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

# **Monetary Policy Report**

No. 1 (5) • February 2014

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Report is prepared on the basis of data as of 14 February 2014. Data cut-off date for forecast calculations is 27 January 2014.

An electronic version of the information and analytical report can be found on the official website of the Bank of Russia: http://www.cbr.ru/publ/.

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### **Summary**

The Bank of Russia decision to keep the key rate unchanged at 5.5% p.a. in November 2013 – February 2014 was based on the analysis of the current trends and medium-term macroeconomic forecast. The inflation is projected to slow down to target levels amid persistently low rates of Russia's economic growth in 2014-2016.

In December 2013, the year-on-year inflation rate stood at 6.5% and exceeded the target range for this period (5-6%). Above-target inflation was mainly caused by the accelerated price growth for some food products in Q4 2013 due to unfavourable harvesting conditions in September-October 2013, and also to worse than expected effects of the poor 2012 harvest. The rouble depreciation in 2013 also contributed somewhat to higher inflation rates.

Acceleration in consumer price growth in late 2013 was short-lived. This is confirmed by the persistently moderate non-food price dynamics, and also by the absence of any pronounced increase in household inflation expectations. In January 2014, year-on-year consumer price growth rates went down to 6.1%. Short-term factors, which spurred inflation at the end of 2013, are expected to exhaust their influence in the first half of 2014.

In Q4 2013, economic growth remained weak, despite some improvement in the dynamics of a number of production and investment indicators. In 2013, Russia's GDP increased by 1.3% compared with 3.4% a year earlier. This slowdown was mainly caused by structural constraints, which will continue to curb output growth in the medium term. Labour supply will be under the impact of unfavourable demographic trends. Capacity utilisation will remain high due to, inter alia, low investment activity in 2013.

In 2014, private consumption will remain the key driver of economic growth. At the same time, its dynamics will be contained by the slower real income growth while retail lending dynamics will support consumer demand. Taking into account budget deficit set forth by the 'Guidelines for Fiscal Policy in 2014 and for 2015 and 2016', general government sector contribution to the aggregate demand dynamics will remain positive, though small. The low 2013 base effect will bring about a moderate increase in investment growth rates.

The contribution of net exports to GDP growth is expected to remain slightly negative as the global economy continues to grow slowly in the coming quarters. Expansionary monetary policy will facilitate recovery in developed economies. At the same time, growth moderation in emerging markets along with a possible increase in oil supply may adversely affect energy product markets. All this will hamper the terms of trade for Russia and curb the growth of its economy.

In 2014, Russia's GDP growth is forecasted at 1.5-1.8%, in 2015-2016 it is expected to accelerate to 1.7-2.0% following the recovery of the global economy, and also due to gradual improvement in investment climate and economic agents' sentiments in Russia. At the same time, the output of goods and services will stay slightly below its potential level.

Inflation is expected to decline to the target levels of 5.0% in the end of 2014, 4.5% in 2015 and 4.0% in 2016. Inflation deceleration will be brought about by the persisting economic slack, along with a gradual decrease in inflation expectations following an actual slowdown in consumer price growth. In 2014, the announced reduction in tariff growth rates for natural monopolies' services will also contribute to lower inflation rates.

At present, the main sources of uncertainty for this forecast are inflation risks associated with end-2013 food price growth acceleration and exchange rate dynamics. If the negative impact of these factors spills over to the prices of a wide range of goods and services and household expectations, the probability of inflation deviation from the medium-term target will increase. In this case the Bank of Russia will stand ready to tighten its monetary policy.

#### I. Macroeconomic conditions

#### I.1. External economic conditions and balance of payments

External economic conditions continue to exert a restraining influence on economic growth in Russia. Despite the fact that growth rates in external demand are increasing, they remain low. There is still some risk that the revival of the global economy may falter. Global financial markets have witnessed a trend towards a fall in stock indices and weakening of emerging markets currencies. In the near term, the Bank of Russia expects a further recovery in foreign demand, but elevated volatility in global financial markets and a possible price reduction in commodity markets will limit the scope for an improvement in external economic conditions for Russia.

#### Global economy and financial markets

Statistical data released since the publication of the last Monetary Policy Report point to the continuing gradual recovery of the global economy. Dynamics in aggregate **external demand**<sup>1</sup> are generally in line with Bank of Russia forecasts and are indicative of the potential to increase demand for Russian goods from trading partner nations.

Currently, global economic activity is increasing largely due to improving situation in developed countries, primarily the United States, the United Kingdom and Germany, whereas economic growth in a number of emerging market economies is slowing.

According to preliminary estimates, in Q4 2013 US GDP increased by 0.8%<sup>2</sup> (the previous quarter's increase was 1.0%). While in the previous quarter economic growth was largely driven by higher investment in inventories with only a slight increase in private consumption, Q4 saw accelerated growth in private consumption. Labour market statistics were also relatively positive, which was one of the factors that enabled the US Federal Reserve (Fed) to begin the scaling back of accommodative measures early in 2014.

In Q3 2013 GDP in the euro area increased by 0.1%, while the total output in Germany rose by 0.3%, the output in Italy saw no change, and in France it dropped by 0.1%. Data on business activity in Q4 show persisting heterogeneity in economic growth rates among countries in the region. In addition, unemployment rates remain high, and lending activity in the banking sector remains low. The improvement in foreign trade conditions has supported economic growth in the region, as evidenced by the positive contribution of exports to GDP growth in Q2-Q3 2013.

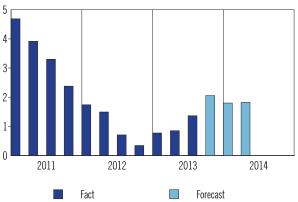
The revitalisation of the UK economy is one of the most pronounced among the developed nations and is based upon improvements in the labour and real estate markets. In Q3, GDP growth in Japan slowed in comparison with the relatively high figures in the first half of 2013, however short-term business activity indicators generally point to a favourable economic situation over more recent months.

Currently, one of the key factors constraining the growth potential of the global economy is slowing economic growth in a number of

Aggregate GDP growth for 23 foreign trading partner nations accounting for the majority of Russian exports (nations whose share in the exports of goods from Russia in 2008-2012 was at least 0.9% annually, including the Netherlands, Italy, Germany, China, Ukraine, Turkey, Belarus, Poland and others; the relative share of each country is determined according to the structure of the export of goods to these main trading partner nations).

<sup>&</sup>lt;sup>2</sup> Here and throughout section I.1 growth rates are given in period-on-period seasonally adjusted terms, unless otherwise stated.

# External demand growth rates (as % on correspondent quarter of previous year)



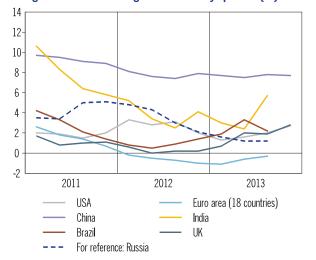
Note: Bank of Russia forecasts based on the forecasts prepared by the IMF, World Bank, OECD, EC, Asian Development Bank, national central banks, and consensus forecasts Consensus Economics, Bloomberg, Thomson Reuters.

Source: national statistics agencies, Eurostat. Bank of Russia calculations and forecast.

emerging market countries. According to preliminary estimates, China's GDP increased by 1.8% in Q4 2013 (by 2.2% in Q3) which was below market expectations (2.0% according to a Bloomberg survey). Moreover, economic activity indicators pointed to the likelihood of a further slowdown in the economic growth of the country in early 2014. This is in part caused by the Chinese government's measures to prevent the overheating of the financial sector and by changes in the structure of the economy.

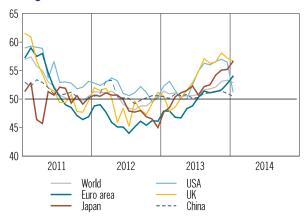
The decline in GDP of Ukraine and Belarus in Q3 also had a negative impact on foreign demand dynamics. According to preliminary

#### GDP growth rates in foreign economies by quarter (%)\*



<sup>\*</sup> Growth on the corresponding quarter of the previous year. Source: national statistics agencies Furnstat

#### **Leading business indicators**



Note: PMI indices in manufacturing industries, and ISM in the USA. Data for the total world are calculated by J.P.Morgan based on the data for the USA, Japan, Germany, Spain, Italy, France, BRIC nations, Australia, Mexico, etc.
Source: Bloomberg.

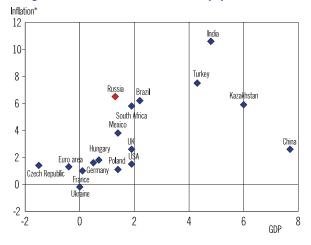
estimates, at the close of 2013 GDP was unchanged in Ukraine and GDP in Belarus had increased by 0.9% compared with 2012. These were the lowest GDP growth rates in these countries since 2009. Economic growth in Kazakhstan has made a positive contribution to external demand increase: based on preliminary estimates, its GDP in 2013 grew by 6.0%.

In Q4 2013, **inflation** fell in Russia's main trading partner nations, excluding Japan, China and Ukraine. Amid restrained price dynamics in global commodity markets, there was a fall in the contribution to inflation from energy and food prices in many countries. At the same time, inflation in a number of emerging markets remained relatively high.

Compared with other emerging markets, in 2013 Russia witnessed relatively low rates of economic growth and elevated inflation rates.

With low growth rates and slowing inflation in the global economy, the **monetary policy** of central banks in foreign countries continued to be accommodative. From October 2013 to January 2014, central banks in many countries continued the reduction of key interest rates, notably with the key rate of the European Central Bank (ECB) being cut. Meanwhile, a number of emerging markets – Brazil, India, Indonesia, Turkey and South Africa – raised key interest

#### GDP growth rates and inflation in 2013 (%)



\* Average yearly general price level growth. Source: World Bank, national statistics agencies, Eurostat, Bloomberg

rates in an effort to contain inflationary pressures and to support national currencies.

Dynamics of **global financial market** indicators from October 2013 to January 2014, as in the previous quarter, were guided by the anticipated actions of leading central banks, primarily the Fed, as well as the dynamics of economic activity indicators. International investors' demand for the assets of developed economies remained high due to improving economic growth outlook. Over the major part of this period the stock indices of developed economies displayed upward trends. temporary fall in indices was observed at the end of January 2014 as the sustainability of economic growth in emerging market countries and the impact of the situation in these countries on the global economy raised concerns among market participants.

Over the same period, the influence of this factor combined with uncertainty about the consequences of any changes to the Fed's policy and an increased risk in the Chinese financial sector, led to most emerging market economies being affected by an outflow of international investors' funds from their stock and foreign exchange markets. The exchange rates of most countries in this group, including the Russian rouble, fell against the US dollar and euro from

#### MSCI stock markets indices (1.01.2013 = 100%)

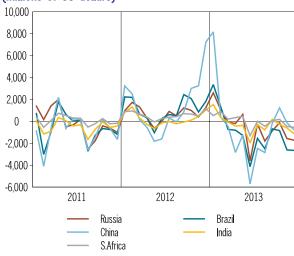


Source: Bloomberg.

October 2013 to January 2014. The consistently high value of the euro exchange rate over this period was supported by a renewed capital inflow into the euro area (in particular, by the end of 2013, there was an increase in the demand for Greek, Spanish, Irish and Portuguese debt securities), improved foreign trade indicators in the region, and a reduction in excess liquidity in the Eurosystem.

Rouble, as well as currencies of other commodity exporters, was also affected by expectations of lower commodity prices, which were caused by published statistical data pointing to slowing growth in the Chinese economy (the largest consumer of industrial raw commodities) and by concerns about the negative impact of problems in the financial sector on growth in the Chinese economy. In addition, elevated inflation rates in Russia combined with relatively slow economic growth also reduced the appeal of Russian assets for international investors. From October 2013 to January 2014, the change in the rouble-US dollar exchange rate was one of the most significant out of all the currencies of emerging market countries. However, over the period from the start of 2013, the rouble depreciated to a lesser degree than the currencies of Brazil, South Africa, Turkey, Indonesia and Australia.

# Net inflow of portfolio investments (millions of US dollars)



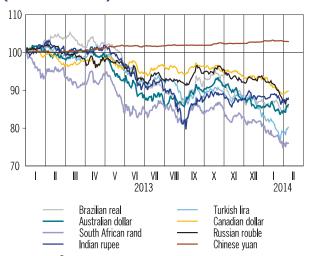
Source: EPFR Global.

The weakening of the rouble in the short term increases the competitiveness of Russian goods in the international market. However, it can also cause an increase in inflationary pressures, contribute to the stagnation of the economy structure and, in the longer term, reduce the economy's potential for modernisation and diversification.

Over the **coming quarters**, the Bank of Russia forecasts continuing recovery in foreign demand, but its growth rates will remain low. As expected, global economic growth will still be primarily supported by the improving situation in developed economies against the backdrop of the loose monetary policies of central banks and the reduction in budget austerity measures. In particular, the leading economic indicators of a number of developed countries show an increase in business activity from late 2013 to early 2014. Economic growth in developed countries will have a positive effect on the economic environment in emerging market countries by increasing their exports.

Despite the Bank of Russia's growth projections in global economic activity, only a slight increase in foreign inflation is expected over the coming quarters, which will not have a significant impact on consumer price growth rates in Russia. This forecast is based on the

# Exchange rate indices against the US dollar (1.01.2013 = 100%)



Source: Bloomberg.

anticipated lack of growth in prices for most energy and food products in the global market, and also takes into account persistently low output growth rates in many countries. There is a risk of a further slowdown in consumer price growth in developed economies, especially in the euro area. If inflation in the euro area stays below the target values for a long time, a reduction in economic agents' inflation expectations may follow, which, in turn, increases the risk of an even more pronounced slowdown in inflation. A significant fall in inflation will constrain economic activity by bringing up the real costs of debt servicing.

Amid persistently sluggish global economic growth and low inflation in major economies, the Bank of Russia expects central banks to maintain loose monetary policies throughout 2014. It cannot be ruled out that over the coming quarters the ECB may resort to further accommodative measures. The gradual tapering of the US Fed's quantitative easing programme may trigger instability outbreaks in the global markets which is not expected to have a significant negative impact on growth in external demand, but may, however, limit possible improvements in external borrowing conditions for Russia. At the same time, in the medium term, the phasing down of large-

#### Situation in the Chinese financial sector

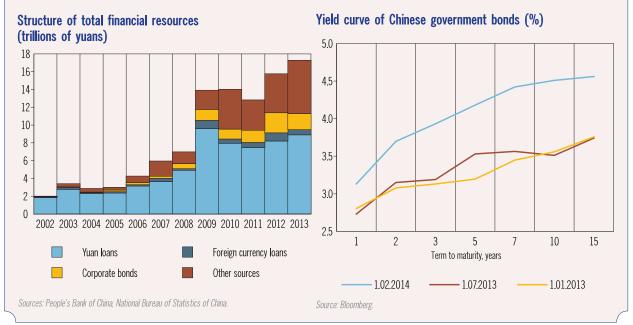
In recent months the risks associated with the financial instability of shadow banking institutions in China have increased. The significant amount of financial instruments maturing in 2014, in the face of rising interest rates in the financial market, is suggestive of possible defaults and declining prospects for economic growth in China.

High growth rates in the Chinese economy have resulted in a considerable increase in demand for credit by economic agents. Financial intermediaries have attempted to circumvent the established government restrictions on lending volumes, which has given impetus to the development of the non-banking financial sector in China. In 2002, bank loans amounted for 92% of borrowed funds in China compared with only 51% in 2013. Economic agents have started to more actively attract financing in the debt market, but also, especially in 2012-2013, through shadow banking institutions, such as trust companies. Trust companies raise funds in the market by creating financial instruments with more attractive yields compared with bank deposits (maximum deposit rate is regulated by the government), and often fund projects associated with high default risks.

At the end of January 2013, China Credit Trust, one of the largest shadow banking institutions in China, was at risk of defaulting on one of its outstanding financial instruments to the value of 3 billion yuan (496 million US dollars) due to the borrower failing to repay the loan. The financial markets reacted to this news with growth in CDS on China. The bankruptcy of China Credit Trust was averted thanks to its debt restructuring through the intervention of an unnamed third party (EIU remarked that it was most likely government intervention). This episode suggests that risks are increasing in the financial sector in China.

Official reports indicate that the Chinese authorities are taking a relatively tough stance on the financial sector boom and intend to continue measures to limit credit growth rates. During 2013, interest rates in the Chinese financial market grew along the entire yield curve, which can be explained by the reduction in the volume of liquidity injected into the money market by the People's Bank of China. Worsening funding conditions are increasing the risks associated with the shadow banking sector.

The significant role played by the state in the Chinese economy and the possible use of non-market methods of regulation would suggest that the Chinese authorities will not allow the occurrence of any systemic problems which may hinder economic growth. However, the risk of bankruptcies in the financial sector will persist in 2014 amid the forthcoming significant repayments on financial instruments. According to Bloomberg reports, in 2014 trust company debt repayments are likely to be 5.3 trillion yuan, or roughly 880 billion US dollars (3.5 trillion yuan, or 580 billion US dollars, in 2013). In view of the close and not always transparent links between financial companies and regional governments, if these risks are realised this may worsen the situation in the financial markets and lead to slowing growth in the Chinese economy. In this case, there are potentially negative consequences for the Russian economy, taking into account the likely fall in commodity prices and the general slowdown in external demand.



scale accommodative measures by developed countries will help to prevent the build-up of the risks associated with an excessive inflow of speculative capital into certain segments of the global financial market.

The risks of instability in the external demand recovery are largely related to economic growth prospects in certain European countries and emerging market countries. The situation in the Chinese financial sector is a threat to the economic growth of the country. The rapid development of the shadow banking sector which accounts for up to one third of the total financial resources in the country, according to the People's Bank of China, creates risks of financial institutions bankruptcies as the Chinese authorities tighten regulation in the financial sector.

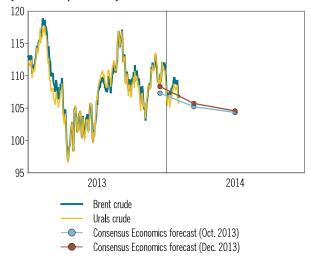
#### Commodity markets

The downward trend in prices in the commodity markets persisted in Q4 2013 and early 2014, suggesting some worsening of **the terms of trade** for Russia. The average value of the CRB commodity markets index from October 2013 to January 2014 was 280, down from 288 in July-September 2013.

On the whole, the expected dynamics in prices for Russian export commodities indicate a slight deterioration in terms of trade in the near term.

The price of oil in the global market in Q4 2013 dropped compared with the previous quarter, but remained relatively high amid the continuing restrictions on Iran's oil supply and disruptions to oil supplies by Libya. The average price of Urals crude in this period was 108.9 US dollars per barrel, down by 1.5% compared with Q3. This value was slightly higher than the Bank of Russia forecast for the period. As a result, over 2013 the oil price was 108.3 US dollars per barrel (in 2012 it was 110.8 US dollars per barrel), slightly exceeding Bank of Russia estimates in the 'Guidelines for the Single State Monetary Policy in 2014 and for 2015 and 2016' (107 US dollars per barrel).

