the share of crude oil being 33%, and of natural gas – 12.8%. (*Table 30*).

Table 29

Net export of petroleum products in 2005–2013

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Net export of petroleum products, mln t	96.8	103.2	111.5	117.5	123.3	129.9	127.2	136.8	150,0
Share of petroleum products in net export of oil and petroleum products, %	27.9	29.5	30.4	32.8	33.4	34.3	34.3	36.4	38,9

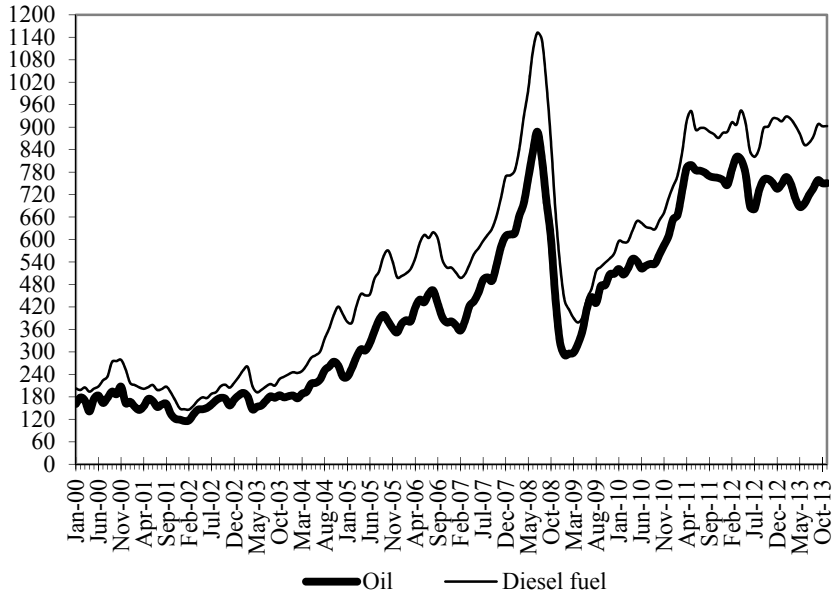
Source: Federal State Statistics Service, Federal Customs Service; estimations were made by the author.

Table 30

Cost and relative importance of export of fuel and energy goods 2005–2013

	2005		2010		2012		2013	
	Billion US dollars	%*	Billion US dollars	%*	Billion US dollars	%*	Billion US dollars	%*
Fuel and energy goods, total	154.7	64.1	267.7	67.5	369.4	70.2	371.8	70.6
including: oil	83.8	34.7	134.6	34.0	180.9	34.5	173.7	33.0
Natural gas	31.4	13.0	47.6	12.0	63.0	11.8	67.2	12.8

* As % of total volume of Russian exports.
Source: Federal State Statistics Service.



Source: calculated according to data from the Federal State Statistics Service.

Fig. 41. Average prices for exported oil and diesel fuel in 2000–2013 dollars/tonne.

4.4.4. Dynamics of prices for energy products on the domestic market

The prices for oil and petroleum products on the Russian domestic market are basically determined by the corresponding global prices and these equal the yield supplies to the foreign and domestic markets, i.e. because net-back prices equal the global price after the deduction of customs export duty and the expenses for export shipment. In 2012-2013 due to an increase in global prices the prices for oil and light-petroleum products on the domestic

market also increased. These prices, however, are still lower than their highest levels of 2008 when the average domestic price for oil (producer price) reached USD 410.2 per tonne, and the average price for petrol reached USD 810.3 per tonne. (*Table 42, Fig. 43*). In fact the domestic prices for oil in Russia are still significantly lower than global prices. In 2013 the domestic price for oil (producer price) was approximately 45.5 dollars/barrel or 42.2% of the global price (price of Urals oil on the European market).

Table 31

Domestic prices for oil, petroleum products and natural gas in US dollars in 2000–2013 (average producer prices, dollars/tonne)

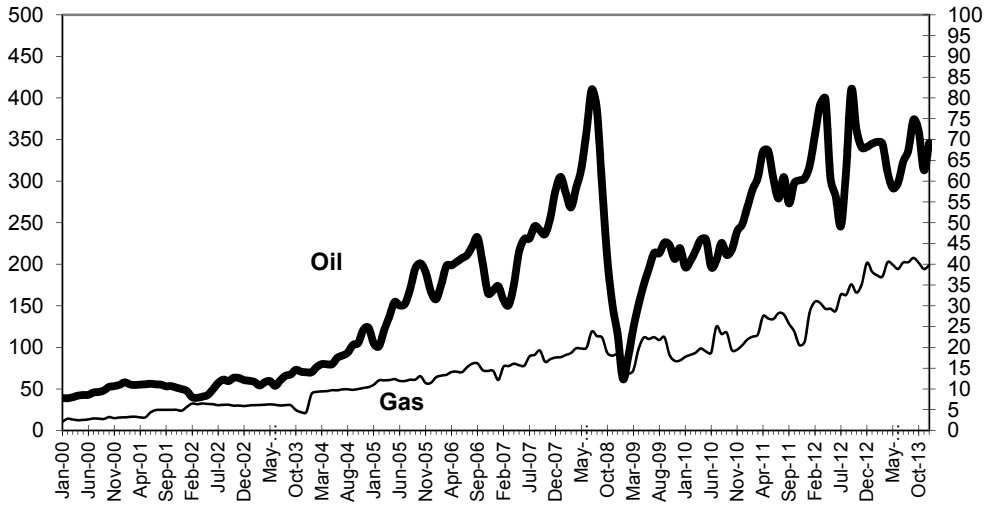
	2000 December	2005 December	2006 December	2007 December	2008 December	2009 December
Oil	54.9	167.2	168.4	288.2	114.9	219.3
Petrol	199.3	318.2	416.5	581.2	305.1	457.4
Diesel fuel	185.0	417.0	426.1	692.5	346.5	394.8
Residual fuel oil	79.7	142.7	148.8	276.5	125.0	250.8
Gas, dollars/thousand cu m	3.1	11.5	14.4	17.6	18.1	16.9

Cont'd

	2010 December	2011 December	2012 December	2013 June	2013 December
Oil	248.2	303.3	341.1	297.9	346.1
Petrol	547.9	576.9	628.7	566.6	614.4
Diesel fuel	536.1	644.9	774.2	596.4	698.0
Residual fuel oil	246.3	274.6	275.3	244.3	235.8
Gas, dollars/thousand cu m	20.5	21.3	40.3	38.9	39.8

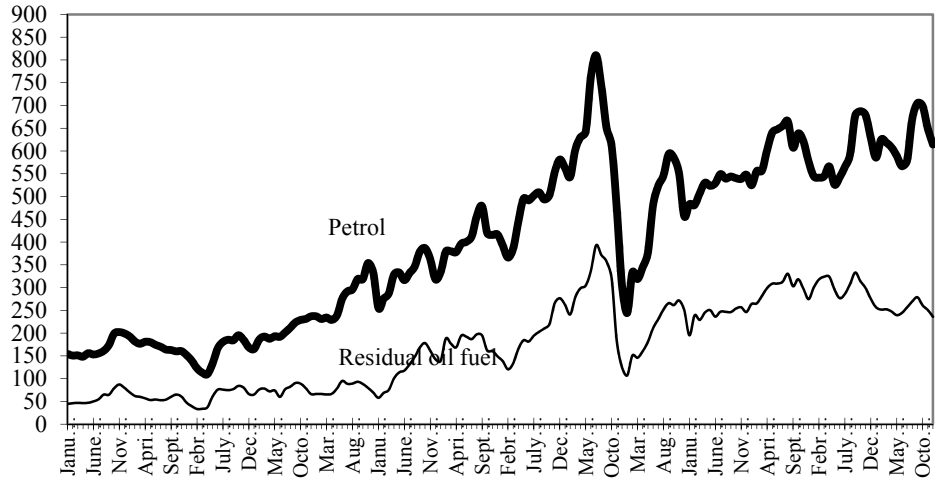
Source: calculations based on data from the Federal State Statistics Service

Domestic prices for gas are still subject to state regulation. In order to ensure the competitiveness of the national economy the government supports a significantly lower level of prices for domestic gas compared with the world price. In 2013 the domestic price (the price for purchasing gas by industrial consumers without indirect taxes) was on average 27.4% of the price for Russian gas on the European market.



Source: calculations based on data from the Federal State Statistics Service.

Fig. 42. Average prices given by manufacturers for oil and gas in US dollars in 2000-2013 dollars/tonne, dollars/thousand cu m



Source: calculations based on data from the Federal State Statistics Service

Fig. 43. Average producer prices for petrol and residual fuel oil in US dollars in 2000-2013, dollars/tonne.

4.4.5. Tax regulation of the oil and gas industry

Alterations to tax regulations have ensured that a reduction of the tax burden and an increase in the flexibility of tax assessment have played key roles in the development of the Russian oil sector during recent years. In order to stimulate the development of new oil and gas fields located in undeveloped regions without any infrastructure, a tax holiday has been applied since 2007 in respect of MET, by using a zero rate of such tax, either for a predetermined period of time or until a specified extraction volume has been achieved. In order to stimulate in-depth development of fields where the reserve depletion is greater than 80%, a special reduction factor (Cd) has been applied to the basic rate of MET since 2007. To encourage the development of small fields a reduction factor Cr (*Table 32*) has been applied since 2007 in respect of fields with initial recoverable reserves of less than 5 million tonnes. Furthermore, reduced rates of oil export duty have been applied since 2009. At the end of 2011 the total rate of export duty for oil was reduced by applying a coefficient 0.60 instead of 0.65 for calculating the rate of export duty. Such measures, by decreasing the tax burden on the oil and gas industry, have thus positively influenced oil extraction.

Table 32

Rates of MET for oil extraction in 2005–2013

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Basic rate of MET for recovery of oil, rubles/t.	419	419	419	419	419	419	419	446	470
Coefficient of dynamic of global oil prices (Cp)	(P_R – 9) x *P*/261				(P – 15) x *P*/261				
Coefficient related to level of reserve depletion of subsurface area (Cd)	–		3.8 – 3.5 x *N/V*						
Coefficient related to region's subsurface reserves (Cr)	–							0.125xV$_3$ + 0.375	

Legends: P_R – average level of Urals oil price for tax period, dollars/barrel; P – average US dollar exchange rate against ruble stipulated by Central Bank of the RF for tax period; N – accumulated oil recovery on the

subsurface area; *V* – initial recoverable reserves of oil of classes A, B, C1 and C2 in the subsurface area; *Vз* – initial recoverable reserves of oil, million tonnes.
Source: Tax Code of the RF (edition 2005-2013), Federal Law № 158-FL as of 22.07.2008, Federal Law № 151-*FL* as of 27.07.2006.

A significant event in 2013 was the adoption of Federal Law № 213-FL, as of 23.07.2013 "On amendments to part two of Chapters 25 and 26 of the Tax Code of the Russian Federation and article 3.1. of the Law of the Russian Federation 'On Tax Rates'". This law includes several measures to stimulate the development of hard-to-recover oil reserves and to establish a differentiation of MET rates depending on indicators representing the permeability of the reservoir, the size of the oil-filled formation and the degree of field depletion.

The law allows for the application of a special reduction coefficient Cr, representing the difficulty of oil recovery, to the MET rate. Depending on the parameters of the particular field (raw hydrocarbon deposit) the following values of the coefficient Cr have been established. (*Table 33*).

When oil is being recovered from a low-permeability reservoir, the established values of coefficient Cr are applied for 120 tax periods (10 years) starting from 1 January of the year when the extent of reserve depletion of that particular deposit exceeded 1%. Where oil is being recovered from deposits related to the productive sediments of the Tyumen Formation and to the Bazhanov, Abalakskiy, Khadumskiy and Domanikov productive sediments, the established values of coefficient Cr are applied for 180 tax periods (15 years) with effect from 1 January of the year when the extent of reserve depletion of that particular deposit exceeded 1%.

Table 33

Coefficient characterising the difficulty of oil recovery (Cr)

	Value of coefficient Cr
When oil is recovered from a deposit related to the productive sediments of the Tyumen Formation	0.8
When oil is recovered from a deposit with a permeability of not more than $2 \cdot 10^{-3}$ micron^2 and efficient thickness of oil-filled layer greater than 10 m	0.4
When oil is recovered from deposit with permeability not more than $2 \cdot 10^{-3}$ micron^2 and efficient thickness of the oil-filled layer of less than 10 m	0.2
When oil is recovered from a deposit related to the Bazhanov, Abalakskiy, Khadumskiy and Domanikov productive sediments.	0

Source: Federal Law № 213-FL, as of 23.07.2013.

To determine the values of the coefficient Cr, the applied parameters of permeability and efficient thickness of the oil-filled layer for raw the hydrocarbon deposits are those as indicated in the state balance of mineral reserves.

At the same time, for the purposes of administering the tax, the following special requirements are established for indicating the quantity of oil recovered from deposits where the coefficient Cr is applied:

- A record of the amount of recovered oil must be kept for each well working the deposit;
- Measurement of the quantity of liquid recovered from well together with a determination of its physical and chemical properties must be carried out for each well working the deposit at least 4 times per month.

Federal Law № 213-FL also stipulates a special coefficient Cdv, characterising the extent of depletion of the reserves in particular deposits of raw hydrocarbons. In the case of a high level of reserve depletion in a particular deposit (more than 80%) this coefficient is decreased and its value is calculated using a special formula.

Thus, 5 coefficients representing the main rent-forming factors are applied to the basic rate of MET:

1) coefficient Cp characterising the dynamics of global oil prices;
2) coefficient Cd characterising the extent of reserve depletion of each particular oilfield;
3) coefficient Cr characterising the amount of reserves in a particular oilfield;
4) coefficient Cr characterising the degree of difficulty of oil recovery;
5) coefficient Cdv characterising the extent of reserve depletion in a particular deposit of raw hydrocarbons.

The application of coefficient Cp allows the level of taxation to take into account the global oil price which determines the gross income of the producer. This coefficient is applied for all fields. The other coefficients are applied to reduce the tax burden in respect of those fields characterised by high expenses for their development (depleted fields, small fields and hard-to-recover reserves). The higher expenses related to the development of such fields are taken into account by means of the application of a lower tax rate.

It should be mentioned that shale oil currently has a Cr coefficient of zero, the same as that of the productive deposits. Reserves of such oil are actively being developed in the USA at present. However, in Russia they remain undeveloped though there are many such reserves in the country and the bulk of them are located in regions which have already been developed, primarily Western Siberia.

Amendments to Law № 5003-1, as of 21.05.1993, "On tax tariffs" were adopted by Federal Law № 213-FL. In accordance with these, oil recovered from fields in which the initially recovered oil reserves are classed as being similar to the productive deposits of the Tyumen Formation, where the initially recovered oil reserves of the field equal 0.8, are included in the list of oil types to which specific formulas are applied for calculating the relevant export tax duties. In accordance with such formulas, reduced export tax duties are established for oil from such fields.

Currently, special formulas to calculate export tax duty rates are applied to high-viscosity oil as well as to oil recovered from the fields located in Eastern Siberia (within the borders of the Sakha Republic (Yakutia), the Irkutsk Region and Krasnodarskiy Territory), the Nenets Autonomous Area and the Yamalo-Nenets Autonomous Area north of latitude 65 degrees, in the Caspian Sea and on the continental shelf.

There are plans to increase the rate of MET during 2014–2016 and these should compensate for the reduced rate of oil export tax. Federal Law № 263-FL, as of 30.09.2013, "On amendments to Chapter 26 of part two of the Tax Code of the Russian Federation "On tax tariffs' determines an increase in the basic rate of MET for oil recovery (from 470 Rb/tonne in 2013 to 559 Rb/tonne in 2016) with a decrease in the coefficient in the formula to calculate the rate of export tax duty for oil from 0.60 to 0.55. (*Table 34*).

Table 34

Rates of MET and export duty for oil in 2013-2016

	2013	2014	2015	2016
Basic rate of MET for oil recovery, rubles/tonne	470	493	530	559
Oil export duty coefficient used in the formula for calculating the rate of export duty	0.60	0.59	0.57	0.55

Source: Federal Law as of 30.09.2013 № 263-FL as of 30.09.2013.

There is one further important issue concerning the rates for export duties. In order to ensure the efficiency of oil refining and the export of petroleum products, such rates are set at a lower level than the rate for export duty on oil. This stimulates the growth of oil refining

within the country and the export of petroleum products. However, recent years have shown that such a differentiation of export duties has hardly stimulated growth in the depth of oil refining. In 2013 oil refining efficiency in Russia was 71.4%, i.e. it has not increased within the last 10 years. In fact the Russian export of petroleum products increased during recent years mostly due to an increase in the export of residual oil, which is used in Europe as a raw material for further refining to obtain light petroleum products.

In order to stimulate modernisation of the Russian oil refining industry and to increase oil refining efficiency, the Russian Government adopted several solutions providing successive increases in the rate of duty for residual oil exports from 39% (average level from 2006-2010) to 66% of the rate of export duty for crude oil. (*Table 35*). Such increases in the rate of export duty for residual oil failed, however, significantly to influence the situation; the production and export of residual oil have continued to grow, whilst oil refining efficiency has actually remained unchanged.

Table 35

Rates of export duties for oil and petroleum products in 2011–2016

	From 1 January 2011 until 30 April 2011	From 1 May 2011until 30 September 2011	From 1 October 2011 until 31 December 2013	2014	2015	2016
Oil*	0.65	0.65	0.60	0.59	0.57	0.55
Commercial petrols, straight-run petrol **	0.67	0.90	0.90	0.90	0.90	0.90
Diesel fuel, light distillates, medium distillates **	0.67	0.67	0.66	0.65	0.63	0.61
Residual oil, lubricating oils and others**	0.467	0.467	0.66	0.66	1	1

* Coefficient in formula for calculating the rate of export oil duty with marginal rate is defined by the formula 29.2 + 0.65x (P – 25)x7.3, where P is the price of Urals oil, dollars/barrel, in accordance with the RF Law № 5003-1 "On tax tariffs" and with a price of Urals oil exceeding 25 dollars/barrel.

** Coefficient with respect to the rate of export duty for oil.

Source: Federal Law as of 30.09.2013 № 263-FL, Resolutions of Government of the RF as of 27.12.2010 № 1155, as of 26.08.2011 № 716.

It should also be noted that the Russian government has announced an increase in the rate of export duty for residual oil from 2015 to match the rate of export duty for crude oil and that this has prompted the oil companies to begin modernisation of their oil refining capacity. Currently oil companies have implement special programmes to modernise oil refining capacity which have been agreed with the federal authorities, the execution of which should significantly improve both the level of technology in the oil refining industry in Russia and its efficiency.

A key point in tax regulation has been the significant strengthening of the tax burden on the gas sector as a result of phased increases in the MET rate for natural gas, from 147 Rb/thousand cu m in 2010 to 622 Rb/thousand cu m in the second half of 2013. Such an increase allowed the government to obtain more of the gas rent generated by this sector. An OPGT reduction coefficient (in 2013 the coefficient was 0.455) has been applied to the independent producers which, unlike "Gazprom", have no income from the shipment and export of gas.

In 2013 Federal Law № 263-FL as of 30.09.2013 "On amendments to Chapter 26 of part two of the Tax Code of the Russian Federation and article 3.1 of the Russian Federation 'On tax tariffs'" introduced essential alterations to the system of tax assessment for the gas sector. This law defined a new procedure to determine the rate of MET for natural gas and gas

condensate recovery, by means of new formulas and coefficients which take into consideration various factors influencing the production profitability and sale of gas condensate. This order will come into force from 1 July 2014.

