Scenarios of Social and Economic Development of Russian Economy in 2010–2012

Prerequisites

For the purpose of analyzing the stability of the budgetary system of the Russian Federation, the main three scenarios of development of internal and external economic processes in the mid-term prospect (the 2009-2012) are considered herein. The above period can be unambiguously defined as the period of exit from the crisis. It should be noted right away that in all the scenarios the main principles of the economic policy of the Russian government irrespective of the dynamics of economic indices, situation on foreign markets and the course of the election campaign in 2011 and 2012 are assumed to be unchanged.

The most probable scenarios include the following:

1. The scenario of inertial exit from the crisis;
2. The scenario of rapid exit from the crisis;
3. The scenario of delayed exit ("the second wave") from the crisis.

1. The Scenario of inertial exit from the crisis corresponds in its main preconditions to the base scenario of social and economic development of the Russian Federation developed by the Ministry of Economic Development of Russia as the basis of the draft federal budget of the Russian Federation in 2010 and planned for 2011 and 2012.

It is assumed, in particular, that the economies of the leading countries are likely to overcome the crisis in the year 2011, while in Russia due to its high dependence on global commodity markets the sustained economic growth may start even later. The adopted crisis exit strategies will ensure a smooth switchover (without a new distress) from the aggressive anti-crisis policy pursued by many states to a reduction of the debt burden accrued during the crisis and a "disposal" of nationalized capital assets and financial assets. In 2010, the global economic growth will not exceed 0.5–1% (mostly due to high growth rates in China, India, Brazil and other developing countries, while in the USA and the EU states growth rates are low, but positive), while in 2011-2012 it will amount to 2.5–3.0% a year. In other words, in the period under review the global economic growth will be slower than that which was observed prior to the 2008 crisis.

The forecast of smooth exit by the world's leading economies from the crisis without serious changes in the structure of the global economy made means that exchange rates of the world's leading currencies will remain practically unchanged. It is expected, in particular, that despite problems of some countries in the Euro zone (primarily in Greece, Spain and Portugal) the Euro currency will remain stable, and within the framework of this scenario the USD/Euro exchange rate is expected to be at the level of 1.35–1.4 in the 2010-2012 period.

Accordingly, oil prices on the world market will remain practically unchanged; additional demand in oil and petrochemicals due to economic growth in China and developing countries in the above period can be compensated by OPEC and other oil-producing countries' return to its former production volumes (since summer 2008 OPEC has repeatedly passed decisions on reduction of oil production quotas). As in the updated scenario prepared by the Ministry of Economic Development of Russia, it is assumed that in 2010 the price of oil (Urals) will amount, on average, to 65 USD/barrel, while in the 2011-2012 period, to 70 USD/barrel.

Due to the level of oil prices on the world market, there are no reasons to believe that new oil and gas fields in Russia are developed and put on production soon. It means that volumes of production and, probably, export of hydrocarbon materials from Russia will go down.

Though metals prices rose by 25-60% in the first six months of 2009 they will be below the pre-crisis level in the period under review. By the end of 2012, the growth in prices on ferrous and non-ferrous metal products is expected to be within the range of 10–15%. However, the situation in the Russian iron and steel industry is likely to improve as the global volume of demand (in physical terms) in metals will increase as compared to that which was observed at the end of 2008 and in 2009.

Stabilization in the financial sector of the world's leading economies with interest rates gradually rising there will result in a new stage of global invertors' activities in developing countries. However, it is believed that due to slow rate of economic recovery and weak trends in the leading international commodity markets a renewal of foreign capital inflow to Russia is only possible as late as 2011. In 2010, the influx of direct foreign investments will be compensated by Russian investors' greater activities in purchasing of such assets abroad as have fallen in price during the crisis, while new private loans are spent primarily on repayment of the existing debts. Thus, the net capital outflow from the private sector is expected to be followed by capital inflow only late in 2011 and 2012.

As regards domestic conditions and trends in development of the Russian economy, the scenario in question points to the prospect of rather slow exit from the crisis. It is evident that pre-crises indices (that is, those which prevailed prior to 2008) as regards the volume of real GDP, industrial output, investments in capital assets, retail sales, households' real income will not to be achieved by the end of 2012.