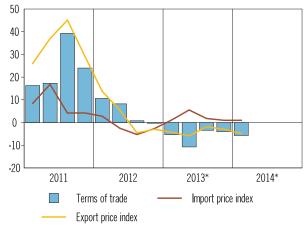
Global oil prices and futures contract market (US dollars per barrel)



Sources: Reuters, Bloomberg, Consensus Economics.

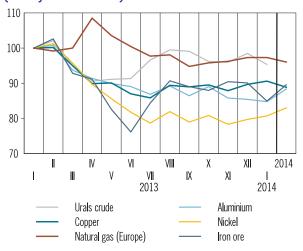
From January to early February 2014, the average price of Urals crude was approximately 107.2 US dollars per barrel. Price dynamics were affected by the decline in business activity indicators in China, suggesting a likely slowdown in demand for energy commodities. On the other hand, despite the expected renewal of supplies from Iran amid progressing agreements on the Iranian nuclear programme and the partial resumption of supplies through ports in Libya, short-term factors buoyed prices, in particular the continuing restrictions on oil supply and high demand for energy in the US due to the cold weather. It is anticipated that the removal

Russia's terms of trade and export and import price indices (as % of correspondent period of previous year)



\* Q4 2013 and Q1 2014 - Bank of Russia estimate. Source: Russian Federal Customs Service, Bank of Russia calculations.

# Global prices for certain commodities (January 2013 = 100%)



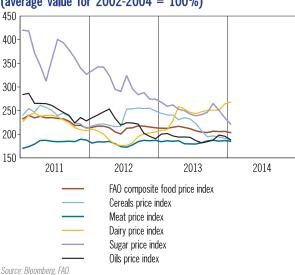
Source: World Bank data and forecasts, Reuters (Urals crude price).

of such short-term factors could cause a further decline in oil prices.

The average price of natural gas in the European market in Q4 2013 remained virtually unchanged compared with the previous period. World Bank projections indicate a probable reduction in 2014 prices for natural gas in Europe. Prices for industrial metals have also not changed significantly over the past months. Their fluctuations are expected to continue to be influenced by divergent factors: on the one hand, strong demand from China, the growth of which although falling, still remains high, and on the other hand, persistently high levels of global metal stocks and production volumes.

From October 2013 to January 2014, the average value of the FAO Food Price Index remained virtually unchanged compared with July to September 2013. A number of components of the FAO index - meat and in particular dairy product prices - continued to show growth, largely explained by increasing demand for dried milk, beef and pork from China. In future, it is likely that China's high consumption growth rates for these goods will continue. However, in 2014 the price rise will be constrained by the expected increase in livestock numbers and a reduction in fodder prices linked to the observed decline in those for grain. The record grain harvest of 2013 led to an





accumulation of supplies and stocks, which led to lower prices in the global market. This trend is expected to continue in 2014.

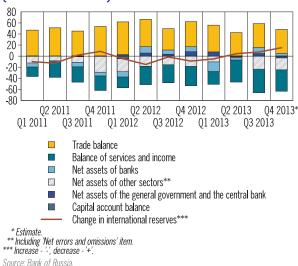
#### Russia's balance of payments

In Q4 2013, the balance of payments current account surplus amounted to 4.7 billion US dollars, a decrease of more than twofold compared with Q4 2012. Such dynamics in this indicator were caused mainly by an increase in the deficit of services and primary and secondary incomes accounts. The trade surplus also decreased amid a reduction in goods exports with virtually unchanged import levels.

Instability in external markets limited the ability of residents to attract foreign funds, resulting in continued substantial net capital outflows<sup>3</sup>, the rouble depreciation, and foreign exchange interventions by the Bank of Russia. In Q4 2013, both the private and public sectors increased liabilities towards non-residents slower than in the comparable period in 2012. The general slowdown in the growth of foreign assets was not as significant, even despite the reduction in outflows in the form of dubious transactions, which could be due to the

<sup>&</sup>lt;sup>3</sup> From this point on, any analysis of the dynamics of balance of payment indicators will take account of data adjusted by the value of currency swap transactions and transactions involving correspondent accounts of resident banks at the Bank of Russia.

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



tightening of Russian laws to counteract illegal financial transactions. In total, the financial account deficit increased in Q4 2013, because of the dynamics of financial flows in the public sector. The net outflow of private capital slowed somewhat (from 15.6 billion US dollars in Q4 2012 to 14.7 billion US dollars in Q4 2013).

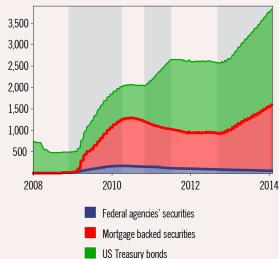
In Q4 2013, on account of the transactions reflected in the balance of payments, foreign exchange reserves fell by 13.3 billion US dollars. More than 70% of this reduction occurred following the interventions of the Bank of Russia in the domestic foreign exchange market. This indicator was also affected by the acquisition of the first tranche of Ukrainian sovereign bonds using funds from the National Wealth Fund.

The Bank of Russia expects that in Q1 2014 the reduction in imports due to seasonal trends and rouble depreciation and the likely increase in exports of goods and services in connection with Russia's hosting the winter Olympic Games will lead to growth in the current account surplus of the balance of payments.

# Consequences of the US Fed's tapering of the accommodative monetary policy measures for the Russian financial markets

The Bank of Russia's analysis of the sensitivity of Russian financial market indicators to the reduction in security purchase volumes by the Fed indicates the possibility of moderate growth in long-term federal government bond (OFZ) yields.

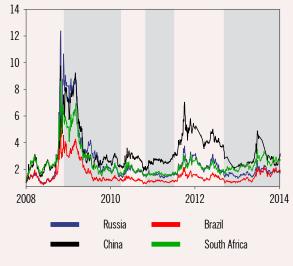
# Securities on the US Federal Reserve's balance sheet (billions of US dollars)



Note. The following periods are shown in grey. US Fed's measures to provide liquidity to financial intermediaries and the 1st round of quantitative easing (QE1) from November 2008 to 31 March 2010, QE2 from 3 November 2010 to 30 June 2011, and QE3 from 13 September 2012 to present time.

Source: US Federal Reserve.

# CDS-spreads of emerging market economies (compared to the index of early 2008)



Source: Bloomberg.

A series of programmes to purchase securities implemented by the US Fed has led to a decrease in the yields of US Treasury bonds through reduced market supply amid accumulation on the Fed's balance sheet, as well as the revival of markets for other securities (for example, mortgage-backed securities) amid the lower risk premiums. Alongside the impact on the domestic financial market, the programmes have influenced financial markets outside the US. Consequently, the programme implementation period was characterised by a growth in investor demand for risky assets, in particular from emerging markets.

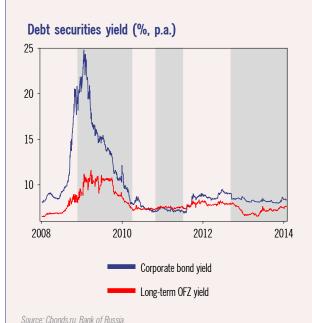
The gradual normalisation of economic activity indicators allowed the Fed to cut monthly securities purchases by 10 billion US dollars in January 2014 and by further 10 billion US dollars in February, to 65 billion US dollars per month. The rate of the further decline in purchase volumes will depend on the sustainability of the US economic recovery.

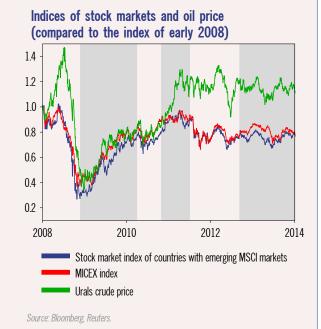
The reduction in the scale of quantitative easing operations creates conditions for international investors to reduce their investments in the assets of emerging markets. The World Bank points to the risk of the inflow of portfolio investments to emerging markets reducing by one third compared with the case of unchanged asset purchases by the Fed<sup>1</sup>.

The analysis conducted by the Bank of Russia offers the following conclusions regarding the sensitivity of OFZ yields, corporate bond yields and MICEX stock index changes to the dynamics of the stock of financial assets on the Fed's<sup>2</sup> balance sheet.

OFZ yield is sensitive to the trends in the US Treasury bonds market and the scale of the Fed's purchases. The cumulative effect of the Fed ceasing its securities purchases may lead to an increase in the long-term OFZ yields of 1.2-1.7 percentage points. At the same time, in 2014 growth in OFZ yields will be contained by other factors, such as the reduction in the declared volume of initial OFZ placement by the Russian Ministry of Finance from 1,215.6 billion roubles in 2013 to 699.8 billion roubles and the slowdown in inflation.

The yield of corporate bonds reacts to Fed's statements regarding changes to the scale of the quantitative easing programme, but compared with the OFZ yield it is less sensitive to the volume of asset purchases, which could be attributed to the smaller share of non-residents in the turnover of the corporate bonds market. For the Russian stock market, alongside the Fed's policy, considerable emphasis will be placed on changes to commodity market conditions and foreign stock indices, which are in turn affected by business cycle indicators.





<sup>&</sup>lt;sup>1</sup> World Bank, Capital Flows in Developing Countries, Global Economic Prospects, 2014.

<sup>&</sup>lt;sup>2</sup> The impact of changes in commodity market indicators and other factors traditionally viewed as determinants of conditions in the Russian financial market have also been taken into account. The approach adopted is similar to the one proposed in the work: Fratzscher, M., Lo Duca, M., Straub, R. On the international spillovers of US Quantitative Easing // ECB Working Papers Series. ECB. 2013. The effects of the statements made by the US Federal Reserve and the change in the actual volume of transactions under the quantitative easing programme have been taken into account separately.

#### I.2. Financial sector

Amid the continuing outflow of liquidity from the banking sector the Bank of Russia increased the volume of refinancing for Russian banks, thereby ensuring the smooth functioning of the money market and maintaining the interbank rates within the Bank of Russia interest rate corridor. As a result, there was no upward pressure from the money market on rates for loans to end-borrowers. These rates remained unchanged or dropped, which helped to preserve the availability of bank loans for households and non-financial organisations.

# Money market and Bank of Russia banking sector liquidity management

In Q4 2013, the **banking sector liquidity** was determined by the dynamics of autonomous liquidity factors and a seasonal increase in demand for bank reserves from credit institutions at the end of the year, which led to an increase in gross credit of the Bank of Russia to credit institutions.

The outflow of liquidity during this period was caused by an increase in the amount of cash in circulation due to rising payments to households at the end of the year and Bank of Russia foreign currency sales in the domestic foreign exchange market within its exchange rate policy framework<sup>1</sup>. In the second half of November to December 2013, the growth in federal budget spending helped to increase the level of banking sector liquidity, which was partially offset by a reduction in federal budget funds deposited by the Federal Treasury with credit institutions and by OFZ operations.

In Q4 2013, the increasing balances of credit institutions' correspondent accounts with the Bank of Russia (on average by 104.2 billion roubles, to 962.4 billion roubles) due to seasonal factors and growth in the averaged

value of required reserves, together with the cumulative effect of autonomous liquidity factors, have contributed to the increase in the Bank of Russia's gross credit by 1.3 trillion roubles to 4.5 trillion roubles.

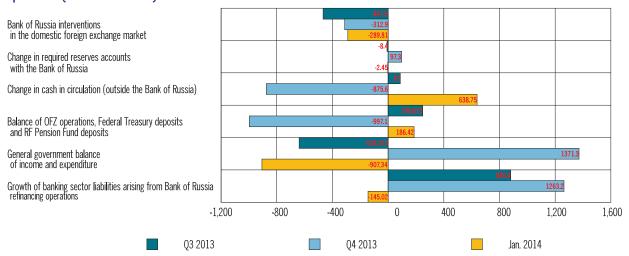
In January 2014, the withdrawal of liquidity via budget and foreign exchange operations was offset by the seasonal decline in cash in circulation. The seasonal decrease in correspondent accounts balances at the start of the year amid the total withdrawal of liquidity of 0.4 trillion roubles helped to reduce the Bank of Russia's gross credit at the end of January 2014 by 0.1 trillion roubles to 4.4 trillion roubles.

In Q4 2013 and in early 2014, repo auctions remained the Bank of Russia's main operations to provide liquidity. The share of such operations in the total volume of funds provided by the Bank of Russia was on average over 60%. From October 2013 to January 2014, the average outstanding amount of auction-based repo operations increased by 0.3 trillion roubles compared with Q3 2013, reaching a maximum level of 3.1 trillion roubles. The weighted average rate on these operations from October 2013 to January 2014 was 5.68%, which is close to the Bank of Russia key rate. As before, credit institutions primarily used one-week repo auctions as the main source of Bank of Russia liquidity.

Changes in the liquidity level, as described above, remained one of the key factors affecting fluctuations in money market rates amid its segmentation. In Q4 2013, with the growth of the structural liquidity deficit, money market rates remained in the upper part of Bank of Russia interest rate corridor, and utilisation of market collateral on some days reached its peak (over 60%). Due to the uneven distribution in the banking sector of securities eligible as collateral for repo operations with the Bank of Russia, and the lack of active redistribution of liquidity in the Russian money market, there

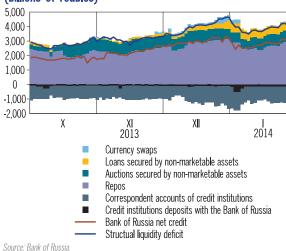
<sup>&</sup>lt;sup>1</sup> See the box 'Bank of Russia exchange rate policy mechanism' in Section II.3 of this Report, as well as the 'Monetary Policy' section, 'Bank of Russia Exchange Rate Policy' subsection on the website of the Bank of Russia.

# Factors affecting banking sector liquidity and growth of banking sector liabilities arising from Bank of Russia refinancing operations (billions of roubles)



Source: Bank of Russia.

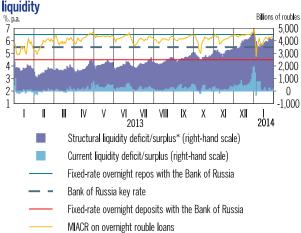
#### Credit institutions demand for refinancing and debt structure on Bank of Russia operations (billions of roubles)



was continued demand from credit institutions for operations secured by foreign currency as well as non-marketable assets or guarantees. The average volume of FX swaps on the days of transactions from October 2013 to January 2014 rose to 129.4 billion roubles (from 60.3 billion roubles in Q3 2013). The average outstanding amount of fixed-rate loans secured by non-marketable assets or guarantees rose to 201.1 billion roubles in Q4 2013 from 81.1 billion roubles in Q3 2013.

This situation contributed to an increase in the interbank market turnover with the **interbank rate** exceeding Bank of Russia

### Money market interest rates and banking sector



\* Difference between Bank of Russia gross credit to credit institutions (excluding the deposit with Vnesheconombank and the subordinated loan to Sberbank) and Bank of Russia debt on liquidity absorption operations.

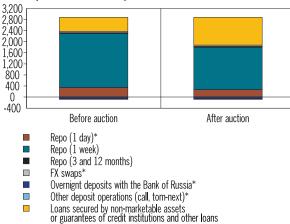
Source: Bank of Russia.

interest rate corridor on several occasions. As a result, the average MIACR on overnight rouble loans, which was at Q3 levels from October to November (6.1-6.2% p.a.), stood at 6.4% p.a. in December. In January 2014, amid some inflow of liquidity into the banking sector the average money market rate dropped to 6.1% p.a.

On 14 October 2013 and 13 January 2014, the Bank of Russia held auctions to provide **Bank** of Russia loans secured by non-marketable assets<sup>2</sup> for the term of 3 months at a floating

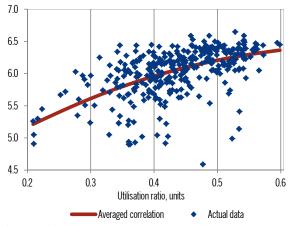
<sup>&</sup>lt;sup>2</sup> In accordance with Bank of Russia Regulation No. 312-P, dated 12 November 2007, 'On the Procedure for Extending Bank of Russia Loans Covered by Assets or Guarantees to Credit Institutions'.





<sup>\*</sup> Sources to cover current and structural liquidity deficit.

## Correlation between money market rate and marketable collateral utilisation ratio



Source: Bank of Russia

#### The forecast of factors affecting banking sector liquidity (trillions of roubles)

		2012	2013	2014 (forecast)*, **
Total for autonomous factors	1 = 2 + 3 + 4 + 5	-1.3	-1.7	[-1.3; -0.9]
of which:				
<ul> <li>change in general government accounts with the Bank of Russia and other items net</li> </ul>	2	-0.8	-0.4	[-0.4; -0.1]
<ul> <li>change in cash in circulation (outside the Bank of Russia)</li> </ul>	3	-0.6	-0.5	[-0.6; -0.5]
<ul> <li>Bank of Russia interventions in the domestic foreign exchange market</li> </ul>	4	0.2	-0.9	-0.3
<ul> <li>change in credit institutions required reserve accounts with the Bank of Russia</li> </ul>	5	0	0	0
Change in free banking reserves***	6	0.4	0	[0.0; 0.1]
Growth of banking sector liabilities arising from Bank of Russia refinancing operations	7 = 6 - 1	1.7	1.7	[0.9; 1.4]
For reference: debt on Bank of Russia refinancing operations (at end-year)****	8	2.7	4.5	[5.4; 5.9]

<sup>\*</sup> January - fact, February-December 2014 - forecast.

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

interest rate. As a result, the banking sector was granted 480 billion roubles at the first auction, which was then refinanced at the auction in January. The three-month credit auctions at floating rates allowed to release part of the marketable assets pledged as collateral for Bank of Russia operations, temporarily reducing the burden on the main open market refinancing operations. In particular, the credit auction in October 2013 contributed to a short-term reduction in outstanding repo transactions by 0.5 trillion roubles. In addition, it brought about a decrease in the weighted average rate on loans

secured by non-marketable assets or guarantees from 6.82% in September to 5.78% in October.

The change in the structure of the **Bank of Russia's gross credit to credit institutions** (i.e. replacing market operations to provide liquidity with loans secured by non-marketable assets or guarantees) has brought about a reduction in the current liquidity deficit determined by the average liquidity gap on one-week horizon. Following the October 2013 auction to provide three-month loans secured by non-marketable assets, the average current liquidity deficit fell by 75 billion roubles to 260 billion roubles.

<sup>\*\*</sup> The forecast does not include the impact on the banking sector liquidity exerted by Bank of Russia operations in the domestic foreign exchange market, and also balance of operations with OFZ and Federal Treasury deposits. The impact of these factors will be shaped by the situation in respective financial market segments.

<sup>\*\*\*</sup> During the period of forecast the demand for free bank reserves is determined on the basis of credit institutions' correspondent account balances with the Bank of Russia (including the value of required reserves averaged on correspondent accounts, and also banks' need to perform settlements and precautionary funds) and the value of credit institutions' deposits with the Bank of Russia.

#### The impact of measures to improve the banking sector on the situation in the money market

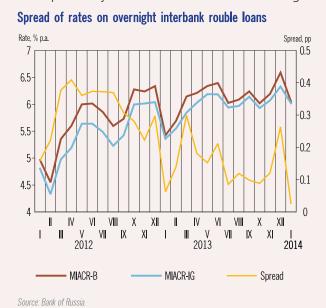
The Bank of Russia's implementation in the second half of 2013 of measures aimed at improving and strengthening the banking sector had a negligible impact on its liquidity and the situation in the money market. The dynamics of demand for correspondent accounts with the Bank of Russia and the cash in circulation were consistent with seasonal trends. The slight increase in demand for bank reserves in the second half of December was caused by the nature of the required reserves averaging and the replacement of collateral by certain credit institutions which were simultaneously repaying previously extended loans and obtaining new loans secured by non-marketable assets.

