

# CASE Network Studies & Analyses

## Macroeconomic Preconditions of the Realization of a New Growth Model

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## **Abstract**

The model of the Russian economy that was formed in the 2000s does not match a new stable growth path, though it helped to calmly overcome the crisis of 2008 and 2009. The state needs to provide stability in the fields under its direct control, i.e. the budgetary and monetary policies. In the budgetary policy we consider the advantages and drawbacks of a “New Budget Rule”, which is based on the long-term average price of oil. In the monetary sphere, we vote for a policy of transition to inflation targeting and prioritizing low inflation against the other goals of the monetary authorities.

This article has drawn upon materials which contributed to the revision of the Conception for the Long Term Socio-Economic Development of the Russian Federation for the period to 2020” (“Strategy 2020”). The Russian version of this paper was published in “*Ekonomicheskaya politika*”. 2012, № 9

## **Introduction**

At present, the Russian and global economies are experiencing tough times. Although the acute phase of the 2007-2009 crisis is over, the global economy continues to be beset by a number of fundamental imbalances. Apart from the 'exit strategies' chosen by developed countries, this situation has given rise to some serious new problems associated with the impossibility of properly balancing the state budgets, stabilizing public debt and launching mechanisms for economic growth stimulation. The unstable growth in developed economies may cause a decline in the growth rate of leading developing countries; in 2012, the growth rate of China's and India's economies slowed.

Russia entered the 2007-2009 global economic crisis with good macroeconomic indicators: in 2000-2008, its average annual real GDP growth rate was 7%, the federal budget surplus rose to 7% of GDP, its government debt was less than 15% of GDP, and its banking and financial sectors were rapidly developing. However, over the entire 2000-2010 decade, the Russian economy faced growing internal problems temporarily camouflaged by the high revenues resulting from a very favorable situation on external raw materials markets.

These problems included:

- the national economy's growing dependence on the prices of oil and other Russian raw material exports. It should be specifically pointed out that this dependence was increasing not only with regard to hard-currency revenues from exports, but also with regard to their influence on the expectations of economic agents and on consumer attitudes in Russia;

- the rapid strengthening of the real exchange rate of the ruble and the rising costs of production. Despite pursuing a quasi-fixed exchange rate regime, the RF Central Bank did not manage to successfully resist the upward trend displayed by the real exchange rate of the ruble. The absence of competition on the labor market further accelerated the upward trend in wages (in 2004-2007, the average annual growth rates of the real incomes of the population amounted to as much as 11.9%);

- the pattern of economic growth in Russia, as well as in the majority of other countries during that period, which was based on expanding consumer demand and on the consumer credit boom that was taking place against the background of a low level of savings in the economy. The lack of internal private savings forced Russian companies and banks to

attract external credits. As a result, by autumn 2008, the external debt of Russia's private sector had risen to almost 40% of GDP;

— the stable rise in the population's welfare coupled with good macroeconomic indicators. This situation did not create stimuli for the urgently needed institutional reforms; the quality of Russia's business and investment climate steadily deteriorated.

During the 2008-2009 crisis, these factors exacerbated the negative impact of external shocks<sup>1</sup>, thus making the economic downturn in Russia one of the most severe in the world. However, the 'safety cushions' created before the crisis in the budget field (the Reserve Fund; Russia's development institutions) and the monetary sphere (the international reserves of the Bank of Russia)<sup>2</sup> enabled Russia to pursue a sufficiently effective anti-crisis policy<sup>3</sup> and to avoid serious social shocks. As early as the end of 2011, the majority of indicators had returned to their pre-crisis peak levels.

However, the prospects for further development of the Russian economy seem very uncertain. The global economy is engulfed in a severe systemic crisis, and so nobody actually knows when economic recovery will occur. Pervasive uncertainty about the future increases the price volatility of Russian oil and other raw material exports, which the Russian economy remains highly dependent upon. Apart from the internal problems of the development of the Russian economy mentioned above, in the next few years Russia will be faced with a number of new negative trends in its economic situation, including:

- the worsening of the demographic situation, related to a decline in the share of able-bodied people as a percentage of its total population;
- the strengthened economic position of state-owned companies and banks, whose business efficiency is low even by Russian standards
- the lack of sufficient access to world capital markets (enjoyed by other developing countries);

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<sup>1</sup> Beside the shocks related to the fall in oil prices (which was very considerable owing to the low short-term price elasticity of demand for energy carriers) and the fact that the global financial market had been effectively shut for developing country borrowers, there existed yet another external factor which determined the extent of the economic downturn in Russia. The factor in question is the decline in the physical volume of demand for investment goods and primary processed raw products in developed countries. This decline in demand caused an immediate profound slump in the export-oriented branches of Russian industry, including ferrous and nonferrous metallurgy, the petrochemical industry, the timber and timber-processing industries, etc.

<sup>2</sup> From a microeconomic point of view, the Reserve Fund should not be contrasted with the international reserves, because the resources of the Reserve Fund constitute part of the international reserves of the Bank of Russia. However, from an institutional point of view, it is quite reasonable to draw a distinction between the Reserve Fund and the international reserves, because decisions concerning their management are made by two different bodies (the RF Ministry of Finance and the RF Central Bank, respectively) in accordance with different legislatively established procedures.

<sup>3</sup> For more details, see Drobyshevsky et al., 2011.

— the increasing fiscal pressures associated with the budget commitments assumed during the crisis<sup>4</sup>;

— the worsening of extraction conditions for energy resources and other mineral resources.

In principle, it would be impossible for Russia to overcome these numerous problems within the framework of the pattern of economic growth that was established in the early 2000s. 'The Strategy of Socio-Economic Development of the Russian Federation for the Period up to the Year 2020' ('Strategy-2020')<sup>5</sup>, developed in 2011 by the expert community at the initiative of the RF government, has offered, in fact, a new model of economic growth based on the promotion of macroeconomic stability, the de-stratification of the economy, and a 'new social policy' (oriented towards increasing the level of human capital development). In the present paper, we are not going to discuss the new model of growth in detail, focusing instead on just one of its aspects – the creation of appropriate conditions for its implementation.

## 1. The Criteria of Macroeconomic Stability:

### 1.1. International Experience and Russia's Specificities

As regards creating a national policy aimed at the creation of macroeconomic conditions that would ensure the stable and continual development of an economy, one should focus on two crucial policy fields – the budgetary and monetary policies. In the majority of countries, the requirements for macroeconomic stability in the field of budgetary policy are confined to the introduction of a rule regulating the adoption of state budget decisions, while those in the field of monetary policy – to the setting of the monetary policy targets of the central bank.