As regards the fiscal policy, the year 2009 and the year 2010 are expected to be rather difficult. With fixed expenditure of the federal budget remaining at the level determined in the draft federal budget in the year 2010 and planned for 2011 and 2012 and oil prices, within the range provided for in the scenario in question, the federal budget is likely to be in deficit in 2011 and 2012. As the Reserve Fund is only sufficient enough to cover the deficit of the federal budget till the end of the first half of 2010, the Ministry of Finance of Russia is expected to borrow actively both on the international capital market (in 2010) and the Russian capital market (throughout the entire period). Accordingly, in 2010 the above policy will permit to reduce somewhat capital flight from the Russian Federation. However, in any case a substantial pressure on interest rates is expected on the domestic market which situation holds back the demand by Russian private investors in borrowed ruble funds and, thus, slows down the renewal of the volume of investments in this country.

The forecasts stated herein regarding the level of prices on oil and metals are unlikely to ensure in the period under review a sustained current account surplus. Taking into consideration the forecast regarding changes in the capital flow balance, fast accumulation of international reserves by the Bank of Russia and respective issuing activity by it are not expected. If the budget deficit is financed on market terms it means that such a tough monetary policy is carried out as makes it possible to ensure a sustained reduction in the inflation rate to a single-digit value.

2. The scenario of rapid exit from the crisis. This scenario is partially similar to the "oil" scenario of the Ministry of Economic Development of Russia and is based on the idea of successful and fast implementation of crisis exit strategies in all the leading states. Under the scenario in question, in 2010 the global economic growth is expected to be at the level of at least 2.5% a year, while in the 2011-2012 period, at that of 3.5-4.5% a year. It means that the above indices will be close to the pre-crisis ones.

Such an explosive growth of the global economy is likely to trigger a new rise in prices on global commodity markets (both through expansion of the demand (in physical terms) and due to participants' growing expectations). It is believed that in the scenario in question oil prices in 2010 may grow to 80 USD/barrel (Urals), while in the 2011–2012 period, to 100 USD/barrel. By the end of 2012, prices on metals will go up by at least 15–30% on the mid 2009 level.

In such a situation, it is expected that (as in the first scenario provided that the fixed expenditure remains the same as in the federal budget passed by the law) the federal budget deficit will be observed only in the 2009-2010 period, while in the 2011–2012 period the federal budget is drawn up with a surplus again.

It is evident that the above scenario entails preservation of such main global structural problems, including those in the primary sector and financial sector as well as threats as existed before the crisis. However, it is believed that such threats (a new serious financial and economic crisis of the global economy) may only come true beyond the horizon of the period under review (after 2012).

Within the framework of the scenario in question, it is assumed that the existing global capital which is being withdrawn from low-income 'reliable' assets in developed countries will be more actively transferred (than in the case of the scenario of inertial exit from the crisis) to emerging markets, including Russia. As a result, as early as 2010 Russia may have a zero capital flight balance, while in the 2011–2012 period a double surplus of the balance of payments is likely to be observed again. Such a situation will result in nominal and actual appreciation of the ruble and slow reduction in the rate of inflation.

In our opinion, appreciation of the ruble, high nominal interest rates (because of the inflation rate) on loans in rubles as well as prevailing conservative expectations of Russian economic agents (in a situation where dependence on trends in the global market is becoming greater than before) do not permit to expect fast recovery of growth rates in the real sector to the pre-crisis level within the framework of the scenario in question. The main imbalances in the Russian economy which existed before the crisis will inhibit the rate of economic recovery despite high prices on hydrocarbon materials and other main Russian export commodities. However, in the period under review accelerated growth in GDP will be observed both in the global economy in general and in Russia, in particular, while negative trends may arise only after the year 2012.

3. The scenario of delayed exit from the crisis ("the second wave" of the crisis). Within the framework of that scenario, a downbeat development of both the global economy and the Russian economy is considered. The scenario in question is based on the idea that either the second wave of the crisis may arise in the global economy or some developments may cause greater uncertainty in the world (that is, provoke a new crisis). Such factors include the following:

1. Such mistakes in realization of the crisis exit strategy as were made by economic authorities of developed countries, for instance, a premature sharp increase in base interest rates, governments' inability to resist further build-up of the budget deficit and other;
2. Such hidden risks in the economy of the USA and Europe as may come into life: a further growth in the rate of unemployment, crisis in the commercial real property sector, new wave of writings-off by financial institutions of toxic assets and other;

3. Ceasing of the effect produced by fiscal stimulus measures in the economy of China which factor in a situation of stagnating demand may result in a dramatic slowdown of the Chinese economy with eventual adverse social and political implications to follow.

Irrespective of the specific factors behind the protracted crisis, under the scenario in question it is believed that recession of the global economy will be observed in 2010 as well, while in 2012 economic growth amounts to maximum 1.5–2%.