When determining the parameters of its main auction operations the Bank of Russia takes into account changes in demand for correspondent accounts and the dynamics of autonomous factors shaping liquidity supply. Thus, the current operational framework serves as an automatic stabiliser that helps to meet the liquidity needs of all credit institutions, also in the periods of potential instability in the money market. In Q4 2013, no additional demand for liquidity from credit institutions was observed, which is confirmed by the fact that demand for repo operations was satisfied within established maximum allotment amounts<sup>1</sup>.

There was also no growth in money market rates resulting from Bank of Russia measures to improve the banking system. In all cases the rates remained at the level consistent with the current liquidity situation.

Turnover in the interbank market increased in Q4: the average daily value of overnight rouble interbank loans surpassed the corresponding value of the previous quarter by 13.1%. The share of the 30 largest

Russian banks in liabilities on interbank loans borrowed in the domestic market increased slightly in Q4, but remained below the levels of early 2013. Thus, funds remained sufficiently available to 'second' and 'third' tier banks, although certain credit institutions faced shortterm problems in attracting interbank loans. Further evidence is provided by the relatively low spread between MIACR-B and MIACR-IG (16 bp in Q4 against 10 bp in Q3), with the expansion of this spread conditioned by short-term growth of rates in December 2013. In January 2014, the spread returned to the low levels observed from October to November 2013. The volume of repos with the central counterparty in the Moscow Exchange, which increased in the second half of 2013, remained relatively small. In January, the share of these operations in repo market turnover declined slightly.



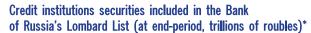
<sup>&</sup>lt;sup>1</sup> See 'On Setting the limits for the Bank of Russia's Market Operations to Provide (Absorb) Liquidity', published in the Russian-language 'Monetary Policy' section on the Bank of Russia's official website.

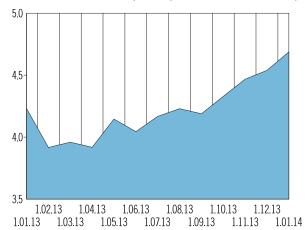
Given the unchanged structural liquidity deficit, the reduction in current liquidity deficit had a positive impact on money market rates, which have decreased by an estimated 5-15 bp due to this factor.

The increasing demand in the banking sector for refinancing was accompanied by Bank of Russia measures to expand the list of eligible marketable **collateral for refinancing operations**. In Q4 2013, due to the addition of securities to the Bank of Russia's Lombard

List, potential volume of refinancing increased by 0.4 trillion roubles. Thus, the total value of assets held by credit institutions and accepted as collateral by the Bank of Russia amounted to approximately 6.0 trillion roubles as of 1 January 2014 (of which about three quarters were securities and one quarter was nonmarketable assets<sup>3</sup>). In 2014, the Bank of Russia

<sup>&</sup>lt;sup>3</sup> Credit agreements and claims which have undergone Bank of Russia verification procedure may be accepted as collateral for Bank of Russia loans.





\* Including securities received as collateral for repo operations. Source: Bank of Russia.

will continue to expand the potential volume of collateral for refinancing operations to meet the banking sector's liquidity needs.

The dynamics of banking sector liquidity factors from February to December 2014 are projected to be similar to that observed in the previous year. Given the cyclical nature of the intra-year liquidity dynamics, there is expected to be an increase in demand for refinancing right up to November 2014. The withdrawal of liquidity during this period as a result of federal budget revenue exceeding its expenditure will be offset by the Federal Treasury's operations to deposit federal budget funds with credit institutions. From February to December 2014, due to the persisting liquidity deficit in the banking sector money market rates are expected to remain in the upper part of Bank of Russia interest rate corridor.

The direction and scale of the impact made by Bank of Russia foreign exchange interventions on banking sector liquidity will be determined within the exchange rate policy framework, and will depend on developments in the domestic foreign exchange market.

#### Asset prices and bond market

From Q4 2013 to the beginning of 2014, the situation in the domestic **stock market** was largely conditioned by factors not dependent on the Bank of Russia's interest rate policy: fluctuations in investors' risk appetite and continuing capital outflow from all segments following the expectations and adoption (in mid-December) of the decision by the Fed to start tapering its quantitative easing programme. The rouble depreciation against the dual currency basket and the lack of improvement in Russia's economic situation had considerable consequences. At the same time, high oil prices helped to maintain stability in the Russian stock market.

Owing to persistent foreign and domestic investment risks, Russian financial institutions predominantly followed conservative investment strategies, reducing investment in high-risk financial assets and increasing the proportion of fixed-yield instruments (bonds, funds in bank accounts and deposits) in their investment portfolios.

The actions of non-residents had a marked influence on the dynamics of domestic **bond market** quantitative indicators from October 2013 to January 2014. The OFZ bond market was most susceptible to this influence, as the bond market leader in terms of fund withdrawals by foreign investors.

From November to December 2013 and in January 2014, the demand of Russian market participants for rouble assets decreased and OFZ bond issues were mostly floated with premiums to their yields in the secondary market. At the same time, interest in corporate bonds, demand for which came largely from domestic investors, remained relatively stable both in the secondary and primary market. Placements of new corporate bonds in the primary market were mostly dominated by issues of Russian highcredit quality borrowers with investment-grade credit ratings. Demand from credit institutions for such securities was supported, among other things, by the possibility of using the securities in Bank of Russia repo operations and the possibility of improving the quality of their assets, which had an impact on the capital adequacy of credit institutions.

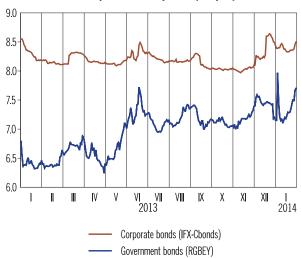
# Average yield of corporate bonds placed at the Moscow Exchange (%, p.a.)



Source: MICEX SE, Chonds.ru, Bank of Russia calculations.

In Q4, the total placement of government bonds increased compared with Q3 1.8 times to 303.4 billion roubles at par value, with nearly half of this amount coming in October. The value of corporate bonds floated in the primary market increased in Q4 1.7 times to 581.6 billion roubles at par value. The share of corporate bonds issued by Russian borrowers with investment-grade credit ratings accounted for more than half of initial placements. In January 2014, the volume of corporate and OFZ bond placements significantly declined and in the domestic primary market new issues

#### Government and corporate bond yields (%, p.a.)

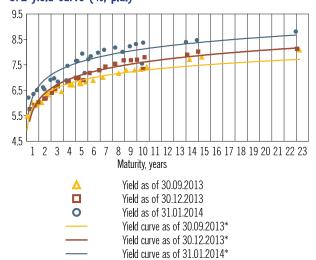


Source: Chonds.ru, MICEX SE

of corporate bonds were exclusively offered by non-bank financial organisations. At the end of January 2014, the volume of traded OFZ bond issues grew by 7.9% compared with the end of September 2013 to 3.6 trillion roubles with corporate bonds increasing by 10.1% to 5.3 trillion roubles.

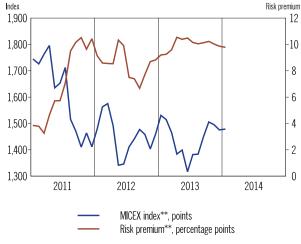
The cost of borrowing in the domestic primary corporate bond market for credit institutions and non-bank financial organisations decreased slightly in Q4 2013 compared with Q3 2013, whereas for non-financial organisations it was virtually

#### OFZ yield curve (%, p.a.)



\* The yield curve is adjusted by the logarithmic function. Source: MICEX SE, Bank of Russia calculations.

#### MICEX index and equity market risk premium\*



\* Portfolio of equities included in the calculation of the MICEX index. \*\* Average monthly indicator.

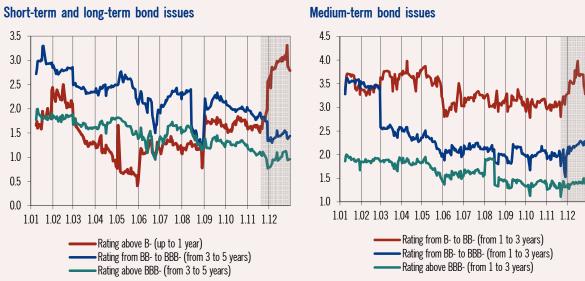
Source: MICEX SE, Bloomberg, Bank of Russia calculations.

#### Risk premium dynamics in the domestic bond market

From October 2013 to January 2014, investors' estimates of investment risk for corporate bonds varied considerably depending on credit quality and the maturity of the bond issues. Most affected by factors determining market conditions during this period (the US Fed's tapering of its quantitative easing programme, news from Russian companies and banks, the depreciation of the rouble against major world currencies) were risk premiums on short- and medium-term bond issues with speculative grade ratings. The risk premiums on such instruments increased dramatically. The volatility of risk premiums also increased on long-term issues by issuers from all credit quality categories, which indicates the uncertainty in long-term price expectations of the Russian bond market participants.

The reaction of the market portfolio risk premium was on the whole less pronounced, which is conditioned by the significant proportion of high credit quality issues in the portfolio and the resident investors' dominance in corporate bond market operations. These factors will have a restraining effect on changes to the corporate bonds market portfolio risk premium in 2014.

#### Spreads between yields of corporate bonds\* and OFZ with corresponding maturity (pp)



\* The corporate bond issues are combined into groups in accordance with ratings assigned to them by Standard&Poor's, Fitch Ratings and Moody's.

Note: Uneven changes in spreads may be related to the revision of calculation base for corporate bond yield indices.

Source: MICEX SE. Bank of Russia calculations.

unchanged. The average yields on the corporate bonds of credit institutions and non-financial organisations floated in the primary market in Q4 2013 was 9.7% p.a., with the yield on bonds of non-bank financial organisations at 9.8% p.a. (in January 2014 it was 9.6% p.a.).

Yield levels on all types of bonds in the secondary market from November 2013 to January 2014 increased alongside yield volatility. In the government bond segment the highest growth was seen in the yields of long-term OFZ bond issues, leading to the OFZ yield curve steepening along with its upward shift. These changes reflected investors' reassessment of risk

premiums in the domestic bond market owing to their intensified expectations of inflation acceleration and the rouble depreciation. At the end of January 2014, compared with the end of September 2013, OFZ bond yield (RGBEY index<sup>4</sup>) and corporate bond yields in the market rose by 50 and 41 bp to 7.7% and 8.5% p.a. respectively. The spread between these indicators changed only negligibly, although for certain groups of corporate bonds and OFZ bonds of comparable maturity the spread

<sup>&</sup>lt;sup>4</sup> An indicator of the effective yield of government bonds calculated by the Moscow Exchange.

increased markedly (see the box 'Risk premium dynamics in the domestic bond market').

The volume of transactions involving corporate bonds in the secondary market in Q4 2013 as in Q3 2013 amounted to 1.6 trillion roubles, while the volume of transactions with OFZ bonds increased by 1.3% to 1.3 trillion roubles at actual cost.

From October to December 2013, **equity market** indices fluctuated without any clear trend and the volatility of quotes and market portfolio risk premiums during this period were virtually unchanged. From January 2014, the RTS index (calculated on the basis of share prices in US dollars) quickly decreased with the rapid growth in the US dollar/rouble exchange rate, while the MICEX index continued its horizontal trend. At the end of January 2014, compared with the end of September 2013, the RTS index fell by 7.1% and the MICEX index was virtually unchanged.

In Q4 2013, the rise in **residential real estate** prices continued amid the further expansion of the mortgage market. At the same time, price growth rates slowed compared with the corresponding period in 2012 and with Q3 2013. The fall in interest rates and the easing of housing mortgage lending conditions by banks (in particular, expanding the range of mortgage programmes) buoyed demand in the housing market. Price dynamics in the **non-residential real estate** segment were similar to the residential market, but showed somewhat greater volatility.

In 2014, with the potential risks of the Fed's tapering its quantitative easing programme, the deteriorating conditions in the global commodity markets, the rouble depreciation and further slowdown in the Russian economic growth, there may be an increase in volatility and yield levels in certain segments of the domestic financial market. At the same time, the fact that the monetary policy is expected to remain accommodative around the world will support investors' demand for emerging markets'

(including Russia) risky assets and will partially neutralise the impact of negative factors.

# Currency and interest rate derivatives market

From Q4 2013 to the beginning of 2014, the situation in the **currency and interest rate derivatives** markets was affected by an increase in volatility in the underlying asset markets.

This period witnessed an increase in demand for currency futures and options as instruments for hedging foreign exchange risk, as well as instruments for speculative and arbitrage transactions. The greatest activity in transactions with these instruments in exchange trades came in January 2014 amid the sharp rouble depreciation against the dual currency basket. In January 2014 compared to September 2013, the average volume of open positions in contracts in the Moscow Exchange derivatives market rose by 10.4% on futures contracts, and by 1.5 times on options, to 3.2 and 0.7 million contracts respectively. The total volume of transactions involving currency futures and options increased by 42.2% to 1.8 trillion roubles.

The spreads between the futures and spot prices of the most liquid currency contracts (on the US dollar/rouble rate) remained positive, widening in November 2013 and January 2014. The most notable expansion was in January 2014, indicating a strengthening during this period of market participants' expectations of the growth in the US dollar/rouble exchange rate. At the same time, by the end of January 2014, with the increase in the US dollar/rouble spot rate, expectations of further growth started to weaken somewhat, and stabilised in the first ten days of February. The ratio between the open positions in put and call options (Put/Call Ratio) on the US dollar/rouble exchange rate futures contracts in the final ten days of the month exceeded 0.7.

At the end of 2013 and early 2014, the volume of transactions involving **interest rate exchange-traded derivatives** remained

# Futures spreads on USD/rouble contracts at the Moscow Exchange (roubles)

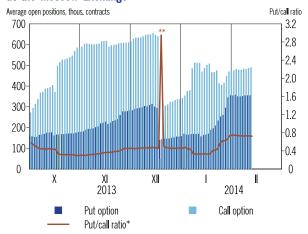


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small. The bulk of transactions involved futures on government bonds, while the volume of transactions involving futures on money market rates did not exceed 0.01% of interbank lending turnover. In Q4 2013 and from January to February 2014, market participants maintained significant open positions on futures based on money market rates that exceeded the trade turnover several fold. This may indicate that market participants used these futures primarily to hedge interest rate risk.

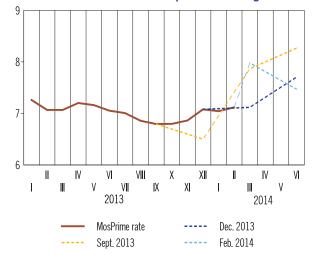
Trends in interest rate futures quotes in late 2013 and early 2014 demonstrate a prevalence of expectations suggesting an increase in three-

# Open positions on options for USD/rouble futures contracts at the Moscow Exchange



\* Ratio of open positions (in contracts) for put and call options. \*\* 16.12.13 contract execution date.

3-month MosPrime rate and its expectations' change\*



\* According to quotes of interest rate futures at the Moscow Exchange. Source: MICEX SE Bank of Russia

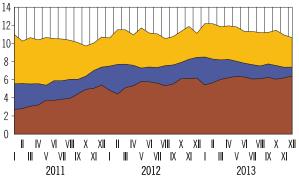
month interbank lending rates in the short term. However, the accuracy of these quotes as an indicator of market participants' expectations is limited due to their high volatility and the low turnover of the interest rate futures market.

# Bank interest rates and non-price lending conditions

The growth in money market rates was not accompanied by an increase in loan and deposit rates, which in Q4 2013 continued to fall under the influence of market situation (the continuing inflow of household deposits to banks, the poor growth in demand for loans). The average rate on long-term rouble household deposits from October to December was 7.4% p.a., down 0.2 pp compared with the average for Q3<sup>5</sup>. Reductions in the cost of funding amid weak growth in demand for loans contributed to a gradual decline in loan rates for endborrowers. Average rates in main segments of the Russian credit market dropped by 0.1-1.1 pp. The spread between long-term rates on loans to non-financial organisations and household deposits did not change significantly.

Interest rates on loans and deposits are calculated as average rates on the loans granted (deposits received) during the month weighted by the volumes of corresponding transactions. The methodology for calculating the rates is described in the comments to tables 4.2.3, 4.3.2 and 4.3.6 of the Bank of Russia 'Bulletin of Banking Statistics'.





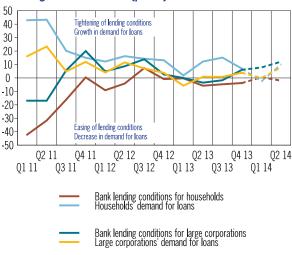
- MIACR on overnight interbank loans, % p.a.
- Spread between long-term household deposit rate and MIACR, pp
- Spread between the rate on long-term loans to non-financial organisations and long-term household deposit rate, pp

Source: Bank of Russi

Q4 did not see the easing of **non-price lending conditions** for household expected by the banks in the previous quarter. During this period, banks tightened their non-price conditions for the majority of market segments, with only the mortgage market showing a slight easing of non-price lending conditions. According to the banks' expectations, in the first half of 2014 the tightening of non-price lending conditions is due to continue amid weak growth or even a decline in demand for loans from both retail and corporate borrowers.

In Q4 2013, growth rates in household deposits with banks slowed somewhat, but remained high. The inflow of funds into 'second' and 'third' tier banks decreased, while their inflow into the largest banks, primarily Sberbank, increased. This was due both to seasonal factors (inflow of funds to payroll accounts in connection with annual payments) and changes in the savings preferences of households as a result of the Bank of Russia's measures to improve the banking sector. Consequently, in Q4 the share of the 30 largest Russian banks in the growth of household deposits exceeded 95%, which facilitated a growth in their activity in the credit market (over Q4, the share of the 30 largest banks in the portfolio of loans to nonfinancial institutions increased by 1.1 pp, and by

#### Lending conditions index (points)

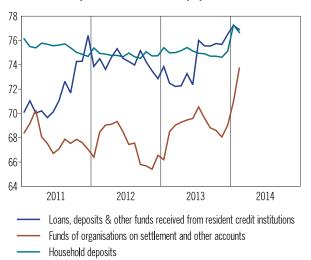


Source: Bank of Russia.

0.6 pp in the portfolio of loans to households). Since these banks tend to have tighter criteria for their borrowers and lower rates on their loans, some decline in average loan rates can be expected if the availability of funding for major banks continues to increase.

In the household lending segment, an important factor in the reduction of credit rates may be the introduction of the law 'On Consumer Loans' limiting the maximum interest rate on consumer loans. Following the introduction of this law the market share of less reliable individual borrowers who receive

Share of 30 top banks in liabilities (%)



Source: Bank of Russia

loans at high rates is likely to decrease, which in turn will contribute to a certain decline in average market rates and a slowdown in the loan portfolio growth. In addition, limitations imposed on consumer loan rates may lead to a further strengthening of the market positions of the largest banks, as reduced ability of 'second' and 'third' tier banks specialising in high-risk retail lending to attract depositors with high interest rates may contribute to lower average deposit rates.

