════════════════ ECONOMIC POLICY ════════════════

A Quarterly Forecast of the Russian Economic Macroindicators 2006–2008: A Baseline Scenario[1]

M. N. Uzyakov

Abstract—On the one hand, this forecast of key macroindicators of the Russian economy is based on tendencies in the dynamics of these indicators; on the other, it accounts for the character of interrelations between economic variables reflected in the QUMMIR[2] model. The topical version of this model's equations and identities, describing these interactions, and the names of the variables, are presented in a special detailed appendix to this article on the RIM[3] (www.macroforecast.ru).

The forecast scope is determined, first, by the availability of most recent quarterly data of the system of national accounts and, second, by the time horizon of the medium-term three-year forecast developed by the Russian Ministry of Economic Development and Trade (MEDT).

The QUMMIR model, reflecting the interaction between production, incomes, and prices in the economy, is essentially a closed system in which endogenous variables depend on each other and on exogenous variables, which are, as a rule, parameters of the economic policy or of external (relative to the Russian economy) conditions. The general scheme of the interactions between variables in this model looks as follows:

At the modern stage of this model, a production forecast is performed under the "final demand" and does not take into account labor and capital constraints. In our opinion, this drawback is not significant due to the short-time character of this forecast. The baseline concept determines the structure and content of the forecast and analytical material:

—the probable course of events is evaluated by the existing tendencies and the economic policy;

—both annual and quarterly expected dynamics of the variables are visualized;

—forecast results are explained on the basis of the interrelations used in this model and the quantitative values of equation parameters;

—the objective evaluation of the quality of forecasts and the model is ensured (in particular, starting with the second issue of the quarterly forecast, we intend to publish a comparative table of forecasts and actual values of the variables);

—the model's changing (developing) character is reflected (starting with the second issue, we intend to devote a special section to changes in the model); and

—G7 package calculations are presented in tabular form.

The G7 package, Interdyme, and other related software are products of the INFORM group—an international community of specialists in the field of macroeconomic and interindustry modeling from more than 20 countries. All the participants use the same software kit. The INFORM group was organized by Professor C. Almon, of the University of Maryland. The URL of the group's site is http://www.inform.umd.edu/.

The QUMMIR model is applicable not only to online inertial forecast calculations but to many other scenarios, for example:

Calculations based on the MEDT scenario conditions capable of evaluating the feasibility of expected economic growth rates, inflation, and other overall indicators;

—calculations based on fundamentally different hypotheses of exogenous variables; and

—special target calculations, including those related to exchange rate forecasts.

The model and the logic of calculations. The QUMMIR model realizes the final demand calculation to obtain forecast output values of the GDP-use and income-formation accounts. The production account is not developed at this stage. In this connection, the resource block is represented only by the exogenous variables of oil and gas exports and the number of employees in the economy, which are necessary to calculate export and the characteristics of labor productivity.

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[1] The study was carried out by a research team at the Institute of Economic Forecasting, RAS, including A.R. Akhmerova, A.S. Makedonskii, S.N. Makedonskii, K.E. Savchishina, N.N. Sapova, R.M. Uzyakov, and A.A. Shirov, under the leadership of M.N. Uzyakov.

[2] QUMMIR is the abbreviation for the **QU**arterly **M**acroeconomic **M**odel of **I**nteractions for **R**ussia.

[3] The RIM group consists of IEF experts who develop model systems using the G7 and Interdyme macroeconomic and interindustry modeling packages. The name of this group originates from the **R**ussian **I**nterindustry **M**odel.

The interaction between the respective price and income variables determines the physical dynamics of all, but export, final-demand elements.

Export mainly depends on exogenously specified oil and gas exports, the world oil price, and the dynamics of production in the EU countries.

The logic of presenting forecast results corresponds to that of forming scenarios and performing forecast calculations and implies the successive consideration of:

—scenario conditions and the main exogenous variables;

—resource restrictions;

—the price dynamics (final-demand elements and GDP as a whole);

—the income formation process (of the main economic agents—the population, the government, and business);

—the impact of monetary policy on production, incomes, and prices;

—the impact of the world economy and foreign trade on Russia's economic development; and

—the formation of the physical dynamics of final-demand elements and lastly, the GDP dynamics.

Baseline scenario. All forecasts developed with the QUMMIR model are in the nature of a scenario. In this respect, a baseline scenario, in our terminology, is a scenario based on the saving of parameters of the economic policy and the most probable (expected) dynamics of exogenous variables that are not economic policy parameters.

The dynamics of the baseline scenario's exogenous variables is largely based on the scenario conditions of the pessimistic variant of development worked out by the MEDT. Nevertheless, we think it more natural for the baseline scenario to present the growing dynamics of oil and gas prices in world markets for the next three years. In addition, taking into consideration the great impact of the consumer credit system on consumption in recent years, we introduced relevant exogenous variables into this model.

Another important variable, increasingly affecting the character of development, is government economic expenditures.

In addition to the main exogenous variables, about 20 other informal exogenous variables are used in the model, mainly related to taxation, money circulation, and balance of payments.

A natural feature of the quarterly model is a quarter-by-quarter presentation of all exogenous variables, while the MEDT scenario conditions envisage a year-by-year presentation. In this respect, it is necessary to calculate the quarterly dynamics of the corresponding variables. If an exogenous variable has a clear quarterly seasonality, we use representations of this seasonality to obtain quarterly values. If there are no such regularities, we primarily use expert estimates of the quarterly dynamics (Table 1).[4]

Curves of exogenous variables are illustrated below, whose values change significantly during the forecast period. The most rapidly developing exogenous variables are:

—oil and gas exports;

—tariffs of natural monopolies;

—consumer credits;

—budgetary spendings; and

—the Brent oil price.

It is advisable to use the relevant trends for presenting variables characterized by significant quarterly fluctuations.

According to the MEDT scenario, the growth oil and gas exports in kind (Fig. 2) decelerates due to natural geological and transport factors.

Obviously, it will be impossible to overcome this tendency in either the medium or long term.

The authors assume that new price ratios are being formed in the world economy, which are adequate to a situation with growing shortages of primary resources. At the same time, after reaching a new level, the long-term trend in oil-price dynamics cannot outpace significantly the total price dynamics. This underlies the assumption that the growth of oil prices will decelerate after 2005 (Fig. 3).

As for foreign-trade contract gas prices, they are known to follow with a certain lag the dynamics of world oil prices.

The dynamics of foreign debt payments naturally tends to decelerate, which is due to the absolute and relative reduction of the debt load. The dynamics of foreign investments (Fig. 4), as is obvious from the graph, reflects moderately optimistic expectations of the government that foreign investors are interested in investing in the Russian economy.

The dynamics of tariffs of natural monopolies (Fig. 5) reflects the point of view, which has been gradually gaining ground in the government, that the growth of prices in monopoly industries should comply with the country's total price dynamics.

The dynamics of personal loans (Fig. 6) reflects the authors' assumption that the peak of accelerated consumer crediting in Russia is already in the past, and, given continuing high growth rates of these loans, some decrease in the consumer credit dynamics is inevitable in the future.

The parameters of the three-year budget largely determine the dynamics of total budgetary costs related to economic expenditures (Fig. 7).

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[4] A table of key exogenous variables by quarter, as well as a full list of exogenous variables, are given in the Appendix presented on site www.macroforecast.ru.

Table 1. The inertial scenario parameters (main exogenous variables)

Indicator	2003	2004	2005	2006	2007	2008
Variables of external conditions						
Brent oil price, $/bl	29.4	44.2	61.4	61.6	64.8	64.6
Cut-off price, $/bl	0.0	20.0	20.0	26.0	26.0	26.0
Oil export, million t	223.8	257.6	254.8	263.0	271.0	273.0
Gas export, billion m^3	183.6	201.9	216.7	198.0	195.0	196.0
Foreign investments, $ billion	0.6	11.8	20.5	16.2	18.0	19.6
External debt service, $ billion	5.8	5.9	5.4	5.1	5.0	4.3
Principal payments, $ billion	9.8	8.5	32.2	8.7	10.9	9.2
Exchange rate variables						
Ruble to dollar rate	29.5	27.8	28.6	29.7	30.3	30.7
Euro to dollar rate	1.19	1.29	1.20	1.21	1.26	1.22
Dynamics of prices (tariffs) of natural monopolies, %/yr						
Electric power prices	13.3	14.8	17.5	18.7	19.9	21.0
Gas prices	15.7	29.6	36.5	40.5	43.7	46.8
Transportation tariffs	14.0	15.4	19.2	20.7	21.7	22.3
Monetary sphere, billion rubles						
Personal loans, rubles	130.3	279.2	402.8	835.4	1410.9	2222.2
Personal loans in hard currency	27.2	40.0	64.3	110.4	174.3	265.5
Parameters of the consolidated budget, billion rubles						
Costs, total	3955.4	4665.4	5799.6	6662.2	7328.4	8427.6
Costs of the economy	955.5	1055.8	1067.2	1359.9	1550.3	1751.8
Labor resources						
Number of employees, million people	67.4	68.1	69.1	69.7	69.1	70.1

To realize to what extent the baseline scenario differs from the MEDT scenarios, it would be reasonable to compare directly the dynamics of oil prices in these scenarios (Fig. 8).

The impact of resource constraints. Despite the fact that the set of variables reflecting the impact of resource constraints in the QUMMIR model is limited, we believe that it gives a certain vector of the influence of resource factors on economic dynamics.

The main conclusion is that primary resources (especially fuel) have been changing from a factor accelerating economic dynamics into a significant restriction on economic growth during the last three years. In view of the simultaneously decreasing growth rates of employment (Fig. 9), the acceleration of economic dynamics in the medium term is possible only at the expense of production efficiency factors.

A considerable reduction of the growth rates of oil export was observed already in 2005. As for gas export, the deceleration of its growth rates is probable during this year.

