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

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The report has been prepared on the basis of data as of 11 September 2014. Data cut-off date for forecast calculations is 25 August 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/eng/publ/Default.aspx?Prtid=ddcp.

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Summary

In September 2014, the Bank of Russia decided to keep the key rate unchanged at 8.00% after its increase by 50 basis points in July. The current stance is conducive to achieving the mediumterm inflation target of 4%. The announcement of sectoral sanctions against the Russian economy by Western countries and the imposition of embargo by Russia on the deliveries of certain types of goods from a number of countries resulted in inflation acceleration and aggravation of economic growth prospects. If the said factors affect prices of a wide range of goods and services and if there is a threat of inflation exceeding the target in the medium term, the Bank of Russia may continue raising the key rate.

Following the June acceleration to a six-month high (7.8% on the corresponding period of the previous year) consumer price growth slowed down to 7.5% in July, due primarily to lower indexation of administered prices and utility tariffs. Foreign exchange market stabilisation facilitated, inter alia, by the rise in the Bank of Russia key rate in March-April 2014 became an additional factor restraining inflation. According to the forecast published in the Monetary Policy Report in June 2014, further inflation reduction was expected in the second half of 2014. However, the imposition of restrictions on the import of certain types of goods from a number of countries led to consumer price growth stood at 7.7% as of 8 September 2014. The scale of further influence of the said factor on prices will depend on the speed of change in suppliers of these goods and the abilities of the import-substituting industries to expand output. The additional contribution to annual inflation connected with import restrictions may amount to 1.5 percentage points and will be made before mid-2015. As a result, consumer price growth rate is likely to remain in excess of 7% till the end of 2014.

Actual GDP growth in 2014 Q2 was somewhat higher than the Bank of Russia's forecast. However, given the restraining impact from internal structural factors, as well as an increased external economic uncertainty in the second half of 2014, economic growth will slow down more than predicted earlier. On the whole, GDP growth in 2014 is expected to stay at the previous level of 0.4%.

The economic growth in Russia is projected to rise gradually and the total output will be close to potential in the medium term. GDP growth will stand at 1.0% in 2015, 1.9% in 2016, and 2.3% in 2017. Domestic investment and consumer demand will remain the major driver of economic growth. As economic uncertainty subsides, economic agents' expectations improve, and financial conditions are eased, investment activity will gradually recover. The commencement of a number of major infrastructure and investment projects supported by the government will also contribute to investment growth. Following its slowdown in 2015, consumer demand growth will recover in 2016-2017 amid an accelerating increase in aggregate wages and salaries, inflation reduction, and stable dynamics of credit supply. In the coming years, external demand growth rates will remain low and will not have a significant stimulating influence on Russia's economic growth. The gradual decline in oil prices will ensure export growth rates to stay low positive. As import growth rates recover, net export's contribution to GDP growth will be slightly negative in 2016-2017.

The current monetary policy stance facilitates gradual slowdown in consumer price growth. According to the Bank of Russia's forecast, inflation is expected to reduce to the target of 4% in the medium term, unless new negative developments occur. A gradual exhaustion of the impact on prices from the restrictions on the import of certain groups of food products from a number of countries imposed in August 2014, exchange rate dynamics stabilisation, low demand pressure due to the aggregate output of goods and services remaining below potential and a fall in inflation expectations will also be conducive to the slowdown in consumer price growth.

At the same time, high inflation risks currently persist and their materialisation may lead to inflation deviating from the target in the medium term. These risks are associated with the uncertainty of further development of the external economic situation and its impact on the ruble exchange rate dynamics and economic agents' expectations. Possible changes to the government's tax policy may also have a strong impact on prices. While determining its monetary policy parameters, the Bank of Russia will take into account the need to ensure inflation slowing to the target without creating risks to economic growth stability.

I. Macroeconomic conditions

I.1. External economic conditions and balance of payments

The recovery of economic growth in Russia's trading partners remains slow and uneven, while foreign inflation remains moderate. In August, the oil price decreased in the global market. The imposition of sectoral sanctions against the Russian economy resulted in restricted access to the foreign capital market for major corporate borrowers. The negative impact of these events on the Russian economy was slightly mitigated by ruble depreciation, which may however result in increased inflationary pressure.

Global economy and financial markets

According to estimates, the decelerating growth in aggregate GDP of Russia's trading partners¹, which began to take shape in early 2014, has continued. This trend is expected to persist until the end of 2014. Moreover, the Bank of Russia has lowered the growth forecast for this indicator. The recovery of the global economy remains slow and uneven, and despite the appearance of positive signals that make it possible to speak of an improved outlook in a number of the world's leading countries, the economic slowdown of European and CIS countries is having a dampening effect on external demand for Russia. In June 2014, the International Monetary Fund (IMF) lowered its forecast for global output of goods and services in 2014 from 3.7% to 3.4%. The revision resulted from not only weak economic activity in Q1 (predominantly in the USA), but also an expectation of slower economic growth in a number of emerging market economies, including Brazil, China, Mexico, South Africa, and Russia.

According to preliminary data, GDP of the euro area did not change² in 2014 Q2 as compared with Q1 (0.2% in the previous quarter). Negative trends were observed in the region's largest economies: Germany (-0.2%), France (0.0%), and Italy (-0.2%, GDP contracted for a second consecutive quarter). On average, the economic data for the euro area released in July-August were worse than market participants had expected. Leading indicators decreased: PMI³ in manufacturing was 50.7 in August, but in France this indicator was below 50 for four months in a row. The consumer confidence index also showed a downward trend. According to estimates, economic activity



Note: Bank of Russia projections are prepared with consideration of outlooks published by the IMF, World Bank, OECD, European Commission, Asian Development Bank, national central banks, and consensus forecasts produced by Consensus Economics, Bloomberg, and Thomson Reuters. Sources: national statistics agencies, Eurostat, Bank of Russia calculations and projections.

¹ The aggregate GDP growth rate across the 23 Russia's foreign trading partners which account for the largest share of Russian exports (countries whose annual share of Russian exports in 2008-2012 was at least 0.9%; the specific weight of each country is determined on the basis of the structure of goods exported to the main Russia's trading partners). See also Table 5 in the Annex.

² Hereinafter throughout section I.1, seasonally adjusted growth rates over the previous period are given, unless indicated otherwise.

³ PMI indices are business activity indicators based on company surveys. A value above 50 means business activity has increased; a value below 50 means it has decreased.



Leading business indicators

Note: PMI indices in manufacturing industries, ISM in the USA, and PMI of HSBC in China. Data for the world as a whole are calculated by J.P.Morgan based on the data for the USA, Japan, Germany, Spain, Italy, France, BRICS nations, Australia, Mexico, etc.

in Central and Eastern European countries also decreased.

In view of the published data, the Bank of Russia has adjusted growth forecasts downward for a number of European countries⁴. Risks of a further slowdown in growth in the region are related to difficulties in the banking sector of certain countries (Portugal and Bulgaria) and the disruption of foreign trade relations resulting from the imposition of bilateral sanctions by the European Union (EU) and Russia. Negative economic trends in European countries are aggravated by extremely low inflation. However, the expansionary actions of the European Central Bank (ECB) are expected to support the economy.

The outlook for GDP growth in CIS countries continued to deteriorate. Apart from domestic imbalances, the slowdown of economic growth in Russia and the increased economic uncertainty had a dampening effect on the economies of these countries. The recession in Ukraine has deepened: in Q2 GDP contracted by 4.6% year-on-year. Considering that the economic conditions in Ukraine failed to see the expected stabilisation, the Bank of Russia revised the forecast of the country's GDP growth rates in 2014 downward. According to estimates, the GDP of Belarus grew by 1.6% in Q2 as compared with 2013 Q2. Economic growth in Belarus is not expected to accelerate perceptibly, because investments in fixed assets continue to contract and the growth of household income is slowing. According to preliminary estimates, the GDP of Kazakhstan increased by 4.0% in Q2, which is below the Bank of Russia's expectations. Moreover, industrial production continued to stagnate. As a result, the Bank of Russia lowered the country's economic growth forecast for 2014.

Favorable trends were observed in the USA and the United Kingdom. After having contracted by 0.5% under the influence of temporary factors in 2014 Q1, US GDP growth accelerated to 1.0% in Q2⁵. The accelerated growth resulted primarily from the increased investments in residential real estate and inventories, which recovered following a significant adjustment early this year. Furthermore, exports and consumer spending have expanded, specifically on durable goods. Short-term business activity indicators and labour market conditions suggest that the favourable trend will continue in 2014 Q3. The unemployment rate fell to 6.1% in August; PMI and the Industrial Production Index were high.

The GDP growth in the United Kingdom in Q2 was 0.8%, the same as in the previous quarter. The increase in GDP was largely caused by 1.0% surge in services, while the Industrial Production Index grew by 0.3%. Despite the fact that PMI in manufacturing fell in July-August, it still remained above 50, indicating further expansion of business activity. The unemployment rate fell from 7.2% in early 2014

⁴ See Table 5 in the Annex 'Change in Bank of Russia forecasts of GDP growth of Russia's main trading partners in 2014'.

⁵ Alongside with preliminary GDP estimate for 2014 Q2, the US Bureau of Economic Analysis conducted an annual revision of data for previous periods. The revision covered the data for a period from 2011 Q1 to 2014 Q1, and for a period starting 1999 for individual components of GDP. Adjusted GDP growth rate in 2013 was 2.2% (the previous estimate was 1.9%), while the estimate for 2014 Q1 was increased from -0.7% to -0.5% (year-onyear growth rate was revised from 1.5% to 1.9%).



to 6.4% in June. However, risks of the real estate market overheating persist: in Q2 demand for mortgage loans grew significantly.

Following the steady growth early this year, the GDP of Japan, as expected, fell by 1.8% in Q2 (GDP growth was 1.5% in the previous quarter), which resulted primarily from an abrupt decrease in household consumption and private investments, as compared with their buoyant growth in Q1 in the run-up to sales tax increase. However, following the decrease in April, many indicators subsequently recovered (PMI in manufacturing reached 52.2 in August). The economic contraction therefore appears to be temporary.

Despite the dampening effect of the recovery slowdown in Europe, the period under consideration saw an improvement of economic conditions in emerging market economies in Asia amid the increased growth rates of the US economy (the USA is a key trading partner for these countries). Economic growth in India accelerated as business community sentiment improved and investment activity increased. In China, government expansionary actions – the reduction of reserve requirements for individual banks and infrastructure projects – contributed to acceleration of economic growth to 2.0% in 2014 Q2 (1.5% in the previous quarter). The acceleration resulted primarily from the





increased investments and exports. Leading indicators continued to point toward an increase in business activity: PMI in July-August stood above 50. However, macroeconomic statistics in July-August, including data on industrial production and lending volumes, pointed to a potential slowdown of economic growth. There are persisting concerns about the real estate market conditions, where prices continued to slide in July. Thus, the prospects of GDP growth to the target level (7.5%) established by the Chinese authorities are subject to considerable risks.

On average, inflation increased in Russia's trading partners in June-July 2014. At the same time, price dynamics similarly to movements in business activity indicators varied significantly among these countries. Annual price growth rates in the USA, Japan, United Kingdom, Brazil, and Turkey were higher in June-July than in February-May 2014. Inflation in Russia's major CIS trading partners saw the most significant acceleration. However, its impact on Russian import prices was smoothed out by the depreciation of the national currencies of Ukraine and Kazakhstan against the ruble since early 2014. The euro area saw further disinflation: in July the price growth rate dropped to 0.4% yearon-year, which was significantly below the ECB target. Five of the region's countries experienced

External conditions affecting the Russian economy

External conditions are highly significant for the Russian economy. However, different aspects of these conditions (a change in oil prices or the global business cycle, as well as factors that specifically affect the financial flows between Russia and the rest of the world) may exert different influence. Accordingly, a quantitative assessment of the impact of external factors on economic growth is an ambitious task. At present, economic recovery in advanced countries may potentially stimulate the Russian economy. Nevertheless, energy price dynamics, traditionally regarded as an important factor of economic growth in Russia, could be an external factor that has an adverse impact. Furthermore, factors specific to the Russian economy may result in the size of financial flows between Russia and foreign countries deviating from that dictated by global trends.

GDP growth rate projections for 2011-2014 based on a Bayesian VAR model can be used to illustrate the significance of assumptions regarding dynamics of external sector indicators when forecasting economic growth in Russia¹. For example, the median forecast, which was obtained with the actual price of oil, in general accurately reflects the actual dynamics of Russia's GDP, but the broad confidence interval indicates considerable uncertainty in the identified relationship between the price of oil and economic growth in Russia (see chart below). Using the euro area's economic growth rate, which approximates external demand dynamics, as extra information in the calculation of the forecast helps significantly narrow the confidence interval, though it fails to predict the slowing of Russia's GDP growth that occurred in the first half of 2014 amid accelerated economic growth in Europe. Overall, Russia's GDP forecast is most accurate when using the balance-of-payment indicators (volume of exports, and foreign financial assets and liabilities), which could be considered as indicators of the Russian economy's interaction with the external sector.

The results indicate that the slowdown in Russia's economic growth in recent years is largely due to the influence of external factors. Accounting for oil prices alone is insufficient when analysing external conditions, and the dynamics of economic growth in trading partner countries is very important. However, the information contained in the standard variables is not enough to explain Russia's economic slowdown in the first half of 2014. The disruption of exports and financial flows as a result of the rise in external economic uncertainty were highly detrimental to Russia's GDP growth in this period.



¹ The model was evaluated using quarterly data for the period from 2001 to 2010 and contains a set of 21 macroeconomic indicators (in addition to external sector indicators, these were economic activity, and price and monetary indicators). For more information about the evaluation method, see Banbura, M., Giannone, D., Reichlin, L. (2010) Large Bayesian VARs, Journal of Applied Econometrics, vol. 25 (1), pp. 71–92.

The Bank of Russia's results concerning the significance of external economic factors agree with IMF estimates (World Economic Outlook, April 2014). IMF estimates also suggest that external conditions, mainly the economic growth of trading partner countries, significantly influence mid-term growth rates in emerging market economies.

The IMF model estimates the elasticity of the 5-year average GDP growth per capita to the growth of trading partner countries at 0.97. Aggregate GDP growth for Russia's trading partners decreased from 4.6% on average in 2003-2007 to 2.4% in 2010 to the first half of 2014. According to the IMF model, this resulted in a structural slowdown of GDP growth per capita in Russia by 2.1 pp. The average rate of growth in terms of trade in this period decreased from 14.2% to 8.8%, and it was negative in 2013-2014. Accounting for the estimated elasticity of 0.1, the less favourable dynamics in terms of trade slowed Russian economic growth by another 0.5 pp (however, this effect is not statistically significant in the model).

On the other hand, the decrease in interest rates in the global financial market that took place in the post-crisis period stimulated growth in emerging market economies. According to estimates, the reduction of average real interest rates in the external market in 2010-2013 relative to 2003-2007 contributed about 1 pp (accounting for the change in the country's financial openness, measured as the ratio of the amount of foreign assets and liabilities net of reserve assets to GDP) to Russia's GDP growth per capita.

deflation, and another three countries saw zero annual price growth.

Global food prices decreased in June-August. The Food and Agriculture Organisation's (FAO) food price index decreased in August by 6.5% as compared with May. Cereals fell in price considerably due to the improved forecasts for harvests in major producing countries. Prices for dairy products dropped significantly amid increased production and a decline in demand. The decrease in global food prices was curbed by the rise in meat prices amid high demand from Asian countries (especially China) and reduced shipments from Australia and the USA.

The coming quarters are likely to see further slide in global food prices due to the expected increase in supply for a number of commodities. Furthermore, the risks of weather deterioration due to El Niño⁶ decreased over the past quarter. According to experts, the probability of this phenomenon and its expected intensity were not as high as had been considered a quarter earlier. The observed economic slowdown in Europe together with the reduction in global food and energy prices increase the likelihood that external inflationary pressure will not intensify for Russia in the coming quarters. However, the change in the structure of trading relations due to the embargo on certain imports will become a pro-inflationary factor for Russia. The need to find new suppliers in the international market may accelerate domestic price increase in the short term resulting from the reduced supply. Another consequence may be the importers' reorientation to food suppliers from countries with higher food cost and overall higher inflation level.

