



Bank of Russia

The Central Bank of the Russian Federation



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Information  
and Analytical  
Review

**MONETARY  
POLICY REPORT**

Moscow

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- 2. Which subjects, in your opinion, should be illustrated in this report?*
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- 4. What is your professional field of interest?*

Many thanks in advance for your assistance.

The report has been prepared on the basis of data as of 5 June 2015.  
Data cut-off date for forecast calculations is 5 June 2015.

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## SUMMARY

*In March – early June 2015, monetary policy conditions were more favourable than in the previous period. Oil price recovery continued and overall geopolitical situation was stable. Russian companies passed the peak of external debt payments which was, among other things, facilitated by the Bank of Russia's foreign exchange liquidity provision operations on a reverse basis. Companies and households demonstrated less demand for foreign currency. As a result, the ruble appreciated significantly against the key global currencies returning to the levels of the beginning of December 2014.*

*As the FX market situation leveled out, in March and April, the Bank of Russia raised interest rates on foreign currency refinancing facilities up to the market interest rates in an effort to motivate credit institutions to look for new funding sources. Amid credit institutions' dropping need for FX, the Bank of Russia cut the volume of foreign liquidity provision in May – early June. In the future, the Bank of Russia's policy will be aimed at the gradual reduction of credit institutions' debt to the central bank on foreign currency refinancing operations.*

*In May, in order to replenish the massively thinned international reserves the Bank of Russia decided to conduct foreign currency purchases in the domestic FX market. These operations do not seek to maintain the ruble exchange rate at a certain level and are conducted in such a way that the impact on the ruble exchange rate dynamics is minimised. The Bank of Russia intends to gradually expand the international reserves up to \$500 billion within a 5-7 year period.*

*Due to the ruble appreciation in February-May 2015 coupled by the acceleration and intensification of exchange rate pass-through effect on prices, the annual inflation peaked earlier than expected, after which in April – early June, there were registered signs of inflation decrease. In May, the annual consumer price growth was 15.8% compared with 16.9% in March. Inflation slowdown was facilitated by a considerable reduction in consumer demand, falling inflation expectations and low money supply growth rates. According to Bank of Russia forecast, these factors will continue to keep the prices in check. Given that and since no new shocks emerged, inflation will slow down faster than previously expected. Annual consumer price growth will not exceed 7% next year and will reach the target of 4% in 2017. Considering the mitigation of inflation risks and having in mind the persistent risks of considerable economy cooling, in April-June 2015, the Bank of Russia cut the key rate by a total of 2.5 percentage points to 11.50% per annum. The Bank of Russia will be ready to cut the key rate further as inflation continues to decline in line with the forecast, although the potential of monetary policy easing will be limited by inflation risks in the next few months.*

*At end-2015 Q1, GDP contracted by 1.9% year-on-year which corresponded to the Bank of Russia's forecast. In April, economic activity continued to cool down. Falling numbers of new orders, worsening consumer sentiment, growth of unemployment, decline in production capacity utilisation, all of these indicate that decline in economy is also of a cyclical nature. At the same time, the labour market is adjusting to the new conditions by decreasing real wages and growing part-time employment, which is typical for Russian economy. The drop of real wages for the past year was considerably deeper than that in 2009, and triggered a sharp contraction in consumer demand. Good financial results demonstrated by business in Q1 along with the implementation of several anti-crisis measures by the government did not allow fixed capital investment to drop as low as expected. The falling investment demand was still caused by high economic uncertainty, tightening domestic lending conditions, as well as by limited possibility to substitute external sources of funding with domestic ones. Sluggish consumer and investor activity restricted imports. Given the floating exchange rate, exports declined less significantly. As a result, net exports were the only component making a positive contribution to output growth. These economic trends are expected to continue till the end of this year, and GDP is expected to decrease by 3.2%.*

Further on, depending on oil price dynamics and the economy's ability to adapt to external shocks, the situation in economy may evolve according to two equally feasible scenarios. The first one assumes a gradual oil price growth up to roughly \$80 per barrel in 2018. In this context, the fixed capital investment is forecast to recover in 2016 already. Investment activity revival will be accompanied by consumer demand growth expectations, decrease in debt burden, gradual diversification of funding sources and loosening internal lending conditions. Consumer demand will remain low during a longer period of time due to moderate rates of wage indexing and decreasing households' welfare. Annual household expenditure growth rates will revert to positive numbers only in 2017. The growth in imports will be stimulated by the recovery in domestic demand. As a result, the net exports' positive contribution to output growth rates will gradually subside and shift to the negative zone in 2017. According to Bank of Russia forecasts, in 2016, GDP growth is expected to be approximately zero, reaching 2.4% in 2017 and 1.7% in 2018.

Under the second scenario, the oil price will remain at the current levels of \$60 per barrel over the whole forecast horizon, hampering the economic activity recovery. In 2016, the output will reduce by 1.2%, in 2017 GDP will have near-zero growth rates. To recover economic activity, this scenario will require structural changes in the economy, which will be conditioned by exchange rate dynamics and gradual loosening of domestic lending condition, among other things. GDP growth rates will move to the positive zone in 2018, reaching 1.7%. To slow down inflation to the target of 4% under this scenario, the Bank of Russia will ease monetary policy more slowly compared with the first scenario, taking into account a smaller output gap due to contracted economic growth potential.

These scenarios view the following factors as main sources of risk: persistent low oil prices over the whole forecast horizon, fiscal policy easing, revision of administered price and tariff increase rates scheduled for 2016-2017, and also increased inflation expectations. Should these risks materialise, the Bank of Russia will implement measures to decrease their pro-inflationary effects taking into account Russian economy potential.

# 1. MACROECONOMIC CONDITIONS

## 1.1. External economic conditions

*External economic conditions generally continue to be unfavourable: GDP growth in Russia's main trading partners is still weak and specific factors (especially the closed external funding markets) continue to have a negative impact on the Russian economy. However, a number of factors have recently helped improve the external economic conditions. Primarily, rising oil prices are having a positive effect. The economic situation in the euro area (Russia's largest trading partner) is also improving. All of this will support Russian exports.*

*The loose monetary policy implemented by the majority of global central banks amid low business activity and the lack of inflationary pressure facilitates the activity of short-term investors and the increase in emerging markets' demand for risky assets, including for the ruble. These factors have already significantly reduced deviations in the ruble exchange rate and the risk premiums for Russian assets from average levels in developing countries in February-May 2015. In April-May 2015, the equilibrium real effective ruble exchange rate grew, with the actual real effective ruble exchange rate slightly exceeding it.*

*The Bank of Russia expects there to be a further slow improvement in external economic conditions: aggregate GDP growth for Russia's trading partners<sup>1</sup> will be higher in the second half of 2015 than in Q1-Q2. In addition, a further smooth adjustment in the risk premium and a gradual reduction in capital outflows is likely. At the same time, the risks of overall situation's deterioration due*

*to unfavourable external conditions and existing structural restrictions remain high.*

## Economic activity and inflation abroad

Growth rates in the global economy continue to be low, with persistent uneven economic activity both among advanced economies and emerging markets (Charts 1.1.1 and 1.1.2). The leading advanced economies (the US and the United Kingdom) showed relatively low growth in 2015 Q1. Japan, which barely avoided a recession at the end of 2014, saw GDP growth close to zero, while the euro area witnessed an acceleration in economic growth<sup>2</sup>.

The fall in US GDP in 2015 Q1 was temporary in nature due to such factors as difficult weather conditions, strikes at ports and dollar appreciation, which led to a fall in net exports and construction volumes. However, employment continued to grow and consumer confidence indicators recovered. Moreover, oil companies, which reduced their investments amid falling oil prices, are reporting an increase in efficiency, which will contribute to growth in corporate returns.

The measures implemented by the European Central Bank (ECB) and the depreciation of the euro were conducive to GDP growth acceleration in the euro area in 2015 Q1. For the first time since 2010, economic growth accelerated not only in Germany, but in France, Italy and Spain, which indicates that the foundation behind economic recovery in the region has expanded. However, the problems holding back economic growth in the region persist, in particular high unemployment and government debt.

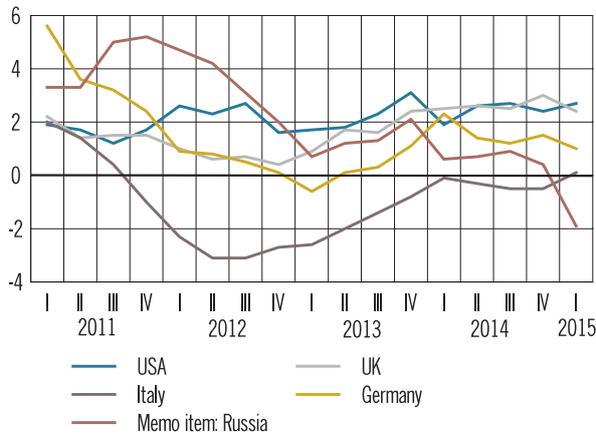
In 2015 Q2-Q3, the Bank of Russia expects economic growth to accelerate in advanced economies. Among other things, short-term leading

<sup>1</sup> The aggregate GDP growth across 23 foreign countries – trading partners which account for the largest share of Russian exports (countries whose share of Russian exports in 2008-2012 was at least 0.9% annually; the relative share of each country is determined based on the structure of goods exported to the main trading-partner countries).

<sup>2</sup> Here and in what follows throughout Section 1.1, seasonally-adjusted growth indicators are given relative to the previous period, unless indicated otherwise.

Chart 1.1.1

### GDP growth rates of Russia's trading partners: developed economies (as % of corresponding quarter of previous year)



Sources: national statistics agencies, Eurostat.

indicators<sup>3</sup> suggest that this will be the case (primarily, in Germany, Italy, Spain, the US and Japan) (Chart 1.1.3).

Economic growth in the majority of emerging market economies continued to slow in 2015 Q1, despite the accommodative measures adopted by the central banks in these countries. In China, the slowdown in economic growth was caused by a fall in investment. In addition, growth rates in indicators for industrial production, retail sales and energy consumption fell along with lending and export volumes. The reduced demand from China, in turn, hampered growth in other Asian economies (excluding India). The fall in GDP growth in export-oriented developing countries, including Brazil and Indonesia, was linked to low commodity prices.

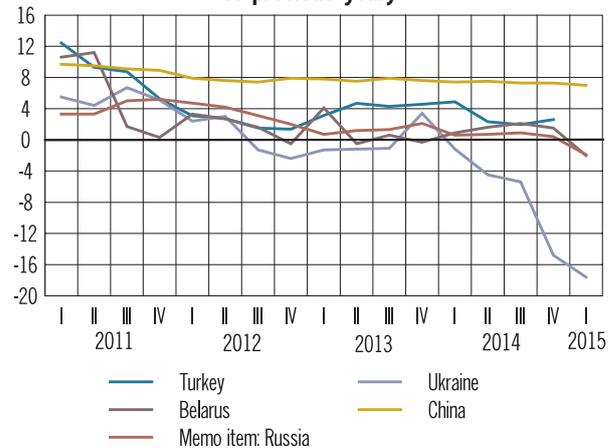
Short-term leading indicators point to a further reduction in economic activity in the majority of emerging market economies in 2015 Q2. Among the largest emerging nations, India was the only one to see its manufacturing PMI above the critical 50 point value. In a number of commodity-based economies, business activity is continuing to fall due to low prices for export goods.

Overall, the trends observed in advanced and emerging market economies are also characteristic of Russia's trading partners. In 2015 Q1, aggregate GDP growth in these countries was minimal over

<sup>3</sup> PMI indices are business activity indicators based on surveys of companies. A value greater than 50 means business activity has increased; a value below 50 means it has decreased.

Chart 1.1.2

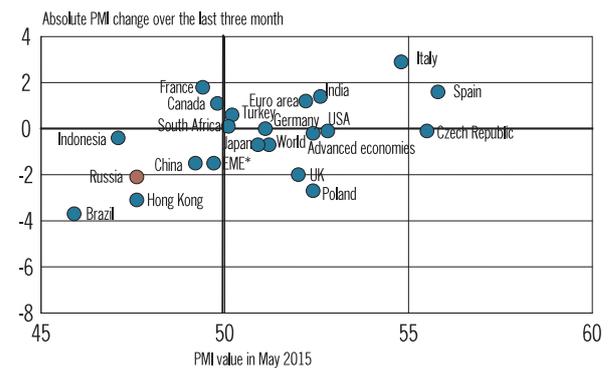
### GDP growth rates of Russia's trading partners: emerging economies (as % of corresponding quarter of previous year)



Sources: national statistics agencies.

Chart 1.1.3

### Changes in business indicators



\* EME - emerging market economies.

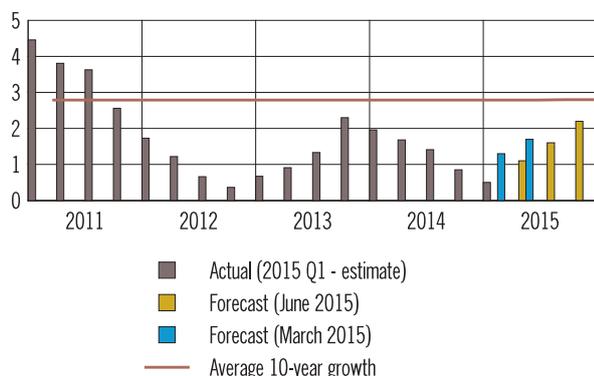
Note: PMI indices in manufacturing industries, and PMI of HSBC in China. Data for the world as a whole are calculated by J.P.Morgan based on the data for the USA, Japan, Germany, Spain, Italy, France, BRICS nations, Australia, Mexico, etc.

