



**THE CENTRAL BANK  
OF THE RUSSIAN FEDERATION  
(BANK OF RUSSIA)**

# **Monetary Policy Report**

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**Moscow  
2013**

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*In order to increase the information transparency of its activity, the Bank of Russia intends to develop the practice of regularly clarifying the details of its monetary policy to the public. This Bank of Russia release marks the start of the publication of quarterly reports on the Bank's monetary policy.*

*The report is intended for a wide professional community, the press and the public. The objective of the report is to better inform the public about the Bank of Russia's policies, as well as the goals of its activity and the measures it takes. In order to better explain the decisions the Bank of Russia takes regarding its monetary policy, the report includes sections describing situation in the world economy, an assessment by the Bank of Russia regarding the current state of the Russian economy and prospects for the development of the economic situation and inflation risks. A separate section is devoted to the implementation of monetary policy, including a description of the existing operating procedure and characteristics of changes in the system of instruments used by the Bank of Russia.*

*This issue focuses on the monetary policy of the Bank of Russia in the fourth quarter of 2012. It also addresses the outcome of the meeting of the Board of Directors of the Bank of Russia, which was held in January 2013.*

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# Summary

The Bank of Russia's monetary policy decisions are based on its analysis of internal and external macroeconomic conditions and prospects for economic development, and also inflation shocks and risks of their spreading on inflation expectations. At the same time, the need to achieve inflation targets in the medium term is taken into account.

Unfavourable trends continued in the world economy through the end of 2012. The recession in the euro area and the generally weak demand in the economies that are the biggest contributors to world consumption led to a slowdown in the GDP growth of emerging markets. All of this led to a decrease in the growth rate of global consumption, including the use of primary resources. However, in the fourth quarter of 2012, there were signs that the downturn in world economic activity had stopped worsening. Financial markets became more stable. Contributing factors included the accommodative measures of the monetary policy taken by the United States and decisions made in the euro area about the response to the crisis and the reduction of long-term risks for the financial system of the monetary union.

The situation in the real sector of the Russian economy in the second half of 2012 was characterised by a certain slowdown of growth. Domestic demand remained the main factor driving economic growth, but in the third and fourth quarters, the consumer and investment demand growth rates were lower than in the corresponding period of 2011. The actual production of goods and services was assessed as close to its potential level. Thus, the demand did not provide upward pressure on inflation in 2012.

In the fourth quarter of 2012, inflation stabilised (in the moving 12-month period) after its increase in the third quarter. At the end of the year, the growth rate of consumer prices exceeded its target range of 5-6% and was higher than it had been in 2011, due to the dynamics of certain volatile factors (prices for fruit and vegetables). At the same time, core inflation declined.

In 2013, global business activity is expected to continue restraining the growth of the Russian economy. Moreover, even more pessimistic external sector scenarios have not been excluded. The outstanding problems in the euro area are driving risk, along with rising public debt in the United States and changes in its fiscal policy. However, if the financial markets do not again undergo strong stresses, and positive influence of the stabilisation measures taken in foreign economies are not (depending on the circumstances) supported with additional incentives, the global environment as a whole will not worsen in comparison with 2012.

The high uncertainty of external prospects implies the possibility that there will be adjustments to Russia's 2013 economic forecasts, along with balance of payments projections, including private capital flows.

As expected, aggregate demand in 2013 will have no upward pressure on inflation. A constraining influence on the growth rate of domestic demand may be exercised by weak fixed capital investment dynamics, a slowing in the demand for credit resources, and a decrease in the growth of real income and the consumer confidence.

The impact of monetary conditions on inflation will probably have a moderate restraining effect. The slowdown in the growth rate of the money supply in 2012 may have an impact on the slowing down of the price growth in the second half of 2013.

The current dynamics of loans to non-financial organisations and households in general represent a shift towards a more moderate rate of growth, while the growth rate of loans to households remains at a fairly high level.

If there are not any additional price shocks in 2013, there is the possibility that the rate of price growth will return to its targets. The risk of exceeding targeted ranges associated with the dynamics of food prices is currently assessed as being moderate.

In light of the aforementioned estimates, the Bank of Russia did not change the interest rates on its main instruments that define the cost of borrowing for banks in the fourth quarter of 2012 and in January 2013. At the same time, in December 2012, rates on the rouble part of currency swap operations decreased by 0.25 percentage points and rates on fixed-term Bank

of Russia deposit operations increased by 0.25 percentage points. The interest rate band was reduced to 200 basis points; its borders became symmetrical to the minimum rate of short-term liquidity auctions. By narrowing the interest rate band, the Bank of Russia intends to limit the volatility of money market rates.

# I. Macroeconomic conditions

## I.1. External economic conditions and exchange rate

### Global economy

In the fourth quarter of 2012, negative trends continued in the global economy; these were caused by the financial difficulties of the euro area and the downturn in the European economy. The recession in the euro area continued.

For the first time in three quarters, Germany witnessed a GDP decrease (by 0.4% compared to the previous quarter, based on preliminary data). This was in line with forecasts, although a smaller decline had been expected. The weakening of business activity among Germany's trade partners led to a reduction of orders (external and domestic) for capital goods and to lower domestic investment.

According to preliminary data, the GDP of the United States in the fourth quarter of 2012 marginally decreased against the previous quarter. The causes of the decrease were lower public sector consumption (due to uneven distribution by quarter) as well as a slowdown in the growth rate of private inventories. The uptrend of GDP was supported by the growth in domestic household consumption. In the fourth quarter, investments in fixed capital increased. During the quarter,

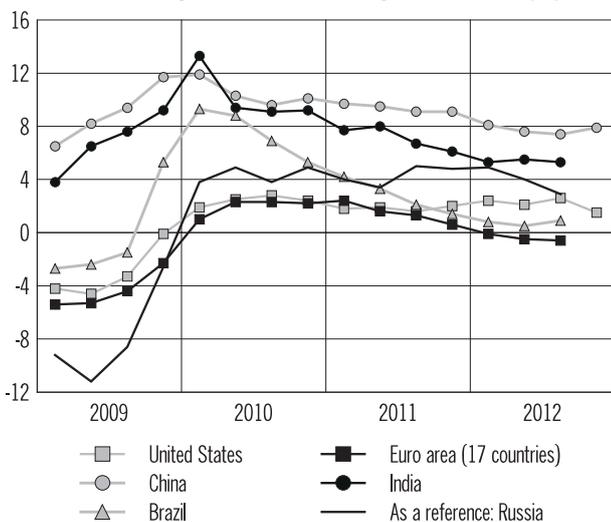
positive information was received on a range of short-term economic indicators, including employment and housing.

Weak demand in the world's biggest consuming economies, coupled with the instability of financial markets in 2012, led to a slowdown in GDP growth in emerging market economies, including Asian countries. However, the measures that China took during the year to support economic activity by increasing public spending and easing the monetary policy contributed to GDP growth rate increase (for the first time in eight quarters) to 7.9% in the fourth quarter of 2012, year on year.

The economic situation worldwide in the fourth quarter remained unfavourable, but did not significantly deviate for the worse from the forecasts. This restored a less pessimistic sentiment in the business community (compared to the third quarter), as well as among investors and consumers. During the quarter, the PMI indices grew in many economies (in the United States and China they again exceeded 50%)<sup>1</sup>. Growth in indicators such as the business climate index in Germany and the consumer confidence index in the USA<sup>2</sup> rebounded.

The sentiment of economic agents and in the financial markets in the fourth quarter of 2012 was influenced by the United States Federal Reserve System, which decided in September to resume the purchase of mortgage-backed securities (MBSs)<sup>3</sup>

The GDP growth rate of foreign economies (%)\*



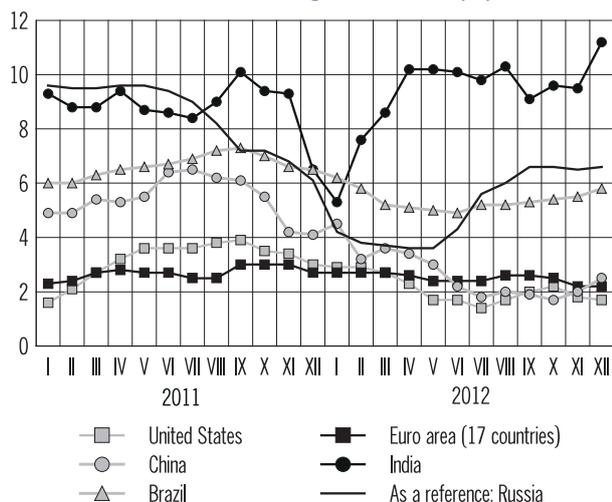
\*Growth relative to the corresponding quarter of the previous year.  
Source: national statistics agencies, Eurostat.

<sup>1</sup> If indicators of business activity (PMI, Purchasing Managers' Indices) are higher than 50%, they signify growing activity, if they are less than 50% they signify decline of activity.

<sup>2</sup> The business climate index in Germany (CES-Ifo Group, Munich) is determined based on the assessments of the current economic conditions and the short-term expectations of companies. The consumer confidence index in the United States (published by the Conference Board in New York) is an indicator of consumer sentiment, as manifested in the use of income on consumption or the creation of savings.

<sup>3</sup> Mortgage-backed securities: a variety of securitised assets – securities backed by pools of claims on mortgage loans. The Federal Reserve is buying MBSs guaranteed by federal mortgage agencies.

**Inflation in foreign economies (%)\***



\* Increase in the general level of consumer prices relative to the corresponding month of the previous year.  
Source: national statistics agencies, Eurostat.

**MSCI stock markets indices (1.01.2010 = 100)**



Source: Bloomberg.

to the amount of \$40 billion per month until they consider the achieved employment growth rate satisfactory. In December, the Federal Reserve also decided to buy long-term government securities worth \$45 billion per month in 2013.

These monetary policy measures are meant to boost activity in the financial market and in the real sector of the economy of the United States. Many economies continued to implement accommodative monetary policy. In the fourth quarter, interest rates were declining in the countries of Central Europe, as well as in Sweden, Turkey, Brazil, South Korea, and Australia. India continued to reduce the required reserve ratio for credit institutions.

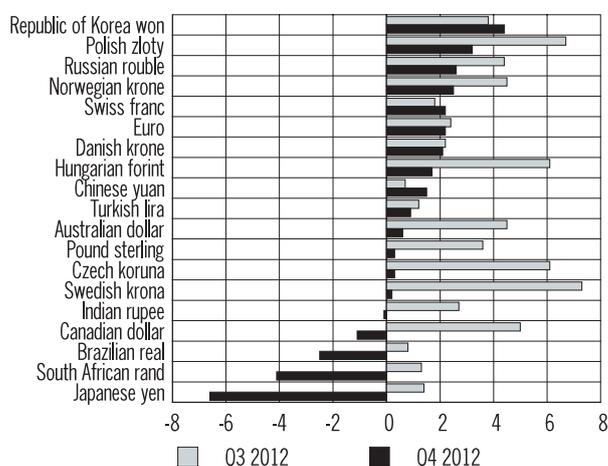
In foreign countries, the easing of monetary policy in 2012 took place against the background of a decrease in inflation, the fundamental reason for which was that aggregate demand was below the potential output. The increase of prices for goods that made up the 'basket' used for calculating the indicators of core inflation contributed less to inflation than in the previous year. The decline in inflation was brought about by a decrease in energy and food prices, compared with 2011. Inflation continued to decline in the fourth quarter.

In the fourth quarter of 2012, as in the previous three months, global financial markets did not experience any severe new stress. The steps that were taken to strengthen financial stability in the euro area, together with the continued easing of monetary policy in foreign countries and realised expectations of new accommodative

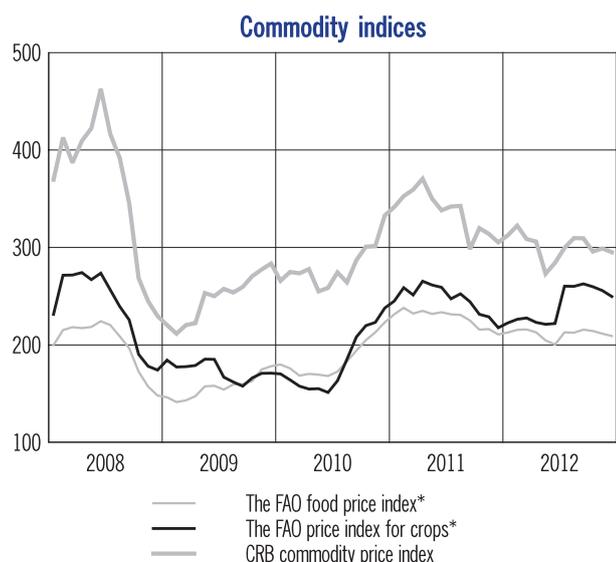
measures taken by the Federal Reserve, helped ease the tensions. The situation was also affected by the disbursement in December of three new tranches of official aid to Greece totalling 34.3 billion euros, as well as a loan to Spain amounting to 39.5 billion euros (in the securities of the European Stability Mechanism) to recapitalise its banks.

The prevailing trend was towards lower volatility of the stock market indices and exchange rates. Many currencies appreciated against the US dollar (the euro – by 2.2% on average in December against September). The bias towards an increase in the stock indices dominated, although sustainable price trends did not appear. Recovery in the stock prices of companies in the

**Change in exchange rate of some currencies against the US dollar (%)\***



\* The average for the last month of the quarter relative to the average for the last month of the previous quarter.  
Source: Bank of Russia.



\* 2002-2004 = 100  
Source: Bloomberg.

European financial sector continued. The cost of borrowing in riskier segments of the capital markets fell.

The resumption of quantitative easing in the United States, which started in September 2012, facilitated a decrease of the credit risk level anticipated by money market participants. This was reflected in the narrowing of spreads between the US dollar LIBOR rates and overnight indexed swap (OIS) rate. However, volatility of S&P 500 Index options (VIX) indicated that the level of market risk, according to the perception of market participants, did not decrease.

Continued tension was largely due to the expected possibility that the United States would sharpen its fiscal policy starting from the beginning of year 2013. At the end of December 2012, the United States adopted decisions based on a compromise on taxes and sequestration, mitigating the impact of fiscal policy on the economic activity, but another danger appeared: federal debt in the United States had reached its legal limit. New loans are placed in an amount that does not exceed the limit, and the federal debt is being serviced using extraordinary actions. In order to change the limit, a legislative act is required.

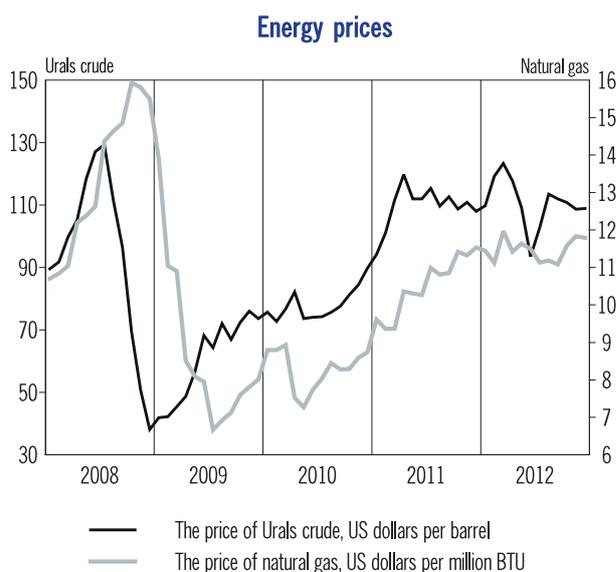
## Commodity markets

The main factors determining price developments in the world commodity markets in the fourth quarter of 2012 included the reduction in the world's economic growth forecasts (which was caused by slowdowns in the economies of the

United States, Japan and China and the recession in the euro area), persisting political tensions in the Middle East and measures that were taken to further ease the monetary policies of a number of countries. The value of the CRB commodity index<sup>4</sup> in December 2012 was 4.6% lower than in September and 3.4% lower year on year (after rising by 8.8% in September compared to June). On average, energy prices increased in 2012 against 2011, whereas non-energy and food prices became lower.

The price of Russian Urals crude in the world market in the fourth quarter of 2012 fluctuated in the range \$107-112 per barrel. Tension in the Middle East, coupled with the decision of the OPEC member countries to maintain their oil production quotas, kept oil prices high despite the significant global oil inventories and reduced oil consumption in the United States and EU countries. As a result, the average price of oil in the fourth quarter of 2012 totalled \$109.5 per barrel, remaining almost unchanged from its third quarter level and the fourth quarter of 2011. In 2012, the average price of Urals crude amounted to \$110.8 per barrel and was 1.1% higher than in 2011.

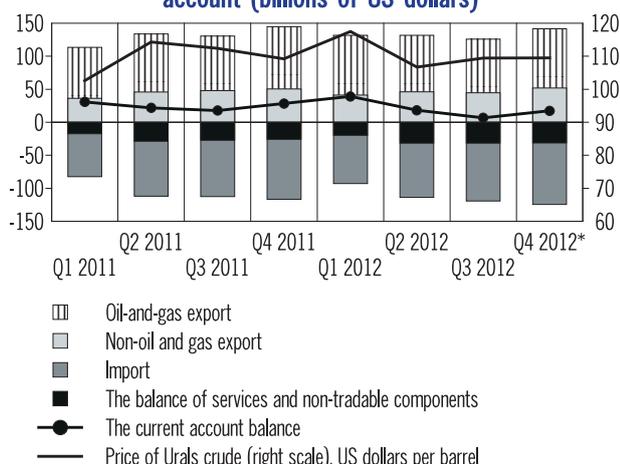
Against the backdrop of seasonal growth of demand, the price for natural gas in the European market in the fourth quarter of 2012 increased by 5.4% against the third quarter and was 2.7% higher than in the fourth quarter of 2011. In



Source: Reuters, World Bank.

<sup>4</sup> The composite index of prices in commodity markets, calculated by Thomson Reuters/Jefferies, based on 19 commodity futures prices.

### Major components of the balance of payments current account (billions of US dollars)



\* Estimate.  
 Note: data for 2011 are calculated using BPM5, for 2012 - BPM6 (see the Bank of Russia's press release, dated 27 June 2012).  
 Source: Bank of Russia.

2012, the average price for natural gas in Europe was 9.1% higher than in 2011.

Market prices for non-ferrous metals increased in the fourth quarter of 2012 against the third quarter. They were lower, however, than in the final quarter of 2011 (except for the price of copper). In 2012, industrial metals were markedly cheaper than in 2011.

Falling global food prices in the fourth quarter of 2012 were mainly due to the adjustment of cereal prices after their rapid growth in the third quarter, and a further decrease of sugar and oils/fats prices. Reductions in the cereal price in October-December 2012 were due to lower demand from the livestock sector, as well as a decline in its use for industrial purposes. However, the projected reduction in world grain stocks associated with the reduction of grain production in the 2012/2013 marketing year helped maintain high price levels. Lower food prices during the fourth quarter of 2012 were noted for almost all product groups observable by FAO<sup>5</sup> (except for dairy products and meat). As a result, the food price index calculated by FAO (when compared to the third quarter of 2012) fell by 0.9% and was 1.2% lower than in the fourth quarter of 2011. In general, for 2012, food prices were 7.0% lower than a year earlier. The most significant decreases were registered for the prices of sugar (17.1%), dairy products (14.5%), and oils/fats (10.7%); the prices of cereal and meat fell less significantly (by 2.4 and 1.1%, respectively).

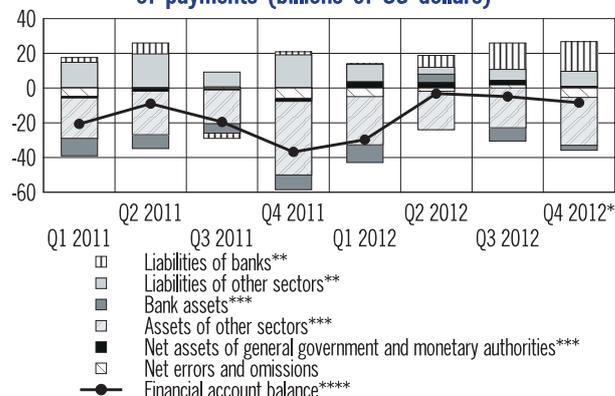
<sup>5</sup> Food and Agriculture Organisation of the United Nations.

## Balance of payments of the Russian Federation

The surplus of the current account of the balance of payments in the fourth quarter of 2012, according to preliminary estimates, totalled \$17.3 billion (\$6.7 billion in the third quarter) or 39% less than in the fourth quarter of 2011. In 2012, the current account surplus declined by 18% against the previous year and is estimated at \$81.3 billion. More than half of the year-on-year loss in the fourth quarter of 2012 was a result of the reduced surplus in the trade balance, whereas for 2012 in general, the growing deficit in the balance of services was the key contributor to the lower current account surplus, along with non-tradable components.

The trade surplus in the fourth quarter of 2012 stood at \$48.6 billion. This is more than in the previous quarter (\$38.4 billion), but less than in the corresponding period of 2011 (\$54.2 billion) due to a reduction in exports coupled with increasing imports of goods. According to the year-end results, the trade surplus fell from \$198.2 billion in 2011 to \$195.4 billion in 2012. This was due to a faster import growth of almost 4%. By comparison, exports increased by less than 2%. The decrease in export quantities of oil and natural gas was not compensated by growth in the export quantities of other goods, including petroleum products; this had a substantial impact on export dynamics. The export of crude oil, petroleum products and natural gas in the fourth quarter of 2012 accounted for only 63% of the total value of exports. In 2012, as in the previous

### Major components of the financial account of the balance of payments (billions of US dollars)



\* Estimate.  
 \*\* Liabilities: "+" - increase, "-" - decrease.  
 \*\*\* Assets: "-" - increase, "+" - decrease.  
 \*\*\*\* Including 'Net errors and omissions' item.  
 Note: data for 2011 are calculated using BPM5, for 2012 - BPM6 (see the Bank of Russia's press release, dated 27 June 2012).  
 Source: Bank of Russia.