In economically developed countries, the *budget rule* usually sets a ceiling for the state budget deficit and/or on the country's public debt. In accordance with the Maastricht criteria, Eurozone member-countries must keep a tight rein on their budget deficit and total public debt. In the USA, the total public debt is subject to a statutory limit; since the autumn of 2011,

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<sup>4</sup> On the eve of the 2008 crisis, in a period of exceptionally favorable conditions for overseas trade, which was also a high growth era for the Russian economy, Russia's federal budget expenditure amounted to approximately 18% of GDP, while general government expenditure amounted to slightly less than 34% of GDP. As a result of the implementation of the package of anti-crisis budget measures in 2009, federal budget expenditure rose to 24% of GDP, while general government expenditure increased to 40.8% of GDP. By now, expenditure (of both budgets) has dropped by approximately 2.5-3.0 p.p. of GDP, but it is still 3-4 p.p. of GDP higher than its pre-crisis level.

<sup>5</sup> For more details, visit Strategy-2020's website, [www.2020strategy.ru](http://www.2020strategy.ru).



a debt-ceiling law has also been in effect in Spain (as an integral part of Spain's Constitution). In primary-commodity-exporting countries, budget rules are usually based on the overtime redistribution of revenues from exports (via stabilization funds).

In the field of *monetary policy*, in addition to the level of inflation, the criteria of stability include the dynamics of the nominal exchange rate of the national currency and the level of interest rates.

We believe that the most precise, thorough, and accurate criteria of macroeconomic stability are the Maastricht criteria, notwithstanding the currently adverse situation in the Eurozone and the near universal abandonment of these criteria by European countries immediately after adopting the euro. In our opinion, these criteria fully reflected all of the necessary requirements concerning the economic policy of euro-candidate countries and Eurozone members, and it is their violation (in the absence of any effective punishment instruments) that is the cause of the deep crisis being experienced by Europe.

In the field of budgetary policy, as has already been pointed out, the Maastricht criteria set a ceiling for the state budget deficit (no more than 3% of GDP) and the level of public debt (no more than 60% of GDP). As regards the field of monetary policy, these criteria do not set any strict quantitative limits on the level of inflation and interest rates. The level of inflation in a given country should not exceed by more than 1.5 p.p. the average inflation level of the three best performing member-countries of the European Monetary System (EMS) in terms of price stability. Long-term interest rates on ten-year bonds issued by a country should not exceed by more than 2 p.p. the average of the three best performing EMS member-countries in terms of price stability. Also, Eurozone candidates have to comply with the following requirements to the movement of the nominal exchange rate: participation in the European Exchange Rate Mechanism II for a minimum of two years and a stable exchange rate *vis-à-vis* the euro (with a fluctuation margin no greater than +/-15%).

When elaborating similar criteria of macroeconomic stability for Russia, the specific features of its economy should be taken into account, namely its orientation towards the export of raw materials, and its heavy dependence on world oil prices, which is especially true in regard to Russia's budget revenue. In particular, EU countries have relatively stable levels of budget revenue (partly due to the changes introduced in their national fiscal systems), even though this level differs from one country to another. An approximately 3% of GDP budget deficit ceiling roughly corresponds to the range of cyclical budget revenue fluctuations experienced by European countries over the past few decades. Thus, this criterion takes into account the possibility of a drop in budget revenue during the low phase of the business cycle, but puts limits (at least in theory) on the unjustified growth of budget expenditure.

In Russia, budget revenue fluctuations are, for most part, related not to the business cycle, but to the behavior of oil prices on the world market. Accordingly, the general level of budget revenue cannot be characterized as stable: year-to-year budget revenue fluctuations can amount to 5-7% of GDP, and it should be noted that budget revenue fluctuations caused by changes in the external economic situation do not necessarily coincide in time with business-cycle impacts.

Thus, as far as Russia is concerned, the most important budget criterion of macroeconomic stability (the basis of its budget rule) is necessarily the *budget revenue base level indicator*. In other words, the accuracy of this criterion is, to a certain extent, 'guaranteed' by its taking into account the existing trends in the world market of raw materials. Such an approach differs somewhat from the concept of structural and irregular revenue applied by the OECD<sup>6</sup>. The structural part of revenue is usually understood as the average level of revenue collected by the state, the irregular part of revenue – as a variable revenue component which changes over the phases of the business cycle.

In this situation, *a limit imposed on the budget deficit level* is of secondary importance; it can be established in order to emphasize the rigidity of the budget rule. Bearing in mind that the budgetary system of the Russian Federation has a multi-tier structure topped by and interlocked with the federal budget representing the budget of the 'highest instance'; it should be noted that maximum effect can be obtained when the budget rule is applied to the *federal budget*.

The second budget criterion of macroeconomic stability is *a limit on the public debt of the Russian Federation*. In Russian conditions, this limit should be imposed with a view not only towards the predominantly raw-material bias of the Russian economy, but also towards the level of development (or the depth) of its national financial sector and the fact that it belongs to the group of countries with developing economies whose country ratings and levels of attractiveness for international investors are approximately similar to Russia's.

The third component of the budget rule (and the most important one for Russia) must be the mechanism of over-time redistribution of revenues from the extraction and export of raw materials (natural rent) to *a sovereign raw material fund (or funds)*. Such a mechanism had functioned in Russia before the 2008-2009 crisis, and it was due to that mechanism that the redundant revenues were withdrawn from the budget and the national economy into the Stabilization Fund (the Reserve Fund and the Future Generations' Fund) during periods of favorable world market conjuncture. In the event of a drop in world oil prices, this mechanism

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<sup>6</sup> For more details on the OECD's approach, see Chouraqui et al., 1990; Giorno et al., 1995.

was made use of in order to address the issue of revenue shortfalls, and to finance the budget deficit through loans.

As regards the requirements of macroeconomic stability in the field of monetary policy, we believe that practically the only criterion applicable in this respect is the *level of inflation* indicator. Until recently, Russia's inflation had been high in comparison with OECD countries and the largest developing economies; therefore, it is crucially important that it should be steadily reduced to a comparable level. The two other Maastricht criteria in the field of monetary policy – a limit on the level of interest rates and on the fluctuations of the nominal rate of exchange of the national currency – are specifically designed for Eurozone candidates, and are by no means fully applicable to Russia.

### **1.2. The New Budget Rule**

The Russian economy's continuing dependence on the situation in world raw-material markets makes it difficult for this country to pursue a coherent domestic anti-cyclical policy. The creation of the Reserve Fund and the singling-out of non-oil-and-gas revenues and the oil-and-gas transfer were the first steps towards neutralizing the effects of internal cyclical and external situational fluctuations. As shown by the 2008-2009 crisis, the Reserve Fund is capable of fulfilling its intended role in smoothing over the effects of downfalls in the level of natural resource rent and the other budget revenues that indirectly depend on the situation in external markets.