As regards the Russian economy, it means the following:

- Prices on Russian main export commodities will go down. In 2010 and 2011, price on oil (Urals) will drop to 40 USD/barrel, while in 2012 it does not exceed 50 USD/barrel. Metal prices will be at the level which prevailed in winter 2008–2009, that is, 30% below the level of the second half of 2009. Accordingly, irrespective of the price factor there are no factors behind an increase in the Russian export in physical terms;
- Russia like other developing countries will be considered as a zone of higher risks for global financial players. Accordingly, in 2010 and 2011 a negative capital flight balance will be observed (to finance the deficit of its federal budget the Russian Federation as a sovereign borrower will experience borrowing limitations on the foreign market as well), while in 2012 a zero balance as regards that component of the balance of payments is quite possible.
- It is unlikely that the Government of Russia is able to finance in full the declared nominal volumes of expenditure at the expense of domestic and foreign market borrowings. Due to the above, the balance of payments and the monetary and fiscal balance can be supported only through depreciation of the ruble nominal exchange rate.

The forecast of the dynamics of macroeconomic and financial variables, as well as indices of the federal budget of the Russian Federation are based on the structural econometric model of the Russian economy developed at the Institute for the Economy in Transition.

Calculations by the Scenario

It is to be noted that for the purpose of limitation of subjective interpretation of quality changes in the economy and behavior of economic agents (for instance, a dramatic change in expectations in a situation of a steep fall in oil prices, volatile nominal fluctuations of the exchange rate and other) and due to use of the academic economic and mathematical tools technique for quantitative estimation of the scenarios, such responsible and efficient behavior of economic agents as is impossible in practice is anticipated, that is, in each scenario such an equilibrium is received for those specific conditions of variables as is impossible in practice with the specified criteria set. It concerns, in particular, the scenario in which a fall in oil prices is anticipated.

The outputs of calculations of the main macroeconomic and financial indices for the above scenarios are shown in *tables 42–44*.

Table 42

The scenario of inertial exit from the crisis

	2007	2008	2009	2010	2011	2012
Oil price (Urals, USD/barrel)	72.52	93.9	60.7	65	70	70
Real GDP growth rate, %	8.10	5.60	–7.90	4.30	3.00	3.70
Nominal GDP (billion rubles)	33103	41256	39016	44142	48604	53675
GDP deflator, %	13.92	18.02	2.68	8.47	6.90	6.49
Nominal GDP (billion USD, at the average annual rate)	1295	1664	1232	1549	1736	1897
Growth rates of fixed investment, %	21.10	9.90	–16.20	–4.50	3.10	3.80
Rates of growth in households' real income, %	10.40	1.90	2.30	6.20	1.10	2.50
Rates of growth in real retail sales, %	15.20	13.50	–5.50	1.50	2.10	3.50
Federal budget revenues (% GDP)	23.50	22.48	18.80	17.00	16.50	16.20
Federal budget revenues (billion rubles)	7779	9276	7337	7504	8020	8695
Federal budget expenditure (% GDP)	18.07	18.35	25.34	22.40	19.32	18.04
Federal budget expenditure (billion rubles)	5983	7571	9887	9887	9390	9681
Surplus / deficit (–) of the federal budget (% GDP)	5.43	4.13	–6.54	–5.40	–2.82	–1.84
Balance of the Reserve Fund as of the year end (billion rubles)		4028	1831	0	0	0
Balance of the National Welfare Fund of the Russian Federation as of the year end (billion rubles)		2584	2769	2736	2848	2975
Export (billion USD)	354	472	303.3	321	338	344
Import (billion USD)	225	293	192.7	235	264	288
Trade balance (billion USD)	129	179	111	85	73	56
Current account balance (billion USD)		102	47.5	42	30	10
Capital account balance (billion USD)	72.3	–138.8	–45.2	–15.0	0.0	30.0
Balance of payments (billion USD)	173	–45	–3.4	16.5	25.3	40.3
Private sector' foreign debt (billion USD)	400	451.9	425.4	410.4	410.4	440.4
Private foreign debt/GDP ratio, %	30.9	27.2	34.5	26.5	23.6	23.2
International reserves of the Central Bank of Russia (billion USD)	476	427	439.0	466	496	536
Change in the USD/Rb nominal exchange rate, %	–5.93	–3.01	27.74	–10.04	–1.75	1.07
Nominal Rb/USD exchange rate (Rb/USD)	25.57	24.80	31.68	28.50	28.00	28.3
Euro/USD exchange rate (USD/Euro)	1.371	1.468	1.39	1.35	1.4	1.4
Nominal RUR/Euro exchange rate (Rb/Euro)	35.06	36.41	44.13	38.48	39.20	39.62
Bicurrency basket exchange rate (Rb)	29.84	30.02	37.28	32.99	33.04	33.39
Change in real effective ruble exchange rate, %	4.20	5.10	–5.60	8.92	3.74	2.53
Index of real effective ruble exchange rate (June 1998 = 100)	112.7	118.5	111.9	121.8	126.4	129.6
Interest rate on loans in rubles (% annually)	10.0	12.2	15.3	9.7	8.0	7.8
Growth rates of consumer price index, %	11.9	13.3	8.8	7.4	6.9	6.6
Wide monetary base (as of the year end (billion rubles)	5513	5579	6467	7406	8423	9551
Growth rates of wide monetary base, %	33.74	1.19	15.93	14.51	13.74	13.39
M2 as of the year end (billion rubles)	13272	13493	15698	17989	20576	23453
M2 growth rates, %	47.54	1.67	16.34	14.60	14.38	13.98
Money multiplier	2.41	2.55	2.43	2.43	2.44	2.46
Monetization of GDP (M2/GDP) , %	40.1	32.7	40.2	40.8	42.3	43.7