Sources: Bloomberg, Bank of Russia calculations.

the last three years (significantly less than forecast in the previous Report) (Chart 1.1.4). Economic growth rates in the CIS countries (especially in Ukraine and Belarus), which were significantly lower in 2015 Q1 than expected by the Bank of Russia, had the largest constraining effect on aggregate indicators. However, the faster GDP growth in the European countries partially offset the negative contribution of the CIS countries. At the same time, aggregate GDP growth will continue to be below historical values: it is expected that aggregate output growth in 2015 will remain at 2014 levels, which is lower than the Bank of Russia's previous forecast. During the coming quarters, economic activity in Russia's trading partners will pick up

Chart 1.1.4

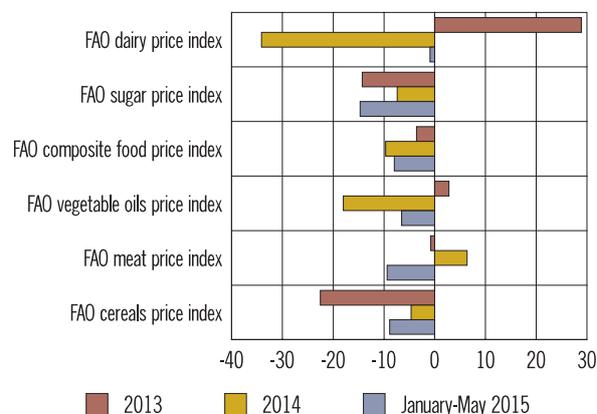
### Aggregate GDP of Russia's trading partners (as % of corresponding quarter of previous year)



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.

Chart 1.1.5

### Global food prices (%)\*



\* Last month value to last December value. Source: FAO.

gradually<sup>4</sup>. This will have a positive impact on Russian export dynamics, especially in the 'non-oil' segment. However, external demand-induced positive effect on the Russian economy will be held back by factors specific to Russia, such as the financial and trade sanctions imposed against a number of Russian companies. Moreover, the risks that the situation will deteriorate, which are due to the unfavourable external climate and structural restrictions, remain elevated.

Weak demand amid sluggish global economic growth will keep prices subdued in the international commodity markets. Global food prices were lower on average in March-May 2015 than in December 2014-February 2015. The Food and Agriculture Organisation's (FAO) food price index contracted by 5.1% in March-May. Sugar prices fell the most, while the price of vegetable oil decreased the least (Chart 1.1.5).

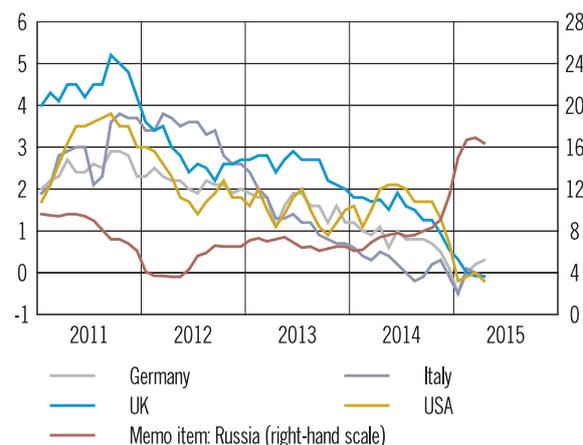
Against the backdrop of the growth in global supply and expectations held by the majority of market participants that grain harvests will be favourable, prices are likely to continue to decline in the global food market over the coming quarters. According to FAO estimates, global food imports volume will shrink in 2015 to a five-year minimum in view of the persistently high levels of food stocks.

Given low energy and food prices in the majority of advanced economies in February-April 2015,

<sup>4</sup> More detailed information on the Bank of Russia's GDP growth forecasts for Russia's trading partners is provided in the Annex.

Chart 1.1.6

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

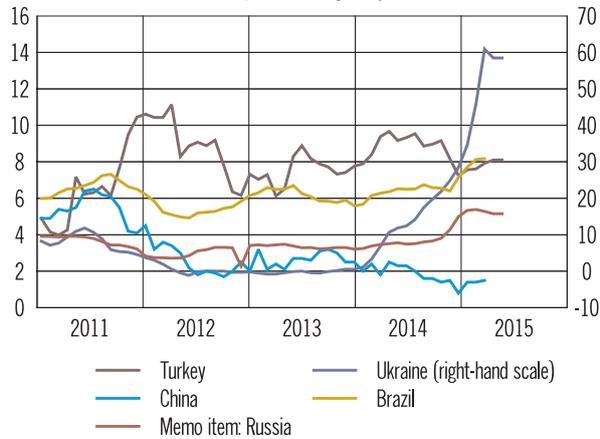


Sources: national statistics agencies, Eurostat.

annual inflation remained close to zero. However, in April-May a number of countries saw a moderate increase in consumer prices. The number of European countries reporting inflation rose and, in the euro area as a whole, prices stopped falling after four months of deflation (Chart 1.1.6). The Bank of Russia expects that increase in oil prices, accelerated economic growth, and accommodative measures of central banks (ECB, Bank of Japan) will support the growth of consumer prices in advanced economies over the coming quarters.

In February-April 2015, inflation in emerging markets was generally markedly lower than average historical figures. For the majority of these countries, the fall in energy prices led to a

Chart 1.1.7  
Inflation in Russia's trading partners: emerging market economies (as % of corresponding period of previous year)



Sources: Bloomberg, IMF, central banks, Bank of Russia calculations.

reduction in inflationary pressure. However, in some regions, including Latin America and the CIS, consumer price growth picked up, largely owing to the devaluation of national currencies accompanied by deterioration in trading conditions, US dollar strengthening, and weak demand for exports from developed countries. Inflation in Ukraine exceeded 60%, and a noticeable price growth was observed in Brazil, Turkey and Belarus (Chart 1.1.7).

The accelerating inflation in the CIS conditioned higher price growth in Russia's trading partners compared with general inflation levels globally, which, according to Bank of Russia forecasts, will cause 2015 aggregate inflation indicators<sup>5</sup> to exceed last year levels. However, price growth in advanced economies – trading partners will be slightly lower than in 2014.

In view of the fall in food and metal prices, moderate growth in energy prices and gradual recovery in economic activity in Russia's trading partners, the Bank of Russia expects a slight increase in external inflationary pressure in the coming quarters, but it will remain below average historical figures. The impact of external inflation on domestic prices is being constrained by factors specific to Russia. However, their effect is starting

<sup>5</sup> The aggregate inflation growth indicator across 23 foreign countries – trading partners that account for the largest share of Russian imports (countries whose share of imports to Russia in 2008-2012 was at least 0.9% annually. The relative share of each country is determined based on the structure of goods imported to Russia from the main trading-partner countries).

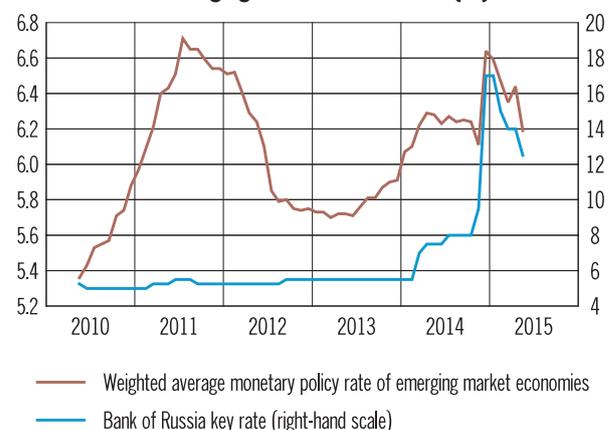
to dissipate, which, together with ruble appreciation, has already led to a decrease in domestic food prices.

## External financial conditions

In the context of relatively low inflation, central banks are continuing to implement a loose monetary policy to stimulate economic growth. On 9 March 2015, the European Central Bank launched its expanded asset purchase programme, under which the bank's balance sheet should increase by a minimum of 1.1 trillion euros. The slowdown in Chinese economic growth was behind the decision of the People's Bank of China on a further cut in key rates and in required reserves ratio, which had not been changed since 2012. In March-May, rates were also reduced by other central banks in developed and developing countries: Australia, Hungary, India, Turkey, and Sweden (Chart 1.1.8).

The loose monetary policy in developed countries kept government bond yields at a low level (Chart 1.1.9). However, from the end of April to the start of May, rates on European countries' sovereign debts, especially on German ones, soared. Yields on 10-year government bonds, which were close to zero, rose to 0.37% at the end of April. As statistics were published and under the influence of statements by the representatives of the ECB, market participants revised the extremely low inflation expectations which had been factored into the prices at the start of the year and also

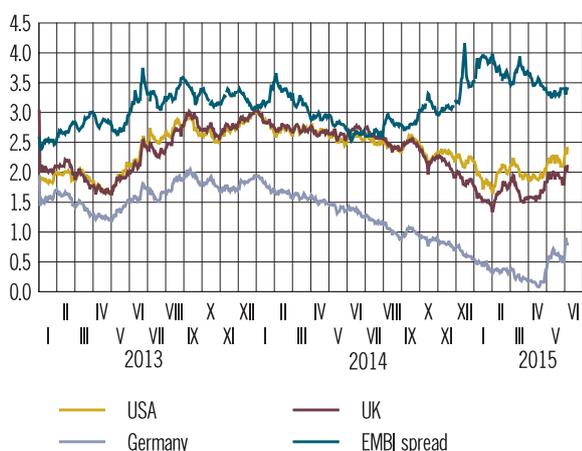
Chart 1.1.8  
Weighted average monetary policy rate of emerging market economies (%)



Note: values of central bank assets were used as weights to calculate the average rate; June data as of 8 June 2015.

Sources: Bloomberg, IMF, central banks, Bank of Russia calculations.

Chart 1.1.9  
10-year developed economies' government bond yields,  
emerging markets bond index (EMBI) spread (%)



Source: Bloomberg.

adjusted their expectations regarding the duration of the ECB's quantitative easing programme towards its pre-schedule termination. Growth in European government bond yields forced prices to be revised for this asset class as a whole, including for US sovereign bonds.

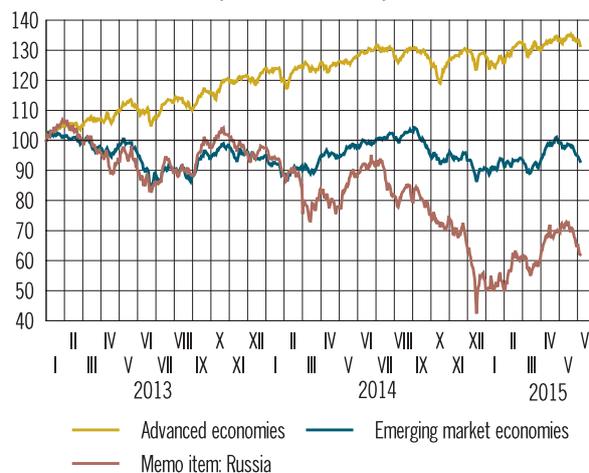
The US dollar, which had rallied significantly since mid-2014, weakened in March-May against other global currencies. Its depreciation was primarily due to the fact that some of the statistics published in 2015 Q1 pointed to a slower than expected recovery in economic growth in the US. This, in turn, adjusted market participants' expectations towards a later increase in federal funds' rate, which will most likely occur in October-December 2015.

European and US sovereign debt rates are expected to remain low over the coming quarters and the US dollar exchange rate will recover as economic growth improves in the country.

Persistent low interest rates in the global financial markets attract short-term investment in emerging market economies and spur demand for risky assets, including for the ruble. Global stock indices rose in March-May (Chart 1.1.10), chiefly as a result of growth in developing countries' stock indices, with the growth in the MSCI index for Russia being the highest. Indicators of global investors' risk perception over the period under review have fallen slightly, though global market volatility is higher than in 2014.

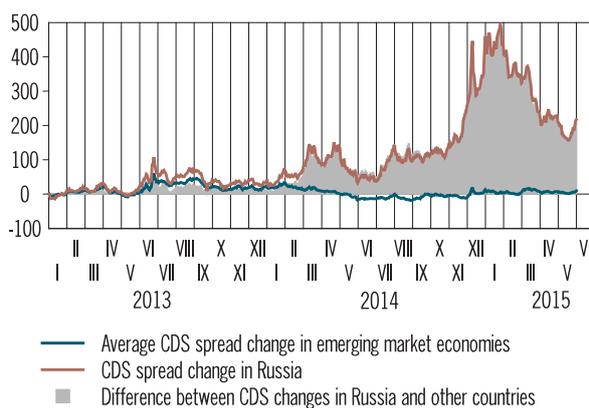
Thus, in March-May there was a slight improvement in external financial conditions for

Chart 1.1.10  
Global stock indices MSCI  
(1.01.2013=100)



Source: Bloomberg.

Chart 1.1.11  
Change of risk premium in Russia and emerging market  
economies from 1 January 2013 (basis points)

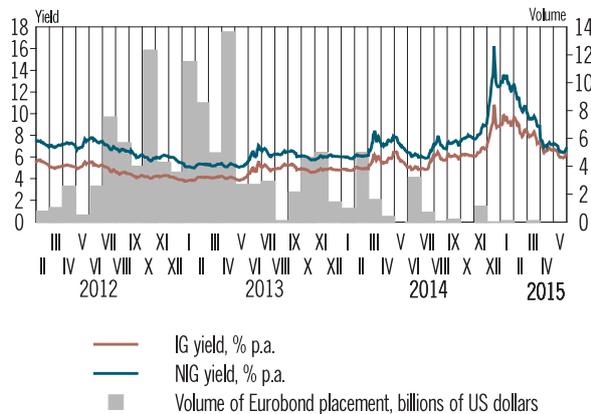


Note: average CDS spread for emerging market economies is based on the data for Brazil, China, Turkey, Mexico, Malaysia, Poland, Hungary, etc.