**Major balance of payments components**  
(billions of US dollars)



\* Estimate.

\*\* Including 'Net errors and omissions' item.

\*\*\* Increase - "-", decrease - "+".

Note: 1. Assets: "-" - increase, "+" - decrease.

2. Data for 2011 are calculated using BPM5, for 2012 - BPM6 (see the Bank of Russia's press release dated 27 June 2012).

Source: Bank of Russia.

year, it amounted to more than 65%. At the same time, the import of goods increased due to growing volumes. The import structure has not changed significantly. The share of engineering products in the value of imports continued to increase, exceeding 50%. The share of two other significant groups of goods (food and chemical products), did not exceed 30%, as in the previous year.

The negative balance of services and non-tradable components in the fourth quarter of 2012 was marginally less than in the previous quarter, but significantly exceeded its value in the same period of 2011. For 2012, the deficit of services and non-tradable components is estimated as being worth \$114.1 billion (\$99.3 billion in 2011).

The financial account deficit (excluding reserve assets) in the fourth quarter of 2012 dropped more than two-fold compared to the previous quarter, and ten-fold compared to the fourth quarter of 2011; it is estimated at \$3.0 billion. In 2012, the financial account deficit decreased more than two-fold and amounted to \$35.8 billion<sup>6</sup>. A prevailing trend of the fourth quarter and of 2012 in general was a distinct role of the banking sector in attracting external resources, amid a sharp reduction of corporate borrowings, and a decline in the export of private capital by banks and other sectors.

<sup>6</sup> Taking into account net errors and omissions, the financial account deficit in the fourth quarter of 2012 amounted to \$8.4 billion (\$4.9 billion in Q3 2012, \$36.8 billion in Q4 2011), \$86.1 billion in 2011 and \$46.2 billion in 2012.

The net outflow of private capital in the fourth quarter of 2012 increased to \$9.4 billion from \$7.6 billion in the previous quarter, but was considerably less than in the fourth quarter of 2011 (\$35.0 billion). For 2012 as a whole, the net outflow of private capital fell to \$56.8 billion<sup>7</sup> (\$80.5 billion in 2011) mainly due to a decline in growth in the foreign assets of banks and corporations.

Due to increased foreign capital inflows, the external debt of the Russian Federation for the fourth quarter of 2012 rose by \$29.3 billion, and as of 1 January 2013, it is estimated at \$624.0 billion. Nearly two-thirds of this growth (\$18.6 billion) were due to an increase in the foreign liabilities of the banking sector. This was largely associated with the issue of new Eurobonds, which were estimated in the fourth quarter of 2012 as being worth \$10.8 billion (there were \$29.9 billion in new Eurobonds in 2012). The external debt of non-financial corporations rose by \$6.9 billion. During 2012, the external debt of the Russian Federation grew by \$83.4 billion (15.4%); the year before, it had grown by \$51.6 billion (10.6%).

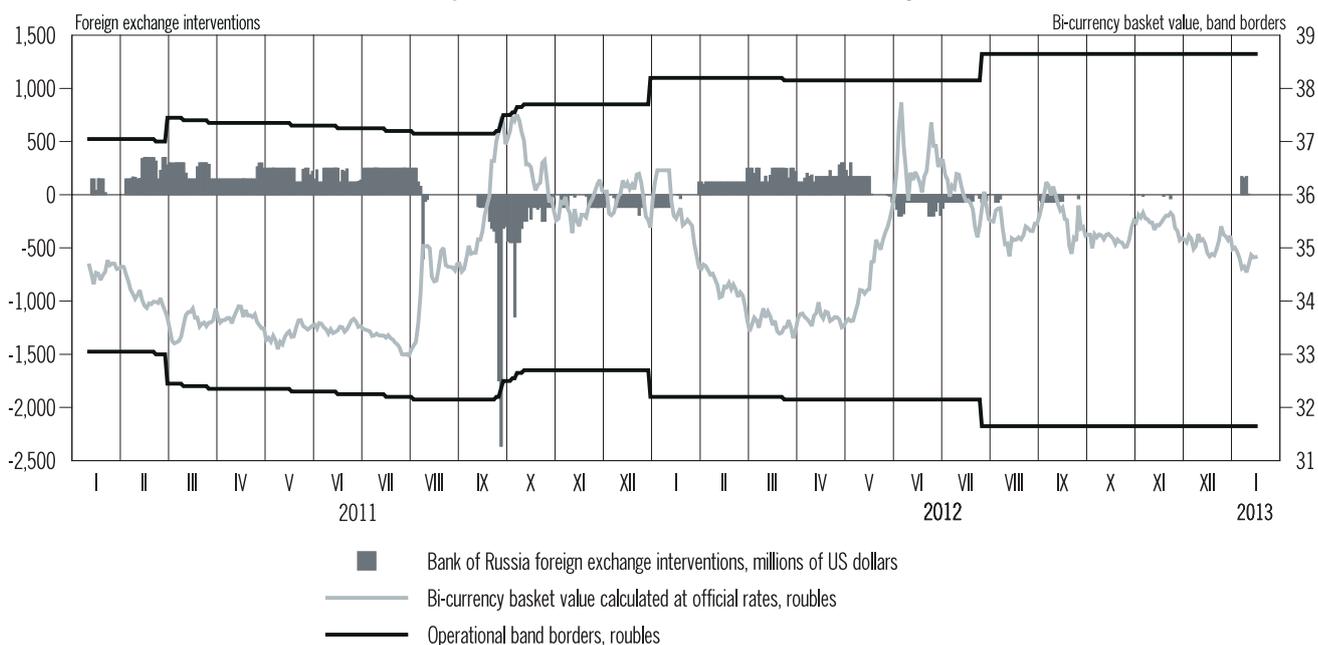
Currency swaps with resident banks and repos with non-resident counterparties were carried out by the Bank of Russia within the framework of international reserves management. These made the largest contribution to the increase in reserve assets in the fourth quarter of 2012 (by \$8.9 billion), according to the balance of payments data. In 2012, the total increase in reserve assets amounted to \$30.0 billion (\$12.6 billion in 2011). As of 1 January 2013, the international reserves of the Russian Federation totalled \$537.6 billion, reflecting an increase of \$7.7 billion during the fourth quarter of 2012 and of \$39.0 billion in 2012 (in 2011, they increased by \$19.3 billion).

## Exchange rate policy of the Bank of Russia

In the fourth quarter of 2012, the Bank of Russia continued to implement the exchange rate policy within the framework of the managed floating exchange rate regime, not hindering

<sup>7</sup> For comparability with previous periods, indicators of the net export of private capital (adjusted for "currency swap operations" conducted between commercial banks and the Bank of Russia) were valued at \$16.8 billion in Q4 2012, and \$65.6 billion total in 2012.

### Bank of Russia interventions in the domestic foreign exchange market and developments of the rouble value of the bi-currency basket



Source: Bank of Russia.

exchange rate developments determined by economic fundamentals.

During the indicated period, the volatility of the rouble exchange rate was moderate and its overall change was insignificant. At the same time, mixed trends were observed in the dynamics of the rouble exchange rate. For most of October 2012, a relative balance was maintained between the supply and demand for foreign currency in the domestic foreign exchange market. However, during the last ten days of the month, a correction in oil prices in the world markets led to the depreciation of the rouble. In November and early December 2012, investors once again became less risk-averse, which contributed to the strengthening of the national currency. The weakening of the rouble that was observed in the second decade of December 2012 was short-lived; this trend was offset by the rouble appreciation at the end of 2012. This was attributable, in particular, to expectations that a seasonal increase in the current account income would occur at the beginning of 2013. As a result, in the fourth quarter of 2012, the value

of the bi-currency basket decreased by 0.5%, to 34.81 roubles.

In October-December 2012, the mechanism of the exchange rate policy remained unchanged. The acceptable fluctuation range of the bi-currency basket's rouble values was set by floating operational band, the borders of which were adjusted depending on the volume of foreign exchange interventions executed.

For most of the fourth quarter of 2012, the Bank of Russia did not carry out any foreign currency operations in the domestic foreign exchange market. The Bank of Russia only conducted foreign currency sales within the pre-set target volumes on certain days. The value of foreign currency sales by the Bank of Russia in the domestic foreign exchange market during the indicated period amounted to \$77.5 million.

As a result, during the period under review, the borders of the floating operational band were not adjusted; the lower and upper borders of the bi-currency basket were kept at 31.65 and 38.65 roubles, respectively.

## 1.2. Internal economic conditions

### Public finances

According to the Federal Treasury data, in January-November of 2012, general budget expenditures accounted for 34.0% of GDP, while non-interest expenditures accounted for 33.3% of GDP (1.5 percentage points higher year-on-year). This trend can be explained by the overall increase in expenditures as a percentage of GDP, as well as the improvement in the even distribution of budgetary funds during the financial year. The share of the general budget expenditures as a percentage of total expenditures scheduled for 2012 amounted to 81.9% in January-November against 80.0% during the same period of 2011. Seasonal patterns are preserved in the spending of budget funds since most of the spending still occurs during the last months of the year.

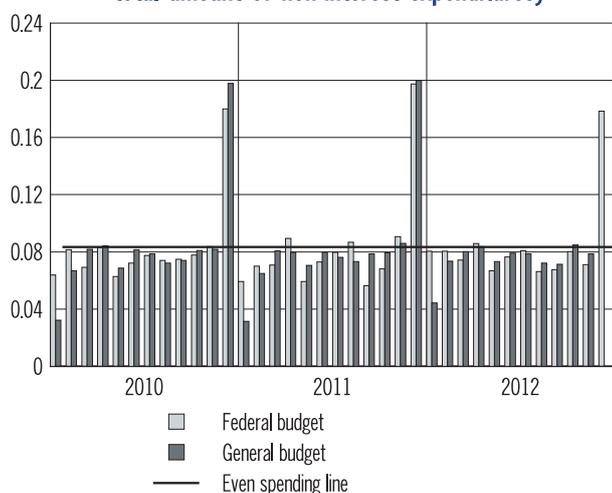
The current dynamics on the expenditure side of the budget (against the background of a decrease of the revenue side as a percentage of GDP) led to the reduction of the general budget surplus by up to 3.1% of GDP in January-November 2012, or by 2.2 percentage points of GDP compared with the same period of 2011. At the same time, the non-oil and gas primary deficit, which better characterises the fiscal policy pursued by oil producing countries, increased during the same period, compared to the

corresponding period of the previous year, by 2.5 percentage points of GDP, to 6.8% of GDP. Given falling non-oil and gas revenues, the increase in budget expenditures (including those on social needs) raises fiscal risks related to fluctuations in oil prices.

In accordance with the 'Fiscal Policy Guidelines for 2013 and the Period of 2014 and 2015' (hereinafter referred to as the Guidelines), an easing of the fiscal policy was planned for 2012. The general budget surplus in 2012, could amount to 0.2 % of GDP, which is 1.4 GDP percentage points lower than in 2011. These dynamics are mainly caused by the growth of non-interest budget expenditures. The structural non-oil and gas primary general budget deficit in 2012, could amount to 9.7% of GDP. This is 1.7 GDP percentage points<sup>1</sup> higher year on year. Based on the output gap dynamics, the budget policy in 2012 may be procyclical<sup>2</sup>, and the possibility of risks for the long-term sustainability of public finance in Russia may increase.

In accordance with the Guidelines, for 2013 the general budget deficit has been set at 0.6% of GDP. Unlike in 2012, the reduction of surpluses and creation of a budget deficit are due to the decrease of oil and gas revenues. At the same time, the programme assumes a tightening of fiscal policy, which is specifically connected with the introduction of the new fiscal rules. The structural non-oil and gas primary general budget deficit is expected to drop to 9.0% of GDP in 2013. Based

**General budget spending in 2010-2012 (as % of the total amount of non-interest expenditures)**

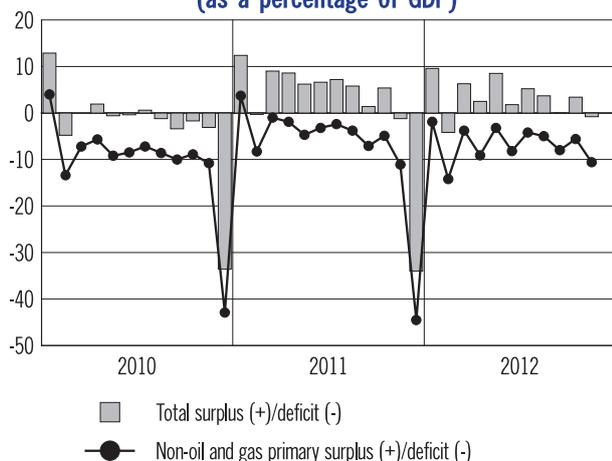


Source: the Federal Treasury of the Russian Federation, the Ministry of Finance of the Russian Federation, 'Fiscal Policy Guidelines for 2013 and the Period of 2014 and 2015'.

<sup>1</sup> Hereinafter, calculations of the Bank of Russia.

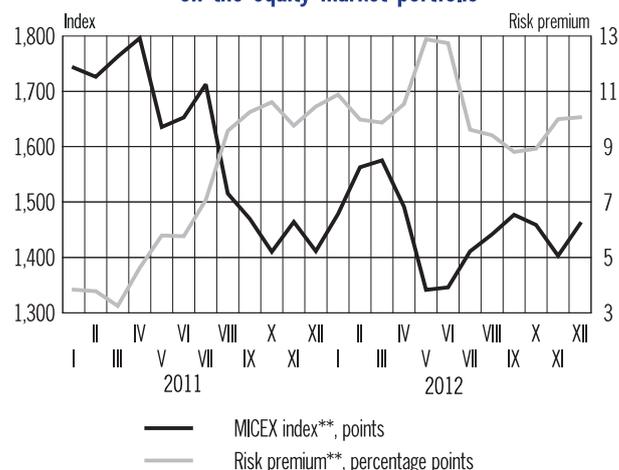
<sup>2</sup> Countercyclical or stabilising fiscal policy implies the tightening of fiscal policy at times of economic 'overheating' and an easing of policy at times of economic downturn. The change in the annualised output gap is used as an indicator of the phase of the economic cycle, while the stringency of fiscal policy is determined by the dynamics of the budget's structural non-oil and gas primary deficit (surplus). The structural non-oil and gas primary deficit (surplus) represents budget elements that do not depend on the phase of the business cycle and are a result of government decisions. In other words, it is the cumulative budget deficit or surplus which is independent of oil and gas revenues as well as net interest payments and items that are directly linked to changes in economic activity. For details see S. Vlasov 'Russian fiscal framework: Past, present and future. Do we need a change?' BOFIT Online 2011, No. 5.

**Total and non-oil and gas primary surplus (+)/deficit (-) of the general budget (as a percentage of GDP)**



Source: Bank of Russia, the Federal Treasury of the Russian Federation, the Ministry of Finance of the Russian Federation, Rosstat.

**MICEX index and risk premium on the equity market portfolio\***



\* Portfolio of shares included in the calculation of the MICEX index.  
 \*\* Average monthly indicator.  
 Source: Moscow Exchange, Bloomberg, Bank of Russia calculations.

on the evolution of the output gap, fiscal policy could be countercyclical in 2013.

## Financial sector

### Asset prices

In the fourth quarter of 2012, the preservation of the level of interest rates for the main operations of the Bank of Russia after their increase in September contributed to the establishment of certainty among the participants of the equity market regarding the cost of borrowing used for investing in stock market assets. Alongside with persisting high global oil prices and growth of the world's major stock indices, it had a stabilising effect on the dynamics of Russian equity prices. Equity market participants adhered mainly to conservative medium-term trading strategies; active operations with stocks and their price volatility declined markedly. The Russian equity market risk premium<sup>3</sup> rose only slightly in October-December compared to September. The monthly value of non-residents' capital outflow from the secondary market in October and November was close to the average annual level and decreased significantly in December. By the end of December, the MICEX and RTS indices grew by 1.1% and 3.5%, respectively, as compared to the end of September.

<sup>3</sup> The equity market risk premium is calculated as the difference between the return on the equity market portfolio, which consists of shares included into the MICEX index calculation base, and OFZ zero-coupon yield.

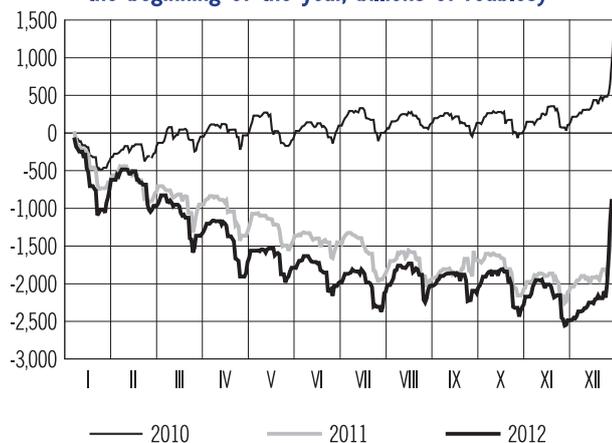
In the fourth quarter of 2012, the increase in residential real estate prices continued. As in the first three quarters of the year, in the fourth quarter the price indices for the primary and secondary housing markets (according to preliminary estimate) exceeded consumer price index. This helped maintain the attractiveness of the residential real estate as a financial instrument for household savings. In the fourth quarter, the commissioning of new housing slightly sped up. However, in view of a high level of demand, the increase in the supply of new housing did not contain the price growth for this type of asset. Despite the continued growth of interest rates on housing mortgage loans, the heavy build-up of their volumes continued to generate an upward pressure on real estate market prices. In the fourth quarter, the increase in housing prices was additionally 'heated' by the increased activity among the buyers and sellers of apartments which is typical for the New Year's period, though last year this activity was relatively less than in the previous years, due to the absence in 2012 of the market's usual summer slowdown.

### Money market

Money market conditions in the fourth quarter of 2012 kept forming in a situation of the ongoing structural deficit of liquidity.

The average amount of funds in the correspondent accounts of credit institutions with the Bank of Russia in the fourth quarter of 2012 grew by 61.6 billion roubles compared to the previous quarter and amounted to 787.2 billion

### Impact on liquidity of changes of general government's account balances with the Bank of Russia\* (accrued from the beginning of the year, billions of roubles)



\* Sign '+' denotes a decrease in balance, and sign '-' denotes an increase in balance.  
Source: Bank of Russia.

roubles. The most significant increase of balances in the correspondent accounts with the Bank of Russia took place in late December; this was due to seasonal factors. The additional need for liquidity, coupled with an increase in the averaged amount of required reserves in the fourth quarter, amounted to 18.1 billion roubles.

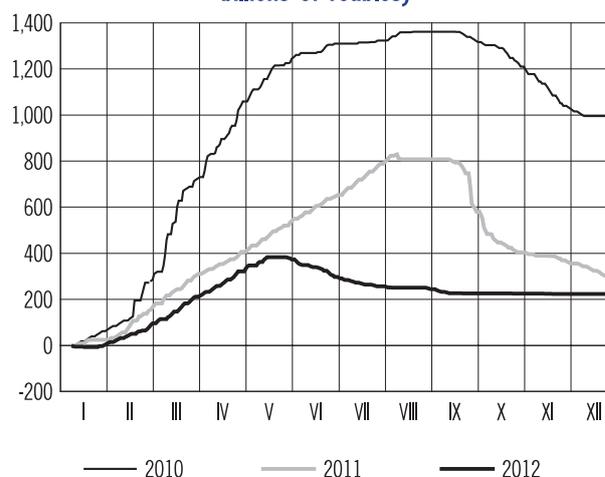
Changes in the supply of bank liquidity that resulted from the effect of autonomous factors in October-December were characterised by multi-directional trends. However, overall in the fourth quarter, the balance was positive – the inflow of funds to the banking sector amounted to 0.4 trillion roubles. The budget flows and changes of cash in circulation had a dominant impact on the liquidity situation in the fourth quarter of 2012.

### Impact on liquidity of changes in cash in circulation\* (accrued from the beginning of the year, billions of roubles)



\* Sign '+' denotes a reduction of the amount of cash in circulation, and sign '-' denotes its increase.  
Source: Bank of Russia.

### Bank of Russia interventions in the domestic foreign exchange market (accrued from the beginning of the year, billions of roubles)



Source: Bank of Russia.

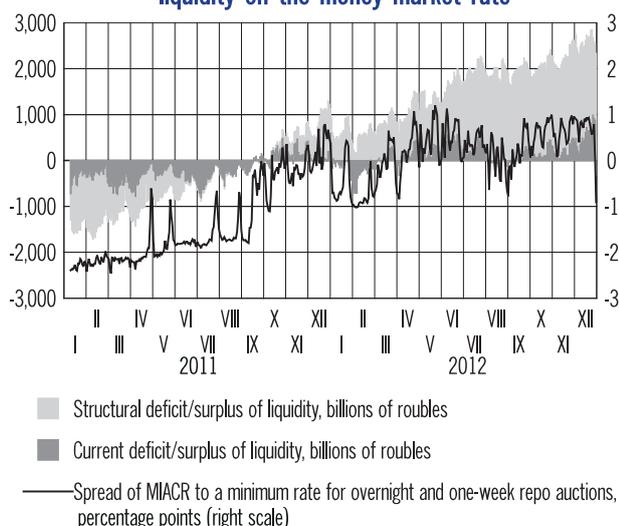
In October and November, the excess of the federal budget's revenue over its expenditure led to a 0.5 trillion rouble decline in the liquidity of the banking sector, but the seasonal increase in the budget expenditure in December contributed to the total inflow of funds via the budget channel, which amounted to 1.2 trillion roubles in the fourth quarter of 2012.

