Institute for the Economy in Transition

RUSSIAN ECONOMY IN 2007

TRENDS AND OUTLOOKS

(ISSUE 29)

www.iet.ru

Moscow
2008

UDC 33(470+571)(066)"2007"
BBC 65.9(2Рос)я54

Agency CIP RSL

R95 Russian economy in 2007 (issue 29): Trends and outlooks / Inst. for the Economy in Transition; [Y. Gaidar and others]. – Moscow, IET, 2008. – 610 p.: il. – ISBN 978-5-93255-250-6.

The review provides a detailed analysis of main trends in Russia's economy in 2007. The paper contains five big sections that highlight single aspects of Russia's economic development: the socio-political context; the monetary and credit and financial spheres; the real sector; social sphere; institutional challenges. The paper employs a huge mass of statistical data that forms the basis of original computation and numerous charts.

Publication of the present paper was sponsored with the grant from the United States Agency for International Development (USAID)

UDC 33(470+571)(066)"2007"
BBC 65.9(2Рос)я54

ISBN 978-5-93255-250-6

Ekaterina Astafieva, Yuri Bobylev, Olga Izryadnova

Russia's Production Macrostructure in 2007

Trends and Factors of Final Demand Changes

Characteristic feature of 2006–2007 was economic growth acceleration rates along with positive effect of foreign economic situation factors and internal economic activity. Increase in business activity was based on anticipating growth of investments as compared with the dynamics of final consumption and had the most significant influence on the nature if structural shifts of the produced and used GDP. GDP increasing by 8.1% in 2007 real final consumption of households went up by 13.1% and investments in fixed assets – by 21.1%.

Table 1

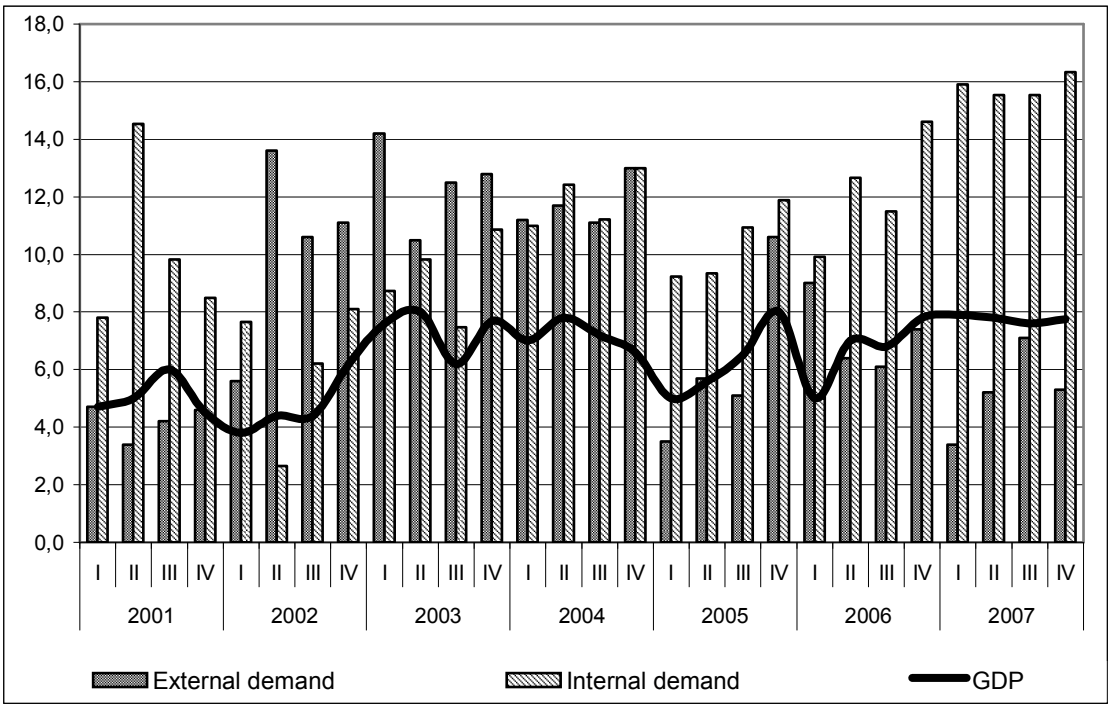
Indices of the Basic Macroeconomic Indicators in 1999–2007, as a Percentage versus the Previous Year

	1999	2000	2001	2002	2003	2004	2005	2006	2007
Gross Domestic Product	106.4	110	105.1	104.7	107.3	107.2	106.4	107.4	108.1
Households' real final consumption	97.1	107.3	109.5	108.5	107.6.	112.1	112.7	111.3	113.1
Investments in the fixed assets	105.3	117.4	110	102.8	112.5	111.7	110.7	113.7	121.1
Housing commissioning		94.6	104.6	106.7	107.7	112.6	106.1	116.1	119.4
Industrial production	111	108.7	102.9	103.1	108.9	108.3	104	103.9	106.3
Agriculture production	104.1	107.7	107.5	101.7	101.3	103	102.4	102.8	103.3
Freight turnover	105.8	105	103.2	105.8	108	106.5	102.7	102.5	102.2
Communication services amount	133.1	113.8	119.1	115.6	127.5	129	115.7	124.0	120.1
Retail trade turnover	93.9	109	111	109.3	108.8	113.3	112.8	113	115.2
Paid services rendered to population	107	104.7	101.6	103.7	106.6	108.4	106.8	107.9	107.1
Foreign trade turnover	86.7	130.2	103.8	108.1	126	132.4	131.5	127.0	123.4
Real disposable monetary income	87.7	112	108.7	111.1	115	110.4	111.1	110.2	110.4
Real wages	78	120.9	119.9	116.2	110.9	110.6	112.6	113.4	116.2
Real amount of accrued pensions	60.6	128	121.4	116.3	104.5	105.5	109.6	105.1	103.8
Average number of those employed in the economy	100.6	100.3	100.7	100.9	100.6	100.6	100.6	100.3	102.4
Number of officially registered unemployed	102.1	77	89.1	99.7	92.3	101.6	90.2	95.6	88.3
Consumer prices indices		120.2	118.6	115.1	112.0	111.7	110.9	109.0	111.9
Industrial producers' prices indices		131.9	108.3	117.7	112.5	128.8	113.4	110.4	125.1

Source: Federal State Statistics Service.

Simultaneous expansion of both internal and external markets was a factor of steady economic development. The ratio of external and internal demand over the period of 2001–2007 has varied considerably. Foreign economic situation being exceptionally favorable starting from 2nd quarter 2003 the deceleration of physical volumes of export growth rates has been observed and from the same period gradual strengthening of the internal demand influence on the dynamics of economic development has been registered. In 2005–2007 slowdown of for-

eign demand growth rates proceeded more acutely. Increase in external demand was on average equal to 12.1% in 2003–2004 as compared with 6.9% in 2005–2006, and it is estimated to be 7.4% in 2007.



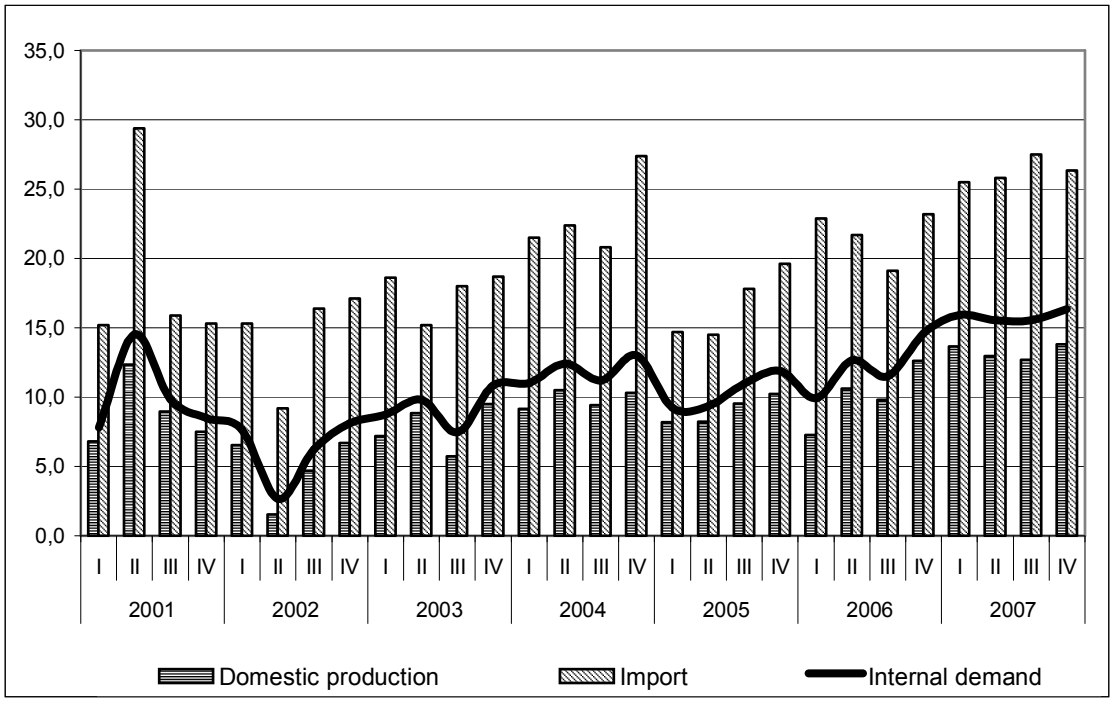
Source: Federal State Statistics Service.

Fig. 1 Growth Rates of Internal and External Demand in 2001–2007, as Percentage versus the Corresponding Quarter of the Previous Year

Joint influence of internal factors that regulate the level of business activity was quite sufficient to make up for the weakening of external demand impact on the economic growth rates. In 2007 the increase in internal demand was equal to 17.0% as compared with 12.9% in 2006 and 10.5% in 2005.

Positive dynamics of the internal market was determined both by the growth of internal production and the expansion of import supplies' scale. After a short-term decrease of import as a result of 1998 devaluation, the import growth rates have been steadily positive since 4th quarter 1999. Whereas at the surge of devaluation the domestic production was characterized by anticipating growth which was partially due to import substitution process, starting from the beginning of 2000 the parameters of standard of living and population's demand restoring, investment activity becoming more lively, market balance was maintained by more intensive growth of import supplies as compared with the domestic production. The situation at the internal market in 2006–2007 was formed under the influence of gradual acceleration of domestic production growth rates. As a result of 2007 the increase in industrial production was 6.3% (as compared with 3.9% in the previous year), workload in construction – 18.2%, agriculture – 3.3%. As a result increase in domestic goods production for consumption at the internal market has increased by 13.7% against 11.0% in 2006 and 8.9% in 2003–2005. This, however, did not change the trend for anticipating import growth in internal market resources formation,

which outlined most distinctly in 2007. Increase in import supply of goods in 2007 was equal to 35.4%, exceeding by 4.1 p.p. the level of the previous year. It should be noted that anticipating (as compared with export) import growth both by physical and value volume, which, in the end, led to absolute reduction in the net export proportion in the GDP was a characteristic feature of 2006–2007.



Source: Federal State Statistics Service.

Fig. 2. Change in Growth Rates of Internal Demand by Components in 2001–2007, as Percentage versus the Corresponding Quarter of the Previous Year

Analysis of retail trade resources formation demonstrates that the trend for the growth of the import supplies of both foodstuffs and non-food goods has recovered in 2005–2007. In the structure of retail trade goods resources the share of import went up to 47%, increase in foodstuffs being 37% as compared with 34.8% in the previous year and non-food goods – up to 54.4% as compared with 51.7% in 2006. High proportion of import goods secured balance of demand and supply at the investment market as well. Expenditures for purchase of import equipment in January–September 2007 were equal to 18.6% of the volume of investments into machinery and equipment.