Sources: Bloomberg, Bank of Russia calculations.

Russia, including increased interest demonstrated by foreign investors in the Russian financial market, which led to an inflow of capital into funds investing in Russia. The main factors behind this resumed demand for Russian assets in this period were growth in global oil prices and higher interest rates as a result of the increase in the Bank of Russia's key rate. The relative stabilisation of the situation in Ukraine following the signing of the Minsk Protocol also helped recover the demand. In addition, the significant deviations of accrued risk premium and the Russian ruble exchange rate from average levels for emerging markets caused these levels to be adjusted (Charts 1.1.11 and 1.1.13). From March to May 2015, 5-year CDS spreads for Russian

Chart 1.1.12  
Effective yield and volume of placement  
of Russian corporate Eurobonds



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.

Chart 1.1.13  
Exchange rate indices against the US dollar  
(01.01.2013 = 100)



Note: average exchange rate index of emerging market currencies is a geometric average 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 rupiah and Indian rupee.  
Sources: Bloomberg, Bank of Russia calculations.

government bonds dropped from 454 to 309 bp, Russian-issued Eurobonds fell by roughly 250 bp (Chart 1.1.12), and the ruble exchange rate to the US dollar increased by 15.7%. According to Bank of Russia estimates, the equilibrium real effective ruble exchange rate increased in April-May amid growth in oil prices, global investors' increased demand, and geopolitical factors. In fact, the actual real effective exchange rate was slightly higher than the equilibrium one.

However, external capital markets remain virtually closed to Russian borrowers: Eurobond placement levels are near-zero (Chart 1.1.12). As a result, the net private capital outflow is persistently high, mainly due to the forced repayment of debt

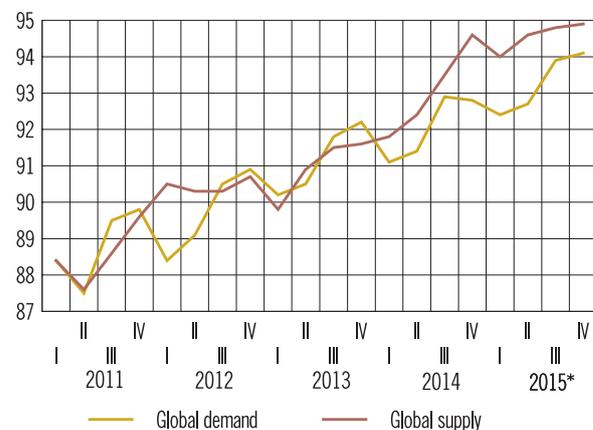
to non-residents by banks and companies (for more details see the Annex, 'Balance of payments' section).

## Terms of trade

The price of Urals crude increased from \$55.1 per barrel on average for December 2014-February 2015 to \$58.8 per barrel on average for March-May 2015. Factors such as high demand from China and India, primarily to replenish strategic reserves; projected decline in oil production outside the Organisation of the Petroleum Exporting Countries (OPEC) as the number of active drilling rigs at shale deposits and investment in the oil industry decrease, and the depreciation of the US dollar, – all had a positive impact on price dynamics. The geopolitical tension in the Middle East and North Africa, in particular in Libya and Yemen, which is not far from the Bab-el-Mandeb strait, an important sea thoroughfare, also propped up oil prices.

However, there still exist factors which, in the long term, will exert downward pressure on global oil prices, they include, among other things, high oil stocks in advanced economies, increased oil production in OPEC member states, and weak growth in global demand, in part due to the slowdown in the Chinese economy. According to forecasts by the US Energy Information Administration (EIA), the surplus oil supply in the global market will increase in 2015 Q2 compared with 2015 Q1. In the future, due to accelerated growth in demand, the situation

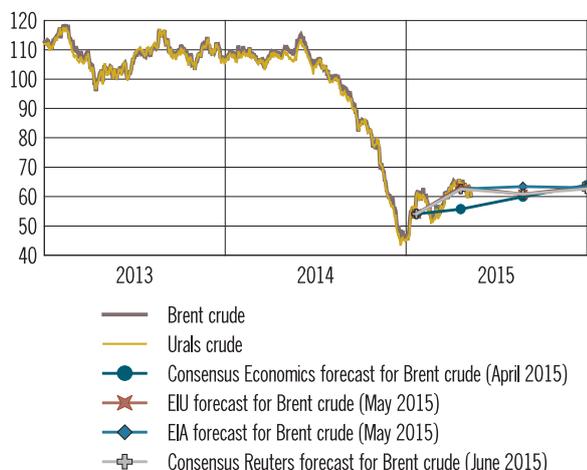
Chart 1.1.14  
Global oil supply and demand  
(millions of barrels per day)



\* The forecast is based on the planned oil production volume by OPEC at 30 millions barrels per day during the forecast period.  
Source: International Energy Agency.

Chart 1.1.15

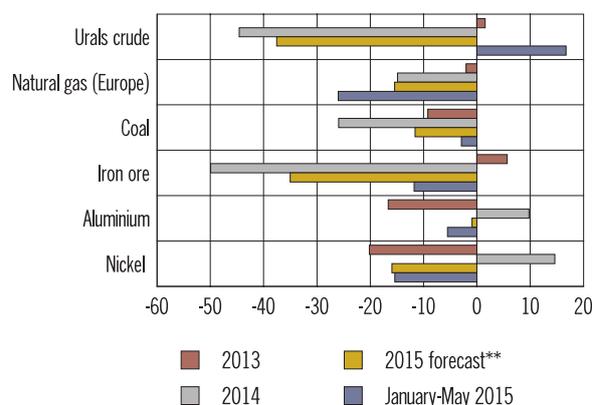
### Global oil prices (US dollars per barrel)



Sources: Thomson Reuters, EIU, EIA, Consensus Economics.

Chart 1.1.16

### World prices of Russian principal export commodities (%)\*



\* Last month average for the period to last December average.

\*\* 2015 forecast to 2014 average.

Sources: World Bank, for oil - Reuters data and Bank of Russia forecast.

will normalise as the global economy recovers and non-OPEC production shrinks amid low global prices (Chart 1.1.14).

The Bank of Russia expects global oil prices to remain close to current levels in the coming quarters, i.e. slightly above the projections of the previous Report (Chart 1.1.15).

Prices for Russia's other key export goods declined in March-May (Chart 1.1.16). The price of natural gas in the European market dropped following the end of the heating season and because of the fall in demand from Ukraine. Coal and metal prices also went down in the context of excess supply, weak demand from the world's largest

consumer (China) and high levels of inventories in advanced nations. The Bank of Russia expects natural gas prices to be stable and coal and metal prices to continue to fall towards the end of 2015.

The price downturn in commodity markets led to a reduction in Russian exports volume in 2015 Q1, which was only partly offset by the depreciation of the ruble. However, given that actual oil prices exceeded the Bank of Russia's forecasts, the fall in exports was not as severe as expected. Over the coming quarters, relatively low prices in the commodity markets will lower Russian exports volume compared with 2013-2014 (for more detail see the Annex, 'Balance of payments' section).

## Factors underlying the reduction in Russian imports in 2014-2015

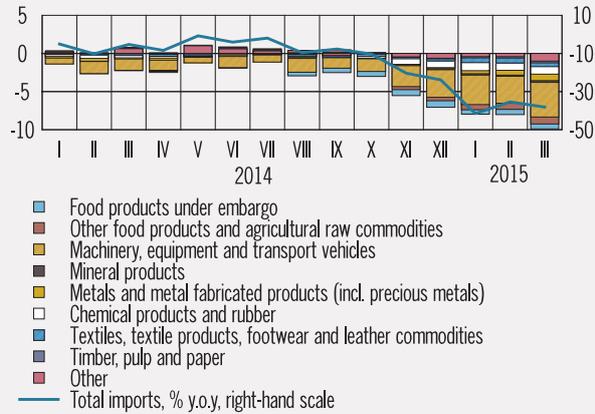
According to Federal Customs Service data, total goods imports into Russia in 2014 and in 2015 Q1, compared with 2013 and 2014 Q1, fell by 9.2% and 38.2% respectively. The decline in imports accelerated considerably in the second half of 2014 and the start of 2015: imports contracted 5.5 times faster in 2015 Q1 year-on-year.

In 2015 Q1, imports fell by \$25.8 billion compared with the same period in the previous year, with the largest contribution to the decrease in imports coming from machinery, equipment and transport vehicles. The food embargo introduced by Russia in August 2014 was not a major factor behind the sharp reduction in total imports: the fall in imports of food affected by the embargo accounted for only 7.2% of the total decrease in imports (Chart 1).

Imports of food and agricultural raw materials dropped by 7.8% in 2014 and by 42.0% in 2015 Q1. However, the share of this category in total Russian imports did not change significantly (14.1% in 2015 Q1), since imports of other categories of goods to Russia fell at a similar pace.

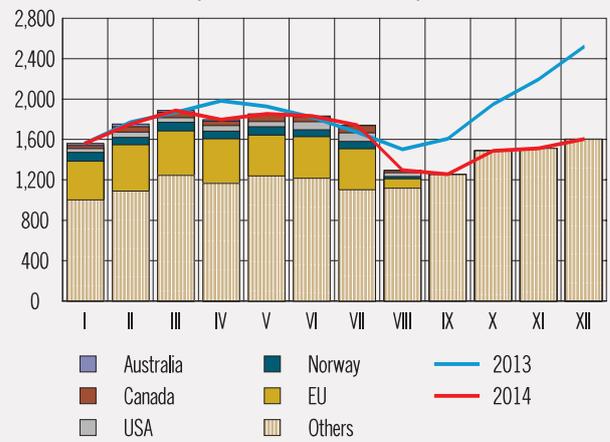
Hence, the restrictions imposed had a perceptible impact on the geographical structure of food imports. Given that the embargo covered the US, the EU, Canada, Australia and Norway, the decline in imports from non-CIS states was

**Chart 1**  
Growth in imports by product type compared with corresponding period of previous year (billions of US dollars)



Note: 1901 and 2106 commodity categories are not regarded as prohibited, as they are partly not affected by the embargo.  
Source: calculation is based on Federal Customs Service data.

**Chart 2**  
Imports of food products under embargo in 2014 (millions of US dollars)



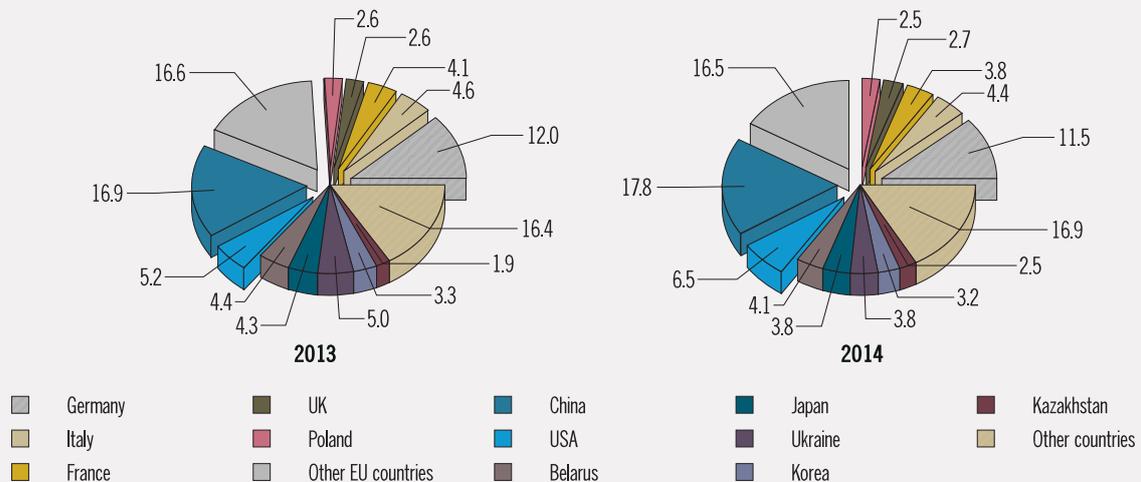
Note: 1901 and 2106 commodity categories are not regarded as prohibited, as they are partly not affected by the embargo.  
Source: calculation is based on Federal Customs Service data.

extremely high (Chart 2). In 2015 Q1, Russian imports of food goods and raw materials to produce food goods from non-CIS states reduced by 40.8% and in April they shrank by 39.5% compared with the same period of the previous year. However, the suspension of imports of prohibited food goods from the countries affected by the embargo was compensated by growth in supplies from other regions, primarily Latin America. As a result, the share of imported goods affected by the restrictions, as a percentage of total food imports in 2015 Q1, was 42.1% compared with 50.5% in 2014 Q1 before the embargo was introduced.

Thus, the structure of goods in overall Russian imports was virtually unchanged. There was a slight decline in the share of EU countries (from 42.6% to 41.4%) and CIS countries (from 12.2% to 11.2%) in the geographical structure of imports in 2014 compared with 2013, largely due to decreased imports from Ukraine (Chart 3).

In order to assess the impact that the sanctions and counter measures have had on import dynamics, Canonical Cointegrating Regression (CCR<sup>1</sup>) models were employed to study the effects of macroeconomic variables on various categories of imports. In addition to a lagged dependent variable, the regressors used in the model were the ruble's

**Chart 3**  
Geographical structure of Russian imports (%)



Source: Federal Customs Service.

<sup>1</sup> Park J.Y., 1992. Canonical Cointegrating Regressions//Econometrica. Vol. 60. No. 1. 119-143.

real effective exchange rate (REER), the PMI for business activity, and dummy variables responsible for the 2008 crisis (CRISIS) and for the period during which the food embargo introduced in August 2014 was in effect (SANCTIONS)<sup>2</sup>.