The depreciation of the rouble and, consequently, the increase in the rouble cost of servicing foreign exchange liabilities was not reflected in interest rate dynamics at the end of 2013 and in early 2014. However, if the depreciation of the rouble continues, in the longer term it may exert an upward pressure on rouble loan and deposit rates.

#### Bank lending and monetary aggregates

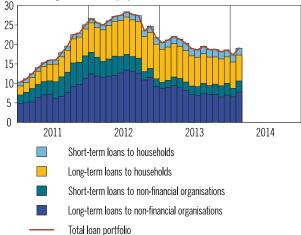
In Q4 2013, amid weak growth in demand for loans, there was a continued slowdown in the growth of **banks' loan portfolios**. On 1 January 2014, loans provided to non-financial institutions and households in roubles and foreign currency amounted to 30.3 trillion roubles, an increase of 17.3% compared with the beginning of 2013 (at the start of October 2013 the annual growth rate of the loan

portfolio was 18.7%; at the start of the year it was 20.4%).

The slowdown in the loan portfolio growth was observed to a certain degree in all market segments, but it was most pronounced in the household loans segment. A re-assessment of household lending risks, connected with the increase in the share of overdue loans, combined with the measures undertaken by the Bank of Russia over recent years to curb the excessive build-up of unsecured consumer lending, led to a decrease in annual growth rates in the retail lending portfolio from 31.0% on 1 October 2013 to 28.7% on 1 January 2014. In this context, long-term consumer lending volumes grew the least. If this trend continues, some reduction in demand for consumer durables can be expected.

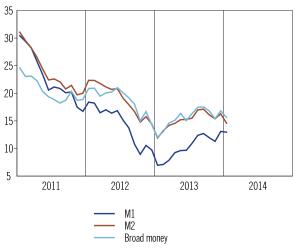
The annual growth rates of **loans to Russian non-financial institutions** at the end of the year was 12.4% compared with 13.8% at the start of Q4. As before, the sectoral structure of the corporate lending portfolio was dominated by loans to wholesale and retail trade enterprises, as well as manufacturing businesses. **Lending to small- and medium-sized enterprises** (SMEs) from October to December grew faster, but its share in total lending remained moderate (approximately one

# Contributions of various components to the annual growth rates of bank loans to households and non-financial organisations (%)



Source: Bank of Russia.

Monetary aggregates (compared with similar date of previous year, %)



Source: Bank of Russia.

#### Analysis of the loan-to-GDP ratio

One of the approaches to analyse credit activity in the context of general economic trends is to compare the current dynamics of credit aggregates with the calculated 'equilibrium' value. In global practices, this approach is used to estimate the relationship between loans and key macroeconomic indicators based on the data for a sample of countries' data and then to use estimated models to analyse credit activity in a particular economy. This type of study¹ has been carried out by ECB specialists for Central and Eastern European countries. On the basis of five of these models² the equilibrium change in the loan-to-GDP ratio in Russia was assessed. With certain assumptions³, the breakdown of the overall equilibrium growth rate between different sectors of the economy can be determined.

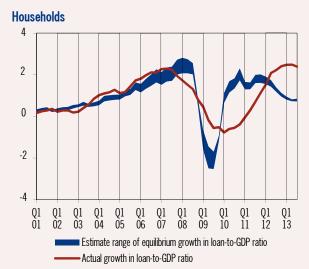
In the main segments of the Russian lending market, trends in lending volumes varied considerably. In the corporate segment the situation has been relatively stable in recent years. The equilibrium growth rates of the lending portfolio exceeded GDP growth rates only slightly, and the actual growth rates in lending were close to the equilibrium level. Only in 2013 did the ratio of corporate loans to GDP start to grow, exceeding the equilibrium level.

In retail lending there is still strong potential for growth, with actual growth rates exceeding the relatively high equilibrium growth rate from 2012. Only in 2013 did this gap stabilise, and by the end of the year it showed a reduction. The Bank of Russia's measures to curb excess growth in unsecured consumer lending may have contributed to this.

The actual growth in the loan-to-GDP ratio above the equilibrium rate could in principle be interpreted as an 'overheating' of the lending market. At the same time, the current divergence of actual and equilibrium levels (especially in the corporate segment) was primarily formed not by the acceleration of actual growth in credit aggregates, which would appear balanced in the medium term, but by the significant fall in the

#### Actual and equilibrium change in loan-to-GDP ratio\* (4-quarter growth, pp)





Source: Bank of Russia calculations.

Source: Bank of Russia calculations.

<sup>&</sup>lt;sup>1</sup> See also: Egert, B., P. Backe and T. Zumer. 2006. Credit Growth in Central and Easter Europe: New (Over) shooting stars? ECB Working Paper No. 687.

<sup>&</sup>lt;sup>2</sup> The models used are equations showing the dependence of the loan-to-GDP ratio on a range of macroeconomic indicators: GDP, GDP taking into account PPP per capita, debt on public sector lending, lending rates, the spread between interest rates on loans and deposits, and the rate of inflation.

<sup>&</sup>lt;sup>3</sup> It is assumed that an equilibrium change in credit aggregates not associated with fluctuations in GDP growth rates is provided by uniform growth on loan debt in all sectors of the economy. At the same time, an equilibrium change in credit aggregates conditioned by fluctuations in GDP growth rates is provided by real growth in loan debt in the non-financial institutions and household sectors in the ratio 1:2, which corresponds to the ratio of income elasticity obtained from the evaluation of sectoral credit demand functions in Russia, as well as in other emerging market economies.

equilibrium level, conditioned by a decline in economic activity. Thus, current lending growth should not necessarily be construed as unstable or as posing a risk to financial stability. Nevertheless, it can be argued that the growth in credit indicators in recent quarters was significantly higher than would be expected based on trends in fundamental factors and, therefore, is not likely to be a cause for slowing economic growth. If current trends are to continue, we can expect that in the medium term lending growth in all segments of the credit market will be somewhat higher than the equilibrium level, and the gap between actual and equilibrium levels for corporate and retail lending will decrease.

quarter). As the requirements to the financial position of corporate borrowers remained tight, the quality of the corporate lending portfolio continued to improve. Overdue debt on loans to Russian non-financial institutions at the end of Q4 2013 reached a four-year low (4.3%).

At the end of January, growth rates in lending to non-financial institutions rose to 15.2%. Meanwhile, there has been a continuing slowdown in lending to households.

Currently, the trends in lending both to households and to companies are not a factor exerting a restraining influence on economic activity. The increase in the **loan-to-GDP ratio** in 2013 surpassed the level determined by fundamental factors (see the box 'Analysis of the loan-to-GDP ratio').

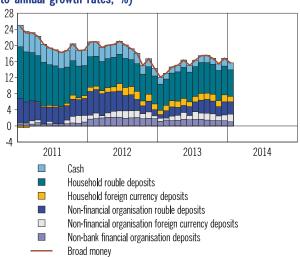
The forecasts set out in the previous release of the Monetary Policy Report regarding the end of the accelerated growth of **money supply**<sup>6</sup> have been proven correct. Annual money supply growth rates stabilised after they increased throughout most of 2013 due to less substantial than in 2012 accumulation of general government funds in Bank of Russia accounts, reaching a local maximum at the end of August 2013 (17.1%). On 1 January 2014, this figure was 14.6%, down 1.5 pp in comparison with the start of Q4. As in previous years, the main source of growth in money supply continues to be the expansion of bank lending. In December 2013, the growth in money supply was also facilitated by a sharp decrease in the net liabilities of the banking sector towards the general government due to seasonal growth in budget expenditure, accompanied by a reduction in balances in

the budget accounts with the Bank of Russia and an increase in bank lending to regional governments.

The largest component of money supply in 2013 continued to be household deposits. Despite the decline in nominal deposit rates, the annual growth rate of household deposits over the entire year ranged from 18% to 22%, consistently exceeding the growth rates of other components (on 1 January 2014, the annual growth rate for corporate deposits was 14.2%, and for cash 8.6%), and the share of household deposits in money supply gradually increased as a result. The faster growth of household deposits compared with corporate deposits could be linked to the economic slowdown and the persisting medium-term economic uncertainty, contributing to a continued household propensity to save and limiting the financial resources of organisations.

In Q4 2013, the seasonal patterns in the dynamics of main monetary aggregates observed

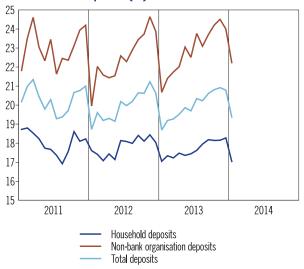
Broad money (contributions of various components to annual growth rates, %)



Source: Bank of Russia.

<sup>&</sup>lt;sup>6</sup> The M2 aggregate according to the national definition.

#### **Dollarisation of deposits (%)**

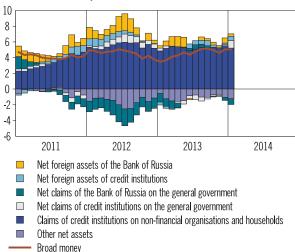


Source: Bank of Russia.

in previous years continued. Budget expenditure at the end of the year led to accelerated growth in the account balances of organisations (for Q4 total sight deposits of organisations increased by 12.1% compared with 0.1% in Q3, and time deposits increased by 14.1% compared with 0.4%). End-of-year bonuses contributed to the growth in household deposits (for Q4 total household sight deposits increased by 20.5%, whereas in Q3 they fell by 3.7%, and time deposits rose by 4.6% compared with 2.5% in the previous quarter). The amount of cash in circulation, which declined in Q3 by 0.9%, increased by 8.9% over Q4. This was due, primarily, to the increase in cash in December, ahead of the New Year holidays. Gains in the majority of monetary aggregates, as indicated above, in Q3 and Q4 2013 were comparable with those of the previous year.

The money supply growth in 2013 slightly exceeded the level consistent with the dynamics of key macroeconomic indicators (see the box 'Analysis of monetary gaps').

# Banking system assets and broad money (annual growth, trillions of roubles)



Source: Bank of Russia.

In Q4, as well as throughout 2013, fluctuations in the rouble exchange rate did not have any marked impact on the currency structure of household deposits. The dollarisation of household deposits remained in the 17-18% range from the start of 2013. In December 2013 and January 2014, despite a noticeable reduction in the nominal exchange rate of the rouble, the volume of household foreign currency deposits in US dollars remained virtually unchanged. According to preliminary data, the volume of foreign currency cash held by individuals from December 2013 to January 2014 increased by 2.6 billion US dollars, but was still relatively small compared with the volume of household deposits with banks. At the same time, in the period under review the seasonal end-of-year drop in the balances of corporate sight deposits in foreign currency was small and was followed by a sharp rise in January 2014. This led to the seasonal decline in the corporate deposit dollarisation at the end of 2013 being weaker than in previous years.

#### Analysis of monetary gaps

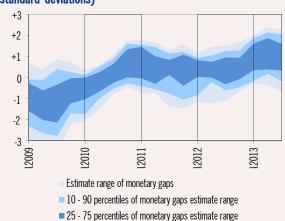
Data on changes to the amount of money in the economy provide information required for the effective implementation of the monetary policy. However, for a meaningful interpretation of this indicator, it is necessary that certain criteria are used to evaluate the speed of money supply growth in relation to dynamics in fundamental factors. One of the most common approaches to this type of analysis is to estimate the demand for money, which is the ratio between money supply and factors determining demand for money in the economy. Using the money demand function, it is possible to calculate the monetary gap indicator as the deviation of the actual value of the monetary aggregate from the calculated level corresponding to the current values of key macroeconomic indicators. The diagram shows the range of the monetary gap values calculated for the Russian economy<sup>1</sup>.

The increase in monetary gaps in 2009-2010 indicates that the acceleration in the growth in monetary aggregates was significantly faster than the recovery of growth rates in the calculated money demand value. In 2011-2012, with the decrease in growth rates of monetary aggregates, the dynamics of the monetary gaps stabilised. The accelerated growth of money supply at the start of 2013 amid a slowdown in economic activity did not match the dynamics of other macroeconomic indicators. This again led to the formation of positive monetary gaps.

The monetary gap value (i.e. positive or negative) can be regarded as a characteristic of the monetary sphere of the economy, but must be interpreted with caution. Hence, the current positive monetary gap indicates that the relationship between the macroeconomic indicators included in the money demand function is not balanced (i.e. there is excess money supply in the economy). Theoretically, there are several options for restoring this balance. First, it may occur as a result of a slowdown in money supply growth. Alongside this, it is possible to return to an equilibrium state with constant money supply growth by accelerating growth rates in indicators which determine demand for money (for example, by increasing

economic activity or price levels for goods and services or assets). In this regard, a positive money gap can be viewed as a sign of a lack of restraining effect on economic growth by monetary factors, as well as a sign of persistent inflation risks. Furthermore, it cannot be ruled out that the equilibrium relationship between money supply and other macroeconomic indicators has changed as a result of a transformation in economic agents' behaviour in the post-crisis period (or any other factors not accounted for in the money demand equation). In this case, the fact that the monetary gap is positive would not indicate the existence of any imbalances in the economy and may not have macroeconomic implications. However, if these changes are temporary, the effects associated with the presence of excessive money supply may start to appear as the situation normalises.

### Monetary gaps (standard deviations)



Source: Rank of Russia calculations

<sup>&</sup>lt;sup>1</sup> For more detailed information on the calculation methodology see: Krupkina, A., Ponomarenko, A. (2013). 'Money demand models for Russia: A sectoral approach.' Bank of Finland, BOFIT Discussions Papers 31.

#### I.3. Internal economic conditions

In 2013, the Russian economy was developing amid low external demand and weak consumer and investment activity. Business confidence indices remained low. The output gap was slightly negative, somewhat restraining growth in prices. Inflation exceeding its target range was the result of the unfavourable situation in the markets for a number of food products and the depreciation of the rouble, largely due to external factors. This led to inflation remaining almost at the same level in 2013 as in the previous year.

#### Real sector

GDP growth in Q3 2013, as in the previous quarter, stood at 1.2% compared with the same period in 2012. Wholesale trade, electricity production and construction made a negative contribution to GDP growth. About 1 percentage point of GDP growth in Q3 came from real estate transactions and financial sector services, with their contribution to GDP growth declining.

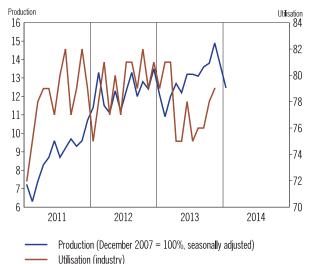
Macroeconomic indicators in Q4 showed some growth in economic activity, largely due to high yields of major agricultural crops and calendar factors, namely the shifting of the harvesting end to October-November.

Q4 saw modest growth in industrial production (excluding factors). seasonal Output in manufacturing industries increased due to higher growth rates in a number of investment-oriented industries (transport and electrical equipment, chemical products), as well as consumer goods manufacturing. The fall in heat and electric energy production due to the abnormally warm weather in November and December had a negative impact on industrial production dynamics. Producers' sentiment indicators remained low. According to business leaders, the main factors constraining output growth were high taxation level, shortage in financial resources, as well as weak domestic demand (in manufacturing industries).

Despite a slight increase in economic activity in Q4 2013, it would be premature to talk about signs of improvement in the economic situation. In 2013, GDP growth was 1.3%.

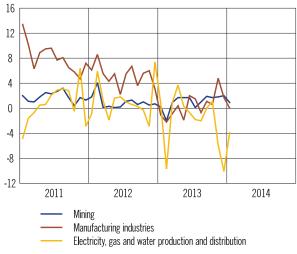
The potential for increasing the output of goods and services remained limited. In industry production factors utilisation is at a high level. The current situation indicates a low level of production efficiency and ensuing high labour costs.

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



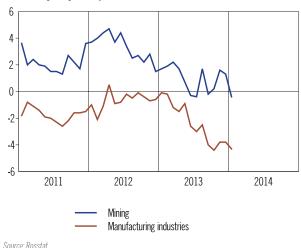
Source: Rosstat, Bank of Russia calculations, Russian Economic Barometer.

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, seasonally adjusted)



Labour force utilisation remained relatively high amid the lack of growth in the economically active population. The **level of unemployment**, seasonally adjusted, during the first half of 2013 showed weak growth, and in the second half it

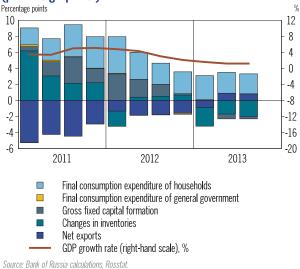
However, low unemployment rates alone do not provide sufficient grounds to presuppose that the labour market is overheated, and that possible pro-inflationary influences are present. The reason is that unemployment indicators do not take into account the trend towards natural decrease in population and significant

long-term changes in the demographic and educational structure of the labour force (such as the reduction in the proportion of groups with traditionally higher levels of unemployment: young and unskilled people). These structural changes raise the level of employment consistent with the absence of inflationary pressure higher than several years ago.

The deterioration of the situation in the labour market, weaker consumer expectations and slowdown in real household income caused a reduction, compared with the previous year, in the growth rate of **household consumer** spending, both in Q3 to Q4 and in 2013 as a whole. However, its contribution to economic growth among the GDP components continued to be the most significant. The increase in consumer activity was assisted by the preservation of relatively high growth rates in retail lending. Seasonally adjusted retail turnover growth accelerated in Q4 compared with the previous quarter. Amid the continuing downward trend in interest rates on household deposits, growth rates in household savings held with banks slowed in Q4. As a result of the less significant depreciation of the rouble, compared with the previous quarter, the share of foreign exchange purchases in the structure of household income use reduced.

# GDP growth structure by expenditure (percentage points)

stabilised at 5.5-5.6%.



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



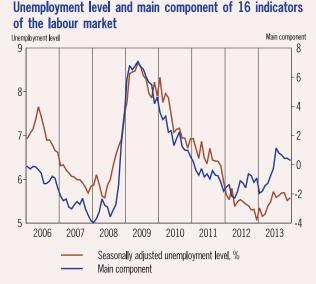
Source: Rosstat.

#### Summary labour market indicator

During the past year, amid a reduction in economic activity there was a decrease in the intensity of labour force utilisation as well as reduced demand for labour. This is reflected in the summary labour market

indicator based on 16 indicators reflecting either alternative sources of information or providing a meaningful alternative indicator of the level of unemployment<sup>1</sup>. The combined dynamics of the unemployment rate and the summary indicator are shown in the graph.

It is worth noting two points. Firstly, the discrepancy between the summary indicator and the unemployment rate from 2012 (which is due in part to a change in the weightings of the overall unemployment rate calculation based on the results of the 2010 population census). Secondly, the lack of any signs of overheating in the labour market (in particular, in comparison with the pre-crisis period of 2007-2008) from the summary indicator for 2012. Both the summary indicator and the unemployment rate began to rise from Q2 2013.



Source: Haver, Rosstat, Bank of Russia calculations, TRAMO\SEATS seasonal adjustment.