Other circumstances being equal the dynamic growth of import contributed into creation of the competitive environment, while high share of import in the retail trade turnover and in the volume of investments in machinery, equipment and transport vehicles strengthened the dependence of internal market trade resources balance on the change in foreign economic situation.

Starting from the second half-year of 2007 growing prices of the world market for crops, dairy and a number of other foodstuffs, reduction of import supplies of the goods of social significance were among the factors that contributed into inflation processes development in the

Russian economy. Internal market reacted to the changes in demand and supply proportions and level of world prices for foodstuffs with the increase in prices for both import and domestic goods.

Agriculture goods producers' prices increased by 30.2% against 10.4% in 2006, prices for crops growing by 45.5%, for sunflower seeds – by 206% and for dairies – by 156%. Raw materials becoming more expensive, foodstuffs producers' prices have grown by 20.0% against 8.3% in 2006, main leap in prices occurring in 2nd half-year of 2007. Traditional seasonal decrease or slow-down of prices rates for foodstuffs in autumn that was observed starting form 2004, was succeeded by 1.8% increase in the 3rd quarter of 2007. In October growth of prices reached the maximum level for the last three years and was equal to 3.3%, exceeding by 0.3 p.p. the level of February 2006 prices.

It should be noted that steps taken to restrict foodstuffs prices growth – that is import duties for milk, dairies and cheeses decrease, signing of agreements between foodstuffs producers and net trade companies on price freezing for some kinds of socially important goods, conduction of goods interventions to the crops markets – did not have considerable influence on present situation. As a result, prices for foodstuffs in 4th quarter 2007 went up by 7.0% and from the beginning of the year – by 15.6%, exceeding the figure of 2006 by 6.9 p.p.

Solution of fundamental problems of balance at the market of foodstuffs in concordance with the program of the Ministry for Trade and Economic Development involves implementation of such instruments as import duties decrease for some kinds of goods, oil, for instance, increase of export duties for crops, development of legal and regulatory measures aimed at agriculture goods production and supply growth, reduction of monopolism and development of competition in the field of production and goods sales. The first results of the declared scheme, however, will evolve only in thee first half-year of 2008.

It should be noted that change in price proportions has not reflected on the consumer market as a whole yet. Increase in retail trade turnover in 2007 was equal to 15.2% against 13.9% in the previous year and the volume of paid services rendered to the population – to 7.1%.

Comparatively low dynamics of prices for non-food goods, high quality goods and service remained the factor that partially made up for growth of prices for foodstuffs. In 2007 prices for non-food goods increased by 6.5% and paid services – by 13.3%.

Consumer market was maintained by acceleration of growth rates of real population's incomes and continuous expansion of consumer crediting. Increase in real population's monetary incomes in 2007 was equal to 10.4% as compared with 10.2% in the previous year, of real wages – to 16.2% as compared with 13.4% in 2006. In the structure of population's incomes the share of labor remuneration was only 70.3%, exceeding by 5.4 p.p. the figure of the previous year. Against the background of growing population's incomes it was observed that the population's inclination for savings has been declining more and more intensively. Over 2007 the share of savings in population's incomes has decreased by 1.4 p.p. and was equal to 8.9%. The dynamics of population's savings was considerably influenced by such factors as inflation acceleration, change in the situation at the real estate market and periodically evolving problems with banks liquidity.

Dynamics of Gross Saving and Gross Accumulation and Their Proportion in the GDP

Favorable combination of factors of domestic business activity and price situation at the world market of raw materials accounted for intensive growth of gross savings scale. The share of gross savings in the last seven years was in the range of 31.1–38.7% of the GDP against 24.0% in the pre-crisis 1997. In 2007 under the influence of export share reduction of the GDP on the one hand, and increase in households expenditures on the other hand, growth of gross national saving was equal to 34.2%.

Table 2

Structure of GDP Use for Gross Savings and Accumulation in 2000–2007, as Percentage to the Total

	2000	2001	2002	2003	2004	2005	2006	2007
GDP	100	100	100	100	100	100	100	100
of which:								
Gross savings	38.7	34.2	31.1	31.9	33.6	33.6	34.5	34.2
of which:								
Gross accumulation	18.7	21.9	20.1	20.8	20.9	20.1	21.3	24.5
Gross accumulation of fixed assets	16.9	18.9	17.9	18.4	18.4	17.7	18.4	21.0
Change in the stocks of material circulating assets	1.8	3.1	2.1	2.4	2.5	2.3	2.9	3.5
For reference:								
The share of investments in the fixed assets in the GDP	15.9	16.8	16.3	16.5	16.8	16.7	17.0	17.3

Source: Federal State Statistics Service.

As the experience of the last two years has demonstrated it is the ratio of investment demand and final consumption that reacted most vigorously to the change of export earning and defined peculiar features of the internal market operation. Sudden fluctuations of investment expenditures for reproduction of fixed assets were compensated by smooth change in the dynamics of final consumption. At the same time the strengthening of investment component impact on the dynamics of the economic growth has been observed from 2nd quarter 2006. The growth rates of the investments in the fixed assets reached the maximum level after the financial crisis of 1998 in 2007, being equal to 121.1% as compared with 113.7% in 2006 and 109.5% on average over 2000–2005. It should however be noted that whereas in 2007 the volume of the GDP exceeded the pre-reform level of 1991 by 10%, investments in the fixed assets were nearly by 1/3 lower than the corresponding index of the same year.

Households' Final Consumption and Change in Population Standard of Living Parameters

Positive dynamics of final consumption was one of the main factors for the development of internal market in 2001–2007, real population's income, real wage and real volume of accrued pensions starting to grow steadily. The growth of the scale of final consumption proceeded against the background of quite steady sustention of the ratio between the consumption of households and the amount of social transfers, received from the governmental institutions and non-commercial organizations. In 2007 the share of expenditures for final consumption in the structure of the GDP was equal to 65.8% in 2007, exceeding the figure of the corresponding period of the previous year by 0.1 p.p.

In 2000 expenditures for households' final consumption reached the level of pre-crisis 1997, and have doubled over seven years that followed. The growth of households' consumption was accounted for by steady increase in population's monetary incomes. Over 2001–2007 real population's incomes have grown by 2.1 times, real wages – by 2.5 times and real volume of accrued pensions – by 1.9 times.

Table 3

Structure of Gross Domestic Product Use in 2001–2007 as Percentage to the Total

	2001	2002	2003	2004	2005	2006	2007
Gross domestic product	100	100	100	100	100	100	100
Of which							
Expenditures for final consumption	65.8	68.9	68.1	66.9	66.2	65.6	65.8
Including:							
Households	48.3	50	49.4	49.3	49.0	47.9	47.9
Governmental institutions	16.4	17.7	17.6	16.7	16.6	17.0	17.3
Gross accumulation	21.9	20.1	20.8	20.9	20.1	21.3	24.5
Net export of goods and services	12.7	10.8	11.3	12.2	13.7	12.7	8.5

Source: Federal State Statistics Service.

Anticipating growth of wages as compared with other sources of income had the primary influence on the population's incomes dynamics. Population's incomes increasing steadily, the reduction of poverty level has been observed. The proportion of people with monetary incomes lower than subsistence level decreased down to 21.5 mln of people in 2007, which was equal to 15.2% of the total number of population as compared with 25.2 mln of people (17.7%) in 2005 and 42.3 mln of people (29.0%) in 2000.

Table 4

Number of People with Monetary Incomes Lower Than Subsistence Level on the whole throughout the Russian Federation

	Mln of people	As percentage to the total number of population
2005		
1st quarter	34.9	24.5
1st half-year	31.4	22.1
Yearly	25.2	17.7
2006		
1st quarter	31.7	22.4
1st half-year	27.0	19.1
Yearly	21.6	15.3
2007		
1st quarter	25.8	18.3
1st half-year	22.3	15.8
Yearly	21.5	15.2

Source: Federal State Statistics Service.

Structural shifts in population incomes formation were accompanied with the change of population distribution by the amount of average per capita incomes. In 2007 average per capita incomes increasing by 22.7% and nominal wages – by 26.7%, the share of the population with the average per capita incomes of more than RUR 12000 expanded by 9.1 p.p., and with the incomes below 6000 reduced by more than 8.8 p.p. However this did not relax the social and economic differentiation of the population by incomes. According to estimation, fund coefficient, which characterizes the ratio of the highest and lowest incomes of the corresponding

decile groups of the population, was equal to 16.8 in 2007 against 16.0 in 2006, and Gini coefficient characterizing concentration of incomes increased up to 0.422 against 0.416 a year ago.

The specific character of incomes distribution also determined the distinctive features of the current expenses dynamics and the level of savings in the households sector. In 2007 the volume of population's monetary incomes was equal to RUR 21138.9 bln, having increased by 22.4% over the year. For goods purchase and payment for services the population spent RUR 14707.8 bln, which exceeds the level of 2006 by 23.5%, and savings were equal to RUR 2981.4 bln, which is by 0.5% higher than in the previous year. The factor that restricted use of savings for current consumption was high investment activity of the population at the housing market. At the expense of own and loaned funds the population has built by nearly 1/3 more housing floorspace than a year before.

Over the last seven years the change in the consumer spending was determined by the increase in the share of expenditures for non-food goods and services and reduction of the share of expenditures for foodstuffs. It is to be mentioned that the statistic monitoring observed gradual shift of sales assortment structure of foodstuffs towards more expensive and of non-food goods towards imported goods of better quality. The change in the population demand and the increase in the share of non-food durable goods and house furnishing goods stirred up the development of consumer crediting. The volume of credits given to individuals expanded by 1.52 times in comparison with the beginning of 2007.

Characteristic Features of GDP Formation by Incomes

The dynamic growth of the population incomes is one of the characteristic features of Russian economy's growth. The sustention of the domestic market dynamics was based on the growth of real wages and was accompanied by the redistribution of incomes from the enterprises to the population. In 2007 the share of the employees labor remuneration in the GDP was equal approximately to 44.8% and remained above the figures of 2005–2006. High differentiation of the average wages by kinds of economic activity was preserved. In the industry the level of wages differentiation was defined by the increase in the gap between the rates of the labor remuneration in extraction and processing industries. Nominal accrued wages in minerals extraction was 2.1 times higher than the average in the economy, including in fuel fossils extraction – by 2.5 times. In processing industries the wages were equal to 97% of the average in the economy and 42% of the figures of extraction industries. The exceeding of the average figure of accrued wages by 2.3 and 2.2 times, respectively, was observed in productions, connected with oil products processing and transportation of fuel fossils. In education and public health care the average wages were equal to 75–7% of the average in the economy, in government administration and military safety security – to 120% and in financial activity – to 260%. The characteristic features of labor remuneration by the kinds of economic activity had a substantial impact on the nature of employment and labor resources distribution in the economy.

Table 5

Structure of the GDP Formation by Incomes in 2001–2007, as Percentage to the Total

	2001	2002	2003	2004	2005	2006	2007
Gross Domestic Product	100	100	100	100	100	100	100
Of which:							

Employees labor remuneration (including hidden wages)	43.0	46.7	47.1	46.0	43.8	44.1	44.8
Net taxes for production and import	15.7	17.0	16.0	16.8	19.7	20.0	18.9
Gross profit of the economy and gross mixed incomes	41.3	36.3	36.9	37.2	36.5	35.9	36.3

Source: Federal State Statistics Service.

Only 8% in the structure of the employed population account for people who do not work for a wage; these are employers, who attract employees on a regular base to work for their own companies, self-employed people. This defined, correspondingly, the nature of the population income structure and the GDP formation. More than 70% of population income accounted for the remuneration of labor of those, who work for wages, the share of the incomes from the entrepreneur's activity and property decreasing.