Amid depressed business activity and weak inflationary pressure, the central banks of developed countries continued to adhere to loose monetary policy during the period under consideration, which led to interest rates staying low in the global financial market. However, given heterogeneous economic conditions in various countries, regulators' plans varied markedly. Easing of monetary policy by the ECB on 5 June⁷ resulted in reduced level of yields in European markets. On 4 September, the ECB decreased the key rate again and announced

⁶ A temperature anomaly manifested as an increase in surface temperature of the equatorial Pacific, usually occurring once every few years. When El Niño develops, changes occur in the circulation of the atmosphere which can cause a serious deterioration in weather conditions in Southeast Asia, South America, and Australia (droughts, floods, and hurricanes).

⁷ For a detailed description of measures announced by the ECB refer to Monetary Policy Report No. 2 (6).

Global food prices (%)*



Sources: national statistics agencies, Eurostat.

Inflation in Russia's trading partners: emerging economies (as % of corresponding period of previous year)





* Last month average to previous period last month average. Source: FAO.

Source: Bloomberg



10-year developed economies' government bond yields. Emerging markets bond index (EMBI) spread (%)

Sources: national statistics agencies.

a programme to purchase asset-backed securities beginning in October 2014. The Bank of Japan also continued its accommodative policy. However, monetary policy stance in the USA and the United Kingdom may soon be changed: the minutes of the latest meetings of the Federal Open Market Committee of the US Federal Reserve System and the Monetary Policy Committee of the Bank of England suggest that interest rates may be raised more rapidly than market participants had previously expected.

Indicators of volatility and investors' risk perception in the global financial market

remained low until the second half of July, but subsequently spiked due to the aggravated tensions in Ukraine and the Middle East. In the second half of August, indicators of volatility fell again, despite the persistence of a number of potential risk factors. The MSCI World Index increased by 2.4% in June-August (7.6% in February-May) with European stock indices falling amid weak macroeconomic data and the bilateral sanctions imposed by Russia and the EU, which may harm the European economy. The US S&P 500 Index added 4.1% during the period under review. Indices of emerging market



Source: Bloomberg

economies showed the most pronounced growth (5.9%) supported, inter alia, by the expectation of accelerated economic growth in China.

Russia's external financial conditions saw improvement in June and the first half of July amid favourable environment in the global financial market, but further aggravation of the situation in Ukraine and the imposition of sectoral sanctions against the Russian economy by certain countries resulted in significant increase in risk premiums and tighter terms of





Note: average CDS spread for emerging market economies is based on the data for Brazil, China, Turkey, Mexico, Malaysia, Poland, Hungary, etc.

Difference between CDS changes in Russia and other countries

Average CDS spread change in emerging market economies

CDS spread change in Russia

external lending. Restricted access to the capital markets of developed countries forces major Russian companies to seek new funding sources, and this subsequently results in higher funding costs. Tighter lending conditions affect not only those companies for which the restrictions have been imposed. Placement of Russian corporate Eurobonds has almost entirely ceased since the middle of July. The general decline in investor confidence in Russian assets and the increase in risk premiums (5-year CDS spread for Russia

Evidence of bubbles in global stock markets and the attendant risks for Russia

Imbalances in asset markets can have a significant influence on the situation in the financial system and in the economy as a whole. In periods of high demand for risky assets, rising prices can become selfsustaining, resulting in securities prices that deviate substantially from fundamentally justified levels. In the long term, this may lead to runaway inflation and the outflow of funds from the real economy. Conversely, when the bubble 'pops', the stock market's sell-off can also become self-sustaining. Collapsing asset prices, growing uncertainty, and rising risk premiums ultimately cause an economic recession.

| MSCI US | Current P/E | 5-year average | 5-year average Current to average ratio p- | |
|------------|-------------|----------------|--|----------|
| 30.06.2000 | 25.2 | 19.8 | 1.27 | 92.7% |
| 30.09.2007 | 16.6 | 16.1 | 1.04 | 79.4% |
| 25.08.2014 | 17.0 | 14.4 1.18 | | 96.3% |
| MSCI WORLD | Current P/E | 5-year average | Current to average ratio | p-value* |
| 30.06.2000 | 27.1 | 24.4 | 1.11 | 89.8% |
| 30.09.2007 | 15.5 | 15.5 | 1.00 | 48.7% |
| 25.08.2014 | 16.1 | 13.9 | 1.16 | 92.3% |

P/E values of US and global stock indices

* Probability of P/E under the current value in the assumption on normal distrubition of P/E. Sources: Bloomberg, Bank of Russia.



Sources: Bloomberg, Bank of Russia.

Moreover, the global nature of the world's financial markets means that bubbles forming (and popping) in one major market has a spillover effect on the markets of other countries. The US stock market – the largest market in the world – deserves special attention in this regard. Developments in the US market usually set trends for the global financial market as a whole. For example, the Fed's announcement of its intention to taper the asset purchase programme in the middle of 2013 led to a massive outflow of funds from emerging markets.

Over the past few years global stock indices (primarily in advanced countries) have grown considerably, reaching new all-time highs.

The ratio of profit per share to the price of a share (price-earnings ratio, P/E) is traditionally used to assess the validity of stock indices.

Various versions use the actual profit for the reporting period, or the forecasted profit or average profit, adjusted for inflation. This indicator may be interpreted as the period over which an investment in the shares will pay for itself if they generate the same income. P/E is usually much more stable over time than the stock indices themselves and a major deviation from the average value suggests an over- or undervaluation of the shares as compared to fundamental indicators (company income dynamics determined by the economic situation).

These indices are currently valued even higher than in the run-up to the dot-com bubble of 2000-2001, creating the risk of a substantial adjustment if a suitable newsworthy event occurs.

A significant deviation of the ratio from average values is a highly reliable indicator of a stock index's future dynamics. When the difference between the current P/E value and the 5-year average P/E value approaches two standard deviations, the probability for a reversal in the index dynamics is high. In 2014, US stock indices have approached 'dangerous' levels once again.

Equity market capitalisation to GDP Corporate profit share in US GDP in different countries (%) and stock index dynamics 2,000 20 World as a whole USA 1,600 16 Euro area UK 1.200 12 Japan 800 8 China India 400 4 Brazi Russia 0 0 1991 1993 1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 0 20 40 60 80 100 120 140 160 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 Average level in 2003-2013 Corporate profit/GDP, %, right-hand scale Current capitalisation to 2014 GDP forecast by IMF S&P 500 Sources: Bloomberg, Bank of Russia. Sources: Bloomberg, IMF, Bank of Russia.

Another indicator of over- or undervaluation of the asset market is the ratio of stock market capitalisation to nominal GDP. In equilibrium, stock market capitalisation grows at rates comparable with the nominal

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Sources: Bloomberg, Bank of Russia.

GDP growth rate. A major deviation from the average ratio of capitalisation to GDP may be caused by an unusually high (or low) capitalisation level, which in turn is indicative of overvalued (or undervalued) assets.

Globally, the current level of stock market capitalisation to GDP remains comparable to the 10-year average. However, there are significant differences between countries: in the majority of emerging market economies the ratio of capitalisation to GDP is still below the average, while in the USA it already exceeds it significantly. In other advanced countries, this indicator also exceeds the average historical levels. We can conclude, therefore, that for large segments of the global stock market prices are beginning to deviate from fundamentally sound levels, creating the risk of an adjustment in demand for risky assets throughout the world.

For now, the US market is the most overvalued. A further negative signal is the fact that the USA will no longer benefit from the two factors that had supported its recent price growth in stock markets, namely: the asset purchase programme of the Federal Reserve is coming to a halt, and the profits of US corporations have begun to fall, at least with respect to GDP.

However, there is also a theory that the current high asset prices in the US market may be considered to be in equilibrium in a sense that they are justified by currently historically low level of interest rates, which can, however, be itself considered 'equilibrium' given current economic conditions, in particular – stable and properly anchored inflation expectations. In this case, a crash of the US (and global) stock market need not be feared, if the increase in interest rates is gradual. With the risk of uncontrolled interest rate increases not apparent, it thus remains unlikely that the US stock market will experience a large-scale adjustment capable of triggering a major collapse of prices in other countries' markets.

Furthermore, the Fed's expected rate hike is partially mitigated by the ECB's loose policy, which will probably maintain the current key rate (0.05%) as least until the end of 2015. The ECB also plans to significantly increase the amount of liquidity provided to European banks.

If the adjustment in the advanced countries' stock markets is a smooth and shallow one, it could even have a beneficial influence on the markets of emerging economies. In contrast to the crisis of 2008-2009, we now see great disparity in the valuations of advanced and emerging markets. The stock indices of emerging market countries (Russia, in particular) remain significantly undervalued. It is highly probable that if the most overvalued markets experience a shallow adjustment, the result will be not a global sell-off of risky assets but a reallocation of funds and increased demand in the most undervalued markets. In the absence of specific for Russia negative factors, this could lead to increased foreign investment in Russian assets.



Note: yield and duration for IG and NIG are calculated on the basis of indexed portfolio of Eurobonds with investment-grade and upper non-investment grade ratings respectively. Source: information agency Cbonds.ru.

averaged 243 bp in August, while in June the spread was some 180 bp) resulted in fall of Russian stock indices and ruble depreciation. Decrease in global oil prices was another factor, which affected the foreign exchange rate. However, capital outflow from the Russian market and depreciation of the national currency were less pronounced than in early 2014 (the ruble nominal effective exchange rate decreased by 2.9% in July-August, while in 2014 Q1 it fell by 7.4%), which can be explained, inter alia, by the interest rate increase, which resulted from the Bank of Russia's tightened policy, making speculations against the ruble unprofitable in the foreign exchange market.

The Bank of Russia expects that with the central banks of developed countries maintaining low key rates short-term interest rates in the global financial market will also remain low over the coming quarters, sustaining the generally favourable external financing conditions for the majority of emerging market economies. However, the increase in mid-term and long-term interest rates and the growth of volatility in the global market are not ruled out in the run-up to the US Federal Reserve's cycle of interest rate hikes. At the same time, given the undervaluation of assets of emerging market economies, the widespread capital outflow from these markets, similar to that of mid-



Note: average exchange rate index of emerging market currencies is calculated on the basis of the exchange rates against the US dollar of Hungarian forint, Brazilian real, Turkish lira, Mexican peso, Polish zloty, Romanian leu, Malaysian ringgit, Philippine peso, Indonesian rupee and Indian rupee. Source: Bloomberg.

2013, is not expected to repeat. However, the persistence of Russia-specific factors connected with the imposed sanctions and possibility of higher external economic uncertainty and new sanctions, suggest that external financial conditions are unlikely to improve substantially for Russia at least until the end of 2014.

Commodity markets

June-August 2014 saw a fall in global prices for Russia's main export commodities, which, in the context of rising import prices, led to a deterioration in terms of trade.

The average price of Urals crude in the period under review decreased relative to February-May 2014, from \$107.4 to \$105.6 per barrel. The price fluctuated widely over this period. In June, due to the conflict in Iraq - one of the OPEC leading oil-producing countries – the price of oil rose to its six-month high (\$113.7 per barrel). However, in August it fell to a 15-month low (\$99 per barrel) due to larger than expected supply from Iraq, where the primary deposits in the south were unaffected by the conflict, and Libya, where key ports that had been previously seized by rebels resumed operation and oil production on a major deposit began after the end of labour strikes. The fall in oil prices was also facilitated by the commencement of oil exports from the United States and the expectation of expanded



Sources: Reuters, Consensus Economics.



Source: International Energy Agency.

shipments due to the lifting of the crude oil export ban that has been in effect for 40 years. The expectation that growth of energy demand will slow down amid worsening global economic growth forecasts has also exerted considerable influence on oil prices. The International Energy Agency lowered the growth forecast for global oil demand in 2014 to 0.9 million barrels per day.

The Bank of Russia expects that the price of Urals crude will return to a level above \$100 per barrel in the coming quarters, considering the ongoing geopolitical risks in the Middle East and Ukraine. Rebels in Iraq, who still control



* Last month average to previous period last month average. Sources: Reuters, World Bank.

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



Sources: Russian Federal Customs Service, Bank of Russia calculations

several oil deposits, continue to attack important strategic sites and oil facilities. International oil companies are evacuating their employees from the country. Disputes about the right to export oil are intensifying between the Kurds and the government. In Libya the opportunity to expand oil production is limited by the capabilities of its worn and damaged infrastructure. Saudi Arabia, the world's largest oil exporter, may continue to reduce production to support prices at an acceptable level (no less than \$100 per barrel).

Other energy commodities also fell in price in the period under review. The price of natural gas in the European market declined due to low seasonal demand and the high stock levels of European consumers. The drop in coal prices resulted from slowing demand from Asian countries, due, inter alia, to reorientation towards other energy sources. In the coming quarters these factors are likely to persist, limiting the possibility for price growth. However, potential disruptions to the flow of gas through Ukraine may exert an upward pressure on the price of this energy source.

Metal prices changed in different ways: iron ore was less expensive on average in June-August compared to February-May 2014 amid increased global exports, while aluminium and nickel rose in price due to the contraction of global supply that took place in the period under review. Despite some growth potential in the coming quarters, according to the World Bank's forecasts, metal prices in 2014 will decline relative to 2013, amid high supply in the global market and slowing demand from China.

Balance of payments

The Russian Federation's balance of payments in 2014 Q2 was formed amid trade surplus growth relative to the corresponding period of the previous year and stabilisation of the dynamics of the financial account's components⁸. The trade surplus increase was ensured largely through the expansion in the value of exports. Energy exports grew, especially oil (amid a 5.9% increase in oil prices and a 2.1% reduction in export quantities, as compared to 2013 Q2), as did exports of non-energy goods. At the same time, imports decreased due to a contraction in domestic demand for foreign goods as a result of the ruble's depreciation and slowing economic growth in Russia. The total balance of trade in services, net wages, and secondary income remained negative and close to last year's levels.

The private sector's net capital outflow in 2014 Q2 slowed down significantly. The portion of outflow that was not caused by fundamental factors but rather an episode of uncertainty in the economy and financial markets, occurred primarily in March 2014. In Q2, private capital outflow dropped sharply. Moreover, according to estimates, a small net inflow was registered in June 2014. Residents' demand for cash foreign currency has stabilised. The normalisation of the situation in the domestic foreign



^{**} Forecast.

Note: items 'Banking sector balance' and 'Change in international reserves' are adjusted by the amount of FX swaps of the Bank of Russia with resident banks and operations on resident banks' correspondent accounts with the Bank of Russia, item 'Other sectors balance' includes item 'Net errors and omissions'. Source: Bank of Russia.

> ⁸ Data on items in the financial account (including reserve assets) given in this section has been adjusted by the volume of resident banks' FX swaps with the Bank of Russia and the volume of operations using their correspondent accounts with the Bank of Russia.

exchange market and the Bank of Russia's measures to increase exchange rate flexibility led to a decline in the Bank of Russia's foreign exchange interventions aimed at smoothing out fluctuations in the ruble's exchange rate. In 2014 Q2, FX reserves grew by \$3.2 billion after their fall by \$40.5 billion in the previous quarter.

According to the Bank of Russia's forecast, the observed decrease in oil prices and projection that they will remain below last year's levels will result in smaller goods exports in the second half of 2014 relative to the same period last year. However, the drop in imports of goods (including due to the import embargo on food products) will be more significant, which together with the reduction in the deficit of primary and secondary income balances will increase the current account surplus to nearly \$14.0 billion (\$7.3 billion in the corresponding period of 2013). Capital outflow will continue to slow down in the absence of additional external shocks, but with the restrictions on access to the capital market imposed by the EU and the USA, difficulties will remain for Russian companies borrowing funds in the international market. In the second half of 2014, the net outflow of private capital from Russia may reach about \$20 billion, and by the end of the year it may total approximately \$90 billion. However, if the external economic situation deteriorates, capital outflow may increase, leading to a weaker ruble and, consequently, to an increase in the current account balance.

I.2. Financial conditions

Given Russian companies' restricted access to international capital markets, the cost of borrowing in the domestic market rose in June-August. Rates have increased in both the bond and credit markets, with long-term rates climbing quickly, reflecting increased geopolitical and economic risks, as well as an intensification of the lack of long-term borrowing, which have largely been obtained through foreign bond markets. Furthermore, Russian companies' lack of access to external funding may contribute to increased bank lending and domestic bond market volumes.