In accordance with the new procedure for calculating the MET rates for natural gas and gas condensate, several essential rent-forming factors will be taken into account, including the prices for natural gas on the external and domestic markets, the prices for gas condensate, the price for Urals oil, the level of oil export duty, the US dollar to ruble exchange rate, the proportion of gas in the total amount of product recovered from raw hydrocarbon deposits, the extent of reserve depletion of the subsurface area, the geographical location of the subsurface area, the depth of the raw hydrocarbon deposit and the specifics of the development of the individual oilfield deposits.

The procedures adopted to determine the rate of MET for natural gas will allow a significant increase in the efficiency of the tax system for the gas sector. The current tax system, based on a single undifferentiated rate of MET for natural gas is very inefficient, both in terms of the security of government revenues and from the point of view of creating favorable conditions for investment in developing the fields.

The new procedure for determining the rate of MET for natural gas allows for a consideration of the main factors determining the profitability of production and the sale of gas and for ensuring the required differentiation of the tax burden, depending on the particular conditions for the development of each individual field.

2013 saw the adoption of Federal Law № 268-FL as of 30.09.2013 “On amendments to the first and second parts of the Tax Code of the Russian Federation and particular legislative acts of the Russian Federation to stimulate the recovery of raw hydrocarbons on the continental shelf of the Russian Federation by means of measures taken with respect to tax and custom tariffs”. This law determines the special preferential tax regime for the development of new off-shore fields. This regime is based on an ad valorem reduction in the MET rate, differentiated in accordance with the areas of shelf involved and standard tax on profits. The rates of MET determined for this regime are 30%, 15%, 10% and 5% depending on the shelf areas (categorised by project complexity). No export tax duty will be imposed on exported products and property related to the off-shore projects.

The Russian oil extraction industry is currently nearing its production capacity. Oil recovery in the developed regions, including Western Siberia, the main oil production region of the country, is currently falling due to the depletion of the fields located there. In order to compensate for this reduction in oil recovery it is necessary to develop new fields both in regions with undeveloped infrastructure, including the fields on the continental shelf, and the unexploited, poorer quality reserves in the developed regions.

The development of new fields and the hard-to-recover reserves incurs substantially higher production expenses, and within a common tax assessment would be uneconomic. In this regard, the adoption of the above legislative solutions in respect of the tax assessment of the oil and gas industry is extremely important. This will allow the development of a significant proportion of the raw hydrocarbon reserves which are currently undeveloped, thus maintaining the levels of oil and gas recovery in the country.

4.5. Russian agriculture: the first year within the World Trade Organization

4.5.1. General outline of agricultural performance

On the eve of Russia's accession to WTO the debate held in the country about possible adverse effects of this step grew more fierce. The main hazard for Russian farm producers was considered to be the commitment to reduce import duties: from the moment of accession the average maximum duties on agricultural items were to be cut from 13.2% to 10.8%[1]. The system applied in Russia prior to entering WTO envisaged support to agriculture primarily by means of transfers from final consumers who paid higher prices (as compared with the world ones) for most farm products. The lowering of duties and consumer transfers implies an actual curtailment of aggregate support to domestic producers. The reduction of risks and preservation of the existing level of aggregate support to Russian farm producers would require an increase of their budget support. But such policies would be in disaccord with the current budget capabilities and potentially would contradict the terms of the country's accession to WTO restricting amber box[2] protection measures.

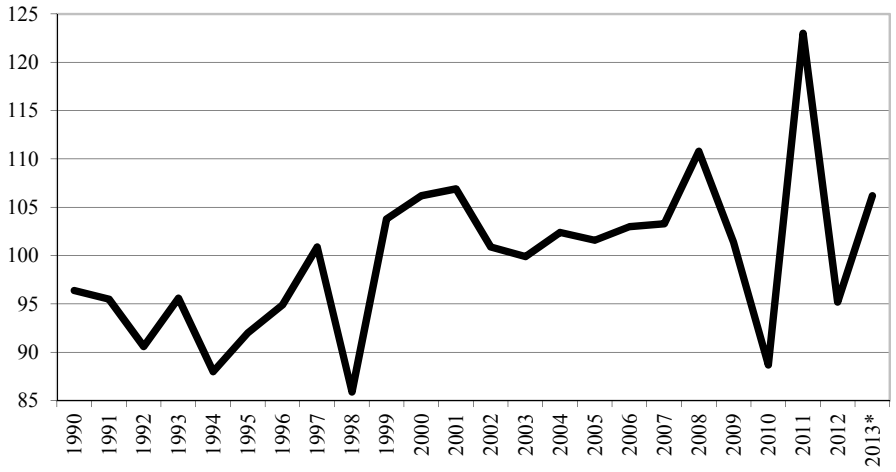
Formally, at the federal level Russia applies long-term mechanisms of state support to farm producers – the financing should comply with the guidelines and amounts envisaged by a regular State program for agricultural development and regulation of agricultural, input and food markets (hereinafter – the State Program) in effect within a particular period (2008-2012, 2013-2020). But in 2013 the mechanisms of support were altered as regards both volumes and directions. In particular, selected sectors still got additional support in excess of the limits stipulated in the State Program3. The allotment of extra budget funds was not directly linked to the WTO accession but was substantiated by the worsening performance of selected sectors following the accession and by the unfavourable conditions of 2012.

Judging by production indicators, 2013 was a better year for agriculture as compared with 2012: its gross output exceeded that of 2012 by 6.2% (*Fig. 44*). But this was due not to a sustainable trend but to poor indicators of the previous year against which the 2013 performance looked better.

[1] Tariff rates for meat products (beef, pork, poultry meat) differ depending on whether the deliveries fall within the quota or are made out of quota. Within the quota the tariff rate for beef is 15%, in excess of it – 55% (for pork – 0% and 65%, respectively). A matter of concern was the abolition of customs duty on import of live pigs. The lowering of specific duties is to be enacted at different dates – some of them come into force at once, others – within the period from 2 to 8 years after the moment of Russia's accession to WTO.

[2] Traditional measures of support applied in Russia are mostly those regarded as so called amber box tools. See: Shagayda N.I. *Otsenka byudzhetnykh raskhodov i byudzhetnoy podderzhki v sel'skom khozyaystve Rossii* [Estimate of budget expenditures and budget support in Russian agriculture] // *APK: ekonomika, upravleniye* [Agro-industrial complex: economy, management]. No. 12, 2012, pp. 14-22.

[3] In 2013 the financing envisaged by the State Program was increased by nearly 30%. A part of additional funds was allocated to the reimbursement of expenditures of pig, poultry and egg producers on the purchase of feeds, the prices for which grew due to the unfavourable weather conditions in 2012.



* - 10 months.
Source: Rosstat.

Fig. 44. Index of agricultural production in all types of farms (in comparable prices, as % of the previous year)

As compared with 2012, the output of grain in 2013 increased by 30%, the output of sunflower seeds – by 11%. The production of sugar beets that used to develop quite dynamically, in 2013 notably fell – by 18% (*Table 36*). The cause of this decrease is to be sought in the change of prices for sugar and the consequent lowering of potential incomes from production of sugar beets resulting in the reorientation of producers towards growing of grains and oilseeds that were more lucrative that year. Grain crops and sunflower seeds compete with sugar beets for areas in the main regions producing this crop.

Table 36

Gross output of basic farm crops in farms of all types, 1,000 tons (annual average)

	1990–1995	1996–2000	2001–2005	2006–2010	2011–2013	For reference:	
						2012	2013*
Grains and legumes	92737	65097	78832	85190	85483	70908	91329
Flax fiber	72	38	53	45	64	46	38
Sugar beets	23440	14023	18530	27130	43482	45057	37747
Sunflower seeds	3158	3330	4507	6313	9298	7993	10204
Potatoes	35798	31834	28359	27315	30801	29533	30189

* - preliminary data.
Source: Rosstat.

Table 37 shows the production dynamics for basic livestock products in corporate farms[1].

In 2013 the process of putting in operation large pig and poultry complexes went on resulting in the increase of overall production of meat despite the continuing decline of beef production in corporate farms. The increase of pork output exceeded 15%, that of poultry meat was about 10%. The most part of these products are produced in corporate farms (*Fig. 45*).

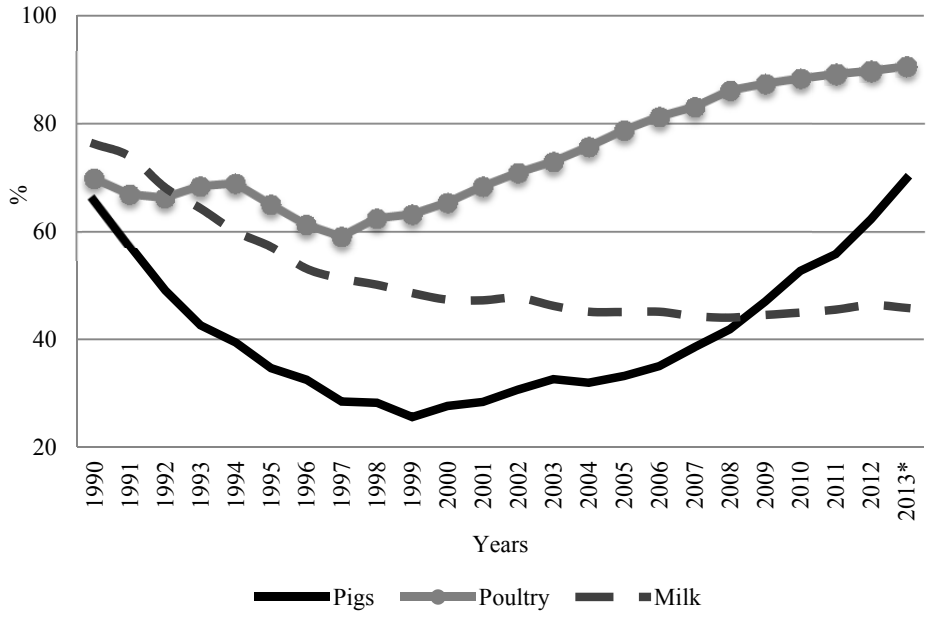
[1] The data for all types of farms is not available.

Table 37

Production of basic livestock products in corporate farms, 1,000 tons (annual average)

	1990–1995	1996–2000	2001–2005	2006–2010	2011–2013	For reference:	
						2012	2013*
Slaughter livestock and poultry (slaughter weight)	5087	1994	2112	3428	5392	5415	6002
including:							
Cattle	2638	1049	761	592	528	533	538
Pigs	1332	447	510	888	1652	1594	2007
Sheep and goats	143	30	15	15	17	17	17
Poultry	925	440	809	1917	3192	3255	3463
Milk	31758	16825	15051	14270	14398	14752	14048
Eggs (million pieces)	30782	22858	26307	29307	32286	32768	32241

* - preliminary data.
Source: Rosstat.

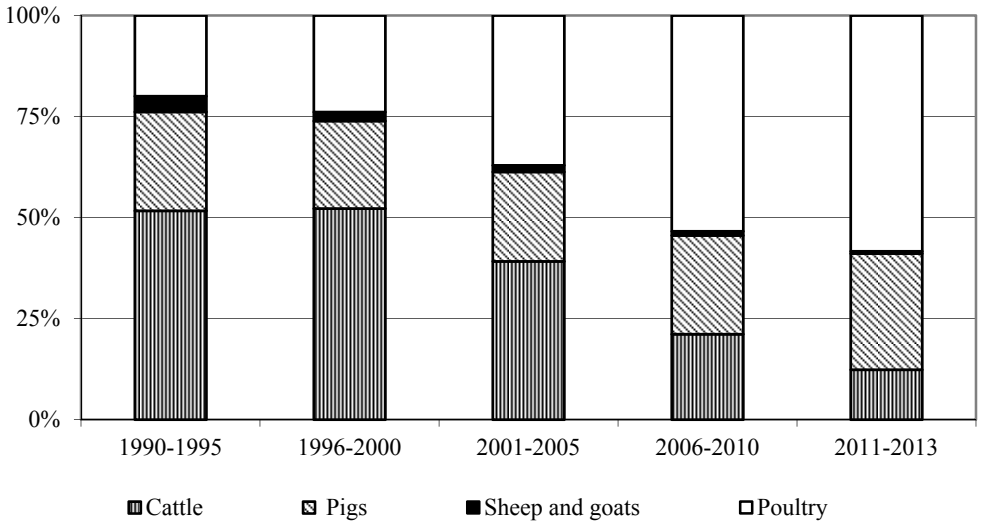


*- preliminary data.
Source: Rosstat.

Fig. 45. Share of corporate farms in production of basic livestock products as % of the aggregate output

In spite of all the efforts of state to stimulate production of milk, in 2013 its output was down 4.7% as compared with 2012. A sharp increase of pork and poultry meat output in corporate farms resulted in a noticeable shift in meat production structure (*Fig. 46*).

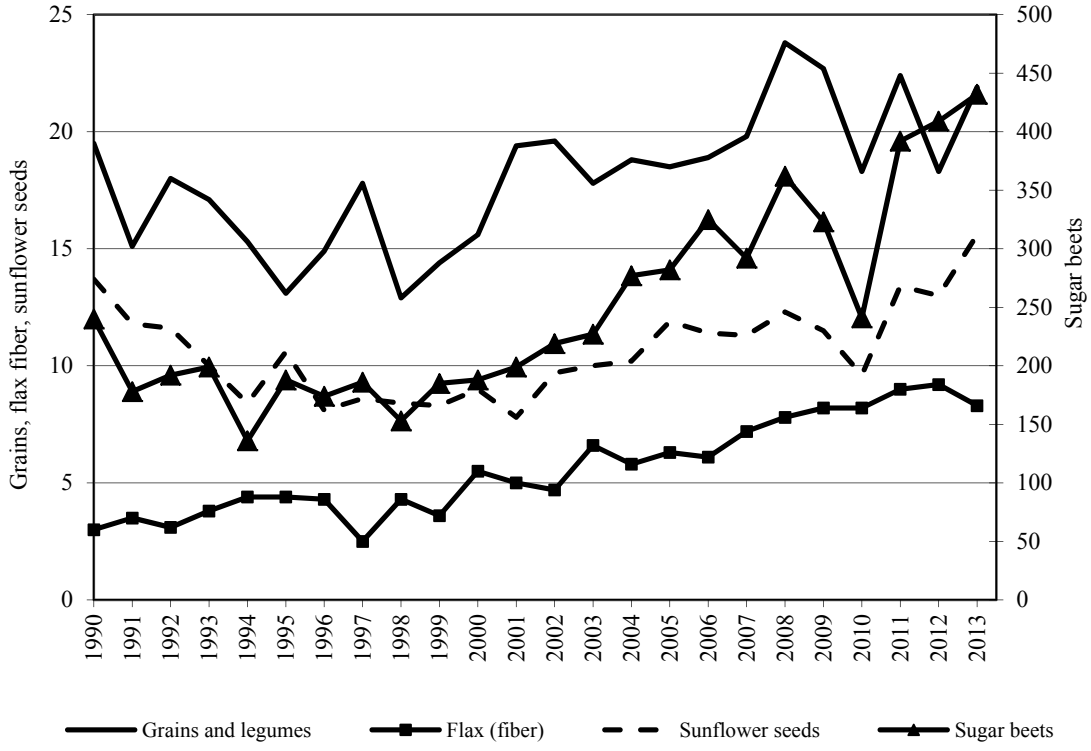
Production of pigs continues to concentrate in corporate farms due to the forced reduction of their population in household farms (attributed to the risk of disease spread in case of home raising of livestock). However, it affects the financial performance of rural households that still keep over 20% of the total pig inventories (in 2006 – over 50%).



Source: Rosstat.

Fig. 46. Structure of meat production by types of livestock, %

In crop production the yields of all basic farm crops continue growing *(Fig. 47*).

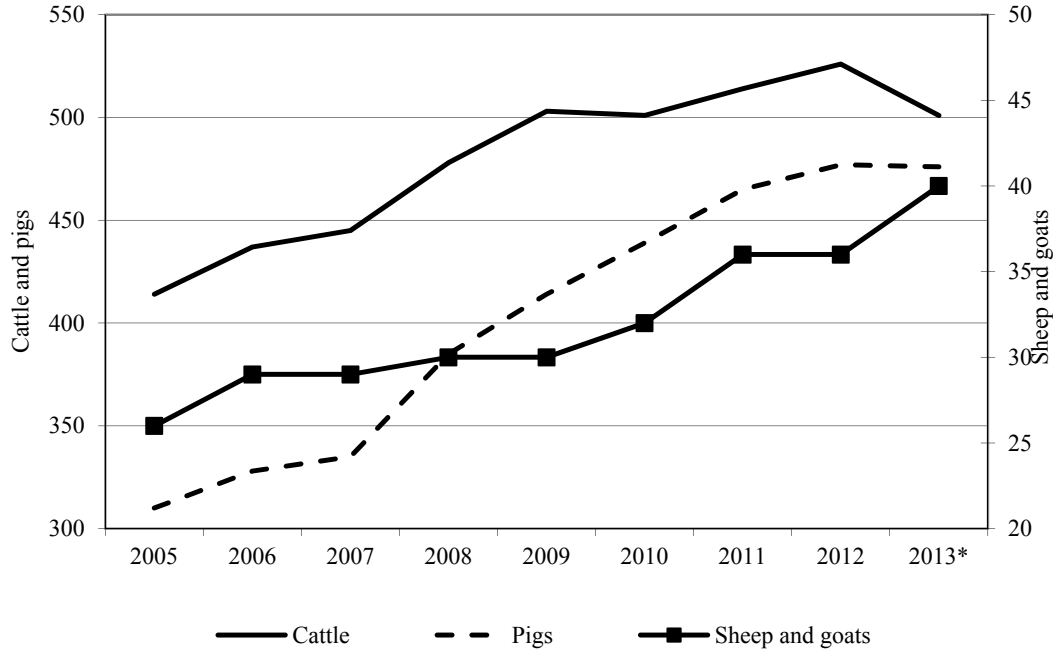


Source: Rosstat.

Fig. 47. Yields of basic farm crops, centners per hectare

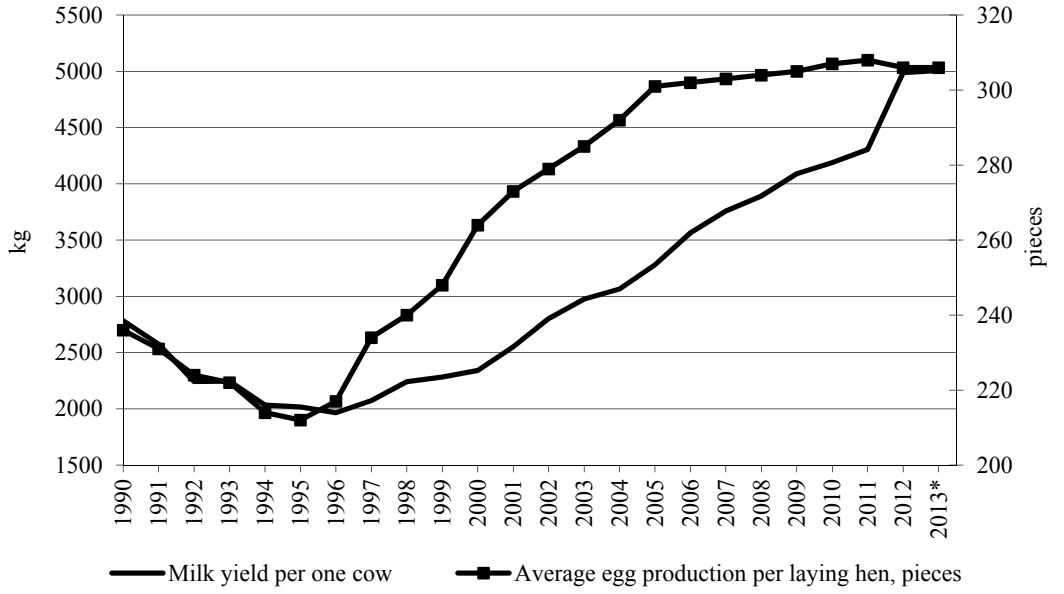
In livestock production higher average daily weight gains in 2013 were recorded only in the raising of sheep while for pigs they remained at the 2012 level and for feeder cattle even

dropped. The productivity of milk cattle raising and production of eggs did not change (*Fig. 48* and *49*).