The following input data were used to calculate the principal component: the ratio of those employed to the number of people aged between 15 and 72 years; the Russian Economic Barometer (REB) employment index; the labour force utilisation index of those employed in the manufacturing industry (REB); the employment growth index (REB); the Rosstat indices showing employment at the enterprises from C and D industry classification groups (according to economic activity surveys); Rosstat indices showing shortages of qualified workers at the enterprises from C and D industry classification groups (according to economic activity surveys); the employment component of the global HSBC PMI index; the number of the officially unemployed per one declared vacancy (Rosstat); the percentage of the unemployed receiving unemployment benefits (Rosstat) – job seekers' incentives; the ratio of the number of unemployed (ILO) to the number of officially registered as unemployed (Rosstat) – job seekers' incentives; the number of hours worked per employee per month (Rosstat); the share of employees working more than 41 hours per week (Rosstat); the average job search time (Rosstat); the share of the unemployed with work experience who were laid-off (Rosstat).

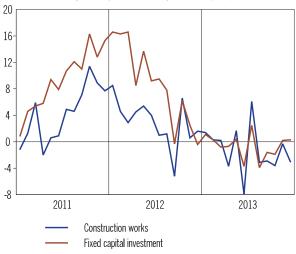
An increase in export quantities and a slowdown in imports growth rates with a decline in investment demand and the rouble depreciation meant that **net exports** made a positive contribution to GDP in Q3. According to estimates, in 2013 overall net export growth was negative.

InQ3, just as in the previous quarters of 2013, the contribution of **gross capital formation** to GDP growth continued to be negative. The most significant reduction in fixed capital investment was seen in the extraction of energy producing minerals and in electricity, gas and water production and distribution (accounting for approximately one third of all investments by large- and medium-sized companies), which is to a certain degree due to the completion of a number of large-scale projects, as well as the curtailing of investment programmes of state

corporations. Despite the seasonally adjusted growth in fixed capital investment, overall trends in Q4 remained weak. A significant decline in profits of non-financial organisations (especially in the manufacturing and transport sectors), as well as uncertainty about the economic outlook held back investment in non-financial assets. According to a corporate survey, the main factor restricting investment activity was a lack of own funds. In 2013, gross fixed capital formation decreased by 0.3% compared with the previous year (in 2012 it grew by 6.4%).

Business activity in the construction industry also remained low. The growth observed in 2013 in housing construction with the easing of mortgage lending conditions in Q4 slowed somewhat. According to a business activity survey among construction companies, the sluggish construction activity was due, in

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



Source: Rosstat.

particular, to high taxation levels and client insolvency.

Currently, the situation in both corporate and retail lending markets is not a factor constraining economic activity. According to estimates, the financial conditions index<sup>1</sup> in Q4 was close to the long-term trend, meaning that financial conditions did not exert any significant impact on goods and services production.

The reduction of inventories made a significant negative contribution to GDP growth amid deteriorating expectations among producers regarding demand, together with the later than usual agricultural harvesting works. According to financial statements<sup>2</sup>, the working capital structure of large- and medium-sized organisations was undergoing some changes, indicating a fall in demand and adaptation to this by businesses: the share of work in progress and goods for resale went up and the share of

With the weak business activity in 2013 a small negative output gap persisted.

In the first half of 2014 consumer demand will continue to be the main driving force for growth in the economy. However, it will be held back by the financial capabilities of businesses and the government to raise workers' salaries, as well as reduced availability of loans as a result of the tightening of household non-price lending conditions. During this period, there may be some increase in fixed assets investment growth against the backdrop of the low base in 2013. However, future investment trends are subject to uncertainty regarding the reaction of natural monopolies to the policy of tariff controls, as well as the effectiveness of government measures to optimise the expenditure of infrastructure sector organisations and to prevent a reduction in their investment programmes. After businesses adapt to the demand constraints, the negative impact of inventories on GDP dynamics will decline. Hence, the contribution of the gross capital formation to GDP growth is expected to be positive. In the first half of 2014, GDP growth may reach an estimated 1-2% compared with the corresponding period in 2013.

One event which may have a significant impact on economic activity in the first half of 2014 is the Winter Olympics in Sochi. Taking into account an analysis of costs and benefits linked to the arrangements, the current state of the Russian economy, and the experience of other countries that have hosted the Olympic Games, the positive contribution of the event to economic growth has been estimated at 0.3 percentage points of GDP. This effect will be witnessed predominantly in Q1 2014 through the increase in the volume of services being provided in the hotel and restaurant industry as

production inventories and stocks of finished goods fell. According to estimates, the increase in inventories in Q4 was helped by the good harvest (by the start of 2014, grain stocks in all categories of farms increased by 14.6% compared with the start of 2013).

<sup>&</sup>lt;sup>1</sup> For the calculation of the financial conditions index, see 'Monetary Policy Report' (2013) No. 3, July, p. 22. The changes in this aggregate indicator characterise the general change in the financial conditions of production activity. Since it is constructed in terms of deviations from the long-term trend, it can be compared with the output gap and assumptions can be made about the degree of influence of the financial conditions on the state of supply and demand in the economy.

<sup>&</sup>lt;sup>2</sup> Based on data from a group of large- and medium-sized enterprises for January to September 2013, compared with the same period of 2012.

#### Uncertainty in output gap estimates

The output gap indicator is defined as the deviation of actual output from potential (inflation neutral) level. This indicator makes it possible to formulate, in a form convenient for analysis, judgements about future demand trends and inflationary pressures and is therefore one of the most important indicators for monetary policy.

If actual output exceeds potential output (a positive gap) acceleration in price growth is expected. A positive gap means that economy is operating above capacity due to excess demand. A negative output gap indicates that there is excess supply (unused capacity) or a slowdown in economic growth due to reduced demand, and establishes prerequisites for a slowdown in price growth.

Central banks seeking to control inflation are equally concerned both about excessive growth in demand and excessive fall in demand, to the extent that it may drive inflation above or below target. Therefore, usually, when it is expected that in the short term demand will exceed the economy's potential (a positive gap) and create the risk of inflation exceeding the target level, central banks tighten their policy and increase rates to moderate demand and reduce inflationary pressures. Equally, they can also do the opposite: when demand is expected to fall below its potential level (a negative gap), central banks may lower interest rates to stimulate demand if they believe that it will help to prevent inflation falling below target.

The output gap is an unobservable variable and cannot be measured directly. There are many techniques used to estimate its value. The use of different methods can yield markedly different results, which sometimes creates a high degree of uncertainty over current estimates.

Nonetheless, all estimates made by the Bank of Russia using different methods are now relatively close to one another. Among the models used are purely statistical and semi-structural multivariate filters<sup>1</sup>, estimates based on production function and econometric estimates based on SVAR-models.

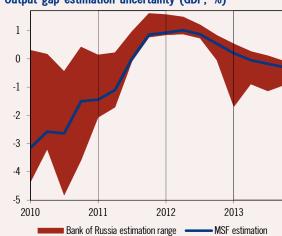
As part of the approach based on production function, the output gap was estimated using the Cobb-Douglas function with constant returns to scale on quarterly data for the period from Q1 2004. As the 'labour' factor in the model, data on employment in the economy was used, and as the 'capital' factor, data on the stock of fixed assets was used (quarterly figures obtained from the corresponding annual data, as well as quarterly data on investment and amortization of capital). The total factor productivity (TFP) was obtained as a residual. Potential GDP was calculated on the basis of potential production factor levels. Potential levels for 'capital' and TFP were estimated by extrapolating trends by means of HP filter. The potential employment level was calculated using NAIRU<sup>2</sup>, estimated as an unobservable variable by the means of the Phillips curve and the Kalman

filter.

Econometric assessments employed the methodology first proposed in the work by economists Olivier Blanchard and Danny Quah<sup>3</sup>. This approach involves the identification of demand and supply shocks in the economy by estimating a structural vector autoregression model, with two variables used in the baseline simulations: changes in real GDP and unemployment level. It is assumed that in the long run demand shocks do not provoke changes in real output, on the one hand, while there is a significant impact from supply shocks on real output, on the other hand.

The results indicate, with a high degree of certainty, that there was a moderate negative output gap at the end of 2013. The graph shows the range of these estimates, as well as an

#### Output gap estimation uncertainty (GDP, %)



Source: Bank of Russia.

<sup>&</sup>lt;sup>1</sup> More details about these methods can be found in the box in Monetary Policy Report No. 1 (November 2012).

<sup>&</sup>lt;sup>2</sup> Non-accelerating inflation rate of unemployment.

<sup>&</sup>lt;sup>3</sup> Blanchard, O., Quah, D. 'The Dynamic Effects of Aggregate Demand and Supply Disturbances' // The American Economic Review Vol. 79, No. 4, Sep., 1989 pp. 655673.

evaluation of the gap obtained using the multivariate structural Kalman filter (MSF)<sup>4</sup>. In the aftermath of the 2008 crisis, the discrepancies in estimates of the gap were significant and strongly depended on estimation assumptions. However, recently the spread of estimates has markedly decreased, and now it can be inferred with a somewhat higher degree of certainty, that there is a moderate negative gap in the economy.

well as transportation services (which will largely be qualified as service exports).

In the medium term, the effect of the Olympics may be linked to certain expenses, primarily on the servicing of Olympic facilities, and to financial risks of investment costs recovery. However, in the longer term, the role of positive factors should increase, namely, the benefits from using the new infrastructure and the favourable impact on tourism industry of the changes in the region.

# **Budget policy**

In accordance with the operational data of the Russian Treasury, in 2013 general government expenditures totalled 37.4% of GDP and non-interest expenditures accounted for 36.7% of GDP, which is lower than each of the corresponding figures for 2012 by 0.1% pp of GDP. Amid the significant decline in both oil and gas and non-oil and gas budget revenues in 2013, there was a deficit of 1.3% of GDP, in contrast to the surplus of 0.4% of GDP in 2012. The structural non-oil and gas primary deficit in 2013, according to estimates, was 10.6% of GDP, an increase of 0.7 pp of GDP compared with 2012.

According to estimates, based on changes in key government finance indicators in 2013, and taking into account fiscal dynamics from previous years whose effect is distributed over time, there was a slight positive impact from the general government sector on growth in aggregate demand in 2013.

Estimates carried out in accordance with the 'Guidelines for the Fiscal Policy in 2014 and for 2015 and 2016' suggest a fall in the overall and structural non-oil and gas primary deficit of the general government budget in 2014 (by 0.3 and 1.4 pp of GDP respectively), primarily due to expenditure reductions in relation to GDP. Despite some unexpected tightening of fiscal policy, with the continuation of the budget deficit and taking into account the cumulative impact of fiscal flows in previous years, contribution of the general government sector to aggregate demand dynamics in 2014 is expected to remain positive, although small.

Assessments prepared using a fiscal stress indicator suggest the persistently high level of sustainability of public finances in Russia in the short term, despite a slight increase in risks in the public sector in 2013 linked to an increase in the value of the structural primary budget deficit, and the negative long-term fiscal trends caused by the expected deterioration in the age structure of the population.

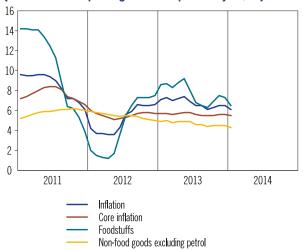
#### Inflation

In Q4 2013, there was acceleration in consumer price growth. In December inflation was 6.5% (compared with December 2012), exceeding the target range of 5-6% set for 2013 in the 'Guidelines for the Single State Monetary Policy in 2014 and for 2015 and 2016'.

The increase in inflation in Q4 2013 was primarily due to the accelerated growth in food prices (from 6.3% in September to 7.3% in December). Thus, there was a sharp increase in the price index for fruit and vegetables due to adverse harvesting conditions. In addition, there was accelerated growth in prices for eggs, milk and dairy products, and cheeses, linked to the 'second-round effects' of the drought in 2012, namely the increase in prices for fodder and dried milk (including imported) and the fall

<sup>&</sup>lt;sup>4</sup> This approach is most consistent with the objectives of the monetary policy, namely making it possible to track down demanddriven inflationary pressures, and not simply to highlight some abstract statistical trend in GDP dynamics.

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

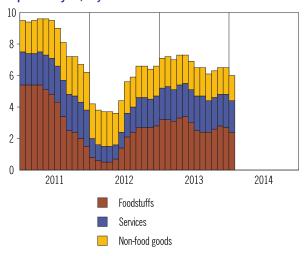


Source: Rosstat. Bank of Russia calculations.

in livestock sector production. The effects of the poor harvest of 2012 in Russia and a number of countries which supply dried milk and finished dairy products (primarily New Zealand) were expected, but their impact was greater than forecast. Cheese prices in the second half of the year were also affected by the depreciation of the rouble, the influence of which was intensified due to seasonal substitution of domestic products with imported cheese.

In Q4, the annual index of service prices and tariffs increased slightly (by 0.2 pp, mainly due

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



Source: Rosstat, Bank of Russia calculations.

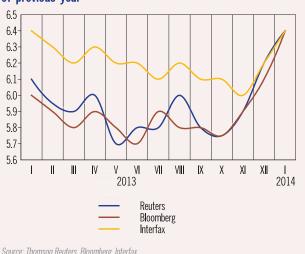
to prices charged by cultural organisations and medical services). Together with the rising prices of a number of food products, this shaped the increase in core inflation.

The results of a population survey commissioned by the Bank of Russia and carried out by the Public Opinion Foundation in February 2014 indirectly indicate that the population sees the accelerating inflation as a temporary phenomenon. Despite a slight increase in inflation expectations for the next month, which could be due to faster growth in prices for a

#### Changes in inflation consensus forecasts

Most professional analysts believe that an increase in inflation was due to unexpected, 'random' shocks. This is shown, in particular, by clear upward revisions from October to November, of the inflation consensus forecasts for 2013 put forward by Reuters, Bloomberg and Interfax.

# Consensus forecasts of inflation for 2013. Forecasted indicator 'December 2013 CPI on corresponding month of previous year'



#### Exchange rate pass-through effect

According to estimates of the exchange rate pass-through effect on inflation using the vector autoregression model, the rouble exchange rate dynamics in 2013 for the most part exerted upward pressure on consumer prices in the economy. Inflation brought about by fluctuations in the exchange

rate was estimated to have reached its peak in September 2013 due to the nominal depreciation of the rouble against the currencies of other major trading partner nations from June to August 2013. The latter was caused by reduced investor risk appetite in connection with the expectations developed during this period of a decline in asset purchases by the US Fed under the quantitative easing programme.

However, the further strengthening of the national currency from September to October presumably contributed to the reduction in the inflationary consequences of the exchange rate dynamics in 2013, the scale of which has been estimated at 0.3-0.4 pp (see Annex 1).

The estimates of the contribution of the exchange rate dynamics to inflation obtained by means of other econometric models corresponds with the above given results (up to 0.5 pp).





Source: Bank of Russia calculations

number of food products at the end of 2013, median estimates of observed and expected annual inflation in February 2014 continue to be lower than the values for Q1 2013. The majority of respondents still believe that over the next 12 months consumer prices growth will remain virtually unchanged.

The continuation in Q4 2013 of the trend observed from the end of 2011 of the reduction in annual growth rates in prices for non-food goods (to 4.5%) is suggestive of the transient nature of the inflationary shock. The annual index for non-food goods excluding petrol, which was the least affected by event-triggered and administrative factors, remained stable in Q4.

In general, over the course of 2013 inflation slowed by 0.1 pp compared with 2012. The slowdown in price growth for non-food goods (by 0.7 pp) was particularly pronounced. Core inflation also fell by 0.2 pp. This indicates that the cumulative impact of fundamental factors on price dynamics in the economy was generally restrictive.

The existence of significant demand constraints is shown by the slowdown in producer prices growth alongside the deterioration in financial indicators of business activity. Consequently, in December 2013, the year-on-year producer price index<sup>3</sup> was 103.7% (a lower end-of-year figure has only ever been recorded for 2008). In general, the prices in the economy increased at a slower pace than costs: in the first nine months of the year, the profitability of sold goods, products, work and services dropped to 7.7% (compared with 10.0% for the same period in 2012). Profits throughout 2013 were also lower than in 2012.

On the contrary, the **exchange rate dynamics in 2013 had a significant pro-inflationary impact**, especially in the second half of the year. Over the entire year, its contribution to growth in consumer prices is estimated at 0.3-0.5 pp. Nevertheless, on the whole the restraining influence of demand

<sup>&</sup>lt;sup>3</sup> For sale in the domestic market.

#### Analysis of the distribution of price changes for consumer goods and services

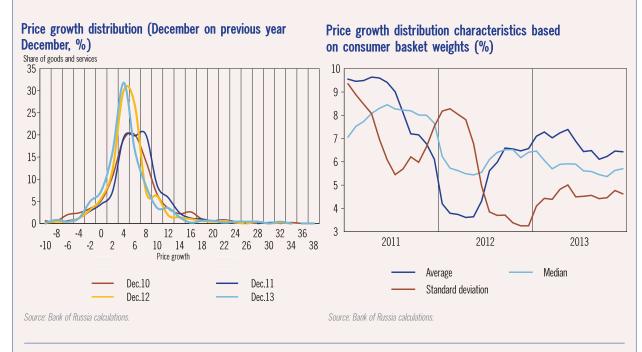
Analysis of the distribution of price changes for goods and services<sup>1</sup> has been carried out to provide a detailed study of inflationary processes and to identify additional risks associated with the various price trends of the consumer basket components.

In the last year and a half, the distribution was characterised by a small dispersion of price changes around the mean, indicating the absence of significant shocks which distorted the dynamics of relative prices, which would be comparable with the shock on the food market caused by poor harvest in 2010.

In December 2013, price changes for 64% of goods and services were within a relatively narrow range (from 2 to 8%); in the previous year the share was 69%. The share of goods and services subject to deflation in 2013 was 8.5% (5.5% in 2012). In 2010-2011, the price changes for most goods and services (more than half) were within the 4 to 10% range.

Taking into account the weights<sup>2</sup> of the different components of the consumer basket allows evaluating the characteristics of the sample distribution.

The median of distribution of price changes for a short list of goods and services was 5.7% in December 2013 compared with 6.4% a year earlier. Throughout 2013, the median was below the mean. The relatively stable standard deviation throughout 2013 could indicate the transient nature of the price shocks for certain types of food products at the end of 2013 and the absence of any significant impact on other goods and services.



<sup>&</sup>lt;sup>1</sup> The distribution was estimated on the basis of a smoothed histogram of price changes for a sample of more than 400 consumer goods and services without adjustment for their weights in total consumer spending.

prevailed over the effect of the weakening rouble.

During 2013, temporary trends in the food market played a major role in shaping inflation. The poor harvest in 2012 led to accelerated growth in food prices early in 2013 as well as in Q4, and there were adverse weather conditions for harvesting fruit and vegetables from October

to November 2013. There was a perceptible rise in prices for milk and dairy products, cheese and eggs. Overall, over the course of the year, the contribution of the 'excessive' growth in prices for this subgroup of food products has been

<sup>&</sup>lt;sup>2</sup> Data on goods and services weights in the consumer basket for 43 key components are published by Rosstat starting from 2006. The estimates were obtained using the 'bootstrap' method.

<sup>&</sup>lt;sup>4</sup> Growth rates exceeding the average growth rate of food prices excluding milk, dairy products, cheese and eggs were regarded as 'excessive'.