The level and the share of employers' wages in the structure of the GDP had a prevailing influence on the social profile, including labor market. The typical aspect of the period of 2001–2007 was the tendency for the growth in the demand for the labor force. Average annual number of the employed in the economy process in 2007, according to the preliminary data, was equal to 70.5 mln of people and increased by 2.4% as compared with the previous year. It is to be noted, that the change in labor force demand was determined by the shift of the employment to the kinds of activities that provide market services. The formation of this tendency at the initial stage of the economic growth restoration had a powerful effect on the life quality and gave a stimulus for service sphere development. In past four years the decrease in employment was observed in almost all branches of industry, the decrease in the number of workplaces being the most intensive in the processing industries. In 2006 as compared with 2004 the average annual number of those employed in processing industry reduced by 532 thousand of people, in extraction industries – by 52 thousand of people. This trend was formed against the background of weakening of the trend for labor efficiency in industry.

Table 6

The Dynamics of Labor Efficiency, as % to the Preceding year

	2003	**2004**	**2005**	**2006**	**2007***
Economy as a whole	107.0	106.5	105.5	106.0	106.0
Broken by kinds of economic activities:					
Agriculture, hunting and forestry	106.0	103.6	102.4	104.1	105.0
Fishing and fish breeding	102.1	104.3	100.1	111.2	102.0
Minerals extraction	109.2	107.3	106.2	102.2	102.3
Manufacturing industries	108.8	106.3	107.1	105.5	109.1
Production and distribution of water, gas and electricity	103.7	100.4	103.7	102.3	100.0
Construction	105.3	106.9	105.9	113.3	114.7
Whole sale and retail trade; motor-vehicles, motorcycles, household appliances and articles of private use service	109.8	110.5	105.1	106.9	107.8
Hotels and restaurants	100.3	103.1	106.5	109.5	No data
Transport and communication	107.5	108.7	102.1	107.9	106.8
Operations with real estate, renting, provision of services	102.5	101.3	112.7	104.8	No data

* Preliminary data.

Source: Federal State Statistics Service.

The low efficiency in factors of production use is one of the main causes of the decrease in competitive advantages of Russian goods. The growth of discrepancy between the rate of labor productivity and wages in favor of the latter had the negative impact on the economic dynamics indices. However possibilities for further increase of costs for labor remuneration were limited due to the changes in competitive environment at the goods markets because of ruble appreciation and increase in import pressure.

Analysis of economic growth in 2004–2007 enables to highlight three factors that determined specific features and dynamics of this growth: first, the decrease of the employment in industrial production, the employment in the economy on the whole increasing and the employed distributing towards the sector of services; second, labor efficiency rates deceleration in the industry; third, dynamic growth of investments in the fixed assets.

On the whole output growth in the economy due to the main factors input in 2007 is mainly (by 37.5%) was accounted for by the increase of investments and volume of the capital involved in production in contrast to other periods, when increase of capital input was determined mainly by involving in production. In 2007 this component defined 21.5% of the output growth rates, which was secured by investments growth rates acceleration (21.1% in 2007 as compared with 13.7% in 2006 and 10.9% in 2005) and, as a consequence, intensification of existing facilities renovation processes.

Increase of labor input is also due to the change in "stocks", that is the number of the employed. In 2007 the increase in the demand for labor force led to the exceeding of the average figure of the employment for the last 7 years. It should be noted that the growth of the number of the employed was mainly due to the sector of services, while in the sector of goods production the employment reduced. At the same time in 2007 the hours of work by one employee a year decreased, which had a negative impact on the GDP growth rates.

Decomposition of output figure (GDP and added value of the industrial production) demonstrates that economic development rates acceleration in 2007 is accounted for mainly by the increase in growth rates of total factor efficiency (TFE) against the background of differentiation of main factors growth rates intensifying. The basis for decomposition[1] is breaking down of the economic growth to extensive and intensive components, which enable estimation growth quality, forecast of further trends for economic development.

TFE growth rates in 2007 was equal to 4.35%, which is three times bigger than the level of 2006, when the corresponding figure was equal to 1.31%, nearly reaching the level of 2004–2005 (4.4%). On average over 2004–2007 annual increase of TFE growth rates was equal to 0.05 p.p., though, according to the linear trend the growth rates decrease annually by 0.29 p.p. In 2007 contribution of TFE in the output growth rates increased as compared with 2006 by 53.8%, the figure being 19.6% then. The value nature of the indices used for estimation makes TFE estimations dependant on the situation factors and especially on oil prices. On exclusion of oil prices growth component from the TFE figure, efficiency growth free from the situation at the world markets changes but little. The contribution of technological component[2] in GDP

[1] Decomposition of GDP output index growth and added value of industrial production is conducted in accordance with the method presented in the book: Factors of the economic growth, "Scientific work" series, No. 70, IET, 2003. TFE is referred to as remainder not accounted for by main factors, labor and capital, characterizing the influence of scientific and technological progress, innovations, increase of production organization efficiency, management quality, as well as change in price situation.

[2] Under "technological" component we understand final remainder obtained after excluding from the productivity evaluation the component determined by the dynamics of the world oil prices.

growth in 2007 was equal to 51.8%. The obtained value considerably exceeds the average figure of this factors' contribution into the GDP over the last years.

Table 7

Decomposition of the GDP Annual Growth Rates and Gross Added Value by Kinds of Economic Activities in 2004–2007[3]

	GDP	Factors costs	including:						TFE
			Labor	Of which:		Capital	Of which:		
				Number of the employed	Hours of work*		Fixed funds volume**	Extent of facilities load***	
Total throughout the economy	7.2	2.99	1.03	0.43	0.60	1.96	0.54	1.42	4.21
	6.4	1.82	0.02	0.22	–0.20	1.79	0.68	1.11	4.58
	6.7	5.39	0.28	0.13	0.15	5.11	1.44	3.67	1.31[4]
	8.1	3.75	0.71	0.84	–0.14[5]	3.04	1.74[6]	1.30[7]	4.35
Minerals extraction	8.60	2.34	–4.22	–4.22	–	6.56	3.60	2.96	6.26
	0.90	3.40	–0.66	–0.66	–	4.06	3.71	0.35	–2.50
	2.10	–0.49	–0.09	–0.23	0.14	–0.40	4.36	–4.76	2.59
	0,3	2,04	–0.55	–0.61	0.06	2.59	2.59	–	–1.74[8]
Processing industries	6.7	0.27	–3.61	–3.61	–	3.88	1.95	1.92	6.43
	5.7	5.17	–0.94	–0.94	–	6.11	2.31	3.80	0.53
	4.9	5.53	–0.54	–0.75	0.21	6.07	2.82	3.25	–0.63
	7,9	1.35	–0.52	–0.66	0.14	1.87	1.87	–	6.55
Electricity, gas and water production and distribution	2	–3.63	–3.84	–3.84	–	0.21	0.21	0.00	5.63
	1.3	0.67	0.30	0.30	–	0.37	0.37	0.00	0.63
	2.6	0.62	0.26	0.13	0.13	0.36	0.36	0.00	1.98
	–0,3	–1.32	–1.60	–0.85	–0.75	0.28	0.28	0.00	1.02

* Per one worker.

** For 2004–2006 on the basis of data on the physical volume of fixed assets.

*** The estimation of the change in facilities utilization throughout the whole economy is base don the data for electricity consumption, in industrial production – on the data for average annual manufacturing capacity of organization, producing different type of goods.

[3] For each type of the economic activity the first line gives growth decomposition in 2004 г, second line – in 2005, third line – in 2006, fourth line – in 2007. The deviation from the data published earlier is due to the change of data supplied by the Federal State Statistics Service.

[4] In 2006 the estimation of the TFE growth rates in the industrial production can be slightly underrated, for the shift upwards of the estimation of growth rates caused by the change in the extent of the facilities load which in its turn is due to the change in the methodology of consumed energy volume measuring.

[5] The estimation for the year is based on the data for January–September 2006.

[6] Preliminary data – estimation of the fixed assets volume growth in 2007 is based on the assumption that the coefficient of fixed assets retirement and the share of investments in their renewal are constant.

[7] The estimation of the extent of facilities load is based on the assumption that the share of energy consumed in the volume of the production output is constant.

[8] In 2007 the estimation of the TFE growth rates in the industrial production can be slightly overrated, for the extent of the industrial facilities utilization was not taken into the account in the calculations.

It should be noted that the dynamics of growth rates of technological component of the TFE is a retarded reflection of changes in the dynamics of investments growth rates. This fact characterizes the period necessary to implement and use the accumulated investments. Slowdown of TFE growth rates in 2004–2006 corresponds to the period of moderate investment activity in 2001–2003. At the same time intensification of investment processes that started in 2004 can be considered as one of the reasons for acceleration rates of technological component in 2007.

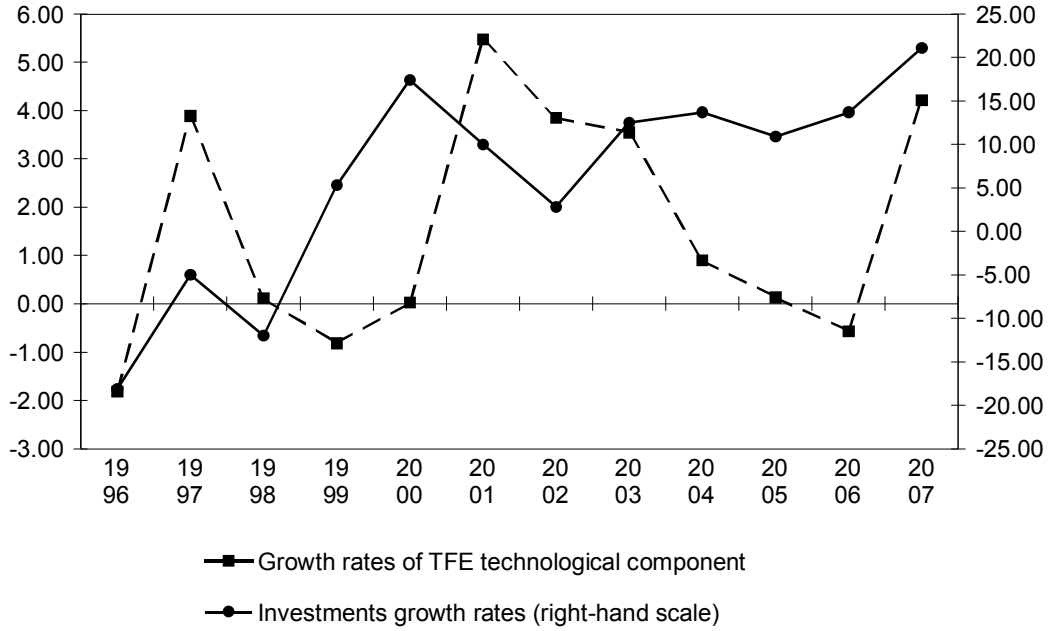


Fig. 3. Dynamics of "Technological" Component of TFE Growth Rates and Investments Growth Rates in 1996–2007