* - January-September.

Fig. 48. Annual dynamics of average daily weight gains of livestock in corporate farms (grams)



* - 2013 - estimate.

Fig. 49. Productivity of livestock and poultry in corporate farms

Labour productivity in agriculture continues to demonstrate an upward trend. By the beginning of 2013 in corporate farms it was more than 4 times higher than in 1990[1].

4.5.2. Situation on selected agricultural and food markets

2013 was the first year of Russian agricultural and food markets' operation within WTO. Among the main concerns associated with conditions of joining this world organization were the risks of domestic production decline, growth of imports and the respective weakening of national food security. Indeed, last year the situation in some agricultural sub-sectors was really difficult. But it was not so much due to the fulfillment of Russia's commitments to reduce import tariffs after joining WTO as to a whole range of other conjoint negative factors: the growth of prices for formula feeds in livestock production, the positive world price dynamics on some commodity markets, Russia's accession to the Customs union.

Imports of agricultural and food products after the country's accession to WTO did not change much. According to data of the RF Federal Customs Service, within 10 months 2012 the value of imports fell by 5.3% against the respective period of 2011 and in 2013 it grew by 4.1% against the respective period of 2012[2].

A matter of concern on the eve of accession to WTO was the probable growth of meat imports. However, imports of red meat fell by 11.7%, imports of poultry meat – by 6.2%. Imports of shellfish increased by 21.3%. Imports of butter and other milk fats grew by 16.1% while imports of dried milk – by more than 48% which is a disturbing rate. Coupled with larger imports of palm oil (up 27.8%) this can be an indirect evidence of softening control over compliance with technical regulations for milk and dairy products or of quite legal increase of foodstuffs' production out of reconstituted milk.

On the contrary, the value of Russia's exports of agricultural and food products in 10 months 2013 fell by 9.4%. It was due to the reduction of export supplies of wheat (by 26.5%), sunflower oil (by 22.7%) and wheat flower (by 44.9%). At the same time the specific trend of the past year was the penetration of Russian meat products to foreign export markets (still, the volumes exported in 2013 remained quite modest – they totaled about 50,000 tons for both meat and sub-products). The major importers of meat from Russia are countries of Middle and South-East Asia (China, Kazakhstan, etc.). The main items exported to foreign markets are poultry meat, pork sub-products and finished meat products.

In Russia the excess of domestic food prices over the world ones (that forms primarily due to the application of import duties and quotas) is the basic mechanism of support to farm producers. Producers of meat and milk enjoy the biggest price support. After Russia's accession to WTO import duties on pig sector's produce noticeably fell: the tariff on import of pork within the quota reduced from 15% to zero, on its import above the quota – from 75% to 65%. The tariff on import of live pigs plummeted several fold – from 40 to 5%. Other food items were not subject to such dramatic liberalization of import restrictions in the first year of Russia's membership in WTO. According to commitments undertaken by our country the lowering of import duties is to proceed gradually – within the so called implementation period. For most agricultural and food items this period ends in 2015-2016.

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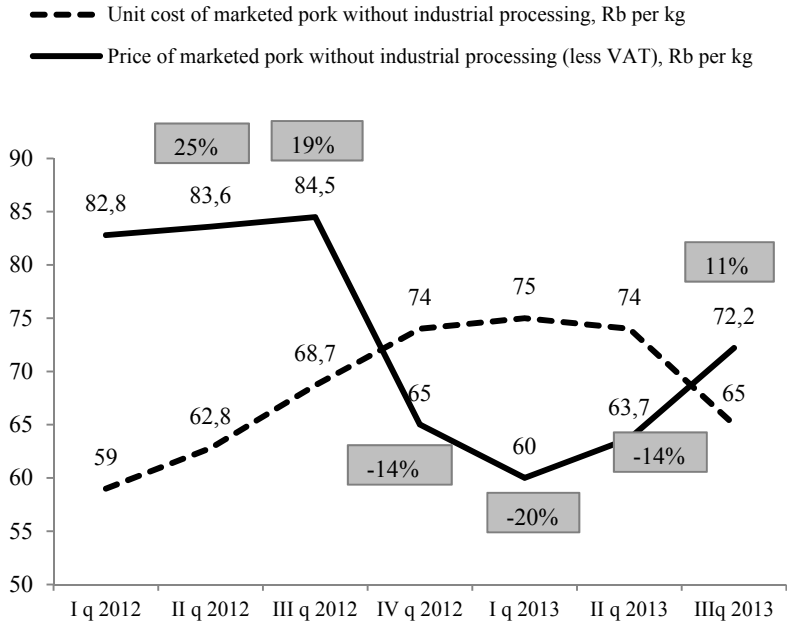
[1] Uzun V.Ya. *Rezultaty yeltsinskoy agrarnoy reformy*. [Results of Yeltsin's agrarian reform] // *Ekonomika sel'skohokhozyaystvennykh i pererabatyvayushchikh predpriyatiy.* [Economics of agricultural and processing enterprises]. No.4, 2013, pp. 19-26.

[2] Hereinafter the data relates to imports and exports in 10 months 2013 and includes trade with the Republic of Belarus and the Republic of Kazakhstan.

In the first half of 2013 the domestic meat sector was affected by the growth of imports and the combination of record high prices for feeds with low purchase prices for basic types of meat. As a result its profitability fell. In the second half of the year the situation in meat sector improved owing to lower cost of feeds for livestock production.

The fourth quarter of 2012 – the first quarter of 2013 were a period of severe crisis in pig raising. Within this period negative trends in the sector were conditioned by a temporary growth of pork imports due to the lowering of import tariffs in the framework of Russia's commitments to WTO, higher prices for grain and the oversaturation of the market owing to both the increase of domestic output of pork in corporate farms and larger import supplies. As a result prices for live pigs in corporate farms fell by 25-30%[1]. All these factors led to the drop of profitability in pig raising (*Fig. 50*). Negative and even zero margins in the period when the sector was undergoing an active phase of investment development can affect the growth prospects of industrial pig production after 2014 if the ratchet effect of increase preserves in 2013-2014. In its turn, the danger of further spreading of ASF[2] and the above mentioned growth of prices for feeds contributed to the cut of livestock inventories in household farms. As a result, there appeared risks of a sharp production drop in the Russian pig sector and the return to situation observed five years ago when the share of imports on the market reached 40-50%.



Source: National Union of Pig Producers.

Fig. 50. Profitability of pig raising in the Russian Federation in 2012–2013

The risk of disease spread and the detected cases of violation of veterinary and sanitary requirements as to the use of ractopamine (feed supplement for increasing muscle mass of pigs and cattle) and antibiotics forced Russia to introduce restrictions on import of live pigs and pork from the countries of EU, North, South and Latin America and the Republic of Belarus. Together with the removal of pork and poultry meat from the list of goods the import

[1] According to data of the National Union of Pig Producers.
[2] African swine fever.

of which from developing and least developed countries is eligible for tariff preferences, eased pressure on domestic pork production. Import supplies of pork started to fall already at the beginning of 2013. Coupled with the lowering of domestic prices for grain, this supported the growth of prices for pork in 2013 and helped domestic pig producers to achieve a positive profitability rate of 11% in the third quarter of 2013.

On the whole, despite all the problems faced at the beginning of 2013, the market of pork demonstrated record annual rates of domestic production growth and a shrinkage of imports. For instance, in 2013 the output of pork in corporate farms grew from 1,594 thousand tons to 2,007 thousand tons slaughter weight (up 25% *Table* 37). Meantime, the decrease of livestock population and production in household farms accelerated. In the situation of tougher competition with imported products non-efficient producers quit the market. Despite the positive dynamics in domestic pig raising sector, the share of imports in the total pork market capacity remains relatively high – about 29%[1].

The situation on the market of poultry meat was similar. The lowering of prices for poultry conditioned by high saturation of the domestic market and larger cost of formula feeds affected the profitability of poultry plants – the respective sector's average fell down to 5%[2]. Still, production of poultry meat continues to grow by inertia while imports are slightly shrinking. After a boost in 2010-2012 the sector's growth rates somewhat declined but nevertheless remain rather high. In 2013 the annual output of poultry in corporate farms increased by 6.3% and reached 3,463 thousand tons slaughter weight (*Table 37*).

The domestic market of poultry meat is close to saturation. The share of imports thereon fell down to 13%. But as different from pig raising where the growth of industrial production offsets the decline of output in household farms, in poultry breeding such substitution is impossible – about 90% of poultry meat is produced by the industrial poultry plants. Therefore, further growth of the domestic poultry production is feasible only in case of developing export supplies. Taking into account specifics of pricing different broiler parts, domestic poultry meat has a good export potential.

The production of beef didn't feel any direct effect of accession to WTO as almost all beef in the country is a by-product of milk cattle breeding. The crisis of milk industry fostered a decline of cattle herd. At the same time positive structural shifts are taking shape in the sector inter alia owing to the active state support – the population of meat breeds and mixed bred cattle is increasing. According to the data of IKAR, in 2013 the rate of increase of meat cow number (22%) exceeded that of the cattle herd in general.

In 2013 the output of slaughter cattle meat in corporate farms didn't fall for the first time in many years – 538 thousand tons against 533 thousand tons in 2012 (*Table 37*). It should be noted that the demand for beef is limited by its relatively high price as compared with that for pork and poultry meat. That's why the growing supply of the latter will continue to force beef out of retailing and processing. Consequently, in the medium term the development of domestic cattle meat sector will result in increased production of quality beef rather than in bigger total output of this kind of meat.

As mentioned above, in 2013 the situation in milk sector that in recent years was stagnant became even worse: the output of raw milk fell and imports of dairy products increased. However, this aggravation was not due to the Russia's accession to WTO but was rather conditioned by problems of domestic origin.

[1] According to data of IKAR.
[2] According to data of IKAR.

The output of milk in corporate farms fell by more than 700 thousand tons and that in all categories of farms – by 1.5 million tons as compared with 20121. The reduction of raw milk output in Russia is due to the shrinkage of milk cattle inventories and productivity resulting from poor quality of rough feeds and the rise of prices for formula feeds.

The drop in production of raw milk has toughened competition of processors for this input and led to the increase of purchase prices for milk. According to data of the RF Ministry of Agriculture, the average price received by domestic producers of raw milk grew from Rb 15.6 per kg at the beginning of the year up to Rb 17.9 kg per kg by mid-December 2013 (up 14.4% as compared with the respective date of 2012).

In the situation of continuing deficit of raw milk and high purchase prices for this input one could observe a substitution of some dairy products for other – the production of items requiring much milk (such as cheese and dried milk) was falling while that of whole milk products (kefir, yoghurt, cream) was growing (*Table 38*). High prices for milk inputs on the domestic market coupled with positive dynamics of the world prices for dried milk following the drought in New Zealand fostered the growth of prices for finished dairy products in Russia. During the year average consumer prices for liquid milk rose from Rb 30.8 to Rb 32.5 per litre, those for butter – from Rb 239.8 to Rb 285.3 per kg, for hard rennet cheese – from Rb 255.7 to Rb 288.5 per kg[2].

Table 38

Production of dairy products in 2012-2013 (1,000 tons)

	2012	2013	Change %
Cheese, cheese products	412.5	389.4	–5.6
Butter	195.3	198.8	+1.8
Whole milk products (in milk equivalent), including	10315.5	10602.1	+2.8
– kefir	780.0	864.1	+10.8
– yoghurt	108.5	114.1	+5.2
– sour cream	525.5	502.0	–4.5
– cottage cheese	366.9	342.0	–6.8
– cream	85.3	93.8	+9.9
Milk in solid forms	117.7	108.6	–7.7
Cream in solid forms	0.3	0.1	–61.1
Dry baby milk (including sour milk) formulas	18.6	17.8	–4.4

Source: Rosstat.

As mentioned above, the reduction of domestic dairy output was compensated by larger import supplies of dried milk and butter.

An essential problem for the Russian market of agricultural and food products is associated with the Customs Union. Transit supplies of "grey" imports come to Russia across the borders of neighboring countries-members of the Customs Union. The major competitor of Russia on the dairy market is Belarus that after the Union's formation has got an unrestricted access to the Russian market. In 2013 Belarus accounted for 77% of the total imports of dried milk and for 41.3% or the total imports of butter3. Last year the country also became the second (after Brazil) largest supplier of meat to Russia.

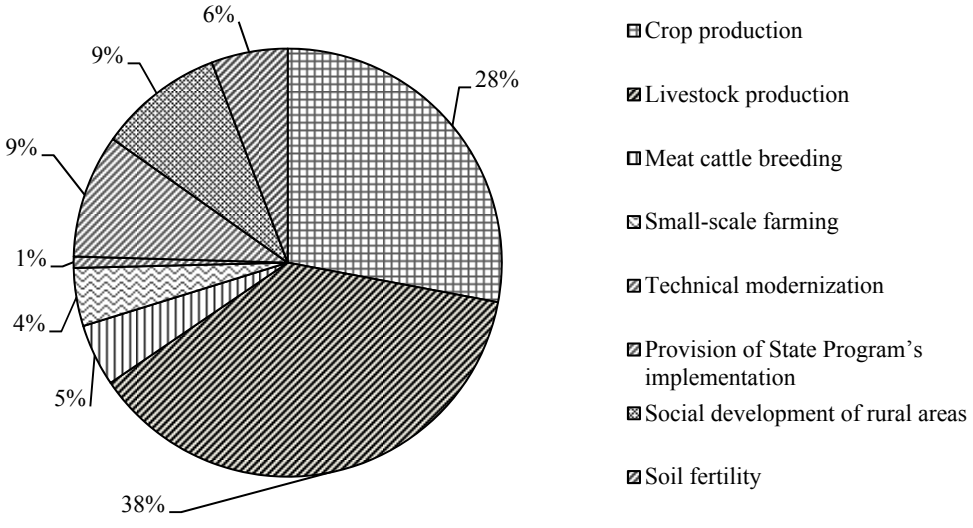
The first year of Russia's membership in WTO showed that natural calamities (drought of the recent years) and the situation on the world markets have a greater impact on the Russian agricultural and food markets than the accession to this organization. Neither essential growth

[1] According to estimates of the National Union of Milk Producers (SouzMoloko).
[2] According to data of FGBU "Spetstsentruchet v APK" [Federal State Budget Institution "Specialized Center for accounting in the agrifood sector"].
[3] According to data of IKAR for 11 months 2013.

of agrifood imports nor expansion of Russian supplies to foreign markets was observed in 2013. Certainly, some sectors of agriculture being at the stage of active investment development require additional measures to adjust to the new conditions of trade. But it's necessary to understand that the accession to WTO determines prospective trends of the farm sector development: improvement of domestic products' competitiveness versus imported items, market exit by non-efficient producers and further consolidation in the sector, measures for the development of export at the state level (efficiency review, granting of quotas, coordination of veterinary certificates) and re-orientation of state policies towards farm support tools permitted within WTO.

4.5.3. Implementation of the State Program in 2013

The eight-year State program for agricultural development and regulation of agricultural, input and food markets for 2013-2020 (hereinafter – the State Program) was adopted as a follow-up of the five-year State Program for 2008-2012. It incorporated actually all basic directions and measures of the first State Program. A few directions (such as "Development of meat cattle breeding" and "Support of small-scale farming") were detached into separate sub-programs while some other measures were merged based on the respective sector (crop production – livestock production). In 2013 the biggest budget infusions were envisaged for the support of livestock production as the priority direction for domestic farm sector development (*Fig. 51*): together with funds for the support of meat cattle breeding it accounted for 43% of the total allocations. It was presumed that following the increase of production and exports of grain, state support would help livestock sector to grow as well. It's noteworthy that the amount of funds envisaged for the State Program's implementation (including expenditures on bureaucratic apparatus) was the same as that for the social development of rural areas (incorporating measures for gasification, water supply, construction of health care and educational institutions all over the country).



Source: the State Program.

Fig. 51. Structure of financing by basic directions of the State Program in 2013

The global task taken upon by the RF Ministry of Agriculture was the adjustment of the State Program's letter and figure to the commitments assumed by Russia following its accession to WTO. At present 62% of the agricultural budget is allocated to "amber box" measures and 38% - to "green box" measures (*Fig. 52*).

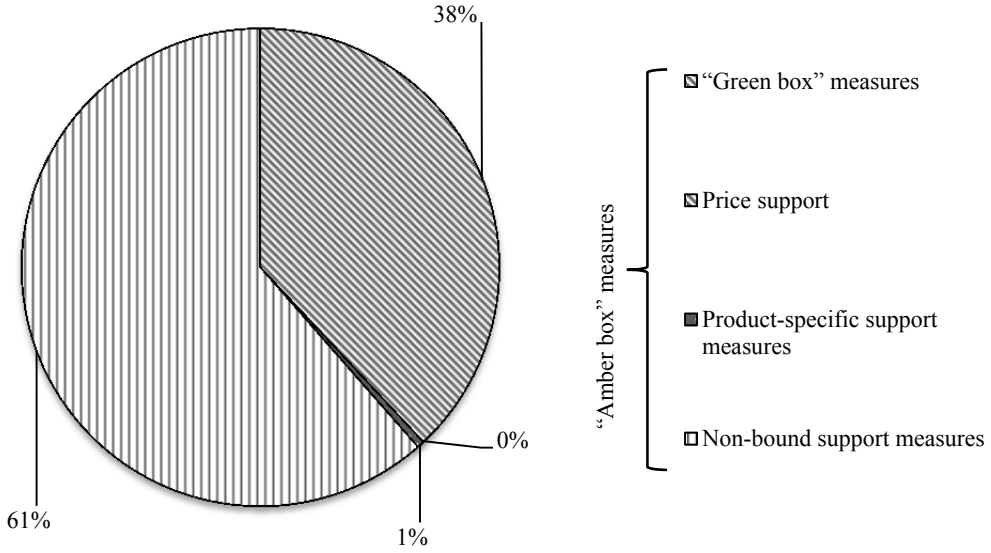


Fig. 52. Structure of farm support in 2013

The reframed support measures are to comply with provisions of Clause 6d Annex 2 of the "Agreement on agriculture", namely: not to be conditioned or determined by types and/or volumes of agricultural output produced by a specific producer in any year after the base period; not to be influenced by the domestic or world prices for agricultural products produced in any year after the base one. In their turn, investments are to be made only in the agreed period and should not be conditioned by requirements to produce a specific kind of produce (which is pretty often the case in the text of the State Program and associated normative acts. For instance, essential economic programs are financed only in the part corresponding to the announced priority directions such as meat cattle breeding, milk cattle breeding, etc.).

One cannot say that the Ministry of Agriculture has so far failed to make successive attempts to adjust measures of state support so that to exclude them from the most market distorting "amber box". Some measures for the development of crop and livestock production were shifted into the category of non-bound support including technical modernization of the sector. It is projected to increase the variety and amount of allocations to general support measures, e.g. product marketing and promotion, construction of logistical centers, support to the development of farm cooperation, information and consulting services, systems of market information, other infrastructural projects. As of January 1, 2014 the state support of farm production and social development of rural areas got Rb 197.8bn from the federal budget which is 44% above the respective indicator of the previous year (*Table 39*).