Quantitative analysis confirms that the impact of the import embargo was generally insignificant. According to estimates, the decrease in imports registered since August 2014 was not down to the sanctions against Russia and the retaliatory ban on the imports of a number of food goods, but rather the depreciation of the ruble and the declining business activity in the country. Moreover, the conclusion that the trade sanctions against Russia and the food embargo were insignificant has been confirmed for all categories of imported goods, including food goods. The sanctions did not even have a material impact on the imports of those goods affected by the embargo. In all probability, the process of substituting imports from countries affected by the embargo took place sufficiently quickly, and as a result the only change that took place for the group of prohibited goods was in the geographical structure of imports, rather than in their quantities. The fall in the share of goods affected by the embargo in food imports can be explained by the heightened sensitivity of these import categories to changes in the exchange rate: the 1% decline in the real effective exchange rate of the ruble leads, all things being equal, to a 0.29% fall in imports of goods from the categories affected by the embargo, while for overall food imports, the decrease would be 0.19%. It is undeniable that the embargo was of material importance only for prohibited import goods from the countries affected by the embargo. More detailed results on the regression analysis are provided in Table 1.

Table 1

**Regressive assessments of various indicators' impact on Russian imports\***

Dependent variable - commodity category (Y)	Constant	Y(-1)	PMI	REER	CRISIS	SANCTIONS
Overall imports	-1.96	0.964	0.366	0.181	0.004	-0.011
	[0.000]*	[0.000]	[0.000]	[0.011]	[0.830]	[0.487]
Machinery and equipment	-2.466	0.957	0.438	0.233	-0.005	-0.006
	[0.000]	[0.000]	[0.000]	[0.002]	[0.811]	[0.711]
Metals and metal fabricated products	-2.273	0.945	0.338	0.275	-0.034	-0.015
	[0.001]	[0.000]	[0.009]	[0.041]	[0.369]	[0.604]
Food products	-1.171	0.952	0.165	0.185	0.004	-0.017
	[0.005]	[0.000]	[0.085]	[0.067]	[0.874]	[0.406]
Food products from prohibited categories	-1.374	0.935	0.111	0.287	0.003	-0.016
	[0.010]	[0.000]	[0.324]	[0.022]	[0.922]	[0.506]
Food products from prohibited categories from countries under embargo	-1.795	0.898	0.073	0.441	-0.027	-0.969
	[0.006]	[0.000]	[0.610]	[0.001]	[0.499]	[0.000]

\* Square brackets have p-values for  $\chi^2$ -statistics of the Wald test to verify the meaningfulness of respective coefficients (the CCR model uses  $\chi^2$ -asymptotics).

<sup>2</sup> The model is evaluated using logarithms.

## 1.2. Financial conditions

*In the majority of the domestic financial market's segments, financial conditions were seen to relax somewhat in March-May 2015. However, overall financial conditions are still relatively strict. Despite the fall in loan rates witnessed after the Bank of Russia reduced its key rate, they continue to be relatively high and non-price lending conditions keep tightening, albeit less actively than in previous quarters. Against this backdrop, annual growth in credit and monetary aggregates remains low, which, combined with the recent appreciation of the ruble, is one of the factors shaping conditions for a further slowdown in inflation.*

### Money market and Bank of Russia banking sector liquidity management

In March-May 2015, money market rates were primarily determined by changes in the Bank of Russia key rate: reductions in the key rate were matched by comparable reductions of interbank loan rates. However, the interbank rate's spread relative to the Bank of Russia key rate was predominantly positive over this period: roughly 40 basis points (Chart 1.2.1). One of the main factors behind the spread's dynamics was the ruble liquidity situation (Chart 1.2.2): significant financing of government expenditures from January to the

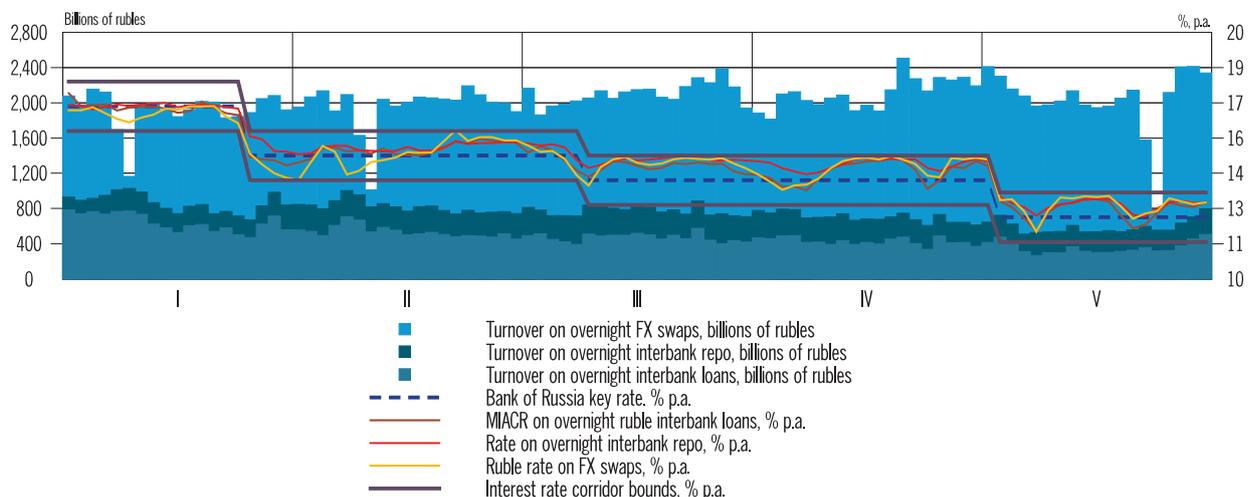
first half of February 2015 boosted the inflow of liquidity into the banking sector and created its current surplus (see the term 'Current liquidity deficit' in the Glossary). However, by March-April 2015, the dynamics of liquidity formation factors approached a more traditional path. As a result, the current liquidity surplus was close to zero and interbank rates returned to the upper half of the Bank of Russia interest rate corridor.

An additional factor behind the positive spread of short-term interbank rates to the Bank of Russia key rate in the period under consideration was the pick-up of implied ruble rates on overnight FX swaps. This was driven by the normalisation of the foreign currency liquidity situation at Russian banks and the latter's concurrent inclination to attract rubles through the above operations. Under these conditions, in March-May 2015, the volume of overnight FX swaps as a percentage of the total ruble money market rose slightly.

According to the assessments given in the previous Monetary Policy Report, credit institutions' demand for refinancing was expected to resume its growth from March 2015. However, the heightened level of budget spending, compared with the same period in previous years, offset the absorption of liquidity as a result of tax payments and the reduction in credit institutions' outstanding amounts on Federal Treasury deposits (Chart 1.2.3). Moreover, at the end of April 2015, pension savings were transferred to non-governmental pension

Chart 1.2.1

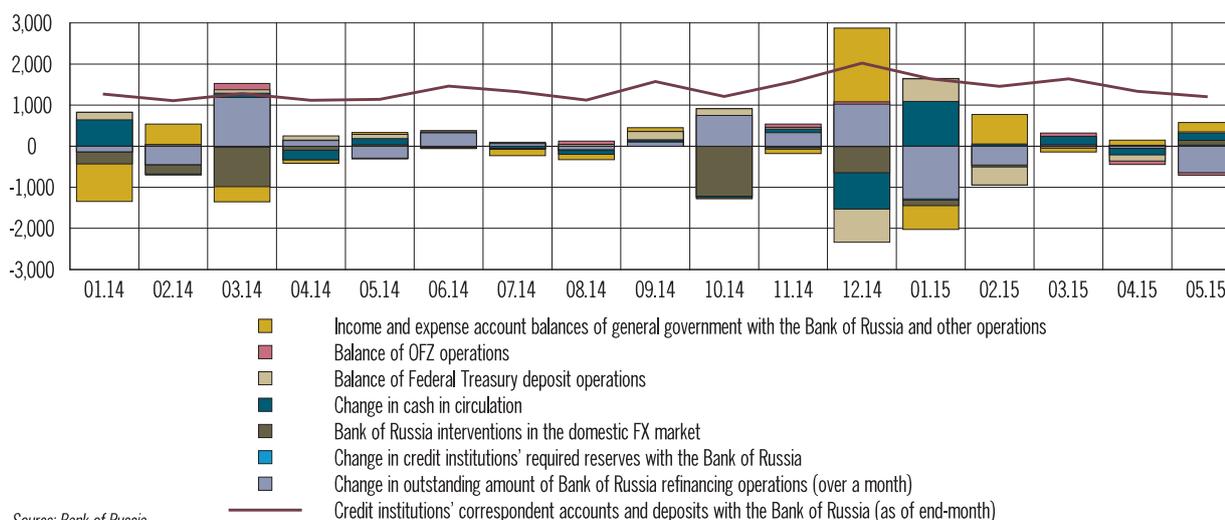
### Money market interest rates and turnover in 2015



Source: Bank of Russia.

Chart 1.2.2

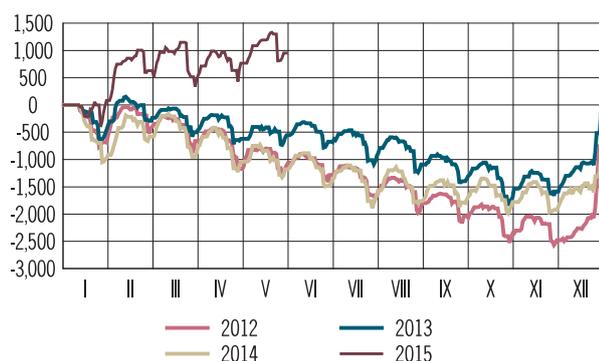
## Banking sector liquidity and liquidity factors (billions of rubles)



Source: Bank of Russia.

Chart 1.2.3

## Cumulative change in general government accounts with the Bank of Russia (year-to-date, billions of rubles)\* ('+' decrease, '-' increase)

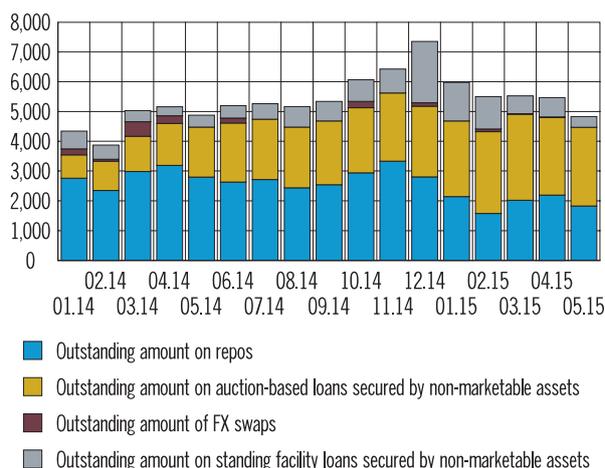


\* Excluding Federal Treasury deposits at credit institutions, OFZ operations, and one-off payments.

Source: Bank of Russia.

Chart 1.2.4

## Structure of Bank of Russia refinancing operations (as of end-month, billions of rubles)



Source: Bank of Russia.

funds, which also expanded banking sector liquidity. The demand for refinancing contracted due to the on-going decline in cash in circulation and the inflow of funds via Bank of Russia foreign currency purchases in the domestic FX market to replenish its international reserves. As a result of these liquidity factors, banks' outstanding amounts on refinancing operations fell by 0.6 trillion rubles to 4.9 trillion rubles by end-May 2015.

Significant changes took place in the structure of this outstanding amount (Chart 1.2.4). The inflow of liquidity into the banking sector at the start of the year, combined with the Bank of Russia's consistent efforts to provide to the banking sector required amount of liquidity through auction-

based operations brought down credit institutions' outstanding amount on standing facility instruments, which increased in December 2014. Ultimately, a reduction in the share of these operations and an increase in the share of Bank of Russia auction-based operations to provide liquidity will keep money market rates close to the Bank of Russia key rate.