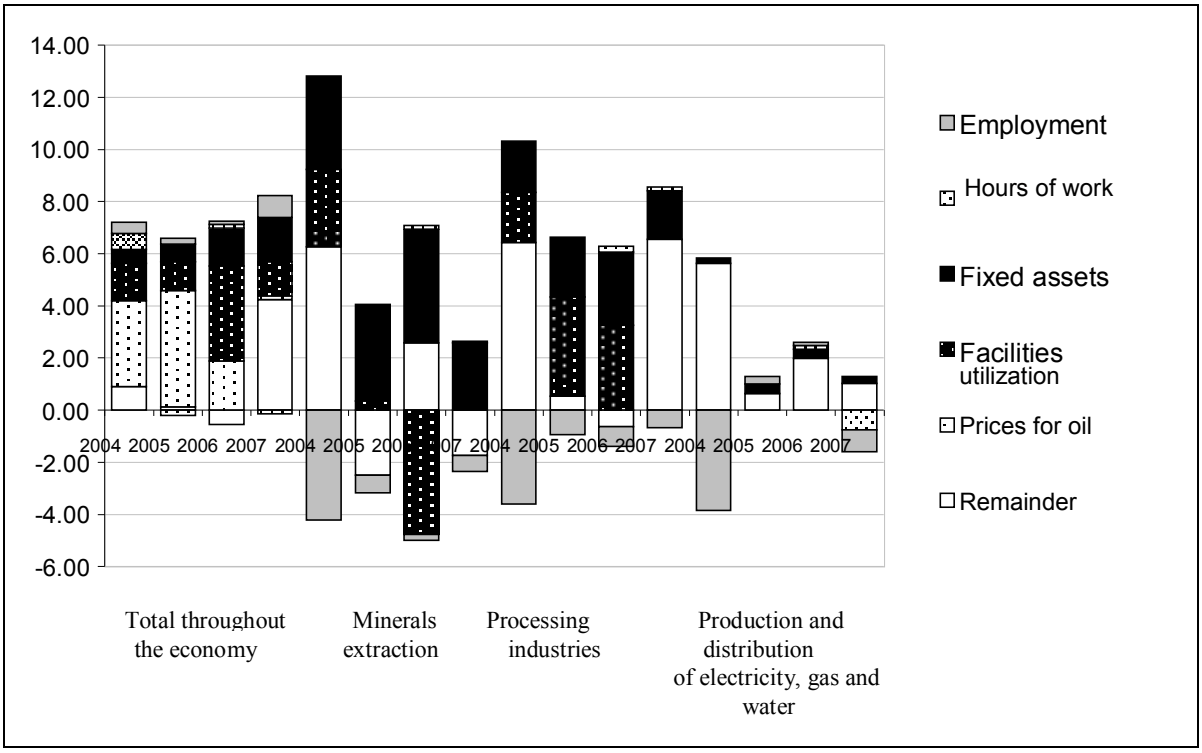
For the enterprises of the minerals extraction sector, in contrast to the economy as the whole, the decrease in gross added value (GAV) growth rates was observed in 2007 as compared with 2006: in 2004–2007 minerals extraction enterprises are characterized with the maximum deceleration of output growth rates in the industrial sector: on average over the period GAV growth rates decrease by 2.77 p.p., and according to the linear trend – by 2.37 p.p.

In accordance with decomposition results the contribution of the labor input to the output growth rates for this type of the economic activity remains negative over the whole period of 2004–2007, which is defined by the decrease in the number of those employed at the extraction industry. The capital input, in contrast, was increasing mainly due to the increase of the industrial facilities in the environment of considerable fluctuation of the extent of their utilization.

TFE of extracting sector dynamics is controversial: extracting enterprises demonstrate negative growth rates of productivity in 2005, in 2004 and 2006 the situation was the opposite – at that time output increase was due to the growth of total factors' efficiency against the background of their costs decrease. In 2007 TFE of this kind of economic activity again shifted to the field of negative values, which was the main reason for unsteady growth

rates of added value. On average over the period TFE growth rates slowed down by 2.67 p.p. (according to the linear trend – by 1.89 p.p.).

The TFE dynamics of the extractive industries sector is more prone to the influence of the price situation at the world markets as compared with other industrial production. It should be noted that separation of the component defined by prices for oil growth from the TFE index demonstrates that technological effectiveness growth rates of the sector has been decreasing since 2005. Against the background of favorable price situation at the world markets of raw materials this testifies that technological characteristics of extraction enterprises functioning have been worsening. This can be connected both with start of exploitation of oil fields with lower efficiency and with the decrease of management quality in the environment of considerable growth of prices. Slow–down of prices for oil growth rates in 2007 caused decrease of price factor input to the TFE of the extractive sector and, as a result, negative dynamics of the TFE, since "technological productivity" dynamics was also negative. In 2007, as well as in 2005–2006, it is the processing enterprises that are characterized with the biggest growth rates. According to the results of the decomposition over the whole period of 2004–2007 the decrease in the number of the employed at the manufacturing enterprises determines the negative contribution of the labor input to the output growth rates for this kind of economic activities, the absolute value of this input, however, decreasing. The growth in the physical volume of fixed assets accounts for steadily positive capital input contribution into output growth rates, which along with the increase in the intensity of industry capacities utilization defined the prevailing position of the capital as a factor of processing industries economic growth in 2005–2006. In 2007 the changes were registered in the structure of added value growth of this kind of economic activity: the share of output, accounted for by the changes on capital costs decreased down to 23.7%, and the most significant factor of processing enterprises' output growth was TFE, whose contribution, according to the preliminary estimations, is equal to 82.9%, though this estimation is likely to be overrated, since it does not take into account the changes in industrial facilities utilization.



Note: decomposition for the industrial production of 2004–2005 was made not taking into account work hours, the data being unavailable.

Fig. 4. Stricture of Gross Added Value in the Economy on the Whole and in the Industrial Production in 2004–2007

The only kind of economic activity where GAV decrease was observed in 2007 is electricity, gas and water production and distribution (GAV growth rates are equal to 99.7%). It should be noted that in 2004–2006 output growth rates of this kind of economic activity demonstrated the most successful dynamics, which is characterized by constant increase of growth rates. Reduction of added value of this industrial sector was mainly due to with the decrease in the main factors input. Against the background of slight growth of fixed assets volume, the negative dynamics of the main factors input was defined by the reduction of the number of those employed at the enterprises of this kind of economic activity and the hours worked by them, that is why labor input in 2007 was the main factor decreasing GAV growth rates at enterprises of electricity, gas and water production and distribution.

In 2007 the impact of main factors input (labor and capital accumulation taking into account the intensity of their usage) was practically equal to that of TFE on the observed GDP growth. The input of efficiency in GDP growth was about 54%, not taking into account world prices for oil, and 52%, when estimation of price situation at the markets of raw materials contribution is excluded.

Structure of TFE growth rates in the industrial sector is not an even one: as a continuation of the trend for efficiency growth rates deceleration that outlined in 2004–2006, in 2007 the enterprises of extractive sector demonstrate TFE decrease; TFE growth rates at the enterprises of electricity, gas and water production and distribution are reducing; at the processing

enterprises, in contrast, TFE growth is observed, it being the prevailing factor that influenced the growth of this industrial sector.

The results presented characterize the transformation of economic growth structure and enable to single out the most significant factors that defined changes in the dynamics of the output growth rates.

As a result of January–September 2007 the economy's profitability was equal to 13.9% against 14.9% in the corresponding period of the previous year. The highest level of profitability is sustained in the industries connected with minerals extraction and processing. The existing differentiation of labor remuneration by kinds of economic activities influences the ratio of labor efficiency and wages growth rates considerably. Average accrued wages in the processing industries is by nearly 1.5 times lower than in extractive industries and its dynamic growth is the factor of attracting qualified labor force.

Disproportions in labor remuneration result in redistribution of decreasing labor resources to the sectors of economy characterized by high profitability, aggravate the deficit of specialists and qualified workers in the majority of processing industries, which is the factor that restricts processing industries development, economy's diversification and efficiency increase.

The profitability of sold goods and services throughout the economy as a whole was equal to, according to the preliminary estimation, 13.9% in 2007 against 14.9% in 2006. The analysis of profits formation by the kinds of activities demonstrates that balanced financial result was formed by 3/5 by economic activities connected with goods production and by 2/5 by services provision. However inside the sectors the industries can be distinguished that have a prevailing impact on the process of profit formation and use in the national economy.

The slowdown in industry financial results was initiated by the reserved dynamics of extractive industries productions. Balanced financial result of fuel fossils excavation in January–September 2007 decreased by 0.2% in comparison with the corresponding period of 2006. Growth of prices for raw materials and investment goods led to the deceleration of the profit growth rates on the whole at processing enterprises, diversified tendencies for other kinds of activities sustaining.

Table 8

Profitability of Sold Goods, Production, Work, Services of Organizations by Kinds of Economic Activity in 2003–2007, %

	2003	2004	2005	2006	January–September	
					2006	2007
Total throughout the economy	10.2	13.2	13.5	13.2	14.9	13.9
Minerals extraction	19.2	32.5	35.6	30.6	35.3	27.9
Processing industries	12.4	14.9	15.3	16.6	16.8	18.5
Electricity, gas and water production and distribution	6.4	5.4	5.3	3.2	2.7	4.2
Construction	5.7	4.2	3.9	5.1	4.5	5.2
Wholesale and retail trade, motor vehicles servicing etc.	8.9	11.3	9.7	10.1	11.3	8.6
Transport and communication	15.3	13.4	14.4	15.1	16.4	17.7
Of which communication	35.8	32.7	33.6	33	36.9	41.4

Source: Federal State Statistics Service.

The Dynamics and the Structure of the Production by the Kinds of the Economic Activities

Main Trends and Factors of the Change of the Produced GDP

The development of the Russian economy in 2007 was formed under the influence of the following most significant factors: increase in domestic demand impact; advance growth of manufacturing industries in comparison with extraction industries, advance growth of investments in fixed assets in comparison with GDP and final demand dynamics; acceleration of final commodities import with regard to domestic production; intensive growth of the service sector; anticipating growth of wages in comparison with labor productivity, sustention of high customer demand and population inclination for savings; the acceleration of prices growth rates of manufacturing goods producers and service tariffs.

Comparative analysis of the Russian economy dynamics as broken by kinds of activities demonstrates, that the ratio of growth rates of the industry, construction and trade had the most significant impact on the nature and structure of development in 2002–2007.

Starting with the second half of 2005 with the increase of the investment activity in the national economy, the trade gave leading positions to the construction. The share of retail and wholesale trade is the biggest in the produced GDP and equal to 17.7% in 2007. It should be noted that the dynamic structural shifts were characteristic for the development of this kind of activity. The change in the demand at the world market determined anticipating growth and the increase of the foreign trade share in the structure of the trade turnover. Intensive growth of the wholesale trade was sustained due to the extension of the internal demand market for material and technological resources. The volumes of wholesale trade exceeded the retail trade turnover by more than two times.