Table 43

The scenario of rapid exit from the crisis

	2007	2008	2009	2010	2011	2012
Oil price (Urals, USD/a barrel)	72.52	93.9	60.7	80	100	100
Real GDP growth rate, %	8.10	5.60	–7.90	5.50	4.20	3.20
Nominal GDP (billion rubles)	32987	41668	39016	45024	50434	55739
GDP deflator, %	13.53	19.62	1.67	9.38	7.50	7.09
Nominal GDP (billion USD, at the average annual rate)	1290	1680	1232	1637	1889	2152
Growth rates of fixed investment, %	21.10	9.80	–16.20	–1.30	5.50	6.80
Rates of growth in households' real income, %	10.40	6.50	2.30	6.50	2.00	3.00
Rates of growth in real retail sales, %	15.20	11.00	–5.50	2.10	3.50	4.30
Federal budget revenues (% GDP)	23.58	22.26	18.80	17.70	17.00	16.50
Federal budget revenues (billion rubles)	7779	9276	7337	7969	8574	9197
Federal budget expenditure (% GDP)	18.14	18.17	25.34	21.96	18.62	17.37
Federal budget expenditure (billion rubles)	5983	7571	9887	9887	9390	9681
Surplus / deficit (–) of the federal budget (% GDP)	5.44	4.09	–6.54	–4.26	–1.62	–0.87
Balance of the Reserve Fund as of the year end (billion rubles)		4028	1831	0	0	0
Balance of the National Welfare Fund of the Russian Federation as of the year end (billion rubles)		2584	2769	2703	2803	2879
Export (billion USD)	354	472	303.3	360	412	419
Import (billion USD)	225	293	192.7	253	299	351
Trade balance (billion USD)	129	179	111	107	114	68
Current account balance (billion USD)		102	47.5	63	71	22
Capital account balance (billion USD)	72.3	–138.8	–45.2	0.0	20.0	40.0
Balance of payments (billion USD)	173	–45	–3.4	53.1	85.7	61.8
Private sector' foreign debt (billion USD)	400	451.9	425.4	425.4	445.4	485.4
Private foreign debt/GDP ratio, %	31.0	26.9	34.5	26.0	23.6	22.6
International reserves of the Central Bank of Russia (billion USD)	476	427	439.0	502	593	655
Change in the USD/Rb nominal exchange rate, %	–5.93	–3.01	27.74	–13.19	–2.91	–3.00
Nominal RUR/USD exchange rate (Rb/USD)	25.57	24.80	31.68	27.50	26.70	25.9
Euro/USD exchange rate (USD/Euro)	1.371	1.468	1.39	1.35	1.4	1.4
Nominal RUR/Euro exchange rate (Rb/Euro)	35.06	36.41	44.13	37.13	37.38	36.26
Bicurrency basket exchange rate (Rb)	29.84	30.02	37.28	31.83	31.51	30.56
Change in real effective ruble exchange rate, %	4.20	5.10	–5.60	12.92	5.52	7.20
Index of real effective ruble exchange rate (June 1998 = 100)	112.7	118.5	111.9	126.3	133.3	142.9
Interest rate on loans in rubles (% annually)	10.0	12.2	15.3	10.6	8.5	8.6
Growth rates of consumer price index, %	11.9	13.3	8.8	8.3	7.5	7.2
Wide monetary base (as of the year end (billion rubles)	5513	5579	6467	7919	9158	10742
Growth rates of wide monetary base, %	33.74	1.19	15.93	22.45	15.64	17.30
M2 as of the year end (billion rubles)	13272	13493	15698	19234	22383	26377
M2 growth rates, %	47.54	1.67	16.34	22.53	16.37	17.84
Money multiplier	2.41	2.55	2.43	2.43	2.44	2.46
Monetization of GDP (M2/GDP) , %	40.2	32.4	40.2	42.7	44.4	47.3