Fig. 1. The QUMMIR model diagram.
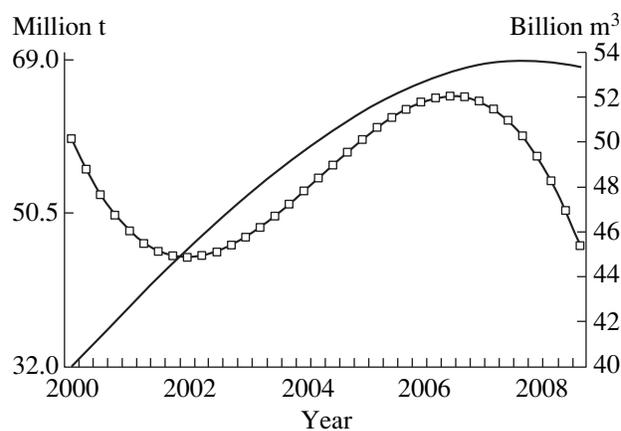
Fig. 2. The export of oil (—) (left scale) and gas (–□–). Trend dynamics.
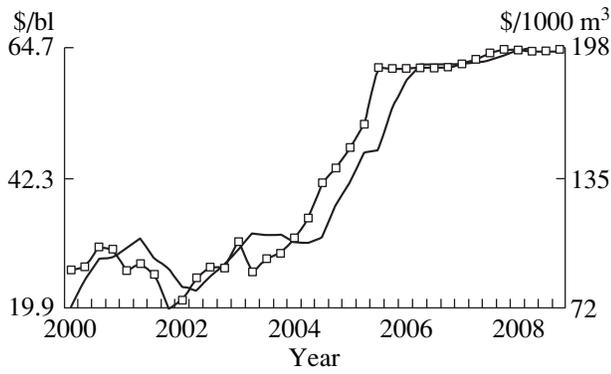
Fig. 3. Oil (–□–) (left scale) and gas (—) prices.
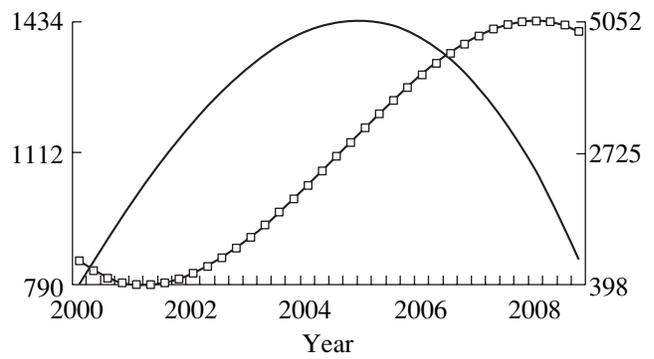
Fig. 4. Foreign investments (–□–) (right scale) and foreign debt payments (—), $ million.
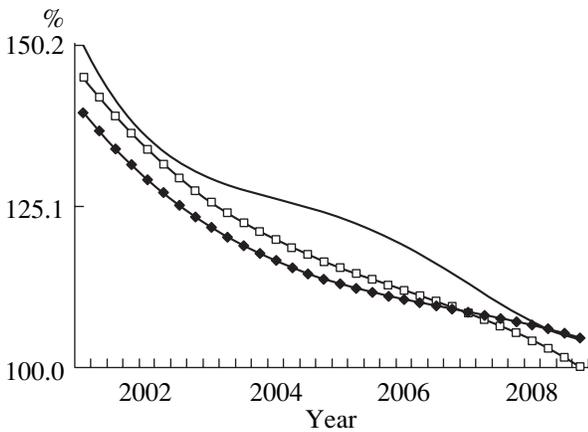
Fig. 5. The trend dynamics of prices (tariffs) of natural monopolies (to the respective period of the previous year): (—) for natural gas; (–□–) for transport; (–◆–) for energy.
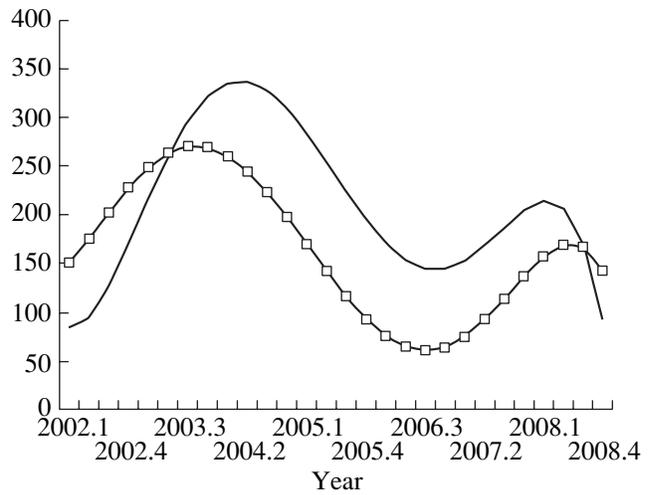
Fig. 6. The personal loan growth rate trend (to the respective period of the previous year): (—) in rubles and (–□–) in foreign currency.
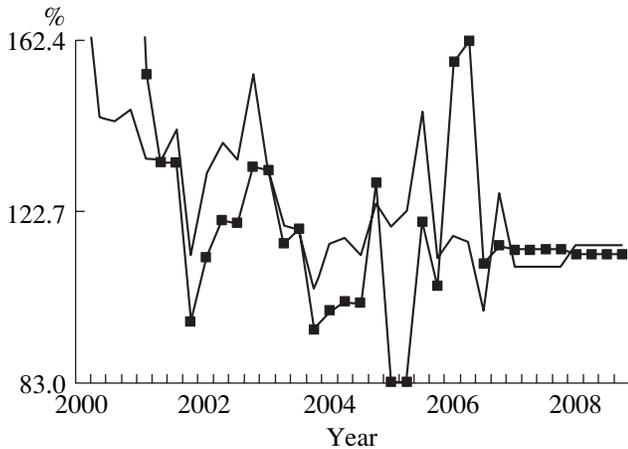
Fig. 7. Budgetary expenditure growth rate (to the respective period of the previous year): (—) total and (–■–) economic expenditures.
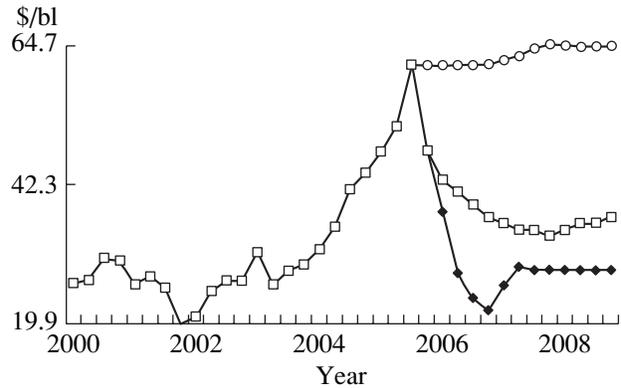
Fig. 8. Brent oil price: (–◇–) for model calculations; (–◆–) for the first MEDT scenario; (–□–) for the second MEDT scenario.

Under the baseline scenario, a period of stable absolute reduction of oil and gas exports will probably begin in 2008 (Fig. 10).

A quantitative estimate of the "capacity" of resource factors, namely, the extent and value to which they can decelerate economic dynamics, is presented in the last section.

Price dynamics. Prices and their dynamics are the key factors that form the business and investment climate in the country. It is not by chance that in recent years the focus was on inflation curbing.

The QUMMIR model forecasts such characteristics of price dynamics as the deflator of household consumption, the deflator of public consumption, the deflator of fixed capital accumulation, the export deflator, and the import deflator.

To obtain the value of the consumer price index (CPI), it is necessary to use an equation coordinating the CPI dynamics with the household consumption deflator.

The approach to forecasting prices used in this model is traditional and consists of the formation of econometric regularities coordinating the main macroeconomic factors of inflation with the characteristics of the price dynamics. The number of such variables used for modeling inflation in the current version of the model may be reduced to the following list:

—variables of the deflator with a lag of one or two quarters;

—the dynamics of tariffs of natural monopolies;

—the dollar exchange rate;

—money supply;

—the price for the Brent oil;

—the dynamics of budgetary costs; and

—time.

In our opinion, these variables are sufficient to describe the behavior of the dynamics of key deflators.

The fundamental problem is to describe the 2005 price situation and to explain the reasons why the planned inflation reference points were not achieved.

Rapid growth of consumer prices was first provoked at the beginning of that year by the explosion of communal tariffs. At the same time, the tariffs of natural monopolies (electric power, gas industry, and transport) sharply increased. Our studies show that consumer prices largely respond to the growth of tariffs of natural monopolies with a lag of two or three quarters. This means that the inflation pressure of the explosion of tariffs of natural monopolies at the beginning of a year must manifest itself until the mid-fall. Below is the graph of the trend dynamics of the consumer price index and that of tariffs of natural monopolies with a lag of three quarters,[5] proving the increas-

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[5] Here we use the weighted product of indices of prices for electric energy, gas industry, and transport as the single indicator of tariffs of natural monopolies.
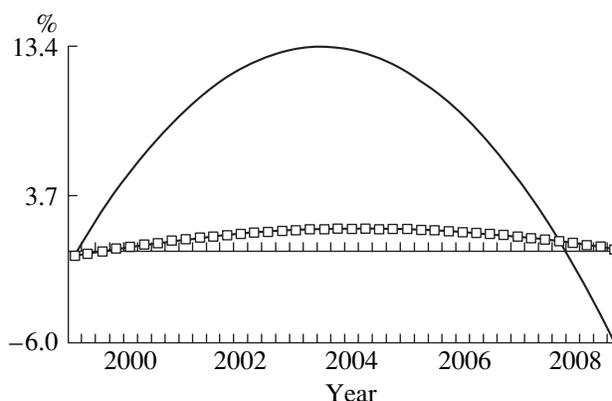
Fig. 9. The oil export (—) and employment (–□–) growth rate trends (to the respective period of the previous year).
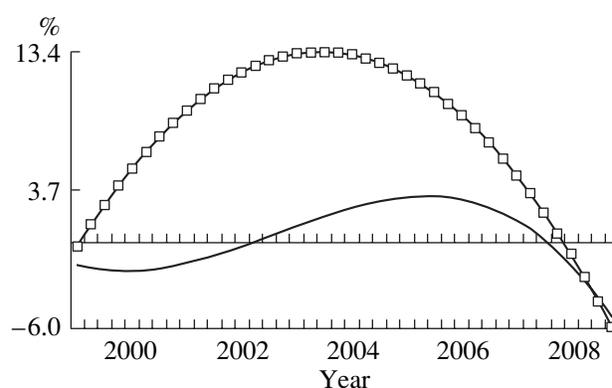
Fig. 10. Oil (–□–) and gas (—) export growth rate trends (to the respective period of the previous year).
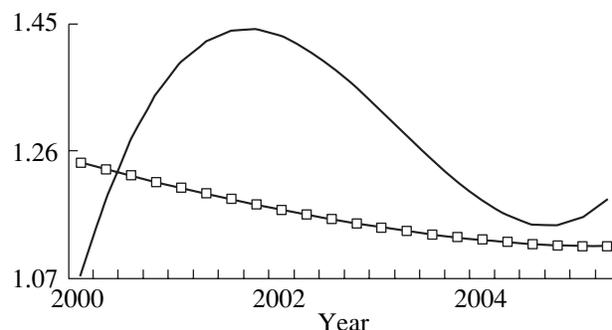
Fig. 11. Monopoly tariffs (—) and the consumption deflator (–□–) (trend index).

ing impact of tendencies of the price dynamics of natural monopolies on the dynamics of consumer prices (by mid-2005) (Fig. 11).