Table 39

Actual amounts of federal budget financing under the first State Program for 2008–2012 by directions, billion rubles

Directions	2008	2009	2010	2011	2012	2008–2012, % of the projected amounts
Sustainable development of rural areas	8.137	8.963	7.720	7.720	11.000	38.7
Creation of general conditions for farming	17.720	17.737	10.106	11.499	11.800	103.5
Development of priority agricultural sub-sectors	13.144	16.417	10.585	23.129	26.800	116.0
Attaining of financial sustainability of farm sector	78.642	112.270	72.991	74.701	81.000	145.8
Regulation of agricultural, input and food markets	0.639	9.636	5.878	7.934	7.000	Up 4.4 fold
TOTAL	118.3	165.0	107.3	124.9	137.6	118.5
% of GDP	0.28	0.48	0.23	0.22	0.22	

Source: National report on agriculture for 2008-2012. Ministry of Agriculture, 2013; authors' estimates.

In 2013 the actual financing of the State Program was better than in the previous years (*Table 40*)[1].

Table 40

Projected and actual financing of the State Program for agricultural development in 2013

	Budget item	Envisaged in the State Program, million rubles	Approved budget, million rubles	Actual funding, million rubles	As % of the initial Program projections
1	2	3	4	5	6
1	Partial reimbursement of expenditures on the purchase of elite seeds, on laying out and maintaining of vineyards, perennial fruit and berry plantations, on purchasing and transportation of seeds to the Far North and equated localities, etc.	1960.7	1960.7	1960.6	100
2	Partial reimbursement of interest rate on: - short-term credits (loans) for the development of crop production, processing and marketing	7199.5	19199.5	19175.4	266
	- investment credits (loans) for the development of crop production and processing, development of infrastructure and logistical support of crop produce markets	8785.0	8785.0	13204.7	150
3	Partial reimbursement of farm producers' expenditures on paying insurance fees	5000.0	5000.0	4397.1	87.9
4	Non-bound support to crop producers	15200.0	25200.0	25279.8	166
5	Support of economically viable regional programs in the field of - crop production	3000.0	3000.0	2689.9	89.6

[1] In the 8-year State Program for 2013-2020 the directions of financial support to agriculture were changed as compared with the previous Program and therefore the financing data for 2013 is given separately in *Table 40*. For more details about the shift in directions of state support under the new State Program see Yanbykh R. *Gosudarstvennaya programma razvitiya sel'skogo khozyaystva na 2013-2020: osnovnye napravleniya i problemy adaptatsii k chlenstvu v WTO.* [State Program for agricultural development in 2013-2020: basic directions and problems of adjustment to the WTO membership] // *Ekonomiko-politicheskaya situatsiya v Rossii.* [Economic and political situation in Russia]. 2012, No.7, pp. 49-52.

Cont'd

1	2	3	4	5	6
	- livestock production	8000.0	8000.0	7255.5	90.7
	- meat cattle breeding	2000.0	2000.0	2000.0	100
6	Support of pedigree livestock breeding	3500.0	3500.0	3558.6	102
7	Subsidies per 1 litre of marketed milk	10000.0	12758.7	12748.1	127
8	Partial reimbursement of interest rate on: - short-term credits (loans) for the development of livestock production, processing and marketing	4094.6	4094.6	4193.4	102
	- investment credits (loans) for the development of livestock production and processing, development of infrastructure and logistical support of livestock produce markets	28740.6	28740.6	34907.2	121
	- investment credits for the building and reconstruction of meat cattle breeding facilities	4424.0	2503.4	0	0
	- long-term, medium-term and short-term credits taken by smallholder farms	5000.0	5000.0	5000.0	100
9	Total amount for the reimbursement of interest rate (2 + 8)	58243.7	68323.1	76480.7	131
10	Renewal of farm machinery inventories	2000.0	7300.0	2430.0	121
11	Forming of state informational resources for ensuring food security	189.7	180.2	128.6	67.7
12	Support to beginner farmers	2000.0	2000.0	2000.0	100
13	Development of family livestock farms	1500.0	1500.0	1500.0	100
14	Partial reimbursement of expenditures of individual private farms (including individual entrepreneurs) on registering ownership titles to agricultural land plots used by them	120.0	120.0	50.7	42.3
15	Federal Target Program "Social development of rural areas till 2013"	9012.3	9012.3	9012.3	100
16	Federal Target Program "Preservation and restoration of soil fertility of farmlands and of agricultural landscapes as the national endowment of Russia in 2006-2010 and for the period till 2013"	7154.3	6625.5	6537.8	91.3
	Total	158942.9	197671.7	197884.6	124

Source: Calculated by authors using data of the Ministry of Agriculture.

The analysis of preliminary results of the first year of State Program's implementation show that in general measures for supporting livestock production are financed better that those for supporting crop production (*Table 41*). In 2013 the basic subsidies to crop production were for the first time ever granted in the framework of so-called non-bound support per 1 hectare. This measure is less market-distorting and has long been applied in the EU countries. Input support in crop production has been cut to minimum and applies only to specific plantations (vineyards, perennial fruit and berry plantations, purchase of elite seeds, their transportation to the Far North regions, etc.).

The strongest support is rendered in the form of subsidizing credits to farm producers. In 2013 the budget for partial reimbursement of interest rate on all types of credits and loans accounted for 38% of all the allocated funds. This trend could also be tracked in the implementation of the first State Program. Experts have cautioned against a serious problem of accumulating state debts before farm producers on payment of subsidies for the

reimbursement of interest rate on investment credits and loans1, but the Ministry of Agriculture has so far failed to cope with it. Imbalances in the structure of financing affect other guidelines of the State Program. Year after year such directions as the social infrastructure of rural areas (*Table 39*), smallholder farms and their agricultural cooperation, support of alternative employment in rural areas do not get sufficient funding. In 2013 the most scarcely financed items were the establishment of informational system for ensuring food security and management of agro-industrial complex, the partial reimbursement of expenditures of individual farmers on registering ownership titles to agricultural land plots and the reimbursement of interest rate on credits and loans taken for the development of meat cattle breeding (*Table 40*). There is an impression that due to the extensive commitments for reimbursement of interest rate regional budgets simply get short of funds for other measures. At the same time no funds are allocated from the federal budget unless there is co-financing from the regional budget.

The average share of regional co-financing under all programs is about 26% of the total. However, it differs by directions: for instance under the programs for developing pig production 62.6% of funds were allocated from the regional budgets, under the programs in poultry sector – 36.7%, under the programs of subsidizing investment and short-term credits and loans – 16%, under the Federal Target Program "Social development of rural areas" – 37.7%[2]. In 2013 the total amount of funding from the consolidated budget of the Federation and regions was Rb 267.5bn, or 0.4% of GDP.

The budget of Russia's State Program is in general comparable to the US agricultural budget ($155bn, or 0.93% of GDP). First, the difference in percentage of GDP is not so big (in absolute terms the US budget is 25 fold larger). Second, almost ¾ of the US agricultural budget is spent on programs for improving the structure and quality of nutrition and for ensuring access to it for the most vulnerable groups of population (pensioners, women, children and disabled people). In 2013 allocations to the Nutrition Assistance program amounted to $111.6bn (72%) while the support to farmers and ranchers – to only $24.8bn (under the Farm and Commodity Programs)[3].

Composition of the EU agricultural budget is similar. It amounts to 129.9bn euro or 1.1% of GDP[4] but the biggest part of it goes to various ecological programs including adjustment to the climatic change, food quality and standardization issues, support to producers of bio-safe products, etc.

According to data of OECD, in 2013 the ratio of aggregate support to farm producers to gross agricultural output[5] in Russia was lower than in Europe (13% versus 20%) but higher than in the US (7%).

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[1] Gataulina E.A. *Programma subsidirovaniya protsentnykh stavok: effect i problemy.* [The program of subsidizing interest rates: effect and problems] // *Ekonomika sel'skohokhozyaystvennykh i pererabatyvayushchikh predpriyatiy.* [Economics of agricultural and processing enterprises]. No.9, 2010, pp. 54-55.

[2] The data on regional co-financing relates to 2012. Source: The National Report on Agricultural Development in 2012.

[3] The data on US agricultural budget is cited from: Budget Summary and Annual Performance Plan, FY 2013.– USDA.

[4] EUROSTAT: http://europa.eu/pol/index_en.htm

[5] Producer Support Estimate (PSE): the annual money equivalent of gross transfers from consumers and taxpayers to farm producers estimated at farm gate and attributable to the state support to agriculture irrespective of their nature, goals and impact on the production or incomes of producers. Source: Agricultural Policy Monitoring and Evaluation 2013: OECD countries and emerging economies. – OECD Publishing, 2013.

The tools of state support to agriculture applied in Russia are mostly those regarded as "amber box" measures. When elaborating the new State Program for 2013-2020 the Ministry of Agriculture made attempts to reduce their share. A new support measure was introduced – the support of incomes in crop production. But even after that about 60% of measures remained in the category of "amber box". If this approach persists, by 2016 the amount of support will come into conflict with commitments taken by Russia when joining WTO. The potential for increasing the level of support is provided in the WTO Agreement on Agriculture[1] but Russia has so far failed to use these mechanisms to their full extent. Attempts to adjust measures envisaged in the effective State Program to the requirements of WTO were made in the study carried out by the Center of Agrarian Policies of the Institute of Applied Economic Research in the Russian Presidential Academy of National Economy and Public Administration[2]. Owing to the alteration of State Program's implementation mechanisms, one has succeeded to transfer support measures to the amount of Rb 83.8bn ($2.7bn) from the "amber box" to the "green box", of them 65% are those envisaged for livestock production (Rb 55.3bn). The sub-program for technical and technological modernization has been completely re-channeled to the "green box". As a result the structure of State Program's budget has radically changed: 24.4% of support still belongs to the "amber box" while 75.6% has been moved to the "green box". It's obvious that the RF Ministry of Agriculture should carry out a similar job as at present 90.3% of measures applying to livestock production can be labeled as non-market support. The market gets seriously distorted since a specific product is being supported and according to WTO regulations this is an immediate indication for treating the measure as one from the "amber box".

So, even in the framework of the existing State program for agricultural development and regulation of agricultural, input and food markets for 2013-2020 there is an opportunity to reduce the amount of most distorting and contradicting WTO rules measures while preserving the basic financial outlays. If all the suggestions for transforming support measures into less market-distorting ones are taken into account, by 2018 the funds for implementing "amber box" support can be cut down to not more than Rb 57,690m ($1.8bn at the exchange rate effective in early December 2013) which is 2.5 fold below the admissible level declared in the Agreement on Agriculture that Russia signed when joining WTO in 2012.

4.5.4. Recommendations for policymakers

Recommendations as to the adjustment of agricultural policy following Russia's accession to WTO are formulated on the basis of analyzing its transformation in the recent decade, the requirements of WTO and the practice of their application in Russia in 2012-2013.

1. Using principles of WTO and Common Economic Space (CES) for the improve-ment of domestic agricultural policies

Having joined WTO and CES, Russia has taken commitments to diminish farm support measures distorting the market and to comply with the set limitations on the amount of such support. The domestic agricultural policies do not envisage similar requirements to regions-subjects of the Russian Federation. Any subject of the Federation has the right to render market-distorting support to home farm producers from the regional budget. The amount of

[1] Agreement on Agriculture. www.wto.ru/ru/content/documents/docs/selhozru.doc

[2] Shagayda N.I. *Otsenka byudgetnykh raskhodov i byudgetnoy podderzhki v sel'skom khozyaystve Rossii* [Evaluation of budget expenditures and budget support in Russian agriculture] // *APK: ekonomika, upravleniye* [Agro-industrial complex: economy, management]. No. 12, 2012, pp. 14-23.

such support is not restricted by either the federal legislation or legislation of the RF constituent members. Moreover, according to the RF Constitution and the effective legislation federal authorities have no competence to introduce such restrictions for subjects of the Federation.

The right of RF regions to support farm producers using "amber box" measures and the active utilization of this right by many subjects leads to the disruption of the national agricultural market. Farm producers from regions with high level of support from the regional budgets enjoy competitive advantages over producers from other regions. As a result the market gets distorted, owing to subsidies the output produced at high cost ousts lower-cost produce from the market.

The priority effort should be the introduction of amendments to Federal Law No.184 of October 6, 1999 "On general principles of organization of legislative (representative) and executive bodies of public authority in subjects of the Russian Federation" that will establish joint responsibility of the Russian Federation and its members for the development of agriculture. It should be envisaged that the federal government is entitled to set mechanisms of control over the level of support to farm producers and to provide for coordination of federal and regional policies of farm support in case international agreements specify restrictions in this field.

2. Abandoning of compulsory co-financing requirement

Federal funds for subsidizing any support measure are allocated only on the condition that it is co-financed from the regional budget1. In case a subject of the Federation does not have sufficient funds in its budget, regional farm producers lose access to federal funds. This situation infringes the equality of their competitive positions and the integrity of domestic agricultural market, results in the channeling of subsidies to regions with high budget capacities that are often located in areas less fit for farm production. Agricultural producers from regions with lower farm profitability (before subsidies) get more subsidies and credits.

The institute of co-financing extremely complicates the mechanism of State Program's implementation. Financing of any measure under the latter depends on decisions taken by the Federal Assembly, the RF Government, the RF Ministry of Agriculture, authorities of subjects of the Russian Federation, participants of the State Program. The complicated multi-level system of takings decisions on state support requires a long period for coordination. Farm producers usually learn the rates of subsidies for the current year only in autumn.

In order to eradicate these bottle-necks in financing of the State Program, one needs to abandon the institute of compulsory co-financing. Program measures implemented by the federal government bodies should be financed from the federal budget. Regional policies and the availability of funds in the regional budget should not inhibit the receipt of federal subsidies.

This will enable federal and regional authorities to get rid of endless approvals, delays and obstacles to the implementation of planned measures. Besides, all producers in the country will have equal access to federal funds.

[1] *De jure* according to provisions of the above mentioned Law No. 184 FZ measures of the State Program are considered to be financed by subjects of the Russian Federation while the federal budget just co-finances them. But taking into account the federal status of the State Program, the definition of its measures on the federal level and the fact that most funds are allocated from the federal budget, in this paper the allocation of funds from the regional budgets is called co-financing.

3. Guaranteeing of subsidy receipt, discontinuing of restricted and competition-based distribution of subsidies

According to the Russian legislation a farm producer has the right to apply to the state for subsidies envisaged under the support programs. In case the sum of farm producers' applications exceeds the subsidy limits set for a particular measure in a particular region, the applicant will get a refusal.

Amendments should be made in the law for agricultural development that will guarantee the getting of subsidies. The right to apply for subsidies should be replaced by the right of their guaranteed receipt by all participants complying with the requirements set in laws, the State Program and other regulatory legal acts. In case of subsidy rejection, the farm producer concerned should have the right to turn to the court.

Regulatory acts should clearly specify the state's commitments before farm producers, conditions, rates and guarantees of receiving state support. The terms should be transparent and understandable for farm producers. The access to subsidies should be ensured not by the decisions of bureaucrats but by the law. This will help to cut the number of officials elaborating regulatory acts on law enforcement and taking decisions on the allocation of budget funds as well as to involve more farm producers in measures under the State Program and to lessen corruption in the state support scheme.

The implementation of this approach will require more careful planning of state support measures, the elaboration of mechanisms for rechanneling funds from one measure to another, the forming of a reserve fund that may be needed in case weather conditions are worse than the annual average.

It's obvious that guarantees of granting support to farm producers will work only in case one discontinues the established practice of restricted and competition-based distribution of budget funds that results in the infringement of conditions for fair competition and the creation of preferences for some producers.

4. Transfer from product-specific to non-bound support measures

In Russia a clear preference is given to bound support measures (when the amounts of payments depend on the production volumes or use of inputs, input prices, etc.). In the State Program for 2008-2012 they accounted for 98% of support granted to farm producers. One non-bound support measure appeared in the State Program for 2013-2020 – the subsidizing of incomes in crop production. It accounts for about 10% of the State Program's funds. In the EU non-bound support measures make up two thirds of all subsidies to farm producers.

The transfer to non-bound support measures will liberate such payments from WTO restrictions and help to improve the efficiency of state funds' utilization through:

a) improvement of the transfer efficiency. According to economic theory, non-bound measures are more efficient than the support of specific products or subsidizing of inputs. When money is allocated to the rise of product prices or the reduction of input costs, it gets re-distributed in favour of product buyers and input sellers. In case farm producers receive subsidies for purchasing fertilizers, the sellers of the latter raise prices and according to studies get about 75% of the subsidy amount while only 25% thereof remains in the disposal of farmers[1]. The situation is similar when the price for a specific product is supported. Processors reduce purchase prices and farm producers lose the granted subventions;

[1] Melyukhina O.G. *Pochemu podderzhka rossiyskogo APK dostatochna, no ne effectivna.* [Why the support of Russian agro-industrial complex is sufficient but non-efficient]. *Agroinvestor*, No.2, 2013.

b) granting more freedom to business in taking decisions. When the state subsidizes specific products and inputs, it determines the structure of production and input use. Meantime, business is more efficient in performing this mission. For instance, in the process of working out the Priority National Project for 2006-2007 and the State Program for 2008-2012 the decision was taken to subsidize interest rate on credits for agricultural development. The state did not specify for what purposes such credits should be used. Business coped with this task on its own. As a result the major part of subsidized credits was used for the development of poultry and pig production. And these sectors were growing at the rate of 10-15% per annum.

When preparing the State Program for 2013-2020, the government preserved subsidies for the partial reimbursement of interest rate on credits but decided to distribute them by sectors at its own discretion. As a result the bulk of appropriations for subsidized credits is to be channeled to meat and dairy cattle breeding. Since these sectors are loss-making in most farms, business will hardly want to use the provided credit lines for the intended purpose.

5. Incorporation of new "green box" measures in the State Program

Many "green box" measures envisaged in WTO "Agreement on Agriculture" are not used in Russia at all. Their incorporation in the State Program will help to improve its efficiency. The following "green box" measures are vital for Russia and require state support: *food aid to population, support to income insurance, assistance in case of natural calamities, subsidizing of farms that stop commodity production* (for instance, the program for halting commodity production of poultry meat and pork in household farms for the purpose of controlling avian flu and African swine fever that envisages compensation of respective producers' losses), *subsidizing of input use conservation, subsidizing of structural shifts by encouraging investments, payments under environmental programs, payments under programs of regional assistance*.

In the situation of compulsory cutting of pig population in household farms with a view to reduce the risk of disease spread there arises the need, on the one hand, to develop fair mechanisms for compensating the cost of slaughtered animals and, on the other hand, to improve territorial planning in rural areas. In order to support micro-business in rural households it would be rational to work out a recommended practice of spatial planning specifying zones for location of household and individual private farms of different sizes that would enable them to keep livestock and poultry. The specification of such zones should correspond with the size of smallholder farms; the respective regulations should delimitate the number of animals that a farmer can keep on a plot of a certain size so that to comply with sanitary and veterinary norms. It's also necessary to inform rural residents beforehand about the requirements to facilities for keeping livestock and the marginal density of livestock population. Besides, the compulsory limitation of livestock inventories in household farms located in built-up areas is to be accompanied by programs supporting restructuring of small family business in order to alleviate the negative effects for rural families.

6. Rigid restriction of "amber box" measures distorting the market

"Green box" measures imply soft options of public support when the state creates favourable environment for farm producers by means of general support or encourages certain structural changes.

When applying "amber box" measures the state intentionally plays against market rules, tries to correct market prices, supply and demand. In this case it has to act rigidly, to take on the responsibility for meeting the assumed commitments, to supervise the transfer of state

support funds to producers and consumers of farm products rather than to middlemen and other market operators. Let's examine it on the example of grain market regulation.