Money market and Bank of Russia banking sector liquidity management

In June-August 2014, both the banking sector's demand for liquidity, i.e. correspondent account balances of credit institutions with the Bank of Russia, and the autonomous factors that form its supply, aligned with long-established seasonal trends to stabilise banks' demand for refinancing. The absence of foreign exchange interventions over most of the period under review also played an important role. Consequently, credit institutions' outstanding amount on refinancing operations accounted for about 5.2 trillion rubles.

Credit institutions' total outstanding amount on the Bank of Russia's refinancing operations remained relatively stable, though its structure changed somewhat. The subsequent increased allotment amount at auctions to provide loans secured by non-marketable assets, and the Bank of Russia's measures to extend the Lombard List and reduce haircuts blunted the severity of the scarcity of marketable collateral that peaked in March. As a result, the share of outstanding amount on standing facilities (FX swaps and fixed-rate secured loans) decreased, while the share of auction-based operations increased.

One-week repo auctions remained the main operations to manage banking sector liquidity. The expansion of the amount of funds provided through auctioned loans secured by nonmarketable assets contributed to the reduction of outstanding amount on repo operations to February's levels and created favourable conditions for the functioning of the money market. For example, the average outstanding amount on auction-based repo operations in June-August 2014 decreased by 0.4 trillion rubles to 2.5 trillion rubles. On certain days when demand for liquidity substantially exceeded its supply shaped by autonomous factors, the Bank of Russia conducted the fine-tuning operations to provide liquidity¹.

Regular auctions to provide loans secured by non-marketable assets and, in July, the secondever 12-month loan auction since this instrument was created in 2013, increased the outstanding amount on these operations in June-August by 0.4 trillion rubles to 2 trillion rubles. In July 2014, the Bank of Russia increased the maximum term for fixed-rate loans secured by non-marketable assets or guarantees, and gold, from 365 days to 549 days. This may allow credit institutions, if necessary, to reduce the share of the Bank of Russia's short-term operations in their liabilities.

Amid the stabilisation of the structural liquidity deficit, money market rates in June-July 2014 were predominantly in the upper half of the interest rate corridor, while the average spread between the interbank lending market's one-day rate and the Bank of Russia key rate amounted to about 0.65 pp. Nevertheless, interbank rates dropped to the lower half of the interest rate corridor in the course of several days, primarily due to the banking sector's transition to the current liquidity surplus (in the final days of the required reserves averaging period, when most banks had essentially

¹ In July, the Bank of Russia conducted two two-day 'finetuning' repo auctions and one one-day auction.



Source: Bank of Russia.



Source: Bank of Russia

satisfied the reserve requirements ahead of schedule) and one-off operations performed by major market participants. The volume and structure of money market turnover in the said period did not undergo significant changes. Moreover, the dynamics of weighted-average interest rates in various segments of the market were codirectional.

The situation in the money market changed remarkably in August. The irregular nature of required reserves averaging as well as major federal budget expenditures at the beginning of August contributed to the formation of the current liquidity surplus in the period between weekly repo operations. As a result, money market rates were significantly below the key rate for several days. Under these circumstances the Bank of Russia performed several 'finetuning' deposit operations. The overall decrease in money market rates in August was also stipulated by the change in the situation with FX swaps. Since the beginning of the month, imputed ruble rates on such operations have fallen considerably, which has promoted the adjustment of overnight rates in other money market segments. The increased demand of market participants for dollar liquidity amid the ongoing difficulties in accessing foreign markets has led to a decline in ruble FX swap rates. With increased demand for foreign currency, market participants were willing to exchange rubles (for foreign currency) at significantly lower rates than in previous months. As a result of these trends, the average overnight interbank lending rate in August was close to the Bank of Russia key rate.

The increased needs of banks for dollar liquidity also helped change the volume of transactions in various money market segments in August. For example, certain major market participants, who have long drawn on considerable volumes of ruble liquidity, largely through FX swaps, have reallocated their borrowing in the interbank market by increasing their share of unsecured transactions. Under



Source: Bank of Russia.

these circumstances, the volume of FX swaps gradually fell off in the second half of August with a simultaneous rise in the volume of deposit operations. However, total turnover in all money market segments during the said period remained at the level of previous months.

Despite the ongoing external risks, the base scenario predicts that the demand for refinancing will grow through the end of the year under the influence of seasonal factors alone. The estimated range of this demand has been scaled back slightly to 6.3-6.8 trillion rubles as compared to the previous report (6.3-6.9 trillion

rubles in June). Moreover, due to higher than previously estimated risks of decreased federal budget revenue and potentially increased expenditures, the lower end of this range is more likely. According to estimates, in the first half of 2015 the influence of liquidity factors will help push the need to 7 trillion rubles.

In circumstances where credit institutions' demand for refinancing is expected to continue growing faster than their portfolios of market securities eligible as collateral in the Bank of Russia's repo operations, the Bank of Russia will continue to take measures to offset the liquidity

| | | 2012 | 2013 | 2014 (forecast)*, ** |
|--|--------------|------|------|----------------------|
| Total for autonomous factors | 1 = 2+3+ 4+5 | -1.3 | -1.7 | [-2.2; -1.8] |
| of which: | | | | |
| change in general government accounts with the Bank of Russia (incl. other operations) | 2 | -0.8 | -0.4 | [-0.3; 0] |
| change in cash in circulation | 3 | -0.6 | -0.5 | [-0.4; -0.3] |
| Bank of Russia interventions in the domestic FX market | 4 | 0.2 | -0.9 | -1.5 |
| change in credit institutions required reserves with the Bank of Russia | 5 | 0 | 0 | 0 |
| Change in free bank reserves**** | 6 | 0.4 | 0 | [0.0; 0.1] |
| Change in outstanding amount of Bank of Russia refinancing operations | 7 = 6 - 1 | 1.7 | 1.7 | [1.8; 2.3] |
| Memo item: outstanding amount of Bank of Russia refinancing operations (as of the end of the year)**** | 8 | 2.7 | 4.5 | [6.3; 6.8] |

The forecast of banking sector liquidity factors (trillions of rubles)

* January-August — fact, September-December 2014 — forecast.

** The forecast does not include the impact on the banking sector liquidity exerted by Bank of Russia operations in the domestic FX market, as well as operations with OFZ and Federal Treasury deposits. The impact of these factors will be shaped by the situation in respective financial market segments.

*** During the forecast period the demand for free bank reserves is determined on the basis of credit institutions' correspondent account balances with the Bank of Russia (taking into account the averaged amount of required reserves held in correspondent accounts, banks' need to perform settlements and precautionary motives) and the volume of credit institutions' deposits with the Bank of Russia.

**** Excluding the subordinated loan of Sberbank of Russia and bonds of certain credit institutions in the Bank of Russia portfolio.

needs through operations backed by non-marketable assets.

Asset prices and bond market

The situation in the Russian stock market continued to be greatly affected by external political and general economic uncertainty, and by the Bank of Russia's monetary policy decisions.

As a result of the shift in market sentiment in response to geopolitical developments, actions by international ratings agencies, and sectoral sanctions against the Russian economy, securities prices remained highly volatile. Investors raised the risk premiums for investing in Russian assets. Together with the rate hikes on the Bank of Russia's operations, this contributed to an increased yield of securities.

However, in June, due to a lessening tension in the domestic bond market, the issuing activity resumption, which was formed in May, became a local boom. The number and volume of new bond issues, including non-financial organisations' bonds, rose substantially in the primary corporate bond market. Initial offerings of government and corporate bonds were met with high demand, allowing issuers to reduce the cost of borrowing. Demand for OFZ issues came mainly from non-residents, who increased their share among holders of Russian government bonds. Moreover, in six out of seven auctions held in June through the first half of July, OFZ issues were placed at a premium over their secondary market yield.

The situation changed dramatically in July-August as a result of increased risk aversion in the domestic stock market, greater outflow of non-residents' funds from the market, and the ruble depreciation. Due to unfavourable market conditions, the Russian Ministry of Finance has not held OFZ auctions in the primary market since the last third of July. The number and volume of new corporate bond placements shrank in July by nearly a factor of three relative to June and have remained at that level in August. Bond issues of credit institutions and non-bank financial institutions were placed predominantly in the primary corporate bond market; there was only one bond placement of a non-financial organisation.

After the USA and the EU introduced sanctions in July 2014 against a number of major Russian corporate issuers, imposing a ban on the purchase of financial instruments issued with maturity of over 90 days, external demand for Russian financial assets has declined sharply. In July-August, only a handful of Eurobonds were placed by Russian corporate issuers.







Sources: MICEX SE, Cbonds.ru, Bank of Russia calculations







Sources: MICEX SE, Cbonds.ru.





Sources: MICEX SE, Bank of Russia calculations.

have restricted the ability of issuers with poor credit quality to borrow funds in the primary market. Under these circumstances, certain third-tier corporate issuers have experienced difficulty in servicing their obligations, which led in June and July to a rise in the number of technical defaults and defaults on corporate bonds. In June, the number of technical defaults reached its maximum since the beginning of 2014, the majority turned into defaults in July. In August, corporate bond holders noticeably increased their share of securities redeemed under scheduled buyback options on corporate bond issues offered by the issuers.

Sources: Cbonds.ru, Bank of Russia calculations.

Overall, at the end of August the volume of outstanding corporate, regional, and government bonds in the domestic market grew relative to the end of May by 4.4%, 1.2%, and 0.6% respectively. The market portfolio of corporate bonds in the external market, denominated in US dollars, contracted by 0.3% (in the ruble equivalent it grew by 4.5% due to a currency revaluation).

Despite the growth in the overall corporate bond portfolio, interest in high-risk bonds remained quite weak in June-August. Low investor demand for such issues and the persistent high yields in the secondary market





Sources: MICEX SE, Bank of Russia calculations.

In July-August, the withdrawal of foreign investors' funds from the Russian stock market and the ruble depreciation were accompanied by the fall in Russian financial asset prices. By the end of August, government and corporate bond yields had risen by 1.1 pp and 0.7 pp relative to the end of May, to 9.5% p.a. and 10.1% p.a. respectively.

The OFZ yield curve responded to the increase of rates on the Bank of Russia's operations at the end of July with an average upward shift of 0.3 pp followed by the traditional short-term flattening due to the more substantial increase in short-term bond yields compared with longterm yields. In August, the OFZ yield curve slope steepened because of growth in geopolitical and economic risks (including inflationary risks).

Secondary trading in the domestic bond market remained low in June-August. The average daily volume of OFZ operations on the Moscow Exchange decreased by 13.0% relative to February-May, to 15.4 billion rubles; that of corporate bond operations - by 21.7% to 15.1 billion rubles.

The price volatility and the market portfolio risk premiums grew in the stock market. Price indices, which in June fully recovered their losses over the first three months of 2014, fell rapidly in July and in the first ten days of August approached their minimum for 2014, wavering



Sources: MICEX SE, Bank of Russia calculations.

within a wide horizontal band for the rest of the month. By the end of August, the MICEX and RTS indices had fallen by 2.2% and 8.1% relative to the end of May, to 1,400.71 and 1,190.23 points respectively.

In July, foreign exchange derivative trading rose somewhat following a major decline in the volumes of these operations in April-May, which testified to increased demand for instruments to hedge foreign exchange risks amid the ruble depreciation. Trading volumes for interest rate exchange-traded derivatives remained low.

Despite the fact that in the second half of August Russian securities prices partially offset the losses of the previous month, the stock market situation remains unstable, and prices may continue to be highly volatile next guarter.

In the mid-term, two factors will negatively affect the Russian capital market: the decision to freeze pension savings in 2015 and the restriction of access for Russian issuers to external capital markets due to the introduction of sectoral sanctions by the USA and the EU. Consequently, the domestic bond market will be deprived of two significant sources of long-term financing, which may lead to increased price volatility and greater borrowing costs for Russian issuers. Also, the decision to freeze for another year any transfers of the cumulative part of the state pension to non-governmental pension funds





Sources: Moscow Exchange, Bank of Russia calculations.

and management companies, will mostly affect segments of government and corporate bonds (in particular, securities of second-tier issuers), which account for the bulk of investments by non-governmental pension funds in securities. Therefore, amid the continued low investor demand for Russian assets, certain second-tier issuers will find it difficult to borrow funds in the domestic bond market.

However, for the Russian companies on the list of sanctioned entities, the loss of access to the capital markets of the USA and the EU may stimulate the placement of additional issues in the domestic bond market. In accordance with the redemption schedule for outstanding Russian corporate bonds and euro-commercial papers in the external capital market², in September-December 2014 the issuers on the list of sanctioned entities will be required to redeem (refinance) three issues of Eurobonds totalling \$1.5 billion and 35 issues of eurocommercial papers totalling \$1.0 billion. Increased placements of corporate bond issues in the domestic market from issuers with high credit ratings, may help raise banks' level of market collateral.

Sources: Federal State Statistics Service, Bank of Russia calculations.

In April-June, amid general economic uncertainty, the public's interest in residential real estate as an investment remained high. By the end of June, price indices in the primary and secondary housing markets had risen by an average of 1.6% relative to the end of March (by 4.8% relative to 2013 Q2). The expansion of mortgage lending spurred the increase in prices for residential real estate.

Bank lending and deposit operations

In June-July 2014, the ability of Russian banks to use one of the traditional sources of long-term funding – borrowing in the global market – was restricted. The share of Russian banks' liabilities, loans, deposits, and other funds borrowed from foreign companies (including banks) decreased gradually (8.68% as of 1 September 2014 versus 8.96% in early June and 9.11% in early 2014)³. And though domestic sources of long-term funding had been partially reestablished (the share of household deposits in bank liabilities grew from 27.38% to 27.67% in June-August, the share of bonds grew from

² Euro-commercial paper (ECP) is a debt security issued by companies and banks in the form of a promissory note for short-term borrowing (from 2 to 365 days) in international money markets.

³ Hereinafter throughout this subsection, indicators are calculated using data from the financial statements of active credit institutions included in the State Register of Credit Institutions.



Interest rates in the Russian lending

** Excluding banks and financial organisations. Source: Bank of Russia

1.88% to 1.91%), they were lower than in early 2014 (29.53% and 2.11% respectively).

Under these circumstances, banks, lacking the ability to increase borrowing in foreign markets, have competed more vigorously in the domestic market, especially by raising deposit interest rates. In June and the first half of July the deposit rate increases gradually slowed. Average interest rates on short-term and long-term ruble household deposits in July were 6.2% and 7.9% respectively, which is 0.1 pp above the corresponding rates in May.

After the Bank of Russia key rate was raised in late July, a number of major banks raised their deposit rates. According to estimates, for the ten largest Russian banks operating in the deposit market, the average rate on one-year ruble deposits over 100,000 rubles increased from 8.6% p.a. in the middle of July to 8.9% p.a. in early September.

Banks were predominantly lowering rates on foreign currency deposits in June and the first half of July, but these rates had begun to climb in late July and in August. According to estimates, for the ten largest Russian banks operating in the deposit market, the average rate on one-year dollar deposits over \$3,000 grew from 2.0% in the middle of July to 2.2% in early September. The rate increases on foreign currency deposits may reflect growing demand for funding in



foreign currencies from banks whose ability to borrow foreign currency in the global market was restricted following the imposition of the sectoral sanctions. Moreover, as of 1 September 2014, according to balance sheet data, foreign currency assets of Russian banks exceeded foreign currency liabilities by nearly \$30 billion. Thus, the banks' increased demand for foreign currency may be due not only to the needs of the banks themselves, but also expectations of a potential increase in demand for foreign currency liquidity on the part of Russian companies which have encountered difficulties borrowing funds in the global market.

Deposit rates increased in both nominal and real terms⁴, reflecting the expectation of larger returns on deposits and making them more attractive to depositors. Monthly household deposit growth rates with banks were rising, gradually approaching their level in the corresponding period of the previous year. In June-August ruble household deposits with banks increased by 3.0% (they increased by

⁴ Rate changes in real terms are calculated ex-ante, i.e. excluding inflation expected by economic agents. Real rate increases outstripped nominal growth, because standard indicators of expected inflation suggest that price growth is expected to slow down in 2015-2016. Models (autoregressive and structural models), surveys, and consensus forecasts suggest that inflation is expected to decline in the medium term.