In the fourth quarter, the banking sector's demand at auctions for funds the Federal Treasury deposited in credit institutions remained at a high enough level, but the amount of budget funds deposited in bank accounts practically did not change. According to the results of the fourth quarter, the specified operations had no significant impact on the liquidity of the banking sector, whereas in the third quarter the inflow of funds into the banking sector generated by these operations amounted to 0.5 trillion roubles.

Favourable situation in the financial markets and positive expectations of market participants with regard to completion in early 2013 the process of liberalising foreign investors<sup>4</sup> access to the Russian market of government securities helped maintain a high level of credit institution activity at Ministry of Finance federal government bond auctions. As a result, the outflow of funds from the banking sector due to these operations on a net basis totalled 0.2 trillion roubles, compared to an inflow of 0.1 billion roubles in the previous quarter.

<sup>4</sup> Conclusion of deals with depository servicing using the Euroclear and Clearstream international settlement systems.

The impact of the current and structural deficit of liquidity on the money market rate



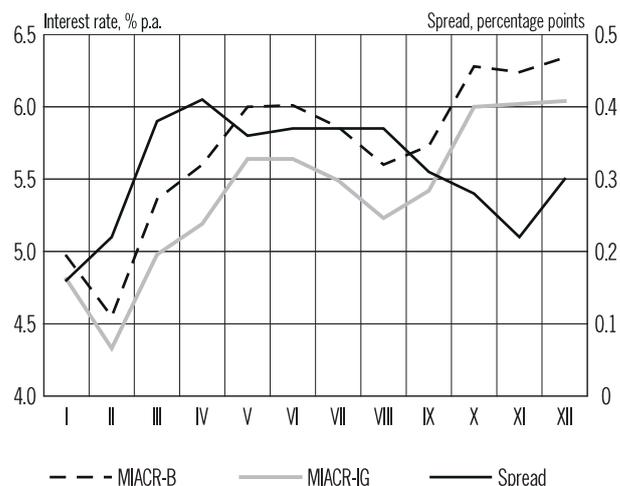
Source: Bank of Russia.

In the fourth quarter and throughout 2012, changes in the volume of cash in circulation represented the second largest autonomous factor in forming the liquidity of the banking sector and were mainly determined by seasonal drivers. The most significant change in the volume of cash in circulation was in December (the issue amounted to 0.8 trillion roubles), in connection with significant payments that were made to individuals at the end of the year and as a result of increased demand for cash to carry out consumer spending before and during the New Year holidays. The total fourth quarter increase in cash in circulation led to a withdrawal of funds from the banking sector worth 0.8 trillion roubles (in the third quarter the impact of this factor on liquidity was almost neutral).

Amid the increasing flexibility of the exchange rate, the influence of the Bank of Russia's interventions on the banking sector liquidity significantly decreased. In the fourth quarter, bank liquidity fell by a mere 2.5 billion roubles (compared to 71.7 billion roubles in the third quarter) as a result of operations conducted by the Bank of Russia in the domestic foreign exchange market.

Due to these factors determining the persistence of the structural deficit of liquidity, Bank of Russia operations continued to play a significant role in balancing supply and demand in the money market: the Bank of Russia's gross loans to credit institutions increased by 0.5 trillion roubles during the fourth quarter. At the same time, the short-term money market rates were at

Spread of rates on overnight interbank rouble loans in 2012



Source: Bank of Russia.

the top of the Bank of Russia's interest rate band. In particular, the overnight MIACR on interbank loans in roubles for most of the fourth quarter ranged from 5.54% to 6.50% p.a. The reduction by the Bank of Russia of rates on the rouble part of currency swap operations from 6.75% to 6.5% p.a. contributed to limiting the volatility of the interbank borrowing cost during this period.

The average overnight interbank interest rate in the fourth quarter of 2012 amounted to 6.1% p.a., marking an increase of 0.6 percentage points compared to the previous quarter. The average monthly rate on overnight rouble-denominated interbank loans rose from 5.5% p.a. in September to 6.1% p.a. in October and November and to 6.2% p.a. in December. The increase of the cost of borrowing in the interbank market was due to the increase in the interest rates on Bank of Russia operations in September 2012 that took place as a result of growing inflation expectations as well as an increase in the structural deficit of liquidity.

The volatility of money market interest rates during the fourth quarter remained moderate. In the period under review, no breaches of the upper border of the Bank of Russia's interest rate band by the overnight money market rates were observed. The spread between the rates, which reflected borrowing by participant groups with different credit ratings (MIACR-IG versus MIACR-B) in the fourth quarter of 2012, narrowed compared to the previous quarter. This shows a decrease in the assessment of interbank operations credit risks by market participants.

In the fourth quarter, no significant changes in participants' activity (compared to the previous quarter) were observed in the major segments of the money market. The turnover of interbank transactions continued to be dominated by unsecured loans (deposits) and currency swaps with a low share of repos. As before, the bulk of operations in the money market were represented by overnight deals. The proportion of money market instruments in the assets of the Russian banking sector remained moderate. The volume of claims on interbank loans and deposits placed in the domestic market totalled 1.67 trillion roubles (3.5% of the total value of assets of Russian banks) at the beginning of December as compared to 1.56 trillion roubles (3.4%) at the beginning of October and 1.65 trillion roubles (4.0%) at the beginning of January 2012.

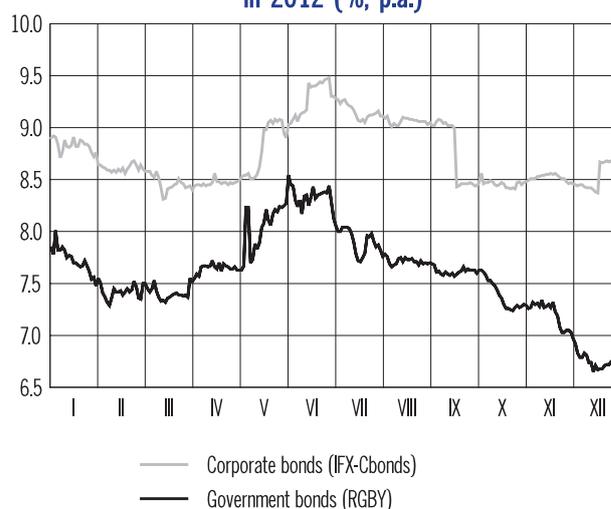
### Debt market

In the fourth quarter of 2012, the liquidity situation in the banking sector created a need among credit institutions for assets that could serve as collateral for the Bank of Russia's refinancing operations and for interdealer repo transactions, which was one of the factors increasing the activity of the participants in the debt securities market.

Increased interest in rouble-denominated debt securities, particularly due to the steps that were taken towards the liberalisation of the Russian securities market<sup>5</sup>, allowed issuers to implement large-scale primary market placement of bonds on rather favourable terms. Sales by issuers of securities in the fourth quarter of 2012 increased 1.3-fold (compared to the third quarter of 2012) in the federal government bond market (296.9 billion roubles at face value), and 2.4-fold in the corporate bond market (519.4 billion roubles at face value). The Russian Ministry of Finance has sold almost all the issues of federal government bonds at a discount to yield in the secondary market or at a discount to yield of comparable traded instruments. Corporate borrowers usually placed bonds within the limits of the originally

<sup>5</sup> In 2012, federal government bonds were admitted for circulation at Russian stock exchanges and in the over-the-counter market. The unification of the process of depository accounting and of the procedure for making payments to investors on government and non-government securities was performed there as well. In September 2012, regulation was enacted that gave non-residents the right to directly access Russian government securities trading, including access through the international settlement systems Euroclear and Clearstream.

Rouble bond yields in the domestic market in 2012 (% p.a.)



Source: Cbonds.ru, Moscow Exchange.

announced first coupon benchmark rates, and certain issuers with high credit-ratings placed them at coupon rates that were below the ranges declared in the bid collection period.

The activity of secondary trades' participants in the fourth quarter of 2012, compared to the third quarter of 2012, also increased. The volume of operations in federal government bonds (OFZ) rose 1.4-fold to 1,702.3 billion roubles, and in corporate bonds the volume rose 1.2-fold to 1,711.5 billion roubles at actual value.

The policy of issuers in the primary market and market participants' expectations regarding the completion of the process of liberalising foreign investors' access to the OFZ market remained the main factors that influenced the yield formation of secondary market debt instruments. That was why the September increase of Bank of Russia interest rates on its operations (which caused the rise in interbank market rates) did not lead to a change of trends in the yields of debt securities. In October-December, the yield of federal government bonds continued to fall, while the yield of corporate bonds<sup>6</sup> was changing within the horizontal band. At the end of December 2012, the yield of OFZ fell relative to the end of September 2012 by 89 basis points to 6.71% p.a., while the yield of corporate bonds rose by 12 basis points, to 8.56% p.a.

<sup>6</sup> On 17 September 2012 and 17 December 2012 the IFX-Cbonds index calculation base was revised.

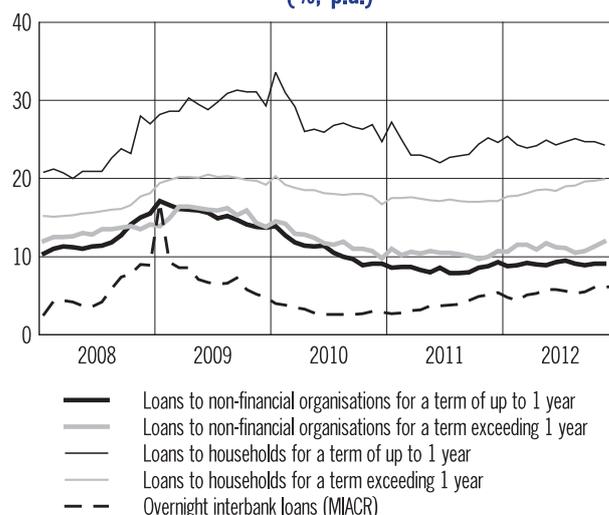
### Bank interest rates and non-price lending conditions

In 2012, the interest rates on short-term loans to non-financial organisations fluctuated around the level established by the end of 2011. For long-term loans, an unsustainable upward trend was observed. In November 2012, the average weighted interest rate on rouble loans to this category of borrowers for up to one year was 9.1% p.a., while for a term exceeding one year, the rate was 11.9% p.a. For most of the fourth quarter of 2012, the rates on short-term loans to non-financial organisations remained unchanged, whereas the rates on long-term loans continued to increase. In the fourth quarter, banks' non-price lending conditions to non-financial organisations<sup>7</sup> continued to tighten. As in the third quarter, the main trend in their change was that the requirements regarding the financial status of borrowers and the quality of collateral increased. Furthermore, given the prospect of continuing uncertainty, a number of banks reduced their maximum loan maturities.

No distinct trends were observed in 2012 in the dynamics of interest rates on up to one year loans to households. At the same time, rates on loans to this category of borrowers for terms exceeding one year increased markedly. The average weighted interest rates on rouble loans to households for terms of up to one year and over one year in November 2012 were 24.3% and 19.9% p.a., respectively. For October-November, the average rate on rouble short-term retail loans, as compared to the third quarter, declined slightly; for long-term loans, this rate increased. In the fourth quarter, many banks continued to raise rates on mortgage loans and car loans, the types of long-term loans that had previously witnessed particularly high demand among individuals. In the fourth quarter, there was a slight weakening of competition among banks in the retail lending segment. Under these circumstances, the non-price lending conditions were changing in different directions. As in the previous quarter, an easing of certain non-price lending conditions (easing

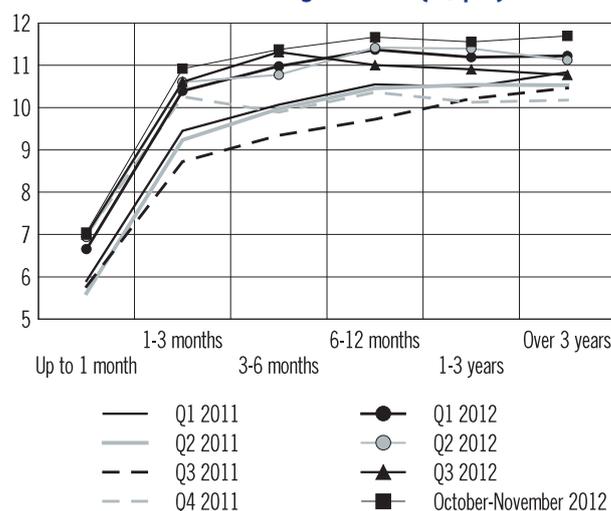
<sup>7</sup> Bank lending conditions are evaluated according to a quarterly survey of credit institutions which is conducted by the Bank of Russia. The evaluation methodology was published in the Bulletin of the Bank of Russia, No. 68 (1311), dated 14 December 2011 (p. 11). The survey results are published on the website of the Bank of Russia in the 'Information and Analytical Materials', in the 'Financial Markets' subsection (Russian version of the website).

Nominal interest rates on rouble loans (% p.a.)



Source: Bank of Russia.

Term structure of interest rates on rouble loans to non-financial organisations (% p.a.)

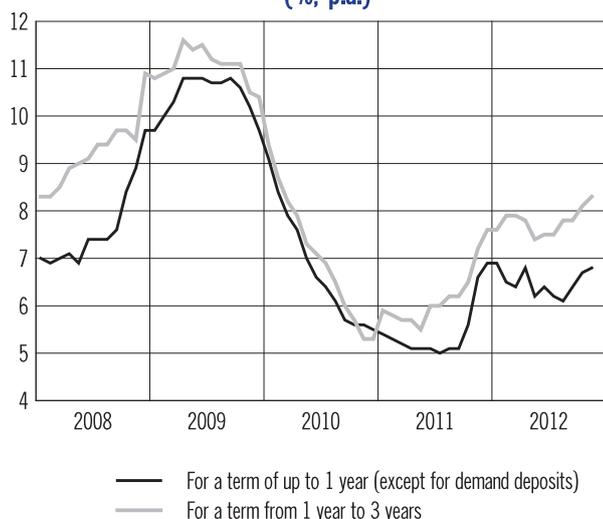


Source: Bank of Russia.

of loan collateral requirements, introduction of new credit products) was observed. At the same time, several banks tightened their requirements regarding the financial status of borrowers and reduced maximum loan maturities.

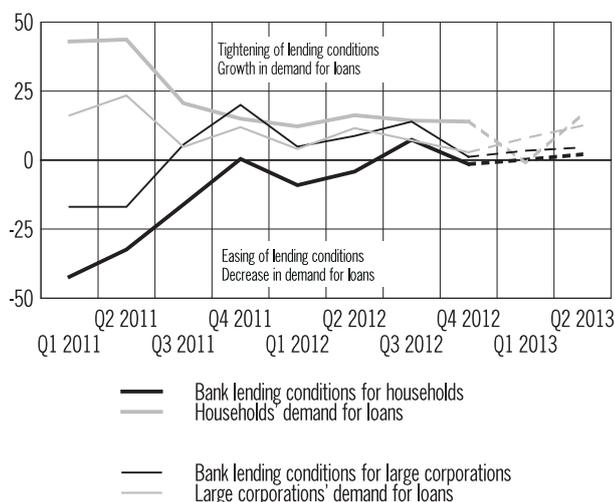
A trend towards higher interest rates was observed among household deposits by the end of 2012. During October-November, the average interest rates on rouble deposits which experienced the highest level of demand among individuals (from 6 to 12 months and from one to 3 years), increased compared to the average values for the third quarter by 0.7 and 0.5 percentage points, up to 7.4% and 8.2% p.a., respectively. The Bank of Russia's monitoring shows that the average maximum rate on the rouble deposits of

### Nominal interest rates on rouble household deposits (%, p.a.)



Source: Bank of Russia.

### Lending conditions index (points)



Source: Bank of Russia.

10 Russian credit institutions which attracted the largest amount of deposits, in the last ten days of December 2012 amounted to 9.65% p.a., having increased by 0.3 percentage points as compared to the last ten days of September 2012<sup>8</sup>.

According to the banks' evaluations, in the first half of 2013, a slight tightening of lending conditions for all categories of borrowers will continue. At the beginning of 2013, banks expect to witness a seasonal slowdown in demand for loans among individuals, but expect this demand

to accelerate again in the second quarter. Non-financial organisations' demand for loans is expected to grow gradually. If these expectations materialise by the end of the second quarter of 2013, a moderate increase in the rates on loans to non-financial organisations can be expected.

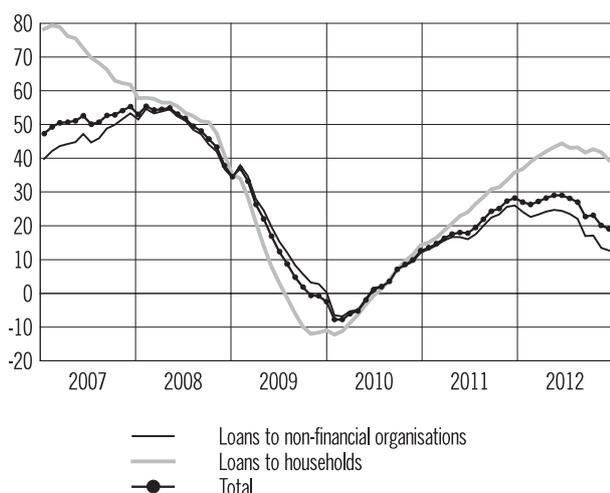
### Credit aggregates

Overall, current dynamics of credit aggregates represent a shift to a more moderate credit growth phase. By end-2012, the annual growth rate of total outstanding loans was 19.1% (28.2% in 2011). The hallmark of the current situation in the credit markets that differentiates it from previous years is mixed dynamics of loans to the various sectors of the economy. While the growth rates of loans to non-financial organisations are declining sharply, causing a slowdown in overall loan debt, growth rates of loans to households remain at a sufficiently high level. Thus, the annual growth rate of loans to non-financial organisations for the year 2012 amounted to 12.7% (26% in 2011). Meanwhile, the loans to households increased by 39.4% (35.9% in 2011). As a result, for the first time in the Russian banking system, the contribution of the growth of loans to households to the overall annual growth of the loan portfolio of banks almost equalled the contribution of corporate loans.

The amount of outstanding loans to non-financial organisations for the term exceeding one year increased by 4.9% in the fourth quarter of 2012 (by 3.6% in the third quarter). In 2012, the growth rate of these loans amounted to 16.5%. The amount of short-term loans issued during the fourth quarter declined, following its marked increase in the third quarter. The share of loans to non-financial organisations for the term exceeding one year in the total volume of loans to non-financial organisations reached 69.3% on 1 January 2013, its highest value in the past few years. In corporate lending, the industry which witnessed the most significant increase in loan debt was transport and communications; its debt to credit institutions grew by 9.6% during the fourth quarter. Wholesale and retail trade companies increased their loan portfolios by 2.0% during this period, while manufacturing enterprises increased their portfolios by 1.7%, maintaining their lead in the sectoral structure of corporate lending. In the fourth quarter, loan portfolio of small and medium-sized businesses

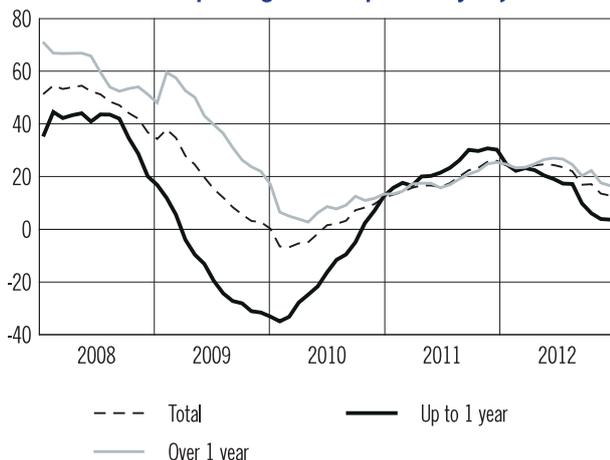
<sup>8</sup> Since September 2012 – excluding the impact of combined deposit products. Since October 2012, the Bank of Russia has focused mainly on credit institutions with rates on deposits that exceed this indicative figure by more than 2.0 percentage points.

### Loans to non-financial organisations and households (growth as % of corresponding date of previous year)



Source: Bank of Russia.

### Loans to non-financial organisations in roubles and foreign currency, by maturity (growth as % of corresponding date of previous year)

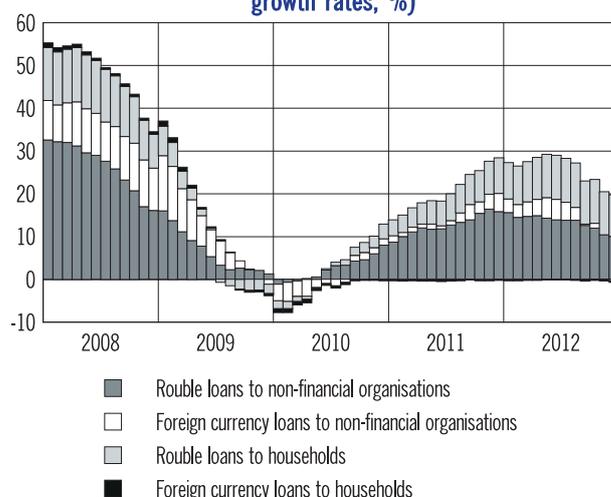


Source: Bank of Russia.

had faster growth rates than the loan portfolio of large borrowers.