It is noteworthy that monetary inflation factors should act in the opposite direction, because the growth of money supply gradually decelerates. At the
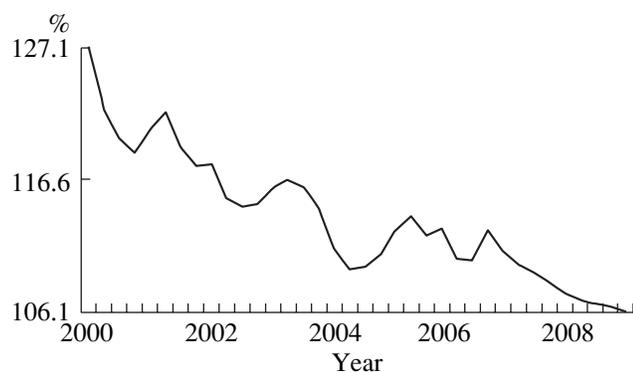
Fig. 12. The household consumption deflator (relative to the respective quarter of the previous year).

Fig. 13. The HC (–□–) and public consumption (—) deflators (to the respective quarter of the previous year).

same time, our analysis shows that the growth of prices in Russia during the last quarters decreasingly reacts to the dynamics of money supply, which testifies to the nonmonetary character of inflation.

In addition, the dynamics of the household consumption (HC) deflator is characterized by the alternation of periods of growth acceleration and deceleration (Fig. 12).

In this sense, 2004 was on the trend of low growth rates, while 2005 fell on the trend of their increase.

Taking into account the CPI content, which is very close to the deflator of household consumption, it is no wonder that its level in 2005 tended to exceed the values of 2004. Moreover, according to our calculations, the CPI in 2005 cannot be lower than 12% (according to the estimate of the Federal State Statistics Service at year end, 10.9%). Thus, one may say that the actual price dynamics in the Russian economy in 2005 is not fully accounted for by the Russian statistical bodies.

At the same time, one may say that the 2006–2008 period is more favorable for targeting inflation decrease, and the inflation level in 2006 will not exceed 10%. It may be expected that in 2007–2008 the CPI will further decrease to 7.5 and 6.5% respectively.

The yearly dynamics of the deflators of the GDP components is presented in Table 2.

Table 2. The dynamics of deflators, % to the previous year

Deflators	2005	2006	2007	2008
GDP	21.7	12.6	9.4	7.1
Consumption	12.8	10.9	8.7	6.6
Public consumption	25.6	16.9	11.8	7.9
Accumulation	13.4	13.6	10.4	7.8
Export	25.1	8.3	4.0	1.6
Import	2.3	–1.9	3.3	1.3

Table 2 shows that the dynamics of deflators of the different GDP components in the forecast period are significantly different.

For example, the public consumption deflator in the future will keep rapid dynamics compared to the household consumption deflator (Fig. 13), which, on the one hand, reflects the gradual restoration of the relation of incomes to prices between the public and private sectors and, on the other, may show low budgetary restrictions on public consumption. A significant increase in the dynamics of the public consumption deflator in 2005 and at the beginning of 2006 is explained by a respective increase in budgetary costs. At the same time, overall, the public consumption deflator follows the tendency of price growth in the consumer market at a higher level.

The dynamics of the deflator of fixed capital accumulation (Fig. 14) is significantly different from the dynamics of the household consumption deflator. The absence of price growth deceleration in the investment sphere in 2006 is related to the forecast high investment activity during this year. Further gradual deceleration of the growth of the deflator of fixed capital accumulation reflects the general tendency toward the deceleration of price dynamics.

The export deflator (Fig. 15) largely depends on the dynamics of world oil prices, the volume of oil exports, and dollar exchange rate, specified in scenarios. Owing to the expected significant deceleration of the growth of oil prices, the growth of export prices will be steady behind the growth of consumer prices in the domestic market starting from mid-2006.

The import deflator (Fig. 16), exposed to the competitive impact of the prices of internal producers, is characterized by the lowest dynamics—about 1–3% of annual price growth. The 2004–2005 tendency to increase this indicator reflects the increasing level of personal dollar incomes and the increased demand for high-quality imported products.
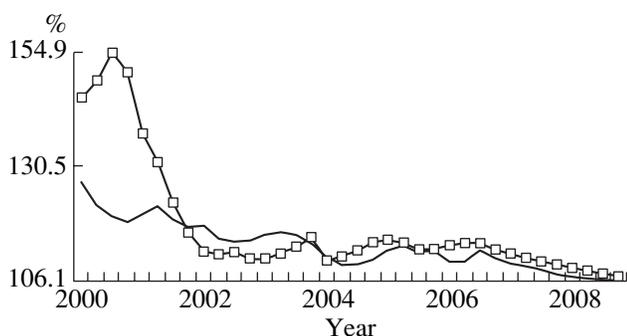
Fig. 14. The HC (—) and fixed capital accumulation (–□–) deflators (to the respective quarter of the previous year).
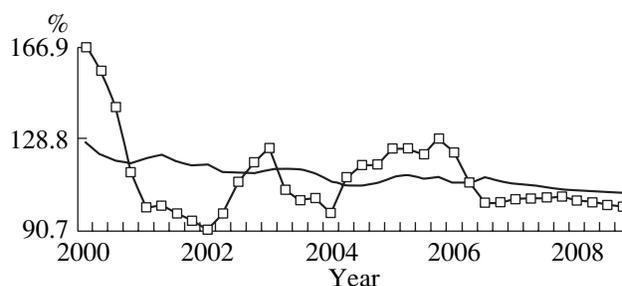
Fig. 15. The HC (—) and export (–□–) deflators (to the respective quarter of the previous year).
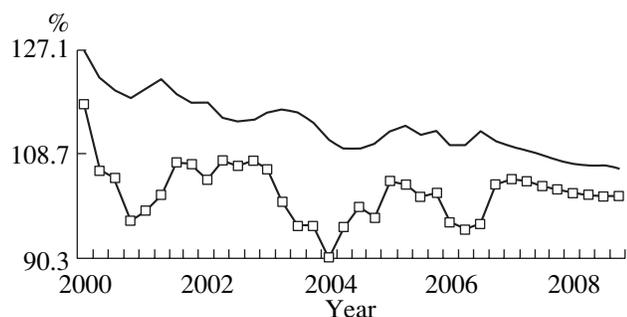
Fig. 16. The HC (—) and import (–□–) deflators (to the respective quarter of the previous year).
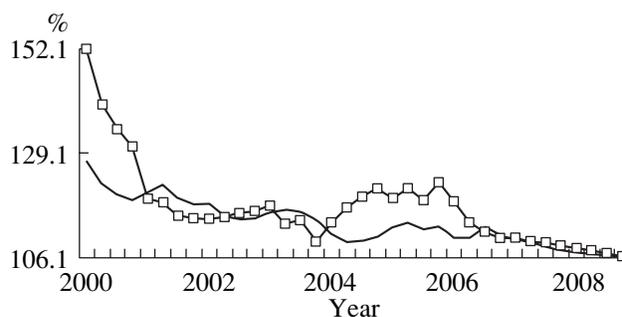
Fig. 17. The HC (—) and GDP (–□–) deflators (to the respective quarter of the previous year).

The GDP deflator (Fig. 17) is the result of the interaction of price tendencies in different markets and sectors of the Russian economy.

Figure 17 shows that the period of relatively high prices in the economy will be at an end in 2006, and a period of moderate (for Russia) inflation in all components of the GDP used will arrive in 2007–2008. As for reaching 2–4% inflation, this is hardly possible before 2010, at least under the baseline scenario of development.

The dynamics of personal incomes and expenditures. In the structure of personal incomes, compensation occupies top place, while other incomes constitute the second in size income item.

It is noteworthy that the share of compensation and that of other incomes change in opposition to each other. Except for the share of property income, which has been increasing since the end of 2002, the structure of incomes during the reporting period is stable (Fig. 18).

Let us consider the results of the forecast calculations now. The relative stability in the income structure results in the fact that compensation will remain the most significant item determining the total dynamics of personal incomes in the future as well (Fig. 19).

One of the most significant parameters from which compensation is calculated in this model is the com-

pensation of public sector employees. The same parameter is used to calculate incomes. The compensation of public sector employees is, in turn, related to the dynamics of budgetary costs.