Table 9

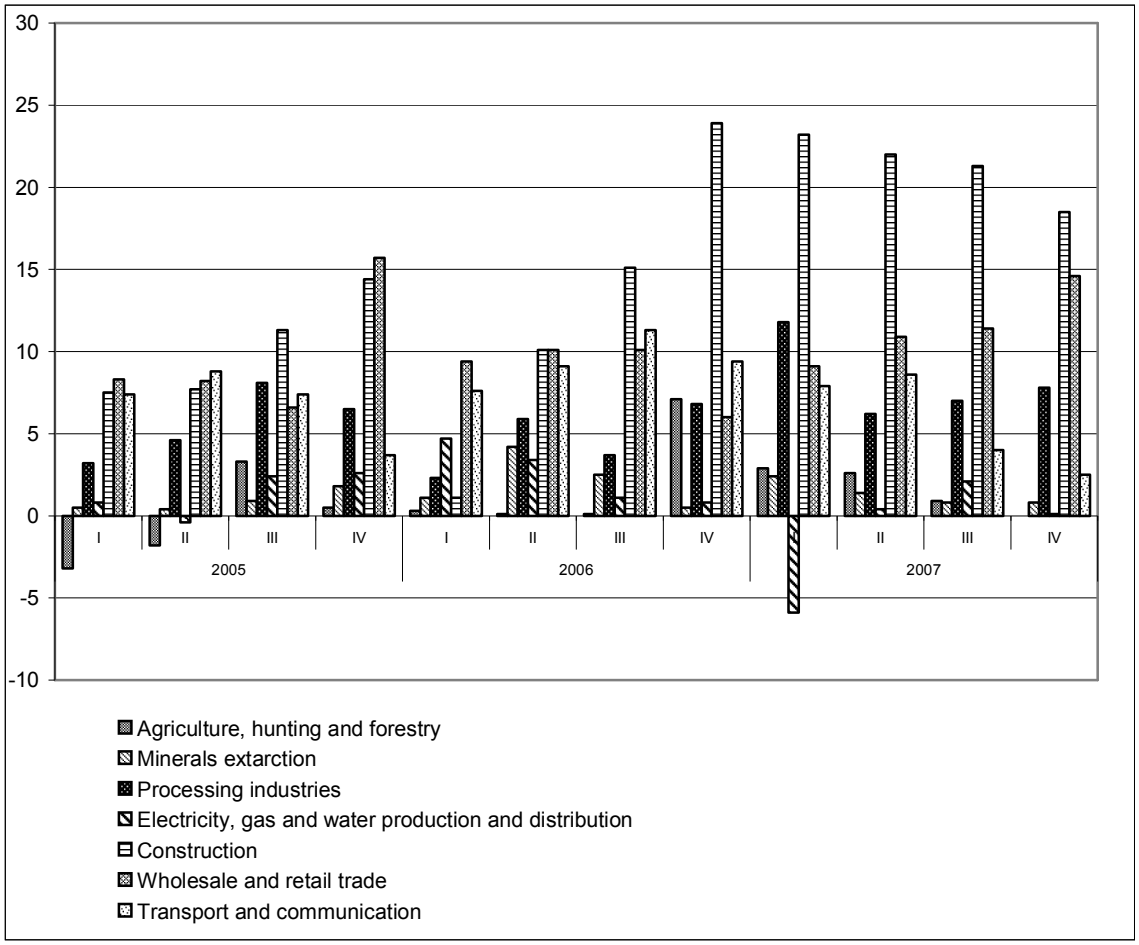
The Structure of the GDP Produced as Broken by Kinds of Economic Activities in 2002–2007, as percentage in current prices

Section		2002	2003	2004	2005	2006	2007*
	Gross domestic product	100.0	100.0	100.0	100.0	100.0	100.0
A	Agriculture, hunting and forestry	5.7	5.5	5.0	4.5	4.1	3.9
B	Fishing, fish–breeding	0.3	0.5	0.4	0.3	0.3	0.2
C	Minerals extraction	6.0	5.9	8.4	9.6	9.5	9.0
D	Processing industry	15.6	14.9	15.8	16.3	15.6	16.4
E	Production and distribution of electricity, gas and water	3.3	3.2	3.3	2.9	2.8	2.7
F	Construction	4.8	5.4	5.1	4.8	4.5	5.1
G	Wholesale and retail trade; vehicles, motorcycles, household appliances and articles of private use service	20.4	19.6	17.8	16.9	17.7	17.7
H	Hotels and restaurants	0.8	0.7	0.8	0.8	0.7	0.8
I	Transport and communications	9.2	9.5	9.7	8.9	8.5	8.1
J	Financial activity	2.8	3.0	3.0	3.5	3.9	4.1
K	Real estate operations, rent and service provision	9.5	9.5	8.3	8.5	8.7	8.9
L	Government administration and military safety security; essential social security	4.5	4.9	4.7	4.4	4.4	4.4
M	Education	2.6	2.4	2.4	2.3	2.3	2.4

N	Public health service and social service provision	3.0	2.8	2.8	2.6	2.9	2.9
O	Provision of other utilities, social and personal services	1.7	1.7	1.6	1.5	1.6	1.7
	Services of financial mediation, indirectly measured	–1.7	–1.6	–1.8	–2.0	–2.2	–2.3
	Total added value by kinds of economic activities	88.5	88.0	87.3	85.7	85.4	85.8
	Net taxes for goods	11.5	12.0	12.7	14.3	14.6	14.2

* Preliminary data.
Source: Federal State Statistics Service.

The extension of the trade volumes in the country and at the international level determined to a great extent the growth of transportation operation. Commercial freight turnover increased by 2.2% over 2007 while the industrial output went up by 6.3%. The state of the transportation system of Russia is a barrier for economic growth, since its inefficiency leads to increased transport costs and the loss of profits from transit transportation.



Source: Federal State Statistics Service.

Fig. 5. Change in the Production Dynamics by Kinds of Economic Activities in 2004–2007, as percentage to the corresponding period of the preceding year

Communication remains the most promising and dynamically developing among the kinds of economic activities. In 2007 the volume of communication services increased by 20.1%. The share of the main communication operators comprised 3/5 of the total volume of the communication services volume and more than a half of population communication ser-

vices. The telephone communication provides 4/5 of the incomes, obtained from the industry services.

Industry: Production Rates and Structure

The analysis of industry production dynamics in the classification of kinds of economic activity allows estimating the impact of the extraction and manufacturing industries on the nature of the Russian economy growth nature. The comparison of the dynamics of industry indices demonstrates that whereas the Russian industry crisis was initiated by the slump in manufacturing industries in the environment of the reserved decrease of fuel fossils production, the economic growth was based on the increase in manufacturing industries production and the recovery of fossil fuels production in 2003 at the pre-reform level. Since that moment the structure shifts in industry were determined by the anticipating growth of manufacturing industry in the Russian economy, the minerals extraction production dynamics being reserved. The main trends for the development of enterprises for minerals extraction were formed under the influence of such factors as the reduction of efficacious reserves facilities, low rates of exploration and putting into operation of new oil fields, limitations from transportation and exploration infrastructure. Underexploitation of extraction industries growth potential was also determined by reserved rates of minerals processing in metallurgy and petrochemistry. The existing structure of fixed assets being what it is the further increase of facilities load was accompanied by production capital intensity growth and the decrease in labor and financial resources efficiency use. This determined the significant impact of the output dynamics volume of the export-orientated industries complex on the structure of the industrial production and demand at the domestic market.

It should be noted that it was the slowdown in the fossil fuels extraction that had the biggest impact on the dynamics of the extraction industries in 2005–2007. The production indices in fossil fuels extraction slowed down to 102.5% in 2006 as compared with 107.5% in 2003, and in metal ores extraction – down to 101.8% against 108.5%.

Structural shifts in industry in 2007 were defined by anticipating growth of processing industries. Increase in industrial production in 2007 was equal to 6.3%, exceeding by 2.4 p.p. the level of the previous year. Increase in production volume of processing industries was 9.3%, extracting industries growing by 1.9% and electricity, gas and water production and distribution reducing by 0.2%. The potential of unused facilities being exhausted, one of the main factors of industry's growth rates acceleration was the growth of the scale of investments in the fixed assets. As a result they were kinds of activities oriented towards investment goods production – for instance machinery and equipment production (growth index 119.3%), electric, electronic and optical equipment production (112.8%), transport vehicles and equipment production (115.9%), non-metal mineral goods production (110.8%) – that had the most considerable influence on the sustention of steady dynamics of processing industries development.

Table 10

Indices of Industrial Production by Kinds of Economic Activities in 2000–2007, as percentage to the previous year

	2000	2001	2002	2003	2004	2005	2006	2007
Industry	108.7	102.9	103.1	108.9	108.3	104	103.9	106.3
Minerals extraction	106.4	106	106.8	108.7	106.8	101.3	102.3	101.9

Fossil fuels extraction	104.9	106.1	107.3	110.3	107.7	101.8	102.5	101.9
Minerals extraction excluding fossil fuels	118.2	96.2	99.1	102.5	108.5	96.8	101.8	101.6
Manufacturing industries	110.9	102	101.1	110.3	110.5	105.7	104.4	109.3
Electricity, gas and water production and distribution	104	101.4	104.8	103.3	101.3	101.2	104.2	99.8

Source: Federal State Statistics Service.

Oil and Gas Sector

Oil and gas sector is the basis for the Russian economy, playing a leading role in the formation of state budget earnings and trade balance of the country. The price situation at the world markets had a determining influence on the position of the oil and gas sector in the Russian economy in 2007. Since nearly 75% of the oil produced in the country is exported in crude or processed form, the level of world prices for oil is actually the main factor that determines incomes and financial situation of the Russian oil industry.

World prices in 2007 were at an exceptionally high level. In November 2007 the prices for oil reached unprecedented maximum in nominal terms. The average price for oil grade Brent was equal to USD 92.6 per barrel, Urals – to USD 90.0 per barrel. The main reasons for such a situation were world economy growth rates, which lead to high demand for oil, and conservative politics of OPEC concerning increase in oil production by member countries. The presence of quite considerable geopolitical risks in 2007 that contributed in sustention of high world prices for oil is also to be noted.

As a result, in 2007 the price for oil grade Brent was on average equal to USD 72.5 per barrel, the price of Russian oil Urals being USD 69.4 per barrel. The average price of the Russian oil at the world (European) market was 13.3% higher in 2007 than the average level of the previous year (*Table 11*).

Table 11

World Prices for Oil in 2000–2007, as USD per barrel

	2000	**2001**	**2002**	**2003**	**2004**	**2005**
Price for oil grade Brent, Great Britain	28.50	24.44	25.02	28.83	38.21	54.38
Price for oil Urals, Russia	26.63	22.97	23.73	27.04	34.45	50.75
Price for oil basket of OPEC member countries	27.60	23.12	24.34	28.13	36.05	50.64

Table 11 (continued)

	2006	**2007 Q I**	**2007 Q II**	**2007 Q III**	**2007 Q IV**	**2007**
Price for oil grade Brent, Great Britain	65.16	57.75	68.76	74.87	88.69	72.52
Price for oil Urals, Russia	61.24	54.30	65.16	72.19	85.91	69.39
Price for oil basket of OPEC member countries	61.08	54.65	64.97	71.59	85.18	69.10

Source: OECD International Energy Agency, OPEC.

The level of world prices for oil, which was observed in 2007, is exceptionally high not only for the period of post-reform development of the Russian economy but also from the point of view of historical retrospective. Over the period since 1900 higher level of world prices for oil in real terms was observed only in 1979–1981. For instance, in 1980 the average annual world price for oil in real terms (in 2006 prices) was equal to USD 90.5 per barrel, being in nominal terms USD 36.8 per barrel (*fig. 8*). For reference it can be noted that in 1998 the average annual price for the oil grade Brent in real terms (2006 prices) was only USD 16.2 per barrel (USD 12.7 per barrel in nominal terms), being on average in 1990ies USD 25.2 per barrel.

Data on monthly dynamics of world prices for oil in 2007 are presented in *Table 12*.

Table 12

Prices for Oil Grades Brent and Urals in 2007, as USD per barrel

	2007 January	2007 February	2007 March	2007 April	2007 May	2007 June
Price for oil grade Brent, Great Britain	53.68	57.43	62.15	67.51	67.23	71.54
Price for oil Urals, Russia	50.00	54.06	58.84	63.81	64.02	67.66

Table 12 (continued)

	2007 July	2007 August	2007 September	2007 October	2007 November	2007 December
Price for oil grade Brent, Great Britain	77.01	70.73	76.87	82.50	92.61	90.97
Price for oil Urals, Russia	73.88	69.04	73.65	79.47	89.98	88.28

Source: OECD/IEA, OPEC.

The development of the gas and oil sector in the Russian economy in 2007 was characterized by the sustention of the tendency for oil, oil products and natural gas production growth. Oil production, gas condensate included, reached in 2007 491 mln tons. This figure is by 13.8% lower than pre-crisis maximum, reached in 1987, when oil production was equal to 569.4 mln tons and by 63% higher than the minimum level of 1996, when the production decreased down to 301.3 mln tons. The reasons for a considerable growth of oil production in recent years are the expansion of export opportunities, in particular due to the building of the Baltic pipeline system and extension of railway transportation use, as well as the growth in domestic demand and intensification of exploitation of oil fields in operation.