Source: Bank of Russia.

3.7% in the corresponding period of 2013). Though, the annual growth⁵ of ruble household deposits remains low (7.2% as of 1 September 2014 versus 7.9% as of 1 June 2014) as a result of the notable outflow of funds from household deposits in early 2014.

Amid nominal ruble appreciation in June and the first half of July, foreign currency household deposits saw an outflow of funds. In dollar terms, foreign currency household deposits shrank by 3.0% in June-August 2014 (they increased by 3.8% in the corresponding period of the previous year), contributing to reduction of dollarisation of household deposits. However, the notable drop in the ruble nominal exchange rate in the second half of July and in August resulted in revaluation of foreign currency deposits. Consequently, in June-August consumer deposit dollarisation remained virtually unchanged.

The change in the currency structure of household deposits was accompanied by some shifts in the distribution of deposit amounts. As a percentage of total household deposits, the share of deposits in the amount approaching the deposit insurance system's upper indemnity limit (400,000-700,000 rubles) rose from 17.0% to 18.1% in 2014 Q2. In the same period, the

share of deposits exceeding 1 million rubles fell from 40.9% to 39.6%; deposits in the amount of 700,000 rubles - 1 million rubles fell from 8.0% to 7.8%. As the largest deposits generally enjoy the most favourable conditions, their relative decline may suggest that depositors are less inclined to accept risk and are willing to sacrifice more favourable interest rates in exchange for diversification and deposit safety.

At the same time, the flow of household deposits and company assets into the largest banks observed in the first months of 2014, ceased in June-July. This could indicate a lack of concern regarding the stability of Russian banks among their customers.

If this depositor sentiment persists, a gradual flow of depositors' funds into second tier banks offering more attractive deposit conditions can be expected. In this case, the major banks will be forced to employ a more active strategy in the deposit market, including by raising deposit rates. Under these circumstances, the bullish trend in deposit rates may be expected to continue, though gradually slowing through the end of 2014.

The increase in household deposit rates was aggravated by the reduction of a traditional source of inexpensive funding: current accounts of organisations. In June-August balances in ruble-denominated current accounts shrank

⁵ Hereinafter, annual growth rates mean year-on-year growth rates.



Source: Bank of Russia.



Source: Bank of Russia.

by 3.1% and by 23.5% in foreign currency accounts (in dollar terms). The reduced share of current accounts in bank liabilities contributed to the overall increase in the funding cost. More expensive bank funding and increased overdue debt, under both corporate loans and household loans, created the necessary conditions for rising interest rates on loans. However, in June-July rates on long-term ruble loans to businesses increased by 0.7 pp, while rates on short-term loans remained virtually unchanged. This may be due to the fact that in March-May short-term lending rates increased sharply and the growth potential of these rates was already realised to



Source: Bank of Russia.

a certain degree. Another factor contributing to the rapid rate increases on long-term loans may be higher demand for long-term loans by major Russian companies who have encountered difficulties borrowing funds in external markets and have turned to Russian banks for funding.

As expected based on the bank survey⁶ conducted in 2014 Q1, in 2014 Q2 banks coupled loan rate increases with tighter requirements to borrower credit quality and loan collateral. Banks attributed the loan rate increase and changes to non-price lending conditions to the restricted access to external and domestic funding, and to the deterioration of conditions in the non-financial sector. Another factor resulting in tighter requirements to major corporate borrowers was fear that the effect of sanctions imposed on major borrowers would spread and affect their solvency. Banks expect further deterioration of lending conditions for borrowers in the second half of 2014, though to a lesser degree than in Q2.

Under these circumstances, lending growth rates in the Russian non-financial sector has continued to decline. In particular, loan rate

⁶ Bank lending conditions are assessed on the basis of data from quarterly surveys of credit institutions carried out by the Bank of Russia. The assessment method and results of the research have been published on the Bank of Russia website in the section 'Monetary Policy'.



Source: Bank of Russia.

increases, tighter requirements to borrowers, and regulatory measures designed to curb the excessive growth of unsecured consumer lending, have contributed to continued slowdown in the annual growth of household lending (retail lending). As of 1 August 2014, the annual growth rate of consumer loans (except for car loans)⁷ was 17.3% versus 21.3% as of 1 June 2014 and 30.1% as of 1 January 2014. The slowdown in consumer lending was caused not only by the banks' transition to a more conservative credit policy, but also weaker demand from households for these loans. Approximately one fourth of banks participating in the survey of bank lending conditions in Q2 reported reduced demand for consumer loans.

Although annual growth of mortgage lending slowed slightly in the period under review, it still exceeded significantly similar indicators for other segments of consumer lending. As of 1 August 2014, the annual growth rate of mortgage loan portfolio was 31.8% versus 31.9% in early June and 28.4% in early 2014. As a percentage of the total retail loan portfolio, mortgage lending increased gradually, but as of the middle of the year it did not exceed one third. As a result, despite ongoing





high growth in mortgage lending, overall retail lending continues to slow. According to balance sheet data, as of 1 September 2014, the annual growth rate of retail lending was 18.2% versus 22.6% as of 1 June 2014 and 28.7% in early 2014.

A decline in the annual growth rate of lending to non-financial organisations has also been observed. As of 1 September 2014, the annual growth rate of this category's loan portfolio was 15.9% versus 17.5% as of 1 June 2014 (excluding foreign currency revaluations: 13.1% versus 15.1%). Long-term lending (for a period over 1 year) to non-financial organisations saw further rapid growth. Annual growth of the portfolio of long-term loans to non-financial organisations as of 1 September 2014 was 20.4% versus 3.4% for the portfolio of short-term loans. Consequently, the share of long-term loans in the corporate loan portfolio grew by 0.3 pp to 71.7% in June-July.

In terms of its distribution by industry, in June-July 2014 the corporate loan portfolio was still dominated by loans to wholesalers, retailers, and manufacturers. Though, the annual lending growth rates in these industries decreased. On the other hand, lending to mining and construction companies became more active in this period.

⁷ Annual growth rates for mortgage lending, auto lending, and other consumer lending are calculated using the information in sections 1 and 3 of report form 0409115.

In June-July Russian banks continued to expand their lending to small and mediumsized enterprises (SMEs). However, the annual growth rates in SME lending were lower than the corresponding general indicator for loans to non-financial organisations and continued to fall, reaching 9.1% as of 1 August 2014 versus 11.1% as of 1 June 2014.

The rising cost of domestic funding and reduced access to external funding will contribute to further loan rate increases in the second half of 2014. At the same time, tighter requirements to borrowers and the initiation of borrowing in the domestic market by major companies that previously borrowed funds in the global market will promote an overall improvement in the credit quality of borrowers, which will suppress loan rate increases. In the retail lending market, the ongoing replacement of consumer loans by mortgage loans will apply downward pressure on rates on long-term loans.

Lending volumes through the end of the year will be influenced by a number of factors having opposing effects on the turnover of the credit market. On the one hand, rate increases and tighter requirements to borrowers will restrict access to loans for borrowers with poor credit quality, while slow economic growth will dampen increased demand for loans. On the other hand, if the sanctions against certain sectors of the Russian economy persist or new sanctions are imposed, demand for loans will grow on the part of major Russian companies and their foreign affiliates, which are replacing funds borrowed in the external market with loans from Russian banks. These factors may be expected to result in stabilisation of the annual growth rates of the loan portfolio or their moderate decline.

Monetary aggregates

The growth of money supply⁸ continued to slow. Monthly consumer deposit growth in June-July approached the corresponding values of the previous year, but other components of

⁸ Monetary aggregate M2 in the national definition.



Source: Bank of Russia.



money supply still grew slowly or decreased. As a result, the annual growth rates of money supply continued to fall to 6.2% as of 1 August 2014 versus 7.7% as of 1 June 2014 and 14.6% at the beginning of the year. Amid fewer foreign currency deposits of organisations and households, the annual growth of broad money slowed dramatically and amounted to 9.0% as of 1 August 2014, 11.8% as of 1 June 2014, and 15.7% at the beginning of the year.

The slowdown of broad money growth was accompanied by a change in its structure. In June-July the share of household deposits in broad money increased by 0.8 pp to 45.0% as of



1 August 2014. The share of cash also increased insignificantly to 18.3% as of 1 August 2014 (18.1% as of 1 June 2014).

In terms of the components that constitute the money supply, the slowdown occurred amid a reduction in net claims of the banking system to the general government (mainly due to the increased balances in federal budget accounts with the Bank of Russia). The decrease in the Bank of Russia's net foreign assets at the beginning of the year, which was due to largescale interventions in the domestic foreign exchange market, also contributed significantly to the decline in the money supply growth. Credit expansion within the economy, which remained the primary driver of money supply growth, also slowed down.





According to preliminary data, in August the annual growth rates of money supply remained unchanged since the beginning of the month. Foreign currency deposits of households and organisations saw further outflow of funds compensated by an inflow of funds into ruble deposits.

If the components of money supply growth maintain the annual cycle that has been seen in the recent years in 2014, the annual growth rates of money supply can be expected to persist or fall slightly through the end of 2014. If the trend of replacing foreign currency deposits with ruble deposits persists and there are no major exchange rate fluctuations, the annual growth rates of the M2 and M2X monetary aggregates will continue to converge.

I.3. Internal economic conditions

In 2014 Q2, economic activity remained moderate. Although quarterly GDP growth rates ceased to be negative, annual growth rates continued their decline. The dynamics of aggregate demand components was different in the period under review. As investment activity began to show signs of recovery, consumer spending slowed down. Despite the fact that actual GDP growth in 2014 Q2 exceeded our expectations, an increase in the adverse impact of the external factor relative to the previous forecast (Monetary Policy Report, June) will mostly likely produce a larger than forecasted economic slowdown in 2014 Q3-Q4. GDP growth in 2014 is still projected to be 0.4%.

After soaring in previous months due to the ruble depreciation and the influence of supply factors in certain markets, in 2014 Q2 consumer price growth rates remained high. On the other hand, the increase in the Bank of Russia key rate was a stabilising factor for the ruble's exchange rate, which suppressed price growth through the exchange rate channel. Moreover, the rate increases on household deposits normalised the propensity to save and thus reduced demandside pressure on prices.

Inflationary slowdown in July was largely caused by the dynamics of prices and tariffs for utility services. The import restrictions imposed on certain food products led to price growth acceleration in August. Inflation may exceed 7% at the end of 2014.

Economic activity

In 2014 Q2, economic activity remained muted, although the actual economic growth rates were somewhat higher than the Bank of Russia's estimates made in June 2014. Quarterly GDP growth rates ceased to be negative (according to estimates, 0.3% on 2014 Q1 seasonally adjusted). Annual growth rates amounted to 0.8%. Thus, annual economic growth rates continued their downward trend.

The low level of business activity came about amid unfavourable external economic conditions (low economic growth in trading partner countries, uncertainty regarding gas shipments to Ukraine, restrictions on noncommodity exports) and under the influence of internal structural causes. Output gap estimates remained essentially unchanged relative to the previous forecast. The output gap in 2014 Q2 is still negative (according to various estimates, in the range from -0.5% to -1.6%) and will remain negative until the end of the year.

In 2014 Q2, manufacturing industries increased their contribution to economic growth relative to the previous quarter. Industrial production's annual growth rates in Q2 accelerated to 1.8% (1.1% in Q1), but in July stood at 1.5%.

Manufacturing industries contributed the most to industrial production growth. The accelerated production of food goods, coke and petroleum products, and metal was the most significant (considering their weight in the industrial production index).

Accelerated growth in food production was most likely due to import substitution. The imposition of additional bans on import of









Sources: Rosstat, Bank of Russia calculations.

Industrial production growth and capacity utilisation (%) Utilisation Production 18 84 -82 16 -80 14 78 12 -76 10-74 8 72 6 70 2013 2011 2012 2014 Production (December 2009 = 100%, seasonally adjusted) Industrial capacity utilisation

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

certain types of products may further promote import substitution. However, the increased rate of production growth due to this factor is limited by significantly depreciated equipment, high equipment load, and limited labour supply. The growing uncertainty accompanied by temporary rise in demand also supported increased output of durable goods in Q2.

The increased growth in production of petroleum products and coke was primarily due to the rise in exports. In particular, increased exports of premium diesel fuel to European countries was largely ensured by the modernisation of Russian oil refineries that has



Output in consumer-oriented industries

(growth as % of corresponding period of previous year)

* Furniture, jewellery, musical instruments, sports goods, games and toys, household goods, interior design items, small wares and other consumer goods.

been in progress over the past few years and has enhanced the competitiveness of Russian exports. In addition, the ruble depreciation in late 2013 – early 2014 caused a rise in profitability of petroleum product exports and, consequently, created the necessary conditions for increased production.

Increased production in the metallurgy industry was partly due to the substitution of diminished imports from Ukraine and the substitution of Ukrainian metal products in the external market. This industry's output was also stimulated by the ruble depreciation and price growth (since February this year) for non-ferrous

32


Output in export-oriented industries (growth as % of corresponding period of previous year)

Source: Rosstat.

Output in investment-oriented industries (growth as % of corresponding period of previous year)



Source: Rosstat.

metals in the global market, which bolstered profitability for metallurgical companies.

However, the subsequent contraction of investment demand continued to suppress output in manufacturing investment-oriented industries (machine and equipment production), and decrease in construction production volumes (except residential construction).

Production growth in the mining industry was moderate in Q2, as it was in the previous quarter. However, in July it slowed noticeably due to reduced production of basic hydrocarbons (oil and natural gas). July saw this year's first

6 4 2 0 -2 -4 -6 -8 2011 2012 2013 2014 Mining Manufacturing industries

Business confidence indices by activity type (seasonally adjusted)

Sources: Rosstat, Bank of Russia calculations.



GDP growth structure by expenditure (percentage points)

Sources: Bank of Russia calculations, Rosstat.

positive output dynamics in the production and distribution of electricity, gas, and water.

Weak economic activity was observed amid the development of a long-term trend towards a reduction in labour supply as a result of demographic factors. In June and July 2014, the unemployment rate reached its record low: 4.9% (5.1% seasonally adjusted). In 2014 Q2, just as in the previous quarter, signs of a larger labour shortage appeared: lower parttime employment and a higher number of hours worked per employee. However, despite the high labour force utilisation, annual growth in



Sources: Rosstat, HSBC, Russian Economic Barometer, Bank of Russia calculations.





Source: Rosstat.



Source: Rosstat.

real wages dropped (from 4.4% in Q1 to 2.4% in Q2 and 1.8% in July). This reflected the labour market's adaptation to weaker business activity and cooled consumer demand.

The dynamics of aggregate demand components were different in Q2. After a surge of feverish demand in February-March, household final consumption expenditure fell in Q2, which was reflected in a decrease in the annual growth rates of the retail turnover from 3.6% in Q1 to 1.8% in Q2 and 1.1% in July this year. Consumption fell amid slower wage increases and saturation of the retail lending market. Moreover, banks' increase of the rates Source: Public Opinion Foundation survey results.

on household deposits also helped restore the public's propensity for organised savings and limited consumer demand. In 2014 Q3-Q4, household final consumption expenditure is expected to stabilise in the range of 1.5-2.0% relative to the corresponding period of the previous year.

In contrast, investment demand dynamics improved somewhat. In 2014 Q2, fixed capital investments declined more slowly, to 1.4% year-on-year, following 4.8% in Q1. Amid the ongoing geopolitical uncertainty, restricted opportunities for a number of major Russian corporations and credit institutions to borrow

The role of structural shifts in unemployment rate dynamics in 2008-2014

The Russian model of the labour market has a number of specific features whose importance is underscored in the works by R. Kapelyushnikov, A. Oshchepkov, and V. Gimpelson¹. The main specifics are the 'hybrid' nature of the Russian model of the labour market (with adjustment for demand shocks not only by changing employment and unemployment indicators, but also by changing the number of hours worked, the load on the labour force, and wages) with strong (and strengthening) pressure from structural factors on the dynamics of labour market indicators. The rise in the labour force shortage (a decrease in the number of working-age population) and structural changes (demographic, educational, and regional) in economically active population (those who are 15-72 years old) have been registered,







Sources: Haver, Rosstat, Bank of Russia calculations.