It is noteworthy that the existing version of the model slightly exaggerates the impact of budgetary costs and, respectively, the compensation of public
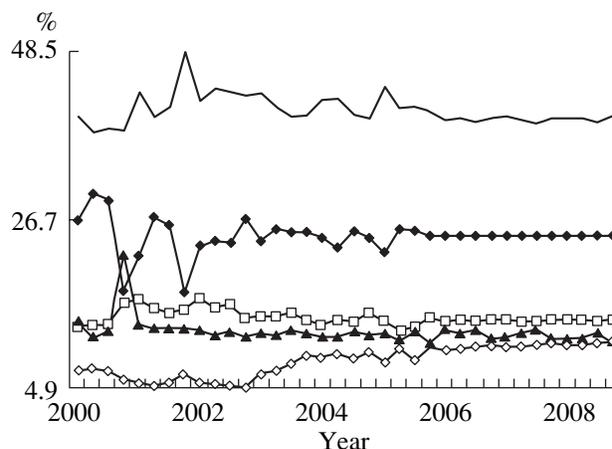
Fig. 18. The structure of personal incomes: (—) compensation; (–□–) transfers; (–▲–) incomes from business activities; (–◇–) property incomes; (–◆–) other.
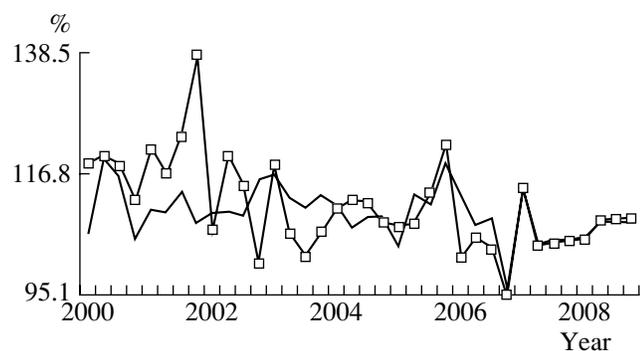
Fig. 19. Real cash personal income (—) and real compensation (–□–) growth rates relative to the respective period of the previous year.

Fig. 20. The annual GDP, saving, and consumption dynamics (on the basis of sliding annual values, relative to the respective period of the previous year): (–□–) the annual average GDP growth index; (–◇–) the annual average index of the growth of savings (right scale); (—) the annual average HC growth index.

sector employees on the total dynamics of personal incomes. As a result, it is the dynamics of budgetary costs that largely determines changes in the dynamics of incomes and consumption.

Let us consider the combined average annual dynamics of GDP (Fig. 20), savings, and consumption.

In the last year of the reporting period, the GDP growth rate decreased to some extent, and the growth of consumption took place owing to the high dynamics of personal loans. In the current year, a further reduction of economic growth rates is expected under the baseline scenario. A sharp decrease of the HC growth rate (up to 6% annually) is possible by the end of this year. The latter is determined not only by the deceleration of budgetary costs but also by the general decrease of the growth rates of the economy's

incomes under the relatively low dynamics of world fuel prices.

Starting in mid-2007, consumption growth will begin to increase again owing to the increased dynamics of compensation and incomes.

Let us now consider the growth rates of the main characteristics of personal incomes and expenditures and the indicators of the structure of personal incomes and expenditures (Tables 3 and 4).

By our estimates, real disposable personal income will increase by 5.6% in 2006, by 6.9% in 2007, and by 7.5% in 2008. The growth rate of population's

Table 3. Personal income and expenditure growth rates, %

Growth	2003	2004	2005	2006	2007	2008
Real disposable incomes	13.2	9.0	12.3	5.0	6.9	7.5
Real expenditures on goods and services	6.4	12.1	13.2	4.9	6.3	7.2
Household consumption	4.7	10.7	11.7	5.3	6.4	7.0
Real savings	31.6	−11.1	17.5	−4.1	14.0	11.9

Table 4. The personal income and expenditure structure, %

Indicator	2003	2004	2005	2006	2007	2008
Compensation	40.3	39.8	40.6	39.9	39.6	39.7
Transfers	13.7	14.6	13.9	13.6	13.5	13.6
Business incomes	11.9	11.7	10.6	11.4	11.5	11.1
Property incomes	9.1	9.5	10.2	10.4	10.7	10.9
Other incomes	25.0	24.5	24.7	24.7	24.7	24.7
Savings–incomes ratio	14.1	10.6	12.1	11.2	11.3	11.5
Consumer loans (% to incomes)	1.5	2.6	2.9	5.2	7.7	10.8

Table 5. Consolidated budget incomes, % to the GDP

Item	2004				2005			
	I quarter	II quarter	III quarter	IV quarter	I quarter	II quarter	III quarter	IV quarter
Incomes, total	29.0	36.6	31.3	33.6	39.0	35.5	32.5	34.5
Tax revenues, total	26.6	32.8	28.8	30.6	36.6	32.8	30.2	29.8
Profit and income tax	7.2	10.0	8.2	9.2	11.6	9.7	8.1	8.7
including								
company profit tax	3.9	6.4	5.0	5.5	8.6	6.3	5.0	4.7
Personal income tax	3.2	3.6	3.3	3.7	3.1	3.4	3.1	3.9
Taxes on goods and services	8.2	8.2	7.7	7.7	11.6	7.9	7.0	7.8
including								
excises	2.1	1.4	1.3	1.2	1.2	1.2	1.1	1.1
VAT	6.0	6.8	6.4	6.5	6.8	6.8	5.9	6.8
Foreign trade taxes	4.3	5.6	5.0	5.7	7.1	7.1	7.3	7.3
including								
import duties	1.2	1.2	1.2	1.4	1.3	1.3	1.2	1.2
export duties	1.3	4.4	3.8	4.3	5.8	5.8	6.1	6.1

Table 6. The consolidated budget income dynamics, % to the previous year

Item	2003	2004	2005	2006	2007	2008
Incomes, total	117.6	131.2	139.1	116.2	112.5	109.2
Tax revenues, total	115.4	147.0	139.5	112.1	114.2	110.4
Profit and income tax	119.6	146.8	139.6	113.9	114.8	110.3
including						
company profit tax	113.6	164.8	147.8	110.9	114.8	108.3
income tax	127.2	126.1	127.2	119.3	114.7	113.6
Taxes on goods and services	120.4	107.3	137.2	109.5	111.5	108.7
including						
excises	129.6	71.4	106.0	99.9	100.0	100.0
VAT	117.2	121.3	144.3	111.1	113.2	109.9
Foreign trade taxes	140.0	189.9	178.3	112.0	106.6	103.7
including						
import duties	122.8	139.3	127.5	106.7	112.7	111.9
export duties	151.4	221.8	193.8	112.5	105.5	102.0
Other incomes	128.6	63.1	135.7	158.1	100.7	99.5

spending on goods and services in the forecast period will gradually decline from 13.2% in 2005 to 7.2% in 2008. The growth of real savings will accelerate in 2007–2008.

Consumer lending will increase significantly. In particular, the annual amount of loans relative to personal incomes may exceed 10% in 2008, which corresponds to a 40–50% level of saturation, typical of developed countries.

The tax and budgetary block. *Incomes.* First of all, it is noteworthy that to analyze and forecast incomes and expenditures of the consolidated and federal budgets and to compare the obtained results with the indicators of 2003–2004, the 2004 budgetary classifica-

tion is used. This means that the company profit tax, personal income tax, VAT, social tax, excises, foreign trade taxes (export and import duties), and other tax payments are attributed to tax incomes.

During the first 11 months of 2005, the income of the consolidated budget was 6832.6 billion rubles (141% compared to the first 11 months of 2004). Such a considerable increase is explained, first, by high prices in the world oil market, which led to a growth of customs duties and tax incomes from oil exporters, and, second, by the total growth of the Russian economy, which also increased tax payments in practically all kinds of taxes (Tables 5 and 6).

% GDP
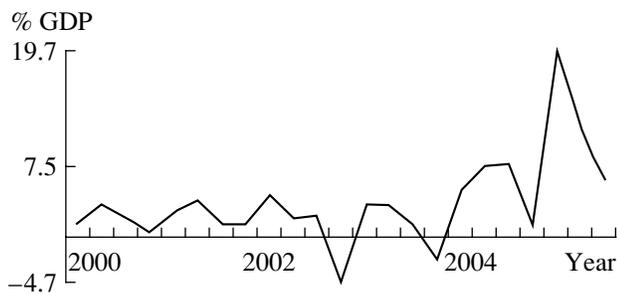
Fig. 21. Consolidated budget surplus.

In the first quarter of 2005, the federal budget and the budgets of the Bashkir Republic, Tyumen oblast, and the Khanty–Mansi Autonomous District received extra taxes and dues of 231.5 billion rubles from OAO NK YUKOS and 32.1 billion rubles from OAO Sibneft in discharge of taxes payable. Hence, company profit tax payments increased 2.67 times compared to the first quarter of 2004, and VAT increased two times. As a result, the consolidated budget incomes in the first quarter of 2005 were 39% of the GDP (in the first quarter of 2004, 29%). However, if we consider the value of consolidated budget incomes less the funds received from the OAO NK YUKOS and OAO Sibneft, the estimate of the income growth relative to the first quarter of 2004 decreases from 164.3 to 139%. Accordingly, the estimate of the total amount of consolidated budget incomes decreases from 39 to 33% of the GDP.

The YUKOS lawsuit affected not only the amount of tax incomes of the federal and consolidated budgets but also the tax raising in the following quarters of 2005 both in the current tax value and in tax liabilities. This can be proved, for example, by a 42% growth of tax payments (net of the single social tax) to the consolidated budget in the second and third quarters compared to the respective period of 2004, while the GDP increased only by 28–29%.

As for the federal budget, according to early data of the Russian Ministry of Finance as of January 1, 2006, the incomes of the federal budget are executed 102.8% (23% of the GDP). According to the preliminary results of the first 11 months, the share of the federal budget in consolidated budget incomes increased from 63% in 2004 to 67.5% in 2005.

The dynamics of the social tax requires special analysis. The rate on this tax decreased from 35.6 to 26% in 2005. It was assumed that this would lead to a reduction of the share of unaccounted ("in envelope") compensation, and thus, to an increase in the taxable base. However, in the opinion of many specialists, this did not happen. As a result, social tax payments to the federal budget were reduced by 40% during the first three quarters of 2005, compared to the respective period of 2004.

Expenditures. Consolidated budget expenditures were 4931.8 billion rubles during the first 11 months of 2005 (26% more than in the respective period of 2004). The growth rate of consolidated budget expenditures in 2005 was lower than that of incomes.