Table 44

The scenario of delayed exit from the crisis

	2007	2008	2009	2010	2011	2012
Oil price (Urals, USD/barrel)	72.52	93.9	60.7	40	50	50
Real GDP growth rate, %	8.10	5.60	–7.90	–4.10	2.00	2.20
Nominal GDP (billion rubles)	32987	41668	39016	40965	44709	48797
GDP deflator, %	13.53	19.62	1.67	9.48	7.00	6.79
Nominal GDP (billion USD, at the average annual rate)	1290	1680	1232	1241	1424	1569
Growth rates of fixed investment, %	21.10	9.80	–16.20	–8.70	–1.90	0.80
Rates of growth in households' real income, %	10.40	6.50	2.30	2.10	0.50	1.70
Rates of growth in real retail sales, %	15.20	11.00	–5.50	–0.50	–1.40	–0.30
Federal budget revenues (% GDP)	23.58	22.26	18.80	15.80	15.50	15.00
Federal budget revenues (billion rubles)	7779	9276	7337	6472	6930	7319
Federal budget expenditure (% GDP)	18.14	18.17	25.34	24.14	21.00	19.84
Federal budget expenditure (billion rubles)	5983	7571	9887	9887	9390	9681
Surplus / deficit (–) of the federal budget (% GDP)	5.44	4.09	–6.54	–8.34	–5.50	–4.84
Balance of the Reserve Fund as of the year end (billion rubles)		4028	1831	0	0	0
Balance of the National Welfare Fund of the Russian Federation as of the year end (billion rubles)		2584	2769	2949	3017	3120
Export (billion USD)	354	472	303.3	245	278	282
Import (billion USD)	225	293	192.7	169	202	226
Trade balance (billion USD)	129	179	111	76	76	55
Current account balance (billion USD)		102	47.5	32	33	9
Capital account balance (billion USD)	72.3	–138.8	–45.2	–35.0	–10.0	5.0
Balance of payments (billion USD)	173	–45	–3.4	–12.5	18.3	14.3
Private sector' foreign debt (billion USD)	400	451.9	425.4	390.4	380.4	385.4
Private foreign debt/GDP ratio, %	31.0	26.9	34.5	31.4	26.7	24.6
International reserves of the Central Bank of Russia (billion USD)	476	427	439.0	437	460	474
Change in the USD/RUR nominal exchange rate, %	–5.93	–3.01	27.74	4.17	–4.85	–0.96
Nominal RUR/USD exchange rate (Rb/USD)	25.57	24.80	31.68	33.00	31.40	31.1
Euro/USD exchange rate (USD/Euro)	1.371	1.468	1.39	1.35	1.4	1.4
Nominal RUR/Euro exchange rate (Rb/Euro)	35.06	36.41	44.13	44.55	43.96	43.54
Bicurrency basket exchange rate (Rb)	29.84	30.02	37.28	38.20	37.05	36.70
Change in real effective ruble exchange rate, %	4.20	5.10	–5.60	–4.05	7.00	4.86
Index of real effective ruble exchange rate (June 1998 = 100)	112.7	118.5	111.9	107.3	114.8	120.4
Interest rate on loans in rubles (% annually)	10.0	12.2	15.3	12.4	10.7	10.8
Growth rates of consumer price index, %	11.9	13.3	8.8	8.4	7.0	6.9
Wide monetary base (as of the year end (billion rubles)	5513	5579	6467	6599	7292	8098
Growth rates of wide monetary base, %	33.74	1.19	15.93	2.04	10.49	11.06
M2 as of the year end (billion rubles)	13272	13493	15698	16049	17862	19967
M2 growth rates, %	47.54	1.67	16.34	2.24	11.30	11.79
Money multiplier	2.41	2.55	2.43	2.43	2.45	2.47
Monetization of GDP (M2/GDP) , %	40.2	32.4	40.2	39.2	40.0	40.9

In case of **the scenario of inertial exit from the crisis,** the received quantitative values of the dynamics of the main indices of the social and economic development of Russia and those of the monetary field point to the fact that positive rates of growth in real GDP will not exceed 3.5–4.5% until the end of 2012. The higher rates of growth in real GDP (4.3%) are observed in 2010 (to a great extent due to a lower base in 2009), however, the economic growth will slow down later. By the end of 2012, the real GDP of Russia will exceed the 2008 level by the mere 2.5%. At the same time, with the growth of the ruble real exchange rate and decline of the population of the Russian Federation taken into account per capita GDP in Russia (at the current rate) will exceed the 2008 level by 15–20% in 2012.