However, if external shocks coincide with the effects of the internal business cycle, the capacities of the Reserve Fund may turn out to be insufficient, and the government will be forced to resort to large-scale market borrowing. The creation of a well-developed market for government securities – primarily for domestic government securities – not only permits the government to somewhat level down the fluctuations of irregular (cyclical) revenue, but also makes it possible for the Central Bank to effectively implement its policy of managing interest rates via operations in the open market.

The first budget rule was introduced in Russia in December 2003 concurrently with the creation of the Stabilization Fund of the Russian Federation. This rule was designed to regulate the surplus of the federal budget being accumulated in the form of balances of the federal budget's accounts with the RF Central Bank. The Stabilization Fund was formed by pooling the excess revenues generated by the production and export of oil (revenues in excess of the planned, theoretical revenues based on the long-term price of oil – either a cut-off price or a base price). Those revenues were comprised of two components: revenues

from the export customs duty on crude oil and revenues from the mineral extraction tax on oil. The actual amount of revenues to be transferred to the Fund was in direct proportion to the excess of the actual rate of a relevant tax over its estimated rate determined by the benchmark oil price (or cutoff price). Thus, the volume of deductions to the Stabilization Fund was dependent on how high a current price of oil was over the benchmark price. The Fund's resources could be used to cover the federal budget deficit only if the oil price should plummet below its benchmark price. However, if the accumulated fund volume should exceed the Rb 500bn, the money could be also allocated to other purposes.

As of January 1<sup>st</sup>, 2004, the benchmark price was established at the level of \$20 per barrel of Ural crude oil, and as of January 1<sup>st</sup> 2006, the cutoff price was raised to \$27 per barrel. In spite of the continually rising oil prices, the cutoff price was no longer raised any further for fear of mounting inflation and the budget's increasing dependence on the foreign market. From February 1st 2008, the RF Stabilization Fund was divided into the Reserve Fund and the National Welfare Fund (NWF). The Reserve Fund became in effect the Stabilization Fund's functional successor, because it represents the part of the federal budget which should be recorded and administered separately in order to effectuate the oil and gas transfer in the event of insufficient oil and gas revenues for its financial coverage. The Reserve Fund is formed out of the federal budget's oil and gas revenues allocated in the amount that exceeds the size of the oil and gas transfer approved for each financial year, on the condition that the accumulated size of the Reserve Fund must not exceed the established norm (10% of GDP); another source is the revenue generated by the management (investment) of the Reserve Fund's assets.

The National Welfare Fund (NWF) accumulates the oil and gas revenues of the federal budget that exceed the value of the oil and gas transfer approved for the corresponding fiscal year after the Reserve Fund reaches (or surpasses) its prescribed size. It also accumulates the investment revenues of the NWF.

Thus, since 2007 Russia has been applying a budget rule based on transferring some part of oil and gas revenues to sovereign funds and on using part of oil and gas revenues to co-finance large-scale budget-funded social programs and to finance the federal budget deficit by means of the so-called oil and gas transfers (Article 96.8 of the RF Budget Code). The greatest advantage of such an approach is its simplicity – the authorized size of a transfer is measured in percentage points of GDP, and therefore does not depend on the behavior of oil prices. However, bearing in mind the conservative nature of budget planning, this rule is effective only when oil prices fluctuate relatively widely: for example, in the 2000s, when oil prices were steadily rising, the amount of the oil and gas transfer authorized in 2004 would have lagged behind the actual inflow of oil and gas revenues into the RF federal budget by

the year 2008. But in this case, the amount of this transfer, almost inevitably, would have been considerably revised upwards, because both the authorized amount and its revision are difficult to substantiate from an economic point of view: such decisions are very prone to subjective biases and lobbying pressures. Therefore, the application of such a rule cannot set a sufficient limit on expenditure so as to achieve a balanced federal budget.

Moreover, the concept of an oil and gas transfer is based on a rigid peg to the two taxes that represent the only source of the oil and gas revenues of the federal budget – the export duty and mineral extraction tax. Correspondingly, any change in the main parameters of these taxes (their tax bases, rates, and distribution by tier of the budgetary system) will make it necessary to re-determine the size of the oil and gas transfer and to alter the budget rule.

We believe that more adequate to the task of achieving a balanced budget would be an approach that takes into account all the direct and indirect channels through which oil prices exert their influence on the level of budget revenues (prices for energy carrier exports, the rate of economic growth, the population's incomes, currency exchange rates, etc.). Besides, it is advisable to take into account not only the revenues generated by current fluctuations of oil and gas prices, but also the cyclical revenues dependent on a business cycle phase. In this connection, it should be remembered that in the present Russian situation the business cycle largely depends on the movement of hydrocarbon prices.

In light of the increasing diversification of the Russian economy and the structure of budget revenue, the budget rule must take into account not only the benchmark oil price, but also the parameters of the business cycle. In other words, in the medium-term perspective it will be necessary to single out those structural budget revenues that are estimated on the basis of the benchmark oil price and the average rate of GDP per business cycle growth. When stabilizing the fluctuations of budget parameters caused by the latter two factors, it should be remembered that, due to the unpredictable nature of the foreign economic situation, part of the redundant budget revenue will have to be kept as reserves, while the budget parameters in the course of each business cycle can be stabilized by borrowing, as is well illustrated by international experience.

The approach to elaborating the budget rule on the basis of a benchmark oil price is more complicated, for technical reasons, than simply fixing the size of the oil and gas transfer, because in the former case the process of budget planning and drawing up the budget for each financial year actually involves making estimations for two budget versions – one being based on the expected prices of oil, and the other on the benchmark oil price. Consequently, the volume of budget revenue pegged to the benchmark oil price will actually determine its size's ceiling, while the expected budget revenue volume will make it possible to plan the

amount of money to be transferred to the Reserve Fund or the amount of its possible spending.