The share of the federal budget in the consolidated budget expenditures by the end of the first 11 months increased from 60% in 2004 to 67.5% in 2005 and reached the level of the federal budget share in incomes.

The structure of noninterest expenditures of the consolidated budget changed significantly. In particular, the share of expenditures for the national economy decreased sharply. This happened because of the practically full dismissal of expenditures on industry, power engineering, and construction (from 183.8 million rubles in the fourth quarter of 2004 to 17.8 million rubles in the first–third quarters of 2005). It is noteworthy, however, that, owing to a changed budgetary classification, these data are initial and will be ascertained after the annual report on the public account is issued. At the same time, the share of expenditures for social policy increased (by 1.6–2.8 percentage points in the first and second quarters of 2005 compared to 2004; however, in the third quarter, it decreased by 1.9 percentage points).

Our analysis of monthly data suggests that the cash performance of expenditures was very uneven during the year.

For example, by December 1, 2005, the federal budget expenditures were executed only 76%. Moreover, in certain parts, the execution was less than 50% (communal services, sports and physical culture, and certain items of the "Education" and "Social Policy" parts). However, by January 1, 2006, the extension of federal budget expenditures reached 98%.

Surplus. The above dynamics of consolidated budget incomes and expenditures resulted in an unprecedented growth of budget surplus: by December 1, 2005, it was 1900.8 billion rubles, which is two times higher than in 2004 (938.4 billion rubles) and 1.5 times higher than the planned amount (Fig. 21). According to initial estimates, by the end of the year, the surplus was about 8% of GDP. The Stabilization Fund after external debt payments and payments to the Pension Fund budget was about 6% of the GDP by the end of the year.

The external public debt. Indicators of external debt payments require special analysis. As is known, the existing favorable situation in the external raw materials markets has allowed the Russian government to pay a part of its external debt ahead of schedule and decrease future interest expenditures.

In particular, in the first quarter of 2005, the Russian government fully sank its debt to the International Monetary Fund (which was $3.6 billion by January 1, 2005).

The total amount of external debt payments during the first half of 2005 equaled $9.3 billion (during the

Table 7. The consolidated budget expenditure dynamics, % to the previous year

Expenditures	2003	2004	2005	2006	2007	2008
Total	116.2	117.0	124.3	114.5	110.0	115.0
Including						
national economy	111.0	110.5	101.1	127.4	114.0	113.0
interest expenditures	101.2	95.7	103.6	93.8	98.1	98.0

same period of 2004, $7.5 billion), including principal debt payments of $6.8 billion (in 2004, $4.8 billion). In the third quarter, $19 billion was paid off (including $16 billion on account of the advanced repayment of the former Soviet Union' debt to the Paris Club). The repayment of another $1.3 billion was planned to be made before the end of the year. Altogether, 730 billion rubles (4% of the annual GDP) was sunk because of repaying the principal.

Forecast. Under the baseline scenario, the revealed tendencies allow us to explain the results obtained in this model in the forecast period. It is assumed that a 18% VAT rate remains unchanged until 2008. Under the baseline scenario, we also do not consider the government's intention to make advanced repayments of a part of the external debt in 2006, because this has not been agreed with creditor countries.

The growth rate of consolidated budget incomes will decelerate primarily owing to the decrease of the growth rates of company profits tax (from 48% in 2005 to 8% in 2008), personal income tax (from 27% in 2003–2005 to 14–19% in 2006–2008), VAT (from 44% in 2005 and 21% in 2004 to 10–13% in 2006–2008), and export duties (from 94–121% in 2004–2005 to 2–5.5% in 2007–2008). Such a sharp decrease in the growth rates of tax payments is the result of several factors. First, oil prices will lose their growth rates and will not be outpacing the total price dynamics. Second, the growth rates of oil export in kind will decrease. Third, the decline of the overall growth rates of the national economy will naturally lead to a reduction of tax payments to the budget. One should also

note the growth of tax raising mentioned above in connection with the YUKOS lawsuit. According to initial estimates, this effect was short-term and has not been accounted for in this model. As a result, the growth rates of tax incomes of the consolidated budget will decrease to 10.4–14% in 2006–2008, compared to 40–47% in 2004–2005.

By the end of 2008, consolidated budget incomes will have been 10.8 trillion rubles, including 90.2% of tax incomes (26.9% of taxes on profits and incomes, 19.8% of VAT, and 14.2% of export duties).

The dynamics of consolidated budget expenditures depends on exogenous indicators of budgetary expenditures in 2006–2008. These indicators have been specified assuming that the government policy in spending and allotting additional money from high oil prices to the Stabilization Fund will not change. "The Budgetary Policy for 2006–2008" confirms this hypothesis. According to this document, the government expects world oil prices to decrease, and, as a result, the growth rates of budgetary tax incomes will decrease too. The decrease of tax payments will be also due to the introduction of "tax innovations" (establishing a common less-VAT procedure in investments and measures to decrease company profit tax payments: rapid 10% depreciation write-offs on newly introduced fixed assets, lifting of restrictions for the transfer of beat for the future—30% to the taxable base, and the write-off of R&D expenditures within two years).

Within the baseline scenario, we first considered the orientation to the existing dynamics of the expenditure pattern. Owing to this, the growth rate of economic expenditures in 2007–2008 is specified at 13–14% per year, while the growth rate of total expenditures does not exceed 15% during the whole forecast period (Table 7).

The advanced repayment of a part of the external debt in 2005 determines a decrease of costs of servicing the remaining part and reduces the share of interest expenditures from 4–6% of the total expenditures in 2003–2004 to 2.6% at the end of 2008.

Thus, by the end of 2008, consolidated budget expenditures will be 8427.6 billion rubles, or 28% of the GDP. Within the baseline scenario (without taking

Table 8. The consolidated budget surplus

Indicator	2003	2004	2005	2006	2007	2008
Incomes						
billion rubles	4135.6	5427.3	7551.3	8771.4	9871.4	10783.7
% GDP	32.4	32.7	35.1	34.6	34.4	3.4
Expenditures						
billion rubles	3955.4	4665.7	5799.6	6662.2	7328.4	8427.7
% GDP	30.9	28.1	27.0	26.3	25.6	26.8
Surplus						
billion rubles	180.2	761.9	1751.6	2109.2	2543.0	2356.1
% GDP	1.4	4.6	8.1	8.3	8.9	7.5

Billion rubles   Million t
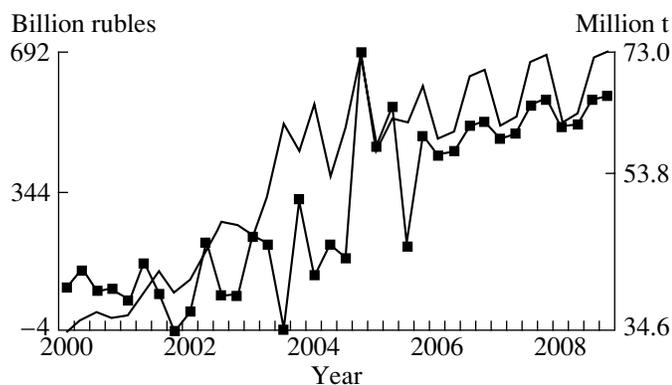
Fig. 22. The foreign assets (–■–) (left scale) and oil export (—) growth.

into account subsidies to the Pension Fund), the surplus may increase up to 8.9% of the GDP (2543 billion rubles) by the end of 2007, while in 2008 it will constitute 7.5% of the GDP (Table 8).

The monetary sphere. The 2005 results show that the credence of people to the banking system gradually increased, which was obvious from a rapid growth of personal and company bank deposits under the simultaneous decrease of real growth rates of cash on hand and purchases of foreign currency.

The growth of ruble deposits of individuals and companies was the main reason of the growth of aggregate bank assets (28%). The sharp growth of call deposits (from 27% in 2004 to 41% in 2005), preconditioned by the growth of ruble deposits of companies, is also noteworthy.

Last year, the dynamics of ruble loans to both individuals and companies decelerated relative to the dynamics of foreign currency loans. As a result, the total dynamics of loans supplied stabilized at the 2004 level (16%).

A considerable increase of banks' foreign assets was observed (55% in 2005 compared to 16% in 2004), which led to a cardinal shift in the total structure (their share increased from 6 to 21%, while the share of loans supplied decreased from 85 to 78%). One may say that owing to high risks and the underdevelopment of financial markets, crediting is behind the ongoing increase of means attracted by the banking system. The growth of foreign assets accelerates as an alternative to the most reliable but relatively low-profit investments of monetary funds.

Last year, the Central Bank made money supply grow primarily by purchasing foreign assets—their net growth was 1.945 trillion rubles in 2005.

The liability structure of Monetary authorities considerably changed in 2005, which was obvious from the increase of the government share (from 25% at the end of 2004 to 37% in 2005). This is primarily due to the accumulation of means in the Stabilization Fund

(1.237 trillion rubles), as well as to a considerable budget surplus, totaling 1.9 trillion rubles by December 1. Despite considerable external debt repayments, the net growth of deposits of government bodies in 2005 was 1.97 trillion rubles.

The sharp decrease of the statutory reserve fund (SRF) was a result of the RRF rates decline in the second half of 2004 (to 3.5%). In 2005, this indicator has been growing proportionally to the growth of ruble and foreign currency deposits, preserving a 3% share in the total amount of liabilities.

The growth of the broad monetary base decelerated in 2005 to 23% (24% in 2004).

Forecast. The calculation of monetary indicators was performed within the framework of the financial block of the quarterly macroeconomic model. The main result of this calculation is a forecast dynamics of money supply. This indicator is a sort of link connecting the financial block with the basic version of this model, which includes blocks of incomes and expenditures of economic agents, the balance of payments block, and others. To calculate money supply, we have calculated separately its cash and noncash components. The cash component of money supply—circulating cash—has been obtained identically from the relation:

Cash = broad monetary base – obligatory reserves of commercial banks in the Central Bank – liquid assets of the banking system.