At the same time oil production growth rates in 2005–2007 decreased considerably. Whereas in 2002–2004 the increase in oil production, gas condensate included, reached 8.9–11% per year, in 2007 the increase in production was only 2.1% (*Table 13*). This is the indicator of exhaustion of reserves for fast increase of oil production in the country and the evidence of necessity of very active actions to develop new oil fields, in the Eastern part of the country, in particular.

The volume of primary oil processing increased by 3.8% in 2007, and the extent of oil processing decreased as compared to 2006 and was equal to 71.7% (in 2006 this index was equal to 72.0%).

The decrease in natural gas production – by 0.8% as compared with 2006 – has been observed for the first time over the recent years. The main reason for it is the drop in external

demand for gas, and consequently, its export, because of warm winters and increase in prices for gas supplied to CIS-countries.

In 2007 the biggest amount of oil was produced by oil companies Rosneft, LUKOIL, TNK-BP, Surgutneftegas and Gasprom. The share of these 5 companies is 77.6% of the total oil production in the country. Production share agreement operators produced 2.8% of the Russian oil in 2007. The share of other producers, to which around 150 small scale oil producing enterprises belong, was 4.2% of oil production in the country (*Table 14*).

Table 13

Oil, Oil Products and Natural Gas Production during 2000–2007, as percentage to the preceding year

	2000	2001	2002	2003	2004	2005	2006	2007
Oil, including gas condensate	106.0	107.7	109.0	111.0	108.9	102.2	102.1	102.1
Primary oil processing	102.7	103.2	103.3	102.7	102.6	106.2	105.7	103.8
Motor petrol	103.6	100.6	104.9	101.2	103.8	104.8	107.4	102.1
Diesel oil	104.9	102.0	104.7	102.0	102.7	108.5	107.0	103.4
Furnace fuel oil	98.3	104.2	107.1	100.3	97.8	105.8	104.5	105.2
Natural gas	98.5	99.2	101.9	103.4	101.6	100.5	102.4	99.2

Source: Federal State Statistics Service.

The increase in the state-owned companies influence in the oil sector was quite characteristic trend for the recent years. The positions of the state-owned companies strengthened considerably due to the purchase of private-owned companies assets (in 2004 of Yuganskneftegas, in 2005 – Sibneft). In December 2006 Gasprom purchased controlling stock in "Sakhalin-2" project, which is being fulfilled by foreign investors on conditions of production share agreement. In 2007 the share of state-owned companies at the market increased due to the purchase of the remaining oil producing and oil processing assets of YUKOS – enterprise was declared bankrupt in 2006 – by Rosneft.

As a result of such redistribution taking place Rosneft became the biggest oil company of the country and the share of state-owned companies in all-Russian oil production increased from 26.6% in 2006 to 31.9% in 2007.

Table 14

The Structure of Oil Production in 2006–2007*

	Oil production in 2006, mln of tons	Share in the total production, %	Oil production in 2007, mln of tons	Share in the total production, %
Russia - total	480.5	100.0	491.3	100.0
Rosneft	81.7	17.0	110.7	22.5
LUKOIL	90.4	18.8	91.4	18.6
TNK-BP	72.4	15.1	69.4	14.1
Surgutneftegas	65.6	13.7	64.5	13.1
Gasprom+Gaspromneft	46.1	9.6	45.8	9.3
Of which: Gasprom	13.4	2.8	13.2	2.7
Gaspromneft	32.7	6.8	32.6	6.6
Tatneft	25.4	5.3	25.7	5.2
Slav-neft	23.3	4.8	20.9	4.3
YUKOS	21.5	4.5	-	-

RussNeft	14.8	3.1	14.2	2.9
Bashneft	11.7	2.4	11.6	2.4
NOVATEC	2.6	0.5	2.6	0.5
Operators of production share agreements	5.1	1.1	13.8	2.8
Other producers	19.9	4.1	20.7	4.2
State-owned companies - total:				
Rosneft+Gasprom + Gasprom-neft	127.8	26.6	156.5	31.9

* According to the organization structure by 31.12.2007.

Source: Ministry for Industry and Power, IET calculations.

Gasprom, whose share in all-Russian production was equal to 84.4% in 2007, commands as usual the gas production (*Table 15*). At the same time gas production by oil companies has increased. The share of the oil companies in gas production remains, however, quite low (8.7% in 2007). The biggest gas volumes production among oil companies is characteristic for Rosneft (2.6%), Surgutneftegas (2.2%) and LUKOIL (2.1%).

Table 15

Structure of Gas Production in 2007

	Gas production, bln of cu m	Share in the total production, %
Russia - total	654.1	100.0
Gasprom+Gaspromneft	551.9	84.4
Of which:		
Gasprom	550.1	84.1
Oil companies	56.9	8.7
NOVATEC	28.5	4.4
Operators of production share agreement	6.7	1.0
Other producers	10.1	1.5
State-owned companies - total:		
Rosneft+Gasprom+Gaspromneft	568.9	87.0

Source: Ministry for Industry and Power, IET calculations.

Data on oil production by oil companies demonstrate that increase in oil production in Russia in 2007 was mainly due to a considerable growth of oil production by projects of production share agreement operators (Sakhalin-1, Sakhalin-2, Khariyagin oil field). The total increase in oil production in 2007 was 10.8 mln of tons, increase in production share projects – 8.7 mln of tons or 80.6% of the total increase. Oil production in Russia not taking into account production share agreements projects increased only by 0.4% in 2007 (*Table 16*).

Table 16

Structure of Oil Production Increase in Russia in 2007 as Compared with 2006

	2006, mln of tons	2007, mln of tons	Increase, mln of tons	Increase, %
Oil production in Russia - total	480.5	491.3	10.8	2.2
Oil production by production share agreement operators	5.1	13.8	8.7	170.6
Oil production in Russia, production share agreements operators excluded	475.4	477.5	2.1	0.4

Source: Ministry for Industry and Power, IET calculations.

A considerable decrease in new production facilities implementation in 2007 is also noticeable. Implementation of new oil wells in 2007 was equal to 2.7 thousands and was the lowest over the recent years, not taking 2005 into account. Considerable decrease of this figure in 2005 – by 29% as compared with the previous year – was accounted for by sharp decrease of

investments in production by YUKOS and Sibneft: YUKOS was busy mainly with urgent payment of taxes imposed on it, and decrease in Sibneft's investments was due to its sale.

In contrast to 2005, in 2007 the drop in investment activity occurred world prices for oil being exceptionally high and there being no destabilizing events. In our opinion, this is an indicator of considerable decrease of incentives for investments in oil production that can be accounted for by two factors.

First in the environment of real worsening of oil production conditions and inflexibility of existing taxation system decrease in expected profitability of investments in the new projects occurred. New oil fields are usually characterized by worse mining, geological and geographical conditions their exploitation requiring increase in capital, operating and transportation costs. At the same time existing taxation system does not provide necessary decrease of tax burden while exploitation of new oil fields with high costs that limits investments in new projects.

Second, governmental expansion in oil sector and apprehensions as to further taking up of the private business considerably decrease willingness of private oil companies to invest in the long run.

As a result, excluding abnormal 2005 out of consideration, in 2007 despite exceptionally favorable situation at the world markets implementation of new oil wells was the lowest over the recent years (*Table 17*).

Table 17

Implementation of New Oil Wells in 2000–2007

	2000	2001	2002	2003	2004	2005	2006	2007
Wells implementation, thousands	2.8	3.8	3.1	3.0	3.1	2.2	3.4	2.7

Source: Federal State Statistics Service.

Such dynamics of new production facilities implementation indicates unsteadiness even of the low oil production growth rates that are being observed at present. The result of the trends mentioned can be a decrease in oil production in the country in the forthcoming years.

Under the influence of oil world prices growth in 2007 a considerable growth in prices for oil and oil products at the domestic market was observed. The producer's prices for oil, car petrol, diesel fuel and furnace fuel oil (mazut) reached the maximum over the whole post-reform period. In December 2007 the average internal price for oil (producers' price) in dollar terms reached USD 222.2 per ton, and average price for car petrol – USD 581.2 per ton, which is the maximum value for oil and car petrol prices over the whole post-reform period (*Table 18*).

Internal prices for natural gas have also increased. The gas producers' prices reached USD 19.2 per 1 thou. cu. m in September 2007. Average price for gas purchase in the industry, including both the gas production price and its transportation costs and trade and sales extra charge reached USD 75.6 per 1 thou. cu. m. in December 2007.

Table 18

Internal Prices for Oil, Oil products, Natural Gas in US Dollar Terms over 2000–2007 (average producers' prices, as USD per ton)

	2000 December	2001 December	2002 December	2003 December	2004 December
Oil	54.9	49.9	60.7	70.1	123.5

Motor petrol	199.3	151.5	168.8	236.9	333.1
Diesel oil	185.0	158.5	153.8	214.3	364.3
Furnace fuel oil	79.7	47.1	66.1	66.0	69.4
Natural gas, as USD per thou. cu. m	3.1	4.8	5.9	4.4	10.5

Table 18 (continued)

	2005 December	2006 December	2007 June	2007 September	2007 December
Oil	167.2	168.4	230.3	240.9	288.2
Motor petrol	318.2	416.5	491.7	493.6	581.2
Diesel oil	417.0	426.1	442.0	467.1	692.5
Furnace fuel oil	142.7	148.8	181.6	210.1	276.5
Natural gas, as USD per thou. cu. m	11.5	14.4	15.6	19.2	17.6

Source: calculated on the basis of Federal State Statistics Service's data.

In January–November 2007 as compared with the corresponding period of the previous year oil export in natural terms decreased by 4.3% while oil products export increased by 8.0% (*Table 19*). In January–November 2007 the share of export in furnace fuel oil (mazut) production was equal to 83.3%, diesel oil – to 55.7%, motor petrol – to 17.7% (for comparison: in 1999 export share in motor car petrol production was equal only to 7.2%, in 2005 – to 18.5%, in 2006 – to 18.3%). The volume of light oil products export being near the figure of the previous year, increase in their import was observed. In January–November 2007 import of motor petrol nearly doubled as compared with the corresponding period of the previous year, while the share of import in petrol resources was equal only to 0.04% (for reference: in the first half-year of 1998, i.e. before ruble devaluation, the share of the import in petrol resources was equal to just 8.7%, in 2005 – 0.03%, in 2006 – 0.02%). Gas export has reduced considerably as compared with the previous year.

Table 19

Oil, Oil Products and Natural Gas Export from Russia, as percentage to the previous year

	2002	2003	2004	2005	2006	2007 (11 months)*
Oil, total	113.9	117.8	115.0	98.4	98.0	104.3
including:						
to non-CIS countries	109.9	118.9	116.3	99.1	98.0	104.9
to CIS countries	137.3	112.4	108.3	94.9	98.0	100.5
Oil products, total	118.5	103.6	105.5	117.9	106.3	108.0
including:						
to non-CIS countries	119.1	102.6	104.9	119.1	104.5	107.4
to CIS countries	102.8	132.3	117.9	94.6	148.8	120.1
Gas, total	102.4	102.0	105.5	103.7	97.6	93.8

* As percentage to January-November 2006.
Source: Federal State Statistics Service.

In 2007 net oil and oil products export was equal to 367.7 mln tons, thus increasing by 18.4 mln tons as compared with the previous year. As a result, the share of net oil and oil

products export in oil production reached 74.8%, net oil export being 53.3% of its production. The share of net export in gas production was equal to 28.1% in 2007 (*Table 20*).