Renewal of the economic growth is ensured both by stable oil prices within a range that is comfortable for the Russian economy and a renewed influx of foreign capital to Russia which situation permits financing Russian companies' investment needs.

According to the forecast, in the 2010-2011 period growth of the domestic consumer demand will lag behind investment activities. It can be explained by the fact that unlike the situation which prevailed before the 2008-2009 crisis the level of employment in the economy is expected to go down as industries in the period of exit from the crisis seek to raise labor efficiency by reducing the number of their personnel or hiring new workers at a slow rate, and, thus, increase production capacities. In our opinion, substantial growth of demand in labor and, as a consequence, growth of real wages and consumer activities is possible only starting from the year 2012.

At the same time, in the 2010-2011 period households' real wages will not only be preserved, but also increase by 8.3% which situation is related to a substantial growth in pensions and households' savings.

Though oil prices are expected to be at a quite "comfortable" (but not high enough) level (it will not cause a currency or financial crisis) the situation in public finances within the framework of the scenario in question remains rather complicated. With the above precondition regarding preservation of fixed expenditure of the federal budget in the amount determined by the Federal Law on the Federal Budget in the Year 2010 and Planned for 2011 and 2012 Period observed, the federal budget will remain in deficit within the entire period under review. The Reserve Fund is sufficient enough to finance the federal budget deficit only in 2010.

As resources from the National Welfare Fund are not expected to be used for financing the budget deficit, accumulations in the National Welfare Fund will amount to 6–6,5% of GDP.

An important condition of renewal of both positive growth rates of investments (in real terms) in capital assets and real growth of GDP is a return by Russian companies and banks to the international capital market, as well as maintaining of sustained influx of direct foreign investments to the Russian Federation. According to the calculations, to ensure the preset rates of growth in investments a sustained net influx of foreign capital to Russia should begin not later than in the second half of 2011 and it should be in the amount of up to 15-20 billion rubles a year.

It is to be noted that in the period under review growth in negative balance of the services account, as well as factor payments and interest payments is anticipated. Accordingly, in the 2011–2012 period reduction in the current account surplus of the Russian Federation to USD 10-30 billion is expected.

As it is believed that in switching over to the inflation targeting regime the Central Bank of Russia will reduce its participation in the foreign exchange market the international reserves of the Bank of Russia will grow rather slowly. By our estimate, by the end of 2012, the volume of such reserves will amount to USD 530–540 billion, which value is below the maximum level registered in the 2007–2008 period.

The balance of payments surplus in the period till the year 2012 will ensure stability of the ruble exchange rate to the currency basket (preservation of the USD/Euro ratio in the bicurrency basket at the level of 0.55: 0.45 is expected). Changes in exchange rates of USD and

Euro to the ruble are determined mainly by a change in mutual quotations of the reserve currencies on the international market. Growth in volatility of the ruble exchange rate to USD and Euro as a result of weakening of the Bank's of Russia impact on the exchange rate has no effect on the overall annual values of the exchange rate as alternate fluctuations offset one another.

At the same time, reduction in the annual growth rate of the consumer price index to 6.5–7.0% will permit to slow down to a great extent the rates of real appreciation of the ruble. In particular, by the end of 2012 the real effective ruble exchange rate will appreciate by maximum 10% and 17% on the figure registered at the end of 2007 and that at the end of 2008, respectively. Accordingly, the positive dynamics of Russian export volumes is expected to be preserved in a situation of stagnating prices on raw materials on international markets. Imports will grow faster than exports throughout the entire period under review. However, due to a lower level of consumer activities import volumes in 2012 are unlikely to exceed the 2008 record high figures.

The model suggests serious changes in the monetary field of the Russian economy. Firstly, as was stated above the model points to a substantial reduction (below the double digit value) in the rate of inflation to 6.5–7.0%.