Sources: Rosstat, Bank of Russia calculations.

which are causing a drift in the natural level of unemployment, i.e. a decrease in NAIRU, as was noted by L. Ball and G. Mankiw, (2002)².

A work by R. Kapelyushnikov and A. Oshchepkov (2014) indicates that from 2008 to 2013 the drift in unemployment caused by shifts in age, gender, and education, could stand at about 1 pp. That is, instead of 5.6% at the end of 2013, in the absence of structural shifts, unemployment may have been approximately 6.5%. According to our calculations, the change to the regional and settlement (urban/rural) structure of the economically active population helped reduce the unemployment rate in the said period by 0.2-0.3 pp. Consequently, by the end of 2013 the structural factors' contribution to the decline in unemployment could have accounted for about 1.5 pp.

¹ V.E. Gimpelson, R.I. Kapelyushnikov. Rossiyskaya model rynka truda: tsenovoye izmereniye [Russian Model of the Labour Market: Price Measurement] // In the book: Zarabotnaya plata v Rossii: evolyutsiya i differentsiatsiya [Wages in Russia: Evolution and Differentiation]/Chief editor: A.V. Poletayev. Issue 2. M.: Publishing House SU-HSE, 2008. Ch. 1. Pp. 18-96. R.I. Kapelyushnikov, A.Yu. Oshchepkov. Rossiyskiy rynok truda: paradoksy postkrizisnogo razvitiya [Russian Labour Market: Paradoxes of Post-Crisis Development]. Voprosy ekonomiki [Economic Questions], 2014, No. 7. R.I. Kapelyushnikov. Konets rossiyskoy modeli rynka truda? [End of the Russian Model of the Labour Market?]. M.: Fond Liberalnaya missiya [Liberal Mission Fund], 2009.

² Ball, L., Mankiw, G., The NAIRU in Theory and Practice, Journal of Economic Perspectives, American Economic Association, 2002, vol. 16 (4), pages 115–136, Fall.



Source: Public Opinion Foundation survey results.





Source: Rosstat.

capital in external markets, and Russian banks' tightened requirements for borrowers, in the second half of 2014 fixed capital investments are expected to stay negative (about 2-4% relative to the corresponding period of the previous year).

Limited demand (especially investment demand) and the rise in prices for imported products have reduced import quantities, which, amid growing exports, ensured positive contribution to the Russian economic growth from net exports of goods and services. According to estimates, in the second half of



Source: Rosstat.

Net financial result* for large and medium Russian enterprises in January-June 2012-2014 (billions of rubles)



* Profit (loss) before taxes. Source: Rosstat.

2014 net exports will continue to boost GDP growth.

Despite the fact that actual GDP growth in 2014 Q2 exceeded the Bank of Russia's forecast, the imposition of a number of additional sanctions by the USA and the EU and the subsequent deterioration of economic agents' expectations will most likely lead to a larger than predicted economic slowdown in 2014 Q3-Q4. Thus, according to estimates, in the second half of 2014, economic growth is expected to decline further. GDP growth is still projected to be 0.4% in 2014.

Fiscal policy

According to data from the Russian Treasury and the Russian Ministry of Finance, in January-July 2014 the Russian Federation's budgetary expenditures amounted to 34.0% of GDP and non-interest expenditures were 33.3% of GDP, which is lower by 1.4 pp and 1.5 pp respectively than the same indicators for the corresponding period in 2013.

Amid a slight decline in budget revenues relative to GDP caused by a reduction in nonoil-and-gas revenues, and a simultaneous rise in oil-and-gas receipts due to the decrease in the national currency's exchange rate, budgets within the Russian Federation's fiscal system were executed with a surplus of 3.4% of GDP, which exceeds the same indicator for 2013 by 1.4 pp. However, in January-July 2014, the Russian Federation budget's primary non-oiland-gas deficit amounted to 6.5% of GDP, which is 0.8 pp lower than the same indicator for the corresponding period in 2013.

According to Bank of Russia estimates, in 2014 the income-to-GDP ratio will grow slightly relative to 2013, while the expensesto-GDP ratio will fall by 0.4 pp. As a result, the total deficit and the structural non-oil-andgas primary deficit will decrease by 0.4 pp to 0.8% and 10.4% of GDP respectively. In 2015, without adopting additional tax measures, budget revenues will shrink by 0.4 pp of GDP, almost entirely due to the downward dynamics of oil-and-gas receipts, while expenditures will grow by 1.2 pp of GDP, chiefly on national defence. This will lead to a considerable growth in the total deficit and the structural non-oiland-gas primary deficit to 2.5% and 11.6% of GDP respectively.

According to Bank of Russia estimates, in 2014 the general government's influence on aggregate demand is expected to be positive close to zero.

Assessments of government finance stability, which were prepared using fiscal stress indicators, allow us to conclude that in the short term Russian government finances will remain highly stable. Basic risks persist in the group of indicators characterising long-term budget trends, namely increased government expenditures on pension payments and the age distribution of the population. However, in 2014 Q2 all budgetary indicators showed downward dynamics, as did most indicators in the assets and liabilities management group, which can be explained by both the revision of budgetary plans in the current year and the worsening of the Russian economy, including increased external risks.



Sources: Federal Treasury, Budget Policy Guidelines for 2015 and the Period of 2016 and 2017, Bank of Russia calculations.

Russian Federation budget revenues and expenditures (moving over last four quarters, as % of GDP) 45 12 10 40 8 35 6 4 30 2 0 25 Т 2011 2012 2013 2009 2010 2014 2015 2016 2017 2018 2008 Non-oil-and-gas revenues Total revenues Total expenditures Oil-and-gas revenues (right-hand scale)

Note: Dotted lines reflect Bank of Russia forecast. Sources: Federal Treasury, Ministry of Finance, Rosstat, Bank of Russia calculations.

In 2014, the Russian Federation Government declined to obtain external loans, significantly reduced scheduled domestic borrowing and amounts of privatisation, and increased lending to the constituent territories of the Russian Federation by reducing the volume of the federal budget's excess oil-and-gas revenues transferred to the Reserve Fund. Pursuant to the Law on the Federal Budget for 2014-2016 (including this year's amendments), 231.9 billion rubles will be transferred to the Reserve Fund when the federal budget is executed in 2014. According to Bank of Russia estimates, these transfers may amount to about 150 billion rubles, taking into account the lower budget revenues from oil-and-gas and non-oil-and-gas sources, and given a ruble-US dollar exchange rate that is higher (stronger) than the forecast underlying the federal budget.

Inflation

After climbing sharply in previous months due to the ruble depreciation and the impact of supply factors in certain markets (specifically, increased global prices for certain types of food products and the influence of measures designed to protect Russian markets from inferior imported products), consumer price growth rates remained high in 2014 Q2. On the other hand, the Bank of Russia's increase of the key interest rate stabilised the ruble exchange rate and suppressed price growth rates through the foreign exchange rate channel. The increase in rates on household deposits has normalised their propensity for organised savings and, thus, reduced demand-side pressure on prices. Retail lending dynamics has also restrained consumer demand.

In July, annual inflation fell to 7.5% after having reached this year's maximum value in June (7.8% year-on-year), which was largely caused by lower planned increases in administered prices and tariffs for utility services than in 2013 (the negative contribution to annual inflation is estimated at 0.4 pp). However, in July inflation decreased slower than had been forecast. The annual growth rate of food prices increased from 9.5% in May to 9.8% in July. But fruit and vegetable market experienced deflation (-1.5% year-on-year), which may be due to a shift in seasonality amid favourable harvesting conditions. Annual price increases for other food products remained at elevated levels.

Despite the anticipations that the effects of the ruble depreciation in late 2013 - early 2014 would be exhausted, inflation rose among nonfood goods in July. This may have been caused by a more asymmetric than expected passthrough effect - a phenomenon in which prices have weaker reaction to ruble appreciation than to its depreciation.



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Amid accelerating price growth for certain food products included in the calculation of core inflation and price growth rates for non-food goods that remained at elevated levels, core inflation rose to 7.8% in July. Excluding food products, core inflation increased from 5.3% in May to 5.5% in July.

The additional restrictions on imports of a number of food products imposed in early August, have triggered more rapid price growth: the drop in goods resources is significant (more than 20% for certain products). The annual growth rate of food prices increased to 10.3% in August. Inflation grew to 7.6%. Core inflation climbed to 8.0%.

The total impact of import restrictions on annual inflation may be up to 1.5 pp and may have an extended effect (until the middle of 2015).

The trade restrictions along with amendments to tax and tariff policy under discussion are also creating prerequisites for higher inflation expectations. Under these conditions it is highly likely that inflation will further exceed 7% through the end of 2014.

Exchange rate pass-through effect changing over time

Macroeconomic research frequently refers to the fact that as exchange rate volatility increases due to greater flexibility in exchange rate formation, the economy experiences an overall reduction in effect of the exchange rate pass-through on inflation. This is primarily caused, on the one hand, by the development of a system of currency risk hedging by economic agents and, on the other hand, by the gradual replacement of the transmission mechanism's currency channel by the interest channel in the course of transition to inflation targeting regime. However, when the exchange rate experiences substantial fluctuations during crisis periods accompanied with a surge in uncertainty and inflation expectations, the pass-through effect may increase.

Empirical research on the effect of the exchange rate pass-through on consumer inflation in Russia has been conducted on the basis of the time-varying parameter vector autoregression model (TVP-VAR). The general model may be presented as follows:

$$y_t = c_t + B_{1t}y_{t-1} + \dots + B_{st}y_{t-s} + \varepsilon_t, \varepsilon_t \sim N(0, \Omega_t),$$

where

 y_t is a vector of observable variables (inflation, output, ruble nominal effective exchange rate, interest rate on loans to non-financial organisations);

 $B_{1,r}$,..., B_{st} are matrices of time-varying parameters defined by a random walk process;

 Ω_t is a covariance matrix of the time-varying parameters;

s is a lag depth (a lag of 1 month was chosen based on preliminary testing);

 ε_t is a random error¹.

The TVP-VAR model was parameterised on the basis of monthly data for the period from January 2003 to July 2014 using an iterative Bayesian MCMC (Markov Chain Monte Carlo) approach. The graph shows the computed cumulative values of impulse functions for a response of consumer inflation to an exchange rate shock. These functions were obtained on the basis of model ratio estimates for three periods: January 2002-January 2006 (period 1 – initial points); February 2006-January 2009 (period 2 – appearance of the most severe consequences of the global financial and economic crisis of 2008-2009); and February 2009-July 2014 (period 3 – the latest recorded observations).

The obtained results, which make it possible to estimate the sensitivity of prices to exchange rate movements at each moment in time, indicate that the effect of the exchange rate pass-through on prices did not change significantly in the first half of the sample. The interconnection between the indicators saw certain intensification close to the crisis period of late 2008 – early 2009, but this change is within

¹ For more information, see Jouchi Nakajima, 2011. 'Time-Varying Parameter VAR Model with Stochastic Volatility: An Overview of Methodology and Empirical Applications', IMES Discussion Paper Series 11-E-09, Institute for Monetary and Economic Studies, Bank of Japan.



the bounds of statistical discrepancy (from 0.23 to 0.25). In subsequent periods accompanied by the increased flexibility in exchange rate formation, the pass-through effect decreased by a small but statistically significant amount. Furthermore, the model calculations yielded no empirical confirmation of a major change in price elasticity based on the exchange rate throughout 2014. These estimates assume that consumer inflation will increase by an average of 0.13 pp due to the 1% depreciation of the ruble nominal effective exchange rate against foreign currencies.

However, according to calculations, the impact of foreign exchange rate on inflation exhausts five months after a shock. On average, the response peaks in the first quarter (in the second or third month, in most cases) following

a shock, and in subsequent months the inflationary response decreases, which generally fits the initial intuitive idea of short-term nature of the exchange rate pass-through effect on prices in an economy.

Dynamics of housing tariffs in 2014

In the first half of 2014, housing tariffs experienced remarkable growth¹ (excluding apartments leased from individuals) amid virtually unchanged tariffs for utility services². Previously, these tariffs, for the most part, increased simultaneously (starting from 2012 – on 1 July). In the first half of 2014, tariff increases



on housing services peaked in May at 2.9%. They grew by 5.5% over the six-month period. In June 2014, housing services (excluding apartments leased from individuals) were 10% more expensive than in the corresponding month of the previous year, and the tariff increases contributed 0.2 pp to inflation. The respective indicators in December 2013 were 5.4% and 0.1 pp. After a seasonal increase in July, housing tariffs continued to rise in August as well.

The launch of a new mechanism to arrange for capital repairs of shared property in apartment buildings was a factor in the tariff increase on housing services (both for homeowners and at state and municipal residential properties)³. Payment of a monthly fee for capital repairs became mandatory.

¹ Housing services include leasing apartments from individuals, payment for housing in state and municipal residential properties, services to maintain and repair housing, and services to arrange and perform work to operate residences.

² Utility services include services for heating, cool and hot water supply, water disposal, gas, and electricity.

³ Corresponding amendments to the Housing Code of the Russian Federation were adopted by Federal Laws No. 271-FZ of 25 December 2012 and No. 417-FZ of 28 December 2013. Furthermore, the constituent territories of the Russian Federation determine the minimum fee (the fee is set in rubles per square metre of the owner's total floor space in an apartment building). The obligation to pay the fee takes effect eight months after the official publication of an approved regional plan for capital repairs of shared property in apartment buildings.

Considering the different rates at which innovations are implemented in the regions (specifically, capital repairs plans were adopted in some of the regions in March-April 2014), we may expect capital repairs charges to continue increasing until the end of the year. Overall, due to the increased housing tariffs associated with the introduction of a new mechanism for funding capital repairs, inflation may rise by up to 0.2 pp in 2014. Unlike in previous years, housing services may rise in price more quickly than utility services.

Inflation expectations

Households

In August the estimates of current annual inflation continued their downward trend. while inflation expectations for the year ahead rose markedly. Results are varying on the onemonth horizon: current inflation estimates have increased while the expectations of price growth in the following month continued to decline to become the lowest in the current year. Inflation expectations for the month ahead is likely to have decreased due to the households' perception of the price hikes on certain goods as temporary or their believes that the import ban on certain food products will not raise the cost of their personal basket of goods. On the other hand, greater economic uncertainty may have negative impact on price trends.

According to the results of the population survey commissioned by the Bank of Russia and carried out by the Public Opinion Foundation, in August 2014 median values of the current inflation continued to fall for the third consecutive month. However, estimates of expected inflation rose significantly.

A qualitative analysis of the August survey suggests that a smaller share of respondents noticed accelerated price growth, which corresponds to seasonal price changes. In summer months, consumer price growth rate usually slows down. However, the share of those expecting acceleration of annual inflation in the future increased, while the share of respondents who expected prices to grow slower or cease





rising, declined. Most households (60%) believe that in the next 12 months prices will grow at the current rate. This indicates the inertial nature of inflation expectations.

On the one-month horizon, this August the households' perception of current and expected inflation varied. The share of respondents who noted price increases the previous month grew from 87% to 90%, mainly due to those who indicated insignificant price increases. The share of respondents who expected prices to grow the following month decreased from 76% to 74% as compared with the previous survey. Moreover, the share of respondents who expected prices to grow increased sharply, from 15% in June to 19% in August. The share of respondents who



In your opinion, how will the prices for food products, non-food goods and services develop in the next month? (as % of all respondents)



Source: Public Opinion Foundation survey results.

expected moderate price growth declined from 51% to 46%.

In August households became more concerned about increases in prices for meat and poultry, cheese, sausage, fish and other seafood. However, the population is now less concerned about price increases in housing and utilities as compared with July. In August just as in the several previous consecutive surveys, the share of respondents who noted high increase in prices for milk and dairy products decreased.

Businesses

Surveys of businesses from various economic segments show slowing dynamics in

Diffusion price index for industrial production, expected changes (share of enterprises showing higher rates over the three months. %)



Source: Russian Economic Barometer survey results.

expectations of output price change in 2014 Q3, that is likely to be a consequence of restrictions on demand.

According to the Russian Economic Barometer (REB) surveys, in June 2014 business leaders viewed prices for output products and purchased products as stable, and anticipated a moderate slowdown in price growth rate in the following three months. However, compared with the surveys in 2013, there was a widening gap between the price indices for purchased products and output products, which is indirect evidence of businesses' negative expectations regarding their financial position.