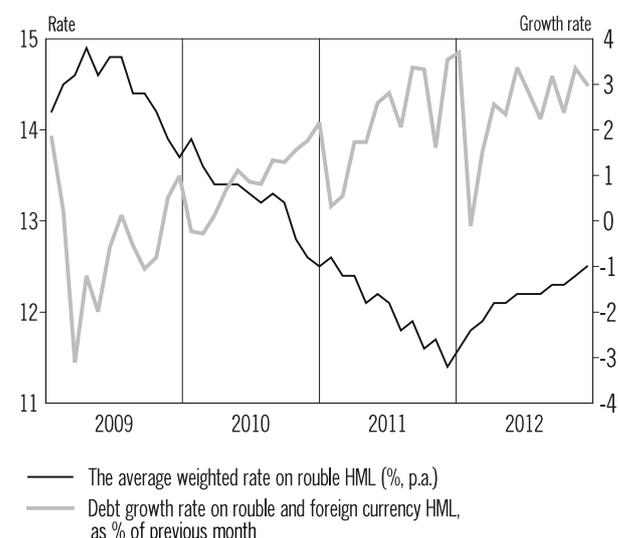
The growth rate of loans to households in the fourth quarter (2.5%) was 0.4 percentage points less than in the third quarter. Retail lending continued to grow more actively than corporate lending. The share of loans to households in the banks' total loan portfolio rose to 22.8% as of 1 January 2013. In the fourth quarter, total loans for up to one year to this category of borrowers increased more (by 10.7%), than for the term exceeding one year (by 7.6%), as had happened in the third quarter. This was due mainly to the decrease in foreign-currency long-term loans to households, including currency revaluation. However, the share of loans to households for

### Loans to non-financial organisations and households (contributions of various categories of loans to annual growth rates, %)



Source: Bank of Russia.

### Housing mortgage loan market



Source: Bank of Russia.

the term exceeding one year in their total volume remained dominant, constituting more than 80%. The trend towards a gradual rise in prices of long-term retail loans, including mortgage and car loans, remained. The average weighted interest rate on rouble housing mortgage loans (HML) increased, starting in August, by approximately 0.1 percentage points each month; in November, this figure reached 12.5% p.a. However, in the October-November period, the average growth rate (3.2%) of HML exceeded the same indicator for the third quarter (2.6%). This can be explained by the propensity of potential borrowers to obtain mortgage loans under the current conditions in anticipation of their further tightening. The sustainable development of the car loan market in

late 2012 was supported by competition between banks, particularly by the reduction of non-price lending conditions. The average growth rate of the car loan volume in October-November amounted to 1.9%, which is 0.3 percentage points higher than the average for the third quarter.

The analysis of credit aggregates, taking into account changes in the dynamics of key macroeconomic variables (in particular, the decelerating growth of both real and nominal GDP) still shows that the lending growth rates remain at a high enough level. Thus, despite the decline in nominal growth rates of loans to non-financial organisations and households, real<sup>9</sup> growth rate values as well as the annual growth of the loan-to-GDP ratio at the end of the third quarter of 2012 were comparable to the values of corresponding indicators at the beginning of 2006 (i.e., in the period before the pre-crisis credit boom).

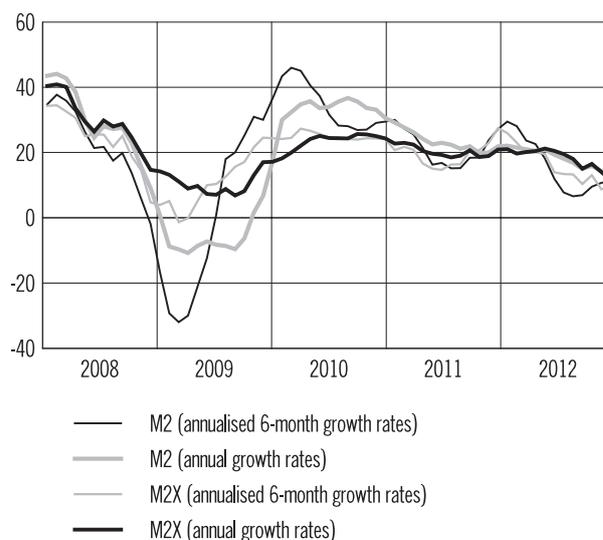
### Money supply

During the first half of 2012, no pronounced trends in the dynamics of annual growth rates of the M2 monetary aggregate were observed. However, the annual growth rates of the rouble money supply were gradually decreasing, starting with the second quarter of 2012; this process intensified in the third and fourth quarters. The annualised 6-month growth rate of M2, which is less dependent on the base effect, was noticeably lower than the annual growth rates, but it slightly increased during the last several months. As a result, the annual growth rate for the M2 monetary aggregate was 11.9% in 2012, which was significantly less than the corresponding indicator for 2011 (22.3%). The 2012 slowdown of the money supply growth rates will help reduce inflation risks in the medium term (see Subsection 'Monetary analysis of inflation risks' in Section II. 2).

The dynamics of household deposits were the most stable ones among the components of the rouble money supply. Their annual growth rates declined less intensively than the M2 monetary aggregate and equalled 19% on 1 January 2013 (22.4% on 1 January 2012). The annual growth rates of the rouble deposits of non-financial and financial organisations were higher than the growth rates of household deposits during January-July 2012. However, they had begun to

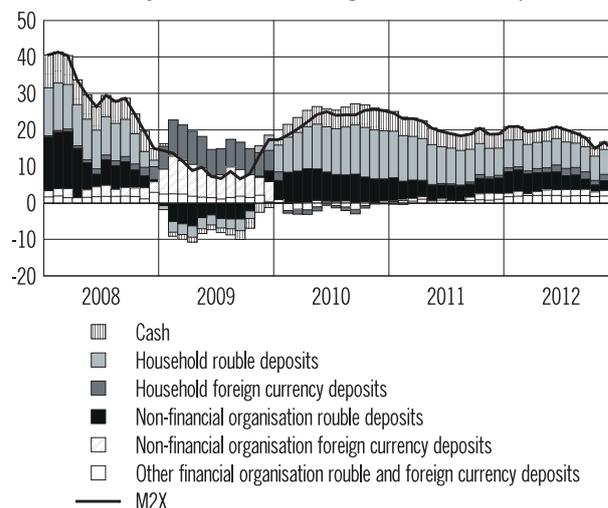
<sup>9</sup> In real terms, the rate was calculated using the GDP deflator.

### Seasonally-adjusted M2 and M2X (%)



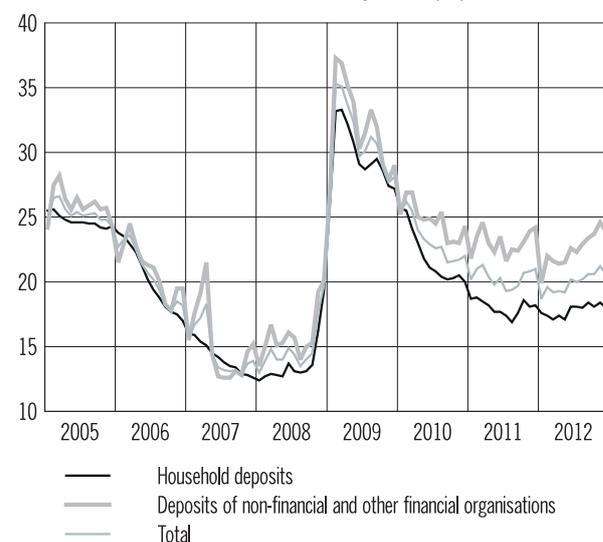
Source: Bank of Russia.

### Broad money (M2X) (contributions by various components to annual growth rates, %)



Source: Bank of Russia.

### Dollarisation of deposits (%)



Source: Bank of Russia.

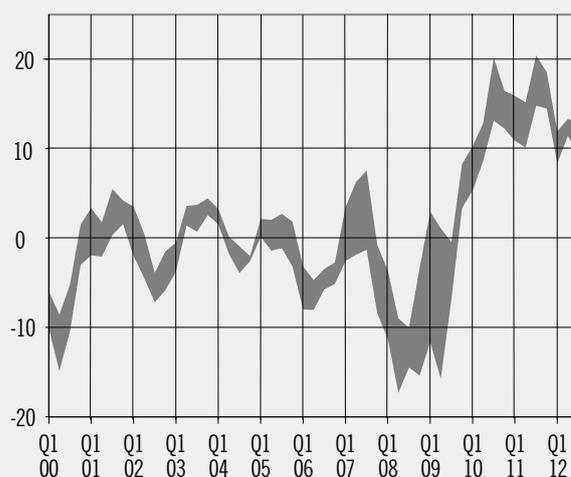
### The use of indicators of monetary gaps in analysing money supply dynamics

The growth rate of monetary aggregates is the main indicator used in the analysis of the money supply dynamics. At the same time, the indicator of the total amount of money in the economy can be used to calculate indicators that might contain the information necessary for the effective implementation of monetary policy. The evaluation of the money demand function that is expressed by the relationship between the money supply and factors representing the economy's demand for money is one of the most common approaches to calculating these indicators. The monetary gap indicator can be calculated based on the money demand function as the deviation of the actual value of the monetary aggregate from the calculated value corresponding to the current values of basic macroeconomic indicators. The figure shows the range of monetary gap values calculated for the Russian economy<sup>1</sup>.

The change in the monetary gap can be considered an indicator of how quickly or slowly the money supply is growing relative to the dynamics of fundamental factors. In particular, it may be noted that the increase in the monetary gap at the end of 2009 and the first half of 2010 showed that the acceleration of growth in monetary aggregates was significantly faster than the recovery of growth rates of the calculated value of money demand. At the same time, since the second half of 2011, the monetary gap dynamics indicated that the growth rate of the money supply in general was below the growth rate of the money demand fundamentals.

The value of the monetary gap (i.e., positive or negative) can also be considered a characteristic of the monetary stance in the economy; however, it should be interpreted with caution. Currently existing positive monetary gap shows that the money demand function relationships are not in equilibrium (i.e., there is an excessive money supply in the economy). In theory, there are several options for restoring this equilibrium. First of all, this can happen as a result of a slowdown in money supply growth. This assumption gives grounds to consider the current slowdown in the growth rates of basic monetary aggregates as a natural process, creating no threats to the functioning of the economy. At the same time, a return to the equilibrium may occur if the money supply grows at a constant rate amid the accelerated growth in money demand (for example, due to the growth in the prices of goods and services or assets). In this context, the positive monetary gap can be viewed as an indicator of persisting inflation risks. Also, it cannot be excluded that the equilibrium was broken due to changes in factors that were not included in the conventional functions of money demand (e.g., changes in the behaviour of economic agents as a result of the crisis). In this case, the positive monetary gap may have no macroeconomic consequences (however, if these changes are temporary, effects associated with the excessive money supply could start to emerge following the normalisation of the situation).

The range of monetary gap values (%)



Source: Bank of Russia calculations.

<sup>1</sup> Monetary gaps are calculated for M1 and M2 monetary aggregates. Calculation methodology is described in detail in the article by Ponomarenko, A., Vasilieva, E., and Schobert, F. (2012) Feedback to the ECB's Monetary Analysis: The Bank of Russia's Experience with Some Key Tools. ECB Working Paper No. 1471.

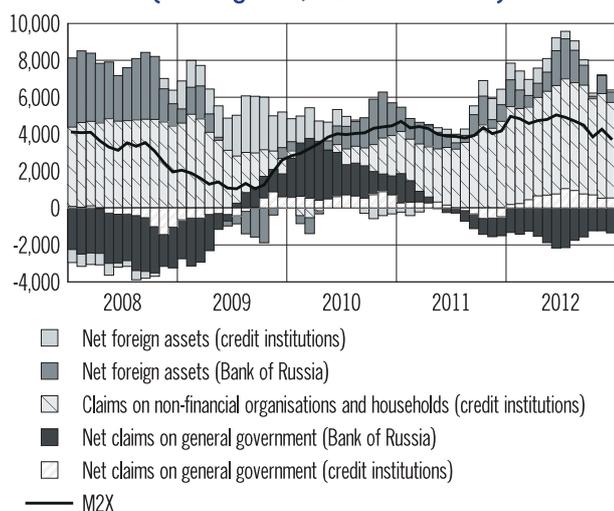
decline starting in August; they equalled 6.4% on 1 January 2013 (26.0% on 1 January 2012).

Annual growth rates of the M2X broad money during 2012, similar to the dynamics of the M2 monetary aggregate, also gradually decreased and amounted to 12.1% on 1 January 2013. At the same time, the annualised 6-month growth rates of M2X declined less intensively

during most of the year as compared to the similar rouble money supply dynamics.

The annual growth rate of foreign currency deposits (in rouble terms) amounted to 12.9% on 1 January 2013, i.e., in general for 2012, it remained at the level of the corresponding indicator a year earlier (13.0%). At the same time, growth rates of foreign currency deposits in the second and third quarters of 2012 increased due

### Banking system major assets and broad money (M2X) (annual growth, billions of roubles)



Source: Bank of Russia.

to changes in exchange rate dynamics. However, despite a slight increase in the level of deposit dollarisation<sup>10</sup> in June-October, the response of dollarisation dynamics to the fluctuations in the rouble exchange rate in 2012 was weaker than other episodes which were observed in the previous years (see Box 'The impact of exchange rate fluctuations on dollarisation dynamics', Quarterly Inflation Review, 2012 Q2, Bank of Russia).

Credit growth in the economy was the main source of the M2X expansion in 2012. At the same time, a reduction of Bank of Russia net claims on the general government had a significant restraining effect on the money supply dynamics during this period. Contributions of the growth in Bank of Russia net foreign assets to the money supply growth decreased compared to 2011.

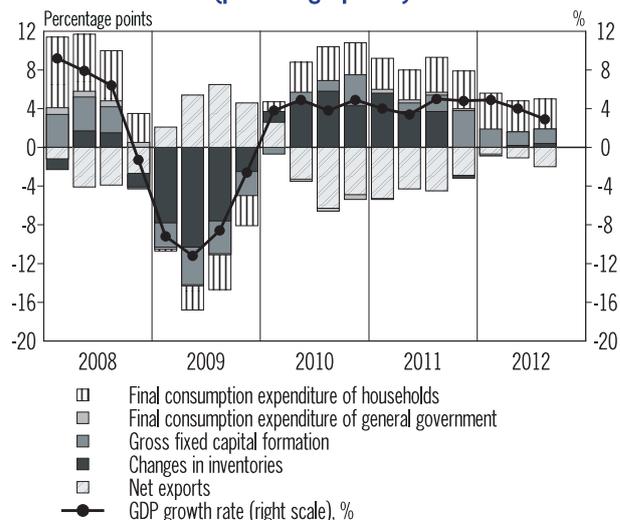
### Domestic demand

In January-September 2012, the GDP grew by 3.9%, in the third quarter it grew by 2.9%. Domestic demand remained the main factor driving economic growth.

Compared with the corresponding period in 2011, the contribution of households final consumption expenditure to GDP growth decreased amid lower consumer activity growth rates in the third quarter of 2012. The contribution of general government final consumption expenditure during this period was negative. The growth rates of fixed capital investment were

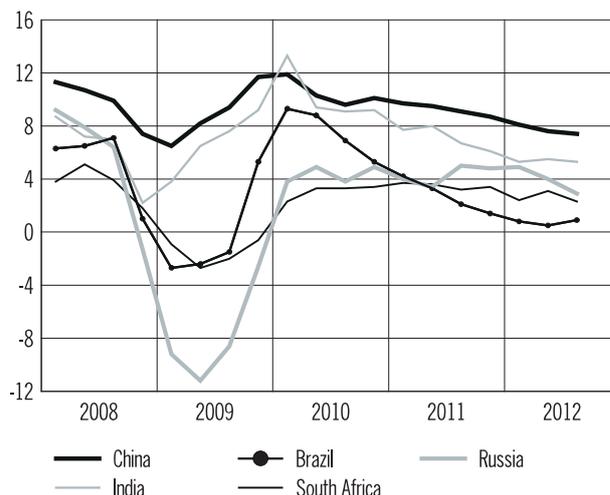
<sup>10</sup> The level of dollarisation in this case is the share of foreign currency deposits of total deposits in the banking sector.

### GDP growth structure by expenditure (percentage points)



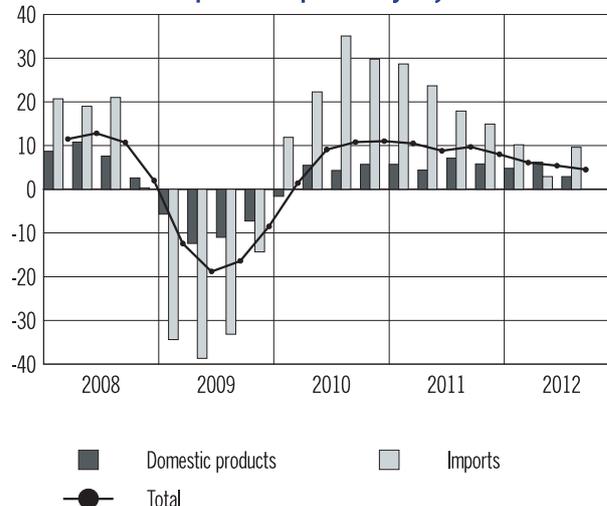
Source: Bank of Russia calculations, Rosstat.

### Real GDP of BRICS countries (growth as % to corresponding quarter of previous year)



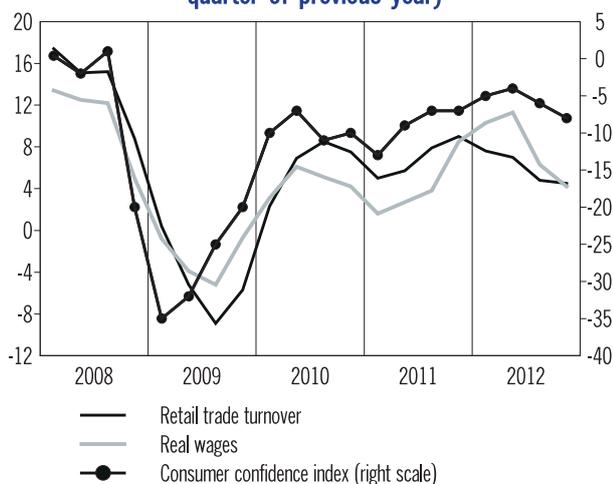
Source: national statistics, Rosstat.

### Domestic demand (growth as % to corresponding quarter of previous year)



Source: Banks of Russia calculations, Rosstat.

### Turnover in real retail trade, real wages and consumer sentiment (growth as % to corresponding quarter of previous year)



Source: Rosstat.

lower than in the third quarter of 2011. This, as well as a reduction in inventories resulted in the decrease of the contribution of the gross capital formation to GDP growth. Against the background of the increase in export quantities of goods and services and a slowdown in the growth rates of their imports, the negative contribution of net exports declined markedly. In the third quarter of 2012, the growth in domestic demand for imported products was higher than for domestic products.

The actual output of goods and services is estimated to be close to its potential level, indicating a lack of meaningful domestic demand pressure on consumer market inflation.

### Consumption

In the third quarter of 2012, the household final consumption expenditures increased by 6.0% compared to the corresponding period of the previous year (by 7.2% in the third quarter of 2011). In the fourth quarter, due to a slowdown in real wages growth compared to the corresponding period of the previous year, growth rates of real household expenditures for the purchase of goods and services were estimated to have decreased from 8.3% to 5.3%. The year-on-year growth of this indicator in 2012 was 5.8%, according to estimates.

In the fourth quarter of 2012, the consumer confidence index (according to Rosstat surveys) continued to decline. This was connected with deterioration in attitudes among individuals regarding how the economy had changed and how

it was expected to change, in their assessing the likelihood that they would make major purchases and the changes in their personal financial situation. The growth in household demand for food most noticeably slowed down, which was somewhat connected with the acceleration of the growth rate of prices for this group of products.

The household final consumption expenditures make the greatest contribution to economic growth. With the output gap close to zero, the existing dynamics of consumer expenditures do not increase inflation risks.

In the fourth quarter of 2012, the household propensity to save (including savings in the form of deposits and securities) was higher than in the corresponding period of 2011. To some extent, the increase in the percent of the money they saved is connected with an increase in the interest rates offered by the major Russian banks for retail deposits in the fourth quarter of 2012. In general, in 2012, the household propensity to save was lower than it had been in the previous year.

### Investments

In the third quarter of 2012, the amount of gross fixed capital formation increased by 7.2% (by 7.9% in the third quarter of 2011). In the fourth quarter, the growth rate of fixed capital investment was significantly lower than in the corresponding period in 2011. In 2012, fixed capital investment expanded by 6.7%.

In 2012, the dynamics of corporate own funds<sup>11</sup> as a source for financing fixed capital investment continued to decline; this is one of the factors that slowed down investment activity. Despite renewed profit growth in the second half of 2012, its rates were significantly lower than corresponding 2011 indicators. In February-March 2012, the growth rates of organisations' profits slowed down, in April-June profits fell compared to the corresponding period 2011, and in August-October profit growth was observed. Overall, in January-October 2012, the net financial result of organisations increased by 9.4% (by 22.4% in January-October 2011).

In addition, in 2012, the growth in demand of non-financial organisations for credit resources noticeably slowed down. For the first 11 months of 2012, the growth rate of loans to non-financial organisations was less than half what it had

<sup>11</sup> The share of own funds in the structure of fixed capital investment by sources of financing was 47.7% in January-September 2012.

### Output gap indicator

The output gap indicator is defined as the deviation of actual output in the current period from the 'potential output'.