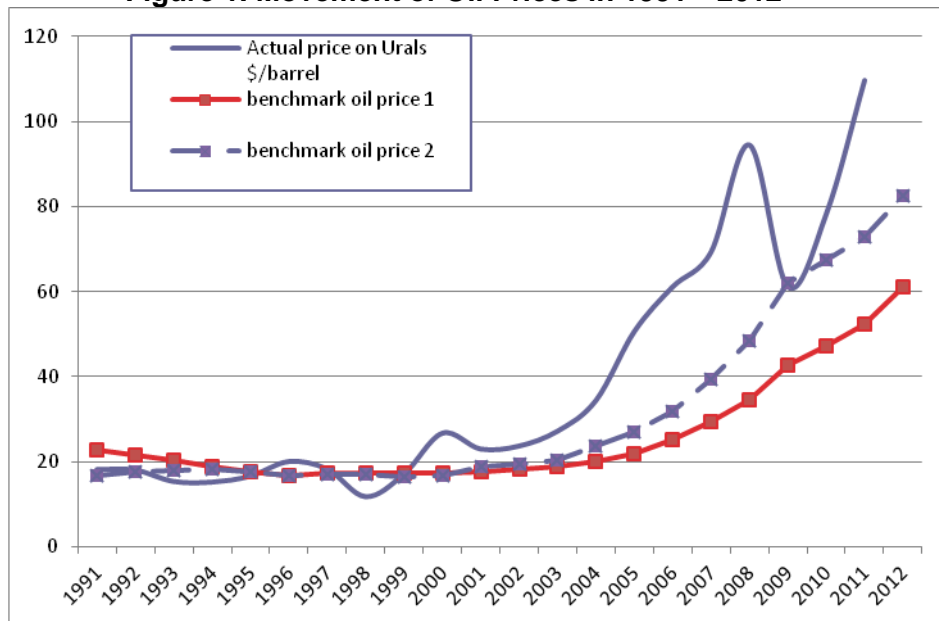
So, the budget rule must incorporate the following indicators:

- the benchmark oil price;
- accumulation/utilization of part of the revenue in the Reserve Fund;
- the ceiling for budget deficit coverage at the expense of net borrowing;
- the ceiling for the size of government debt.

Evidently, the issue of determining the benchmark oil price in the framework of this rule is a key one. *Fig. 1* demonstrates the movement of the price of Urals crude oil over the period of 1991—2012 and two versions of the benchmark oil price:

- benchmark oil price 1 — the moving arithmetic average of the oil price over the previous decade;
- benchmark oil price 2 — the moving arithmetic average of the oil price over the previous 5 years.

**Figure 1. Movement of Oil Prices in 1991—2012**

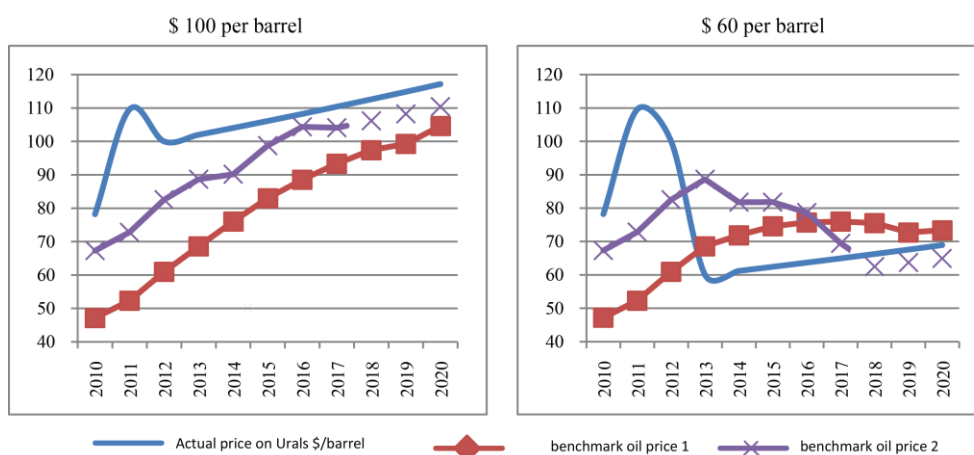


Sources: BP; RF Central Bank; authors' calculations.

As seen in this graph, in the 1990s and early 2000s, when the scale of oil price fluctuations was relatively small, the two benchmark oil price indices were relatively similar. However, from 2005 onwards, their movement began to display increasingly strong differences: the five-year average price rather soon became close to the actual oil price level, while the ten-year average price points to the need to moderate the size of budget expenditure.

*Fig. 2* demonstrates the movement of hypothetical prices of Urals and the two benchmark oil prices in 2010—2020 under two scenarios. The first one envisages a situation in which, from 2012 onwards, oil prices remain at \$ 100 per barrel (in constant prices); the second one predicts that in 2013, they will drop to \$ 60 per barrel and thereafter remain at that level (in constant prices).

**Figure 2. Scenarios of Oil Price Movement in 2010—2020**



Source: authors' calculations.

As seen in these two graphs, the average five-year benchmark oil price has practically no downward effect on the volume of budget expenditure under the scenario that envisages oil price growth ('\$ 100 per barrel'), while under the 'crisis' scenario ('\$ 60 per barrel') the price of oil becomes adapted to the new regime (declining below the level of scenario prices in 2018) at a faster rate than its ten-year average value. However, the accumulated volume of acceptable budget expenditure in 2013—2017 is noticeably higher than the same index for the 2013—2020 period observed in combination with the ten-year mean benchmark oil price (17.6 against 15.1% of GDP). Besides, the allowed ceiling under the budget deficit rule in combination with the five-year mean benchmark oil price may reach the level of 5.0—5.5% of GDP, while in combination with the ten-year average benchmark oil price it can hardly go up to 2.0% of GDP.

So, from our point of view, it would be more feasible to take as the benchmark the price of Urals estimated as its sliding arithmetic mean value for a ten-year period. If that index is applied as the benchmark, the most even distribution of the Reserve Fund's accumulation rate can be achieved, with the gradual and moderate spending of its resources in the event of an unfavorable situation on the world oil market.

The accumulated Reserve Fund's volume must be adequate so as to cover the federal budget deficit for a period of two or three years. Then it will become possible to gradually adapt the size of budget expenditure to its new level, thus avoiding its one-time shrinkage over one budget period. The available estimates indicate that, to satisfy that condition, the size of the Reserve Fund must amount to 6—8% of GDP. Thus, for example, our estimates demonstrate that, under the so-called 'crisis' scenario ('\$ 60 per barrel') when the price of oil shrinks by 40% from its previous level, the Reserve Fund at 6% of GDP will be sufficient to cover the budget deficit for a period of 2.5 years. As this particular scenario is based on the



prospect of a long-term decline in oil prices (they remain below the average ten-year level for 9 years), after the Reserve Fund is spent, it will become necessary either to revise the rule, or to cover the budget deficit by borrowing on the market (in the event of a suitable market conjuncture).

After the target size of the Reserve Fund is achieved and a favorable market conjuncture ensures further growth of additional budget revenue, this money is to be transferred to the National Welfare Fund. (An analysis of the goals and principles of its functioning would go beyond the framework of this paper.)