Article 14 of the Law on agricultural development establishes the mechanism of grain market regulation. It's core is as follows. Each year the RF Ministry of Agriculture is to set minimum and maximum prices for 5 types of grain: milling wheat, feed wheat, feed barley, rye and corn. In case the actual market price falls below the minimum threshold, the state has to protect the interests of grain producers by carrying out purchase interventions, i.e. by buying grain at the minimum price. If the actual market price exceeds the maximum threshold, the state has to protect the interests of grain consumers (in fact the buyers of bread) by carrying out commodity interventions, i.e. by selling grain at the market at maximum price in order to prevent the growth of prices above the maximum level.

So, the declaration of maximum and minimum prices is a strong regulator. Grain consumers and producers make efforts themselves to hold prices from falling below the minimum or rising above the maximum. In case authorities adhere to the taken commitments and nothing extraordinary takes place on the market, the state does not need to buy or sell grain in big quantities. Purchase interventions do not require extensive budget funds.

In fact Article 14 of the Law on agricultural development has turned out to be a "green box" measure since the state does not buy grain from producers at the minimum price (as it was the case in other countries applying this mechanism) but makes a purchase declaration at the exchange. Minimum price is declared as the opening one and then usually follows the Dutch auction. OJSC "United Grain Company" that represents the state in grain purchase interventions at the same time buys grain for its own needs, i.e. for resale. It's obvious that the company is interested in maximum reduction of the purchase prices for grain.

For Article 14 of the Law on agricultural development to really foster "stabilization of prices on agricultural, input and food markets and support of farm producers' incomes" (Paragraph 1 of Article 14) and be an "amber box" measure, one should omit from Paragraph 2 of this article the words "including at exchange auctions", to specify the date of publishing maximum prices and the terms of pledge transactions.

7. Increase of support at the account of budget funds and decrease thereof at the account of consumers

As a result of Russian agricultural policies of the recent decade consumers of farm products have become the main source of aggregate support to agriculture. In 2012 they accounted for 54.1% of this support while only 45.9% were provided by the budget. In the US the share of the budget in aggregate support is as high as 97.6%, in the EU – 82.7%.

In 2010-2012 the aggregate annual support to agriculture in Russia averaged Rb 556.1bn. The funds were provided by consumers of agricultural products – Rb 411.2bn and by the budget – Rb 144.8bn (net receipts). In fact budget expenditures totaled Rb 312.5bn but owing to the support measures Rb 167.7bn returned back (import duties, etc.).

Provided that after the accession to WTO the amount of farm support in Russia remains the same but the structure of its sources comes close to the EU pattern, the appropriations from the budget will need to be increased almost 3.3 fold (from Rb 144.8bn up to Rb 472.7bn).

8. Support to small business, setting of limits for support to large business

Measures for the support of agriculture and mechanisms of their implementation are primarily targeted at the support of large business. In spite of declarations about equal rights and equal access to budget subsidies, for small business the latter is actually limited.

In 2010 about 30% of corporate farms and less than 1% of individual farmers and entrepreneurs and consumer cooperatives got subsidies for the partial reimbursement of interest rate on short- and long-term credits of banks and credit cooperatives. The share of smallholder farms in subsidies for mineral fertilizers is somewhat higher: about 3% of individual private farms and entrepreneurs benefitted from them.

The share of small business in the total amount of subsidies is very small: corporate farms and agribusiness companies received about 98% of all subsidies while individual farmers and entrepreneurs and consumer cooperatives accounted for approximately 2% thereof. The only exception were subsidies for fertilizers where the share of smallholder farms reached 12.6%.

The share of 5% of the biggest beneficiaries from budget appropriations was as high as 72.6% of all subsidies on investment credits, 61.6% of subsidies on short-term credits and 47.1% of subsidies on fertilizers.

For the small business to get real state support a whole set of measures need to be taken. The most important of them are listed below:

a) to specify the categories of farm producers eligible for state support;

b) to set limits on the minimal size of a farm eligible for state support. Such limits exist in many countries;

c) to limit the support to large corporate farms and agroholdings. In the EU there is a rule providing that farms with a size of more than 2 thousand hectares are not eligible for support. In the US the upper limit of the total amount of subsidies that can be received from the budget is set at $300,000.

4.6. Foreign trade

4.6.1. The state of the global economy

In spite of the fact that in 2013 countries were able significantly to reduce two of the most serious risks for economic growth in the short term – the threat of the collapse of the Eurozone and the threat of drastic budget cuts in the US, the world economy is still in a state of uncertainty. The rate of growth of the global economy remains low: in the first part of 2013 it was only 2.5% compared with the first part of 2012. On the whole, according to IMF data, the growth rate in2013 was 3.0%. Correspondingly, the growth rates of both those countries with developed economies and countries with developing economies have slowed. (*Table 41*).

It is expected that the incentives for economic growth will come, first of all, from the USA. The U.S. GDP in the first quarter of 2013 grew by 1.1% and in the second quarter, by 2.5%. The second evaluation of U.S. GDP growth in the third quarter[1] was rather surprising: the annual growth rate was 3.6% in comparison with the preliminary evaluation of 2.8% and to the predicted figure of 3.1%. The third evaluation of GDP growth turned out to be even higher and was 4.1%[2], which was the highest growth since 2011. The major factor for such upward adjustment turned out to be the revaluation of growth in private consumption from 1.4% to 2% in annual terms. During conversions the second rate played the major role in the increased investments in stocks.

According to preliminary estimates, in the fourth quarter of 2013 the average annual growth in U.S. GDP was 3.2%[3]. During 2013 the U.S. GDP rose by 1.9% (in 2012 it rose

[1] http://www.bea.gov/newsreleases/national/gdp/gdpnewsrelease.htm
[2] http://www.bea.gov/newsreleases/national/gdp/gdpnewsrelease.htm
[3] http://www.bea.gov/newsreleases/national/gdp/gdpnewsrelease.htm

2.8%). The major contribution to GDP growth was made by the growth in private consumption, net exports and investment into housing infrastructure which offset the negative impact of the continuing decline in government spending.

In connection with improvements in dynamics of the U.S labour market as well as the medium term prospects from the meeting of the Federal Open Market Committee that took place on the 17and 18 December 2013, a decision was made to reduce the quantitative easing QE programme. It was decided to reduce the volume of monthly purchases by the U.S of Treasury from $45bn to $40bn while the volume of purchased securities backed by mortgage bonds was reduced from $40bn to 35$bn per month.

On 29 January 2014 the US Federal Reserve reduced its purchase of assets by an additional $10bn to $65bn per month and has kept the key interest rate of federal funding in the range of 0.00–0.25% per annum.

Hopes for economic recovery within the countries of the Eurozone in 2013 do not seem to have been realised. In the second quarter of 2013, in comparison to the previous quarter, the GDP growth rates were 0.3% in the Eurozone and 0.4% in the other countries of the EU. The long-lasting recession in Italy (over nine quarters) and a reduction in the GDP of France caused some decline in growth in the region. According to a preliminary evaluation by Eurostat[1], the GDP of the Eurozone in the third quarter rose by only 0.1%; and the GPD of the 28 countries of the European Union (EU-28) increased by 0.2%. In comparison to the same quarter of the previous year, in the third quarter of 2013 the GDP in the Eurozone fell by 0.4%, whilst that of the EU-28 increased by 0.1%.

The year-end GDP of the integrated group had essentially not risen while a decline was witnessed in the Eurozone, although less than was seen in 2012. According to Eurostat data, in 2013 the Eurozone GDP was reduced by 0.4% while in other EU countries it had increased by 0.1%.

The main contribution was made by Great Britain, which is the largest non-Eurozone country of the European Union. According to Eurostat, the economy of Great Britain increased in 2013 by 0.7% in comparison to the previous quarter, and in comparison to the same period of the previous year, by 2.8%.

In October 2013 the World Trade Organisation (WTO) published the digest 'International Trade Statistics, 2013' which provided the major indicators characterising current trends in the development of international trade in goods and services[2]. In 2012 world merchandise exports rose by 2.5% as did global GDP.

The leaders in world trade are still the United States of America, where foreign trade turnover in 2012 was $3881.2bn. At the same time a significant deficit in trade balance still remains: in 2012 it had increased by 0.5% in comparison to 2011 and was $789.8bn (4.9% of the GDP). In 2008 the U.S. balance of trade deficit was $882bn.

The U.S. is followed by China, which, with an annual foreign trade turnover of $3867.1bn; it remains the largest exporter of goods. The trade surplus of the People`s Republic of China has been positive since 1994, and in 2012 it reached $230bn (2.8% of GDP), having increased during the year by 48.7%.

[1] http://epp.eurostat.ec.europa.eu/cache/ITY_PUBLIC/2-04122013-BP/EN/2-04122013-BP-EN.PDF
[2] http://www.wto.org/english/res_e/statis_e/its2013_e/its2013_e.pdf

Table 41

Dynamics of global GDP and world trade
(Growth rates, as % of the previous year)

	2010	2011	2012	2013	Prognosis		Difference between the prognosis and the data for October 2013 and January 2014	
					2014	2015	2014	2015
Global GDP	**5.1**	**3.9**	**3.1**	**3.0**	**3.7**	**3.9**	**0.1**	**0.0**
Countries with developed economies	**3.0**	**1.7**	**1.4**	**1.3**	**2.2**	**2.3**	**0.2**	**– 0.2**
USA	2.4	1.8	2.8	1.9	2.8	3.02.6	0.2	–0.4
The Eurozone	2.0	1,5	–0.7	–0.4	1.0	1.4	0.1	0.1
Germany	4.0	3.4	0.9	0.5	1.6	1.4	0.2	0.1
France	1.7	2.0	0,0	0.2	0.9	1.5	0.0	0.0
Italy	1.8	0.4	–2.5	– 1.8	0.6	1.1	–0.1	0.1
Spain	–0.3	0.1	–1.6	–1.2	0.6	0.8	0.4	0.3
Japan	4.5	–0.6	1.4	1.7	1.7	1.0	0.4	–0.2
UK	1.8	1.1	0.3	1.7	2.4	2.2	0.6	0.2
Canada	3.2	2.5	1.7	1.7	2.2	2.4	0.1	–0.1
Other countries with developed economies	5.9	3.2	1.9	2.2	3.0	3.2	–0.1	–0.1
Countries with emerging markets and countries with developing economies	**7.4**	**6.2**	**4.9**	**4.7**	**5.1**	**5.4**	**0.0**	**0.1**
Central and Eastern Europe	4.6	5.4	1.4	2.5	2.8	3.1	0.1	–0.2
Commonwealth of Independent States	4.8	4.8	3.4	2.1	2.6	3.1	–0.8	–0.7
Russia	4.3	4.3	3.4	1.5	2.0	2.5	–1.0	–1.0
Without Russia	6.0	6.1	3.3	3.5	4.0	4.3	–0.1	–0.1
Developing Asian countries	9.5	7.8	6.4	6.5	6.7	6.8	0.2	0.2
China	10.4	9.3	7.7	7.7	7.5	7.3	0.3	0.2
India	10.1	6.3	3.2	4.4	5.4	6.4	0.2	0.1
Latin America and Caribbean countries	6.2	4.6	3.0	2.6	3.0	3.3	–0.1	–0.2
Brazil	7.5	2.7	1.0	2.3	2.3	2.8	–0.2	–0.4
Mexico	5.6	4.0	3.7	1.2	3.0	3.5	0.0	0.0
World trade of goods and services	**12.6**	**6.1**	**2.7**	**2.7**	**4.5**	5.2	**–0.5**	**–0.3**
Imports								
Countries with developed economies	11.4	4.7	1.0	1.4	3.4	4.1	–0.7	–0.5
Countries with emerging markets and developing countries	14.9	8.8	5.7	5.3	5.9	6.5	0.0	–0.2
Expors								
Countries with developed economies	12.0	5.7	2.0		2.7	4.7	0.3	0.0
Countries with emerging markets and developing countries	13.7	6.8	4.2		3.5	5.8	–0.7	–0.5

Source: http://www.imf.org/external/russian/pubs/ft/weo/2014/update/01/pdf/0114r.pdf

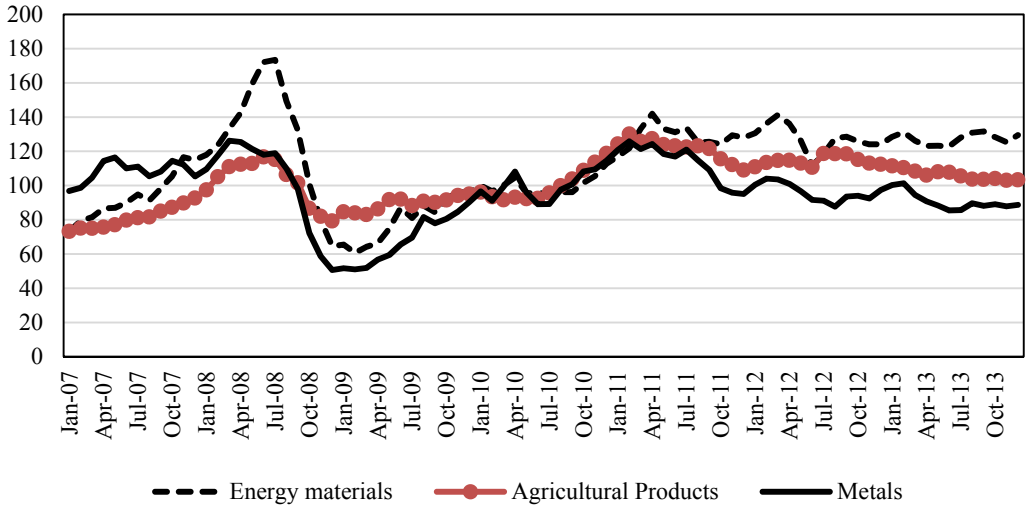
Germany has retained third place in spite of a reduction in foreign trade turnover from $2728.9bn in 2011 to $2574.3bn in 2012 (by 5.7%). The trade surplus was $240bn (7.0% of GDP).

Because of structural problems in the Eurozone, foreign trade turnover of the majority of EU countries diminished in 2012.

In 2012 an export volume of $529.1bn for the Russian Federation lifted it to eighth place from its previous ninth position where it had been since 2011. Russia's share of global goods export was 2.9%. Russian imports had placed it 17th in 2011 but lifted it to 16th place through its purchase of products totalling $335.8bn. Russian imports reached 1.8% of the global import volume. Over the last 20 years there has been a trade surplus in Russia. In 2012 it was $193.3bn.

4.6.2. Conditions of Russian foreign trade: the situation for prices of import and export of basic goods

After significant growth in the middle of 2008 and a sharp decline at the beginning of 2009, the range fluctuations in global commodity prices remained moderate. In 2013 there also were no significant changes in the raw materials market (*Fig. 53*).



Source: http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/0

Fig. 53 Commodity price index of the World Bank (in 2010=100)

The price dynamics for commodities on the global market in 2013 (*Table 42*) were influenced by geopolitical tensions in the oil-producing and adjacent regions of the world. So, in the first quarter the increase in prices for raw materials was explained by the escalation of the Syrian conflict and in the third quarter by aggravation of the situation in Egypt. The soft monetary policies of many countries played a very significant role in supporting global raw material prices on the world market (the policy is implemented in many countries: the USA, the European Union, China, Japan). Weak global economic growth had a negative influence on the dynamics of commodity prices.

The global oil price situation in 2013 remained quite calm, there were no sudden ups or downs: for most of the year prices for 'Brent crude' were higher than $100 per barrel, but did not rise above $120 per barrel. On 9 February the price reached its annual maximum of $118.92 per barrel; but on 17 April the price for 'Brent crude' had reached its lowest level of $97.67 per barrel. However it did not remain below $100 for long and by 22 April 'Brent crude' rose to reach $100.51 per barrel; during the second quarter of 2013 prices remained fairly stable and varied in the range between $100.15 and $106.02 per barrel. In the third quarter there was a rise in prices, but by the end of the quarter there had been another decline in prices: in the fourth quarter the price dynamics were better regulated: Brent oil prices fluctuated around a value of $108.5 per barrel.

During 2013 the price for North American WTI oil remained lower than prices for Brent, although in the third quarter the gap between them narrowed. Whereas during the first quarter one barrel of Brent oil cost $18.59 more than one barrel of WTI oil, then during the third quarter the difference was only $4.27.

In 2013 the average price for Brent crude was $108.7 per barrel, which was 3.1% lower than in 2012. The price for WTI North-American oil during the year rose 3.2% to reach $98 per barrel.

The price of Urals oil obeyed the dynamics of the world market and at the beginning of 2013 began to grow, reaching its maximum monthly average for the year at a value of $114.45 per barrel. But during the second quarter those indicators began to fall. In April Urals oil achieved $101.1 per barrel which was its minimum average monthly rate for 2013. In the third and in the fourth quarters of the year the dynamics improved. But, on the whole, the average price for Urals oil was 2.8% lower than the previous year at only $107.9 per barrel.

The world natural gas market, in 2013, remained rather heterogeneous – the price dynamics in different countries developing in different directions.

Gas production rates in the U.S. were still growing. According to the US Energy Information Administration, in 2013 the gas production rate in the country had increased in comparison to the previous year by 1% to 690.8 billion cubic metres (bcm)[1]. So, taking into consideration that in Russia, during that period, about 652.6bcm of gas were produced[2], we can conclude that the U.S. still retains the lead in this field.

The United States is reducing its dependence on imported gas. For January-November 2012 in the supply of natural gas to the U.S. had diminished by 9% compared with the corresponding period of 2011, and reached 81.7bcm; then, in January-November, 2013 compared with the similar period of 2012 it diminished by a further 9.9% to only 73.6bcm.

Gas prices in the U,S. still remain the lowest in the world, although in 2013 there was a very marked increase; according to the IMF, in 2013, the spot price for gas at the Henry Hub terminal averaged $3.73 per one million British thermal units (BTU) which was 35.4% higher than in 2012.

The highest gas price still persist in Southeast Asia despite diminishing by 4.4% in 2013 compared with the figures for2012. According to the IMF, in 2013, the average price for liquefied natural gas imported by Japan and Indonesia was, on average, $17.3 per 1m BTU.

In 2013, Russian gas prices at the border with Germany were lower than the year before, which could be explained not only by the oil price dynamics but also by the fact that Gazprom provided the majority of its clients with discounts. According to the IMF, Russian gas prices in Europe in 2013 were $11.2 per 1m BTU which was 6.7% less than in 2012.

The world market for non-ferrous metals began to worsen in 2011 and in 2013 retained its negative character for Russian exporters. There remained excessive reserves of nonferrous metals which even grew on the London Metal Exchange. The only exception was lead, its stockpiles were reduced by more than ¼ during the year. At the same time copper reserves practically doubled while those of zinc and nickel were also significantly increased. Simultaneously, the growth in metal production in China remained, and, according to Chinese data, the total volume of 10 types of non-ferrous metals produced in the country increased by 10.5% in January-November 2013 compared with the corresponding period of 2012, and reached 36.9m tonnes[3]. All these factors contributed to the start of a further decrease in world prices for nonferrous metals. According to the London Metal Exchange, prices for aluminum were 8.7% lower than in 2012, while those for copper were 7.9% and for nickel 14.3% lower.