In 2015, the future dynamics of banking sector demand for refinancing operations will depend on the intensity of the Reserve Fund's utilisation to finance the federal budget deficit and on the investment of the National Wealth Fund resources. Depending on these parameters, by the end of the year demand for liquidity could range from 3.8 to

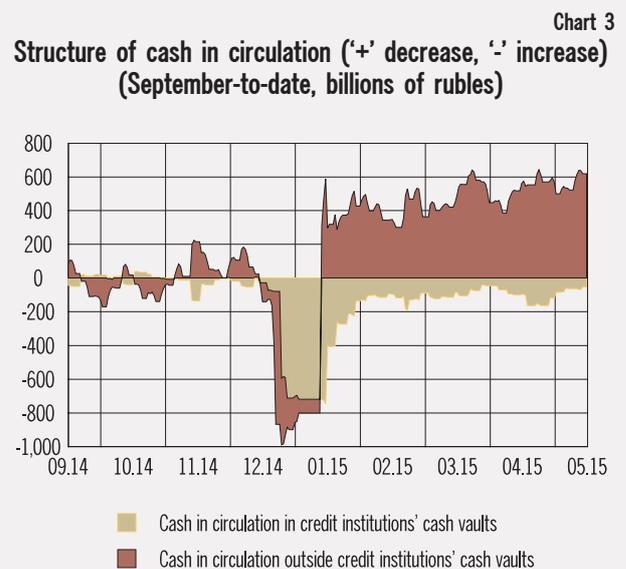
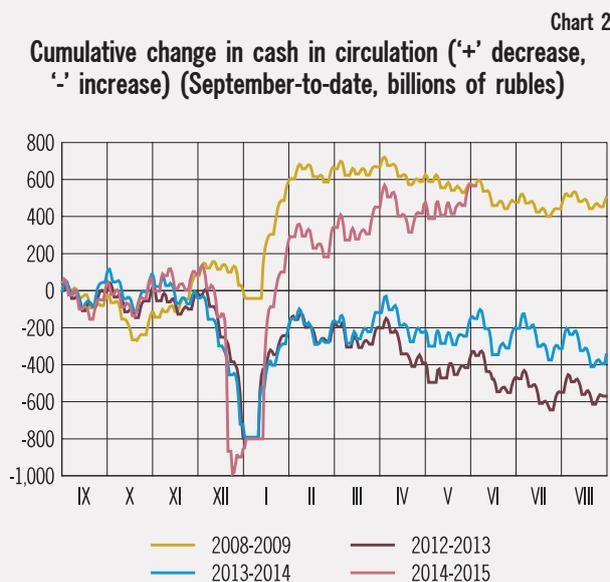
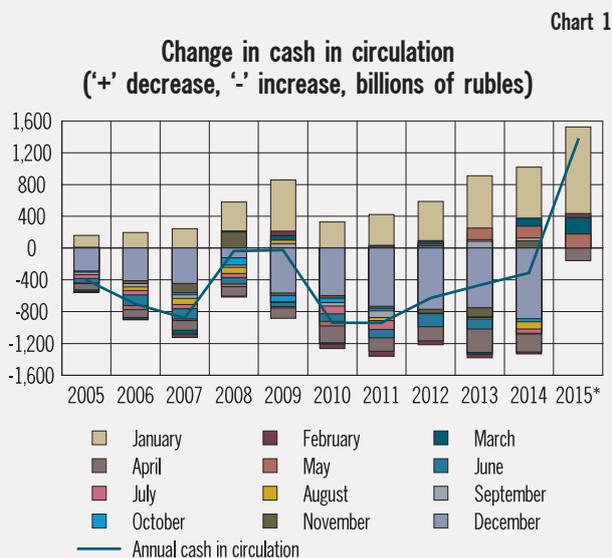
## Changes in cash in circulation at the end of 2014-2015

Over the last 10 years, the amount of cash in circulation has grown. For the banking sector, this meant an outflow of funds ranging from 0.02 trillion rubles in 2009 to 0.9 trillion rubles in 2010 and 2011 (Chart 1). However, based on the first five months of 2015, there has been an inflow of liquidity through this channel, comparable in volume to that of end-2008 – early 2009 (Chart 2).

The intra-year dynamics of cash in circulation is largely conditioned by seasonal factors. The established trends were disrupted at the end of 2014. Heightened demand for cash, including active withdrawals from ruble deposits by households in the period from 18 to 22 December 2014, was the main factor behind the large-scale outflow of cash from the banking sector, which exceeded 0.8 trillion rubles. This behaviour by depositors was caused by a number of factors, in particular growing tension in the foreign exchange market and household fears regarding the stability of the Russian banking sector. Commercial banks responded to these events by increasing the amount of cash in cash offices by 0.7 trillion rubles during the last ten days of December, which was 0.4 trillion rubles more than the year before (Chart 3). However, a significant portion of these funds was not needed by customers and, in the first

half of January 2015, was returned to credit institutions' accounts with the Bank of Russia. Together with retailers' usual earnings received during the New Year holidays and deposited to their bank accounts, this delivered an inflow of cash into the banking sector totalling 1.1 trillion rubles by the end of January 2015.

The return of cash to the banking sector continued in February-May 2015. The increase in the Bank of Russia key rate in December 2014 followed by the growth in interest rates on bank deposits spurred household interest in ruble deposits at the beginning of 2015. Despite subsequent cuts of the Bank of Russia key rate, households' propensity to save remained high in the first half of the year in view of the still attractive rates on bank deposits and the expectations that these rates would fall in future. The fall in demand for cash was also a result of the overall slack in economy and, specifically, in consumer demand (see Section 1.3).



According to Bank of Russia forecasts, conditional on the persistence of the current trends, we can expect an inflow of up to 0.3 trillion rubles in liquidity into the banking sector due to the contraction of cash in circulation at the end of 2015.

In the long-term perspective, as the share of cashless payments in the economy rises and the volume of transactions involving cash declines, the impact of cash on banking sector liquidity will subside.

Table 1.2.1

### Forecast of banking sector liquidity factors (trillions of rubles)

		2013	2014	2015 <sup>1</sup> (forecast)
Total for liquidity factors	1 = 2 + 3 + 4 + 5	-1.7	-2.6	[1.8; 3.6]
of which:				
– change in general government accounts with the Bank of Russia and other operations <sup>2</sup>	2	-0.4	0.9	[0.7; 2.9]
– change in cash in circulation	3	-0.5	-0.3	[0.1; 0.3]
– Bank of Russia interventions in the domestic FX market, purchases of monetary gold <sup>3</sup>	4	-0.9	-3.1	[0.5; 0.8]
– change in credit institutions' required reserves with the Bank of Russia	5	0	-0.1	[0; 0.1]
Change in free bank reserves <sup>4</sup>	6	0	0.2	[0.1; 0.2]
Change in outstanding amount on Bank of Russia refinancing operations	7 = 6 - 1	1.7	2.8	[-3.5; -1.6]
Memo item: outstanding amount on Bank of Russia refinancing operations (as of end-year) <sup>5</sup>	8	4.5	7.3	[3.8; 5.8]

<sup>1</sup> January-May 2015 - actual, June-December 2015 - forecast.

<sup>2</sup> Including interest payments on Bank of Russia refinancing operations.

<sup>3</sup> In previous MPR releases these operations were categorised as 'change in general government accounts with the Bank of Russia and other operations'.

<sup>4</sup> 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.

<sup>5</sup> Excluding the subordinated loan of Sberbank of Russia and bonds of certain credit institutions in the Bank of Russia portfolio.

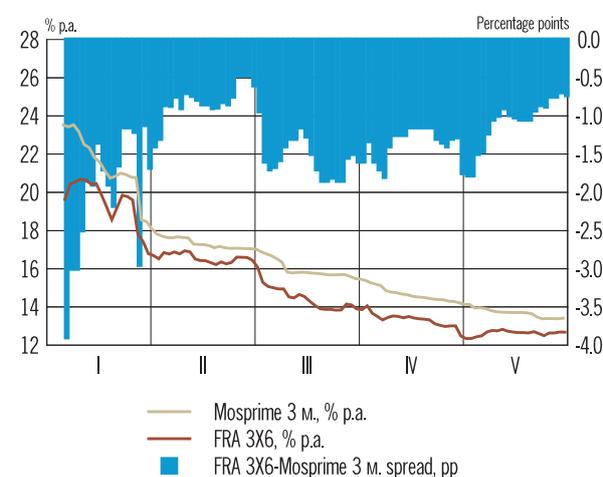
Source: Bank of Russia calculations.

5.8 trillion rubles. In this context, the FX purchases by the Bank of Russia in the domestic FX market to replenish its international reserves could support the inflow of liquidity into the banking sector. The Bank of Russia examines various scenarios and, in the event of a change in banking sector demand for liquidity, will be ready to adjust the amount of funds provided through auction-based operations<sup>1</sup>. The Bank of Russia's repo operations will continue to play a central role in regulating banking sector liquidity, while medium-term demand for liquidity will be regulated by providing auction-based loans secured by non-marketable assets. In general, the Bank of Russia's operations to regulate liquidity will still be geared toward creating environment for

setting money market rates close to the Bank of Russia key rate.

The shape of yield curves and the dynamics of IR derivative prices in the ruble segment of

Chart 1.2.5  
FRA 3X6 - Mosprime 3-month spread in 2015



Source: Bank of Russia.

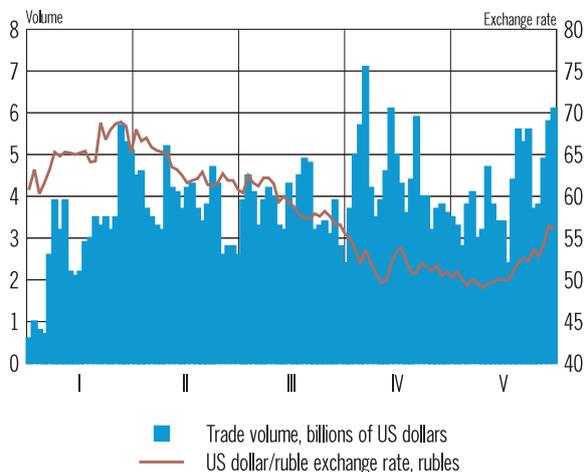
<sup>1</sup> See the term 'Outstanding amount on Bank of Russia refinancing operations' in the Glossary, as well as the material 'On setting limits on Bank of Russia market operations to provide (absorb) liquidity' (in the Russian language) on the Bank of Russia website: [http://www.cbr.ru/DKP/standart\\_system/DKP\\_limit.pdf](http://www.cbr.ru/DKP/standart_system/DKP_limit.pdf).

the money market point to market participants' persistent expectations of a further fall in short-term interbank rates and, consequently, the Bank of Russia key rate. In March-May 2015, the value of the three-month OIS was 20 basis points below the key rate on average, while the spread between the Mosprime 3-month rate and forward contracts on this rate (FRA 3x6) exceeded 100 basis points for a large part of the period under consideration (Chart 1.2.5). Overall, the current term structure of money market rates suggests that market participants are expecting the Bank of Russia to reduce its key rate by 100-200 basis points over the next quarter.

### Foreign exchange market and Bank of Russia foreign currency liquidity provision

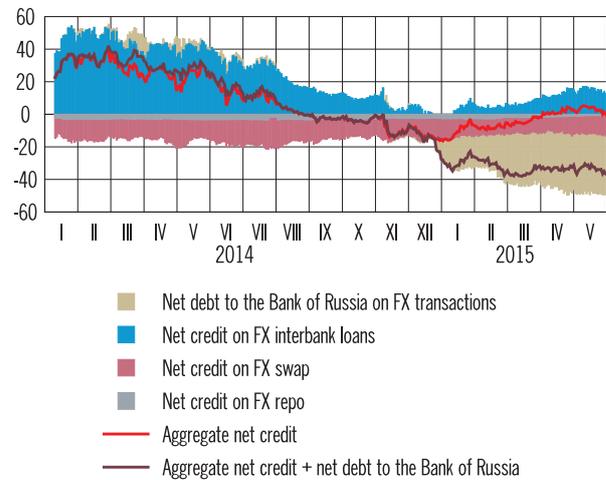
With the increase in credit institutions' outstanding amounts on Bank of Russia foreign currency refinancing operations and Russian organisations having passed the peak of their external debt payments (in February-March 2015), the foreign currency liquidity situation of Russian banks improved considerably. Together with the contracted demand for foreign currency from the corporate sector and households, this contributed to the ruble appreciation in March-May 2015 and a reduction in its volatility (Chart 1.2.6). The increase in oil prices and the depreciation of the US dollar relative to the basket of key global currencies along

Chart 1.2.6  
Volume of trade and US dollar/ruble exchange rate at the Moscow Exchange in 2015



Source: Moscow Exchange.

Chart 1.2.7  
Net FX credit from resident banks to non-resident banks (billions of US dollars)



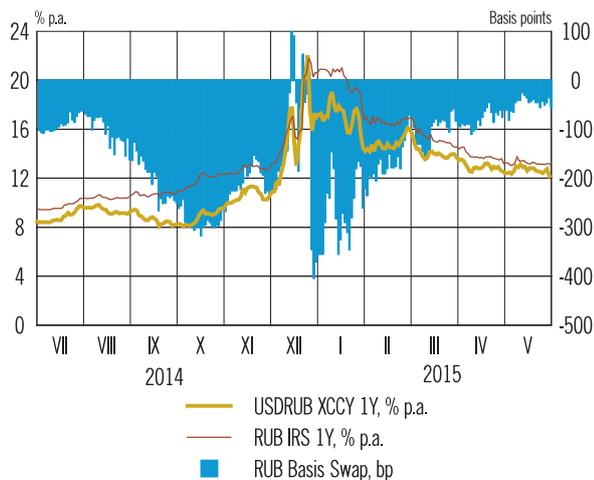
Source: Bank of Russia.

with the shift in market participants' expectations regarding the start of tightening of the US Fed policy (see Section 1.1) rendered serious support for the Russian currency during the period under consideration. In addition, the consistently high interest rate differential between ruble-denominated and foreign currency-denominated financial instruments also appreciated the ruble.

The return of Russian banks' net credit to non-resident banks on money market operations<sup>2</sup> to positive values at the beginning of May 2015, as was the case in mid-July 2014 (the period before the introduction of sector-specific sanctions), specifically signals an improvement in the foreign currency liquidity situation for credit institutions (Chart 1.2.7). In addition, the spread between

<sup>2</sup> Russian banks' net credit to non-resident banks on money market operations makes it possible to indirectly assess the available foreign currency liquidity held by Russian banks. Net credit to non-resident banks, which peaked at \$40 billion, started to fall in June 2014 and became negative in August, reflecting the formation of a foreign currency liquidity deficit in the Russian banking sector. Its stabilisation at the end of December 2014 and subsequent growth were largely down to the Bank of Russia's operations to provide foreign currency liquidity. Thus, the dynamics of the net credit to non-resident banks in general reflect the change in the situation with dollar liquidity which evolved in the second half of 2014-2015.

Chart 1.2.8  
Interest rates on FX and IR derivatives



Source: Thomson Reuters.