It should be specifically pointed out that the concept of the intertemporal smoothing of oil and gas budget revenues relies on the assumption that there are certain patterns in the movement of oil prices and, consequently, that of budget revenue. If oil prices and budget revenue fluctuate around their average values, and the favorable and unfavorable periods are approximately similar in their duration, then the resources accumulated over a favorable period (as a result of saving all the revenues in excess of their average level) would be sufficient to replace the amount of budget revenue lost over the period when the price of oil is low. However, it is well-known that the movement of oil prices is a *non-stationary process* (its parameters, including mean value, dispersion and other distribution indices, being changeable over time), and so it is impossible to correctly evaluate the duration and scale of the fluctuation of prices in any direction. Consequently, the movement of Russia's budget revenue is also non-stationary. As in the case of oil prices, this circumstances make it difficult to predict changes in the budget size. It is hardly possible to elaborate a budget rule applicable to a non-stationary process and capable of stabilizing the size of budget expenditure.

When the movement of oil prices is non-stationary, the resources accumulated over a period of favorable external economic conditions are insufficient to provide even the average volume of resources necessary for stabilizing expenditures over the course of an unfavorable period (that will see both savings shortages and savings surpluses). The reason is that these periods can be relatively long and of different durations; moreover, it is unclear which level of revenues should be considered 'average', because this indicator changes over time<sup>7</sup>.

In such a situation, the afore-described budget rule, based on the (average multiyear) benchmark oil price cannot ensure full stabilization of the federal budget. For all such effects to be taken into account, it is necessary to introduce a more intricate asymmetric rule that

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<sup>7</sup> Here we discuss the non-stationarity caused by the behavior dynamics of the energy-carrier market. It should be noted that a similar problem with the stationarity of trends, including business cycles, in macroeconomic time series, formulated as early as 1982 by Charles R. Nelson and Charles I. Plosser (Nelson, Plosser, 1982), has not been solved as yet (for more detail, see Maddala, In-Moo Kim, 1999).

would exert a restraining influence on budget expenditures during periods of high oil prices, and then would quickly adapt the budget to a lower level of oil prices during periods of decline. In a period of high conjuncture, marked by revenue accumulation, budgetary authorities can use a rule based on the (average multiyear) benchmark oil price. In a period of low prices in world energy-carrier markets (especially when oil prices experience a sharp fall by more than 20-30%), this approach can become counterproductive. Since the period of low oil prices can be unpredictably long, one should not attempt to stabilize budget expenditures at their average multiyear level. Budget expenditures should be planned on the basis of actual oil prices or their forecasts, and on the amount of resources accumulated in the Reserve Fund. By taking into account a number of factors, including forecasts of the duration of the period of low prices, one should then determine a lower expenditure trajectory.

Despite the above reservations, we believe that in the foreseeable future the over-time balancing (stabilization) of the federal budget will actually be possible – to an extent. To achieve these ends, the budget rule should ensure the conduct of a sufficiently conservative budgetary policy during a period of favorable external economic conditions and should mitigate, at the expense of the accumulated resources, the effects of economic shocks caused by their worsening. In the event of a rapid and considerable worsening of the situation in overseas markets, it would be advisable to abandon the symmetry of the budget rule, which uses the average multiyear price of oil as a benchmark irrespective of whether the current oil prices are low or high. Once this is done, it would be possible for the budget projections to be based on lower oil prices, thus facilitating a quick adaptation of the budget to unfavorable conditions on overseas markets.

The budget rule suggests that the federal budget should be balanced at the benchmark oil price. However, such a rigid requirement is difficult to implement in practice. Firstly, the simple rule does not take into account the particular phase of the business cycle in which the economy is operating, which, as has already been pointed out, could necessitate heavy borrowing in a period of low business activity. Secondly, the current volume of federal budget expenditure is far above the ceiling determined on the basis of the benchmark oil price.

Thus, in the Budget Message to the Federal Assembly of the Russian Federation for the period of 2013—2015, the volume of federal budget expenditure for 2013 is set at the level of Rb 13.4 trillion, or approximately 20.4% of forecasted GDP; there is a possibility of a further increase in budget expenditure during the procedure of approving the budget for 2013—2015, although in accordance with the benchmark oil price (\$ 68.6 per barrel), its 2013 volume must not exceed 16.5—17.0% of GDP. According to our estimates, a political decision to cut the size of budget expenditure by more than 1 p.p. of GDP would be unlikely

in the absence of any serious external shocks, and so at the given benchmark oil price the budget can become balanced no earlier than 2016.

The document entitled 'The Main Directions of Budgetary Policy for 2013 and the 2014-2015 Planning Period' envisages that, in 2015, federal budget expenditure is going to be 2-2.5 p.p. of GDP less than in 2012. Thus, the RF Government has declared its intention to relatively quickly cut Russia's budget expenditure. However, an analysis of the structure of budget expenditure raises doubts as to whether or not this scenario is actually feasible.

In particular, the amount of public expenditure on national defense, national security and law enforcement will be even greater in real terms, while cuts will be made, first of all, in the expenditure items related to human capital investment (health care, education). Public expenditure on the national economy and the housing and utilities sector will also be reduced, while spending on social policy will remain practically unchanged<sup>8</sup>. It is doubtful whether the announced cuts in expenditure can be carried out without some serious negative social and political consequences. Most likely, the corresponding expenditures will be revised upwards.

Thus, it is practically inevitable that Russia's federal budget will run deficits in the period until 2016. Moreover, it should be noted that, quite often, the necessity arises to finance unforeseen additional expenditures in the course of executing the federal budget. Therefore we consider it possible that the federal budget based on the benchmark oil price should be authorized to run deficits up to 2.5% of GDP until 2016, and up to 1% of GDP thereafter. So long as the market situation permits, these deficits should be exclusively financed by market borrowing, or at the expense of revenues from privatization – in order not to influence the volume of allocations to the Reserve Fund.

The possibility for Russia's federal budget to run a deficit and to finance it through borrowing should be limited by means of imposing a ceiling on public debt. Estimates show that, if oil prices fall to \$ 60 per barrel and the depth of Russia's financial sector remains unchanged, Russia will be able to service and finance public debt in an amount not exceeding 25% of GDP. Although this level is much lower than the existing criteria of a maximum level of government debt (60% of GDP according to the Maastricht criteria; slightly more than 100% of GDP in the USA), even this low level poses extreme danger to the Russian economy. It should be not be forgotten that in August 1998, on the eve of Russia's default, the volume of

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<sup>8</sup> In Strategy-2020, the expert community put forth the opposite concept of changing the structure of expenditure: a reduction in expenditure on the 'power block' and an increase in expenditure on the budget items related to the development of human capital, the improvement of national infrastructure and the environment, and the implementation of the State's social obligations.

the GKO-OFZ market amounted to only 16.3% of GDP. Data on the budget deficits and on the volumes of public debt in OECD countries are presented in *Table 1*.