There are several techniques one can use to evaluate potential output. When analysing and forecasting is conducted for the purpose of supporting monetary policy decisions aimed at achieving inflation targets, the potential output concept is treated as inflation neutral. In this case, the potential output is understood as the amount of products that can be produced and put on the market without creating preconditions that change the pace of price growth.

Thus, the potential output is not connected with any particular level of inflation, but merely indicates the presence or absence of preconditions for its acceleration/deceleration. If the potential output is exceeded by the actual one (a positive gap), it indicates an expected acceleration in the growth rate of prices. A positive gap means that the economy is operating at above its capacity because of the existence of excess demand. A negative output gap shows that there is an excess supply (unused capacity) or a slowdown in economic growth due to a reduction in demand and indicates an expected slowdown in the growth rate of prices.

Retrospective assessments are not as important for the purposes of monetary policy as short- and medium-term projections of changes in key indicators under various scenario assumptions. Output gap allows one to make judgments about future demand dynamics and inflationary pressure (in a form that is convenient for analysis), and therefore it is one of the most important indicators used when monetary policy is determined. Central banks are equally concerned about an increase in demand or its decline influencing the status of inflation above or below the target level. So usually, when it is expected that demand will exceed the capacity of the economy (positive gap), the central banks tighten their policies and raise interest rates to cool down the demand and lower the inflationary pressure. The reverse happens as well: when the demand is expected to fall below the potential level (negative gap), the central banks lower interest rates in order to boost demand and prevent inflation from falling below the target level.

The potential output is an unobservable variable and cannot be measured directly. Currently, there is no single best technique to estimate the potential output.

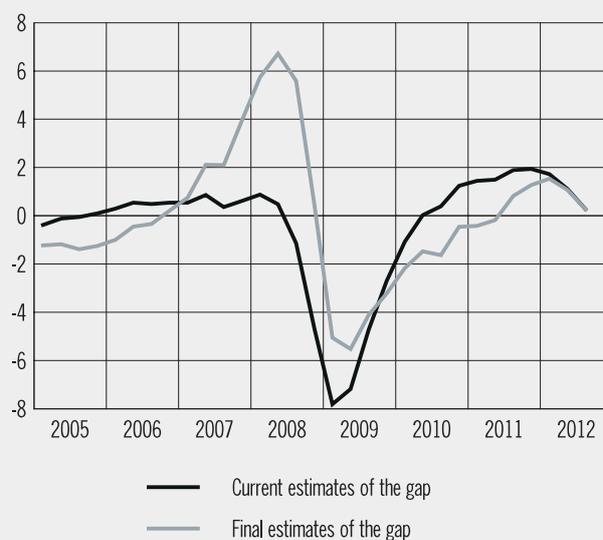
The main challenge of the assessment procedure is the so-called 'end-of-sample' problem. The thing is that assessments of the potential output in the current period (it is the last in the sample) can be significantly adjusted by adding new observations to the sample and by the revaluation of an expanded sample. This problem is typical for models that use a minimum set of data and structural assumptions. One of the best-known examples of such a model is a univariate Hodrick-Prescott filter.

The chart shows current and final output gap estimates based on the Hodrick-Prescott filter. The curve of 'current' estimates is based on the last points of the linear gaps, obtained with a univariate Hodrick-Prescott filter using a sample that is consistently expandable by one observation. For final estimates, a sample was used for the period from 2003 through the third quarter of 2012. Compared with the estimated results throughout the overall array of data until mid-2012, the calculations based on shorter samples resulted in an underestimation of the growth of the gap before the 2008 crisis, and subsequently – to an overestimation of the negative gap.

The second problem is the adequacy of the assumptions and structural constraints that are used to economic realities. For the Russian economy, this problem is exacerbated by the time series lack of duration and heterogeneity from a statistical point of view, which makes it difficult to use the optimisation techniques of parameterisation, and in many cases, forces economists to calibrate the parameters on the basis of experts' assessments. Therefore, the reliability of the results of the model often depends on the quality of the judgments of experts, the verification of which is practically impossible.

Thus, in order to increase the reliability of estimates it is expedient to use several different methods. The methods used by the Bank of Russia include univariate filtering, multivariate Hodrick-Prescott filters, an econometric model of

Univariate Hodrick-Prescott filter



Source: Bank of Russia calculations.

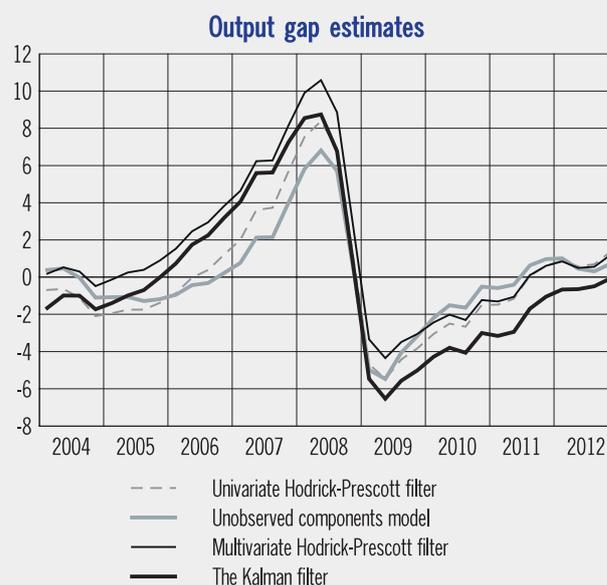
unobservable components as well as a multivariate Kalman filter, the estimates of which are now considered to be the most reliable ones.

The multivariate Hodrick-Prescott filter allows one to use for the purpose of analysis information on the rate of inflation and unemployment. Formally, this information can be used to improve the quality of estimates made by the filter by incorporating the residuals of corresponding equations (analogues of Okun's law and Phillips curve), which are expressed through the gap values into the loss-function<sup>1</sup>.

The econometric approach is based on the presentation of a filter in the form of a multivariate model of unobservable components with a common cycle. The model has been complemented by a process to describe the dynamics of unemployment. As with Okun's law, the equilibrium component is selected in the unemployment rate fluctuations, and its cyclical fluctuations are linked to the fluctuations of the output gap<sup>2</sup>.

The Kalman filter estimates are based on a traditional new Keynesian equation system, which implements a set of structural assumptions regarding the expected nature of the relationship between the output gap, inflation and a number of other macro-economic indicators. The advantage of this method is that it uses for the purposes of estimation a wide range of observed indicators that characterise economic activity, the real monetary conditions and the status of the external sector. This allows economists to alleviate the 'end-of-sample' problem to the fullest extent, as estimates are linked to the dynamics of observed variables with values that do not change during revaluation on the basis of an extended sample. In addition, the structure of the system of equations explicitly uses the assumption of a relationship between the gap and inflation, which allows estimates of the potential GDP to be obtained that substantially correspond to the task set, meaning that it reflects the inflationary pressure from the demand side rather than just some abstract statistical trend in the GDP dynamics.

Even if a large number of structural assumptions and a wide spectrum of observed variables are used, it is not feasible to completely get rid of the 'end-of-sample' problem. Therefore, estimates of historical dynamics of the output gap may change as new data arrive. The most significant changes happen if short-term forecasts of observed variables are inaccurate. Under conditions of high uncertainty such as those associated with the crises which have transpired in the world economy in recent years, this situation is not uncommon, especially what concerns external sector forecasts.



Source: Banks of Russia calculations.

<sup>1</sup> Laxton D., Tetlow R. (1992). A simple multivariate filter for the measurement of potential output, Bank of Canada Technical Report No 59.

<sup>2</sup> Scott A. (2000). A multivariate unobserved components model of cyclical activity. Reserve Bank of New Zealand Discussion Paper #2000/04.

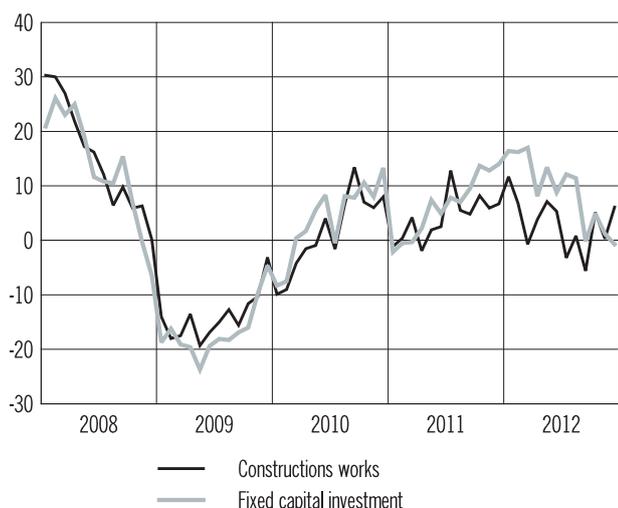
been in 2011. To some extent, this is due to the fact that many Russian banks tightened their non-price lending conditions for non-financial organisations (mainly requirements regarding their financial status, credit collateral, and loan term reduction). In the sources of financing of fixed capital investment, the share of loans issued by banks in January-September 2012 was 0.4 of percentage points less than in the corresponding period in 2011, and amounted to 8.2%.

The high base in the second half of 2011 affected the slowdown in fixed capital investment.

The amount of budget appropriations for the construction of facilities under the targeted investment programme for 2012 declined year on year. The monthly dynamics of construction activities were volatile in 2012. Construction rose again in the fourth quarter, after a reduction in the third quarter (compared with the corresponding period in 2011). In general, in 2012, construction increased by 2.4% (by 5.1% in 2011).

According to a survey of the business activity of construction organisations (Rosstat), the business confidence index in construction

### Fixed capital investment and construction works (growth as % of corresponding month of previous year)



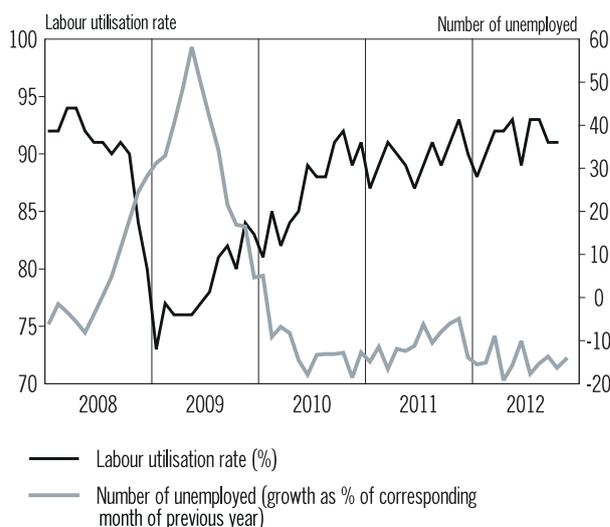
Source: Rosstat.

decreased in the fourth quarter of 2012, compared to the previous quarter, which corresponds to the seasonal dynamics of the indicator. Most of the surveyed managers underlined the high level of taxes and the high cost of materials, structures, and products as being among the factors that constrain construction activity.

### Labour Market

In the fourth quarter of 2012, the growth of population employed in the economy continued. During the first 11 months of 2012, the number of employees who had dead time through employers' faults and for reasons beyond the control of employers and employees decreased

### Unemployment and labour utilisation in industry

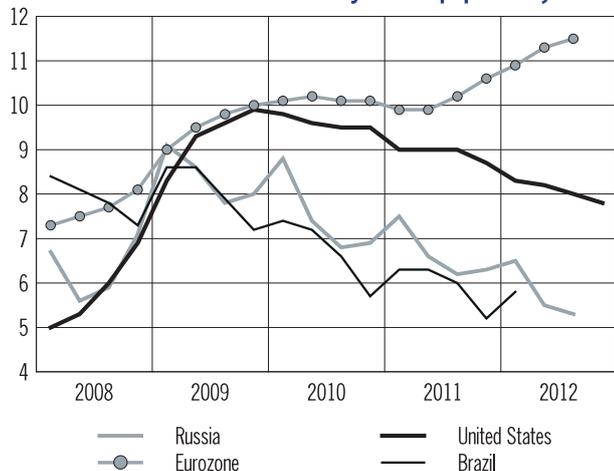


Source: Russian Economic Barometer, Rosstat.

year on year. The reduction of part-time employment is evidence of a high level of labour utilisation in the national economy, which limits the increase in employment in view of the existing low unemployment level. Estimates show that the growth rate of the employed population in 2012 was lower than in 2011.

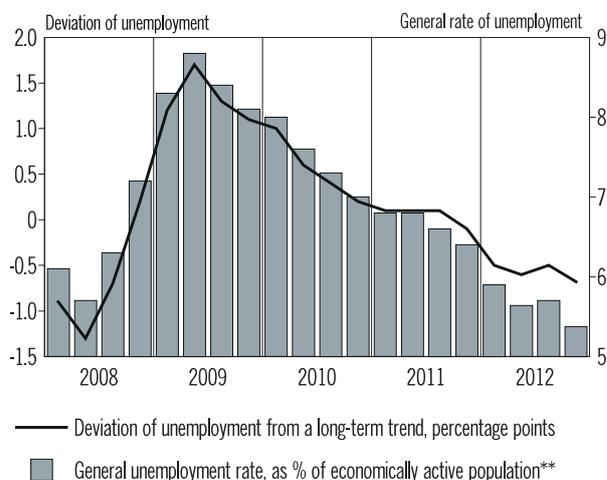
In 2012, the unemployment level fell to its lowest value in the last 20 years (5.2% in August and September, 5.3% in December). With seasonal factors excluded, this indicator continued to drop in October-December. In 2012, the general level of unemployment is estimated to be lower than the long-term trend, which factor amid the accelerated growth rate of unit

### Unemployment in Russia, the United States and the eurozone (average for the reporting quarter, as % of the economically active population)



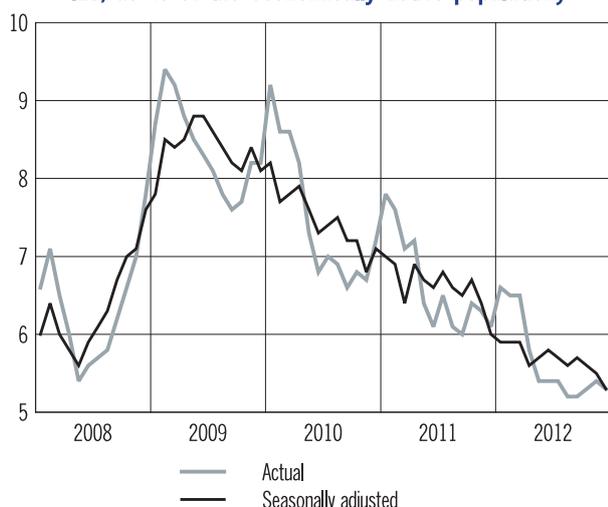
Source: national statistics, Eurostat, ILO, Rosstat.

### Unemployment rate (for the quarter)\*



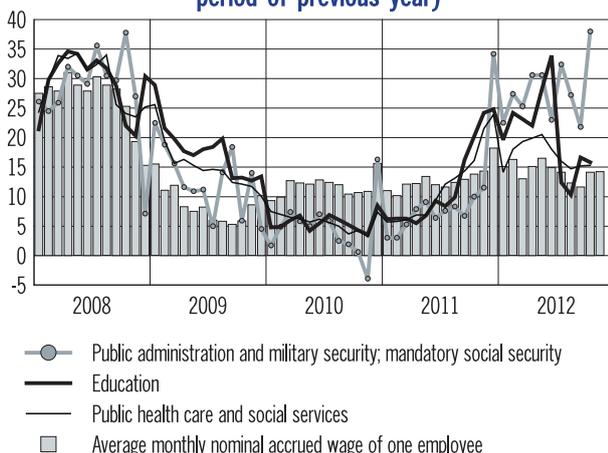
\* Long-term trend was assessed by the Hodrick-Prescott filter.  
\*\* Seasonally adjusted.  
Source: Bank of Russia calculations, Rosstat.

**Unemployment rate (the number of unemployed by the ILO, as % of the economically active population)**



Source: Bank of Russia calculations, Rosstat.

**Average nominal accrued wage in the economy as a whole, and in types of activity with a high share of financing by the state budget (as % of corresponding period of previous year)**



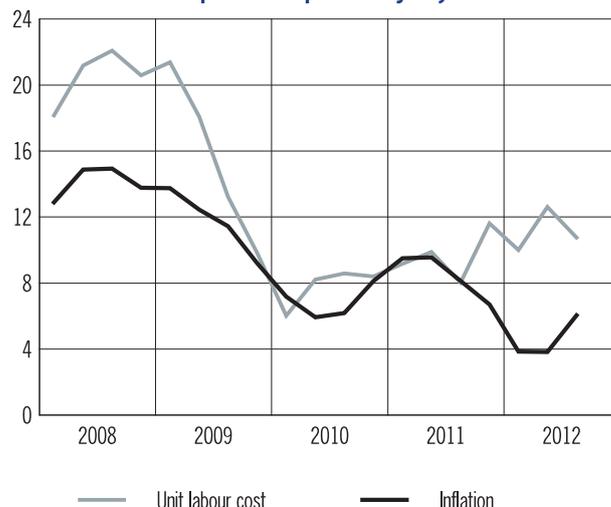
Source: Rosstat.

labour cost<sup>12</sup>, demonstrated a certain cost-push inflationary pressure in the economy.

The labour productivity growth in the third quarter was lower than in the first quarter and in the second quarter of 2012, being estimated at 3% for the period from January to September year on year. Starting from the third quarter of 2009, the rates of growth in real wages were generally in line with the rate of labour productivity change.

<sup>12</sup> Calculated as the ratio of the growth rate of nominal wage of one employee to labour productivity growth. It is similar to the growth rates of 'unit labour cost' calculated by American and other countries' statistical agencies as a ratio of average hourly nominal wage to labour productivity, the ratio being an indicator of the pressure exerted by production costs on inflation.

**Unit labour cost and inflation (as % of corresponding quarter of previous year)**



Source: Bank of Russia calculations, Rosstat.

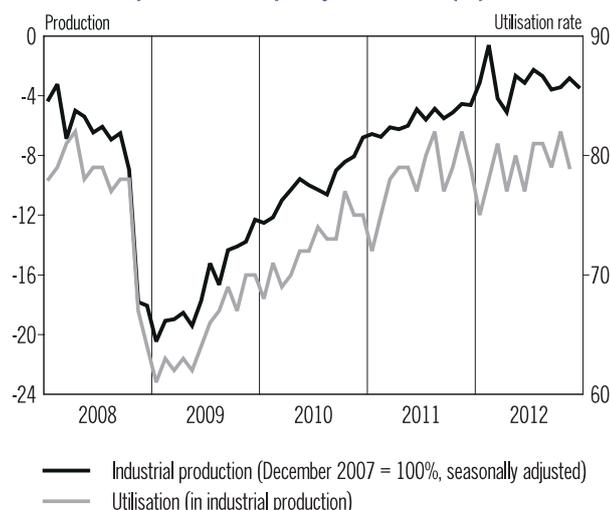
Starting from the fourth quarter of 2011, the real wages growth increased as affected by the relatively low base of the previous year and a significant inflation slowdown. 2012 saw a significantly higher wage growth in the activity types largely financed from the state budget. However, their level is still behind the Russia-wide average monthly wages. In January-October 2012, the average wages of the 'Public health care and social services' employees were 82% of their level for manufacturing industries, while the wages of education employees amounted to 75% (in January-October 2011: 79% and 70%, respectively).

## Production

In January-September 2012, wholesale and retail trade, transactions with real estate, and financial activity contributed the most to the GDP growth rate. In the fourth quarter, as in the three previous quarters of 2012, the growth rate of goods and services production in key economic activities<sup>13</sup> was lower than in the respective quarters in 2011 (0.8% in October 2012, 1.2% in November 2012), which is caused by a decrease in the production of agricultural goods and a slowdown of the rate of growth in construction, industry, transport, as well as retail and wholesale trade. In the whole period from January to

<sup>13</sup> Calculated on the basis of data on changes in the quantities of the output of agriculture, mining, manufacturing, electricity, gas, and water production and distribution, as well as construction, transport, retail and wholesale trade.

### Industrial production growth and industrial production capacity utilisation (%)



Source: Rosstat, Bank of Russia calculations, Russian Economic Barometer.

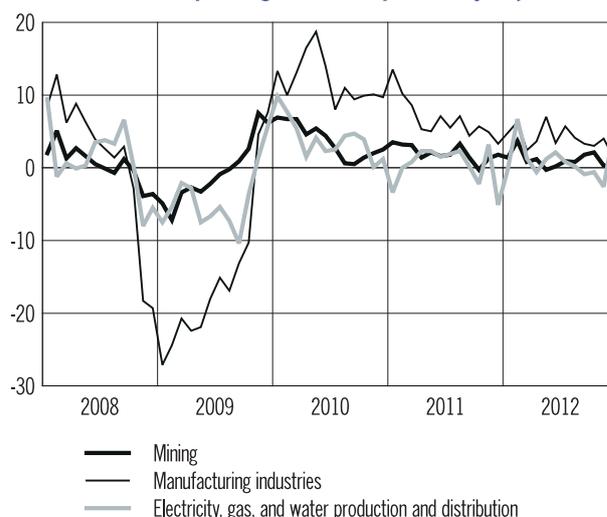
November 2012, year on year, the output in key economic activities increased by 2.7%.

Seasonally adjusted, the monthly average rate of industrial growth in the fourth quarter was lower than in the respective period of 2011. In 2012, the industrial production increased by 2.6%. The surveys performed by Rosstat showed that producers' sentiment in the mining and manufacturing deteriorated in the fourth quarter of 2012. The factors restraining production growth included the high level of taxation, uncertainty of the economic situation, scarcity of financial resources, and insufficient demand for manufactured products in the domestic market. The Business Confidence Index of the electricity, gas, and water production and distribution in the fourth quarter, as compared to the previous quarter, decreased in a way that reflected the seasonal dynamics of this indicator.