[1] http://www.eia.gov/naturalgas/monthly/pdf/ngm_all.pdf
[2] http://minenergo.gov.ru/activity/gas/
[3] http://www.stats.gov.cn/english/PressRelease/201312/t20131211_478510.html

Table 42

Average annual world prices

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2013/ 2012 (%)
Oil (Brent), USD/barrel	37.4	54.38	65.15	72.32	97.64	61.86	79.64	110.9	111.97	108.86	97.2
Natural gas (U.S.) USD/1m BTU	5.89	8.92	6.72	6.98	8.86	3.95	4.39	4.00	2.75	3.73	135.4
Natural gas, European market, USD/1m BTU	4.28	6.33	8.47	8.56	13.41	8.71	8.29	10.52	11.47	11.79	102.7
Natural gas (Japan), USD/1m BTU	5.13	5.99	7.08	7.68	12.55	8.94	10.85	14.66	16.55	16.02	96.8
Copper, USD/t	2866	3679	6722	7118	6956	5149	7534	8828	7962	7332	92.1
Aluminum, USD/t	1715	1898	2570	2638	2573	1665	2173	2401	2023	1847	91.3
Nickel, USD/t	13823	14744	24254	37230	21111	14655	21809	22910	17557	15032	85,7

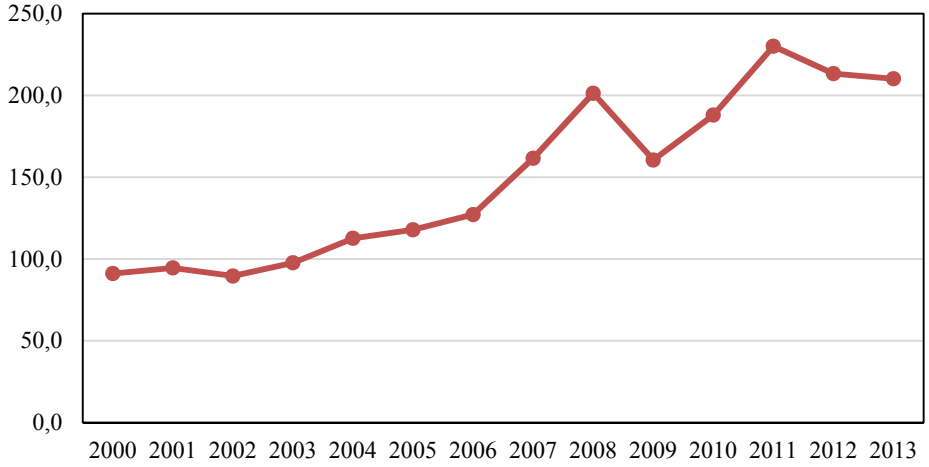
Source: calculations are based on World Bank data, IMF

Fig. 54 shows the change in prices of basic agricultural commodities on the world market according to the UN Food and Agricultural Organisation (FAO) food price index, the main indicator of changes in international prices for a basket of food commodities per month). The index is calculated on the basis of the average values of price indexes for 5 major product groups (meat, dairy products, cereals, vegetable oils and sugar) weighted with the average share of each group in world exports during the period of 2002-2004.

In 2011 the FAO consumer prices index reached its record high of 230.1 points, and although it decreased in 2012 to 213.4 points this was still very high. In spite of some decrease in the prices for food products in 2013 the FAO CPI retained a rather high position (210.2 points). This was possibly because of a significant growth in the price index for dairy products which amounted to 242.7 points, a record maximum for the whole survey period. Prices for meat reached their maximum value at 184.2 points, explained by the growth in demand in China and Japan. The price index for cereals decreased and fell from 236.1 points in 2012 to 219.2 points in 2013. The price index for vegetable oils also turned out to be lower than before: 193 points in 2013 against 223.9 points in 2012. Prices for sugar had fallen in 2013 in comparison to those in 2012, by 18%, which could be explained by an increased rate of supply. The harvest in the country which is the largest producer and exporter – Brazil – turned out to be higher than had been predicted. Record production volumes were also achieved in the second largest exporter of sugar - Thailand.

An upward price trend in the dairy market was caused by a decrease in milk production.Whereas,in 2012 the world milk production rate was increased by 2.32%, then the same indicator in 2013 was only 0.85% or 465.893m tonnes[1]. In the first term of 2013, because of a drought in the southern hemisphere, milk production in New Zealand, Australia and Argentina was diminished. The beginning of a new season in Europe was delayed because of a late spring, and this led to a reduction in milk production. In spite of a gradual increase in the supply of dairy products in Europe and the U.S., the growth in prices remained during the second term of 2013. This tendency remained due to growth of demand in the largest world importer and consumer of milk powder – China.

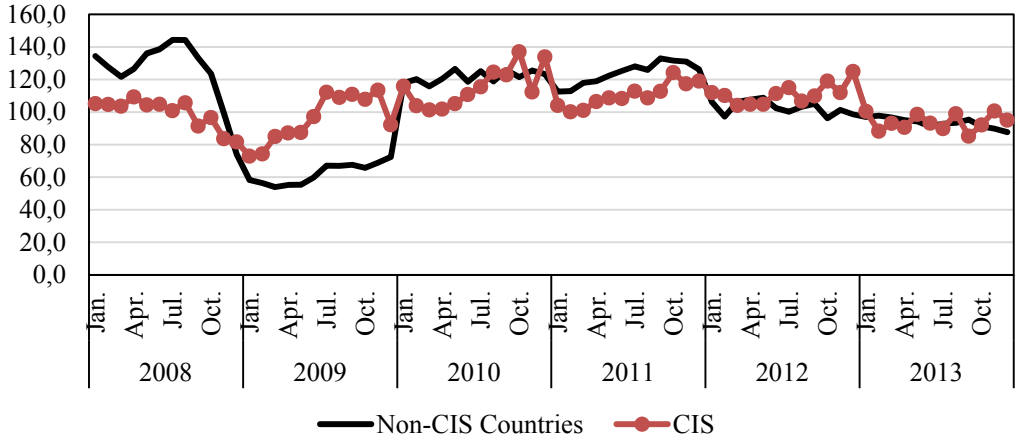
[1] http://www.eurasiancommission.org/ru/act/trade/catr/monitoring/



Source: http://www.fao.org/worldfoodsituation/wfs-home/ru/

Fig. 54. The FAO food price index

Under current trends in the world market in 2013 Russian trade worsened significantly. In January – September the trade conditions index (*Fig. 55*) was 94.5 points. At the same time trade conditions with non-CIS countries (where the trade conditions index was 94.6 points) and CIS countries (index – 94.2 points) worsened. But trade conditions in 2013 became significantly better than they had been in the crisis period of 2008–2009.



Source: The Ministry of Economic Development

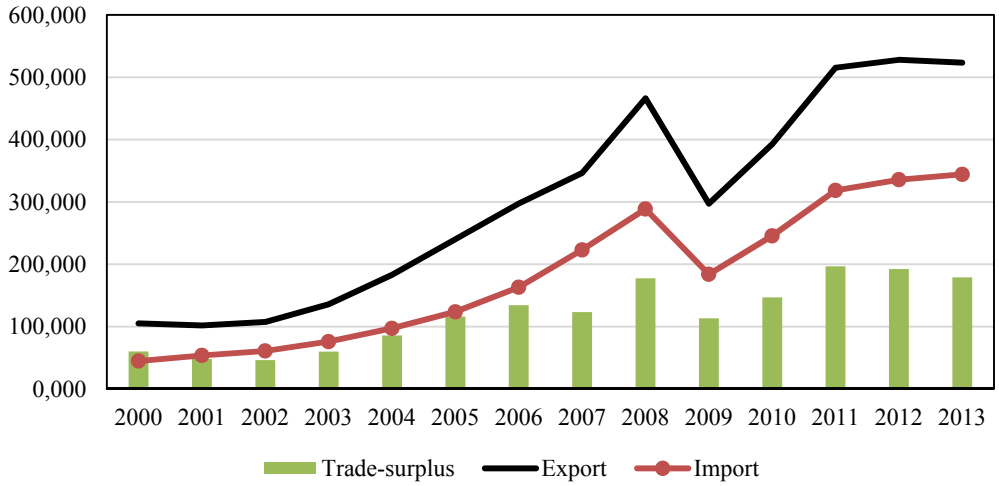
Fig. 55. Index of foreign trade conditions in the Russian Federation

4.6.3. Major indicators of Russian foreign trade

The 2013 Russian foreign trade turnover, calculated on the basis of balance of payments was $867.6bn, which was 0.5% more than in 2012. At the same time Russian foreign trade turnover with non-CIS countries increased by 0.9% and reached $739.6bn, while the turnover rate with CIS countries decreased by 2.2% dropping to $128.0bn.

In 2013 the Russian trend, typical of 2012, of slowing growth in foreign trade indicators remained (*Fig 56*). Import dynamics still remained positive, but export dynamics became negative and, as a result, the trade-surplus was significantly reduced.

Russian exports in 2013 were $523.3bn, which was 0.9% less than the same indicator for 2012. Russian imports increased by 2.6% and reached $344.3bn which is the highest value of the whole survey period.



Source: the Central Bank of the Russian Federation

Fig. 56. Major indicators of Russian foreign trade, 2000–2013, billion of dollars.

The negative dynamics in Russian export rates were caused by the price factor in the growth in volume of exported goods. The overall increase in value of imports was caused by an increase in average import prices even though there was a decrease in the physical volume of Russian imports (*Table 43*).

Table 43

Indices of Russian foreign trade, as % of the previous year

	2010		2011		2012		2013	
	Trade volume	Average prices	Trade volume	Average prices	Trade volume	Average prices	Trade volume	Average prices
Export	110	119.8	97.8	132.9	99.9	101.6	104.9	95.7
Import	135.4	101.6	122.2	109.1	105.1	97.3	97.8	102.5

Source: the Ministry of Economic Development

The trade-surplus in 2013 was positive and reached $179bn (8.5% of GDP) which was 6.9% less than in 2012. The crucial factor in reducing the trade surplus was a deterioration of the terms of trade. The import-export coverage ratio decreased from 157.3% in 2012 to 152% in 2013.

The coefficient of foreign trade imbalance (ratio of positive trade balance to trade turnover) decreased from 22.3% in 2012 to 20.6% in 2013.

Structure and dynamics of exports

In 2013 the Russian export of goods was reduced to $523.3bn which was 0.9% less than the corresponding figure for 2012. The value of exports to non-CIS countries increased and the total price of exported goods to those was $444.9bn which was 0.1% more than the level of the previous year (*Table 44*). Meanwhile, the total value of goods sold to CIS countries was $78.4bn which was 6.3% less than in 2012. The export share of the non-CIS countries increased from 84.2% to 85%.

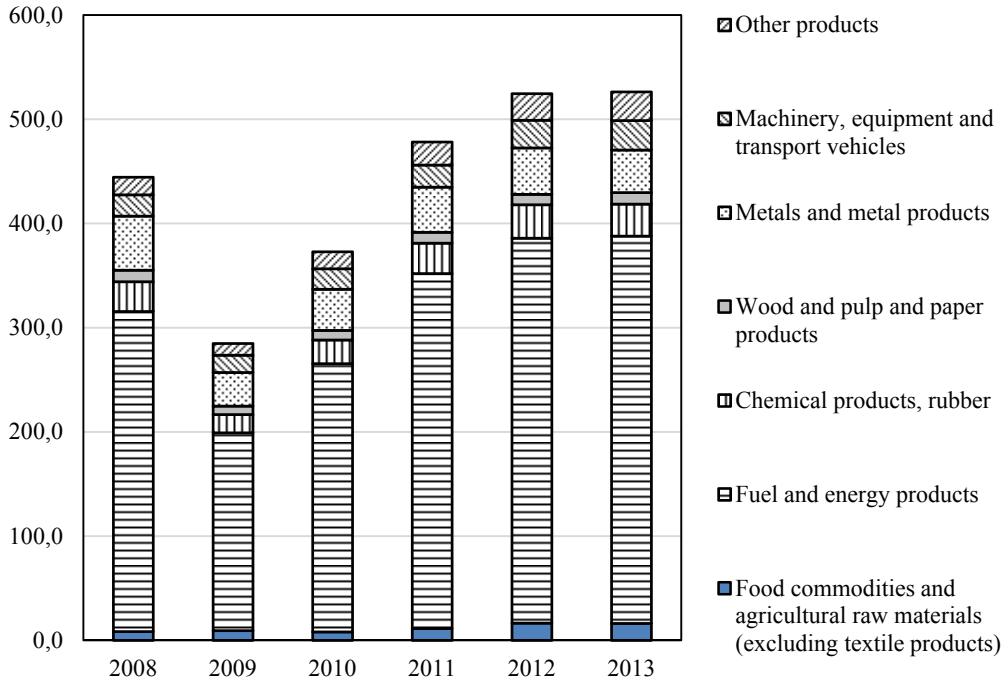
Table 44

Dynamics of Russian export

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Export, billion. dollars	107.3	135,9	183.2	243.8	303.6	354.4	471.6	303.4	400.6	515.4	529.1	523.3
Including:												
Non-CIS countries	90.9	114.6	153.0	210.2	260.2	300.6	400.5	255.3	338.0	436.7	445.2	444.9
Growth Rates, as % of the Previous Year												
Volume Index	115.0	109.5	110.7	104.7	105.8	105.0	96.8	97.0	110.0	97.8	99.9	104.9
Price Index	86.0	113.4	122.7	126.9	119.7	110.9	137.4	76.4	119.8	132.9	101.6	95.7

Source: the Bank of Russia; the Ministry of Economic Development

There is still a very high share of fuel and energy products in the structure of Russian exports (*Fig. 57*) while the proportion of machinery, equipment and transport vehicles is still rather low. At the end of 2013 the value of mineral products in the export structure was 71.6% (including fuel and energy products: 70.6%), in 2012 it was a little lower at 71.4%. In the total volume of Russian exports the share of metals and metal products is continuing to shrink: in 2013 in was just 7.8% in comparison to 2012 when it was 8.5% (in 2011: 9.1%). The proportion of machinery, equipment and transport vehicles in the structure of exports rose to 5.4% in comparison to 5.0% in 2012 (in 201: 4.4%).



Source: FCS.

Fig. 57. Trade dynamics of Russian exports, billion dollars

A decline in the value of exports in 2013 in comparison to 2012 could be witnessed in three product groups.

The export abroad of foodstuffs and agricultural raw products diminished by 2.4% while the share of this group of products within the total export volume decreased from 3.2% to 3.1%. The decrease in value for this group was caused by a 13.9% reduction in the volumes of wheat and mixtures of cereal grains exported and also by a 10.5% reduction in contract prices.

The volume reduction can be explained both by decreasing purchase by Egypt, which, until recently had been the largest buyer of Russian grain and also by increased competition from Ukraine and Kazakhstan, caused by good harvests. Contract prices declined in line with trends in the world market.

In 2013, for the first time since 2009, a reduction in exports of chemical products could be seen. According to the FCS, exports of Russian chemical products in 2013 decreased 3.9% in comparison to 2012to $30.7bn. The situation happened because of a plunge in export prices for fertiliser and synthetic rubber. So, prices for nitrogen fertiliser fell by 10.3% during the year, potash fertilisers by 14.7% while synthetic rubber fell by 18.1%.

The most significant reduction in the value of exports in 2013 was observed within the product group: 'metals and metal products'. Exports of these products were down 8.1% compared with 2012. This happened due to a decrease in contract prices for the whole range of goods within this group and a reduction in the physical volume involved. The reason for this reduction was an overproduction of steel in the world, increased competition and the fall in external demand .

The volume of exports of mineral products increased by 0.6% in 2013 in comparison to 2012. This happened despite a decline in the export price of oil by 4% because of both a reduction in physical volume by 1.4% and because the products were sold at a price which was 2.7% lower than in 2012.

Nevertheless, the reduction in price of the exported oil was compensated by the growth in volumes of exported petroleum products (up by 9.7%) and of natural gas (up by 22.9%). The contract prices for these products actually decreased: for petrol, by 4.6%, for fuel oil not containing biodiesel, by by 7.9% and for natural gas, by 2.9%. In spite of this, in 2013, exports of oil products reached 151.4m tonnes thanks to exports to non-CIS countries (which increased by 16.5%). Exports of petroleum products to the CIS countries diminished by 39.3%.

Natural gas exports in 2013 amounted to 196.4bcm which was a record level for the whole observation period (*Table 45*).

'Gazprom' in its report for the fourth quarter of 2013 provided information on the growth of gas sales abroad. Compared with 2012, sales rose from 7.1% to 217.59bcm in 2013. At the same time, exports to non-CIS countries grew by 16.3% and reached 161.49bcm while exports to the CIS and to the Baltic States fell by 12.9% to 56.1bcm. The volume of gas exported to non-CIS countries reached its highest level compared with recent years. The major growth was divided between three countries: Italy increased its purchase of Russian gas in 2013 by 67.9% compared with 2012, the UK, by 54.5% and Germany, by 21.1%. This can be explained by a series of factors. At the beginning of 2013 the demand for gas in Europe was increased because of extremely cold temperatures; at the beginning of March, as supplies from Libya began to be interrupted because of clashes between Libyan militants in the north-western part of the country, in the region where the Mellitah gas distribution system is located. A decrease in exports of liquefied natural gas (LNG) from Qatar to Europe became a significant factor and was connected with the beginning of long-term agreements on gas deliveries to Asia and South America.

Natural gas exports to the CIS and the Baltic States were at their lowest level for several years as a result of decreased demand from such countries as Ukraine, Moldova, Lithuania and Latvia.

Table 45

Natural gas for exports by OAO «Gazprom», billion cubic meters

State	2012	2013	2013 as % of 2012
Germany	33.16	40.15	121.1
Italy	15.08	25.32	167.9
Turkey	27.02	26.69	98.8
France	8.04	8.17	101.6
Finland	3.75	3.54	94.4
Austria	5.22	5.23	100.2
Greece	2.5	2.62	104.8
Netherlands	2.31	2.13	92.2
Switzerland	0.3	0.37	123.3
Denmark	0.33	0.34	103.0
Great Britain	8.11	12.53	154.5
Hungary	5.29	5.97	112.9
Poland	9.94	9.79	98.5
Slovakia	4.19	5.42	129.4
Czech Republic	7.28	7.32	100.5
Romania	2.17	1.19	54.8
Bulgaria	2.53	2.8	110.7
Serbia and Montenegro (Yugoslavia)	0.74	1.14	154.1
Slovenia	0.5	0.53	106.0
Bosnia and Herzegovina	0.26	0.19	73.1
Macedonia	0.08	0.05	62.5
The Ukraine	32.87	25.84	78.6
Belorussia	20.26	20.26	100.0
Moldova	3.08	2.39	77.6
Lithuania	3.32	2.7	81.3
Latvia	1.12	1.13	100.9
Estonia	0.62	0.73	117.7
Kazakhstan	0.93	0.88	94.6
South Ossetia	0.03	0.03	100.0
Armenia	1.94	1.96	101.0
Georgia	0.25	0.18	72.0
In Total	203.22	217.59	107.1

Source: http://www.gazprom.ru/f/posts/21/499896/qr0312.pdf, http://www.gazprom.ru/f/posts/52/479048/gazprom- emitent-report-4q-2013.pdf

An increase in exports can be observed for product groups with small specific weights. So, although leather, furs and products based on these comprised only 0.1% of total Russian export values in 2013 this was an increase of 21.6%. The export of textile, textile products and footwear (at 0.2%) had also risen in 2013 compared with 2012 (by 22.6%) while exports of precious stones, precious metals and products based on them (at 2.7%) had risen by 4%.

There was a 7% increase in the value of machinery, equipment and transport vehicles exported with an extra 0.8% of this product group going to non-CIS countries while exports to the CIS increased by 16.7%. Sales of Russian cars to the CIS increased by 50.9%.