**Table 1. Budget Deficits and the Volumes of Public Debt in OECD Countries in 2011 (% of GDP)**

Country	Central government budget deficit	Government debt
Australia	-3.9	22.9
Austria	-2.6	72.2
Belgium	-3.9	98.5
Brazil	-	66.2
Canada	-4.5	85.0
Chile	1.2	9.9
Czech Republic	-3.1	41.5
Denmark	-1.9	46.4
Estonia	1.0	6.0
Finland	-0.9	48.6
France	-5.2	86.3
Germany	-1.0	81.5
Greece	-9.2	160.8
Hungary	4.2	80.5
Iceland	-4.4	99.2
Ireland	-13.0	105.0
Israel	-4.4	74.3
Italy	-3.8	120.1
Japan	-9.5	229.8
South Korea	1.8	34.1
Luxembourg	-0.6	20.9
Mexico	-3.4	43.8
The Netherlands	-4.6	66.2
New Zealand	-8.2	37.0
Norway	13.6	49.6
Poland	-5.1	55.4
Portugal	-4.2	106.8
Slovakia	-4.8	44.6
Slovenia	-6.4	47.3
Spain	-8.5	68.5
Sweden	0.1	37.4
Switzerland	0.8	48.7
Turkey	-0.3	39.4
UK	-8.4	82.5
USA	-9.7	102.9

Source: OECD; IMF.

The currency structure of public debt is extremely important: as the volume of public debt approaches its upper limit, the share of debt denominated in foreign exchange should tend to zero. In the event of unfavorable changes in the situation on the raw-material or financial market, the greatest danger to the stability of public debt policy comes from the foreign-exchange component of public debt, which can be instrumental in breaching the ceiling imposed on public debt, and can even cause problems with refinancing.

Thus, a new budget rule that would be capable of ensuring macroeconomic stability or, at least, not to become a de-stabilizing factor, can be defined as follows:

The upper limit imposed on federal budget expenditure must be equal to the amount of revenue estimated on the basis of the Urals benchmark crude oil price as a 10-year moving average.

Federal budget revenue in excess of the revenue volume estimated on the basis of the benchmark oil price must be allocated to the Reserve Fund. Its prescribed size is set at 6 to 8% of GDP, which makes it possible to finance the budget deficit over the course of three years in the event of a 20-30% drop in oil prices. If the Reserve Fund's volume exceeds the above-mentioned levels, any further resources allocated should be transferred to the National Welfare Fund.

For the period up to 2016, the deficit of the federal budget can be set at around 2.0-2.5% of GDP, and later on – at up to 1.0% of GDP. It should be financed by revenues from privatization and by debt financing (to be carried out predominantly in the RF national currency).

The upper limit of public debt should be set at around 25% of GDP.

### **1.3. Monetary Policy and Lowering Inflation**

The main challenge in the field of monetary policy is the domestic monetary sphere's extremely heavy dependence on external conditions. Fluctuations in hydrocarbon prices and revenues lead to fluctuations in the inflow of foreign exchange into the economy, and, correspondingly, to fluctuations of the exchange rate of the national currency and of the money supply volume. In order to reduce the economy's dependence on these fluctuations, it is necessary to create a new 'nominal anchor' which can serve as an alternative to the exchange rate, and to make market agents confident of this 'anchor'.

In a resource-dependent economy, it is difficult, for objective reasons, to simultaneously maintain low inflation and constrain the fluctuations of the exchange rate. Thus, as far as monetary policy is concerned, a choice must be made between two options – either to rapidly reduce the rate of inflation, disregarding a number of short-term negative effects of such a move, and thus to significantly improve conditions for domestic investment in the following years; or to maintain a high short-term GDP growth rate, and suffer from a chronic shortage of domestic investment in the medium-term perspective.

In the 2000s, both Russia and China implemented the latter approach to monetary policy. Their monetary policies were aimed at making their domestic producers price-competitive in the short-term. To achieve these ends, they stimulated economic growth by expanding exports and promoting import substitution, while simultaneously keeping the exchange rates of their national currencies at a low level. The results of such a policy were different in each

of the two countries. In China, the rate of inflation was considerably lower than in Russia due to rapidly increasing demand for real money balances, large-scale sterilization of currency purchase operations through the sale of the central bank's bonds, and the established high norms for mandatory reserves. Consequently, the currency inflow into China via the current and capital accounts of the balance of payments and the accumulation of currency reserves by the central bank affected the inflation rate's growth and the Yuan's real exchange rate only slightly. In Russia, a similar policy triggered rapid inflation growth and strengthened the ruble's real exchange rate, thus eliminating the effect of all of the government's efforts aiming at promoting economic development.

When comparing the two policy scenarios (a quasi-fixed exchange rate with broad fluctuations of money supply in response to fluctuations in the current or capital accounts of the balance of payments or inflation targeting with broad fluctuations of the ruble's exchange rate), it should be borne in mind that, while planning their activity in a situation of low inflation coupled with dramatic exchange rate fluctuations, economic agents (exporters and importers alike) can use forward markets to hedge their currency exchange risks. However, the risks associated with potential fluctuations in the inflation rate cannot be hedged. Thus, the scenario based on a low inflation rate and considerable exchange rate fluctuations can, on the whole, ensure a higher predictability level for market participants and, as a consequence, better conditions for economic growth.

We believe that the latter scenario would be the best choice. In that case, the main priority for the RF Central Bank in the medium term (until 2015) will be to bring down the inflation rate and make monetary policy less dependent on external conditions. Thus, in particular, Russia's monetary authorities would have to achieve a rapid reduction — over a period of 1.5—2 years — of the inflation rate to less than 5% per annum. Thereafter it would have to be maintained within the range of the 'mean EU inflation rate + 1.5—2 pp'. As a lower inflation rate can only be achieved by limiting money supply to the banking sector and by increasing its value, the implementation of such a scenario would entail worsening, for a short period, the terms for loans issued to the non-financial sector and the resulting slowdown in the growth rates of investment in fixed assets and real GDP. However, on the plus side, as early as 2014—2015, there will already be more favorable conditions for economic growth than under the inertia-oriented scenario.