Secondly, change in the regime of the Bank's of Russia monetary policy means that the Bank of Russia will be more active on the government securities market (it can be explained by the fact that apart from resources from the Reserve fund and external borrowings the Bank of Russia will need more funds to finance the federal budget deficit), in refinancing commercial banks against securities it will acquire in its portfolio (for instance, corporate bonds) and in provision of long-term secured loans (with a maturity of minimum one year) to commercial banks.

Change in the main methods of the monetary authorities' policy is to result in growth in real interest rates in the economy. In the 2010–2012 period, the real interest rate on loans (with a maturity of up to one year) to non-financial private sector will be within the range of 1.5–2.0%. Meanwhile, the money multiplier (the ratio of M2 to the reserve funds) is anticipated to be preserved at the current level of around 2.45. In other words, in the period under review no such active growth in credit expansion of the banking sector as was observed prior to the 2008 crisis is expected.

Summing up the outputs of the analysis of **the scenario of inertial exit from the crisis**, it is important to point out its specific features which are as follows:

1. Renewal of the volume of real GDP and investments (in real terms) in capital assets up to the pre-crisis level is possible only at the end of 2012.
2. Ensuring of such volumes of investments in capital assets as would be relevant to the respective GDP growth is possible in as situation of stable oil prices in the range of at least 60-65 USD/barrel and in case of return by Russian companies to the international capital market.
3. Mandatory switchover to new mechanisms that ensure the Central Bank's of Russia money supply is required as well as growth in real value of money in the economy.
4. Factors behind the federal budget deficit still prevail; the Reserve Fund will be spent up completely, while accumulations in the National Welfare Fund grow at a very low rate.
5. The inflation rate will substantially go down in a situation where the real effective ruble exchange rate slowly appreciates and the money supply and monetization of the Russian economy grow fast.

Taking into account the actual situation in the first quarter 2010, **the scenario of rapid exit from the crisis** is quite probable though the scenario of inertial exit from the crisis has been selected as the base one so that direct comparisons against the scenario of the Ministry of Economic Development of Russia and federal forecasts for 2010 and 2012 could be made.

Increase in average prices on oil (Urals) to 80 USD/barrel in 2010 and 100 USD/a barrel in the 2011–2012 period (in the fourth quarter 2009 and the first quarter 2010 oil prices amounted to about 70–75 USD/barrel) will permit the Russian economy to grow by 5.5% as early as 2010, while in the 2011–2012 period growth in real GDP is to amount to 3.5–4.5% a year (though growth rates will eventually slow down). By the end of 2012, real GDP will be 5% higher than that in 2008. In 2012, per capita GDP (expressed in USD at the prevailing exchange rate) will increase up to USD 15,000, that is, a 20–25% increase on the 2007 figure.

As regards dynamics of investments in capital assets, households' real income and retail sales, the scenario in question does not differ much by the main trends from that of inertial exit from the crisis, however, in the 2010–2011 period the overall growth rates of all the indices will be substantially higher.

Under this scenario, despite higher prices on international commodity markets, the federal budget revenues are insufficient for the planned expenditures to be financed in full, either. In the 2011–2012 period, the federal budget deficit will decrease to about 1–1.5% of GDP, however, replenishment of the Reserve Funds will not take place even in a situation of higher prices on oil (100 USD/barrel).

A favorable foreign economic situation within the framework of the scenario in question permits to ensure stability of the balance of payments of the Russian Federation. Throughout the entire period under review, the balance of payments as well as its both components are in surplus. In particular, the balance of payments is in the range of USD 70–90 billion a year, while the annual influx of private capital to the Russia amounts to USD 55 billion.

Under the scenario in question, the Bank of Russia cannot escape a substantial growth in international reserves as result of a return to the policy of containment of ruble nominal appreciation. Thus, by the end of 2012 international reserves of the Bank of Russia will amount to USD 650–660 billion and surpass the 2008 level.

In the в 2010–2012 period, the nominal Rb/USD exchange rate will appreciate to 26.0–27.0 rubles for a USD, that is, a 15-20% increase on the level registered at the end of 2009. At the same time, though the inflation rate (according to the consumer price index) keeps going down it is still higher (7.0–7.5%) than that in the scenario of inertial exit from the crisis. As a result of that, there will be a sustained real appreciation of the ruble, and by the end of 2012 the real effective exchange rate of ruble will exceed by nearly 25% the 2008 level.

As in the scenario in question the Central Bank of Russia is expected to switch over to the inflation targeting regime and use of interest rates as a main operating instrument (though a particular attention will still be paid to the foreign exchange market), the real value of money in the economy will grow as well. By our estimate, the real interest rate on loans with a maturity of one year to the non-financial sector will amount to 1.5–2.0%. At the same time, monetization of the economy will increase to 47.3% of GDP.