According to surveys conducted by the Bank of Russia in July, most respondents still expected prices to rise, despite these expectations being lower than in the previous month, which is typical of summer months. The largest growth in the share of respondents who believed prices for finished products (services) would fall in the following three months was seen among businesses engaged in chemical and metallurgical production, and production of goods made from concrete, gypsum, and cement.

According to Rosstat surveys, businesses expect slower price increases in retail and services in Q3, probably due to seasonal changes.

Professional analysts

In August professional analysts' inflation forecasts for the end of 2014 worsened significantly.

This August professional analysts continued revising their forecasts for 2014 towards the increased inflation. August's consensus forecasts for 2014 were in the range of 7.2%-7.3%. The experts' expectations worsened primarily due to the imposition of bans and restrictions on imports of certain food products. Various experts' quantitative estimates of this factor's

Expected changes in prices (tariffs, sale prices) for finished goods (services) of enterprises in the next three months (Russia as a whole)



potential impact on consumer price growth through the end of 2014 were in the range of 0.4-2.0 pp.

The median value of expected inflation at the end of 2014, calculated by Bloomberg with consideration of the accuracy of the survey participants' forecasts, was 7%.

Short-term inflation expectations, calculated using financial market data, indicated an increase in inflation expectations in Q2 for the forthcoming quarter.



Inflation forecasts of professional analysts (%)

Quantification of inflation expectations

Source: Bank of Russia

Inflation expectations play an important role in macroeconomic models, affecting decision making in monetary policy (Cagan, 1956¹, Friedman, 1968², Lucas, Rapping, 1970³). Accordingly, the ability to compare inflation expectations calculated using a model with the actually observed inflation expectations of economic agents is extremely important. A number of approaches are used to measure the latter, e.g. estimation of financial market participants' expectations (Hamilton, 1985⁴), estimations based on forecasts by market analysts (Granger, Ramanathan, 1984⁵). This section examines a method of estimating household inflation expectations based on public surveys commissioned by the Bank of Russia and conducted by inFOM LLC.

² Friedman M., 1968. The role of monetary policy. // The American Economic Review, Volume LVIII, March 1968 number 1.

³ Lucas R, Jr. and Rapping L. A., 1970. Price Expectations and the Phillips Curve. // The American Economic Review, Vol. 59, No. 3 (Jun., 1969).

Sources: Rosstat, Interfax, Bloomberg, Reuters.

¹ Cagan, Ph., 1956. The Monetary Dynamics of Hyperinflation. In Friedman, Milton (ed.). // Studies in the Quantity Theory of Money. Chicago: University of Chicago Press.

⁴ Hamilton, J. D., 1985. Uncovering Financial Market Expectations of Inflation. // Journal of Political Economy, Vol. 93, No. 6 (Dec., 1985).

⁵ Granger C., Ramanathan, R., 1984. Improved methods of combining forecasts. // Journal of Forecasting. Volume 3, Issue 2, April/ June 1984.



Consumer inflation expectations for the next 12 months may be calculated using two different questions in the survey. The first question asked respondents to indicate the interval the inflation would be in (interval estimate). The second question asked how prices would change against the current prices (point estimate). The relevance of respondents' answers on the first type of question was evaluated by calculating the share of people whose interval estimate did not agree with their point estimate (for example, respondents saying that inflation would rise and then indicating a lower interval) and the share of respondents who did not even provide an interval estimate. These two categories totalled more than 50% of respondents. Thus, calculating the interval estimate is not meaningful, especially considering the fact that the interval estimate in each period was at least 10 pp. Instead, a

probabilistic approach to numerical estimate of the expected inflation based on respondents' point estimates was employed (Carlson, Parkin, 1975⁶, Berk, 1999⁷, Lyziak, 2012⁸).

The essence of the probabilistic approach lies in the assumption that agents' ideas of the future inflation level x (a random variable) are distributed according to a specific law and this random variable has an expected value (the expected inflation level). Based on the assumption, the random variable's range is split into several segments. In segments ($-\varepsilon$, ε) and ($\pi_0 - \delta$; $\pi_0 + \delta$) the respondent does not distinguish inflation from zero and current inflation respectively ($\pi_0 - current$ inflation, δ , ε >0 – sensitivity parameter). In the remaining intervals the respondent replies that prices will fall, increase slower than at present, or increase more rapidly than at present (Berk, 1999). An assumption is made regarding the distribution $x - F(\theta)$, its parameters θ and the sensitivity parameters δ , ε are estimated using simultaneous equations: $1 - F(\pi_0 + \delta) = a_1$; $F(\pi_0 + \delta) - F(\pi_0 - \delta) = a_2$,..., where a_1 , a_2 – are the share of respondents who believe that inflation will be higher than at present, and the share of respondents who believe it will remain at its current level respectively.

It is not initially possible to rely on the histogram to make any serious assumptions on the form of distributions, because the potential shape of the distribution depends heavily on the sensitivity parameters. Therefore, in this section expectations are estimated on the basis of three distributions frequently encountered in the literature (Berk, 1999, Oral, 2013⁹): normal, even, and noncentral t distributions. The latter is asymmetric with heavy tails, and in the even distribution the random variable is assumed to stay within a limited area, i.e. the respondent cannot expect an infinite rise or fall in prices. It should be noted that as the number of degrees of freedom goes to infinity, t approaches the normal distribution. However, according to the Bank of Russia's estimates, the number of degrees of freedom is small (between 2-3, a fraction is used), lending greater credibility to the estimate using the t-distribution.

In the literature such measures of inflation expectations are used as a variable in structural vector autoregression models (for example, in Clark, Davig, 2008)¹⁰, followed by an analysis of the impulse responses. However, in Russia the monthly inFOM survey data, enabling quantification through this

¹⁰ Clark T., Davig T. An empirical assessment of the relationships among inflation and short and longterm expectations. // Research Working Paper, 2008, No. 5, Federal Reserve Bank of Kansas City.

⁶ Carlson, J. A. and Parkin M., 1975. Inflation Expectations. // Economica, Vol: 42.

⁷ Berk J. M., 1999. Measuring inflation expectations: a survey data approach. // Applied Economics, 1999, 31.

⁸ Lyziak T., 2012. Inflation expectations in Poland. // National Bank of Poland working paper No. 115.

⁹ Oral E., 2013. Consumer Inflation Expectations in Turkey. // Irving Fisher Committee on Central Bank Statistics publication. Bank for international settlements.



Sources: Bank of Russia calculations, Public Opinion Foundation.

method, are available only from April 2014. Therefore, only a preliminary correlation analysis may be performed, which does not allow for fundamental conclusions regarding existing dependencies to be drawn. However, these data may serve as a reference point for future structural analysis. Two assumptions were made concerning the behaviour of inflation expectations. First, inflation expectations can depend on the exchange rate dynamics (ruble/US dollar). Correlation analysis revealed a positive relationship (p < 0.10) between logarithmic differences of these indicators. However, calculating the individual correlation ratios by monitoring the behaviour of current inflation, demonstrated that this relationship is not significant. Second, it was assumed that expectations are adaptive (inertial). A positive correlation (p < 0.10) between the current inflation level and the estimation of expectations was revealed.

The expected inflation level was estimated using various probabilistic distributions and compared with the existing forecasts of the Bank of Russia's models presented in June's Monetary Policy Report (before the imposition of sanctions). Expected inflation in September 2014 is essentially the same for all methods and very close to the previous forecasts by the Bank of Russia. Future inflation expectations show an upward trend, but according to a consensus forecast by experts and the Bank of Russia's model calculations, the inflation level will fall in 2015, indicating that households do not yet use the inflation target as a reference point when forming their expectations.

II. Economic outlook, risk assessment and monetary policy decisions

The external conditions will likely continue to exert moderating influence on the Russian economy in 2015 but this influence will start to weaken in 2016-2017, however, the risks of less favourable developments have increased over the past few months.

Low rates of output growth are expected to be maintained in 2015, together with a subsequent recovery in business activity in 2016-2017. In the medium term, the potential growth of the economy will slow down. Price growth in 2015-2017 will be restrained by the low level of economic activity. In the absence of additional inflationary factors and the maintenance of a moderately tight monetary policy stance, inflation is expected to achieve the target in 2015-2017. Inflation slowdown will facilitate a reduction in bank lending and deposit rates. According to the Bank of Russia's estimates, the expected growth rates of monetary and credit aggregates from 2015 to 2017 are balanced, and will not create risks in achieving the inflation targets.

The main risks forecast at present include the possibility of a continued decrease in oil prices, an intensification of the negative effects of the external financing restrictions, and also uncertainty regarding further dynamics of food prices. The balance of risks for inflation forecast remains shifted upwards, whilst the risks of inflation exceeding the target in the medium term increased somewhat over the past quarter.

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

The draft Guidelines for the Single State Monetary Policy in 2015 and for 2016 and 2017 sets out the scenarios for macroeconomic development and the characteristics of the three-year monetary policy (I baseline and alternative scenarios II and III). This section of the report describes the main parameters of the baseline scenario.

Uncertainty over the Russian economic outlook has increased in past few months. It is associated with both external factors (possible changes in the geopolitical situation, uncertainty about the duration of sanctions and their influence on the Russian economy) and internal factors (including the fiscal policy measures being discussed by the Russian Federation Government).

It is expected that the growth rate of the global economy will increase in the next few years. At the same time, the economic outlook of a number of Russia's trading partners has worsened in the past few months due to the fall in activity witnessed in Europe and the CIS countries. It is expected that growth in external demand will remain insufficient to produce a stimulating effect on economic growth in Russia.

As the global economy recovers, the central banks of advanced countries will move towards consistent normalisation of monetary policy in the near future (in the USA already in the middle of 2015), which will lead to gradual interest rate increases in foreign markets. For emerging market countries, the worsening of external financing conditions due to the rate increases will be partially offset by the readiness of external creditors to provide larger financing volumes, as the global financial markets recover, and the improvement of investor sentiment. Nevertheless, in 2015, the cost of borrowing in the domestic market for Russian companies will increase, and the amount of loans provided lower than supposed earlier, due to the negative



Source: World Bank.

influence of the financial restrictions imposed against Russia. The situation is expected to normalise gradually in the future.

The trend towards worsening in the terms of trade for Russia is predicted to continue. The Bank of Russia expects a fall in the world price of Urals crude from \$106.5 per barrel on average in the period from the start of 2014 to \$102.0-103.0 per barrel in 2016-2017 amid moderate growth in demand and rapidly expanding supply. An increase in demand will be constrained by the slowdown in economic growth in the largest oil importing countries (China, euro area), the introduction of energy-saving technology, and the move towards other energy sources. The expansion in world supply will be driven by an increase in oil production and oil export from North and Latin America and the Middle East. At the same time, serious interruptions in the oil supply are possible. The escalation of the conflict in Iraq, which, according to the forecasts of the International Energy Agency, will be responsible for 60% of the growth in OPEC's production capacity in the medium term, could lead to insufficient investment being attracted for the development of oil reserves. Interruptions to supplies from Libya, in connection with the continuing conflicts in the country, are also possible.



A deterioration in the terms of trade in the medium term will be caused by a fall in oil prices and the expected stability of prices for other significant commodities exported by Russia, together with the continued rise in the prices of Russian imports. This will become an additional factor restricting the potential output growth rate and ultimately economic dynamics in Russia.

The worsening terms of trade, accompanied by a gradual recovery in domestic demand and resulting growth in imports, will lead to a reduction in Russia's current account surplus from more than 2% of GDP in 2014 to about 1% of GDP in 2015-2017. In the absence of Bank of Russia operations in the domestic foreign exchange market under the floating exchange rate regime, the financial account deficit will decrease in proportion to changes in the current account. This will take place mainly due to a decrease in residents' demand for foreign assets.

In these conditions, a relatively low rate of growth in the Russian economy, at 0.9-1.1%, is expected for 2015. A gradual recovery in economic activity is predicted in the future after the lifting of mutual sanctions and restrictions and restoration of access for Russian finance and non-finance companies to world capital markets expected in late 2015. GDP growth, according to estimates, will increase to 1.8-2.00% in 2016, and 2.2-2.5% in 2017 respectively.



Domestic demand in 2015-2017 will, as before, be the main driver of GDP growth. It is expected that already by 2015 the rate of growth in fixed capital investment will be positive. In 2016-2017, a further recovery in investment activity is predicted amid a gradual reduction in economic uncertainty, an easing of internal and external financial conditions, and an improvement in the expectations of economic agents. The planned measures for financing infrastructure projects, the expansion of the Bank of Russia's special refinancing programmes, aimed partially at stimulating lending of long-term investment projects, as well as the start of a large investment project within the framework of long-term cooperation with China in expanding gas exports should also provide support for investment in 2015-2017. It is expected that fixed capital investment growth will be 1.4-1.6% in 2015 and 2.5-3.5% in 2016-2017.

Consumer demand growth is to slow down significantly in 2015 as compared with previous years, with a reduction in salary growth rates amid fairly weak economic activity. Retail lending dynamics will also have a moderating effect on consumer demand. In 2016-2017, due to a gradual increase in business activity, an increased growth in labour compensation is expected, which will facilitate consumer demand growth



Source: Bank of Russia calculations.

recovery. Thus, the rate of growth in consumer demand will be 0.7-0.9% in 2015 and 1.6-2.6% in 2016 and 2017.

The fiscal policy implemented under fiscal rules will make a minor positive contribution to the aggregate demand dynamics, partially offsetting the moderating influence of external conditions on the economy and thus maintaining a countercyclical stance.

Taking into account the labour deficit and structural characteristics of the Russian labour market, it is expected that the market will adapt to any changes in economic activity primarily with changes in salary levels while maintaining a low unemployment rate (4.5-5.0%) over the forecast period.

In 2015, net exports' contribution to GDP growth will be close to zero, with low growth in imports amid comparatively weak consumer and investment demand. Furthermore, the restrictions on imports of certain food products imposed in August 2014, accompanied by price growth in the corresponding segments of the food market, will create conditions for import substitution resulting in a larger share of consumer demand for food products being met by internal production. In 2016-2017, a recovery of investment and consumer demand will lead to an increase in import growth, which, against the backdrop of limited potential for

export growth, will result in a small negative contribution to GDP growth from net exports. In 2015-2017, the annual growth rates of exports and imports will be 0.8-1.6% and 1.0-3.6% respectively.

The baseline scenario forecasts that the negative output gap formed in 2014 will close by the end of 2017. Furthermore, in the medium term a reduction in potential economic growth amid unfavourable demographic trends, long-term deterioration in the terms of trade and a decline in the potential output growth of the trading partner economies are expected. The forecasted potential growth of the Russian economy for the period of 2015-2017 has been slightly revised downward over the past quarter.

The economic growth prospects in the medium term will be determined by the speed and consistency of the essential structural reforms and the ability of the economy to overcome domestic infrastructure and resource limitations, including those linked with unfavourable demographic trends. In these conditions, the possibility of stimulating economic activity using monetary policy measures without significant inflation acceleration may be limited.

In 2015-2017, price growth will slow down. It is expected that the effect from the imposition of sanctions and food import restrictions will be short-term and start to become exhausted from 2015 Q2 due to import substitution and supplies of food products from countries not affected by sanctions. In these conditions, the growth rate of food prices will return to normal by 2015 Q2. Moreover, in August-September 2015, after the expected lifting of trading restrictions, suppliers from EU countries are predicted to return to the Russian market, which will cause an additional reduction in food prices in 2015 Q3-Q4.

Taking into account that the effect of the aforementioned shock will subside, the conditions for a subsequent inflation deceleration will be guaranteed through the forecast moderate growth in consumer demand, stable exchange rate dynamics, and supposed reduction in inflation expectations while maintaining moderately tight monetary policy and the spill-over effect of the slowdown in monetary and credit aggregates growth which took place in 2014. Also, the baseline scenario assumes that the economic agents will regard the acceleration in food price growth in 2014 Q3 - 2015 Q1 as a temporary phenomenon, which will limit the increase in inflation expectations. In these conditions, inflation is forecast to be close to the target of 4.5% at the end of 2015 and will fall to 4% by the middle of 2016.

As inflation reaches its target path, the Bank of Russia will consider the possibility of easing its monetary policy, relying on the evaluation and forecast of such indicators as the output gap, that testifies to the inflationary pressure in the economy, various core inflation indicators, which are not influenced by short-term supply factors, and also inflation expectation indicators.