Here are the arguments in favor of the choice of inflation suppression as the main monetary policy target. First, a high inflation rate creates strong incentives for current consumption and low motivation for saving (as saved money is depreciating); so, the economy begins to feel a deficit of 'long' money needed for big and long-term investments, which then has to be replaced by short-term borrowings. Consequently, the risks increase under conditions of a



resource-dependent economy. Secondly, when the inflation rate is high, it spoils the effect of monetary policy by depriving the RF Central Bank of opportunities to regulate demand. It also undermines trust in the national currency. Thirdly, a high inflation rate is associated with high risks for investment planning (if inflation grows rapidly, the relative prices of different commodities display different growth rates, and so errors are very probable both with regard to estimations of a project's profitability and the real value of borrowed money); this factor brings down both the volume of investment and the potential rate of economic growth. Fourthly, it becomes difficult to control poverty, and the population's incomes begin to diverge more impressively (inflation has a stronger adverse effect on the incomes of the poor), thus escalating social tensions.

In spite of high public awareness of the aforesaid issues, Russia remains one of the world's leaders in terms of its inflation rate – even in comparison with the largest developing economies (see *Table 2*).

**Table 2. Inflation in G20 in 2008—2010**  
(as % of previous year)

Country	2008		2009		2010	
	mean per annum	as of end of year	mean per annum	as of end of year	mean per annum	as of end of year
Argentina	8.6	7.2	6.3	7.7	10.6	11.0
Australia	4.4	3.7	1.8	2.1	3.0	3.1
Brazil	5.7	5.9	4.9	4.3	5.0	5.2
Canada	2.4	1.9	0.3	0.8	1.8	2.1
China	5.9	2.5	-0.7	0.7	3.5	3.5
France	3.2	3.2	0.1	0.1	1.6	1.6
Germany	2.8	1.1	0.2	0.8	1.3	1.3
EU	3.7	2.6	0.9	1.2	1.9	1.9
India	8.3	9.7	10.9	15.0	13.2	8.6
Indonesia	9.8	11.1	4.8	2.8	5.1	5.9
Italy	3.5	2.4	0.8	1.0	1.6	1.7
Japan	1.4	0.4	-1.4	-1.7	-1.0	-1.1
South Korea	4.7	4.1	2.8	2.8	3.1	3.0
Mexico	5.1	6.5	5.3	3.5	4.2	4.5
RF*	14.1	13.3	11.7	8.8	6.6	8.8
Saudi Arabia	9.9	9.0	5.1	4.2	5.5	6.5
South Africa	11.5	9.5	7.1	6.3	5.6	5.8
UK	3.6	3.9	2.1	2.1	3.1	2.6
Turkey	10.4	10.1	6.3	6.5	8.7	7.6

Source: World Economic Outlook database / IMF. \* Data as of end of period provided by Rosstat.

To ensure that its monetary policy is compliant with the requirements for macroeconomic stability, the Bank of Russia will have to resort to the measures enumerated below. Some of them have already been implemented, and it would be prudent for the RF Central Bank to remain consistent in its policy.

1. The RF Central Bank's policy should incorporate some elements of modified (hybrid) inflation targeting (in 2012—2014). In this connection, it will be necessary to ensure the flexibility of the ruble's nominal exchange rate relative to the bi-currency basket by consistently lowering the volume of target (planned) interventions in response to the ruble's exchange rate's intraday fluctuations. Until a complete switchover to inflation targeting is achieved, it will be possible to keep the ruble's nominal exchange rate against the bi-currency basket as an operative target. Simultaneously, currency interventions will be needed not only to level down the daily and intraday fluctuations, but also those near the boundaries of a sufficiently wide currency corridor. An important related measure will be to broaden the scope of refinancing to commercial banks through operations with securities.
2. Money supply will have to be restricted until the inflation rate is brought down to 5% per annum by means of maintaining the RF Central Bank's rate of refinancing at a level no less than 1 pp higher than that of the current inflation rate in per annum terms, raising the interest rates on the Bank of Russia's deposit and direct REPO



operations, and imposing constraints on money supply by banks (restrictions on retail crediting, differentiation of reserve norms by type of liability).

3. Institutional measures aiming at lowering the inflation rate will be needed (this sphere is only partly controlled by the monetary authorities, and therefore the active participation of the RF Government is essential). These include de-monopolizing the economy, removing barriers impeding competition, taking action against cartel agreements etc., reforming natural monopolies, revising the established ceilings for regulated prices and tariffs — meaning pegging their level to the inflation target set for a given calendar year. An obstacle to implementing a policy of rapid inflation decline will be the necessity to eliminate the existing distortions in relative prices (energy resources, regulated prices and tariffs), which is conducive to speeding up the inflation rate.

One more noteworthy point is the necessity to increase the informative value and transparency of the decisions made by the Bank of Russia's Board of Directors concerning monetary policy issues.

4. The RF Central Bank's switchover to a fully-fledged regime of modified (hybrid) inflation targeting (from 2015 onwards) will require that its target value be set at a level no higher than 1.5 - 2 pp above the forecasted (target) inflation level set by the European Central Bank. This measure will make it possible to reckon for the effects of external price factors (fluctuations of the FAO Food Price Index, world prices for energy resources, etc.).

Interest rates must become the principal monetary policy instrument. Changes in the volume of money supply to the banking sector must be controlled by means of operations (pledges, purchases/sales) in the market for ruble-denominated financial instruments. It will be feasible to allow the ruble's exchange rate against the bi-currency basket to float freely – with due regard for the situation on the world raw materials markets and short-term capital movement. As far as interventions on the currency market are concerned, a discretionary policy can be possible if geared by the movement of the fundamental factors (the status of the balance of payments, the level of currency risks, and changes in the ruble's real effective exchange rate). In this regard, it would be unwise to establish rules for target (or planned) interventions. Currency purchase (or sale) must be carried out predominantly in the interests of the RF Ministry of Finance (in order to replenish or spend the Reserve Fund and the National Welfare Fund). Similarly to the transition period, it will be feasible for the RF Government to set, on a discretionary basis, the ceilings for regulated prices and tariffs for each calendar year, pegging their level to the inflation target set by the Bank of Russia.

The implementation of this package of measures will make it possible to achieve several important goals in addition to that of lowering the inflation rate by late 2013 to the level of 5% per annum. Among these goals are the creation of adequate preconditions for the ruble to perform some of the functions of a reserve currency (currency of foreign equity securities; reserve currency for the central banks of Russia's major partners in trade and the countries situated in geographically proximal regions; currency of settlement of some trade operations); the promotion of de-dollarization of the savings and debt obligations of Russian economic agents in RF territory; and a gradual increase in the monetization level of Russia's economy (up to 70 -80% of GDP by 2020, depending on the level of the Russian financial market's development and the success of the project envisaging the creation of an international financial center in Moscow).