Thus, the main difference between **the scenario of rapid exit from the crisis** from that of **inertial exit from the crisis** is as follows:

1. The scenario in question is closer both to the actual situation which was observed in the past two quarters and current trends than that of inertial exit from the crisis;
2. Renewal of the real volume of GDP and investments in capital assets is faster;

3. There is a favorable situation as regards the balance of payments and its components as well as fast accumulation of international reserves;

4. The federal budget remains in deficit, and there are no accumulations in the Reserve Fund;

5. The inflation rate goes down slowly, while the ruble exchange rate appreciates fast in a situation of higher growth rates of money supply and monetization of the Russian economy;

6. The central Bank of Russia has a limited potential to carry out a switchover to the inflation targeting regime. It has to pay more attention to the situation on the foreign exchange market.

Under **the scenario of delayed exit from the crisis**, negative growth rates of investments in capital assets still prevail in the 2010–2011 period, while in 2012 they slightly exceed the zero level (0.8%). Real GDP decreases in 2010 (a 4.1% decrease), however, in the 2011–2012 period there is positive growth in real GDP (around 2% a year) due to the effect of a low base (on the basis of the results in 2009-2010 period) and adjustment of the Russian economy both to lower prices on oil and lower real ruble exchange rate. Thus, by the end of 2012 the real GDP will be nearly 10% lower than that in 2008.

Calculations within the framework of the scenario in question point to the fact that with oil prices below 50 USD/ a barrel (Urals) consumer activities will keep decreasing up to the year 2012 included which situation precludes to a great extent a renewal of positive GDP growth rates. Some growth in households' real income (by 0.5–1.5% a year) can be explained by increase in social transfers from the budget and wage indexation in the public sector.

The federal budget deficit does not drop below 4.5% of GDP which factor poses a serious threat to stability of the entire financial system of the Russian Federation. It is believed that with given oil prices there is still limited potential to finance the federal budget deficit through external financing, while domestic borrowings in the amount of up to 15% of GDP create within a period of three years a situation which is similar to that in the 1996–1998 period where the government securities market virtually became a financial pyramid and the only market which attracted capital inside Russia. Thus, as regards the fiscal policy the scenario in question points to the fact that the main parameters of the federal budget expenditure need be reviewed for the sake of fiscal stability.

Under the scenario in question, the net private capital flight from Russia is observed up to 2012. Thus, the balance of payments surplus can be ensured only by an increase in the current account surplus which factor with the given oil prices suggests a reduction in imports through depreciation of the ruble exchange rate.

By our estimate, if the Bank of Russia gives up the idea of active interventions on the foreign exchange market (within the limits of a switchover to inflation targeting regime) stabilization of the balance of payments is possible with a nominal devaluation of the ruble to the level which was observed in the first half of 2009 (that is, 37–38 rubles for the bicurrency basket). It is to be noted that the model does not take into account possible "swings" in the exchange rate, and greater fluctuations towards depreciation of the ruble exchange rate are quite possible within each year limits. The model points to the fact that in 2012 some nominal appreciation of the ruble is possible, however, it will still be 5–10% below the level registered at the end of 2009.

Under the scenario in question, the inflation rate remains quite high, that is, in the range of 7.0–8.5%, as the Bank of Russia (even after it has minimized its participation in the foreign exchange market) is unable to give up both support to the banking system and indirect financing (through operations on the secondary market) of the federal budget deficit. In addition to the above, the exchange rate will have an impact on the prices. Thus, the model points to the fact that nominal depreciation of the ruble will be completely offset by inflationary pressure, while by 2012 the real effective ruble exchange rate remains at the 2008 level.

In a volatile situation, the precondition regarding use by the Bank of Russia of interest rates as the main instrument results in growth in real value of the money in the economy. By our estimate, under the scenario in question the real interest rate on bank loans will not fall below 4%. Accordingly, banks' lending activities will be low, while monetization of GDP remains at the level of 40% of GDP.

Summing up the outputs of the analysis of **the scenario of delayed exit from the crisis**, it is to be noted that in the scenario in question the Russian Federation is not expected to exit from the crisis in 2010–2012 period which can be characterized as a period of protracted stagnation. Though the year 2012 is characterized by some positive developments it is a turning point from stagnation to growth, while the period of sustained growth may begin starting from 2013 provided that relevant external scenario conditions are in place.