#### Monetary analysis of inflation risks

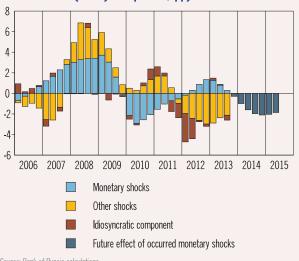
In order to identify the risks of price, as well as financial and general economic instability, the Bank of Russia carries out regular analyses of monetary and credit aggregate trends. In doing so, an assessment of inflation risks based on monetary methods is generally carried out for the long term and is based on an examination of the changes to low-frequency components in the inflation and money supply growth dynamics.

One of the ways to formalise this approach is to use a dynamic factor model<sup>1</sup>. Under this method, after modelling a set of monetary and price indicators, fluctuations in CPI growth rates are broken down into several components. In particular, this involves separation of 'monetary' shocks (fluctuations

which are characteristic of both monetary and price indicators), 'non-monetary' shocks (fluctuations which are characteristic only of price indicators) and idiosyncratic component (fluctuations which are exclusively characteristic of CPI trends). At the same time, due to the fact that money supply is a leading indicator for price growth, the future (over 6-8 quarters) monetary component of the CPI dynamics will be determined largely on the basis of shocks which have already occurred.

The estimates obtained using this model indicate that the sharp fluctuations in inflation rates in 2011-2012 occurred mainly due to non-monetary and idiosyncratic shocks. The slowdown in the growth of monetary aggregates during 2011-2012 will have a restraining effect on inflation in 2014 and, all things being equal, may reduce inflation by about 2 pp compared with end-2013 levels.

# Decomposition of CPI annual growth rates (deviation from the base (trend) component, pp)



Source: Bank of Russia calculations.

estimated at up to 0.7 pp. The pro-inflationary influence of the situation in the markets for these products was only partially offset by decline in prices for grain-based products following the good harvest. As a result, at the end of the year food prices rose by only 0.2 pp less than in 2012.

The accelerated growth in prices for certain groups of food products was brought about by temporary factors. It is expected that the influence of these factors will have come to an end in the first half of 2014. The normalisation of the situation in the milk, dairy, fruit and vegetables market will be accompanied by a slowdown in inflation.

In 2013, tariffs on passenger transport services rose to a greater extent than in 2012, partly as a result of a higher increase in administered tariffs. For the same reason, in

2013, prices and tariffs increased for housing and public utilities more markedly than in 2012. The contribution of these increases to inflation in 2013 has been estimated at 1.2 pp (0.1 pp higher than in 2012). In the second half of 2014, the restrictions imposed on the indexation of prices and tariffs for the goods and services of infrastructure organisations for the general public, will have a dampening impact on inflation (their contribution is estimated to be about 0.5 pp lower than in 2013).

In 2013, alcohol and tobacco price growth accelerated, in part due to the increase in excise duties, which was higher than in 2012. In contrast, the increase in excise duties on these products from 1 January 2014, as well as on petrol, has been implemented on smaller scales, which may somewhat limit inflation.

<sup>&</sup>lt;sup>1</sup> For more on the methodology of this approach see Deryugina E., Ponomarenko A. (2013). 'Money-based inflation risk indicator for Russia: A structural dynamic factor model approach.' Bank of England, CCBS Joint Research Paper No. 3.

In January 2014, there was a fall in the year-on-year growth rates for the main components of the consumer basket. In general, inflation slowed to 6.1% and core inflation was down to 5.5%. Most noticeable was the fall in the indices reflecting growth in food prices (to 6.5%), including fruit, vegetables and eggs.

The increase in the annual price index for dairy products continued; the seasonally adjusted month-on-month growth rate remained at the level registered in the second half of 2013. This indicates the possibility of a further slowdown in food price growth as the situation in this segment of the food market normalises.

# II. Economic prospects, risk assessment and monetary policy decisions

Over the next three years, the main objective of Bank of Russia monetary policy is to reduce inflation to 5.0% by the end of 2014, 4.5% by the end of 2015, and 4.0% by the end of 2016. Low and predictable inflation will become one of the most important conditions for achieving balanced and sustainable economic growth.

Since the impact of monetary policy on the economy is distributed over time, decisions about its stance are taken by the Bank of Russia on the basis of macroeconomic forecasts and risk assessments. The medium-term forecast for the development of the Russian economy is based on an approach integrating model-based calculations and expert judgement and involves an analysis of current trends and short-term forecast of the main macroeconomic indicators of the Russian economy and of external economic conditions<sup>1</sup>. Based on these forecasts and risk assessments Bank of Russia decides whether it is necessary to adjust the current stance of its monetary policy.

The revision of the forecast for 2014-2016 using available data on the state of the economy in Q4 2013 and based on a set of indicators for January 2014 shows that economic development and inflation are generally in line with baseline scenario II (a) set out in the 'Guidelines for the

Single State Monetary Policy in 2014 and for 2015 and 2016'. According to the updated forecast, GDP growth in 2014-2016 will be somewhat lower than previously expected. At the same time, due to the rouble depreciation, the negative contribution of net exports to GDP will be less. However, the rouble exchange rate dynamics will not have a significant impact on economic activity due to the fact that exchange rate fluctuations have a different effect on the competitiveness and production costs of different sectors of the economy. Thus, the exchange rate pass-through effect on inflation will to a large extent be offset by the lower than previously expected level of aggregate demand. Food price growth, which caused inflation to exceed the upper border of the target range at the end of 2013, will be temporary and will not have a significant impact on inflation by the end of 2014. Thus, the baseline scenario forecasts a slowdown in inflation to the target by the end of 2014 and a further gradual decline to target levels in 2015 and 2016. Economic activity will remain moderate and the negative output gap will have a dampening effect on price growth. Meanwhile, the balance of risks for 2014 is such that inflation may potentially exceed its target.

<sup>&</sup>lt;sup>1</sup> The data cut-off date for forecast calculations is 27 January 2014.

# II.1. Economic outlook and decisions on Bank of Russia key rate level

In the period 2014-2016, **external demand** will continue to weigh on economic growth, due to the continued cyclically low economic activity in Russia's trading partner nations (in particular in the euro area). However, in the medium term, a gradual acceleration in economic growth in trading partner nations is expected, which will lead to a recovery in external demand.

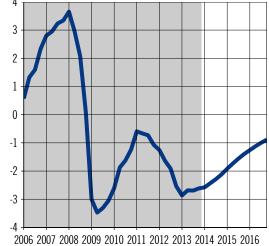
The projected low rates of global economic growth coupled with the likely increase in the oil production (including by alternative methods) are limiting the growth potential of prices for oil and oil products, which are major Russian exports. Oil prices from 2014 to 2016 are expected to decline from their current levels, staying within the range of 95-105 US dollars per barrel. Given the relatively stable price level for Russia's main exports and the moderate growth in import prices, terms of trade will worsen, which will contain the growth of the Russian economy. Thus, in terms of the external economic environment it is likely that the situation will develop according to a scenario similar to variant II (a) in the 'Guidelines for the Single State Monetary Policy in 2014 and for 2015 and 2016', which Bank of Russia views as a baseline scenario.

The level of inflation in trading partner nations will remain low. Accordingly, the inflationary pressure from imported inflation on consumer prices in Russia will be small. Amid moderate economic activity in 2014 and the first half of 2015, central banks in developed countries will more than likely implement an extremely loose monetary policy. It is expected that the US Fed will not raise interest rates before the second half of 2015, and the ECB will follow no sooner than the start of 2016. The influence of the accommodative monetary policies in Russia's trading partner nations on their respective economies will be limited.

Against the gradual recovery in economic activity in developed countries, the investors' interest in the assets of emerging market economies will remain relatively weak due to the slowdown in their economic growth. Thus, no significant improvement in **borrowing conditions** in the global financial markets for Russian companies is expected during 2014, and possibly beyond. According to Bank of Russia estimates, the cost of funding for domestic companies in the global capital markets may grow. Also, it seems unlikely that there will be an increase in the inflow of portfolio investments to emerging market countries, including Russia.

**Economic growth rates in Russia** will remain low in 2014-2016. The main driver for economic growth will continue to be **consumer demand**, though it will be constrained by the moderate growth rates in household income. The stabilisation of unemployment rate at a relatively low level amid the changes to the demographic and educational structure of the workforce will ensure positive growth rates in nominal wages during the 2014-2016 period. At the same time, the planned slowdown in public sector wages increase compared with 2013 will constrain growth in disposable household





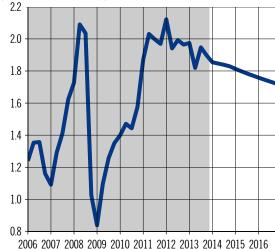
Source: Bank of Russia calculations.

income in 2014-2016. Retail lending will provide some support for consumer demand, despite the expected decrease in consumer loan growth rates from 28.7% at the end of 2013 to a level around 20-22% during the 2014-2016 period. Thus, it is expected that the growth rate in household consumption in 2014 will fall to 3.1-3.3% compared with 4.7% in 2013. In 2015-2016, alongside a general improvement in the economic situation in Russia and around the world, a slight acceleration in private consumption growth may follow.

Some recovery is also forecasted for growth in fixed capital investment, at least due to the low base effect of 2013. In 2014, the annual growth rate of **fixed capital investment** will be 1.4-1.6% (after the fall of 0.3% in 2013). In addition, in 2014 Russian enterprises are expected to finish the adjustment of inventories, which took place in 2013. Thus, the **gross capital formation** will make a positive contribution to GDP growth rates. In 2015-2016, as the investment climate and producers' sentiments gradually improve, there is expected to be a further acceleration in fixed capital investment growth.

Over the period 2014-2016, net exports are likely to continue making a negative contribution to GDP growth, although the said contribution will be negligible. In 2014, amid a relatively slow recovery in external demand, export growth will not exceed 2.0% (after 3.8% in 2013). Meanwhile, import growth will be hampered by the slowdown in private consumption dynamics and will drop to 3.8-4.0% in 2014 from 5.9% in 2013. Moreover, the depreciation of the rouble in January 2014, together with the projected real exchange rate dynamics resulting from a fall in oil prices, will most likely further restrain imports. Later in 2015-2016, there is expected to be some acceleration in import growth amid recovery in investment demand. At the same time, with the recovery of the global economy, growth rates in the exports of goods and services should also increase. As a result, the negative contribution





Source: Bank of Russia calculations.

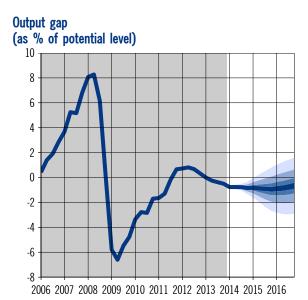
Note: Terms of trade are approximated by the real price index of Urals crude (oil prices adjusted by foreign inflation).

of net exports to GDP growth during 2015-2016 will remain rather small.

The impact on economic activity of the rouble exchange rate dynamics observed from Q4 2013 to January 2014 remains uncertain. On the one hand, the rouble depreciation increases the competitiveness of the Russian economy and can stimulate exports of goods and services. On the other hand, the rouble depreciation increases the costs of those businesses and industries which source raw materials and factors of production abroad. These effects differ across sectors of the economy in terms of scale and direction and may offset one another.

By the end of 2014, GDP growth is projected at 1.5-1.8%. In the future, there may be some increase in GDP growth. In 2015-2016, it may reach 1.7-2.0%. Still, over the three years, the moderately negative output gap is forecasted to remain.

Therefore, the GDP growth forecast has been revised downward compared with the estimates set out in the 'Guidelines for the Single State Monetary Policy in 2014 and for 2015 and 2016' for scenario II (a). This was due to the release of new data indicating that slowdown in business activity (primarily investment demand) in Russia in the second half of 2013 was more

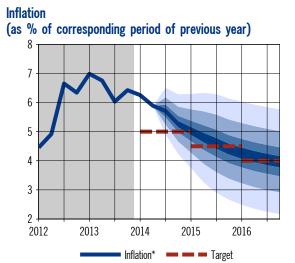


substantial than previously predicted. Despite the weaker dynamics of real sector indicators, the observed **monetary** dynamics have not significantly deviated from earlier expectations, which suggests that monetary conditions in 2014-2016 will generally be in line with the baseline scenario of the 'Guidelines for the Single State Monetary Policy in 2014 and for 2015 and 2016'. In particular, the annual lending growth in 2014-2016 is projected at 15%.

Source: Bank of Russia calculations.

In 2014, **inflation** is projected to fall to target values. In the absence of significant adverse shocks, the slowdown in inflation recorded in January 2014 will continue, and by June 2014 the year-on-year growth rate of consumer prices will decline to 5.8-6.1%. The expected persistence of the relatively high inflation rates is mainly attributed to the price dynamics of certain food products (livestock products, influenced by high production costs, and fruit and vegetables, due to unfavourable weather conditions during the harvesting period in the previous year).

In addition, there may be an inflationary pressure from the rouble depreciation, which occurred from late 2013 to early 2014. According to Bank of Russia estimates, the



\* The indicator is calculated on the basis of seasonally adjusted values. Source: Bank of Russia calculations.

exchange rate pass-through to inflation can occur within one to two quarters. The contribution of the rouble depreciation observed in Q4 2013 and in January 2014 to inflation in 2014 will be approximately 0.3-0.5 pp. However, this effect may be offset in the near term if the exchange rate adjusts to a level determined by the currently stable trends in macroeconomic fundamentals. Moreover, the inflationary effect derived from the fall in the rouble exchange rate will, to a large degree, be offset by the influence of rather low aggregate demand. Consequently, according to estimates, the current exchange rate dynamics will not interfere with the achievement of the 2014 inflation target.

In the second half of the year, a significant decline in inflation rate is expected, caused by the influence of supply-side factors being exhausted, in addition to lower growth rates in tariffs for housing and public utility services in 2014 compared with the previous year.

As the influence of inflationary factors comes to an end, the slowdown in actual inflation is expected to dampen inflation expectations, which, together with the cyclically low demand, will contribute to lower inflation both in 2014 and in the 2015-2016 period.

# Consumer inflation expectations in February 2014 (data from regular survey commissioned by the Bank of Russia to the Public Opinion Foundation (FOM)<sup>1</sup>

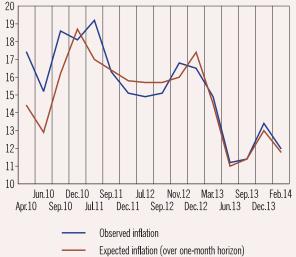
Latest figures show that in February 2014 inflation estimates and expectations among Russians remained relatively high, but the acuity of inflation perception has fallen slightly compared with December. This situation is fairly typical for this time of year: December 2013 was characterised by short-term (throughout the quarter) hikes in inflation expectations. As a rule, after those rises expectations stabilised or fell.

In February, consumer estimates of observed inflation dropped slightly. Meanwhile, the proportion of respondents expecting a rise in prices in the next month increased to its maximum value for the entire

observation period, which could be the result of faster growth in the prices of some food products at the end of 2013. However, this increase is largely due to the increase in the proportion of respondents who predicted moderate growth. On the contrary, the proportion of respondents expecting prices to rise sharply<sup>2</sup> actually fell.

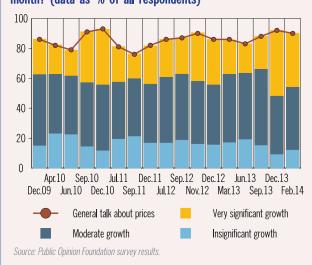
There has been a stabilisation of inflation expectations for the year ahead: median estimates of observed and expected year-on-year inflation in February 2014 were lower than those recorded in Q1 2013. These estimates are calculated from inflation expectation dynamics and, as a rule, do not correspond to the level of inflation measured by the consumer price index. Most respondents believe that over the next 12 months growth in prices will not change significantly.

# Direct inflation estimations: median values (%)

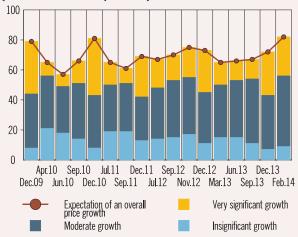


Source: Public Opinion Foundation survey results.

# What, in your opinion, was the general change in the prices for foodstuffs, non-food goods and services during the last month? (data as % of all respondents)



What, in your opinion, will the general change in the prices for foodstuffs, non-food goods and services be next month? (data as % of all respondents)



Source: Public Opinion Foundation survey results.

<sup>&</sup>lt;sup>1</sup> For more information see the website of Bank of Russia: www.cbr.ru under the section 'Monetary Policy'.

<sup>&</sup>lt;sup>2</sup> Previous research shows that the indicator 'proportion reporting a sharp rise in prices' correlates the most with actual inflation. Using the same indicator when forecasting inflation also gives the most reliable results. Therefore, when analysing the answers of respondents, attention is usually focused on this group.

44 II.2. Risk Assessment

# II.2. Risk Assessment

Under the baseline scenario, inflation in 2014-2016 will reach the set targets. At present, there are a number of risks which, if realised, may lead to deviation of forecasted inflation from the target. If the risk scenarios are realised, the need for monetary policy reaction will be determined, taking into account the nature of the shock, assessments of the scale of its impact on inflation expectations, mediumterm forecasts for inflation and economic activity.

Currently, the balance of risks is shifted towards inflation exceeding target values, especially in 2014.

The significant upside risks for inflation forecast are linked to the risks of the further rouble depreciation and the stability of inflation expectations. With the tapering of the US Fed's quantitative easing programme and the capital outflows from emerging markets, the Russian rouble has depreciated to a level which, according to Bank of Russia estimates, could be considered undervalued, based on the trends in fundamental factors, including the current account of the balance of payments. Nevertheless, with respect to the exchange rate dynamics there is a high uncertainty associated with the divergent monetary policies of major developed countries and emerging market economies, as well as the unpredictability (and often irrationality) of investors' reactions to changes in policy and macroeconomic data. The Bank of Russia considers as a stress scenario a sustained weakening of the rouble for over one to two quarters. Such exchange rate dynamics could give rise to a short-term uptake in business activity, and even provoke a rise in inflation expectations. In this case, the achievement of inflation targets could require a tightening of monetary policy already in the first half of 2014. The need for and extent of the tightening will be determined on the basis of the observed trends in a range of macroeconomic and financial indicators.

Another important factor which could prevent a fall in inflation to target values is the high inertia of inflation expectations. Analysis of the situation shows that the impact of the hike in inflation at the end of 2013 and the exchange rate volatility in early 2014 on inflation expectations was moderate. If the significant growth in food prices in Q4 2013 and the rouble depreciation from the end of 2013 to the start of 2014 were translated into a significant and sustained increase in inflation expectations, achieving inflation targets may require a tighter monetary policy. Persistently high inflation expectations could prevent a reduction in inflation in the 2014-2016 period. Were this to occur, the level of interest rates consistent with medium-term inflation targets will have to be higher compared with the case of the stabilisation of inflation expectations in Q1 2014 and their further reduction.

The risks that inflation will be below target levels also exist and stem from a possible underestimation of a further fall in aggregate demand. By Q4 2013, there was an upward trend in unemployment, a significant reduction in the rate of household income growth and a deterioration of the situation in the labour market as a whole. Another negative factor is the high debt burden of the part of households and corporate sector. These factors could exert a negative influence on aggregate demand and economic growth rates which, in turn, will dampen price growth. However, the Bank of Russia estimates the probability of a scenario where inflation is significantly below target values as lower than scenarios where inflation exceeds the targets.