To obtain the noncash part of money supply—deposits of individuals and companies in the national currency—regression equations have been comprised.

Foreign assets (FA) of monetary regulatory bodies include the international reserve assets of the Russian government and Central Bank, as well as the Central Bank nonreserve assets. The growth of this indicator takes place in the Central Bank open market purchases of currency. Since the main flow of currency proceeds is due to raw-material (oil) exports at present, foreign assets largely depend on indicators of the physical volume of oil export and on oil prices in the world markets (Fig. 22).

While in the past the volumes of currency intakes to the market largely depended on the norm of the obligatory sale of currency proceeds, at present they are determined by obligatory allocations to the budget by export-oriented enterprises.

Reduction of foreign assets occurs thanks to external debt repayment, which is connected with the decrease of general government deposits in the Central Bank (largely at the expense of the Stabilization Fund).

The existing interconnection between the FA dynamics of Monetary authorities, external debt repayments, Brent oil price, and volumes of exported oil makes it possible to comprise a forecast FA
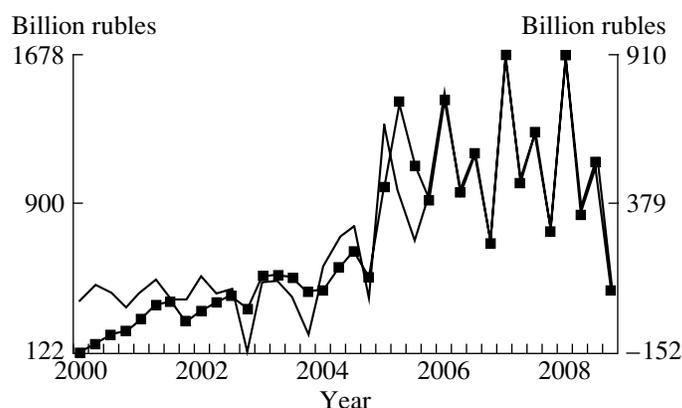
Fig. 23. General government deposits in the Central Bank (—) (left scale) and budget surplus (–■–).

dynamics depending on the dynamics of the above indicators.

General government deposits in the Central Bank can be conventionally divided into the Stabilization Fund means, constituting a strategic reserve, and the "current" account servicing other tax proceeds and dues and budget incomes.

The volume of the Stabilization Fund is directly related to the volume of exported oil, its price, and dollar exchange rate and is calculated on the basis of correspondent indicators.

General government deposits in the Central Bank that do not include the means of the Stabilization Fund obviously depend on budgetary incomes/expenditures, i.e., reflect the current volume of budget surplus (Fig. 23).

The forecast based on the baseline scenario implies a considerable deceleration of the growth of world oil prices and hydrocarbon exports. Scenario annual payments for external debt servicing will average $5 billion, while payments for sinking the debt principal will be $9 billion. As a result, we obtain a gradually decreasing growth of foreign assets from 57% in 2005 to 23% of growth in 2008, their volume being $240 billion by the end of 2006. Government deposits in the Central Bank will decelerate their growth from 41% in 2006 to 19% in 2008. The absolute reduction of budget surplus is noteworthy, which is related to the deceleration of the growth rates of budget revenues and the increase of expenditures.

The cut-off price increases from $20 in 2005 to $26 in 2006–2008. Taking into account that the scenario oil price will increase by only 5% from 2006 through 2008, this will lead to a decrease in currency intakes to the Stabilization Fund. Its annual average growth is forecast at 750 billion rubles. In 2004, its growth also constituted 700 billion rubles despite high oil prices and a low cut-off price of $20. This was due to a reduction of the fund means because of external debt repayments. Thus, by the end of 2005, the volume of the Stabilization Fund may reach 1850 billion rubles,

while by the end of 2007, it may reach 2.6 trillion rubles.

As a rule, in the structure of the ***liquid assets of credit organizations*** in the Bank of Russia, the share of correspondent accounts prevails, being 60 to 70% of the total reserves. The share of banks' deposits in the Central Bank considerably decreases over the year inversely to the change of correspondent accounts, i.e., excess assets are deposited, while the deficient amount is transferred back to correspondent accounts. Hence, a considerable increase in correspondent accounts at the end of the year decreases the share of deposits to 10% (in 2004, it was 15%). In 2005, the Bank of Russia bonds fully replaced operations of the Bank of Russia on the repurchase of securities (REPO), the shares of these indicators in this structure (for REPO relative to 2004 data and for Bank of Russia bonds relative to 2005 data) being approximately the same and averaging 15%. Each of the above indicators is a kind of instrument to sterilize bank liquidity—correspondent accounts. One may make an assumption that it is purposeful to estimate the general behavior of absolutely liquid bank reserves from the point of view of the main function of correspondent accounts—the execution of payment transactions. Thus, the indicator of available bank reserves was approximated to indicators of the payment cycle, which, in turn, reflects total economic growth. As a result, we have obtained a gradually decreasing dynamics of the growth of liquid bank resources: from 26% in 2005 to 8% in 2008.

The volume of ***the obligatory reserve fund*** has been forecast with regard to the conservation of the existing deposit rates for physical and legal persons at 3.5%.

Since the remaining balance indicators constitute a small part of the total volume of assets and liabilities, their dynamics has been specified with regard to the latest tendencies.

As a result, we obtain a gradual increase of the growth rates of the ***broad monetary base,*** determined

Billion rubles
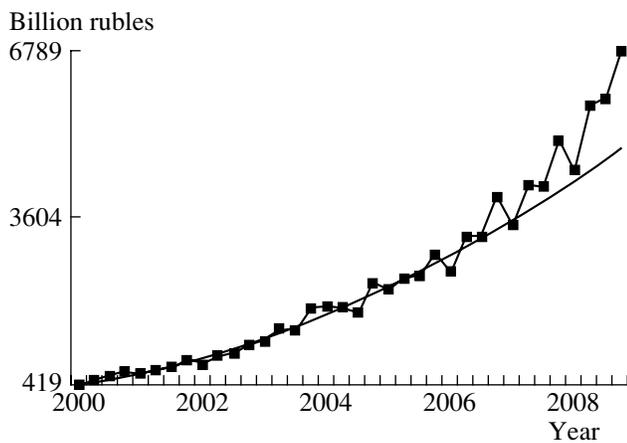
Fig. 24. The monetary base–trend dynamics: (–■–) monetary base and (—) the monetary base trend.

Billion rubles

Fig. 25. The money supply–trend dynamics: (–□–) money supply and (—) the money supply trend.

by the relatively high growth of foreign assets against the background of a slower dynamics of government deposits, which in this case are elements of sterilizing cash liquidity. If the growth rate of deposits (taking into account the Stabilization Fund) drops from 40% in 2006 to 19% in 2008, the growth of foreign assets will decrease from 28% in 2006 to mere 23% (Fig. 24).

As a result, identically calculated *cash* also accelerates its growth on the basis of the growth of the broad monetary base and a relative deceleration of bank reserves.

Personal deposits in rubles demonstrate a decreasing growth determined by the decrease of personal cash incomes. *Deposits of businesses* are forecast from the gross profit of the economy, and their growth also gradually goes down.

Money supply, which is the sum of the obtained forecast value of cash and deposits in national currency, is characterized by decelerating growth rates. In 2005, its growth was 38%, while in 2006, it is forecast at 24%, and in 2008, at only 20% (Fig. 25).

As a result, we may make the following *conclusions* (Table 9). The conservation of high oil prices in the forecast period, although with a considerably decelerated dynamics of their growth and low growth rates of oil export, directly affects the decrease of the growth of the Central Bank's foreign assets. At the same time, the growth of Central Bank public accounts, which in the current situation sterilize money issue, decelerates even more significantly. This is related to the forecast increase of budget expenditures, as well as to the increase of the cut-off price, reducing intakes to the Stabilization Fund. As a result, the dynamics of the monetary base accelerates.

At the same time, the decrease of the dynamics of personal cash incomes, as well as that of the economy's aggregate profit, leads to a reduction of the growth of ruble and currency deposits of individuals
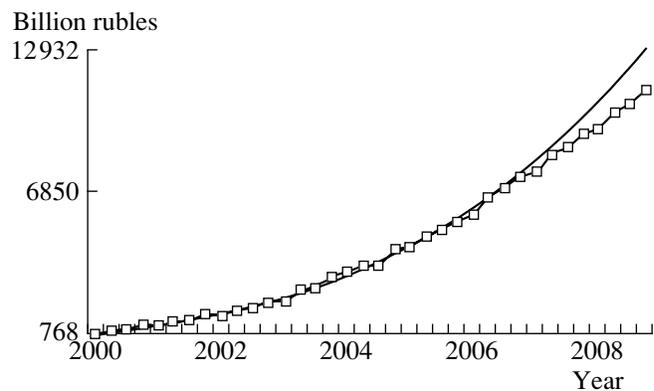
and companies. This leads to a deceleration of the growth of money supply.

As a result, the money multiplier, having reached its peak (2.3) at the beginning of the current year, will be decreasing during the whole forecast period (to 1.9). Taking into account the continuous growth of this indicator since the beginning of 2003, this contradictory situation is probably a result of our assumptions. The forecast of deposits of physical persons and organizations is based on the existing tendency and reflects the inertial dynamics of these indicators. At the same tome, the growth of budget expenditures and the increase of the oil cut-off price are elements of the future government policy and constitute exogenous indicators for forecasting. At present, this policy is not fully reflected in forecast calculations; they do not allow for the impact of these government actions on the growth of business profitability, personal incomes, and, correspondingly, personal savings. Thus, the task is to estimate the scale of this impact that may smooth this contradiction or, on the contrary, to intensify it.

Foreign trade and balance of payment. The main tendency in foreign trade in 2005 was the deceleration of the growth of physical volumes of energy resources export. For example, by the end of this year, a decline of oil export by about 15% will be observed for the first time over recent years.

Taking into account the fuel products, which constitute up to 55% of Russian export in value terms, such a significant deceleration of export growth rates of the most important part of the Russian foreign turnover could not but affect the total export dynamics.