As a result, as early as 2013 - 2014, the level of inflation in Russia may decline to 4.5 - 5.0% per annum, and interest rates on credits to 7 - 8% in per annum terms. Meanwhile, the rates on deposits will also drop to 5 - 6%, while remaining positive in real terms.

The actual implementation of that type of anti-inflation policy is difficult due to the necessity to monetize the balance of trade if the RF Central Bank decides not to withdraw entirely from the currency market, so as to prevent the exchange rate from fluctuating too sharply, especially if currency inflow on the capital account resumes. This is done because the increasing amplitude of the exchange rate's fluctuations in conditions of a de-dollarized economy pushes up the level of investor uncertainty in the size of their future yield, and so may trigger speculative demand for currency. Similarly, the implementation of an inflation targeting policy can be complicated by an inflow of foreign speculative capital triggered by increasing interest rates and the expectations of strengthening of both the nominal and real exchange rates of the ruble.

Another constraint associated with the switchover to inflation targeting is an asymmetrical influence of the exchange rate on domestic prices. This effect is stronger when the ruble's exchange rate is declining than in the reverse situation. It results in speeding up the inflation rate in periods of a lower exchange rate; however, when the exchange rate is on the rise, there is no compensatory slowdown in the inflation rate.

And, finally, the implementation of an inflation targeting policy in the short term is seriously hindered by increasing interest rates. This may result in a drop in the scope of crediting granted to the non-financial sector, which would be followed by a slowdown in investment and GDP growth rates.

Thus, the policy of accelerated inflation decline may be associated with some short-term negative effects, but then result in significantly improved conditions for domestic investment growth in 2013 - 2020.

The inertia-oriented scenario, under which the inflation rate is maintained at its present level, envisages a higher growth rate in the short term and a chronic shortage of domestic investment in 2013 - 2020. The experience of the anti-inflation policy in the USA pursued by the Reagan Administration and the Federal Reserve (headed by Paul Volcker) in the early 1980s testifies to the fact that the period of slower growth (if the anti-inflation policy is implemented consistently and aggressively) does not exceed 1 - 1.5 years (see *Table 3*).

**Table 3. Anti-inflation Policy Parameters and Economic Growth in the USA**

1981	1982	1983	1984	1985	1986	1987	1988
16.4	12.3	9.1	10.2	8.1	6.8	6.7	7.6
10.3	6.1	3.2	4.3	3.6	1.9	3.7	4.0
2.5	-1.9	4.5	7.2	4.1	3.5	3.2	4.1
1.9	3.9	5.9	4.7	5.0	4.9	3.1	3.0

Source: International Financial Statistics / IMF.

\* \* \*

We have discussed the main conditions of macroeconomic stability that must be ensured by the State in the fields directly under its control - budget and monetary policies. In our opinion, the creation of such conditions is a necessary (but by no means the only) prerequisite for a successful implementation not only of a new growth pattern, but also of stable economic growth in principle. In our paper, we used the Maastricht criteria as an example of the criteria (or conditions) of macroeconomic stability. However, given the Russian economy's strong dependence on raw materials, these criteria were seriously revised and adjusted.

In the field of budgetary policy, the requirements designed to ensure macroeconomic stability may be stipulated in the framework of a new budget rule. Among other things, this rule should determine the ceilings to be imposed on expenditure and the federal budget deficit (on the basis of the benchmark oil price), the mechanism of and conditions for the allocation of irregular revenue (natural rent) to sovereign raw-material funds and its subsequent use through these funds, the mechanism of the functioning of these funds, and the upper limit to be placed on the Russian Federation's public debt.

At the St. Petersburg International Economic Forum held on 21-23 June 2012, RF President Vladimir Putin and RF Minister of Finance Anton Siluanov put forth the new principles of the

Russian Federation's budgetary policy for 2013 - 2015, which to a certain extent are similar to our proposals. Thus, in particular, it was announced that the oil benchmark for calculating the upper limit to be imposed on federal budget expenditure should be based on the 10-year moving average of the oil price; that surplus revenue should be allocated to the Reserve Fund; and that a ceiling should be placed on the Russian Federation's public debt. However, the introduction of the new procedure for determining the benchmark oil price in 2013-2015 (on the basis of the 5-year moving average of the oil price) and persistent uncertainty about whether or not the expenditure ceiling will be complied with, may considerably undermine the effect of the newly adopted decisions. According to our estimates, in the next few years it will be necessary to reduce federal budget expenditure by no less than 4 p.p. of GDP. The current volume of expenditure emerged in 2008-2009, in the framework of implementing packages of anti-crisis measures. As the consequences of the crisis are overcome, Russia should return to a lower level of public expenditure. It should be noted that in 2007 and in the first half of 2008, in the period when oil prices were on their pre-crisis high, the volume of federal budget expenditure did not exceed 18.0-18.5% of GDP, about 3 p.p. of GDP less than the planned volume of expenditure for 2013.

Given the extremely unstable state of the world economy, the high probability of crisis escalation in the Eurozone and the possibility of a decline in the growth rate of China's economy, a drop in oil prices in the near future is a likely scenario. Under these conditions, the RF government must urgently adopt decisions on restructuring Russia's budget expenditure in order to make it more efficient, and must develop a strict program for public expenditure reduction (while taking into account possible anti-crisis measures) before the expected drop in oil prices actually occurs.

Moreover, it is unlikely that the government will manage to preserve the current low level of social and political tensions, if it gives financial priority only to the Ministry of Defense, the Ministry of Internal Affairs, and the defense-industrial complex. Therefore, there is a risk that expenditure will expand along all lines – from pensions, social benefits and welfare payments to education, health care and science to road construction and other areas of public investment.

The situation in the field of monetary policy is less troublesome. In the past two years, the Bank of Russia made good progress in switching over to inflation targeting and increasing the flexibility of the nominal exchange rate of the ruble. Over the course of 2011 and 2012, inflation has dropped to 4.5-6.0% per annum, which represents a record low in contemporary Russian history. However, in the summer of 2012, inflation risks escalated again, in response to the government's decision that prices and tariffs for goods delivered and services rendered by natural monopolies should be raised from 1 July 2012. We believe that the



current trend in inflation will not radically change due to a number of factors, including the monetary policy of the RF Central Bank. In the first six months the growth of M2 broad money supply was as low as 1%, and the rate of refinancing considerably exceeded that of inflation. However, the lack of progress in further reducing inflation and stabilizing it at less than 5% per annum is a worrying sign.

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