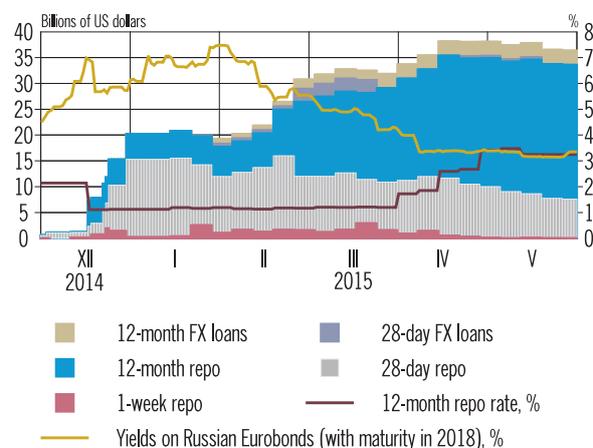
one-year ruble IR swaps and currency IR swaps<sup>3</sup> narrowed significantly (Chart 1.2.8).

Under these conditions, as the situation in the domestic foreign exchange market normalised and the risks to financial stability fell in March-April 2015, the Bank of Russia raised its minimum interest rates on instruments for providing foreign currency liquidity on three occasions. These decisions were aimed at bringing interest rates on foreign currency refinancing operations closer to market interest rates (Chart 1.2.9) and were designed to encourage banks to more actively search for alternative sources of foreign currency funds both in the domestic market and abroad. At the same time, the need to increase the amount of debt on Bank of Russia foreign currency refinancing operations fell. Consequently, in June 2015, the Bank of Russia suspended 364-day foreign currency repo auctions and also reduced the limits on these operations with 7- and 28-day maturities. If credit institutions' need for foreign currency subsequently changes, the Bank of Russia is prepared to promptly adopt decisions to change the limits on FX repo auctions.

In view of the stabilisation of the situation in the FX market and the significant decrease in international

<sup>3</sup> The spread between one-year ruble interest rate swaps (IRS) and currency IR swaps (fix/float USDRUB XCCY) represents the premium on the LIBOR that market participants pay to obtain foreign currency liquidity for the corresponding period. The narrowing of this spread indicates a reduction in the cost of borrowing dollar liquidity in the money market.

Chart 1.2.9  
Credit institutions' debt to the Bank of Russia on refinancing FX instruments (billions of US dollars)

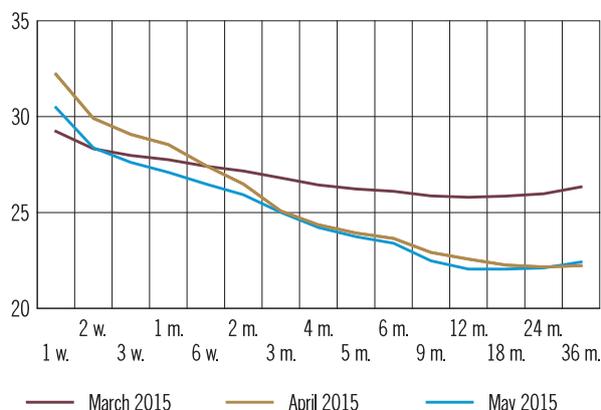


Sources: Bank of Russia, Bloomberg.

reserves over the last year, the Bank of Russia decided to conduct foreign currency purchases in the domestic foreign exchange market beginning 13 May 2015 in order to replenish those reserves. These operations are not intended to maintain the ruble exchange rate at a certain level: the purchases are carried out in small amounts (\$100-200 million) and distributed evenly during trading hours, which minimises their impact on the ruble's exchange rate dynamics and volatility. Amid the on-going impact of external factors restricting Russian companies' access to the international capital markets, the existence of robust international reserves creates environment for the uninterrupted servicing of foreign liabilities and for the stable functioning of the Russian financial system in case of any prolonged negative shocks. In view of this, the Bank of Russia plans to gradually expand the international reserves to \$500 billion. If there are any material changes in the foreign exchange market, the daily volume of these operations may be adjusted. In particular, if there are risks of destabilisation in the foreign exchange market, the Bank of Russia can cease its foreign currency purchases. In addition, the Bank of Russia is still prepared to carry out foreign exchange interventions if there is a threat to financial stability.

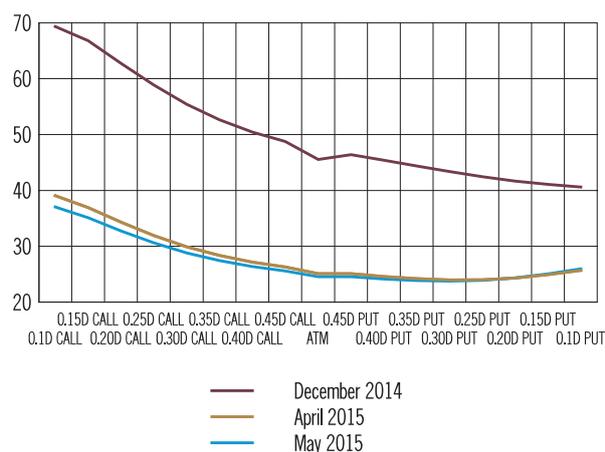
The national currency appreciation in the period under consideration contributed to the slowdown in inflation beginning from April 2015 and will facilitate a further reduction in the exchange rate dynamics impact on inflation in near term. This fact, among other things, was taken into account by the Bank

Chart 1.2.10  
Term structure of implied volatility for FX options  
(at-the-money)\* (monthly average values, pp)



\* Option strike price is equal to the underlying asset current price.  
Source: Thomson Reuters.

Chart 1.2.11  
Volatility smile on 3-month at-the-money options  
(monthly average values, pp)



Source: Thomson Reuters.

of Russia when making decisions to cut the key rate. However, the ruble exchange rate dynamics are only considered by the Bank of Russia to the degree that they affect the prospects of achieving inflation targets in the medium term and change the balance of risks for price dynamics and economic growth.

The strengthening of the ruble in March-May 2015 was accompanied by a decline and subsequent stabilisation of the ruble's volatility and affected the pricing of FX options. For example, the historical and implied volatility for (at-the-money) one-month USD/RUB call options ranged from 20 to 35 percentage points per annum during this period (while at its peak, in December 2014,

the realised volatility reached 90 percentage points). The current time structure of the implied volatility suggests that it will remain in this range in the medium term (Chart 1.2.10). Moreover, the asymmetric distribution of the ruble exchange rate against the US dollar relative to a risk-neutral measure fell in May 2015 compared with the previous month, which is consistent with a change in the shape of the volatility smile<sup>4</sup> (Chart 1.2.11). This suggests that FX option market participants expect the risks of the ruble significant depreciation to decline over the coming quarter.

## Asset prices and bond market

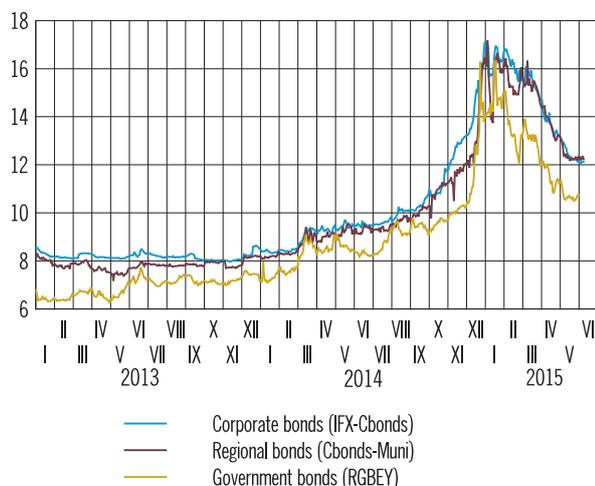
The Bank of Russia's phased out reduction of the key rate and the normalisation of the situation in the domestic foreign exchange market, combined with on-going expectations among Russian financial market participants with regard to the following monetary policy easing triggered growth in prices and decline in the yield of ruble-denominated financial assets in March-May 2015 (Charts 1.2.12 and 1.2.13).

In the context of relatively favourable situation in the domestic bond market, real sector companies and banks actively announced and released new issues of corporate bonds in March-May 2015 (Chart 1.2.14). Thanks to investors' high interest in these corporate bond issues, the issuers largely reduced the cost of their initial borrowing. Continued restrictions on access to external funding also maintained the high level of issuing activity in the corporate segment of the bond market.

Russian Ministry of Finance auctions to place federal government bonds (OFZs) in the primary market were also highly successful amid the high demand, which allowed the issuer to sell 89% of the OFZs offered over the period under consideration (Chart 1.2.15). The demand in the OFZ market was largely shaped by expectations that interest rates would fall. Long-term OFZ issues with permanent coupon income (OFZ-PD), which make it possible to fix attractive yields over the long term, and short-term OFZ issues with a variable coupon income (OFZ-PK) tied to the RUONIA money market rate, enjoyed heightened interest from investors.

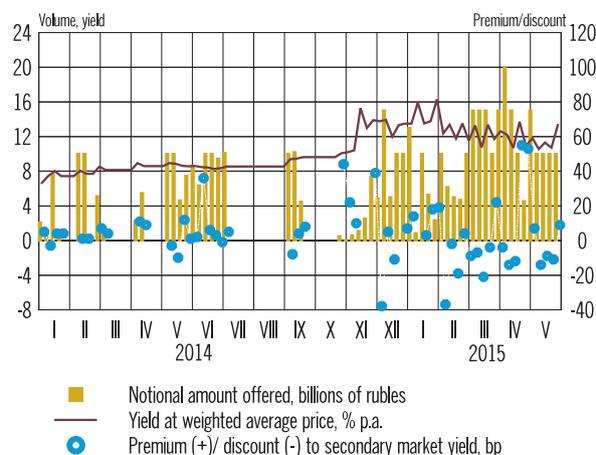
<sup>4</sup> See the Glossary.

**Chart 1.2.12**  
**Bond yields (% p.a.)**



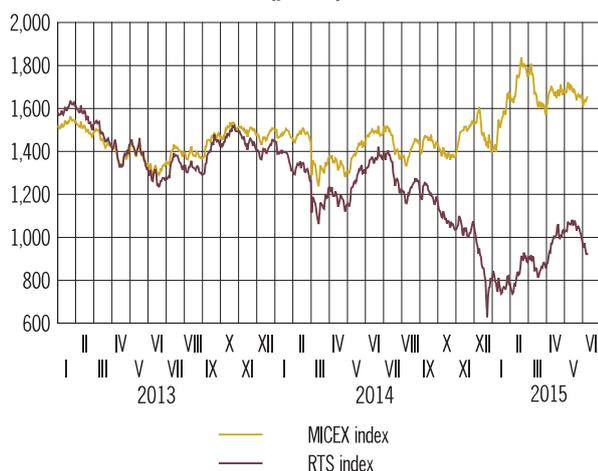
Sources: MICEX SE, Cbonds.ru.

**Chart 1.2.15**  
**Ministry of Finance auctions for OFZ placement/additional placement**



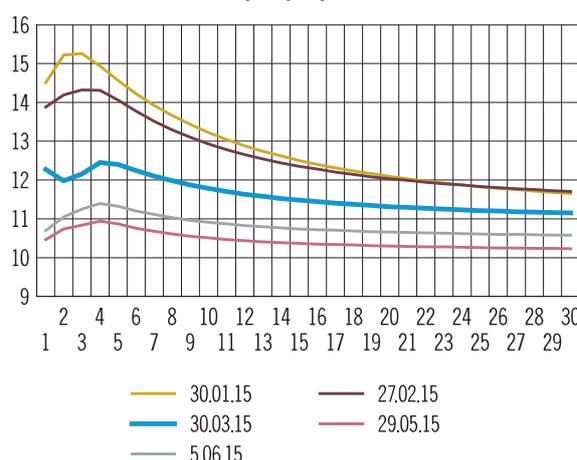
Sources: MICEX SE, Bank of Russia calculations.

**Chart 1.2.13**  
**Equity indices (points)**



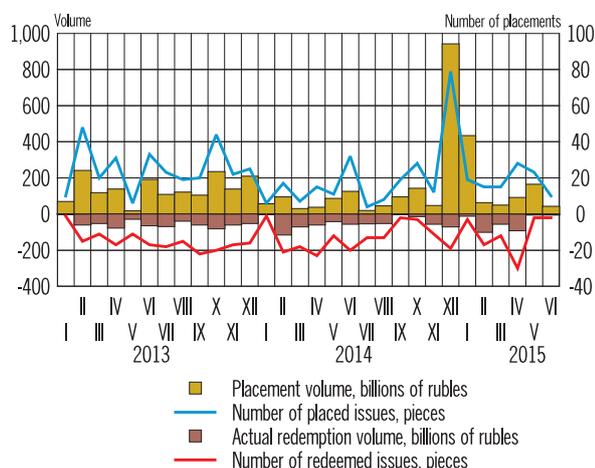
Source: MICEX SE.

**Chart 1.2.16**  
**Coupon-free OFZ yield curve (% p.a.)**



Sources: MICEX SE, calculated using the method elaborated together with the Bank of Russia.

**Chart 1.2.14**  
**Placement at the Moscow Exchange and redemption of corporate bonds**



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

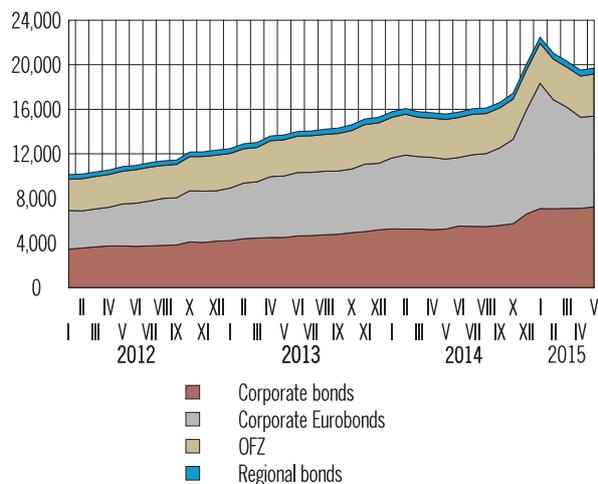
However, as market expectations regarding short-term rates were realised following the Bank of Russia's phased-out reduction of the key rate, the inversion on the long section of the OFZ yield curve decreased (Chart 1.2.16).