Given that under the baseline scenario inflation reaches the target values in 2014-2016, at a meeting on 14 February 2014, the Bank of Russia Board of Directors decided to keep the key rate at 5.5%. At meetings in Q4 2013, the Bank of Russia Board of Directors

kept rates at the same level taking into account expected medium-term inflation dynamics. In the meantime, with the balance of risks shifting towards inflation exceeding its target values, especially in 2014, the Bank of Russia will be ready to tighten its monetary policy, should inflation risks be realised.

# II.3. Changes to the system of instruments and other monetary policy measures

In accordance with decisions adopted by the Bank of Russia Board of Directors in September 2013, from 1 February 2014 Lombard auctions for all terms and repo auctions for 3- and 12-month terms have been suspended. In addition, daily overnight repo auctions have been stopped, with Bank of Russia system of instruments being supplemented by 'fine-tuning' operations to provide liquidity in the form of 1- to 6-day repo auctions<sup>1</sup>. A similar instrument to absorb liquidity in the form of 1- to 6-day deposit auctions<sup>2</sup> was introduced from 17 February 2014.

The uniform rate<sup>3</sup> on 'fine-tuning' operations is set equal to the Bank of Russia key rate. The Bank of Russia does not determine the dates of 'fine-tuning' auctions in advance but decides whether to conduct them in the morning of the auction day. Decisions on the terms of 'fine tuning' operations and the maximum amount of funds provided to credit institutions or placed in deposits with the Bank of Russia following the auction are adopted by the Bank of Russia on the basis of the banking sector liquidity forecast.

The Bank of Russia conducts 'fine-tuning' operations if there is a significant discrepancy between demand for liquidity and its supply. On the last day of the required reserve maintenance period, the Bank of Russia conducts 'fine-tuning' operations to provide liquidity if there is any excess demand for liquidity over its supply.

The Bank of Russia<sup>4</sup> determines the amount of funds allocated through a one-week repo auction on the basis of liquidity forecast so that the average weekly liquidity needs of credit institutions are fully satisfied. In this regard, banks' demand for Bank of Russia funds, which arises from insufficient use of main one-week auction operations, will be met through Bank of Russia 'fine-tuning' operations only partially. The Bank of Russia estimates that the need to hold repo auctions for terms of less than one week will occur no more than 2-3 times per month following the banks' adaptation to the changes in the Bank of Russia operational framework.

After the abolition of daily repo auctions banks can adapt to fluctuations in liquidity levels between the main one-week auction operations by managing correspondent account balances through the reallocation of funds in the interbank market and the required reserves averaging. In order to enhance the averaging mechanism, in November 2013 the Bank of Russia decided to increase the required reserves averaging ratio<sup>5</sup> to 0.7 from 10 December 2013.

Another direction in the development of Bank of Russia system of instruments has been to improve the mechanism for providing **loans** 

<sup>&</sup>lt;sup>1</sup> The press release dated 13 September 2013 regarding the interest rate instruments of the Bank of Russia's monetary policy is available in the 'Monetary Policy' section ('Press releases on monetary policy') of the website of the Bank of Russia (http://cbr.ru/press/PR.aspx?file=130913\_1350427l.htm).

<sup>&</sup>lt;sup>2</sup> The press release dated 14 February 2014 regarding the 'fine-tuning' operations to absorb liquidity is available in the 'Monetary Policy' section ('Press releases on monetary policy') of the website of the Bank of Russia (http://cbr.ru/ press/PR.aspx?file=14022014\_134218 stavka-likvidnost.htm).

<sup>&</sup>lt;sup>3</sup> The minimum rate on repo auctions and maximum rate on deposit auctions.

<sup>&</sup>lt;sup>4</sup> The press release dated 29 January 2014 regarding the procedure for 'fine-tuning' operations is available in the 'Monetary Policy' section ('Press releases on monetary policy') of the official website of the Bank of Russia (http://cbr.ru/press/PR.aspx?file=29012014\_182938DKP.htm).

<sup>&</sup>lt;sup>5</sup> The required reserves averaging ratio is used by credit institutions (excluding settlement non-bank credit institutions and non-bank credit institutions with the right to carry out fund transfers without opening bank accounts and any other banking transactions associated therewith) to calculate the averaged value of required reserves in accordance with Bank of Russia Regulation No. 342-P, dated 7 August 2009, 'On Credit Institutions' Required Reserves'. The press release dated 18 November 2013 regarding changes to the averaging coefficient is available in the 'Press Releases' section of the website of the Bank of Russia (http://cbr.ru/press/PR.aspx?file=131118\_193 520intern1.htm).

#### The Bank of Russia's system of monetary policy instruments

The Bank of Russia manages the overnight money market rates within the interest rate corridor, trying to keep them close to Bank of Russia key rate and limit their volatility.

The basis of the Bank of Russia's system of instruments is **one-week auction-based operations** which are conducted as repo auctions or deposit auctions, depending on the banking sector liquidity position. The uniform rate on these auctions is the Bank of Russia key rate which reflects the monetary policy stance. Auctions are held weekly, as a rule, on Tuesdays, with settlement on the day after the transaction. The volume of funds provided (absorbed) at the auction is determined on the basis of a liquidity forecast for the coming week so that it can fully satisfy the average weekly need of credit institutions to attract or deposit funds. As there is currently structural liquidity deficit in the banking sector, the main operations used by the Bank of Russia are repo auctions.

**Overnight standing facilities**, which are available to banks on their own initiative, are used by the Bank of Russia to limit fluctuations in money market rates. Deposit operations are a standing facility used to absorb liquidity. Refinancing standing facilities are diverse in terms of the form of operations (secured loans, repos, swaps) and the types of collateral used (bonds, shares, foreign currency, claims on nonfinancial organisations, guarantees, gold) and offer banks a wide range of opportunities to obtain funds. However, the provision or absorption of liquidity is not the priority of such transactions, per se, and so their volumes are small compared with Bank of Russia main operations.

Standing facilities are available at fixed rates. Rates on one-day refinancing and liquidity absorbing operations are symmetrical relative to the key rate and respectively constitute the upper and lower borders of the Bank of Russia's interest rate corridor. The corridor width is 200 basis points. If the key rate changes, the interest rate corridor borders are automatically shifted by the same value.

On some days, when demand for liquidity significantly deviates from its supply, the Bank of Russia conducts 'fine-tuning' operations for terms ranging from 1 to 6 days in the form of repo or deposit auctions so as to avoid excess volatility in money market rates.

The Bank of Russia's system of instruments also includes **refinancing operations with terms of more than one month**, the use of which is conditioned by the specific circumstances of the Russian banking system. Non-marketable assets, guarantees and gold can be used as collateral for these operations. Amid rising structural liquidity deficit some credit institutions lack securities eligible as collateral for the Bank of Russia repo operations. In this environment the provision of funds using alternative forms of assets helps to reduce the burden on the main refinancing operations and thus to steer money market rates more efficiently.

The main longer-term refinancing operations are monthly auctions to provide loans secured by non-marketable assets for a three-month term at a floating interest rate linked to the Bank of Russia key rate. Thus, the interest rate on outstanding loans is adjusted for changes in the key rate from the date on which the corresponding decision by the Bank of Russia Board of Directors comes into effect. Additional longer-term refinancing is provided through fixed-rate loans for terms of up to 12 months, secured by non-marketable assets, guarantees or gold.

In order to manage banking sector liquidity, the Bank of Russia can also conduct **other types of operations**, in particular issuing Bank of Russia bonds (OBRs), and purchasing or selling securities in the open market. These operations are not used at the present time.

# secured by non-marketable assets or credit institutions' guarantees.

According to forecasts, demand from banks for auction-based operations to provide loans secured by non-marketable assets for a three-month term at a floating interest rate is likely to persist in the medium term. In order to make this instrument more convenient for credit institutions, in December 2013 the Bank of Russia decided to conduct these operations on

a monthly basis starting from 2014. The 2014 schedule for three-month auctions at a floating interest rate, as well as for other regular auction-based operations, has been published by the Bank of Russia for the entire 2014<sup>6</sup>.

<sup>&</sup>lt;sup>6</sup> The press release dated 13 December 2013 regarding Bank of Russia auctions in 2014 is available in the 'Monetary Policy' section ('Press releases on monetary policy') of the website of the Bank of Russia (http://cbr.ru/press/PR.aspx?file=131213\_160004auction\_2014.htm).

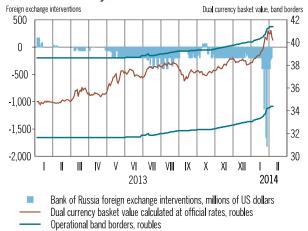
In addition, since the start of January 2014, credit institutions have been able to use assets pledged to the Bank of Russia for outstanding loans secured by non-marketable assets or guarantees as collateral for new loans if the loan is provided on the same day as the previously granted loan is repaid<sup>7</sup>.

In December 2013, the Bank of Russia decided not to suspend from 1 February 2014 operations to provide loans secured by non-marketable assets or guarantees and loans secured by gold at fixed interest rates for terms from 2 to 365 days<sup>8</sup>. A uniform interest rate for all refinancing terms was set for each of these instruments at 7.25% and 7.00% respectively. The retention of these instruments was conditioned by the refinancing needs of some credit institutions that were unable to attract funds in the interbank market or at Bank of Russia repo auctions due to uneven distribution of marketable collateral in the banking sector.

# Exchange rate policy decisions

In the period from October 2013 to 14 February 2014, the Bank of Russia continued to increase the flexibility of the exchange rate in order to accomplish a gradual transition to a floating exchange rate regime by 2015. Thus, from 7 October 2013, the Bank of Russia implemented a symmetrical expansion of the range in which it would not carry out any foreign exchange interventions, from 1 to 3.10

Bank of Russia interventions in the domestic foreign exchange market and the rouble value of the dual currency basket



Source: Bank of Russia.

roubles9, while keeping the overall width of the operational band unchanged. The Bank of Russia also reduced the target foreign exchange interventions with effect from 21 October 2013 from 120 to 60 million US dollars and from 13. January 2014 to zero. Moreover, in the period under review, the Bank of Russia reduced by 50 million US dollars the cumulative volume of interventions triggering a 5-kopeck shift in the operational band: from 13 January 2014 it was 350 million US dollars. The implementation of these measures has helped to increase the sensitivity of the operational band borders to the volume of the Bank of Russia's foreign exchange interventions. The volume of interventions, conducted by the Bank of Russia depending on the position of the dual currency basket value within the operational band, remained unchanged during the period under review.

To guarantee the translation of supply and demand for foreign currency from the Federal Treasury onto the domestic FX market, from 1 October 2013 the operations of the Federal Treasury related to accumulation or expenditure of the sovereign funds

<sup>&</sup>lt;sup>7</sup> More information on collateral criteria for Bank of Russia loans secured by assets using assets pledged for another Bank of Russia loan can be found in Bank of Russia Ordinance No. 3113-U, dated 18 November 2013, 'On the Amendments to Bank of Russia Regulation No. 312-P, Dated 12 November 2007, 'On the Procedure for Extending Bank of Russia Loans Covered by Assets or Guarantees to Credit Institutions' and the press release regarding Bank of Russia Ordinance No. 3113-U, dated 18 November 2013, (http://cbr.ru/press/PR.aspx?file=09012014\_175546inform.htm).

<sup>&</sup>lt;sup>8</sup> The press release dated 13 December 2013 regarding Bank of Russia liquidity provision operations at fixed interest rates is available in the 'Monetary Policy' section ('Press release on monetary policy') of the website of the Bank of Russia (http://cbr.ru/press/PR.aspx?file=131213\_133003stavka-likvid.htm).

<sup>&</sup>lt;sup>9</sup> Includes the 'neutral' range with a width of 3 roubles, where no interventions are conducted aimed at smoothing out the volatility of the rouble exchange rate, and the 'technical' range with a width of 0.1 roubles, where the Bank of Russia does not conduct any operations.

#### The schedule for meetings of the Bank of Russia Board of Directors in 2014

At the start of 2014, in order to further enhance communication with the general public as part of the transition to inflation targeting regime, the Bank of Russia published a schedule of meetings of the Board of Directors on monetary policy issues for 2014. Until 2014, the Bank of Russia only announced the date of the forthcoming meeting.

In 2014, there will be eight meetings of the Bank of Russia Board of Directors: four main meetings and four intermediate ones. The main meetings of the Bank of Russia Board of Directors will be held on 14 February, 16 June, 12 September and 11 December; the intermediate meetings will be held on 14 March, 25 April, 25 July and 31 October. At each of the eight meetings, the Bank of Russia Board of Directors may decide to change Bank of Russia key rate. The main meetings of the Bank of Russia Board of Directors will be followed by a press conference with representatives of the media; a Monetary Policy Report will be released which includes up-to-date quarterly macroeconomic forecasts.

Information on the schedule of meetings of the Bank of Russia Board of Directors on monetary policy issues is available on the Bank of Russia website under the 'Monetary Policy' section ('Calendar of Major Events').

in foreign currencies are factored in the parameters of Bank of Russia operations to buy and sell foreign currency in the domestic FX market. In 2013, Bank of Russia operations in the domestic market, related to the Federal Treasury accumulating sovereign funds, were only conducted in October. The volume of these operations was 308 million US dollars. In 2014, the forecasted value of similar operations will increase compared with 2013: according to a statement by the Ministry of Finance of the Russian Federation, in 2014 there are plans to replenish the Reserve Fund with an equivalent of 212 billion roubles in foreign currency. Corresponding operations will be spread out

evenly over time by the Bank of Russia so that the daily amount is relatively small. This helps to mitigate the impact on the relationship between the foreign currency supply and demand in the domestic market, and hence the dynamics of the exchange rate.

For the purposes of increasing transparency and allowing economic agents to better understand the exchange rate policy, the Bank of Russia has disclosed the details of exchange rate policy mechanism and the parameters of operations in the domestic FX market in thematic material on its official website (the subsection 'Bank of Russia Foreign Exchange Policy' under the 'Monetary Policy' section).

### Bank of Russia exchange rate policy mechanism

The range of permissible values for the operational indicator of Bank of Russia exchange rate policy – the rouble value of the dual currency basket consisting of 0.55 US dollars and 0.45 euros – is determined by a floating operational band with a width of 7 roubles. The current exchange rate policy mechanism allows purchasing or selling foreign currency when the value of the dual currency basket is both within the operational band or on its borders. The parameters of Bank of Russia operations in the domestic FX market are dependent on the position of the value of the dual currency basket within the operational band, also taking into account operations by the Federal Treasury related to accumulation or expenditure of the Reserve Fund and National Wealth Fund.

In the event that the exchange rate breaches the borders of the operational band, Bank of Russia conducts unlimited foreign exchange interventions in the corresponding direction until the value of the dual currency basket returns to the operational band or there is a shift in the borders of the band so that the value of the dual currency basket is within the new borders.

# Parameters of the exchange rate policy mechanism (as of 14 February 2014)

Volume of interventions to smooth out the volatility of the rouble exchange rate\*, millions Volume of operations to replenish (spend) sovereign funds\*\*, millions of US dollars per day

			ot us dollars per day						
		Nidth							
Upper band border	41.65	0.95 roub.	-400						
		1 roub.	-200						
'Technical' range		0.1 roub.	0						
'Neutral' range		3 roub.	0						
		1 roub.	200						
Lower bank border	34.65	0.95 roub.	400						

It is determined depending on the volume of Federal Treasury's operations to buy (sell) foreign exchange from/to the Bank of Russia.

The operational band borders are adjusted automatically based on the following rule: when the volume of sales (purchases) of foreign currency by the Bank of Russia aimed at smoothing the exchange rate volatility reaches the set value (350 million US dollars as of 14 February 2014) the borders shift up (down) by 5 kopecks. This rule allows for multiple changes in the operational band borders within one day with the new border values taking effect immediately.

<sup>\* &#</sup>x27;+' — foreign exchange is bought by the Bank of Russia, '-' — foreign exchange is sold by the Bank of Russia.
\*\* The volume of these operations does not depend on the specific rouble value of the dual currency basket within the operational range. The only exclusion will be a 'technical' range where no operations are conducted by the Bank of Russia.

# **Glossary**

# Autonomous factors shaping the liquidity of the banking sector

Changes in the balance-sheet of a central bank which affect the liquidity of the banking sector, but are not the result of central bank operations to manage liquidity. These autonomous factors include changes in cash in circulation, changes in extended government account balances with the Bank of Russia, Bank of Russia operations in the domestic foreign exchange market (excluding operations regulating banking sector liquidity), as well as changes to the value of required reserves of credit institutions as a result of changes to their obligations.

# Averaging of required reserves

The right of a credit institution to meet ratios set by the Bank of Russia on required reserves by maintaining a share of required reserves equal to the averaging ratio on a correspondent account with the Bank of Russia during a specified period.

# Banking sector liquidity

Credit institutions' funds held in correspondent accounts with the Bank of Russia to carry out payment transactions and to comply with the Bank of Russia's reserve requirements.

# Bank lending conditions index

A generalised indicator of changes to bank lending conditions, as calculated by the Bank of Russia based on the results of a quarterly survey among leading Russian banks operating in the credit market as follows: (proportion of banks reporting a significant tightening of lending conditions, as a percentage) + 0.5 x (proportion of banks reporting a moderate tightening of lending conditions, as a percentage) - 0.5 x (proportion of banks reporting a moderate easing of lending conditions, as a percentage) - (proportion of banks reporting a significant easing of lending conditions, as a percentage). Measured in percentage points (pp).

#### Bank of Russia interest rate corridor (interest rate corridor)

The basis of Bank of Russia interest rate system. The interest rate corridor is structured as follows: the centre of the corridor is set by the Bank of Russia's key interest rate; the upper and lower borders are symmetric relative to the key interest rate, and are determined on the basis of overnight standing facilities (deposit facilities and refinancing facilities).

#### Bank of Russia key interest rate

Interest rate on main operations of the Bank of Russia to manage banking sector liquidity. A key monetary policy indicator.

#### Broad money (monetary aggregate M2X)

Includes all of the components of the monetary aggregate M2 and foreign currency deposits of residents of the Russian Federation (organisations and individuals) placed in operating credit institutions.

#### Consumer price index (CPI)

The CPI tracks changes over time in the overall price level of goods and services purchased by households for private consumption. It is calculated by the Federal State Statistics Service and is measured as the ratio of the value of a fixed set of goods and services at current prices to the value of the same set of goods and services at prices of a previous (reference) period. The CPI

is calculated on the basis of data on the actual structure of consumer spending and is therefore one of the key indicators of household living costs.

#### Core inflation

Inflation as measured on the basis of a core consumer price index (CCPI). The difference between the CCPI and the consumer price index (CPI) lies in the CCPI calculation method, which excludes a change in price for individual goods and services subject to the influence of administrative and seasonal factors (fruit and vegetables, fuel, passenger transportation services, communications services, and the majority of housing and public utility services).

# Countercyclical currency

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

# Countercyclical (stabilising) fiscal policy

A tightening of fiscal policy in a period of economic 'boom' and easing in a period of economic downturn. In the opposite scenario the policy would be described as procyclical. As an indicator characterising a phase of the economic cycle, the change in the size of the annualised output gap is used, whereas the tightness of the fiscal policy is determined by shifts in the structural non-oil and gas primary deficit.