The structure and dynamics of imports

The slowing of import growth which began in 2012 intensified in 2013. As a result, Russian imports in 2013 increased by only 2.6%, reaching $344.3bn (*Table 46*). This growth in imports was helped by an increase in deliveries from non-CIS countries, the value of goods transferred from these reaching $294.7bn, which was 2.1% higher than the corresponding rate for 2012. The value of goods imported from the CIS into Russia reached $49.6bn, which was 5% more than in 2012. In total, the import share from non-CIS countries diminished from 85.9% to 85.6%. Import growth could be seen in almost all commodity groups except for mineral products, machinery, equipment and transport vehicles (*Fig. 58*).

The imports of precious stones, metals and products based on these materials increased especially significantly, with the increase being estimated at 20.1%; imports of wood, pulp and paper products increased by 9.2% while imports of textiles, textile products and footwear increased by 7.5%.

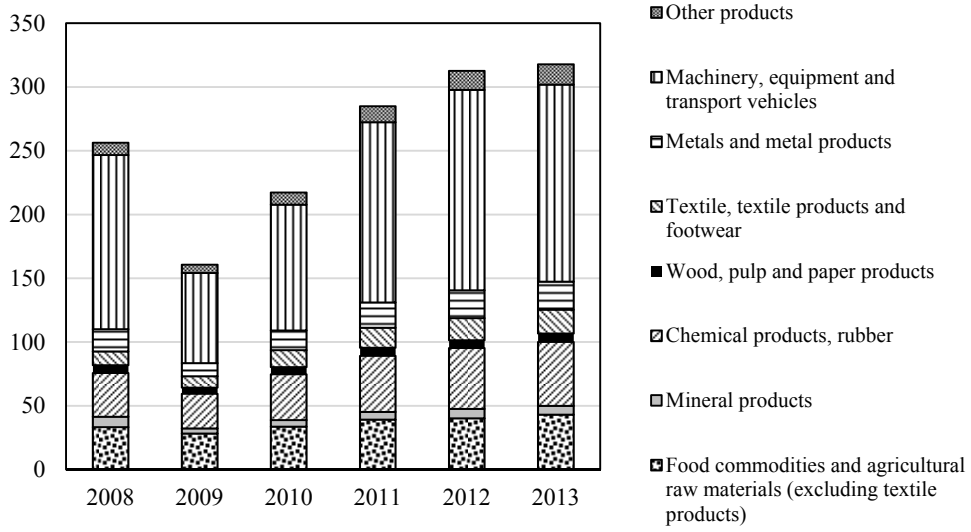
Table 46

Russian Imports, billions of dollars.

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Imports, billion of dollars	60.9	76.1	97.4	125.4	164.3	223.5	291.9	191.8	248.6	318.6	335.8	344.3
Including:												
Non-CIS Countries	48.2	60.1	76.4	103.5	138.6	191.2	253.1	167.7	213.3	275.5	288.5	294.7
Growth Rates, as % of the Previous Year												
Volume Index	117.6	119.2	124.2	122.4	130.1	127.1	113.5	63.3	135.4	122.2	105.1	97.8
Prices Index	93.4	98.7	106.1	106.5	105.5	107.6	117.8	99.1	101.6	109.1	97.3	102.5

Source: the Bank of Russia; the Ministry of Economic Development

In 2013, according to the FCS, the Russian Federation imported foodstuffs and agricultural raw materials valued at $43.1bn, an increase of 7.1% on 2012, the total volume of Russian imports for this product group having increased by 0.7 percentage points compared with 2012, reaching 13.6% of total imports.



Source: FCS.

Fig. 58. Trade dynamics of Russian imports in billions of dollars

In comparison with 2012 the volumes of import purchases of wheat and meslin rose by more than 4 times, the import of milk and concentrated cream rose by 46.9%, of butter, by 23.7% and of sugar, by 29.2%. For the same product positions a growth in average contract prices can be noticed. So, the prices for wheat and mixtures of cereal grains increased by 7%, for milk and concentrated cream, by 36.9% and of butter, by 22.9%.

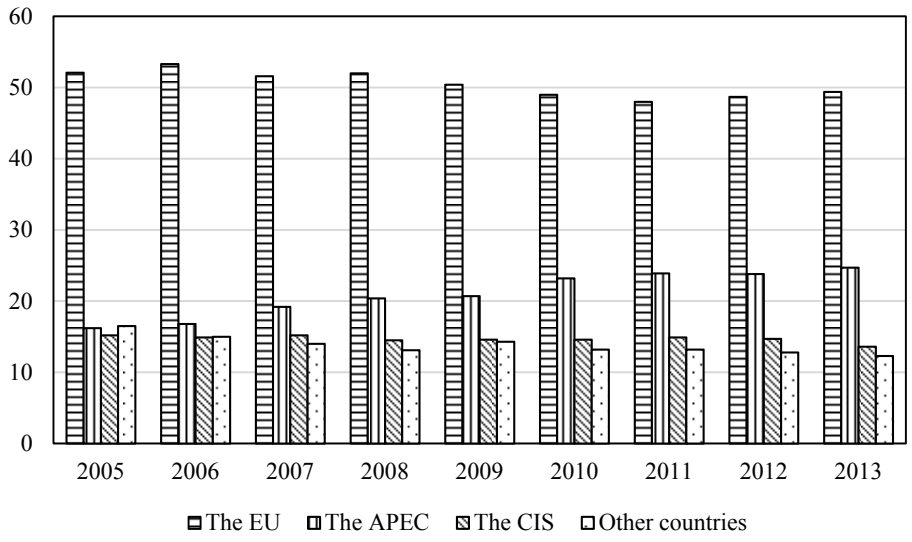
The value of imports of metals and metal products grew by 0.9% and reached $18.6bn mainly attributable to an increase in the amount of imported steel pipes (by 4.9%) and ferrous metals (by 1.8%). The share of imported metals and metal product volumes had decreased until it reached 6.9% in 2013, compared with 7% in 2012.

Imports of chemical products in 2013 were estimated at $50.1bn and had increased by 5.1% while their share within total Russian imports had increased from 15.3% in 2012 to 15.8%.

The main Russian import items are still machinery, equipment and transport vehicles. Imports of this category of products diminished by 1.8% in comparison to 2012, falling to $154.3bn while their share within total Russian imports decreased from 50.3% in the previous year to 48.6%. According to the FCS, imports of cars into Russia in 2013 had diminished by 16.9% in comparison to 2012 with the number of cars estimated at 894.100 pieces; and with the number of HGVs decreasing by 26% and estimated at 88000 pieces.

4.6.4. Geographical structure of Russian foreign trade

The European Union still remains the main foreign trade partner of the Russian Federation. In 2013 the share of the EU in the geographical structure of Russian foreign trade turnover (*Fig. 59*) had increased since 2012 by 0.7 percentage points and was estimated at 49.4%. The Netherlands still remained the major trade partner of Russia within this group, although their share had diminished by 0.8 percent points and was estimated at 9%. Second place was occupied by Germany, and its share in Russian foreign trade turnover had increased from 8.7% in 2012 to 8.9% in 2013. Italy was the third largest partner of Russia within the European Union in foreign trade volume, with its share at 6.4%, having risen by 1 percentage point. On the whole, in 2013, the EU countries had increased their volume of foreign trade with Russia by 1.9% in comparison to 2012 - the volume of Russian exports had increased by 2.2% while the volume of Russian imports had increased by 1.3%.



Source: FCS RF.

Fig. 59. Geographical structure of Russian foreign trade (%), 2009–2013

The share of the Asia-Pacific Economic Cooperation (APEC) in Russian foreign trade turnover increased from 23.8% in 2012 to 24.7% in 2013. The total volume of Russian trade with APEC countries in 2013 increased by 4.2%. At the same time Russian exports to those countries rose by 8.9% and Russian imports, by 0.2%.

The main foreign trade partner of Russia under this group is China, its share in foreign trade turnover remained at the same level as it had been in 2012: 10.5%. Second place belongs to Japan, the share of which increased from 3.7 to 3.9%. The share of trade with the U.S. remained at the same level as it had been in 2012: 3.3%.

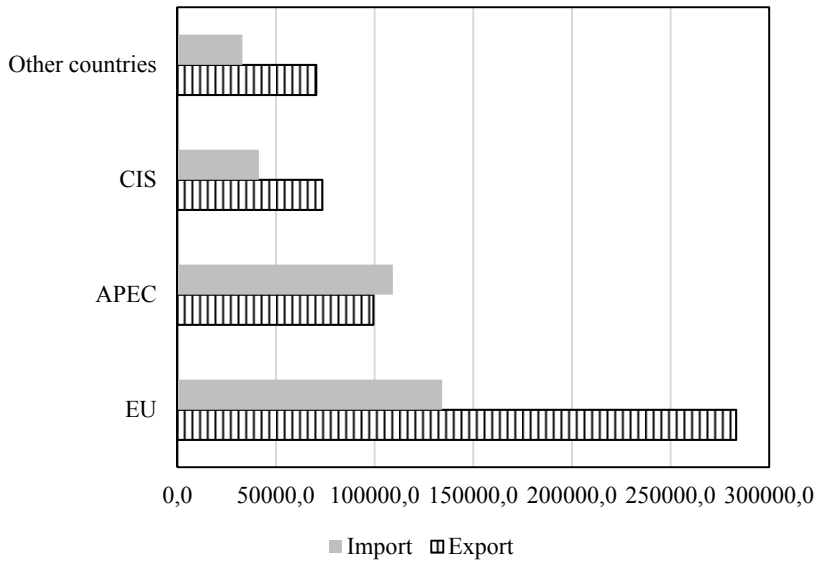
The share of the CIS within the foreign trade turnover of Russia in 2013 was reduced in comparison to 2012, from 14.7% to 13.6%.The major trade partner within this group is Ukraine but it achieved a share of only 4.7% in 2013 in comparison to 5.4% in 2012.

On the whole, in 2013, the trade turnover of Russia with these states diminished relative to 2012 by 2.2%.

Russia's trade balance in 2013 (*Fig. 60*) turned out to be positive for all groups of countries, excluding the member-countries of APEC (- $9.9bn). The negative balance of Russian trade was formed with 23 countries, with their share in the total trade turnover of the Russian Federation estimated at 30.3%.

The largest deficit in trade of Russia was formed with China (- $17.6bn), the USA (- $5.3bn), France (- $3.8bn) and Austria (- $2.6bn).

The largest recorded trade surplus of the Russian Federation was with the Netherlands (at $64.3bn), followed by Italy ($24,8bn) and Turkey ($18.2bn).



Source: FCS RF.

Fig. 60. Major indicators of Russian foreign trade by regions in 2013 in billions of dollars

4.6.5. Regulation of Russian foreign trade

Tariff regulation

Export duties

In the first quarter of 2013 the Government of the Russian Federation adopted three resolutions to correct the rates of export customs duties for oil and oil products.

According to the Resolution of the Government of the Russian Federation № 276 of 29 March 2013: on 1 April 2013 a new procedure for the determination of the rates of customs duty came into force. According to the procedure, the Ministry of Economic Development in

Russia monitors the prices of oil and oil products on the world markets and from these determines the export customs duties in respect of those products in accordance with methodology approved by the Government. On a monthly basis, throughout the period from April until December 2013 the Russian Ministry of Economic Development implemented adjustments to the export customs duties on crude oil and for certain categories of goods produced from oil.

Table 47

Export duty rates for oil and oil products in 2012–2013 dollar/tonnes

	Oil	Oil Products
2012		
January 1st	397.5	262.3
February 1st	393.7	259.8
March 1st	411.2	271.4
April 1st	460.7	304.0
May 1st	448.6	296.0
June 1st	419.8	277.0
July 1st	369.3	243.7
August 1st	336.6	222.1
September 1st	393.8	259.9
October 1st	418.9	276.4
November 1st	404.5	267.0
December 1st	396.5	261.7
2013		
January 1st	395.6	261.1
February 1st	403.3	266.2
March 1st	420.6	277.6
April 1st	401.5	265.0
May 1st	378.4	249.7
June 1st	359.3	237.1
July 1st	369.2	243.6
August 1st	379.8	250.6
September 1st	400.7	264.4
October 1st	416.4	274.8
November 1st	395.9	261.2
December 1st	385.7	254.5

Source: Government resolutions of the Russian Federation, data from the Ministry of Economic Development

In order to bring the customs duties in line with the international obligations of the Russian Federation under the WTO the following Resolution of the Government of the Russian Federation №754 was passed: 'On approving customs export duties for goods exported from the territory of the Russian Federation beyond the borders of the Customs Union-signatories and the repeal of certain legal acts of the Russian Federation' of 31 August 2013. The resolution implies a partial decrease in customs duties (generally by 1.25 - 2.5 percentage points) for many products which are subject to export duties: in particular, fish (salmon, flatfish, walleye pollock, herring, poutassou), crabs and shrimps, together with magnesium and tungsten ores and concentrates, bituminous mixtures, hides and skins, silver-plated and gold-plated metals etc.

Import duties

During 2013 it was decided to reset the rates of import duties (for some types of forge-stamping hydraulic presses and hydraulic radial-forging machines, some types of self- and non-self-propelled railway wagons, certain types organic chemicals, terephthalic acid and its salts, some types of artificial viscose fibres, some fruit products and silicon).

From 1 April to 30 June 2013 the customs import duties were raised for quark, butter, dairy spreads and some types of cheese in order to protect dairy product producers within the

countries of the Customs Union (CU). Thus, the duty for natural butter was raised to 18.3%, but not less than €0.29 per kilo (previously, 15%, with the same lower limit). The same duties were put in place for recombined oils (whey butter and dairy spreads). Dairy spreads with more than 80% fat are taxed at 18.3%, but not less than €0.16 per kilo (previously, 15%, with the same lower limit).The custom duties for quark that has less than 40% fat were raised to 18.3%, but not less than €0.5 per kilo (previously, 15%, with the same lower limit). The situation is the same for dairy cheese with less than 40% fat. The duties for quark and cottage cheese with more than 40% fat were raised to 18.3%, but not less than €0.4 per kilo (previously, 15%, but not less than €0.3 per kilo).

According to decision №42 of the Council of the Eurasian Economic Commission (EEC) of 2 July 2013 the effect of the premium import customs rates for butter, dairy spreads, other fats and milk butter, cottage cheese and quark was extended up to, and including 31 August 2013.

To stimulate an increase in the production of televisions sets within the Customs Union, according to the decision of the EEC №20 of 14 March 2013, the import duties on LCD and plasma-screen televisions and for TV sets with screens produced using LCD technology was increased to 16%. Previously the rates had been 10% and 15%, respectively.

On 13 September 2013 the Russian Federation joined the WTO multilateral Agreement on information technology directed at the liberalisation of trade in this sector of the world economy. Russia became the 78th party to this Agreement. Upon its accession Russia took a commitment to decrease customs duties for IT products from 5.4% to 0% by 2016.

In total the proportion of participants in the WTO Agreement on information technology accounts for 97% of world exports of information technology. Russia is a net importer of information technology: in 2012 the value of IT exports from the Russian Federation was $0.99bn, and the value of imports was $20.21bn.

In order to fulfil its tariff commitments to the WTO on 1 September 2013 new import customs duties came into force in the Russian Federation, those duties being adopted under the Decision of the Eurasian Economic Commission Council №45 of 2 July 2013 (*Table 48*). The decrease in duties concerns about 5100 product lines accounting for almost half of the Common Customs Tariff of the CU. The duties have been slightly decreased for individual items: in the range of 1–3 percentage points. For a small proportion of the product lines the import customs duties have been increased.

On the whole, the decrease in customs duties concerns commodity products including fish, exotic fruits, confectionary products, and raw materials for juice production. However customs duties have also been reduced on some types of equipment (from washing machines to tractors), and also for tropical oils, and certain clothes and fabrics.

So, import customs duties have been diminished from 10% to between 8 and 9% for some product types: 0302, 0303 (fresh fish/chilled and frozen), 0304 (fish fillet). Rates have been reduced from 20–25% to 18.3–22.5% for product type 0402 (milk and cream with added sweeteners), from 15% to 13.3% – for products of type 0407 (birds' eggs). At the same time the customs rates for fats and oils produced from milk and milk spreads (0405) and a range cheeses and quark (0406) have been increased from 15.0%, but not less than €0.5 per kilo to 22.5 %, but not less than 0.45 per kilo, which means that, the ad valorem rate reached its maximum level under the commitment noted above, as, prior to 1 September 2013 the level had been lower.

For a number of product classifications the combined rate has been replaced by the ad valorem rate. For example, knitted garments and other items of clothing previously came under a combined rate of 10.0%, but not less than €3.0 per kilo. Since 1 September 2013 the import duty on these products has been subject to an ad valorem rate of 18.3%.

Table 48

Comparison of the different Unified Customs Tariffs in %

	The UCT of the CU	
	Decision of the EEC Council of 16 July 2012 №54	**Decision of the EEC Council of 2 July 2013 №45**
The lowest ad valorem rate, other than zero	2	2
The highest ad valorem rate	65	65
Average ad valorem rate for the most protected groups:		
Meat and meat offal	37	37
Carpets and floor coverings	20	16
Arms and ammunition	20	19
Alcoholic and non-alcoholic beverages	18.4	16
Finished textile products	18.4	16
Precious stones and metals	18	17
Arithmetic average rate	10	9.5

Source: http://www.eurasiancommission.org

A gradual decrease in customs duties will continue until 2018, provided for by transitional periods for different types of product.

So, according to the Decision of the Eurasian Economic Commission Council №58 of 9 October 2013, import customs duties have been reduced to 13% from the earlier rate of 13.7% for mashed potatoes and plum paste produced from 'Prunus' plumbs, in primary packaging with net-weights of not more than 100 kg and intended for industrial processing.

The import duty for ethylene vinyl acetate has been reduced from 8.8% to 6.5%. Import duties for paving and tiles have been reduced from 13% to 12%. Additionally the import duties on turntable units (decks) and sound equipment without a recording function have been cut from 12.3% to 11%. The Decision came into force on 31 December 2013.

Non-tariff regulation

Bans and restrictions

According to the Decision of the Eurasian Economic Commission Council №33 of 5 March 2013 'On amendments to section 1.5 of the unified register of goods within the framework of the AurAsEC, where the import or export of which are banned or restricted for the member states of the Customs Union in trade with undeveloped countries' the register of banned–for-export wood products, regenerated paper, cardboard and wastepaper has been reduced. Wood products made of oak with a thickness greater than 6mm, coniferous species and other species with a thickness of not more than 6mm, timber, shuttering for concreting, carpentry constructions such as beams, roof timbers and roof spacers have been excluded from the register.

According to the Decision of the Eurasian Economic Commission Council №121 of 4 June 2013 'On amendments to section 2.12 of the unified register of goods within the framework of the AurAsEC, where the import or export of which are banned or restricted for the member states of the Customs Union in trade with third countries' the list of narcotic drugs and psychotropic substances which require licences for their import or export has been extended. The following products, in particular, have been added: AMT (*Alpha-Methyltryptamine*) and products based on it, modafinil, nalbuphine, dimethocaine, methoxetamine and its derivatives,

methedrone and ethylphenidate. In all, 69 products were added to the register. Licences for the import of the above substances into Russia and export of those products from the territory of Russia under the terms of trade with undeveloped countries are granted by the Ministry of Industry and Trade of Russia. If a substance is included into the appropriate Russian registers (registers I-IV), then instead of a licence the permission of the Federal Service of the Russian Federation for Control of Narcotics (Federal Narcotics Control Agency of Russia)(FNCA of Russia) is required, and in the case of medicines, a certificate from the Ministry of Healthcare and Social Development is also required for export/import.

Protective measures

Having become a full-fledged member of the WTO, the Russian Federation together with the members of the Customs Union are continuing to develop a range of trade policy instruments to protect their internal markets and in particular the introduction of antidumping duties.