Table 20

The Ratio of Energy Supplies Production, Consumption and Export in 2000–2007

	2000	2001	2002	2003	2004	2005	2006	2007 (estimation)
Oil, mln tons								
Production	323.2	348.1	379.6	421.4	458.8	470.0	480.5	491.3
Export, total	144.5	159.7	187.5	223.5	257.4	252.5	248.4	259.1
Export to non-CIS countries	127.6	137.1	154.8	186.4	217.3	214.4	211.2	221.5
Export to CIS countries	16.9	22.7	32.7	37.1	40.1	38.0	37.3	37.6
Net export	138.7	154.7	181.3	213.4	253.2	250.1	246.1	256.3
Domestic consumption	123.0	122.9	123.5	129.8	124.2	123.1	131.2	123.6
Net export, as percentage to the production	42.9	44.4	47.8	50.6	55.2	53.2	51.2	52.2
Oil products, mln tons								
Export, total	61.9	70.8	75.0	78.4	82.1	97.0	103.5	111.8
Export to non-CIS countries	58.4	68.3	72.5	74.9	78.0	93.1	97.7	104.9
Export to CIS countries	3.5	2.5	2.6	3.5	4.1	3.9	5.8	6.9
Net export	61.5	70.5	74.8	78.2	81.4	96.8	103.2	111.4
Oil and oil products, mln tons								
Oil and oil products net export	200.2	225.2	256.1	291.6	334.6	346.9	349.3	367.7
Oil and oil products net export, as percentage of oil production	61.9	64.7	67.5	69.2	72.9	73.8	72.7	74.8
Natural gas, bln cu. m								
Production	584.2	581.5	594.5	620.3	634.0	636.0	656.2	651.0
Export, total	193.8	180.9	185.5	189.3	200.4	207.3	202.8	190.2
Export to non-CIS countries	133.8	131.9	134.2	142.0	145.3	159.8	161.8	153.2
Export to CIS countries	60.0	48.9	51.3	47.3	55.1	47.5	41.0	37.0
Net export	189.7	176.8	178.3	180.5	193.5	199.6	195.3	182.7
Domestic consumption	394.5	404.7	416.2	439.8	440.5	436.4	460.9	468.3
Net export, as percentage to the production	32.5	30.4	30.0	29.1	30.5	31.4	29.8	28.1

Source: Federal State Statistics Service, Ministry for the Industry and Power, Federal Customs Service, IET calculations.

The share of oil products export having increased to some extent, the crude oil export, being about 70% of the total export volume, still prevailed in the structure of oil export. It was the furnace fuel oil, which is used as a primary product in Europe for further processing, and diesel oil that consisted the main part of the oil products export. The main part of the energy supplies (85% of oil, 95% of oil products and 81% of gas) was exported beyond CIS.

As it is demonstrated by the analysis of the Russian oil export dynamics over the long period of time in 2007 the total net export of oil and oil products reached unprecedented level and by 76.1 mln tons (26.1%) exceeded the level of 1988, which was characterized by a maximum oil export volumes (291.6 mln tons) before the crisis. At the same time the increase of oil products share in oil export was observed, their share increasing from 18.2% in 1990 to 30.3% in 2007 (*Table 21*). In the environment of the sharp reduction of domestic oil consumption (according to our calculations it has decreased from 269.9 mln tons in 1990 to 123.6 mln tons in 2007, that is more than by half) the share of oil and oil products net export in oil production increased over this period from 47.7% to 74.8%. In contrast to oil and oil products export the net gas export and its share in production do not exceed the level of 1990ies in recent years

and the share of net gas export in its production is about that of the pre-reform period (28.1% in 2007 against 28% in 1990).

Table 21

Oil Products Net Export in 2002–2007

	2002	2003	2004	2005	2006	2007 (estimation)
Oil products net export, mln. tons	74.8	78.2	81.4	96.8	103.3	111.4
The share of oil products in net export of oil and oil products, as percentage	29.2	26.8	24.3	27.9	29.6	30.3

Source: Federal State Statistics Service, Federal Customs Service, IET calculations.

The given data testify that the export orientation of oil sector in comparison with the pre-reform period has considerably reinforced. It should be, however, taken into account that it is connected not only with the increase of the absolute export volumes, but also with a considerable decrease in the domestic oil consumption as a result of Russian economy market transformation.

High level of world prices for oil, which was observed in 2007, determined considerable incomes growth in the oil sector of the economy. In January–November 2007 total earnings from oil and main kinds of oil products export (car petrol, diesel oil and furnace fuel oil) reached USD 147.4 bln., which is a record level over the whole post-reform period (*Table 22*). For reference it can be noted that the minimum level of oil export earnings was observed in the environment of world oil prices fall in 1998, when the export profit was only USD 14 bln.

Table 22

Oil and Oil Products Export Earnings in 2000–2007, USD bln

	2000	2001	2002	2003	2004	2005	2006	2007 (11 months)
Oil and main kinds of oil products export earnings	34.9	33.4	38.7	51.1	74.6	112.4	140.0	147.4

Source: calculated on the basis of the Federal State Statistics Service data.

The share of power and energy commodities in Russian export in 2006 was equal to 64%, of which crude oil accounted for 34.4%. The data on the structure of Russian export of energy suppliers are presented in *Table 13*.

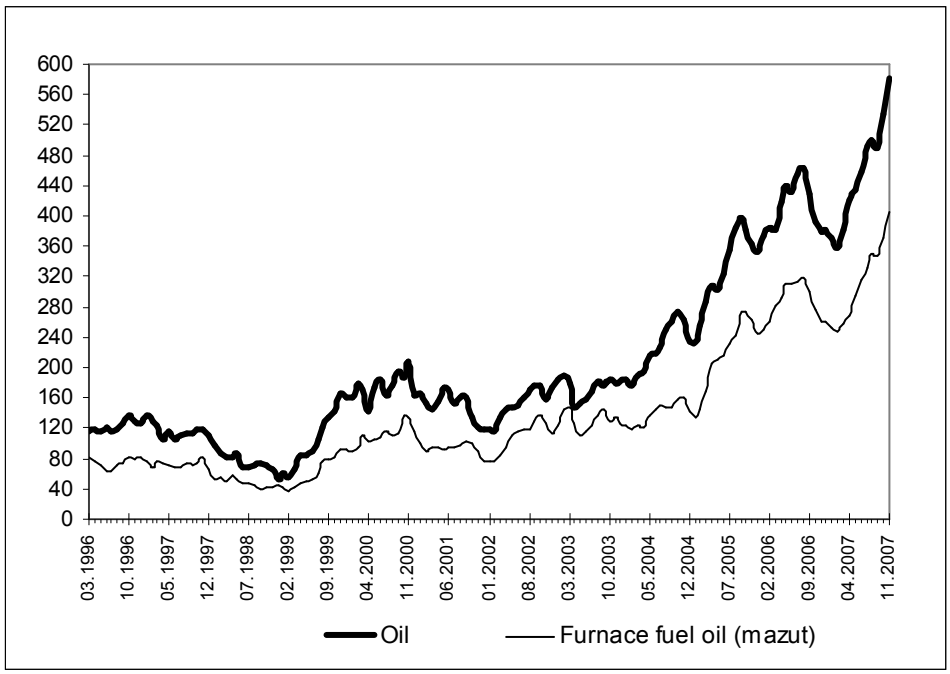
Table 23

Value and Share of Fuel and Power Commodities in 2005–2007

	2005		2006		2007	
	USD bln	%*	USD bln	%*	USD bln	%*
Fuel and Power commodities, total	154.7	64.1	196.9	65.4	225.6	**64.0**
of which:						
oil	**83.8**	**34.7**	**102.3**	**34.0**	**121.4**	**34.4**
natural gas	**31.4**	**13.0**	**43.9**	**14.6**	**44.8**	**12.7**

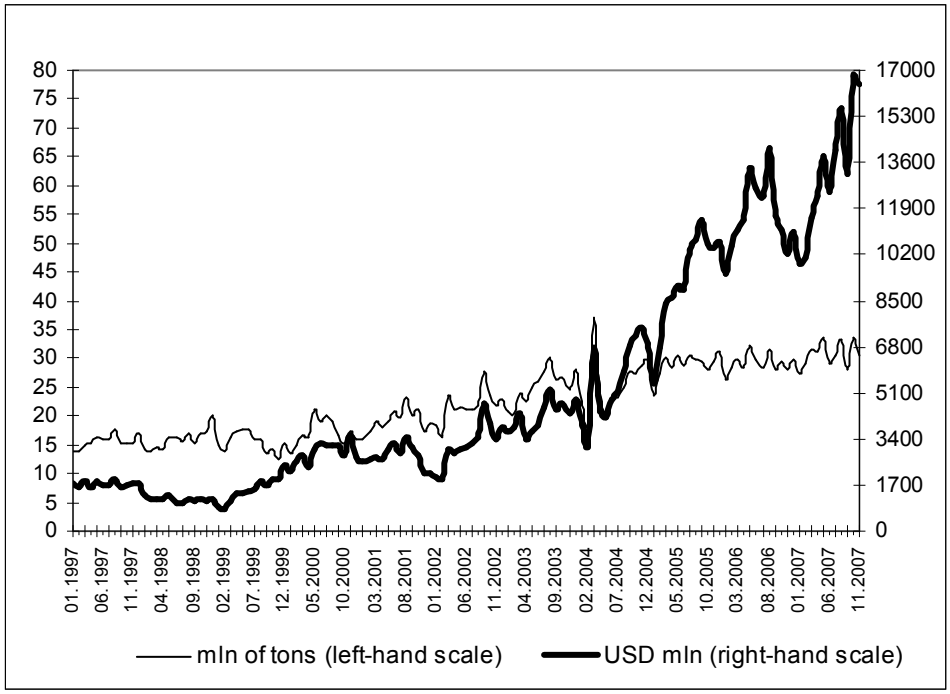
* As percentage to the total volume of Russian export.
Source: Federal State Statistics Service.

The dynamics of separate indices of oil and gas sector development is shown in *fig. 6–9* (value indices are given in current prices).



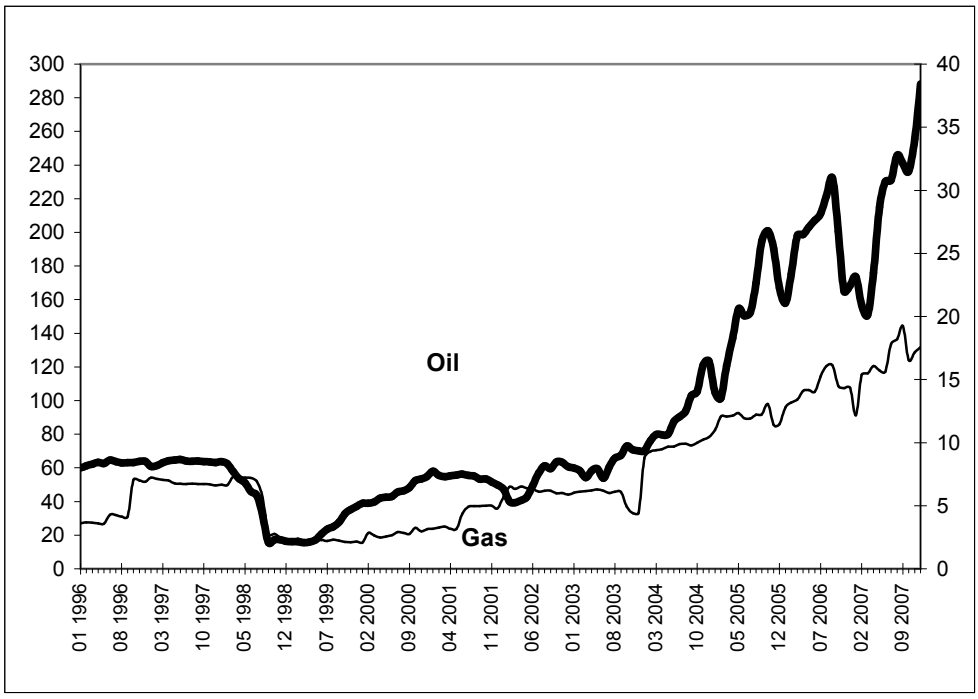
Source: calculated on the basis of the Federal State Statistics Service data.