In 2015-2017, inflation slowdown will be conducive to a reduction in bank lending and deposit rates. An additional factor of the average rates' reduction in the retail segment of the lending market could be an ongoing growth of the share of mortgage loans in the total amount of loans provided to the public. Based on the assumption that the role of external sector transactions in shaping broad monetary aggregates will decrease, lending will continue to be the main driver of their growth.

If there are no significant unexpected fluctuations in the foreign exchange market, the currency structure of bank deposits can be expected to stabilise. According to Bank of Russia estimates, the annual growth rates of money supply (monetary aggregate M2) and credit to the economy will stand at 9-13% in the period of 2015 to 2017. These growth rates seem to be balanced from the viewpoint of financial sector development, consistent with the expected transaction requirements of the economy and will help achieve the targets for reducing inflation.

II.2. Risk assessment

Under the baseline scenario, inflation will converge to the target trajectory in late 2015, and will reach the medium-term target of 4% by the middle of 2016. The balance of risks for inflation forecast remains on the upside. Furthermore, the risks of exceeding the inflation target in the medium term have increased over the past quarter.

The main risks forecast at present include the possibility of further fall of oil prices, prolonged effect of financial sanctions, as well as the uncertainty over further movement of food prices, due to, inter alia, longer restrictions on imports of food products than assumed in the baseline scenario.

Significant and prolonged fall in oil prices is likely to result in, on the one hand, acceleration of ruble depreciation, and on the other hand, significant slowdown in economic growth. In these conditions the reaction of the Bank of Russia will be aimed at supporting the price stability and will be determined according to the expected impact of these factors on the price growth rate. If a long-term trend of falling oil prices develops, the slowdown in domestic economic growth will include a structural component. In these conditions, stimulation of economic activity using monetary policy measures could turn out to be unproductive. The monetary policy stance will be determined on the basis of the analysis of the nature of slowdown in economic growth, the expected effect on exchange rate dynamics, and the impact of the fall in business activity on consumer prices. Furthermore, changes in inflation expectations will be an important factor. If adherence to inflation targeting policy increases confidence in the ability of the Bank of Russia to ensure the achievement of targets, ceteris paribus, it will be possible to support an easier monetary policy stance.

Lower availability of external borrowing, which has become marked against the backdrop

of expansion of US and EU sanctions against Russia, could result in lower sensitivity of ruble exchange rate dynamics to changes of domestic interest rates, including the Bank of Russia key rate, and its lower level than in the baseline scenario in 2015. This sort of exchange rate dynamics could have a stimulating effect on the economy, however, in the short term, the effectiveness of monetary policy could decline, which will hamper the achievement of inflation targets.

The dynamics of food prices is currently one of the main factors of uncertainty of mediumterm forecasts, as the effect of the imposition of sanctions and their duration is fairly difficult to evaluate. If the effect of the import restrictions is extended beyond 2015 Q3, and in case the recovery of trade links with EU countries takes a longer period after the import restrictions are lifted, the growth rate of food prices could remain excessive significantly longer than the baseline scenario assumes. There is a risk that a prolonged acceleration in food price growth will be translated into an increase in inflation expectations due to the adaptive nature in which they are formed. In these conditions, inflation decrease to the medium-term target will take a longer period than the baseline scenario provides for. Given the causes of the inflation growth have a non-monetary nature, the Bank of Russia will implement a tighter monetary policy only in case there are secondary effects, especially the increase in inflation expectations, in order to avoid long-term inflation exceeding the target.

Discussed changes in the tax policy also create additional inflation risks. Implementation of the indicated measures will result in a onetime inflation acceleration, which could be reflected in the inflation expectations. In these conditions, inflation is very likely to remain above the target trajectory in 2015-2016. Taking into account the effect of this factor, the Bank of Russia's policy will be aimed at providing gradual inflation decrease without creating risks of excessive slowdown in the economy, and achieving the medium-term inflation target of 4%.

Monetary analysis of inflation risks

Change in the money supply in the economy contains information required for effective implementation of monetary policy. However, for a meaningful interpretation of this indicator, it is essential to use certain criteria in order to diagnose how quickly or slowly the money supply grows in relation to the movement of fundamental factors. One of the most widespread approaches to such an analysis is an estimation of the money demand function in terms of the ratio of the money supply and factors determining the money requirements of the economy. The monetary gap indicator can be calculated on the basis of the money demand function as a deviation of the actual value of the monetary aggregate from the calculated level corresponding to the current value of the main macroeconomic indicators. The range of values of monetary gaps calculated for the Russian economy is shown in the graph¹.

The increase in the monetary gaps in 2013 and early 2014 can indicate that despite rather low level, the growth rate of monetary aggregates was still higher than considered fundamentally sound. As a result, an excess of money supply could be formed in the economy. Sharp decrease in the gaps shows that the growth of monetary aggregates in 2014 Q2 was significantly lower than the equilibrium growth rate for the first time in several years. On the whole, such movement of monetary gaps is natural



and expected, and reflects the return of the ratio between the money supply and other macroeconomic indicators to the equilibrium point. Nevertheless, this episode can be considered as a turning point in the movement of monetary indicators and provides a basis for expecting a moderate inflationary influence in the medium term.

Taking into account that the alternative models for inflation risk assessment based on the monetary analysis² are indicative of the reduction in the contribution of monetary factors in inflation during the last 18 months, and considering the current movement of monetary indicators and certain restriction of their drivers in the future, the moderating impact of monetary factors on inflation can be expected to persist or increase in the medium term.

¹ For more information about the calculation method, see the article by A. Krupkin and A. Ponomarenko. (2013). 'Money demand models for Russia: A sectoral approach'. Bank of Finland, BOFIT Discussions Papers 31.

² See the article by A. Deryugina and A. Ponomarenko. (2013). 'Money-based inflation risk indicator for Russia: A structural dynamic factor model approach'. Bank of England, CCBS Joint Research Paper No. 3.

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

The Bank of Russia system of instruments is primarily aimed at establishing conditions for effective steering of money market interest rates, which provide for their maintaining within the bounds of the Bank of Russia's interest rate corridor close to the key rate. Besides, the Bank of Russia resorts to certain instruments to provide banking sector liquidity in order to realise other goals not directly related to monetary policy implementation.

Currently, the significant value of banking sector liquidity deficit accounts for a relatively high share of Bank of Russia claims in the liabilities of credit institutions: its value rose from early 2013 by more than 3 pp, to approximately 9% as at the end of the second half of 2014. Under the main operations the Bank of Russia provides funds predominantly for a period of 1 week that could result in a fall in maturity of liabilities of credit institutions. The Bank of Russia uses and develops non-conventional monetary policy operations with longer maturity in order to alleviate this influence. Thus, on 30 June 2014, the Bank of Russia increased the maximum terms for standing facilities to provide loans secured by non-marketable assets or guarantees, and loans secured by gold, from 365 to 549 days. As a result of changes in the maximum terms for provision of funds under the said loans, the Bank of Russia has established conditions to increase flexibility of liquidity management by credit institutions. Loans for a period from 2 to 90 days are extended at a fixed interest rate; loans for a period from 91 to 549 days are extended at a floating interest rate in order to enhance the impact of the Bank of Russia's monetary policy decisions on market interest rates. These operations are not attributed to the Bank of Russia main instruments to provide liquidity, and their use by credit institutions is auxiliary.

During the period under review, the Bank of Russia also adjusted the parameters of some

special instruments used to provide incentives to certain segments of the lending market, the development of which is restrained by structural factors. Along with the increase of the key rate from 28 June 2014, the Bank of Russia increased interest rates on individual transactions by 0.5% to 7% p.a. (1 pp below the Bank of Russia key rate). The change affected the interest rates on loans secured by the rights of claim on loans for investment project financing; loans secured by bonds placed for the purposes of investment project financing; and loans secured by the rights of claim on loan agreements secured by insurance contracts of OJSC Russian Agency for Export Credit and Investment Insurance. The interest rate on loans secured by the rights of claim on interbank loan agreements OJSC MSP Bank concluded with partner banks in the framework of the programme for financial support for the development of small and medium-sized business remained unchanged.

Exchange rate policy decisions

In July-August 2014, the Bank of Russia conducted exchange rate policy in rather favourable conditions in the domestic foreign exchange market. Stabilisation of the situation enabled the Bank of Russia to continue increasing the exchange rate flexibility of the national currency in the framework of the existing exchange rate policy mechanism. In these conditions, despite ruble depreciation against major world currencies, the Bank of Russia did not implement foreign exchange interventions aimed at smoothing the volatility of ruble exchange rate during the period under review.

Furthermore, on 20 June 2014, the Bank of Russia completed reflecting in the domestic foreign exchange market foreign currency purchases by the Ministry of Finance of the Russian Federation and the Federal Treasury



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

Source: Bank of Russia.

for replenishing the Reserve Fund in 2013. Thereby, from 23 June 2014 to the end of the period under review, the Bank of Russia did not carry out any operations in the domestic foreign exchange market.

Starting 17 June 2014, the Bank of Russia decreased the cumulative volume of foreign exchange interventions triggering a 5-kopeck shift in the floating operational band borders from \$1,500 million to \$1,000 million, and decreased the volume of interventions aimed at smoothing the volatility of the ruble exchange rate in the internal ranges by \$100 million. As a result of the adjustments of the exchange rate policy parameters, the range where the Bank of Russia does not implement the FX interventions to smooth the volatility of the national currency exchange rate was increased from 3.1 to 5.1 rubles (with consideration of the 'technical' range). As a result, the volume of foreign exchange interventions aimed at smoothing the volatility of the ruble exchange rate was set at \$0 million for all ranges of the operational band, except those adjacent to the borders. Starting 18 August 2014, the Bank of Russia expanded the operational band from 7 to 9 rubles, set the volume of foreign exchange interventions aimed at smoothing the volatility of ruble exchange rate at level equal to \$0 million in all the ranges of the operational band, and decreased the cumulative volume of foreign exchange interventions to \$350 million. As a result of these adjustments, the Bank of Russia abandons foreign exchange interventions aimed at smoothing the volatility of the national currency exchange rate when the value of the dual currency basket is within the operational band. As before, when the value of the dual-currency basket reaches the borders of the operational band, the Bank of Russia will implement unlimited interventions until the value of the dual currency basket is within the floating operational band as a result of changes in the ruble exchange rate against the US dollar and euro, or the borders of the operational band are shifted in accordance with the rule.

Volume of operations aimed at sovereign funds accumulation (expenditure)**, millions of US dollars

per day

Change of the parameters of Bank of Russia exchange rate policy in 2014

Parameters of Bank of Russia exchange rate policy

FX intervention volumes aimed at smoothing the volatility of the ruble exchange rate*, millions of US dollars per day

1.01.2014

Upper border of the operational band 40.05

| -400 | 0.95 rubles | Upper border of the operational band 40.05 |
|------|-------------|--|
| -200 | 1 ruble | |
| 0 | 0.1 rubles | 'technical' range |
| 0 | 3 rubles | 'neutral' range |
| 200 | 1 ruble | |
| 400 | 0.95 rubles | Lower border of the operational band 33.05 |
| | | I I |

Cumulative volume of FX interventions - 350 million US dollars

3.03.2014

Upper border of the operational band 42.40 -400 0.95 rubles -200 1 ruble 0 0.1 rubles 'technical' range 0 'neutral' range 3 rubles 200 400 1 ruble

0.95 rubles Lower border of the operational band 35.40

Cumulative volume of FX interventions - 1.5 billion US dollars

22.05.2014

| -300 | 0.95 rubles | Upper border of the operational band 43.40 |
|------|-------------|--|
| -100 | 1 ruble | |
| 0 | 0.1 rubles | 'technical' range |
| 0 | 3 rubles | 'neutral' range |
| 100 | 1 ruble | |
| 300 | 0.95 rubles | lower border of the operational band 26.40 |

Lower border of the operational band 36.40

Cumulative volume of FX interventions - 1.5 billion US dollars

17.06.2014

| -200 | 0.95 rubles | Upper border of the operational band 43.40 |
|------|-------------|--|
| 0 | 1 ruble | |
| 0 | 0.1 rubles | 'technical' range |
| 0 | 3 rubles | 'neutral' range |
| 0 | 1 ruble | |
| 200 | 0.95 rubles | Lower border of the operational band 36.40 |

Cumulative volume of FX interventions - 1 billion US dollars

18.08.2014

Upper border of the operational band 44.40

| 0 | 0.95 rubles | oppor border of the operational band 11.10 |
|---|-------------|--|
| 0 | 1 ruble | |
| 0 | 0.1 rubles | 'technical' range |
| 0 | 5 rubles | 'neutral' range |
| 0 | 1 ruble | |
| 0 | 0.95 rubles | Lower border of the operational band 35.40 |

Cumulative volume of FX interventions - 350 million US dollars

* «+» — foreign currency purchase by the Bank of Russia, «-» — foreign currency sale by the Bank of Russia. ** Volume of these operations does not depend on the ruble value of the dual currency basket within the operational band, except for the 'technical' range where the Bank of Russia does not carry out any operations.

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Glossary

Autonomous factors of banking sector liquidity

Changes in the central bank balance sheet affecting banking sector liquidity, but which are not the result of central bank operations to manage liquidity. These autonomous factors include changes in cash in circulation, changes in general 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 in required reserves deposited by credit institutions in required reserve accounts with the Bank of Russia.

Average rate on interbank loans

An average rate on Russian banks' operations to provide loans to other banks. Rates are calculated on all interbank loans (MIACR), loans extended to Russian banks with investment grade ratings (MIACR-IG), and loans extended to Russian banks with speculative grade ratings (MIACR-B). The spread between MIACR-B and MIACR-IG is one of the indicators of credit risk assessment by the interbank lending market participants.

Averaging of required reserves

The right of a credit institution to meet required reserve ratios set by the Bank of Russia 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 lending market as follows: (share of banks reporting a significant tightening of lending conditions, as a percentage) + $0.5 \times$ (share of banks reporting a moderate tightening of lending conditions, as a percentage) - $0.5 \times$ (share of banks reporting a moderate easing of lending conditions, as a percentage) - (share of banks reporting a significant easing of lending conditions, as a percentage) - (share 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 centre of the corridor is set by the Bank of Russia key rate; the upper and lower bounds are rates of overnight standing facilities (deposit facilities and refinancing facilities) symmetric to the key rate.

Bank of Russia key 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)

Total amount of cash in circulation and funds of the Russian Federation residents (non-financial and financial (excluding credit) organisations and households) in settlement, current and other on-demand accounts (including accounts for bank card settlements), time deposits and other

types of deposits in the banking system denominated in the currency of the Russian Federation or foreign currency, and interest accrued on them.

Consumer price index (CPI)

The CPI measures changes over time in the overall price level of goods and services purchased by households for private consumption. This index is calculated by the Federal State Statistics Service being the ratio of the value of a fixed set of goods and services in current prices to the value of the same set of goods and services in prices of a previous (reference) period. The CPI is calculated on the basis of data on the actual structure of consumer spending being therefore one of the key indicators of household living costs.

Core inflation

Inflation being measured as 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 prices for individual goods and services subject to the influence of administrative and seasonal factors (fruit and vegetables, fuel, passenger transportation services, telecommunication services, and the majority of housing and public utility services).

Countercyclical currency

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

Current liquidity deficit

An excess of banking sector demand for liquidity over the liquidity supply on a given day covered by daily Bank of Russia operations in the money market. A reverse situation, called 'current liquidity surplus', is an excess of the liquidity supply over demand on a given day.

Dollarisation of deposits

A share of deposits denominated in foreign currency 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 rubles) and made up of US dollars and euros (effective since February 2005). The ruble value of the dual currency basket is calculated as the sum of 0.55 US dollars and 0.45 euros in rubles (effective since 8 February 2007).

Fiscal stress indicator

An approach developed by the IMF experts using an aggregate early crisis warning indicator, calculated on the basis of studies of signals from three complementary groups 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 unpredictable. 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 Bank of Russia key rate. If the Bank of Russia Board of Directors decides to change the key rate for loans previously provided at a floating interest rate the interest rate applied will be adjusted to the change of the key rate with effect from the corresponding date.