The sharply decelerated growth rates of export physical volumes could create serious problems for the country's balance of payment, but their negative effect was compensated by a considerable rise in prices for products of Russian export. The year-end average Urals oil price exceeded $50.6 per barrel (the growth by 47% compared to the level of 2004). Russian natural gas prices were also rising in compliance with the main tendencies in the markets of oil and

Table 9. The monetary sphere and related indicators—growth rates, %

Indicator	2003	2004	2005	2006	2007	2008
Foreign assets	50.2	52.2	57.0	28.6	29.3	23.5
General government deposits in the Central Bank						
without the Stabilization Fund	24.6	17.9	71.2	35.6	14.9	0.2
with the Stabilization Fund	24.6	135.0	106.8	41.8	30.5	19.1
Budget revenues	17.6	31.2	39.1	16.2	12.5	9.2
Budget surplus	61.1	322.8	129.9	20.4	20.6	−7.4
Liquid bank reserves	87.0	35.5	26.6	7.8	10.0	7.8
Payment cycle	41.7	25.1	37.9	20.7	14.6	10.9
Personal deposits						
in rubles	47.9	23.8	24.5	14.7	11.8	10.6
in hard currency	22.3	21.6	19.3	20.5	14.6	8.2
Deposits of companies						
in rubles	26.1	18.5	23.4	11.8	9.2	10.0
in hard currency	−4.1	86.9	45.5	49.7	25.8	11.2
Real personal incomes	15.5	8.8	19.7	−4.0	3.3	6.4
Real ruble exchange rate	12.8	10.7	11.7	5.5	4.8	5.9
Monetary base	57.4	25.4	23.9	22.6	27.7	26.9
Money supply	50.5	35.8	38.5	24.2	24.0	20.5
Cash volume	50.5	36.4	2.7	56.3	32.7	32.2
Accumulated volume of personal loans						
in rubles	89.7	91.3	57.2	71.8	67.2	59.8
in hard currency	119.9	85.5	63.4	63.8	61.9	57.9
Nominal indicators						
Brent oil price, $/bl	29.4	44.2	61.4	61.6	64.8	64.6
Stabilization Fund, billion rubles	0.0	522.3	1266.9	1851.4	2608.0	3373.3
Cut-off price, $/bl	0.0	20.0	20.0	26.0	26.0	26.0
External debt service, $ billion	6.1	6.1	5.3	5.0	5.0	4.3
External debt repayment, $ billion	10.2	8.7	31.9	8.6	10.9	9.2

other energy resources. In addition, prices for other Russian export goods were growing too: for ferrous and nonferrous metals, organic fertilizers, and timber.

Let us consider the results of the forecast calculations. The main exogenous indicators impacting the dynamics of foreign trade and balance of payment are the dollar exchange rate, oil price dynamics, and the volume of energy resources export.

The dynamics of the main indicators of balance of payment is also closely connected with that of export and import in constant prices. It is noteworthy that a further deceleration of export growth rates is observed in the forecast period under the conservation of high import growth rates. The state of the main aggregates of balance of payment in the forecast period largely corresponds to the main tendencies in the trade balance formation. As for the export dynamics, it depends on the situation in world raw materials markets.

The aggregate cost estimate of oil export in 2006, according to our forecast, will be $92.9 billion, which is 15.5% higher than in 2005 ($80.4 billion). In 2007 and 2008, this growth will continue against the background of high world prices.

In 2006, the external surplus will increase by 23.9%, compared to the same indicator of 2005. In 2007, trade surplus will reach $171.1 billion. The tendency for the growth rates of trade surplus to decrease is noteworthy.

According to the cost estimate of foreign trade, the rapid growth of export relative to import will stop (Fig. 26).

As a result, import will cover export with a ratio of 1.91 in 2006, 1.85 in 2007, and 1.75 in 2008.

The balance of services in 2006 will be offset with a negative result. According to the forecast calculations, the relation of services export to the aggregate

$ million
78 382

44 181

9980
2000   2002   2004   2006   2008
                                    Year
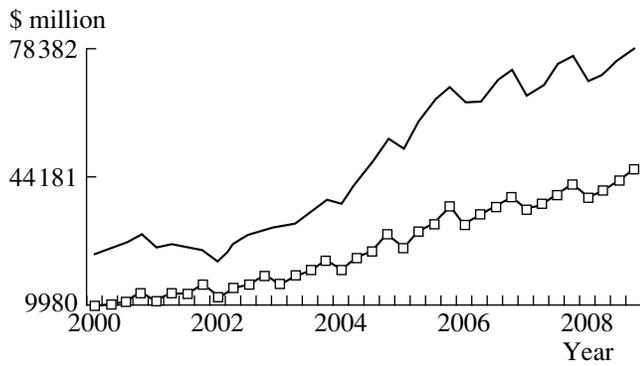
Fig. 26. Goods export (—) and import (–□–) dynamics.

export in the Russian economy will constitute 10.1% in 2006, 11.0% in 2007, and 11.1% in 2008. In the structure of services import, one can mention a tendency to increase the share of transport services under a certain reduction of the share of other services and a stable share of services within the "Trips" item.

The balance of investment incomes in 2006, as well as in previous years, will be negative.

Thus, the account balance of current transactions in the forecast period will be rather significant. Its share in the GDP will reach its maximum in 2006 (19.4%) and then will decrease to 17.2% in 2008.

In the structure of transactions with capital and financial instruments, a considerable increase of the economy's liabilities is noteworthy (Fig. 27).

It is also noteworthy that such high volumes of foreign borrowings were observed only before the crisis of 1998. However, those were mainly government borrowings. At present, considerable changes have taken place in the structure of liabilities, and the forecast dynamics may be acceptable for a developing country characterized by a stable economic and political situation.

High indicators of liabilities are comprised primarily of the increase in estimates within the "Banks" item and, above all, the "Nonfinancial Businesses" item. Private business rapidly increases borrowings from nonresidents, which is favored by the general increase of the world estimate of the state of the Russian economy.

The intensified activity of international nonfinancial businesses was also one of the main reasons for a considerable growth of international assets of the Russian economy (Fig. 28).

Private business propelled foreign assets. The growth of foreign assets of nonfinancial businesses is very rapid: from $33.6 billion in 2004 to $36.1 billion in 2005, $44.9 billion in 2006, $51.8 billion in 2007, and $54 billion in 2008. In the structure of business assets, direct and portfolio investments continue to prevail, covering up to one-third of the total asset growth.

As a result of the above behavior of the main aggregates of balance of payment, stably high and increasing values of changes in the economy's cur-

$ million
18 824

4002

–10 820
        1995   2000   2005   Year
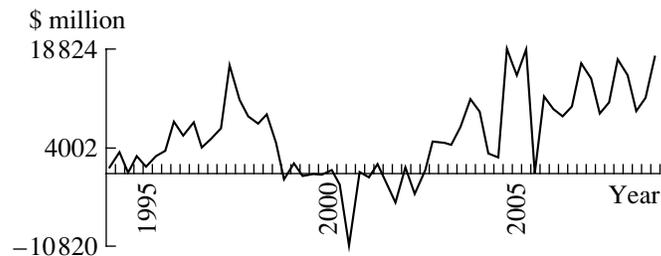
Fig. 27. The change in the economy's liabilities ("+" growth, "–" reduction).

$ million
9436

–4782

–19 000
        1995   2000   2005   Year
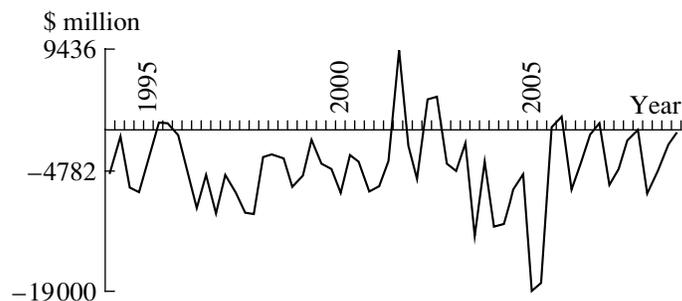
Fig. 28. The change in the economy's foreign assets ("+" growth, "–" reduction).
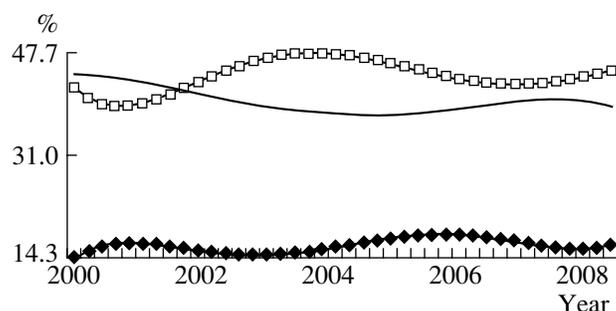
Fig. 29. The income-formation account structure (smoothed values): (—) the share of profit in the GDP; (–□–) the compensation share in the GDP; (–◆–) the share of taxes in the GDP.
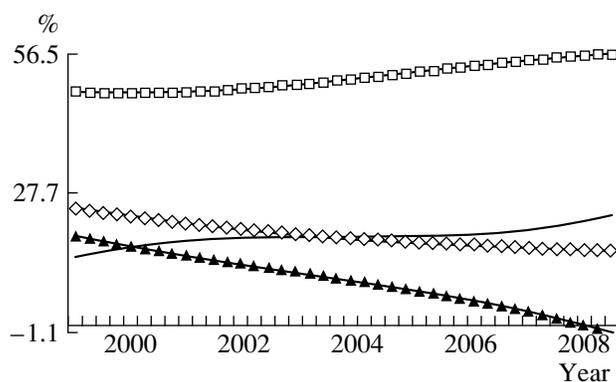
Fig. 30. The GDP structure (2003 comparable prices—smoothed values): (–▲–) the net export share; (—) the household consumption share; (–□–) the investment share; (–◇–) the public consumption share.

rency reserves are observed: from \$42.5 billion in 2004 to \$72.3 billion in 2005, \$112.2 billion in 2006, \$129.6 billion in 2007, and \$132.4 billion in 2008.

The net capital outflow by the balance of payment methodology is replaced by capital inflow, but this tendency will not be longstanding—by the end of 2006, capital outflow will recommence.