Due to significant placements of corporate bonds and OFZs, by the end of May 2015, the total portfolio of outstanding bonds in the domestic market increased by 2.9%, compared with the end of February 2015, to 11.6 trillion rubles<sup>5</sup> (Chart 1.2.17).

<sup>5</sup> Excluding OFZ issues (with a total nominal volume of 1 trillion rubles) transferred by the Russian Ministry of Finance to the state-owned corporation Deposit Insurance Agency (DIA).

Chart 1.2.17

### Volume of outstanding Russian bonds (billions of rubles)



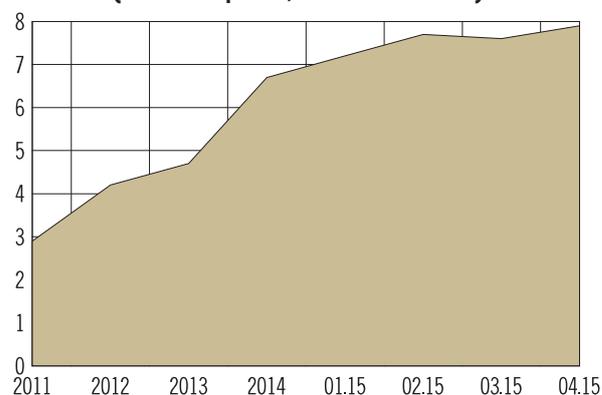
Sources: MICEX SE, Cbonds.ru.

The securities market expanded especially due to the keen interest in securities demonstrated by credit institutions. The domestic bond market is the main source of market collateral for banks and is used, among other things, in Bank of Russia refinancing operations. In March-May 2015, Russian banks accounted for two thirds of the total volume of corporate bond trade and more than 80% of the total volume of OFZ trade in the primary and secondary MICEX markets. At the same time, the slight increase in investment by foreign funds in ruble-denominated financial assets witnessed in the period under consideration did not have a noticeable impact on the volume of non-residents' trade in Russian corporate bonds and OFZs and their share in the structure of holders of Russian debt securities. Growth in banks' demand for debt instruments, combined with the programme for bank recapitalisation that is currently being implemented through the OFZ mechanism<sup>6</sup> and Bank of Russia measures to expand the Lombard List, will increase credit institutions' market collateral by the end of

<sup>6</sup> Pursuant to Federal Law No. 98-FZ, dated 20 April 2015, 'On Amending Certain Laws of the Russian Federation', the DIA is entitled to carry out measures to increase the capitalisation of banks by transferring OFZs to banks in exchange for banks' preferred equity or their subordinated liabilities. In all, over 0.8 trillion rubles were allocated to recapitalise the banks permitted to participate in this programme. In May 2015, the DIA transferred government bonds with a face value totalling 71.5 billion rubles to OJSC Petrocommerce Bank, PJSC Bank Otkritie FC and PJSC Sovcombank.

Chart 1.2.18

### Securities held by credit institutions included in the Bank of Russia Lombard list (as of end-period, trillions of rubles)\*



\* Including securities pledged as collateral under repos.

Source: Bank of Russia.

the year to 8.5 trillion rubles from 6.7 trillion rubles as of 1 January 2015 (Chart 1.2.18).

If there is no deterioration in external conditions and current trends in the foreign exchange and money markets continue, prices of financial assets will continue to recover and issuing activity will remain high. An additional factor underlying growth in demand in the domestic bond market, in particular in the corporate bond segment, will be the implementation of the Government of the Russian Federation's decision to transfer pension savings into non-governmental pension funds<sup>7</sup>. Corporate bonds comprise a significant portion of the portfolio of these funds. However, the cooling of economic activity will have a constraining effect on the dynamics of quantitative indicators in the stock market.

In 2015 Q1, growth indices for prices in the primary and secondary housing market were comparable with the corresponding figures for 2014 Q4, staying below inflation (Chart 1.2.19). Residential construction growth rates remained high. In January-March 2015, new housing commissioning increased by 32.8% year on

<sup>7</sup> Insurance contributions for pension savings for the second half of 2013, the pension savings of individuals who decided to move from state management companies to non-governmental pension funds, household contributions under joint-funding programmes for the investment part of state pensions, 'maternity capital' resources, and other funds totalling roughly 0.5 trillion rubles were transferred to management companies and non-governmental pension funds (NPFs).

Chart 1.2.19  
Housing and consumer goods price indices  
(quarter as % of corresponding quarter of previous year)



Sources: Rosstat, Bank of Russia calculations.

year (in 2014 Q1, it increased by 30.6%). The positive growth rates of housing prices was in part supported by the mortgage interest rate subsidy programme<sup>8</sup>. The expansion of mortgage lending has been one of the main drivers of housing prices growth in recent years. However, given the forecast of economic cooling and the fall in household real disposable income, it is expected that growth rates in housing prices will remain well below inflation over the coming quarters. Nonetheless, considering the lowering of the Bank of Russia key rate in recent months and the expected slowdown in inflation, mortgage lending rates are forecast to fall gradually, which will buoy the housing market.

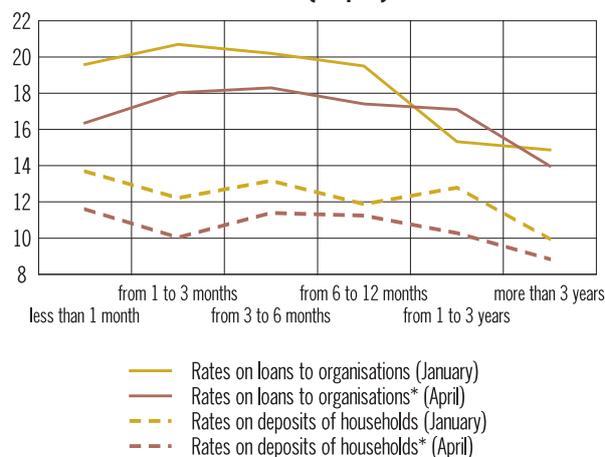
## Bank lending and deposit operations

The key rate reduction by the Bank of Russia since the beginning of 2015, combined with expectations of a further monetary policy easing, brought down rates in most segments of the lending and deposit market (Chart 1.2.20).

Despite the downturn in deposit rates, they remained relatively high, and the normalisation of the situation, due to the inflow of household funds

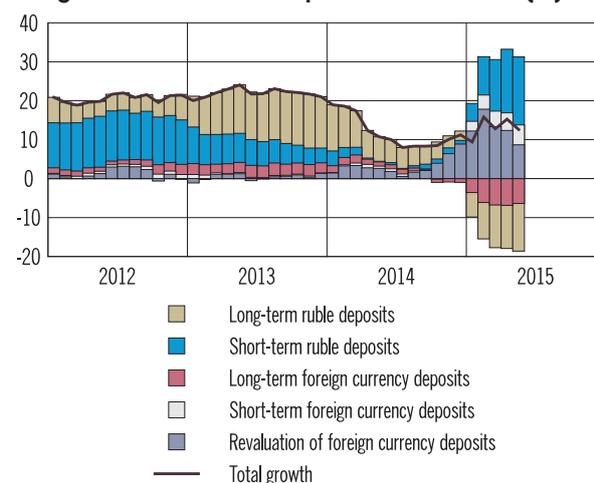
<sup>8</sup> Under the mortgage interest rate subsidy programme, 20 billion rubles will be allocated from the budget to the acquisition of residential properties under construction or new construction, which will allow roughly 400 billion rubles worth of mortgages to be issued at rates of up to 12% p.a.

Chart 1.2.20  
Term structure of rates on ruble bank transactions  
in 2015 (% p.a.)



\* Preliminary estimate.  
Source: Bank of Russia.

Chart 1.2.21  
Contributions of various components to the annual  
growth rates of bank deposits of households (%)



Source: Bank of Russia.

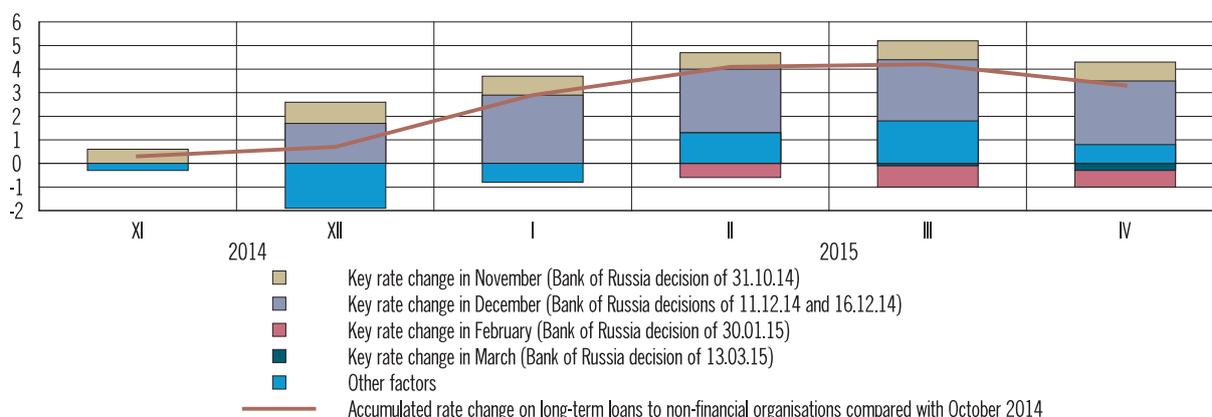
into bank deposits in January, was also seen in the period under consideration. Amid the fall in cash in circulation, growth in household deposits in February-April 2015 (adjusted by the foreign exchange revaluation) was 5.9%, reaching its highest value<sup>9</sup> since the start of 2014.

The inflow of funds to household deposits was accompanied by further shifts in their structure (Chart 1.2.21). First, depositors continued to substitute long-term deposits with short-term ones, which can be explained both by the persistently inverted maturity structure of deposit rates and by

<sup>9</sup> Growth in household deposits over three moving months prior to the reporting date.

Chart 1.2.22

**Estimate\* of the Bank of Russia key rate impact on the rate  
of long-term loans to non-financial organisations (percentage points)**



\* The estimate is derived from time-varying parameter factor vector autoregression model (TVP FAVAR) built on the basis of a wide range of macroeconomic and financial indicators (48 statistical indicators), including monetary and real sector indicators.

\*\* Preliminary estimate.

Source: Bank of Russia.

macroeconomic uncertainty, which renders long-term investment unattractive. Second, although the inflow of household funds to foreign currency deposits recovered in April 2015, growth rates for household foreign currency deposits lagged behind the equivalent figures for ruble deposits, which, combined with the ruble appreciation, led to a fall in deposits dollarisation. Nevertheless, the current level of dollarisation still exceeds the initial retail deposit dollarisation level registered at the start of the previous year. This is linked to the fact that the exchange rate of the ruble relative to main foreign currencies is still lower than that at the start of 2014 and, accordingly, the positive revaluation of foreign currency deposits has been retained.

As banks and depositors adapt to the different situation in the economy and financial sector, we can expect a rapid decrease in short-term deposit rates, which will restore the inflow of funds to long-term deposits and increase the average maturity of bank liabilities. In addition, given the stabilisation of the situation in the FX market and expectations of inflation downside in the medium run, we can expect the downward trend in the household deposits dollarisation witnessed in recent years to stay (ruble deposits growth rates have consistently exceeded foreign currency deposits growth rates, even in the periods of significant ruble depreciation in nominal terms).

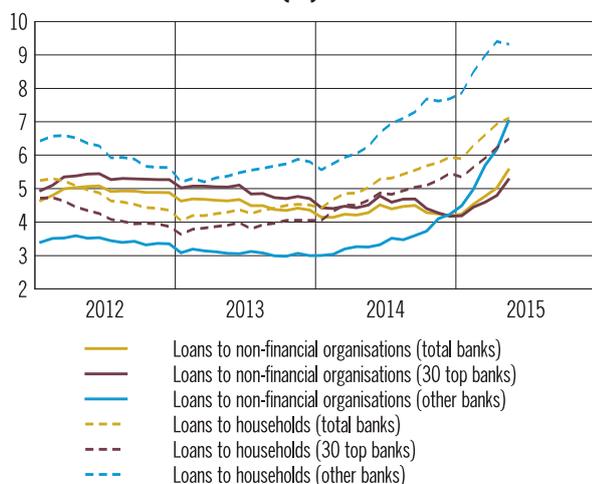
The spread of rates in the deposit market, which widened at the end of 2014, carried over into February-April 2015. During this period, relatively

high deposit rates offered by 'second-tier' banks put an end to the flow of deposits from small and medium-sized banks to large banks, which had been the case in previous months. The share of top 30 banks in the total volume of deposits attracted by Russian banks was virtually unchanged in the period under consideration.

The pass-through effect of the Bank of Russia's decisions on the credit market had a moderate lag, and in the first few months of 2015 credit rates continued to grow under the influence of the key rate hike occurred at the end of the previous year. However, in March-April 2015, the majority of market segments recorded falling rate dynamics. According to preliminary estimates, the overall reduction in the Bank of Russia key rate in January-April 2015 contributed 1.0-1.5 percentage points to the reduction in credit rates (Chart 1.2.22). However, the downward potential of the key rate reduction with regard to credit rates is not yet exhausted.