Foreign exchange swap operation

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

Free credit institution reserves

Include ruble correspondent and deposit accounts of credit institutions with the Bank of Russia, as well as credit institutions' investments in Bank of Russia bonds.

Funds on general 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 extra-budgetary funds and extra-budgetary funds of constituent territories of the Russian Federation and local authorities.

Generalised (composite) consumer confidence index

Calculated by the Federal State Statistics Service 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 which considers maintaining price stability as the final target of the central bank. 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 affects the economy through interest rates. Decisions are made primarily on the basis of economic forecasts and inflation dynamics. An important feature of this regime is 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 M1

Total amount of cash in circulation and funds of the Russian Federation residents (non-financial and financial (excluding credit) organisations and households) in settlement, current and other on-demand accounts (including accounts for bank card settlements) opened in the banking system in the currency of the Russian Federation and interest accrued on them.

Monetary policy stance

The characteristics of a monetary policy's impact on the economy. 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 implies economic stimulation with possible upward pressure on inflation.

Monetary policy transmission mechanism

The process of transferring the impulse of monetary policy decisions (i.e. decisions made by a central bank in relation to changes to interest rates on its operations) to the economy as a whole and to 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 raise funds, and as a result on decisions regarding consumption, saving and investment and, thereby, on the aggregate demand, economic activity and inflation.

Money supply

Total amount of funds held by residents of the Russian Federation (excluding general government and credit institutions). For the purposes of economic analysis various monetary aggregates are calculated (see Monetary aggregate M1, Money supply in the national definition and Broad money).

Money supply in the national definition (monetary aggregate M2)

Total amount of cash in circulation and funds of the Russian Federation residents (non-financial and financial (excluding credit) organisations and households) in settlement, current and other on-demand accounts (including accounts for bank card settlements), time deposits and other types of deposits in the banking system denominated in the currency of the Russian Federation and interest accrued on them.

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 ruble exchange rate index

The nominal effective ruble exchange rate index reflects changes in the exchange rate of the ruble against the currencies of Russia's main trading partners. Being calculated as the weighted average change in the nominal exchange rates of the ruble 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 Secured with 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 liquidity-absorbing 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.

Outstanding amount on Bank of Russia refinancing operations

Includes loans extended by the Bank of Russia against the collateral of securities, non-marketable assets, guarantees, and gold, as well as repo auctions and FX swaps.

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 normally appreciates in periods of global economic growth. Specifically, this category of currencies includes the euro, the Canadian dollar, and the Australian dollar.

Real effective ruble exchange rate index

Calculated as the weighted average change in real exchange rates of the ruble to the currencies of Russia's main trading partners. The real exchange rate of the ruble to a foreign currency is calculated using the nominal exchange rate of the ruble 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 ruble 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 ruble liquidity in exchange for collateral in the form of securities.

RGBEY index

RGBEY (Russian Government Bond Effective Yield to Redemption) index reflects an effective yield to redemption of Russian government bonds calculated as an average gross yield to redemption without accounting for bond issue duration.

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).

Shadow banking sector

Financial intermediaries providing credit intermediary services whose activity is not regulated by banking legislation.

Standing facilities

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

Structural liquidity deficit

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. A calculated level of structural liquidity deficit/surplus is a difference between amounts outstanding on Bank of Russia refinancing and liquidity-absorbing operations.

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 revenues, net interest payments, one-off budget revenues, and other items directly dependent on changes in economic activity.

Statistical annex

Table 1

| | | (n | | <i>i</i> ous month, | %) | | | |
|---|-----------|-------------------|----------------------|-----------------------------------|--|--------------------------|---|-------------------------|
| | Inflation | Core inflation | Food price growth | Food price growth ¹ | Vegetable and fruit price growth | Non-food price growth | Non-food price growth, excluding petrol ² | Service price growth |
| | | | 20 |)12 | | 1 | | 1 |
| 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 |
| Мау | 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 |
| | | | 20 |)13 | | | | |
| January | 1.0 | 0.5 | 1.8 | 1.2 | 7.4 | 0.4 | 0.4 | 0.6 |
| February | 0.6 | 0.4 | 0.8 | 0.6 | 2.8 | 0.4 | 0.4 | 0.4 |
| March | 0.3 | 0.4 | 0.4 | 0.5 | 0.1 | 0.4 | 0.4 | 0.2 |
| April | 0.5 | 0.4 | 0.7 | 0.4 | 3.6 | 0.4 | 0.4 | 0.5 |
| Мау | 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 |
| | | | 20 | 014 | | | | |
| January | 0.6 | 0.4 | 1.0 | 0.5 | 5.8 | 0.3 | 0.3 | 0.5 |
| February | 0.7 | 0.5 | 1.2 | 0.7 | 5.1 | 0.4 | 0.4 | 0.4 |
| March | 1.0 | 0.8 | 1.8 | 1.3 | 5.3 | 0.7 | 0.6 | 0.5 |
| April | 0.9 | 0.9 | 1.3 | 1.2 | 2.3 | 0.6 | 0.6 | 0.7 |
| Мау | 0.9 | 0.9 | 1.5 | 1.3 | 2.4 | 0.5 | 0.5 | 0.8 |
| June | 0.6 | 0.8 | 0.7 | 1.1 | -2.8 | 0.4 | 0.4 | 0.9 |
| July | 0.5 | 0.6 | -0.1 | 1.0 | -8.1 | 0.4 | 0.3 | 1.4 |
| August | 0.2 | 0.6 | -0.3 | 0.9 | -10.7 | 0.5 | 0.4 | 0.7 |

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

¹ Excluding vegetables and fruit. ² Bank of Russia estimate.

Sources: Rosstat. Bank of Russia calculations.

Table 2

| | (mo | nth on co | rresponding | month of pre | vious year, % | 6) | | |
|-----------|-----------|-------------------|----------------------|-----------------------------------|--|--------------------------|---|-------------------------|
| | Inflation | Core inflation | Food price growth | Food price growth ¹ | Vegetable and fruit price growth | Non-food price growth | Non-food price growth, excluding petrol ² | Service price growth |
| | | 1 | 20 | 012 | | 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 |
| | | | 20 | 013 | | | | |
| 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 |
| Мау | 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 |
| | | 1 | | 014 | | 1 | 1 | 1 |
| January | 6.1 | 5.5 | 6.5 | 6.4 | 7.7 | 4.3 | 4.3 | 7.8 |
| February | 6.2 | 5.6 | 6.9 | 6.5 | 10.1 | 4.3 | 4.3 | 7.9 |
| March | 6.9 | 6.0 | 8.4 | 7.5 | 15.9 | 4.6 | 4.5 | 8.2 |
| April | 7.3 | 6.5 | 9.0 | 8.3 | 14.4 | 4.9 | 4.7 | 8.5 |
| Мау | 7.6 | 7.0 | 9.5 | 9.5 | 10.1 | 5.1 | 4.9 | 8.4 |
| June | 7.8 | 7.5 | 9.8 | 10.5 | 3.9 | 5.3 | 5.0 | 8.7 |
| July | 7.5 | 7.8 | 9.8 | 11.2 | -1.5 | 5.6 | 5.2 | 7.0 |
| August | 7.6 | 8.0 | 10.3 | 11.5 | -0.8 | 5.5 | 5.3 | 6.7 |

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

¹ Excluding vegetables and fruit.
² Bank of Russia estimate.
Sources: Rosstat. Bank of Russia calculations.

| | | (seasor | nally adjuste | d, growth a | s % of prev | lious period |) | | |
|-----------|---------------------------------------|-------------|---------------|---------------------|--------------------------|-----------------------------|-----------------------------------|--|------------------|
| | Industrial production ¹ | Agriculture | Construction | Freight turnover | Retail trade turnover | Fixed capital investment | Household consumer spending | Output index of goods and services by key industries ² | GDP ³ |
| | | | | 2012 | | | | | |
| January | 0.7 | 0.7 | -0.3 | 2.0 | 0.2 | -0.2 | -0.6 | 0.0 | |
| February | 1.7 | 0.9 | 0.2 | -1.6 | 1.0 | 1.0 | 1.3 | 0.2 | |
| March | -1.6 | 0.8 | -0.1 | 1.1 | 0.1 | 0.1 | 0.2 | 0.0 | 0.9 |
| April | -0.4 | 0.7 | 1.2 | -0.3 | 0.4 | -0.1 | 0.2 | 0.5 | |
| May | 1.1 | 0.7 | -0.8 | -0.4 | 0.7 | 1.0 | 1.1 | 0.5 | |
| June | -1.0 | 0.5 | 1.7 | 0.1 | 0.4 | 0.4 | 0.8 | 0.0 | 0.5 |
| July | 1.0 | 1.4 | -1.2 | 0.3 | 0.1 | -0.7 | -0.4 | -0.2 | |
| August | 0.9 | 0.7 | -0.3 | 0.1 | 0.3 | 0.2 | 0.4 | 0.6 | |
| September | -1.1 | 1.4 | -5.3 | 0.9 | 0.6 | 0.0 | 0.7 | -0.4 | 0.4 |
| October | 0.7 | -1.7 | 6.5 | -2.2 | 0.2 | 0.6 | 0.5 | -0.1 | |
| November | -0.4 | 1.7 | -1.8 | 1.6 | 0.2 | -1.3 | 0.4 | -0.2 | |
| December | 1.0 | -0.6 | 0.8 | 0.2 | 0.4 | 0.1 | 0.5 | 1.1 | 0.0 |
| | 1 | | | 2013 | | | | | |
| January | -1.2 | 0.4 | -0.5 | -0.9 | 0.4 | 1.9 | 0.7 | -0.3 | |
| February | -1.0 | 0.3 | -0.5 | 0.3 | -0.2 | -1.2 | -0.3 | -0.3 | |
| March | 1.0 | 0.3 | 0.0 | -0.2 | 0.6 | -0.1 | 0.5 | 0.5 | 0.1 |
| April | 0.2 | 0.2 | -0.9 | 0.8 | 0.5 | -0.8 | 0.7 | -0.2 | |
| May | -0.2 | 0.2 | 0.4 | -0.3 | 0.1 | 0.7 | 0.0 | -0.1 | |
| June | 0.9 | 0.4 | -1.4 | -0.5 | 0.4 | -0.8 | 0.5 | 0.1 | 0.5 |
| July | 0.0 | 0.7 | 13.4 | 0.3 | 0.4 | 0.7 | 0.6 | 0.4 | |
| August | -0.1 | 0.2 | -11.6 | 0.4 | 0.2 | -0.7 | 0.3 | -0.3 | |
| September | 0.4 | 0.2 | -0.8 | 1.0 | 0.1 | -0.7 | 0.0 | 0.1 | 0.7 |
| October | 0.3 | 1.9 | -0.3 | 1.3 | 0.2 | 0.5 | 0.2 | 0.6 | |
| November | 1.0 | -0.6 | 0.4 | -2.2 | 0.4 | 0.2 | 0.3 | 0.4 | |
| December | -1.0 | -0.5 | -1.0 | 1.7 | 0.1 | -0.6 | 0.3 | -0.8 | 0.6 |
| | | | | 2014 | | | 1 | | |
| January | -1.0 | 0.6 | -0.8 | -0.1 | 0.0 | -1.8 | -0.2 | -0.4 | |
| February | 0.8 | 0.6 | 0.4 | -2.6 | 0.4 | 1.0 | 0.5 | 0.6 | |
| March | 0.2 | 0.6 | -0.6 | -0.3 | 0.2 | -0.5 | 0.1 | -0.2 | -0.9 |
| April | 0.8 | 0.6 | -0.3 | -0.1 | -0.1 | 0.3 | -0.1 | 0.1 | |
| May | 0.1 | 0.5 | -0.8 | 1.2 | 0.1 | 0.2 | -0.1 | 0.2 | |
| June | -0.7 | 0.3 | -0.7 | 0.5 | -0.1 | 0.1 | -0.1 | -0.5 | 0.3 |
| July | 0.6 | 2.1 | 0.0 | -1.3 | 0.2 | -0.4 | 0.0 | 0.4 | |

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

¹ Rosstat estimate.
² Output index of goods and services by key industries.
³ Quarterly data..
Sources: Rosstat, Bank of Russia calculations.

Table 3

Table 4

| (as % of corr | esponal | ng perio | oa ot pr | evious y | year <i>)</i> | | | | |
|--|---------|----------|----------|----------|---------------|------|------|------------------|----------------------|
| | | 2014 | | | | | | | Memo item: |
| | January | February | March | April | May | June | July | January- July | January-July 2013 |
| Output of goods and services by key industries | -0.5 | 1.1 | 0.4 | 0.6 | 0.7 | 0.0 | 0.3 | 0.4 | 0.8 |
| Industrial output | -0.2 | 2.1 | 1.4 | 2.4 | 2.8 | 0.4 | 1.5 | 1.5 | -0.1 |
| Agricultural output | 0.8 | 1.0 | 1.3 | 1.8 | 1.8 | 1.4 | 8.5 | 3.5 | 2.2 |
| Fixed capital investment | -7.0 | -3.5 | -4.3 | -2.7 | -2.6 | 0.5 | -2.0 | 2.6 | -0.2 |
| Construction | -5.4 | -2.4 | -3.1 | -2.8 | -5.4 | 1.2 | -4.6 | -3.0 | 6.1 |
| Retail trade turnover | 2.7 | 4.0 | 4.1 | 2.7 | 2.1 | 0.7 | 1.1 | 2.4 | 4.0 |
| Household real disposable money income | -0.5 | 0.5 | -6.9 | 1.9 | 6.5 | -2.9 | 2.3 | 0.2 | 4.3 |
| Real imputed per employee wage | 5.2 | 4.6 | 3.8 | 3.2 | 2.1 | 2.1 | 1.8 | 3.1 | 5.5 |
| Number of unemployed | -6.6 | -2.5 | -5.4 | -4.7 | -5.2 | -9.8 | -7.8 | -6.0 | -3.0 |
| Unemployment (as % of economically active population, at end-period) | 5.6 | 5.6 | 5.4 | 5.3 | 4.9 | 4.9 | 4.9 | 4.9 | 5.3 |

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

Sources: Rosstat, Bank of Russia calculations.

Table 5

Change in Bank of Russia forecasts of GDP growth of Russia's main trading partners (%)

| | | Forecast of GDF | growth in 2014 | Memo item: country's share in aggregate GDP of | | |
|-------|---------------------|-----------------|----------------|--|--|--|
| | | September | June | trading partners | | |
| Total | | 1.6 | 1.7 | 100 | | |
| 1 | The Netherlands | 0.7 | 0.6 | 15.7 | | |
| 2 | Italy | 0.0 | 0.3 | 8.7 | | |
| 3 | Germany | 1.6 | 2.0 | 8.0 | | |
| 4 | China | 7.3 | 7.4 | 7.0 | | |
| 5 | Ukraine | -5.9 | -5.0 | 6.5 | | |
| 6 | Turkey | 3.0 | 2.5 | 6.4 | | |
| 7 | Belarus | 1.1 | 1.1 | 5.9 | | |
| 8 | Poland | 3.2 | 3.3 | 4.9 | | |
| 9 | Unated Kingdom | 3.0 | 3.0 | 3.5 | | |
| 10 | Unated States | 2.1 | 2.5 | 3.5 | | |
| 11 | Finland | 0.1 | 0.1 | 3.4 | | |
| 12 | Kazakhstan | 4.9 | 5.6 | 3.4 | | |
| 13 | Japan | 1.0 | 1.3 | 3.3 | | |
| 14 | France | 0.5 | 0.8 | 3.2 | | |
| 15 | Korea's Republic of | 3.7 | 3.7 | 2.8 | | |
| 16 | Switzerland | 2.0 | 2.0 | 2.6 | | |
| 17 | Latvia | 3.4 | 3.5 | 1.9 | | |
| 18 | Hungary | 2.7 | 2.3 | 1.8 | | |
| 19 | India | 5.1 | 5.1 | 1.7 | | |
| 20 | Belgium | 1.1 | 1.3 | 1.5 | | |
| 21 | Czech Republic | 2.5 | 2.0 | 1.5 | | |
| 22 | Slovakia | 2.5 | 2.5 | 1.5 | | |
| 23 | Spain | 1.2 | 1.1 | 1.3 | | |

Source: Bank of Russia.

List of boxes

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