The utilisation of industrial production capacity was equal to its pre-crisis level. According to the Russian Economic Barometer, in January–November 2012, the average value of this indicator was 79.1%.

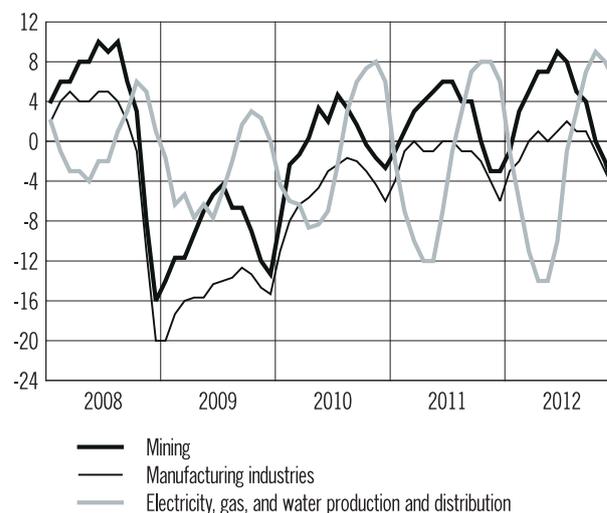
In 2012, the crop harvest was lower compared to the previous year, due to the unfavourable weather conditions in most Russian

### Industrial production by activity type (growth as % of corresponding month of previous year)



Source: Rosstat.

### Business confidence indices by activity type (growth as % of corresponding month of previous year)



Source: Rosstat.

regions. The aggregate yield for farm businesses of all categories totalled 70.7 million tonnes of grain, or 25% less than in 2011 (94.2 million tonnes). A significant harvest reduction can have a negative effect on food price behaviour in the first half of 2013.

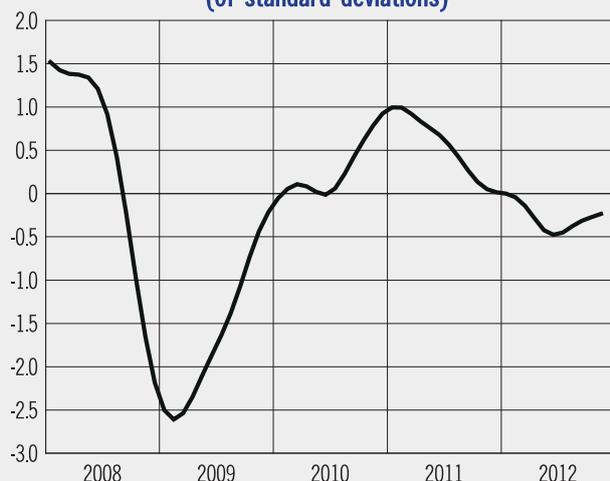
In 2012, Russia's GDP increased by 3.4% (by 4.3% in 2011).

### Financial Conditions Index

The Financial Conditions Index (FCI)<sup>1</sup> can be used to determine whether the financial conditions give an impetus to economic development or, alternatively, decelerate growth. It is assumed that the deviation of every individual financial variable from its long-term trend exerts influence on the production of goods (provision of services), thus increasing or decreasing the output gap.

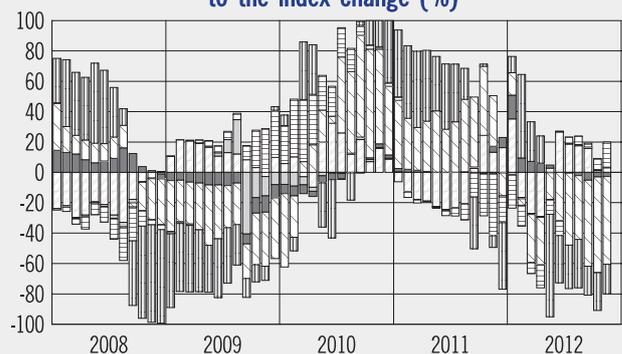
According to calculations, in November 2012, the Financial Conditions Index was close to zero, which was evidence of the absence of substantial risks of economic growth decelerating on the part of the financial sector. The largest negative contribution to the index value is high rates for short-term loans to non-financial organisations.

**Financial Conditions Index\*  
(of standard deviations)**



\* Trend: normalised series.  
Source: Bank of Russia calculations.

**Contribution of financial variables  
to the index change (%)**



- Real rouble / US dollar exchange rate
- ▨ Net foreign assets of the banking sector
- Money supply (M2)
- ▧ Interest rate on loans to non-financial organisations for the term of up to one year
- ▩ Capital adequacy ratio (N1)
- ▤ RTS index

Source: Bank of Russia calculations.

<sup>1</sup> The underlying idea of the index calculation is the same as the idea used in the calculation of the Monetary Conditions Index first proposed by C. Freedman (C. Freedman "The role of monetary conditions and monetary conditions index in the conduct of policy", Bank of Canada Review, Autumn 1995). The Financial Conditions Index is calculated on the basis of the following indicators: the real rouble to US dollar exchange rate, money supply (M2), the RTS index, the net foreign assets of the banking sector, the capital adequacy ratio (N1), and the interest rate on loans to non-financial organisations for the term of up to one year. In the course of calculating the index, cyclic and random components are determined for all variables; after which these components are normalised. Normalisation allows one to compare the effects of individual variables on output. At the final stage, the index is calculated as a weighted total of financial variables. Weights are determined using the impulse response function from the vector autoregressive model.

## I.3. Inflation

In the fourth quarter of 2012, inflation was stabilised (in moving annualised terms) after having risen in the third quarter. In December, inflation amounted to 6.6%, which is higher than the target range (5–6%), established for 2012 in the 'Guidelines of the Single State Monetary Policy in 2012 and for 2013 and 2014'.

The acceleration of annual food price growth in the fourth quarter of last year was markedly less than in the third quarter. The year-on-year price growth rate for food products in June was 3.6%; in September it was 7.3%; whereas in December it was 7.5%.

In the period under consideration, there was a decrease in vegetable and fruit prices (these prices grew in the last three months of 2011). In December, the prices for this group of foodstuffs were 11.0% higher than in December 2011. Price growth rates for other foodstuffs decelerated. Grain interventions, performed since October 2012, were aimed to restrain prices in the food market.

In the fourth quarter of 2012, the decreasing trend observed from the beginning of the year in the annual growth rate of non-food prices continued (relative to the respective months of the previous year). In December, the rate was 5.2%, which is 0.2 percentage points less than in September. A decrease in price growth rates for non-food goods (excluding petrol prices) also

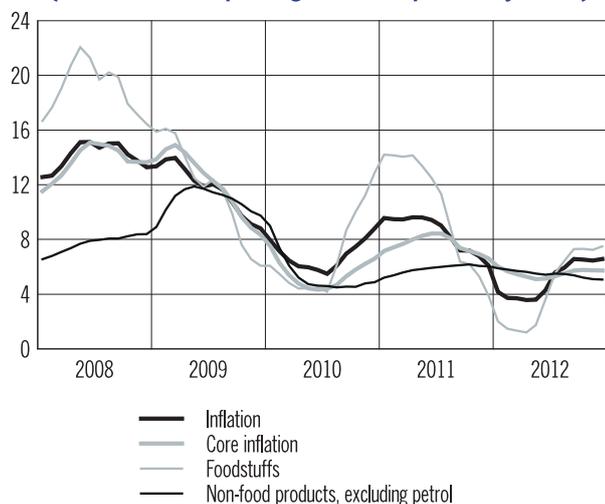
continued, these items being least susceptible to the influence of administrative and certain volatile factors. In December, they were estimated at 5.1%, which was 0.3 percentage points less than in September.

In December 2012, the price growth rate for services, relative to the respective month of the previous year, was 7.3% – the same value as in September.

On the whole, in December 2012, inflation was 0.5 percentage points higher than in December 2011, which was caused by the effect of a volatile factor – the dynamics of vegetable and fruit prices. If the price growth rate for products and services is taken without accounting for this group of foodstuffs (nearly 97% of the consumer basket), it amounted to 6.4% in December 2012 year on year (7.5% in December 2011). Core inflation in December 2012 was 5.7% or 0.9 percentage points lower than the previous year.

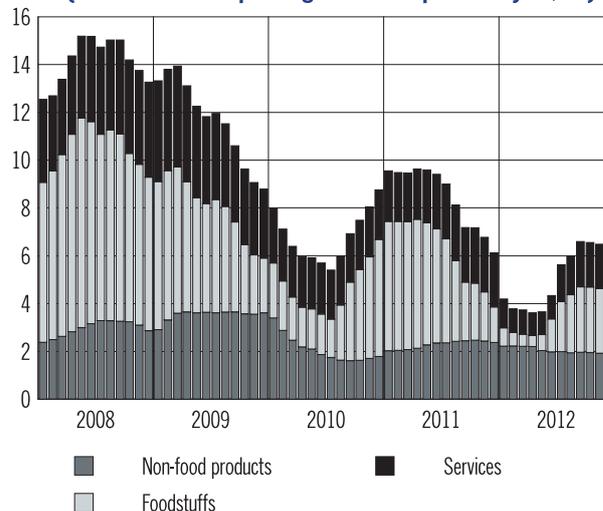
In 2012, the demand did not put upward pressure on inflation: the output gap during the year was estimated to have remained close to zero. According to calculations, the aggregate effect of the changing dynamics of the rouble rate on inflation could be determined as restraining. Estimates imply that the growth rates of administered prices and tariffs in 2012 were lower than in the previous year (10.4% against 10.9%).

**Prices for consumer goods and services**  
(month on corresponding month of previous year, %)



Source: Rosstat, Bank of Russia calculations.

**Contribution to inflation**  
(month on corresponding month of previous year, %)



Source: Rosstat, Bank of Russia calculations.

## II. Economic development prospects and risk assessment

### II.1. Economic development prospects

According to forecasts, the foreign economic situation in the first six months of 2013 will be characterised by the persistence of low rates of world economic growth. The recession is expected to continue in the eurozone in the coming months, followed by the restoration of economic activity in the second half of the year. The detected trend toward a gradual improvement of the economic situation in China and the USA can be also expected to persist, subject to progress in stabilising the US public finances. Aggregate indicators of economic growth and inflation in countries which are trade partners of Russia continued to decrease in the second half of 2012, whereas the short-term forecasts for their economies in general remained pessimistic, though did not become significantly worse. According to these forecasts, the eurozone (Russia's largest consolidated trade partner) avoided the most unfavourable scenarios, where it would have sunk into a deeper recession. The output gap in the eurozone in 2012, is expected to be -2.4% of the potential GDP (-1.5% in 2011) and about -3% in the first and second quarters of 2013. It is expected that a negative output gap in the eurozone will exist until 2016<sup>1</sup>. Therefore, external demand will remain weak and restraining with respect to the dynamics of global commodity prices, including energy prices, and the growth of Russian net exports. In the highly uncertain present situation, the risks of negative scenarios being realised remain significant, although their probability has decreased, according to the Bank of Russia's assessment.

It is forecasted that foreign inflation will remain moderate. It seems unlikely that the central banks of the leading countries will cut their accommodative measures against this background. In the second quarter of 2013, the European Central Bank may decrease its refinancing rate from 0.75 to 0.5% p.a. An

increase of the key interest rate by the Federal Reserve is not expected until 2015<sup>2</sup>.

Despite pessimistic estimates of worldwide prospects for economic growth, accommodative measures in the economies of the USA and the eurozone will support oil prices; so, at the beginning of 2013, the oil prices in the global markets are expected to stay close to their current level.

The preservation of a sufficiently high level of oil prices will stimulate domestic demand, whereas weak external demand will remain a restraining factor. As expected, the quantitative easing measures that foreign central banks are currently taking will not drive inflation. Without additional price shocks in the global markets and factors which markedly affect the exchange rate, the risk that Russian consumer price growth rates will be enhanced by imported inflation will remain insignificant.

Domestic conditions in the first half of 2013 will be characterised by the same basic trends in the Russian economy as those observed in the second half of 2012. Domestic demand will be the primary driver of the Russian economy, given relatively weak external demand.

In 2012, economic development was mainly supported by growing domestic demand resulting from increases in real wages, lending to households and economically active population. However, by the year end one could observe the slackening of both consumer and investment activity, which manifested as an appreciable slowdown of GDP growth as early as in the third quarter. According to estimates, the economic growth in the fourth quarter of 2012 and in the first half of 2013 will be lower than in their respective previous periods. Close-to-zero values regarding the output gap during 2012 provide a basis for conclusions about the full recovery from

<sup>1</sup> As estimated by the European Commission and the IMF.

<sup>2</sup> According to Bloomberg and Thomson Reuters forecasts.

the economic decline in 2008–2009. In future, output gap dynamics will be predominantly controlled by restraining factors, first of all, a possible deceleration in oil price growth, weak external demand, and real rouble appreciation, which is expected to continue.

Modest growth in household real income and the moderate pattern of lending growth will restrict the augmentation of consumer demand. Fixed capital investment growth may also slow down due to the deceleration of the profit increase related to non-financial organisations – a major source of investment financing. In the first half of 2013, the GDP growth is forecasted at 2.5–3.5% year on year.

In 2012, unemployment hit its lowest level in 20 years and was below the long-term trend. Due to the accelerated growth rate of unit labour costs (against the corresponding period of 2011), this can generate certain inflationary pressures in the economy. However, the output gap estimates obtained through unemployment indicators (see 'Output gap indicator' box) do not allow one to reliably identify overheating risks related to the situation in the labour market.

No significant deviation of output from potential figures is expected. It is assumed that the output gap in 2013–2014 will be about zero; however, there are prerequisites for minor negative gaps appearing due to the uncertainty of the foreign economic situation.

Monetary conditions can affect the economic advance in a somewhat restraining way. According to Bank of Russia surveys, the non-price conditions of bank lending are tightening and this trend is expected to persist in the future. At the same time, the Financial Conditions Index (FCI) is about zero; in the current economic situation this reflects the absence of essential risks originating from the

financial sector that are capable of slowing down economic development.

The mid-term forecast implies a gradual reduction of inflation. However, in the first half of 2013, it is highly probable that the inflation will be above the established target range of 5–6%. In the first quarter of 2013, annual inflation could demonstrate a short-term rise, mostly due to the food prices behaviour against a low statistical base of the previous year. A scheduled increase of administered prices and tariffs in the middle of the year will be conducive to more uniform intrayear inflation and the stabilisation of inflationary expectations. This should facilitate a more moderate growth in consumer prices if there are no additional price shocks or substantial inflationary pressures caused by aggregate demand.

Recently, estimates of expected inflation have started to decrease. Thus, the consensus forecast for annual inflation which Reuters compiled for the first quarter of 2013 by interviewing experts in January 2013, was lowered by 0.4 percentage points to 6.9% compared to October 2012. Short-term inflationary expectations calculated from financial market data have stopped growing. Public opinion polls<sup>3</sup> indicate that consumer expectations are still under the influence of accelerated price growth in the second and third quarters of 2012. At the same time, the preliminary results of the poll held in December suggest that high short-term expectations are largely attributable to traditionally expected price hikes occurring in January.

The risks of exceeding target ranges established in the 'Guidelines for the Single State Monetary Policy in 2013 and for 2014 and 2015' (5-6% in 2013, 4-5% in 2014-2015) are currently estimated as moderate.

<sup>3</sup> Public opinion polls are conducted by the Public Opinion Foundation at the request of the Bank of Russia (12 polls have been conducted since December 2009). The polls are aimed at obtaining an estimation and analysis of inflationary expectations and households' consumer sentiment.

## II.2. Risk assessment

Medium-term inflation forecast plays an important role in decision making process on monetary policy issues. The forecast takes into account the existence of time lags in the effect of these decisions on the economy. There are a number of risks which can lead, if realised, to inflation exceeding the target range set for 2013, thus affecting the stance of monetary policy in future.

### Short- and medium-term risks

At present, the situation in the Russian economy is assessed as relatively stable, so primary risks are associated with the external sector. The behaviour of the world economy and situation in financial markets will largely depend on solving the debt crisis both in the United States and in the eurozone. In the beginning of 2013, one of the most serious risk factors could be America's so-called 'fiscal cliff'. This is the sequestration of budget expenditures stipulated by law, alongside a simultaneous expiration of the validity of laws, according to which the United States maintained reduced income tax rates and other fiscal incentives in the recent years. Though the US politicians came to an agreement at the beginning of 2013 which has made it possible to avoid a drastic tightening of fiscal policy, major foreign economic risks in the coming months will be related to a probable delay of negotiations on the strategy of stabilising the country's public finance. All this could result in a sharp reduction of net consumption in the public sector and a recession in the United States. A recession could aggravate the prerequisites for economic decline in major developing economies. Another risk factor could be associated with a longer (in comparison with current forecasts) recession in the eurozone and/or a slower recovery in the economies of the United States and China. In addition, one cannot exclude the possibility that another debt crisis will escalate in the eurozone if there are difficulties in the implementation of budget saving efforts in certain countries. The materialisation of any of the specified risks could last long, thus leading to a fall in commodity prices and growing tension in the global financial markets.

Long-lasting weakness in external demand and a decrease in Russian export prices, accompanied by tightening access to financial resources, can have a marked negative effect on the development of the Russian economy due to its strong dependence on the world's commodity markets.

The protracted aggravation of external conditions will result in a further reduction of revenues in the private and public sectors of the Russian economy, a slowdown in the rate of growth in investment and consumer demand, as well as the deceleration of economic growth. A worse balance of payments position could lead to the accelerated growth of the bi-currency basket's rouble value.

The dynamics of the national currency exchange rate are a potential source of inflation risk, if a sufficiently long and significant currency depreciation takes place. However, in the current situation there are no reasons to expect a long and significant fall of the national currency that could take place if the above-described foreign economic risks materialise. The measures taken by the European authorities in recent months and temporal elimination of a threat of the automatic tightening in the US fiscal policy at the beginning of 2013 stabilised financial markets and somewhat reduced the probability of risky scenarios transpiring in the current year. The ultra-loose monetary policy of the leading central banks and large quantities of free liquidity, accumulated by them as a result of the anti-crisis measures they took could make the fall of asset prices less pronounced (including commodity prices and assets from the emerging markets, among them Russia).

If the external risks occur, Russia's monetary policy can react by substantial loosening in the medium-term perspective. At the same time, if the rouble depreciates and causes a rise in inflation risks, a short-term increase in the interest rate is possible in order to prevent the growth of inflationary expectations.

Food price behaviour is one of the major sources of inflation risks, as assessed by the Bank of Russia. The significance of this factor for Russia

can be explained by the substantial (even in global terms) share of these goods in the structure of the consumer price index basket. In 2012, this share was 37.3%<sup>1</sup>. At the present stage, there are highly ambiguous estimates of the future harvest of basic crops both in Russia and throughout the world. Nevertheless, now there are no factors that could drive expectations of significant food price growth in the current year. Moreover, the rather high baseline of food prices, formed in the second half of 2012, will be favourable for the inflation dynamics in 2013.

### Foodstuffs\* share in the CPI structure of individual countries (%)

India	49.7**
Russia	37.3
Japan	19.1
Brazil	23.1
South Africa	21.6
United States	15.3
Germany	13.5

\* Including alcoholic beverages.

\*\* Including tobacco products. The share in the total CPI is presented. The shares for rural and urban CPIs are 59.3 and 37.2%, respectively.

For reference: The share of tobacco products in the Russian CPI structure was 0.75% in 2012.

Source: national statistics agencies.

Moreover, certain inflation risks can appear if the inflation rate is above the target range for a long time, because this can exert some influence on the expectations of economic agents. The risks that inflation in 2013 will be lower than the target values have been assessed by the Bank of Russia as being insignificant.

## Monetary analysis of inflation risks

Identifying the role of money supply dynamics in the generation of inflationary processes is an important prerequisite for the efficient implementation of monetary policy. Experience gained from the last financial crisis also indicates that the prevention of monetary imbalances is essential not only for mitigating the risks associated with price instability but for handling financial and general macroeconomic instability risks, as well.

<sup>1</sup> As of the time of this Report's compilation, the basket structure for the calculation of the 2013 consumer price index was not published yet.

The development and transformation of the financial sector, significant changes in factors shaping the money demand, as well as the substantial role of non-monetary factors in the CPI dynamics in Russia account for the lack of a fully stable relationship between the growth rates of individual monetary aggregates and short-term inflation rates. Accordingly, the methodology of including the money supply dynamics in the assessment of inflation risks is based on the analysis of the most significant changes in low-frequency inflation components<sup>2</sup>. Calculations which have been performed in line with these approaches have allowed us to make the following conclusions.

A sharp decrease in inflation rates which began at the end of 2011 did not fully correspond to the money supply dynamics that had been demonstrated in the previous periods. This circumstance was an indication of possible risks that the trend towards the slowing down of the CPI growth rate might be unstable (this was partially confirmed in the second half of 2012); therefore, it justified a tightening of the monetary policy.

On the other hand, the acceleration of price growth rate as such does not provide any evidence of further growth of inflationary monetary risks. On the contrary, the slowdown in the growth of the money supply to a relatively low level may have a pronounced restraining influence on price growth rates in 2013.

Without explicit factors accelerating the growth rate of bank lending (which is currently the principle source of money supply growth) and subject to preservation of a well-balanced fiscal policy profile, it can be assumed that the trends which have formed in the dynamics of monetary aggregates according to the results of 2012 will continue in 2013. This will help the Bank of Russia alleviate inflation risks and meet its medium-term inflation targets.