Introduced at the initiative of Russian companies, the antidumping taxes were effective until April 2013 in protecting companies within the Customs Union 7. Major products, which then came under antidumping scrutiny by the Customs Union, included metals and metal products. However, only one antidumping measure was directed against Ukrainian exports of synthetic yarns. Countries that now come under the current active antidumping measures of the Customs Union are Ukraine and China. In April 2013 two new antidumping taxes directed against Chinese imported products were introduced.

According to the Decision of the Eurasian Economic Commission Council №64 of 9 April 2013 it was decided to introduce antidumping duties at the rate of 51.87% of the customs' value on enamelled pig-iron bathtubs, imported from China. The decision came into force on 26 May 2013 and is effective until 25 January 2018.

Preliminary antidumping duties had been introduced ahead of the completion of the antidumping investigation concerning the Chinese enamelled pig-iron bathtubs on 26 January, 2013. Following the preliminary investigation, the antidumping duties were introduced for a period of 5 years.

Within the period 2009-2011 imports of enamelled pig-iron bathtubs from China to Customs Union countries increased by 48.4%, while the proportion of these Chinese imports represented 82% of the total of this type of product.

Since the consumption of enamelled pig-iron bathtubs in 2011 remained at the 2009 level, the production volume in the Customs Union fell by 16.8% and the volume of their sales, by 26%, while product stockpiles increased by 1.5 times. The share of products produced by enterprises within the Customs Union fell by 15.2% on the domestic market as a result of the increase in imports from China under the dumping prices.

According to the Decision of the Eurasian Economic Commission Council №65 of 9 April 2013 it was decided to introduce antidumping duties of 19.5% for Cold-Deformed seamless stainless steel pipes produced in China and imported to the Customs Union. This antidumping measure was introduced for five years.

This antidumping investigation was started by the Ministry of Industry and Trade of the Russian Federation on 25 November 2011 according to an application filed by the OJSC 'Chelyabinsk Tube Rolling Plant', the OAO 'Pervouralsk New Pipe Works', OAO 'Synar tube plant' and the OOO 'TMK-INOKS'. In connection with the delegation of their authority to the Eurasian Economic Commission the Customs Union countries transferred supranational

powers for implementing special protective antidumping measures and compensation investigations to the EEC.

The investigation showed that the share of imports from China in the total imports of seamless stainless steel pipes to the Customs Union between 2008 and 2010 increased steadily so that, by 2010 the share was already 78.8%. In the second half of 2010 the indicator grew further, reaching 81.3%, but during the first half of 2011 it fell back to 63.2%.

In 2010 the weighted average price for such tubes from China had diminished by 15.2% in comparison with 2008. The unified dumping margin for all exporters and/or producers of seamless stainless steel pipes from China was 19.15%.

Within the period between 2008 and 2010 despite the growth in consumption of stainless steel tubes within the Customs Union by 48.2% the production volume by Customs Union companies fell by 9.1%. The rapid increase in imports of the Chinese tubes was accompanied by a decrease in the share of the Customs Union of domestically-produced tubes by 12 percentage points while the share of Chinese imports increased by 31.6 percentage points.

In the face of intense price competition from the increased Chinese imports, the economic enterprise sector of the Customs Union reduced their prices which resulted in a decrease in sales profitability by 5.8 percentage points and in a reduction of 38.3% in profits, so it was decided to introduce antidumping taxes.

According to the Decision of the Eurasian Economic Commission Council № 133 of 14 May 2013 antidumping taxes on light commercial vehicles (LCV) from Germany, Turkey and Italy imported into the Customs Union were introduced for a term of 5 years. The Decision came into force 30 calendar days after it had been officially published on 16 June 2013.

The antidumping investigation was initiated by OOO ‘Sollers-Elabuga”. Analysis of the Russian market for LCVs during the period from 2008 until 2011 indicated that, while there was a reduction in the total volume of imported light commercial vehicles into the Customs Union by 29.1%, their imports from Germany, Italy and Turkey had increased by more than 23%. At the same time the proportion of dumped imports increased steadily. According to the Eurasian Economic Commission Council, the proportion of dumping was 95.4% of the total import volume, having increased by 40.5% compared with the figures from 2008. The weighted average price for the products from Germany, Italy and Turkey in 2011 had decreased by 9.5% in comparison to 2008.

The demand for LCVs within the member-states of the Customs Union in 2011 had increased by 3.7 times in comparison to 2009, but the share of vehicles produced by the Customs Union in the consumption volume had decreased during the period of 2009–2011 by 20.1 percentage points; the profits of the corresponding sectors of the Customs Union economy having decreased by 17% in 2010 compared with 2009; in 2011 the vehicle production sector of the economy suffered losses, with the profitability of production becoming negative. Thus, while production costs had increased by 42.7%, in an effort to remain competitive against the increased dumping imports the wholesale prices rose by only 6.4 %. To sum up, the investigation showed the existence of dumping imports from Germany, Italy and Turkey which had caused material damage to the economies of the members of the Customs Union.

The antidumping duty for all German manufacturers was set at 29.6% of the customs value; for the Italian Sevel S.P.A. factory (owned by PSA Peugeot Citroen) and others Italian manufacturers the duty was 23%, and for all the Turkish manufacturers, including Ford,

Otosan Sanayi Anonim Sirketi the duty was 11.1%. The antidumping duty is in addition to a current duty of 10%.

According to the Association of European Businesses, in 2012 LCV sales in Russia had increased by 7% compared with 2011, reaching 188,095 units. At that time the market leader was the 'GAZ Group' – 90247 units. Among foreign brands the leading positions were taken by light commercial vehicles from Volkswagen (16161 units), Ford (12962 units) and Peugeot (9933 units).

The introduction of antidumping duties for the import of LCVs is likely to lead to a reduction in the volume of imports. To maintain leading positions in the Russian market, the foreign automotive concerns will have to localise their production of LCVs within the Russian Federation. So, Ford together with the 'Sollers-Elabuga' company has already started producing some LCV models in Tatarstan. Fiat, Peugeot-Citroen and Renault are looking at the possibility of starting production of LCVs in ZiL. Since 2013 Mercedes has been manufacturing its Sprinter LCV at the GAZ Group production line in Nizhny Novgorod.

It should be noted that German manufacturers do not approve of the introduction of antidumping duties for LCVs and they intend to appeal the decision in accordance with established procedures. The French producers are also studying the possibility of sending a request either to amend or to revoke the duties. The companies have the right to ask for arbitration by the WTO or to challenge the decision through the EurAsEC Court. They can send a request to the ECE after one year to ask for another investigation on the basis of which they can ask for the measures to be reviewed or cancelled. However, for that to occur the companies will have to demonstrate that the markets for that industry have improved.

In April 2013 the ECE completed its reinvestigation in connection with caramel imports from Ukraine, which was undertaken as a result of a request from the Ukrainian companies DO 'Confectionary Corporation ROSHEN', PJSC 'Kharkov biscuit makers' and PJSC Confectionary Plant 'Kharkovchanka'.

A special protective measure in connection with caramel was introduced under the Resolution of the Government of the Russian Federation №445 of 3 June 2011, for a 3 year period and imposed a special duty of $294.1 per tonne. This has been in place since 8 July 2011. According to the Agreement on the Application of Special Protective, Antidumping and Countervailing Measures, during the transitional period from 19 November 2010, this Russian measure was also extended into the territory of the Customs Union.

During the investigation it was found that, in the first half of 2012, compared with the first half of 2011, against a backdrop of a 4.1% fall in caramel consumption in the Customs Union, the production rate remained almost level, yet the sales volume increased. At the same time, a reduction in the volume of caramel imported, by 30.7%, made possible an increase of 5.1% in its share of goods in the Customs Union.

During the same period the sale weighted average selling price fell by 1.3% against a backdrop of a reduction in the cost of production by 11.4%. This provided companies with the opportunity to increase their levels of profitability to 4.4% while, during the first term of 2011, they had suffered losses. So, the effect of the special protective measure against caramel imports had a positive impact on that sector of the economy. As a result the College of the Eurasian Economic Commission made a decision to diminish the effective rate of the special duty for caramel. The reduction was implemented in two stages: from 15 June until it reached $283.8 per tonne, and from 15 December, 2013 until it reached $273.5 per tonne.

During the investigation it was found that the share of caramel imports from Brazil exceeded the 3% threshold for total caramel imports so it will now also be subject to the effect of special protective measures.

Under the Decision of the ECE №181 of 27 August 2013 a special protective duty was introduced for china dinnerware. The duty is effective from 28 September 2013 until 28 September 2016 (inclusive).

On 3 September 2012 an investigation was initiated in relation to an application by OOO DO 'Promisly Verbilok', OAO 'Imperial Porcelain Plant', ZAO «Dobrushsky Porcelain Plant» and the PK «Dulevsky Porcelain Plant» and this confirmed the presence of grounds for the use of special protective measures. Between 2009 and 2011 the volume of imports increased by more than 70% and during the first half of 2012 compared with the first half of 2011, by additional 15.9%. The porcelain dinnerware was being imported into the Customs Union and sold at prices which were well below those of the Customs Union members. This caused a reduction in the ratio of the production volume to the import volume of the china dinnerware by 1.7 times and led to a reduction in manufacture and sales, and a fall in the market share of the manufacturers within the Customs Union and to unprofitability of production.

From 29 September 2013 until 28 September 2014 (inclusive) the duty will amount to $1479 per tonne. From then on, until 28 September 2015(inclusive) the special duty will be reduced to $1035.3 per tonne. From 28 September 2016 the duty will be $591.6 per tonne.

This measure is directed, initially, against manufacturers in Chins and Ukraine which are the major suppliers of this kind of dinnerware to the Customs Union. During the period under examination 83% of the total volume of imports was from China.

At the meeting of the College of the Eurasian Economic Commission which took place on 25 June 2013 it was decided to introduce a final special protective duty for combine-harvesters and their modules until 7 March 2016.

During the period of investigation by the College of the Eurasian Economic Commission a preliminary special protective duty was introduced on 25 December, 2012 to cover combine-harvesters and their modules, with its level set at 27.5% of the customs value. Based analysis of the results of the investigation, it was concluded that there was a basis for the use of a special protective measure.

So, during the period between 2009 and 2011 the volume of import of combine-harvesters to the Customs Union in absolute numbers increased by 19.9% and in the second half of 2012 by an additional 92.3%[1] compared with the first half of 2011. This led to a reduction in the production of combine-harvesters by 14.4%, to a fall in volume of their sales by 43.4% and to an increase in stockpile by 67.4%. As a result the share of national producers of combine harvesters on the Customs Union market was reduced by14.6 percentage points, and their profits by 3.6 times. In 2012 those trends intensified.

According to the conclusions of the investigation, the ECE decided to introduce duty at rate of 26.7% until March 2016 with a phased reduction to 25.7%. Nevertheless, Kazakhstan blocked the decision of the College of the Eurasian Economic Commission. After conducting several consultations with the Customs Union member-countries the ECE decided to introduce import quotas for combine-harvesters and their modules in place of the antidumping duties as a protective measure. The quota came into force on 1 January 2014 and lasts until 21 August 2016. The size of the quota in 2014 for Russia will be 424 units, in 2015 –

[1] http://www.eurasiancommission.org/ru/act/trade/podm/eec_investigations/Documents/report_final_harvesters.pdf

437 units, in 2016 – 288 units; for Kazakhstan – 300 units, 309 units and 204 units respectively; for Belarus – 50 units, 52 units and 34 units respectively. The import of combine-harvesters to the Customs Union member-states in excess of the quota during the effective period of the protective measure will be forbidden.

In total nowadays there are 14 effective measures for the protection of the domestic markets of the Customs Union (*Table 49*).

Table 49

Internal market protective measures within the Customs Union

Product	Product Position CN FEA CU	Exporting country	Type of Measure
China dinnerware	6911	Worldwide	Special protective
Light commercial vehicles	8704	Germany, Italy, Turkey	Anti-dumping
Enamelled pig-iron baths	7324	The PRC	Anti-dumping
Cold-deformed seamless stainless steel tubes	7304	The PRC	Anti-dumping
Graphite electrodes	8545	India	Anti-dumping
Activated charcoal	3802	Worldwide	Special protective
Stainless steel tubes	7304, 7306	Worldwide	Special protective
Polymer coated metals	7210, 7212, 7225	The PRC, Taiwan, Hong-Kong, Macau	Anti-dumping
Forged steel rolls for rolling mills	8455	Ukraine	Anti-dumping
Caramel	1704, 1806	Worldwide	Special protective
Roller-bearings	8482	The PRC	Anti-dumping
Some types of steel pipes	7304, 7305, 7306	Ukraine	Anti-dumping
Fasteners	7318	Worldwide	Special protective
Combine-harvesters and modules	8433	Worldwide	Import quota

Source: http://www.eurasiancommission.org/ru/act/trade/podm/mery/Pages/default.aspx

Proceedings by the WTO

On 9 July 2013 the European Union lodged the first legal complaint against the Russian Federation with the Court of the WTO in connection with the implementation of scrappage taxes on cars. In Europe it is believed that in spite of all imports from the EU being subject to the fees, while vehicles produced within Russia, Kazakhstan and Belarus are exempt from the tax. According to this the duty creates preferences for automotive manufacturers in the Customs Union, which is in contravention of the WTO agreements. I the EU it was hoped that the conflict over the scrappage taxes would have been settled by 1July, 2013, with the adoption of amendments to Federal Law №89-FZ of 24 July 1998 'On Production and Consumption of Wastes' which levelled the conditions levy on national and foreign producers, but the amendments had not been passed by this time, and the State Duma was dissolved for the summer holidays.

According to the Federal Treasury data on performance, from the day of introduction of the scrappage taxes in September 2012 until 1 December 2013 the federal budget a profit from them was RUR64.3bn.

According to the WTO rules, the parties to a dispute have 60 days for peaceful settlement of the conflict, meaning settlement of the problem through consultations. After the period of 60 days the claimant is entitled to require the formation of a dispute settlement panel.

The bilateral consultations which were held on 29 and 30 July 2013 did not lead to any bridging of differences. So in October 2013 the time frame of 60 days provided for reaching a peaceful agreement with the EU under the rules of the WTO ended. On 10 October 2013 the EU appealed to the WTO Dispute Settlement Committee with a proposal to form an arbitration panel to consider the question of the legality of the fee.

On 22 October 2013 a meeting of the WTO Dispute Settlement Committee was held and during that meeting the Russian representative challenged the request of the EU to the WTO on convening a panel of arbitrators to consider the existing mechanism of scrappage taxes in Russia on the basis that not all means of peaceful settlement had yet been undertaken.

In July 2013 the European Union authorities filed a complaint with the WTO which forced the Russian authorities reconsider their position. On 21 October 2013 the President of the Russian Federation, Vladimir Putin, signed the amendments to the Law 'On Production and Consumption Wastes' that levelled the conditions of the scrappage taxes on cars from both national and foreign producers. According to the new law, which came into force on 1 January 2014, utilisation fees will need to be paid not only for cars imported into the Customs Union, but also for cars produced within the Customs Union itself. Vehicles belonging to compatriots moving to Russia for permanent residence under special diplomatic programmes and consular missions are regarded as exempt. Additionally, rare vehicles manufactured a minimum of 30 years ago are also exempt from the fee.

On 25 November, 2013 a meeting of the WTO Dispute Settlement Committee took place and, during that meeting, at the renewed request of the European Union an arbitration panel was formed for the settlement of the dispute on the regime of utilisation fees for automotive vehicles levied in the Russian Federation. According to the principles of the organisation, a renewed request cannot be denied. Thus the first panel proceedings against the Russian Federation have begun since Russia entered the WTO in 2012.

The WTO should send the Russian party a list of arbitrators, and, within two weeks of receipt of the list, Russia, together with the EU must agree on the list. If, within this period, they are not able to come to an agreement, the case will be handed to the Director-General of the WTO in order that he can designate the arbitrators himself.

The panel must then decide within six months which party to the conflict is right. At this stage it is very important that the governments of the countries which are parties to the conflict are provided with the support of qualified advisers and from the authorities of other countries whose interests could be affected by the results of the dispute resolution.

According to statistics, 60% of decisions of the panel are appealed to the Appeal Board however changes to, or cancellations of, the decisions of the panel are very uncommon. It should be noted that decisions made by the Appeal Board are not subject to further appeal and become the basis of the case law of the WTO.

China, India, Japan, Korea, Norway, Turkey, Ukraine and the USA expressed their willingness to take part in the investigation as third parties.

On 23 December 2013 Russia lodged the first legal complaint in the whole existence of the World Trade Organisation against the EU on the issue of so-called 'energy corrections' in conducting antidumping investigations.

Prior to 2002 the EU, regarded the Russian Federation as a state with a non-market economy, defining its assessment of dumping, on the basis of comparing Russian export prices with the selling prices within the domestic markets of undeveloped countries. In 2002 the European Union acknowledged the Russian Federation's status as a country with a market economy. But for the determination of dumping, in relation to Russian exporters, so-called 'energy corrections' were still used. In the calculation of the value of a product the prices at which Russian exporters purchased gas or electricity were not taken into account. Instead, the EU used the higher prices for energy in other countries that do not have access to their own

resources; this fact automatically transferred Russian enterprises into the category of infringers of trade regulations. This policy is still being implemented.

From 1995 until 2012 the European Union introduced 17 antidumping measures against Russian exporters, the majority of those measures were adopted in breach of international rules and caused significant losses to the Russian producers of fertilisers, ferroalloys, tubes and other steel products and of aluminum foil.

On 1 February 2014 five EU antidumping measures directed against Russian products were effective[1]:

- *Ammonium nitrate* - from 12.07.2008 to 12.07.2013 a unified specific duty at the rate of €41.42 – 47.07 per tonne, depending on the type of a product, was effective. With respect to the company OAO «Eurohim» individual duties are effective – €28.88 – 32.82 per tonne. The measure was first introduced on 23 August 1995. On 12 July 2013 a five-year review of antidumping measures was initiated.
- *Seamless tubes* - from 5.07.2012 until 4.07.2017 a duty at the following rate is effective: OAO 'Chelyabinsk metallurgical Plant' and OAO 'Pervouralsk New Pipe Works' – 24.1%, from 28.12.2012 enterprises of the Pipe Metallurgical Company (PMC) – 28.7%, for other Russian companies– 35.8%.
- *Ferrosilicon*– from 01.03.2008 till 28.02.2013 a duty at the following rate was effective: Bratsky Ferroalloy Smelting Plant – 17.8%, for other Russian companies – 22.7%. On 28 February 2013 a five-year review of antidumping measures was initiated.
- *Welded unalloyed pipes* – from 19.12.2008 till 20.12.2013 a duty at the following rate was effective: enterprises of the group the United Metallurgical Company (UMC) – 10.1%, enterprises of the group PMC – 16.8%, for other Russian companies – 20.5%. On 19 December 2013 a five-year review of antidumping measures was initiated.
- *Pipe fittings* – from 17 January 2013 a duty at the rate of 23.8% for import of pig-iron and steel fittings is effective for all Russian companies.

The unfair antidumping policy of the EU has been discussed during many expert consultations, but it has not led to any changes in the position of Russian major trading partner. Under conditions where all other forms of conflict management have been exhausted, the resort to the WTO procedures is an inevitable, but at the same time important, measure for restoring normal trade terms with the EU.

In accordance with the rules of the WTO, consultations were held within 60 days from the date of the request, i.e. until 22 February 2014. During this period the parties did not manage to find a solution to the problem. In one month Russia therefore has the right to initiate the formation of an arbitration panel (arbitration court of the WTO) in the course of its action against the 'energy corrections' implemented by the European Union.

[1] http://www.ved.gov.ru/mdb/information/database/