# 'Currency swap' operation

A deal which consists of two legs: one party to the deal initially exchanges a certain amount in a domestic or foreign currency for an equivalent amount in another currency provided by the second party to the deal. Then, once the deal term has expired, the parties reverse-convert the currency (in the corresponding volumes) at a predetermined rate. Currency swaps are used by the Bank of Russia to provide credit institutions with refinancing in roubles.

#### Current liquidity deficit

A situation on any given day where the demand for liquidity from the banking sector exceeds the supply liquidity covered by daily Bank of Russia operations in the money market. A reverse situation, called 'current liquidity excess', is characterised by the excess of the banking liquidity supply over demand on any given day.

#### **Dollarisation of deposits**

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

### Dual currency basket

Operational indicator of the exchange rate policy of the Bank of Russia expressed in the national currency (in roubles) and made up of US dollars and euros (effective since February 2005). The rouble value of the dual currency basket is calculated as the sum of 0.55 US dollars and 0.45 euros in roubles (effective since 8 February 2007).

#### Fiscal stress indicator

An approach developed by experts at the IMF using an aggregate early crisis warning indicator, calculated on the basis of studies of signals from three complementary clusters of indicators: primary budget indicators; long-term budget trends; and, asset and liability management (a total of 12 indicators). For each indicator a threshold is calculated, which, if exceeded, signals the threat of a crisis in the following year (a signal strength is also estimated, i.e. its weight in the fiscal stress indicator). For more details see the methodology in: Baldacci E., McHugh J.,

Petrova I., 'Measuring Fiscal Vulnerability and Fiscal Stress: A Proposed Set of Indicators'. IMF Working Paper, No. 94, 2011 and Baldacci E., Petrova I., Belhocine N., Dobrescu G., Mazraani S., 'Assessing Fiscal Stress'. IMF Working Paper, No. 100, 2011.

# Floating exchange rate regime

Under this regime the exchange rate of the domestic currency is determined predominantly under the influence of market factors, and its path is not predictable. The central bank does not set targets for the level of, or changes to, the exchange rate. In this case, the central bank conducts foreign exchange interventions to smooth out any excessive exchange rate fluctuations not associated with fundamental factors.

# Floating interest rate on Bank of Russia operations

An interest rate tied to the key interest rate of the Bank of Russia. If the Bank of Russia Board of Directors decides to change the key interest rate for loans previously provided at a floating interest rate the interest rate applied will be adjusted in line with the change to the key rate with effect from the corresponding date.

#### Free credit institution reserves

These include balances of correspondent accounts in the currency of the Russian Federation and of deposit accounts of credit institutions with the Bank of Russia, as well as credit institutions' investments in Bank of Russia bonds.

# Funds on extended government's accounts

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

#### Generalised (composite) consumer confidence index

Calculated by Rosstat on the basis of quarterly surveys, as an arithmetical mean value of five indices: occurred and expected changes in personal wealth; occurred and expected changes in the economic situation in Russia; and, the favourability of conditions for high-value purchases. Partial indices are calculated by drawing up the balance of respondents' estimates (as a percentage). The balance of estimates is the difference between the sum of shares (as a percentage) of decisively positive and 1/2 of the rather positive answers and the sum of shares (as a percentage) of negative and 1/2 of the 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 licences), overdue loans and overdue interest on loans, funds provided by the Bank of Russia to credit institutions through repos and currency swaps.

#### Inflation targeting regime

A monetary policy framework where the central bank's main aim is to guarantee price stability. Under this regime a quantitative inflation target is set and announced. The central bank is responsible for achieving this target. Typically, under an inflation targeting regime, the monetary policy may affect the economy through interest rates. Decisions are made primarily on the basis of economic forecasts and inflation dynamics. An important aspect of this regime is the practice of offering regular explanations to the public of decisions adopted by the central bank, which guarantees its accountability and transparency.

#### Interest rate corridor

See Bank of Russia interest rate corridor.

# Monetary aggregate M2

Total amount of cash in circulation and cashless funds of non-financial and financial (excluding credit) organisations and individuals who are residents of the Russian Federation in on-demand accounts and time deposit accounts opened in the banking system in the currency of the Russian Federation.

# Monetary policy stance

The characteristics of a monetary policy's impact on the economy. A tight stance suggests the restraining effect of the monetary policy on economic activity in order to reduce inflationary pressures, whereas a loose monetary policy stance suggests economic stimulation with possible upward pressure on inflation.

# Monetary policy transmission mechanism

The process which serves to transfer the effect of monetary policy decisions (in particular, decisions made by a central bank in relation to changes to interest rates on its operations) on the economy as a whole and on price dynamics, in particular. The most important channel of monetary policy transmission is the interest rate channel. The impact of the latter is based on the influence of a central bank policy on changes to the interest rates at which economic agents may deposit and attract funds, and as a result on decisions regarding consumption, saving and investment and, thereby, on the aggregate demand, economic activity and inflation.

# Money supply

See Monetary aggregate M2.

#### 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 the currency of the Russian Federation (including the averaged amount of required reserves) and deposit account balances of credit institutions with the Bank of Russia, and investments by credit institutions in Bank of Russia bonds (at prices fixed as of the start of the current year).

#### Net private capital inflow/outflow

The total balance of private sector operations involving foreign assets and liabilities recorded on the financial account of the balance of payments.

# Nominal effective rouble exchange rate index

The nominal effective rouble exchange rate index reflects changes in the exchange rate of the rouble against the currencies of Russia's main trading partners. It is calculated as the weighted average change in the nominal exchange rates of the rouble to the currencies of Russia's main trading partners. The weights are determined according to the foreign trade turnover share of Russia with each of these countries in the total foreign trade turnover of Russia with its main trading partners.

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

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

# Non-price bank lending conditions

Bank lending conditions aside from the cost of a loan to the borrower, such as maximum loan amount and lending term, collateral requirements and the financial standing of the borrower.

# Open market operations

Operations carried out on the initiative of a central bank. This type of operations includes auction-based refinancing and sterilisation operations (repo auctions, deposit auctions, etc.), as well as purchases and sales of financial assets (government securities, currency, gold).

### **Output gap**

Deviation of GDP from potential output, expressed as a percentage. Characterises the balance between demand and supply and may be regarded as 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), all else equal, inflation is expected to accelerate. A negative output gap is an indicator of an expected slowdown in price growth. Output fluctuations around its potential level are called cyclical fluctuations.

#### Potential output

The aggregate level of output in the economy achieved under normal utilisation of production factors with existing resource and institutional constraints. Reflects the volume of products that may be produced and sold without creating prerequisites to a change in price growth rates. The level of potential output is not linked to a certain level of inflation; it merely indicates the presence or absence of conditions for the inflation acceleration or deceleration.

# **Procyclical currency**

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

#### Real effective rouble exchange rate index

Calculated as the weighted average change in real exchange rates of the rouble to the currencies of Russia's main trading partners. The real exchange rate of the rouble to a foreign currency is calculated using the nominal exchange rate of the rouble to the same currency and the ratio of price levels in Russia to those in the corresponding country. When calculating the real effective exchange rate, weights are determined according to the foreign trade turnover share of Russia with each of these countries in the total foreign trade turnover of Russia with its main trading partners. The real effective rouble exchange rate index reflects changes in the competitiveness of Russian goods in comparison to those of Russia's main trading partners.

#### Repo operation

A deal which consists of two legs: one party to the deal initially sells securities to the other party in return for cash, and then, once the deal term has expired, buys them back at a predetermined price. Repos are used by the Bank of Russia to provide credit institutions with liquid assets in roubles in exchange for collateral in the form of securities.

### Risk premium on the market securities portfolio

Calculated in accordance with the capital asset pricing model as the difference between the yield of a market securities portfolio and the yield of a risk-free asset. The yield of a risk-free asset is, as a rule, taken to be the yield of government securities (for example, OFZ – federal government bonds). Measured in percentage points (pp).

### Standing facilities

Operations carried out by the Bank of Russia to provide and absorb liquidity at fixed interest rates.

# Structural deficit of banking sector liquidity

The state of the banking sector characterised by a stable demand by credit institutions for liquidity through operations with the Bank of Russia. The reverse situation, characterised by a stable demand by credit institutions to deposit funds with the Bank of Russia is a structural liquidity surplus.

# Structural non-oil and gas primary budget deficit

Budget items that are not dependent on the phase of the business cycle and are determined by general government decisions. It is the aggregate budget deficit, excluding oil and gas revenue, net interest payments and other items directly dependent on changes in economic activity.

# **Annex 1. Methodological comments**

# VAR-model of the transmission mechanism as an instrument to assess the relationship of macroeconomic indicators

An empirical assessment of the possible inflation consequences of exchange rate dynamics for the Russian economy was carried out by calculating parameters of the transmission mechanism model in the form of vector autoregression (VAR). The model specification in its reduced form is expressed as follows:

$$y_t = \Gamma_1 y_{t-1} + \ldots + \Gamma_p y_{t-p} + \varepsilon_t,$$

where:

 $\mathcal{Y}_t$  – is the vector of the observed endogenous variables,

 $\Gamma_1,...,\Gamma_p$  – is the matrix of unknown estimated parameters,

p – is a lag,

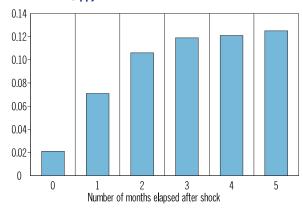
 $\varepsilon$  – is a random error.

Indicators of inflation, real GDP growth, the nominal effective exchange rate and short-term interest rates in the interbank market are all classified as endogenous variables in the given model. In addition, in alternative simulations, the VAR-model in its reduced form can be expanded using exogenous parameters which affect the endogenous indicators unilaterally (for example, oil prices, foreign interest rates, etc.).

The results of the estimation of the vector autoregression model using the least squares method allow to evaluate cumulative impulse response function of consumer inflation to a 1% unexpected nominal exchange rate shock.

According to the empirical estimates of the VAR-model on retrospective data, the size of the 'pass-through effect' of the nominal effective rouble exchange rate to foreign currencies on consumer inflation is currently estimated at 0.13 (depreciation of the rouble against foreign currencies by 1 pp leads to the acceleration of consumer inflation by an average of 0.13 pp). This effect is however spread over time, and its duration is approximately 1-2 quarters.

Cumulative response of consumer price inflation to 1%-change in the nominal effective rouble exchange rate against foreign currencies (calculations are based on VAR-model, pp)



Source: Bank of Russia calculations.

# **Annex 2. Statistical tables**

Table 1 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
2011								
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	-1.5	0.5	0.5	0.5
May	0.5	0.4	0.0	0.2	-1.5	0.8	0.4	0.7
June	0.3	0.3	-0.2	0.1	-3.2	0.4	0.3	0.7
July	0.0	0.3	-0.7	0.1	-9.2	0.4	0.3	0.6
August	-0.2	0.4	-1.4	0.4	-16.0	0.5	0.4	0.3
	0.0	0.4	-0.6	0.3	-9.8	0.5	0.4	-0.1
September	l .			0.2			1	
October	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 to December)	6.1	6.6	3.9	7.4	-24.7	6.7	6.0	8.7
2012								
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 to December)	6.6	5.7	7.5	7.1	11.0	5.2	5.0	7.3
2013	0.0	J.1	7.0	7.1	11.0	J.L	3.0	1.5
January	1.0	0.5	1.8	1.2	7.4	0.4	0.4	0.6
1	0.6	0.3	0.8	0.6	2.8	0.4	0.4	0.4
February	0.8	0.4	0.6	0.5	0.1	0.4	0.4	0.4
March		0.4			3.6			0.2
April	0.5		0.7	0.4		0.4	0.4	
May	0.7	0.3	1.0	0.3	6.5	0.3	0.3	0.8
June	0.4	0.3	0.5	0.2	3.0	0.2	0.2	0.6
July	0.8	0.3	0.0	0.4	-3.0	0.1	0.1	3.1
August	0.1	0.5	-0.7	0.6	-11.3	0.5	0.3	0.9
September	0.2	0.7	0.0	0.8	-7.6	0.5	0.4	0.1
October	0.6	0.6	1.1	0.9	3.6	0.5	0.5	-0.1
November	0.6	0.6	0.9	0.7	3.0	0.4	0.5	0.2
December	0.5	0.4	0.8	0.5	2.8	0.2	0.3	0.6
Total for the year (December to December)	6.5	5.6	7.3	7.1	9.3	4.5	4.4	8.0
2014								
January	0.6	0.4	1.0	0.5	5.8	0.3	0.3	0.5
1.1 Evoluding vegetables and fruit	0.0	5.1	2.0	5.0	5.0	3.0	5.0	0.0

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

Source: Rosstat, Bank of Russia calculations.

Table 2 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
2011	<u>'</u>	'	<u> </u>					
January	9.6	7.2	14.2	10.2	51.1	5.6	5.1	8.2
February	9.5	7.4	14.2	10.5	46.9	5.6	5.3	7.9
March	9.5	7.7	14.1	10.8	42.9	5.8	5.5	7.9
April	9.6	8.0	14.1	11.2	39.1	5.9	5.7	8.2
May	9.6	8.3	13.4	11.6	27.7	6.3	5.8	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
2012	1		, , , , , , , , , , , , , , , , , , ,					
January	4.2	6.0	2.0	6.3	-30.5	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	5.0	7.3
2013			l					
January	7.1	5.7	8.6	7.8	16.1	5.1	4.9	7.8
February	7.3	5.7	8.7	7.8	16.8	5.3	5.0	8.2
March	7.0	5.6	8.3	7.7	13.8	5.2	4.9	7.9
April	7.2	5.7	8.8	7.7	18.3	5.1	4.9	8.1
May	7.4	5.9	9.2	8.0	19.1	5.0	4.8	8.3
June	6.9	5.8	8.0	7.9	8.2	4.9	4.9	8.1
July	6.5	5.6	6.8	7.4	1.3	4.8	4.6	8.4
August	6.5	5.5	6.5	7.2	0.8	4.9	4.6	8.7
September	6.1	5.5	6.3	7.2	-1.4	4.7	4.4	7.8
October	6.3	5.5	6.9	7.2	4.4	4.5	4.3	7.7
November	6.5	5.6	7.5	7.3	8.9	4.5	4.4	7.9
December	6.5	5.6	7.3	7.1	9.3	4.5	4.4	8.0
2014					-10			
January	6.1	5.5	6.5	6.4	7.7	4.3	4.3	7.8
Excluding vegetables and fruit		5.0	0.0	0.1				7.10

<sup>1</sup> Excluding vegetables and fruit. <sup>2</sup> Bank of Russia estimate. Source: Rosstat, Bank of Russia calculations.

Table 3 Macroeconomic indicators (seasonally adjusted, growth as % of previous period)

	Industrial production <sup>1</sup>	Agriculture	Construction Freight turnover		Retail trade turnover	Fixed capital investment	Household consumer spending	Output index of goods and services by key economic activities <sup>2</sup>	GDP <sup>3</sup>
2012									
January	0.7	-26.8	-0.7	2.8	-0.1	-3.2	-1.6	0.8	
February	1.7	25.1	-0.7	-0.3	1.1	2.2	2.1	1.7	
March	-1.6	1.9	0.1	-0.9	0.0	0.9	0.3	-2.3	0.6
April	-0.4	3.3	0.4	-0.9	0.4	-5.5	-0.1	-0.5	
May	1.1	3.0	0.1	-0.6	1.0	6.4	1.4	2.1	
June	-1.0	-0.7	0.7	0.8	0.5	0.0	1.1	-0.3	0.6
July	1.0	3.7	-0.7	0.1	-0.3	-0.4	-0.8	0.4	
August	0.9	3.7	1.1	0.6	0.3	1.2	0.4	-0.1	
September	-1.1	17.6	0.2	0.6	0.7	-3.5	0.6	-0.5	0.5
October	0.7	-21.1	4.7	-2.9	0.1	3.8	0.3	0.4	
November	-0.4	6.0	-4.8	1.4	0.2	-2.0	0.5	0.0	
December	1.0	0.5	1.0	1.6	0.7	0.1	1.5	0.3	0.3
2013									
January	-1.2	-27.7	-0.4	-1.5	-0.3	-0.4	-1.4	-0.4	
February	-1.1	29.2	-1.3	-1.1	-0.2	0.7	0.2	0.2	
March	1.0	0.9	-0.4	0.5	1.2	-0.2	0.2	0.5	0.2
April	0.6	1.5	-2.9	0.5	0.1	-5.5	0.5	-0.5	
May	-0.4	2.0	4.5	-0.4	-0.1	7.0	0.2	-0.2	
June	0.9	1.9	-8.5	-0.2	1.0	-2.8	1.3	-0.6	0.3
July	0.0	4.2	14.4	0.6	0.8	4.6	0.5	0.9	
August	-0.1	0.7	-7.3	1.5	-0.1	-4.5	0.0	-0.5	
September	0.4	10.0	0.3	1.9	-0.2	-0.2	-0.1	-0.1	0.3
October	0.2	3.0	2.9	1.2	0.5	1.5	0.4	2.2	
November	1.0	-1.9	-0.9	-3.9	1.0	0.3	0.6	-1.1	
December	-1.1	-4.0	-1.4	3.1	0.1	-0.3	1.1	0.5	

<sup>&</sup>lt;sup>1</sup> Rosstat estimate.

Source: Rosstat, Bank of Russia calculations.

Table 4 Macroeconomic indicators (as % of corresponding period of previous year)

	2013										For ref.:			
	January	February	March	April	May	June	July	August	September	October	November	December	Year	2012
Output of goods and services by key economic activities	0.7	-0.9	2.0	1.9	-0.4	-0.9	0.1	-0.4	-0.1	1.9	0.7	0.9	0.5	3.3
Industrial output	-0.4	-3.1	-0.1	1.1	-0.5	1.7	0.8	-0.2	1.3	1.0	2.8	0.4	0.4	3.2
Agricultural output	2.5	2.4	2.1	1.7	1.5	2.1	5.8	3.3	-1.4	26.3	18.3	1.4	6.2	-4.8
Fixed capital investment	1.1	0.3	-0.8	-0.7	0.4	-3.7	2.5	-3.9	-1.6	-1.9	0.2	0.3	-0.3	6.6
Construction	1.4	0.3	0.2	-3.7	1.7	-7.9	6.1	-3.1	-2.9	-3.6	-0.3	-3.0	-1.5	2.4
Retail trade turnover	4.4	3.2	4.5	4.2	3.0	3.6	4.6	4.2	3.3	3.6	4.5	3.8	3.9	6.3
Household real disposable money income	0.6	5.9	9.1	8.0	-0.7	1.6	4.0	3.4	-0.2	5.3	2.4	1.5	3.3	4.6
Real imputed per employee wage	5.4	3.3	5.1	8.5	4.7	5.3	6.4	6.8	6.3	5.4	4.8	1.9	5.2	8.4
Number of unemployed	-5.8	-6.9	-9.5	-0.6	-2.2	2.7	1.2	3.9	3.8	6.5	4.1	9.5	0.2	-16.1
Unemployment (as % of economically active population, at end-		Γ0	F 7	Г.С	Γ0	F.4	F 2	Γ.0.	F.0		F.4	Г.С	Г.С	F.1
period)	6.0	5.8	5.7	5.6	5.2	5.4	5.3	5.2	5.3	5.5	5.4	5.6	5.6	5.1

Source: Rosstat, Bank of Russia calculations.

Output index of goods and services by key economic activities.
 Quarterly data.

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