In conclusion, let us estimate the impact of changes in world oil prices on the main economic indicators.

The calculation results under this model show that an oil price increase by 1 dollar/barrel during one year in the conditions of 2006 will lead to the following changes in the resultant indicators:

—an oil export growth by 1.7% in US dollars;

—a goods export growth by 0.9% in US dollars; and

—an increase in the GDP by 0.1%.

Final demand and economic dynamics. Components of final demand and the GDP dynamics are final forecast characteristics, reflecting interactions between incomes, prices, and production proper. One should remember that owing to significantly different rates of changes of deflators, tendencies in the shifts

of nominal and real indicators of the GDP components significantly diverge.

For example, the forecast dynamics of the elements of income formation account shows a certain decrease in the compensation share of the GDP in 2006 and at the beginning of 2007 and an increase in the gross profit share (Fig. 29).

The share of household consumption and that of fixed capital accumulation in the structure of the GDP used (in the 2002 constant prices) preserve the stable tendency to growth, formed in recent years.

The graph below (Fig. 30) shows that the increase of the share of these components of the GDP used is balanced in the forecast period by the decrease of the share of government expenditures and net export.

This graph also shows that under the baseline scenario, net export in the 2002 comparable prices may become a negative value in 2008, which is explained not only by the specific price proportions in 2002 but also by the emerging physical dynamics of export and import described above.

The fundamental change in export dynamics is noteworthy in this respect. It is commonplace to say that the period of the rapid growth of production and
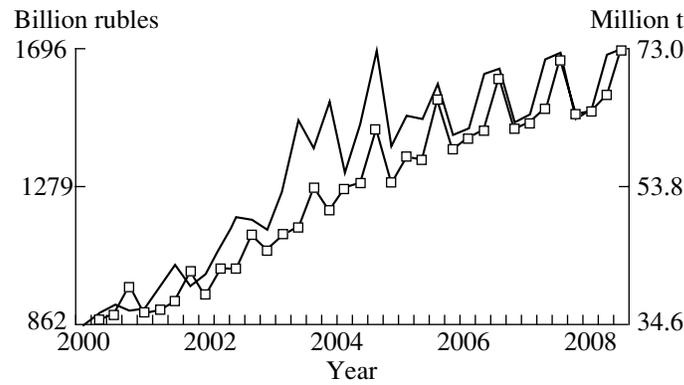
Fig. 31. The total export (left scale) and oil export dynamics: (–□–) export in 2003 prices; (—) oil export.
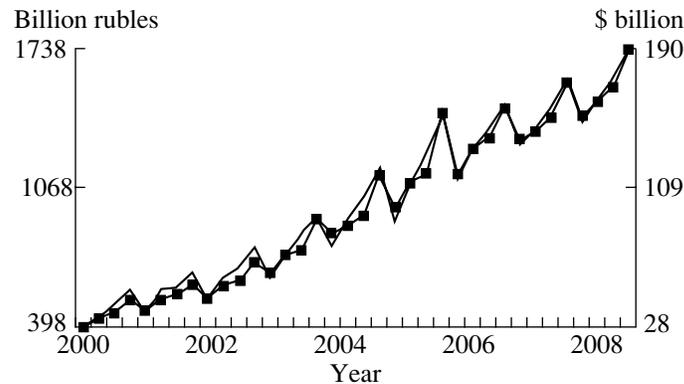
Fig. 32. The dynamics of import (—) in 2003 prices (left scale) and personal dollar incomes (–■–).

export of raw resources in Russia has finished. Taking into consideration that the favorable external situation ensured more than half of the 7% growth in the previous two years, one may expect a significant decrease in the total economic dynamics under the baseline scenario.

At the same time, a certain increase of the growth rates of government expenditures in 2005 compared to the same period of 2004 and a decrease of import growth rates under a high (even increased) dynamics of household consumption and accumulation did not allow the GDP growth rates to drop to less than 6%.

The future dynamics of export will largely depend on such exogenous parameters as the value of oil and gas export in kind, as well as on prices for these energy resources. The quarterly dynamics of the total export in comparable prices of 2002 and oil export in kind are presented in Fig. 31.

The future dynamics of import is affected both by external and internal factors (Fig. 32). At the same time, the dynamics of incomes in dollar actually reflecting the strengthening of the ruble, is decisive. In addition, it is obvious that import potentialities are largely determined by the economy's export incomes.

Despite the extraordinarily high growth rates of household consumption and fixed capital accumulation preserved in 2005, forecast estimates show that the economic dynamics will inevitably decelerate in 2006–2008 under the inertial (passive) economic policy. This is associated not only with the situation in the foreign trade market but also with the total decline in the growth rates in all components of final demand.

Even the growing scenario world oil prices cannot ensure a high dynamics of consumption under a sharp deceleration of the growth rates of personal loans and an increased tendency to make savings. The growth rates of household consumption decrease from 10.6% in 2005 to 7.6% in 2008.

Personal consumption remained the most powerful locomotive of the economic dynamics until recently. At the same time, the problem is that under a weak state-protection policy and excessive strengthening of the ruble, the growth of consumption expenditures favors the inflow of imported goods and, consequently, hinders the expansion of national production.
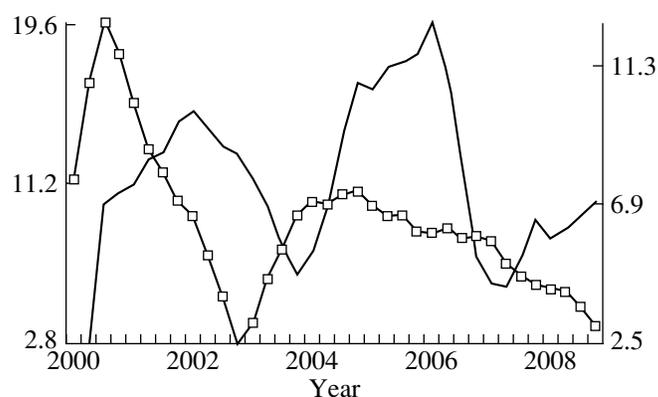
Fig. 33. The fixed capital accumulation (–□–) (left scale) and consumption (—) growth rates (for sliding annual totals), %.
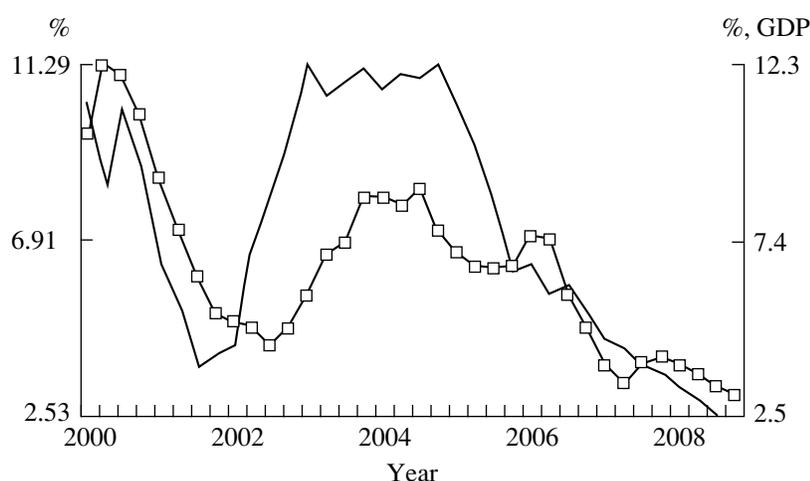
Fig. 34. The export (—) (right scale) and the GDP (–□–) growth rates (for sliding annual totals).

Only investments can help overcome the low competitiveness of the national economy. However, to all appearances, the investment market may "break down" already at the beginning of 2007.

The matter is that investment activity is ensured primarily by the total economic dynamics, whose deceleration provokes the deceleration of the investment growth, which even more decreases the possibilities of not only a long-term but also the current increase in production.

The graph below shows the growth rates of the sliding annual totals of household consumption and fixed capital accumulation (Fig. 33).

It is worth repeating that the role of export in the Russian economic dynamics of recent years was initiating.

Figure 34 shows that periods of GDP growth acceleration and deceleration clearly correlate with periods of export acceleration and deceleration.

The following conclusion arises in this respect: as long as Russia cannot increase nonprimary export, there will be no serious breakthrough in economic dynamics, growth quality, and the structural reconstruction of production.

Table 10. The dynamics of the GDP and its components in comparable prices of 2003, %

Indicator	2004–2005	2005–2006	2006–2007	2007–2008
GDP	6.3	4.8	3.3	2.5
Household consumption	11.7	5.2	5.2	6.2
Public consumption	2.4	0.6	1.5	1.5
Gross accumulation	10.3	9.2	7.8	5.7
Fixed capital accumulation	8.7	8.7	6.2	4.0
Export	6.6	5.6	4.0	2.5
Import	19.0	11.8	9.4	9.9

Table 11. The GDP structure in current prices, %

Indicator	2005	2006	2007	2008
Household consumption	47.02	45.41	47.03	48.43
Public consumption	17.83	17.61	17.69	17.63
Gross accumulation	19.99	20.35	21.22	21.86
Export	36.25	35.23	33.71	32.00
Import	21.10	19.61	19.64	19.92

Table 12. The GDP structure in constant prices of 2003, %

Indicator	2005	2006	2007	2008
Household consumption	53.73	54.00	55.04	56.98
Public consumption	17.37	16.60	16.31	16.15
Gross accumulation	22.09	23.13	24.16	24.93
Fixed capital accumulation	18.98	19.73	20.28	20.58
Export	37.08	37.28	37.53	37.52
Import	30.54	32.70	34.67	37.16

The fullest picture of the dynamics and structural shifts in the GDP in 2006–2008 is presented in summary Tables 10–12.

The most general conclusion from analyzing the forecast characteristics of development is that a passive economic policy, even under growing oil prices, does not ensure satisfactory results. The growth rates of household consumption and fixed capital accumulation decrease by about 6% annually. Since a sufficiently high dynamics of import (at 10% per annum) is preserved, the GDP growth in 2008 will reduce to 2.5%.