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When making decisions on monetary policy issues, the Bank of Russia will take the aforementioned inflation risks into consideration along with other factors, including assessments of economic growth prospects. If the risk of inflation

<sup>2</sup> The basic methodological principles of this approach are described in detail in Chapter 4, Papademos, L. D. and Stark, J. (2010) *Enhancing Monetary Analysis*, European Central Bank.

remaining above the target range increases, the practicality of policy tightening will be determined after due consideration of inflation shocks, along

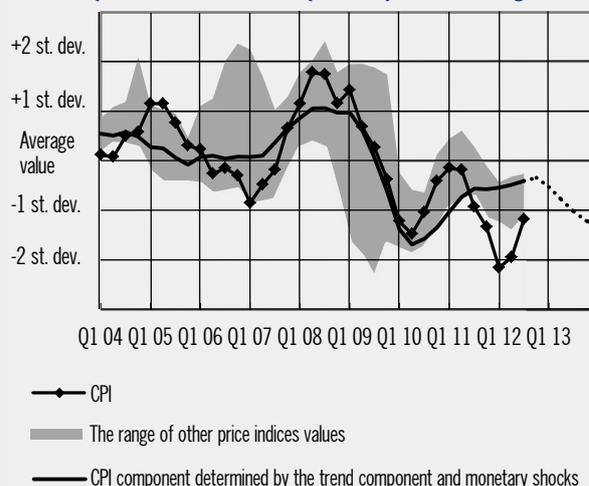
with the risks of shocks influencing inflationary expectations and mid-term inflation forecasts.

**Dynamic factor model of the interrelation between money supply growth and inflation**

One of the methods used by the Bank of Russia for analysing inflation risks that are related to monetary developments employs the dynamic factor model<sup>1</sup> to extract (from the time series of the CPI growth rate) the component which is common for the dynamics of a wide spectrum of monetary and price indicators. It is assumed that this component characterises the monetary ingredient of price growth and can be analysed in the most efficient way by using monetary analysis methods. This decomposition allows one to meaningfully interpret the fluctuations of the inflation rate, which is necessary when developing a well-grounded response of the monetary policy.

As can be seen in the figure, a slowdown in the rate of annual CPI growth, which began at the end of 2011, was not in line with any other price index considered (according to the results of the second quarter of 2012, the annual growth rates of other price indices were lower than the average value by approximately one standard deviation, whereas for the CPI this difference was equal to two standard deviations). The observed inflation rate was also substantially lower than the model-based estimation of the value that consists of the baseline (trend) component and the effects of shocks, which are identified as monetary shocks. Therefore, it can be assumed that the observed acceleration of the CPI growth rate is not related to the easing of monetary conditions in the economy (in exactly the same way that the previous inflation slowdown was not related to their tightening), but rather the inflation returns to a level corresponding to the effect of long-term factors. At the same time, a decrease of projected values of trend and monetary components in the CPI growth dynamics can be considered an indicator of decreasing inflation risks, if seen from a mid-term or a long-term perspective.

**Annual growth rates of CPI and other price indices (standard deviations (st. dev.) from average value)**



Source: Bank of Russia calculations.

<sup>1</sup> For more details, see, e.g. Nobili, A., (2009). "Composite indicators for monetary analysis", Bank of Italy Working papers 713.

# III. Implementation of the Bank of Russia monetary policy

## III.1. Key monetary policy decisions

The Bank of Russia bases its monetary policy decisions on its analysis of the current economic situation and prospects for development, taking the mid-term inflation targets into account.

In addition, due consideration is given to external and internal factors which determine economic and inflationary developments.

During the fourth quarter, the annual rate of growth of consumer prices exceeded the established target range and reached 6.6% by the year end. In addition, it was taken into account that in the first half of 2013, there is a high probability that inflation will remain above 6%. Given the effect that above-target inflation might have on the expectations of economic agents, the Bank of Russia treated this factor as a source of inflation risk.

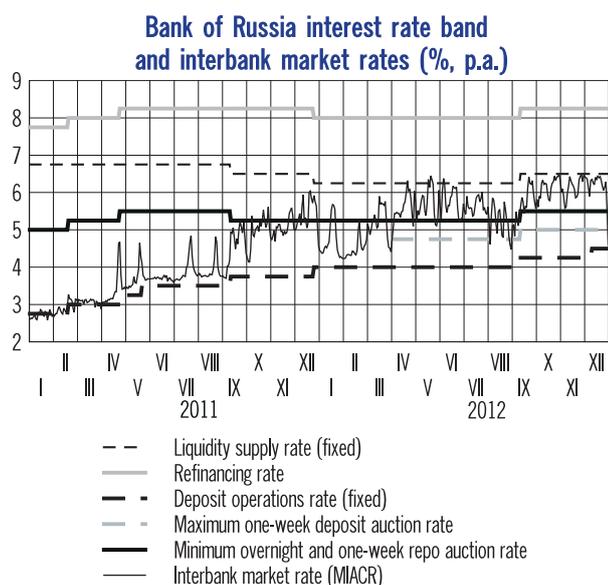
At the same time, in the specified period there was virtually no inflation acceleration – the price growth stabilised for a wide range of goods and services, with a certain slowdown of price growth for non-food products. Demand-side inflationary pressures were also absent: as estimated by the

Bank of Russia, the total output remained at a level that was close to the potential one.

At the same time, there were also medium-term risks of decreasing economic activity.

If the rate of growth of external demand is too modest, investment activity is unstable, consumer spending behaviour is restricted by a low growth rate of real household incomes and an expected slowdown in lending activity, the Russian economy might decelerate. In general, the total demand will not have an upward effect on prices. A consistently lower money supply growth will also exert a restraining influence on inflation.

Given the forecasted internal and external macroeconomic trends and the balance of risks, the Bank of Russia did not change the stance of its monetary policy in October 2012 – January 2013. At the same time, in December 2012 the Bank of Russia Board of Directors decided to cut the currency swap rate from 6.75 to 6.5% and increase the rate on Bank of Russia fixed-term deposits from 4.25 to 4.5%. The specified arrangements were aimed at the technical narrowing of the Bank of Russia's interest rate band and strengthening its borders in order to contain the volatility of the money market rates and enhance the efficiency of the interest rate channel of the monetary policy transmission mechanism. The width of the interest rate band decreased to 200 basis points, and its borders became symmetric with respect to the minimum rate on short-term liquidity provision auctions.



Source: Bank of Russia.

## III.2. Bank of Russia operations to regulate banking sector liquidity

The current operational framework forms the basis for the implementation of the Bank of Russia Board of Directors' interest rate policy decisions. The interest rate band of the Bank of Russia constitutes the range of acceptable volatility of money market short-term rates. Its upper and lower borders are determined by the interest rates on standing short-term operations which are conducted by the Bank of Russia in order to provide and absorb liquidity.

Apart from ensuring the normal functioning of the money market and smooth processing of settlements and payments, the system of banking sector liquidity management is aimed at maintaining short-term money market rates at a level that is consistent with achieving the ultimate goal of the monetary policy. For this purpose the Bank of Russia conducts operations to regulate banking sector liquidity in the short term. It does so to satisfy the needs of the banking sector either for refinancing or for depositing free cash funds, primarily through market operations, whose parameters are established on the basis of the aggregate liquidity forecast of the banking sector.

In order to enhance the transparency of the calculation procedure by which it sets the limits on its one-week market operations, the Bank of Russia began to publish weekly forecasts of autonomous liquidity factors in December 2012. These data reflect the expected movements of liquidity flows and the influence on banking sector liquidity of cash operations, budget operations, changes in required reserve ratios, as well as debt on operations with the Central Bank. The algorithm used for the calculation of the published indicators is presented in the 'Example of the Calculation of Weekly Limits' on the Bank of Russia website ([http://cbr.ru/dkp/standart\\_system/raschet.xls](http://cbr.ru/dkp/standart_system/raschet.xls)).

In the fourth quarter of 2012, amid a continued structural deficit of liquidity, credit institutions demonstrated high demand for the refinancing operations of the Bank of Russia: gross credits to banks<sup>1</sup> for the period under review

increased by 0.5 trillion roubles to 2.7 trillion roubles.

As before, the Bank of Russia provided liquidity to credit institutions primarily in the form of auction-based operations, especially via its repo auctions. According to the fourth quarter results, the debt on auction-based repo operations grew by 334.1 billion roubles. In the second half of December, the total debt on repo operations reached its historical maximum: 2 trillion roubles.

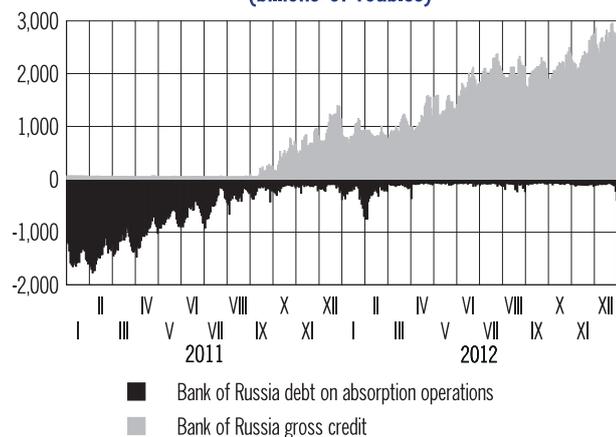
Credit institutions continued to use one-week repo auctions as their primary means of obtaining liquidity from the Bank of Russia: as in the previous quarter, the debt of credit institutions on these operations exceeded 1 trillion roubles on average. The participation of credit institutions in the overnight repo auctions of the Bank of Russia was determined by their daily liquidity management needs. Thus, in December, amid seasonal increase in the quantity and volatility of cash flows, one could also see growth in demand for this instrument. Consequently, in the fourth quarter, the average volume of funds provided by the Bank of Russia through overnight repo auctions, virtually doubled and amounted to 330.6 billion roubles.

In the fourth quarter, there remained a moderate demand of credit institutions for long-term auction-based liquidity provision operations. The debt of credit institutions on repos and 3-month Lombard loan auctions decreased by 12.3 billion roubles to 136.7 billion roubles by the end of December. In these conditions, 1-year repo and Lombard loan auctions, conducted in the fourth quarter, were declared invalid because of lack of demand; the debt of credit institutions on these instruments remained unchanged at 30 billion roubles.

The decrease of Bank of Russia currency swap rate amid the persisting structural liquidity deficit of the banking sector led to a higher frequency of these operations in the fourth quarter, as well as to growth in the average daily amount of liquidity provided via these operations to 53.6 billion roubles (from 17.8 billion roubles in the third quarter). The maximum amount of Bank of Russia operations in the fourth quarter exceeded

<sup>1</sup> Excluding a subordinated loan to Sberbank and Bank of Russia deposits placed with credit institutions.

**Bank of Russia gross credit to credit institutions\*  
and liabilities on absorption operations  
(billions of roubles)**



\* Excluding a subordinated loan to Sberbank and Bank of Russia deposits placed with credit institutions.

Source: Bank of Russia.

300 billion roubles (in the third quarter: 49 billion roubles).

As before, Bank of Russia currency swaps were most actively conducted during the periods characterised by interest rate growth in the money market, including tax payment periods. Significant volumes of Bank of Russia currency swap operations were also registered on days when the demand of credit institutions at repo auctions was below the liquidity provision limit established by the Bank of Russia, which could have been caused, among other factors, by an insufficient intensity of fund redistribution in the money market and the uneven distribution of collateral among its participants.

Credit institutions continued to demonstrate a significant demand for Bank of Russia loans secured by non-marketable assets and guarantees of credit institutions. In the fourth quarter, the average debt on this type of loans increased from 592.3 billion roubles to 712.1 billion roubles.

The volume of other refinancing operations with fixed rates (overnight loans, Lombard loans, loans secured by gold, and repos) remained insignificant in the reporting period.

Taking into account the growing demand for refinancing facilities, in 2012 the Bank of Russia took measures to extend the list of securities which may be used as collateral in operations with the Central Bank: more than 250 issues of securities with a nominal value of about 2 trillion roubles were included in the Lombard List of the Bank of Russia.

In the reporting period, the demand of credit institutions for the placement of free cash funds remained virtually unchanged (the average daily amount of Bank of Russia debt on deposit operations with credit institutions increased from 102.2 billion roubles to 102.6 billion roubles).

In the fourth quarter of 2012, when a continued liquidity deficit persisted and demand of credit institutions for refinancing was increasing, the level of money market rates was mainly determined by the short-term auction-based repo rates and currency swap rates of the Bank of Russia. Factoring in the September increase of Bank of Russia rates, the average MIACR level for overnight interbank roubles loans increased by 0.6% compared to the previous quarter and reached 6.1%. At the same time, the average spread between the MIACR and the minimum short-term auction repo rate increased by 43 basis points.

In the first quarter of 2013, the liquidity deficit is expected to persist (see Box 'Forecast of liquidity-forming factors in the first quarter of 2013'), demand of credit institutions for Bank of Russia refinancing facilities will remain high.

The available set of Bank of Russia instruments is sufficient to satisfy the liquidity needs of the banking sector in the volumes necessary for maintaining the normal operation of financial markets and achieving the goals of the Bank of Russia's interest rate policy.

Currently, the volume of potential collateral (in the form of securities and non-marketable assets) on Bank of Russia refinancing operations, at the disposal of credit institutions is about 5 trillion roubles (of which, approximately 3/4 are securities and 1/4 is non-marketable assets).

At present, utilisation rate of market collateral is about 60%. That is, the Bank of Russia is capable of satisfying additional refinancing needs of credit institutions in the volume up to 1.5 trillion roubles through the appropriate refinancing mechanisms.

As for non-marketable assets, the credit institutions currently use as collateral about 30% of the assets audited by the Bank of Russia and considered eligible. Therefore, the increase in refinancing through this mechanism can amount to 900 billion roubles; moreover, the new non-marketable assets of credit institutions can be included into the list of eligible assets.

### **Forecast of liquidity-forming factors in the first quarter of 2013**

Changes in both the balances on the general government's accounts with the Bank of Russia and the volume of cash in circulation will be the major factors which determine the level of medium-term liquidity in the banking sector.

It is expected that the spending of budget funds will continue to be uneven in 2013. Based on the seasonal patterns, in the first quarter of 2013 the excess of budget revenue over expenditure (as estimated by the Bank of Russia) may cause an outflow of liquidity from the banking sector totalling about 0.9 trillion roubles. Under these circumstances, it is becoming more important to use the mechanism of depositing temporary free federal budget funds at credit institutions. This must bring about the smoothing of the intrayear unevenness of fiscal flows and reduce their effect on the banking sector liquidity and on the money market.

A key factor which has determined the effect of the amount of cash in circulation on banking sector liquidity in the first quarter of 2013 is the seasonal withdrawal of significant volumes of cash out of circulation in January, due to the considerable consumer spending during the New Year holiday period and historically observed excess of households' spending over income during this month. As estimated by the Bank of Russia, in the period from January to March 2013, the decrease of cash in circulation is expected to cause an inflow of about 0.6 trillion roubles into the banking sector.

The direction and scale of Bank of Russia foreign exchange interventions' effect on the liquidity volume will depend on the developments in the domestic foreign exchange market. At the same time, within the existing framework of the exchange rate policy which is designed to ensure the flexibility of the rouble's exchange rate the effect on the liquidity of Bank of Russia foreign exchange operations has become considerably weaker compared to the previous years.

# Glossary

## **Autonomous factors**

*Changes in the balance-sheet of a central bank which affect the level of correspondent accounts of credit institutions, but are not directly controlled by the liquidity management system. These factors include changes in cash in circulation, changes in the balances on the accounts of the general government with the Bank of Russia as well as Bank of Russia operations in the domestic foreign exchange market.*

## **Balances on general government's accounts**

*Balances on accounts with the Bank of Russia for federal budget funds, the budgets of the constituent territories of the Russian Federation, local budgets, government extra-budgetary funds and extra-budgetary funds of the constituent territories of the Russian Federation and local authorities.*

## **Bank of Russia net operations**

*Defined as the difference between the liabilities of the Bank of Russia to the banking sector and the claims of the Bank of Russia on the banking sector which are due on the current day. The liabilities of the Bank of Russia to the banking sector include volume of funds to be returned by the Bank of Russia via deposit operations and the redemption of outstanding Bank of Russia bonds net of funds raised by the Bank of Russia through deposit operations and through Bank of Russia bonds allotment on previous days, which are due on the current day. The claims of the Bank of Russia on the banking sector include the volume of funds to be paid back by credit institutions to the Bank of Russia through repos and currency swaps and through the redemption of Bank of Russia loans net of funds provided by the Bank of Russia on previous days through repos, currency swaps and loans which are due on the current day. Bank of Russia net operations also include the volume of operations, conducted by the Bank of Russia with banks, on the sale/purchase of foreign currency on the previous working day on tom-next conditions.*

## **Bi-currency basket**

*Operational benchmark of the exchange rate policy of the Bank of Russia, expressed in the national currency (in roubles). The basket is comprised of US dollars and euros (effective since February 2005). The rouble value of the bi-currency basket is calculated as a sum of 0.55 US dollars and 0.45 euros in rouble terms (effective since 8 February 2007).*

## **Broad money (monetary aggregate M2X)**

*It includes all the components of the monetary aggregate M2 and foreign currency deposits.*

## **Consumer price index (CPI)**

*One of the key indicators characterising the inflation processes. The CPI tracks temporal changes in the overall price level of goods and services purchased by households for unproductive consumption. It is computed by the Federal State Statistics Service and is measured as the ratio of the cost of a fixed set of goods and services in current prices to the cost of the same set of goods and services at prices from a previous (reference) period.*

### **Countercyclical currency**

A currency which demonstrates traditional appreciation in periods of instability in the world markets and/or a recession in the world economy. Specifically, this category of currencies includes the US dollar, Japanese yen, and Swiss franc.

### **Dollarisation of deposits**

Share of deposits denominated in foreign currency in the total volume of the banking sector deposits.

### **Free bank reserves**

These include balances on the correspondent accounts in Russian currency (including an averaged amount of required reserves) and on the deposit accounts of credit institutions with the Bank of Russia, as well as credit institution's holding of Bank of Russia bonds.

### **Generalised (composite) consumer confidence index**

Computed by Rosstat on the basis of quarterly surveys, as an arithmetical mean value of five indices: occurred and expected changes in one's personal wealth, occurred and expected changes in the economic situation in Russia, and favourable conditions for large-value purchases. The indices are calculated by drawing up the balance of respondents' estimates (in percents). The balance of estimates is the difference between the sum of shares (in percents) of definitely positive answers and rather positive answers and the sum of shares (in percents) of negative and rather negative answers. Neutral answers are not taken into account.

### **Gross credit of the Bank of Russia**

Includes loans extended by the Bank of Russia to credit institutions (including banks with revoked licenses), overdue debt and overdue interest on loans, funds provided by the Bank of Russia to credit institutions through repos and currency swaps.

### **Index of bank lending conditions**

Generalised indicator of changes in the conditions of bank lending, which is calculated by the Bank of Russia on the basis of a quarterly survey of the leading Russian banks – participants in the lending market as follows: (share of banks which reported a substantial tightening of their lending conditions, %) + 0.5 x (share of banks which reported a moderate tightening of their lending conditions, %) – 0.5 x (share of banks which reported a moderate easing of their lending conditions, %) – (share of banks which reported a substantial easing of their lending conditions, %). Measured in percentage points.

### **Index of real effective rouble exchange rate**

Geometrically weighted average of indices of real rouble exchange rates to the currencies of the countries which are the main trade partners of the Russian Federation (with weights determined according to the shares of individual countries in the total foreign trade turnover of the Russian Federation with its main trade partners).

The real exchange rate of the rouble to a foreign currency is calculated as a product of the nominal rate of the rouble exchange rate to the foreign currency and the ratio of the consumer price index in the Russian Federation to the consumer price index in a given foreign state.

### **Interest rate band of the Bank of Russia (Interest rate band)**

The range of fixed interest rates of the Bank of Russia for a one-day term. The upper border of the interest rate band is determined both by the rate of Lombard loans and fixed-rate repos, while the lower border is determined by the fixed-rate deposit operations (overnight) rate. At the same time, it is possible to use the concept of a 'wide interest rate band', with its upper border considered to be the overnight credit rate of the Bank of Russia, which is currently equal to the refinancing rate.

## **Monetary aggregate M2**

Total amount of cash in circulation and cashless funds. The national definition of the money supply indicator includes all of the funds of non-financial and financial (except credit institutions) organisations and individuals who are residents of the Russian Federation, in cash and cashless form in roubles.

## **Net credit of the Bank of Russia to credit institutions**

Gross credit of the Bank of Russia to credit institutions net of correspondent account balances in Russian roubles (including the averaged amount of required reserves) and deposit account balances of credit institutions with the Bank of Russia, credit institutions' holding of Bank of Russia bonds (at a bond price fixed as of the beginning of the current year).

## **'Non-marketable' assets, eligible as collateral for Bank of Russia loans**

Promissory notes and credit claims accepted as collateral for Bank of Russia loans, in line with Regulation of the Bank of Russia No. 312-P, dated 12 November 2007, 'On the Procedure for Extending Bank of Russia Loans Covered by Assets or Guarantees to Credit Institutions'.

## **Open market operations**

Operations performed at the initiative of the Central Bank. This type of operations includes auction-based refinancing and sterilisation operations (repo auctions, deposit auctions, etc.), as well as purchase and sale operations with respect to financial assets (government securities, currency).

## **Output gap**

Deviation of GDP from potential output, expressed as a percent. Characterises the demand-to-supply ratio, being an aggregate indicator of the effect which the demand factors have on inflation. If the actual output is larger than the potential output (positive output gap), one can expect a price growth acceleration trend. A negative output gap is an indicator of an expected slowdown in price growth.