Fig. 6. Average Export Prices for Oil and Furnace Fuel Oil (mazut) in 1996–2006, as USD per ton



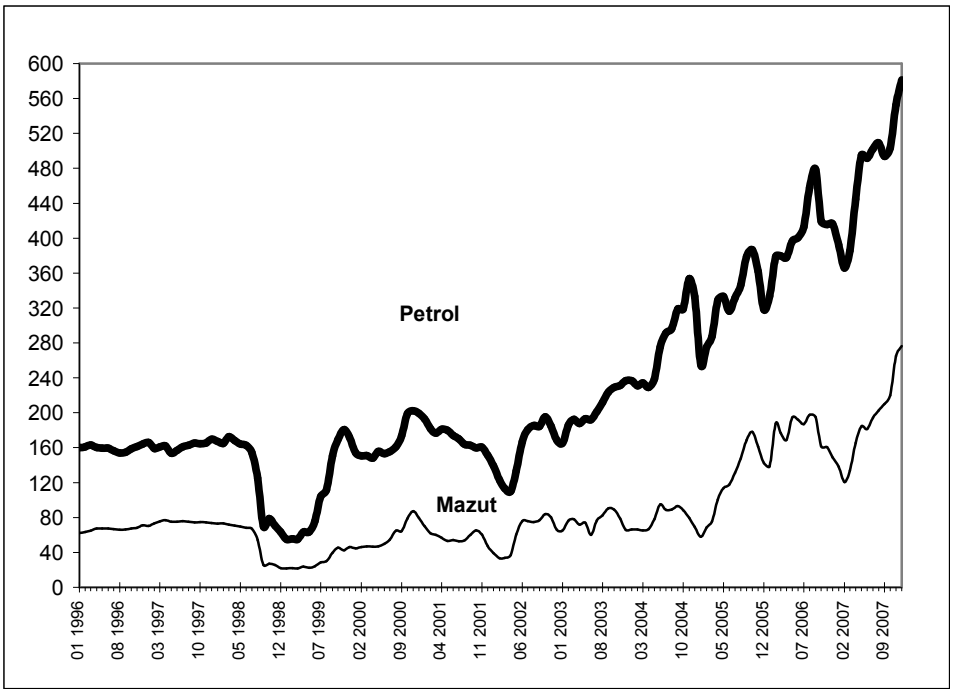
Source: calculated on the basis of the Federal State Statistics Service data.

Fig. 7. Oil and Oil Products Export in Natural and Monetary Terms in 1997–2007, mln tons, USD mln



Source: calculated on the basis of the Federal State Statistics Service data.

Fig. 8. Average Producers Prices for Oil and Gas in Dollar Terms in 1996-2007, as USD per ton and as USD per thou. cu. m, correspondingly



Source: calculated on the basis of the Federal State Statistics Service data.

Fig. 9. Average Producers' Prices for Motor Petrol and Furnace Fuel Oil in Dollar Terms in 1996–2007, as USD per ton

A number of factors provide favorable demand and price prerequisites for further development of oil sector in Russia. The export opportunities of Russian oil to European countries will expand the demand for oil in the countries of Western and Eastern Europe increasing and oil production in the Northern Sea decreasing. At the same time the growth of demand for oil in the countries of Asian-Pacific Region, China in particular, as well as the predicted considerable aggravation of their dependence upon the import create favorable opportunities for Russia's access to the markets of this region's countries and for considerable growth of oil export in this direction.

New oil pipelines projects that are being carried out at present, for instance construction of oil pipeline East Siberia-Pacific Ocean with the branch for China, will enable necessary infrastructure creation to increase Russian oil supplies to the world market. At the same time opportunities for Russian oil export will be more and more limited by the possibilities of its production expansion, real worsening of production conditions.

Increase in oil production and export in the future is possible only on condition of new oil fields development, whose exploitation in many cases is characterized by high capital, exploitation and transportations costs. Start of such oil fields development requires improvement of the existing system of oil sector taxation, pursuing of special tax policy, which provides necessary incentives for investments in oil production.

Worsening of extraction conditions accounts for the necessity of tax load decrease while new oil fields with high costs are being developed, implementation of privileged or more flexible tax regimes. This will enable to start industrial production at such oil fields, which will provide additional oil production and tax earnings.

In order to stimulate development of new oil fields, territorial step-down coefficients for severance rates that are implemented for the whole period of new oil fields exploitation of the particular regions over the whole period of exploitation are preferable as compared with the tax vacations mechanism that was introduced for oil field of East Siberian oil and gas province in 2007, from our point of view. The values of such coefficients can be defined by calculation, based on the requirement to guarantee necessary profitability of the investment in oil fields development of the corresponding territory (shelf zone). Exploitation of oil fields of the continental shelf requires the lowest tax rates – down to zero rates – to be implemented.

Use of territorial step-down coefficients to the severance tax rates has a number of substantial advantages as compared with the scheme of the taxations vacations; it is better suited to protect governments' interest. In contrast to the scheme of taxation vacations such an approach does not induce speeding up of the oil production in the first years of oil field development in order to exempt the biggest amount of the oil produced from taxation, that is it does not have a distorting influence on the behavior of entrails users, production profile or oil extraction level. Severance payment on application of such an approach is made from the very beginning of oil production, and does not have a suspended character. The deeper exploitation of oil field is stimulated since the amount of severance tax is less at the later stages of production than in case of taxation vacation scheme implementation.

A more developed form of oil extraction taxation is taxation of net profit that is defined in some way. Such an approach can be fulfilled in different forms, for instance, on the basis of implementation of tax for additional income from hydrocarbons production, royalty or addi-

tional profit tax. As compared with severance tax scheme taxation of net profit is by far more complicated when tax administration is concerned.

Adoption of any decisions on investments in new oil fields development stimulation should correspond to the real opportunities of the government to administer new tax regimes. For the time being it is preferable to use simpler non-individualized tax regimes, for instance, implementation of territorial step-down coefficients to severance tax rate, which, in the environment of high world prices for oil and positive dynamics of oil extraction, is advisable to limit to the regions of Eastern Siberian oil and gas province and continental shelf zones.

In prospect, after necessary prerequisites having been fulfilled, it seems sensible to transfer to more developed forms of taxation of oil production, that are based on the figures of the incomes received and take into account real costs for particular oil fields' exploitation.

Manufacturing Industries

The steady economic growth due to the expansion of the internal market demand as well, gave additional stimulus for the development of the manufacturing industries. The dynamics of the manufacturing industries differentiates substantially by the kinds of the economic activity, the ratio of the rates of investment and consumer's goods production having the biggest influence. The growth fluctuations by the kinds of the economic activity being quite big, the anticipating growth of machine-building production output was the prevailing tendency of the recovery period, which positively affected the level of business activity of industries adjacent to construction materials production and other intermediate goods production. The ratio of growth rates of different kinds of economic activities in 2000–2007 demonstrates the gradual turn from the growth that was orientated towards natural and raw materials potential exploitation towards the formation of the resource system for the investments development. In the environment of the production growth the demand for domestic and imported equipment is growing dynamically.

Table 24

Change in the Rates of Production by Kinds of Manufacturing Industries Economic Activity in 2000–2007, as percentage to the previous year

	2000	2001	2002	2003	2004	2005	2006	2007
Manufacturing industries	10.9	2	1.1	10.3	10.5	5.7	4.4	9.3
Foodstuffs, including tobacco and beverages production	5.3	8	7.2	6.9	4.4	4.4	5.4	6.1
Textile and clothing industry	24.9	7.8	–2.5	1.2	–4	–1.5	7.3	-0.3
Leather, leather goods and footwear production	7.6	13.7	11.4	11.5	–0.6	–2.7	16.7	-0.1
Woodwork and wooden goods production	14.1	–2.5	4.2	9.7	8.7	4.5	0.5	6.2
Pulp-and-paper production, editing and printing activity	18	9.6	4.1	7.8	5.1	1.2	6.4	9.0
Coke and oil products production	2.4	2.8	4.6	2.2	2.4	5.4	6.1	2.7
Chemistry industry	15.2	0.3	0.2	5.4	6.6	2.6	1.9	6.1
Rubber and plastic goods production	26.1	1.6	0.2	5.5	13.5	5.5	11.7	23.0
Other non-metal mineral goods production	10.6	3.8	1.2	7.3	8.4	3.5	10.8	10.8
Metallurgical production and finished metal goods production	15.3	4.6	5.1	7.2	3.9	5.7	8.8	2.0
Machinery and equipment production	5.7	6.4	–8.8	19	21.1	–0.1	3.3	19.3
Electric, electronic and optical equipment production	25	8.4	–7.7	43.2	34.5	20.7	–5.5	12.8
Transport vehicles and equipment production	10.7	–26.4	–1	14	11.5	6	3.3	15.9
Other productions	11.5	8.5	3.9	10.8	10.5	0.7	7.2	5.0

Source: Federal State Statistics Service.

The analysis of the dynamics of the investment goods market in recent years indicates that the level of the business activity depends considerably on the economy revenues from the foreign economic activity. The additional factor of machine-building industry growth was the improvement in trade of high-tech equipment produced domestically at the external markets as well as the positive changes in investment environment connected with the gradual reduction of the duties for imported components and equipment and the introduction of industrial assemblage regimes in motor-vehicles production. At the same time it should be noted that the production output in some branches of machine building is subjected to quite considerable fluctuations.

Domestic machinery and equipment production increased by 19.3% in January 2007. The dynamics of the machinery and equipment output was determined mainly by the extension of the demand for handling machinery, railway, power and agricultural machine building, instrument making, communication facilities production. Besides, over the last years the steady growth of the demand for the consumer's complex equipment sustained.

Anticipating import growth rates as compared with domestic production also had a considerable influence on the dynamics and nature of machine-building development. This is due to the fact that non-competitiveness of many kinds of machinery and equipment as compared with the import analogues by the criterion of price to quality ratio as well as absence of the facilities for production of the modern equipment limits considerably market for the domestic machine-building.

The influence of import is considerably differentiated by sectors of economy and goods markets. For instance, at the market of intermediate goods import of some kinds of primary products, components for household appliances, components for industrial assemblage within the framework of motor-vehicles assemblage projects has a positive impact on the processes of restructurization and the level of business activity of domestic producers. At the market of the goods of investment machine building increase of import was one of the main factors to fulfill investment projects, modernize production and implement technological innovations. At the same time the competition is observed to become more acute in such machine-building branches as tools making, agriculture machine building, construction and road equipment production, motor-vehicles production. Low investment activity, high level of fixed assets deterioration, outdated technologies were still characteristic for these kinds of production. One of the promising directions of such fields of activity development was active implementation of industrial assemblage mechanism and creation of the environment, which will stimulate foreign companies to transfer their activity into the territory of the Russian Federation. Anticipating growth of goods output at the enterprises with foreign capital participation changes the conditions of the competition and favors increase of efficiency at traditional structures.

Transition from predominantly extensive model of the Russian economy development to the intensive one, involves considerable structural changes, connected with the diversification of the investment activities directions, human resources development, and conduction of thorough institutional reforms that will provide favorable conditions for economic agencies activity.