## **Pro-cyclical currency**

A currency which demonstrates traditional appreciation in periods of world economic growth. Specifically, this category of currencies includes the euro, Canadian dollar, and Australian dollar.

## **Risk premium on the market securities portfolio**

Calculated in compliance with the capital asset pricing model as a difference between the yield of the market securities portfolio and the yield of a risk-free asset. The yield of the risk-free asset is usually taken to be that of government securities (e.g., OFZ – federal government bonds). Measured in percentage points.

## **Standing facilities**

Bank of Russia operations aimed at providing and absorbing liquidity at fixed rates.

## **Structural deficit of the banking sector liquidity**

An excessive demand for liquidity compared to the supply of banking sector liquidity. The excess is formed due to autonomous factors, i.e. factors that are not directly controlled by the liquidity management system of the Central Bank. A reverse situation is characterised by a structural surplus (excessive liquidity). A structural deficit (surplus) usually has a longer duration, being either a stable state or a prevailing trend, as compared with other short-term deficits and surpluses, such as a seasonal liquidity deficit (surplus).

## **Term structure of interest rates**

Yields on debt instruments (loans, deposits, bonds, etc.) of various terms. Yields give an indication of the cost of funds in the financial market depending on the borrowing period. The term structure of interest

rates in the bond market (yield curve) can be visually presented as a plot, with its abscissa and ordinate axes being time to redemption and yield at maturity, respectively.

### **Transmission mechanism of the monetary policy**

The process which serves to transfer the effect of monetary policy decisions (in particular, decisions made by the Central Bank to change the interest rates on its operations) on the economy, as a whole, and on the price level, in particular.

# Appendix 1

## (disclosure of information on monetary policy on the official website of the Bank of Russia)

No.	The title of the section and subsection of the official website of the Bank of Russia, Internet address of the page	Section/subsection contents
<b>1</b>	<b>Main page – Monetary policy (<a href="http://www.cbr.ru/dkp/">http://www.cbr.ru/dkp/</a>)</b>	
	<b>Monetary policy</b>	
	Guidelines for the Single State Monetary Policy	Archive of documents since 2000
	Monetary policy goals and measures	Change in refinancing rate
		Change in required reserve ratios, averaging factors for the calculation of averaged value of required reserves
		Borders of variation of the rouble exchange rate, introducing the policy of a floating rouble exchange rate
	Press releases on monetary policy	Archive of press releases since 2000
	On setting limits for Bank of Russia market operations related to the supply (absorption) of liquidity	The limit for Bank of Russia market operations in the context of liquidity management in the banking sector The role of Bank of Russia operations in the creation of liquidity in the banking sector Forecasted supply of liquidity in the banking sector Forecasted demand for liquidity in the banking sector Calculation of limits for overnight repos Calculation of limits for one-week auction-based operations
	<b>Monetary policy instruments</b>	
	Interest rates on Bank of Russia operations	Tables of interest rates on Bank of Russia operations in 2011-2012
	Required reserve ratios (reserve requirements) of the Bank of Russia	Legislative and regulatory framework for required reserves to be deposited with the Bank of Russia
		Procedure for depositing required reserves with the Bank of Russia
		Regulation of required reserve volume
		Required reserve averaging mechanism, including statistical data
		Sources of information on required reserves of the Bank of Russia
	Bank of Russia secured loans	Terms and conditions of Bank of Russia operations on extending secured Bank of Russia loans with fixed interest rates to credit institutions
		Legislative and regulatory framework
		General description of the refinancing (lending) system of the Bank of Russia
		Loans against the collateral (blocking) of securities from Bank of Russia Lombard List (intraday loans, overnight loans, and Lombard loans)
		Loans secured by non-marketable assets or guarantees
		Loans secured by gold
		Development prospects of refinancing operations (lending) of the Bank of Russia
	Bank of Russia repos	Refinancing and Banking Electronic Speedy Payment system (BESP) of the Bank of Russia
		Basic features of the instrument
		Participants in repos
		Collateral for repos
		Discounts for repos
	Bank of Russia currency swaps	Parameters of repos
		Basic features of the instrument
		Counterparties of Bank of Russia currency swaps
		Currency swap parameters

No.	The title of the section and subsection of the official website of the Bank of Russia, Internet address of the page	Section/subsection contents
	Bank of Russia deposit operations	Types of deposit operations Requirements to credit institutions that are counterparties of the Bank of Russia Deposit operations performed via regional branches of the Bank of Russia Deposit operations performed using Reuters Dealing Deposit operations performed using the MICEX electronic trading system Statistical and graphical data Development prospects of Bank of Russia deposit operations Sources of information on Bank of Russia deposit operations
	Operations with Bank of Russia bonds	Basic features of the instrument Participants of operations with Bank of Russia bonds Parameters of operations with Bank of Russia bonds Secondary market for Bank of Russia bonds
	Purchase/sale of securities in the open market by the Bank of Russia	Basic features of the instrument
	Bank of Russia unsecured loans	Basic features of the instrument Terms and conditions of extending unsecured loans to credit institutions Participants in operations Bank of Russia regulations which establish (amend) the procedure for extending unsecured loans to credit institutions
	Results of surveys of commercial banks on refinancing issues	Information material, 2005
	Monetary sphere and implementation of monetary policy	Analytics, spreadsheets and charts, quarterly, archive since 2010
	<b>Bank of Russia exchange rate policy</b>	
		History of Bank of Russia exchange rate policy in 1999–2010. Effective mechanism of Bank of Russia exchange rate policy
<b>2</b>	<b>Main page – Publications of the Bank of Russia – List of publications of the Bank of Russia (<a href="http://www.cbr.ru/publ/">http://www.cbr.ru/publ/</a>)</b>	
	Annual report of the Central Bank of the Russian Federation	Archive of Bank of Russia annual reports since 1992
	Bulletin of the Bank of Russia	Materials are available one month after publication, archive since 1998 A list of Bank of Russia regulations, orders and letters published in the Bulletin of the Bank of Russia Interviews and speeches published in the Bulletin of the Bank of Russia Bank of Russia consultations published in the Bulletin of the Bank of Russia
	Includes analytical materials published in the Bulletin of the Bank of Russia	Review of domestic foreign cash market Balance of payments and external debt of the Russian Federation Foreign financial markets Monetary sphere and implementation of monetary policy Russian banking sector Domestic financial market Change of the terms and conditions of bank lending
	Bulletin of Banking Statistics	Archive of monthly statistical bulletins since 1998
	Quarterly inflation review	Archive of quarterly reviews since 2004
	Review of the management of foreign exchange assets by the Bank of Russia	Archive of quarterly reviews since 2007
<b>3</b>	<b>Main page – Information and analytical materials (<a href="http://www.cbr.ru/analytics/">http://www.cbr.ru/analytics/</a>)</b>	
	<b>Financial markets</b>	
	Financial market review	Archive of semi-annual reviews since 2009
	Domestic financial market situation	Archive of monthly information and analytical materials since 2007
	Analytical review 'Non-Banking Financial Intermediaries'	Archive of semi-annual reviews since 2009
	Review 'Change of the Terms and Conditions of Bank Lending'	Archive of quarterly reviews since 2009

No.	The title of the section and subsection of the official website of the Bank of Russia, Internet address of the page	Section/subsection contents
	<b>Financial stability</b>	
	Inter-dealer repo market report	Quarterly reports for Q1-Q3 2012
	Review of global risks	Monthly reviews since January 2012
	Rating structure of collateral under repo operations	Monthly spreadsheets since June 2012
	Financial stability review	First release for Q2-Q3 2012
<b>4</b>	<b>Main page – Bank of Russia today – Publications and reports (<a href="http://www.cbr.ru/today/?Prtid=pubdoc">http://www.cbr.ru/today/?Prtid=pubdoc</a>)</b>	
	Financial stability review	Archive of annual reviews for 2009–2011
	Speeches of the Bank of Russia's executives	Speeches for 2010–2012
<b>5</b>	<b>Main page – Press centre (<a href="http://www.cbr.ru/press/">http://www.cbr.ru/press/</a>)</b>	
	Interviews of the Bank of Russia's executives with the Russian and foreign mass media	Archive of interviews since 2008
<b>6</b>	<b>Main page – Database on currency rates (<a href="http://www.cbr.ru/currency_base/">http://www.cbr.ru/currency_base/</a>)</b>	
	Official exchange rates of foreign currencies on a selected date set on a daily basis	Database for 1992-2012
	Official exchange rates of foreign currencies on a selected date set on a daily basis	Bank of Russia regulations on setting official exchange rates of foreign currencies against the rouble
	Dynamics of the official exchange rate of a selected currency	Database for 1992-2012
	Official exchange rates of foreign currencies on a selected date set on a monthly basis (before 11.01.2010)	Database for 1999-2010
	Foreign currency exchange rates in the period before 1.07.1992	Database for the period before 1992
<b>7</b>	<b>Main page – Interbank market rates (<a href="http://www.cbr.ru/mkr_base/">http://www.cbr.ru/mkr_base/</a>)</b>	
	Interbank lending market rates MIBID, MIBOR, MIACR, MIACR-IG, MIACR-B and turnover volumes of respective transactions	Database for 2000–2012
<b>8</b>	<b>Main page – Statistics (<a href="http://www.cbr.ru/statistics/">http://www.cbr.ru/statistics/</a>)</b>	
	<b>Monetary and financial statistics</b>	
	Monetary base (broad definition)	Database since 2002
	Money supply	Database since 1997
	Central Bank survey	Database since 2001
	Credit institutions survey	Database since 2001
	Banking system survey	Database since 2001
	Other financial organisations survey (data cover insurance companies and private pension funds)	Data since 1.01.2006
	Financial sector survey (data cover banking system, insurance companies and private pension funds)	Data since 1.01.2006
	Monetary and financial statistics indicators	Databases for 2008–2012, 2001–2007, and 1995–2000
	Analytical accounts of monetary authorities	Database for 1995-2000
	Analytical accounts of credit institutions	Database for 1995-2000
	Monetary survey	Database for 1995-2000
	The Bank of Russia balance sheet	Database for 1996-2012
	<b>Banking sector liquidity indicators</b>	
	Correspondent account balances of credit institutions	Database for 1997-2012
	Factors affecting banking sector liquidity	Database for 2011-2012 (Chart and Spreadsheet)
	Forecast of factors affecting banking sector liquidity used to determine the limit on Bank of Russia 1-week operations	Weekly forecasts beginning from December 2012
	<b>General data on interest rates</b>	
	Interest rates	Database for 1995–2012
	<b>External sector statistics</b>	
	Basic derived indicators of rouble's exchange rate dynamics	Database for 2004–2012

No.	The title of the section and subsection of the official website of the Bank of Russia, Internet address of the page	Section/subsection contents
<b>Monetary policy instruments of the Bank of Russia</b>		
	Refinancing rate of the Bank of Russia	Data since 1992
	Bank of Russia operations balance for liquidity supply/withdrawal	Database since 2003
	Required reserves	Information since 1991
	Foreign exchange transactions <ul style="list-style-type: none"> <li>– data on Bank of Russia interventions in the domestic FX market</li> <li>– dynamics of the borders of Bank of Russia floating operational band</li> <li>– bi-currency basket structure</li> </ul>	Information since August 2008 Information since February 2009 Information since February 2005
	Repo operations	Information since 2002
	Unsecured loans	Information since October 2008
	Lombard loans and Lombard credit auctions	Information since 2003
	Overnight loans	Data available since 18.06.1998
	Intraday loans	Data available since 29.06.2007
	Other loans of the Bank of Russia	Data available since 10.10.2007
	Currency swaps	Data available since 26.09.2002
	Deposit operations	Databases since 1997 and 2002
	Operations with Bank of Russia bonds (OBRs) and reverse repo operations	Database since 1998
<b>Ministry of Finance transactions</b>		
	Database of budgetary funds allotment on commercial banks' deposits	Data available from 18.04.2008 to 28.12.2012
<b>Credit institutions performance indicators</b>		
	Interest rates on rouble-denominated loans extended to non-financial organisations and on private deposits	Database for 1998–2012
	Average rates on short-term loans (in foreign currency) extended by Russian credit institutions	Database for 1998–2012

## Appendix 2 (statistical tables)

Table 1

**Interest rates on Bank of Russia operations**

Purpose	Type of Instrument	Instrument	Term	Interest Rate, % p.a.			
				23.12.2011	15.06.2012	13.09.2012	10.12.2012
Liquidity supply	Standing facilities (with fixed interest rates)	Overnight loans	1 day	8.00		8.25	
		Currency swaps (rouble part)	1 day	8.00	6.50	6.75	6.50
		Lombard loans, repos	1 day, 1 week <sup>1</sup>	6.25		6.50	
		Lombard loans	30 days <sup>1</sup>	6.25		6.50	
		Repos	12 months <sup>1</sup>	7.75		8.00	
		Loans secured by gold	Up to 90 days	6.75		7.00	
			From 91 to 180 days	7.25		7.50	
			From 181 to 365 days	7.75 <sup>2</sup>		8.00	
		Loans secured by non-marketable assets or guarantees	Up to 90 days	7.00		7.25	
			From 91 to 180 days	7.50		7.75	
	From 181 to 365 days		8.00		8.25		
	Open market operations (minimum interest rates)	Repo auctions	1 day	5.25		5.50	
		Lombard auctions, repo auctions	1 week	5.25		5.50	
			3 months	6.75		7.00	
6 months <sup>1</sup>			7.25		7.50		
12 months			7.75		8.00		
Liquidity withdrawal	Open market operations (maximum interest rates)	Deposit auctions	1 week	4.75 <sup>3</sup>		5.00	
			1 month <sup>1</sup>	5.5		5.75	
			3 months <sup>1</sup>	6.5		6.75	
	Standing facilities (fixed interest rates)	Deposit operations	1 day, 1 week <sup>1</sup> , 1 month <sup>4</sup> , on demand	4.00		4.25   4.50	
<b>For reference:</b>							
Refinancing rate				8.00		8.25	

<sup>1</sup> Operations are suspended.

<sup>2</sup> Interest rate is valid since 2.04.2012.

<sup>3</sup> Interest rate is valid since 10.04.2012.

<sup>4</sup> Interest rate is valid since 2.07.2012.

Table 2

**Consumer prices by group of goods and services  
(month on previous month, %)**

	Inflation	Core inflation	Food price growth	Food price growth <sup>1</sup>	Vegetable and fruit price growth	Non-food price growth	Non-food price growth, excluding petrol <sup>2</sup>	Service price growth
<b>2010</b>								
January	1.6	0.5	1.4	0.8	7.2	0.2	0.3	3.9
February	0.9	0.5	1.3	0.8	5.6	0.3	0.3	1.0
March	0.6	0.5	1.0	0.7	4.2	0.4	0.4	0.4
April	0.3	0.2	0.3	0.2	1.1	0.3	0.3	0.2
May	0.5	0.1	0.7	-0.1	7.2	0.4	0.3	0.4
June	0.4	0.2	0.5	0.0	4.6	0.2	0.2	0.4
July	0.4	0.4	0.3	0.4	-0.6	0.3	0.2	0.6
August	0.6	0.7	0.9	1.2	-1.4	0.4	0.4	0.3
September	0.8	1.1	1.6	1.8	0.2	0.6	0.6	0.0
October	0.5	0.8	0.7	1.0	-1.8	0.6	0.7	0.0
November	0.8	0.7	1.4	1.0	4.0	0.7	0.7	0.2
December	1.1	0.7	2.0	1.2	8.6	0.5	0.4	0.4
Total for the year (December on December)	8.8	6.6	12.9	9.4	45.6	5.0	4.9	8.1
<b>2011</b>								
January	2.4	1.1	2.6	1.6	11.2	0.9	0.6	4.1
February	0.8	0.7	1.2	1.0	2.7	0.3	0.5	0.8
March	0.6	0.7	0.9	0.9	1.4	0.5	0.6	0.3
April	0.4	0.5	0.4	0.6	-1.6	0.5	0.5	0.5
May	0.5	0.4	0.0	0.2	-1.6	0.8	0.4	0.7
June	0.2	0.3	-0.2	0.1	-3.2	0.4	0.3	0.7
July	0.0	0.4	-0.7	0.4	-9.2	0.3	0.3	0.6
August	-0.2	0.4	-1.4	0.3	-16.0	0.5	0.4	0.3
September	0.0	0.5	-0.6	0.2	-9.8	0.7	0.7	-0.1
October	0.5	0.5	0.5	0.5	0.5	0.7	0.7	0.1
November	0.4	0.5	0.5	0.7	-1.0	0.6	0.5	0.1
December	0.4	0.4	0.7	0.6	1.3	0.3	0.4	0.3
Total for the year (December on December)	6.1	6.6	3.9	7.4	-24.7	6.7	6.0	8.7
<b>2012</b>								
January	0.5	0.5	0.8	0.6	2.8	0.4	0.5	0.2
February	0.4	0.4	0.7	0.5	2.1	0.3	0.4	0.0
March	0.6	0.5	0.8	0.6	2.7	0.5	0.5	0.4
April	0.3	0.4	0.2	0.3	-0.4	0.4	0.4	0.3
May	0.5	0.2	0.6	0.0	5.8	0.4	0.3	0.7
June	0.9	0.4	1.6	0.3	13.4	0.2	0.2	0.8
July	1.2	0.5	1.1	0.8	3.5	0.3	0.3	2.7
August	0.1	0.6	-0.5	0.8	-10.8	0.4	0.4	0.6
September	0.6	0.7	0.1	0.8	-5.6	0.7	0.6	1.0
October	0.5	0.6	0.5	0.8	-2.2	0.7	0.6	0.1
November	0.3	0.5	0.5	0.6	-1.3	0.4	0.4	0.0
December	0.5	0.4	0.9	0.7	2.4	0.3	0.3	0.4
Total for the year (December on December)	6.6	5.7	7.5	7.1	11.0	5.2	5.1	7.3

<sup>1</sup> Excluding vegetables and fruit.

<sup>2</sup> Bank of Russia estimate.

Note. Tables 2 and 3 are based on Rosstat data and Bank of Russia calculations.

Таблица 3

**Consumer prices by group of goods and services  
(month on corresponding month of previous year, %)**

	Inflation	Core inflation	Food price growth	Food price growth <sup>1</sup>	Vegetable and fruit price growth	Non-food price growth	Non-food price growth, excluding petrol <sup>2</sup>	Service price growth
<b>2010</b>								
January	8.0	7.6	6.1	6.6	0.7	9.1	9.0	9.1
February	7.2	6.3	5.5	5.8	1.4	7.7	7.4	8.7
March	6.5	5.4	4.8	5.1	1.1	6.6	6.1	8.4
April	6.0	4.8	4.4	4.5	2.4	5.9	5.2	8.4
May	6.0	4.4	4.4	4.1	5.4	5.7	4.7	8.4
June	5.8	4.3	4.5	4.0	6.1	5.1	4.6	8.4
July	5.5	4.3	4.2	4.2	2.1	4.8	4.6	8.2
August	6.1	4.6	6.1	5.1	13.1	4.5	4.5	8.0
September	7.0	5.3	8.7	6.5	28.0	4.4	4.6	8.0
October	7.5	5.8	10.0	7.6	33.9	4.4	4.5	8.1
November	8.1	6.2	11.2	8.5	38.0	4.7	4.8	8.1
December	8.8	6.6	12.9	9.4	45.6	5.0	4.9	8.1
<b>2011</b>								
January	9.6	7.2	14.2	10.2	51.1	5.6	5.2	8.2
February	9.5	7.4	14.2	10.5	46.9	5.6	5.4	7.9
March	9.5	7.7	14.1	10.8	42.9	5.8	5.6	7.9
April	9.6	8.0	14.1	11.2	39.1	5.9	5.8	8.2
May	9.6	8.3	13.4	11.6	27.7	6.3	5.9	8.6
June	9.4	8.4	12.5	11.7	18.3	6.6	5.9	8.8
July	9.0	8.4	11.3	11.7	8.1	6.6	6.0	8.9
August	8.2	8.1	8.8	10.7	-7.9	6.8	6.1	9.0
September	7.2	7.4	6.4	8.9	-17.1	6.8	6.1	8.8
October	7.2	7.2	6.2	8.4	-15.2	6.9	6.2	9.0
November	6.8	6.9	5.3	8.0	-19.3	6.8	6.1	8.8
December	6.1	6.6	3.9	7.4	-24.7	6.7	6.0	8.7
<b>2012</b>								
January	4.2	6.0	2.0	6.3	-30.4	6.2	5.9	4.7
February	3.7	5.7	1.5	5.8	-30.8	6.2	5.8	3.9
March	3.7	5.5	1.3	5.5	-29.9	6.2	5.7	3.9
April	3.6	5.3	1.2	5.2	-29.1	6.1	5.6	3.7
May	3.6	5.1	1.7	4.9	-23.8	5.6	5.5	3.7
June	4.3	5.2	3.6	5.1	-10.8	5.4	5.4	3.8
July	5.6	5.3	5.5	5.6	1.7	5.5	5.5	5.9
August	5.9	5.5	6.5	6.1	8.0	5.3	5.5	6.2
September	6.6	5.7	7.3	6.7	13.1	5.4	5.4	7.3
October	6.5	5.8	7.3	7.0	10.1	5.3	5.2	7.2
November	6.5	5.8	7.3	7.0	9.8	5.2	5.1	7.2
December	6.6	5.7	7.5	7.1	11.0	5.2	5.1	7.3

<sup>1</sup> Bank of Russia estimate.<sup>2</sup> Excluding vegetables and fruit.