One of the factors shaping the credit market situation in February-April 2015 was piling credit risks. Caused by the slack in economy, the share of overdue loans in banks' loan portfolios continued to grow. In the corporate loan portfolio of small and medium-sized banks, the share of overdue loans moved close to the highs of the end of 2009. However, top 30 banks maintained lower levels of credit risk, which constrained growth in overdue loan numbers in the banking system as a whole (Chart 1.2.23).

Chart 1.2.23

Overdue bank loans  
(%)

Source: Bank of Russia.

Chart 1.2.25

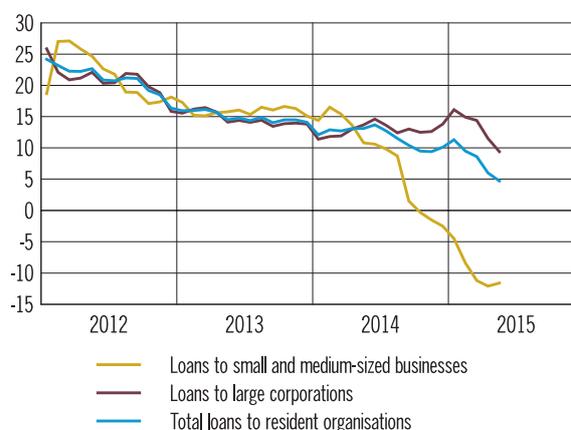
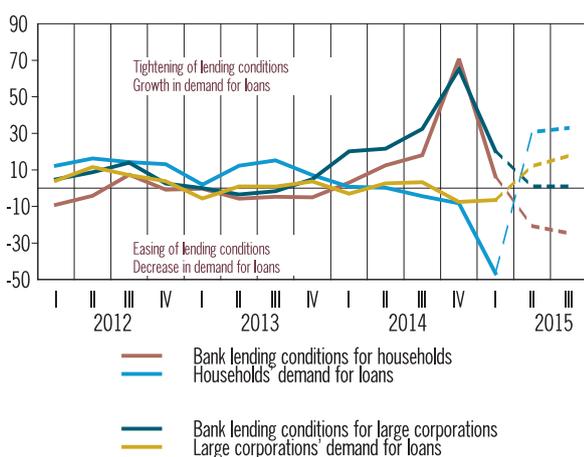
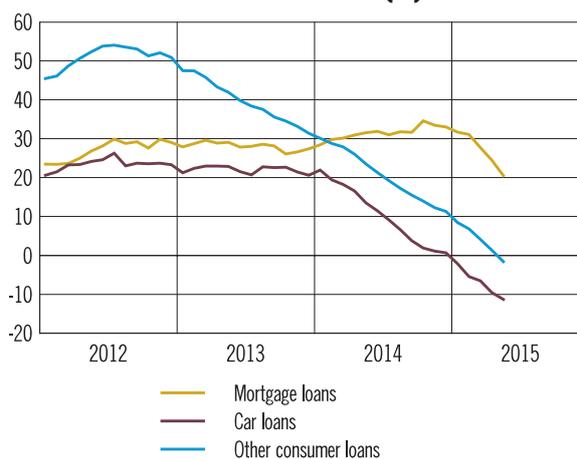
Annual growth rates of outstanding loans to organisations  
and individual entrepreneurs\* (%)\* According to reporting form 0409302, excluding foreign currency revaluation.  
Source: Bank of Russia.

Chart 1.2.24

Lending conditions and demand  
for loan index (points)

Source: Bank of Russia.

Chart 1.2.26

Annual growth rates of outstanding  
loans to households\* (%)\* According to sections 1 and 3 of reporting form 0409115.  
Source: Bank of Russia.

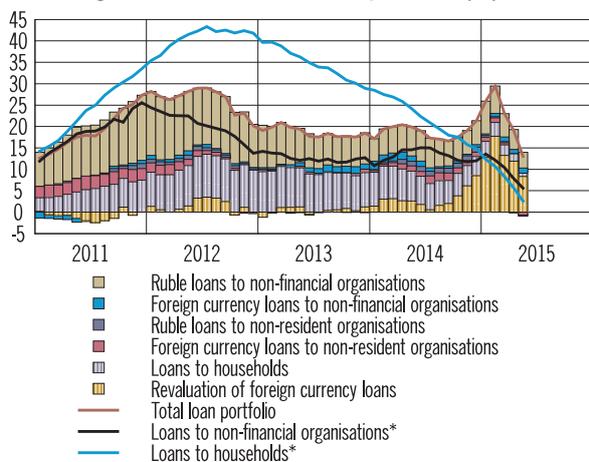
Amid escalating credit risks, in 2015 Q1, banks continued to tighten their non-price lending conditions, primarily their requirements for the financial standing of borrowers and the quality of loan collateral, albeit to a lesser degree than in previous quarters (Chart 1.2.24). As a result, the 'dash for quality' continued: the replacement of lending categories characterised by higher credit risk with less risky ones. In the corporate lending segment, lending to small and medium-sized business continued to shrink and was replaced by lending to large corporate borrowers (Chart 1.2.25). In the retail segment of the market, there was a downturn in consumer lending and car loans amid weak growth in mortgage lending (Chart 1.2.26).

Overall, growth rates of less risky corporate lending consistently exceeded the equivalent indicator of retail lending. Both in the corporate and retail segments of the market, the share of long-term loans with stricter borrower selection criteria increased. The structure of banks' loan portfolio was affected both by increased credit risks and by growth in demand demonstrated by large corporate borrowers, which had previously been actively obtaining funds in the international markets.

The economic crisis of 2008-2009 also saw the replacement of more risky lending with less risky lending. If in the medium term the rate of recovery of the loan portfolio structure is the same as it was observed in 2009-2010, the current shift

Chart 1.2.27

## Contributions of various components to the annual growth rates of bank loan portfolio (%)



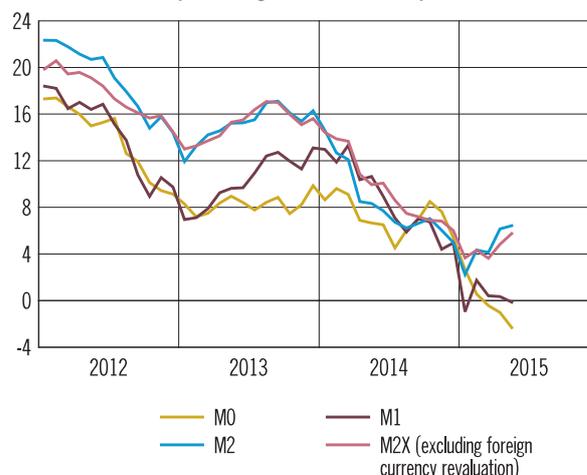
\* Excluding foreign currency revaluation.  
Source: Bank of Russia.

in the structure of the loan portfolio will not have a significant impact on the economy. However, if the trends in the structure of bank lending that are linked to the ‘dash for quality’ remain for a longer period of time, the risk that small and medium-sized companies’ share in the real sector structure will diminish could grow and, consequently, competition could weaken in the goods and services markets.

Overall, in March-April 2015, annual growth in banks’ total loan portfolio continued to fall as expected (Chart 1.2.27). This was due to stricter non-price bank lending conditions in 2015 Q1 coupled by persisting macroeconomic uncertainty and the associated decline in demand for credit, as well as the high debt burden of companies and households<sup>10</sup> (in part due to the revaluation of foreign currency debt). Despite the fall in credit rates seen in March-April, their overall level still remained relatively high, which also constrained lending. Thus, general bank lending conditions during the period under review were still relatively tight, even though there were signs of their easing. As of 1 May 2015, annual growth in the loan portfolio (adjusted by foreign exchange revaluation) fell to less than 5%, reaching its lowest value since the end of 2010. The positive annual growth was mostly linked to increased lending in the second half of 2014. In January-April 2015, the corporate loan portfolio of Russian banks shrank by 0.9% and the retail loan portfolio fell by 4.7%.

<sup>10</sup> See box ‘Debt burden indicators in the Russian economy’ in Section 1.3.

Chart 1.2.28

Monetary aggregates  
(annual growth rates, %)

Source: Bank of Russia.

According to banks’ estimates<sup>11</sup>, the tightening of lending conditions will come to an end in 2015 Q2-Q3. Moreover, in some market segments (in particular in the household lending segments and small and medium-sized business segments) lending conditions will be eased. Banks expect this to be accompanied by a partial recovery in demand for credit.

However, the existing conditions are not conducive to any notable increase in credit market participants’ activity in the short run. With the forecast slack in economy and the associated increase in credit risks, we can still expect relatively low annual growth in the total loan portfolio of banks over the coming quarters. By the end of 2015, growth could be 2-7%. As compared with the previous Report, the forecast has been lowered as a result of a more serious, than expected, contraction in the lending at the start of this year.

Low growth in lending has held back growth in money supply. Nevertheless, with the increased budget spending in early 2015, annual growth rates in monetary aggregates have stopped falling, stabilising around their 5-year low (Chart 1.2.28). Amid the expected slowdown in lending, which has been the main source of growth in money supply over the last few years, we can expect low growth rates in monetary aggregates to persist. At the same time, the planned use of the Reserve Fund

<sup>11</sup> Based on the results of the quarterly survey of bank lending conditions for 2015 Q1 ([http://www.cbr.ru/DKP/iubk/iubk\\_15-1.pdf](http://www.cbr.ru/DKP/iubk/iubk_15-1.pdf)).

resources to cover the budget deficit could support growth in money supply: all things being equal, with an increase of 1 trillion rubles in budget spending, the contribution of this source to annual growth in broad money supply could amount to roughly 2.5 percentage points. However, high budget spending could reduce demand for credit, which will constrain the impact of budget spending on money supply growth. Overall, by the end of 2015, growth

in ruble money supply is forecast to be in the range of 2-7% in line with the last release of the Report.

Low rates of growth in money supply alongside other factors create the necessary conditions to reduce inflation in the medium term (see Section 2), which was just one of the facts taken into account by the Bank of Russia when deciding to cut its key rate.

## 1.3. Internal economic conditions

In 2015 Q1, GDP fell by 1.9%. The moderate reduction in output was in line with Bank of Russia estimates. In April, aggregate demand continued to contract. Moreover, the decline in consumer spending turned out to be more considerable than expected. At the same time, fixed capital investments showed a milder decline than forecast. Although structural factors continue to constrain the development of the Russian economy, this year the contraction in output is also cyclical in nature. It is evidenced by higher unemployment rates, lower production factor utilisation, decline in new orders, deterioration of consumer confidence, and downturn in the real estate market.

Despite persistently negative annual GDP growth until late 2015, the economic recovery is expected to start in the second half of the year. According to estimates, as the terms of trade improve and the economy adjusts to the consequences of negative external shocks, GDP growth (seasonally adjusted) will resume. On the whole, GDP growth estimates for 2015 are revised upward against the forecast published in the Monetary Policy Report this March.

Inflation was below the previous estimates, having peaked in March this year, it started reducing in April. The ruble appreciation and its return to the fundamental values, lower inflation expectations and demand-side restrictions were the main factors behind the slowdown in consumer price growth. Inflation forecast for 2015 has been revised downward.

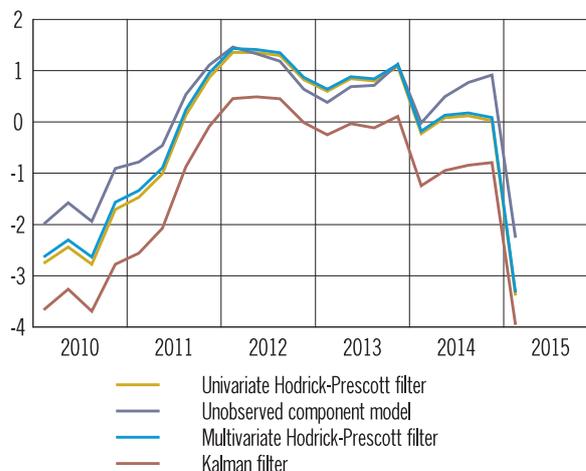
### Demand

In 2015 Q1, the annual GDP decline rate stood at 1.9%, which was in line with Bank of Russia estimates. Although structural factors continue to constrain the development of the Russian economy, this year the contraction in output of goods and services is also cyclical in nature. In 2015 Q1, the output gap was estimated, as before, to be negative, at the 2-4% level<sup>1</sup> (Chart 1.3.1). According to estimates, it may rise slightly in Q2-Q3, but it will start to shrink from Q4.

<sup>1</sup> As new information comes in, output gap estimates may be revised.

Chart 1.3.1

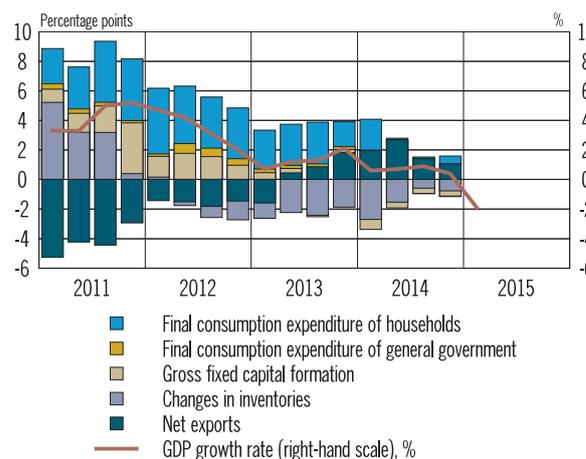
### Output gap estimates (as % of potential output)



Source: Bank of Russia calculations.

Chart 1.3.2

### GDP growth structure by expenditure (percentage points, of corresponding period of previous year)



Sources: Rosstat, Bank of Russia calculations.

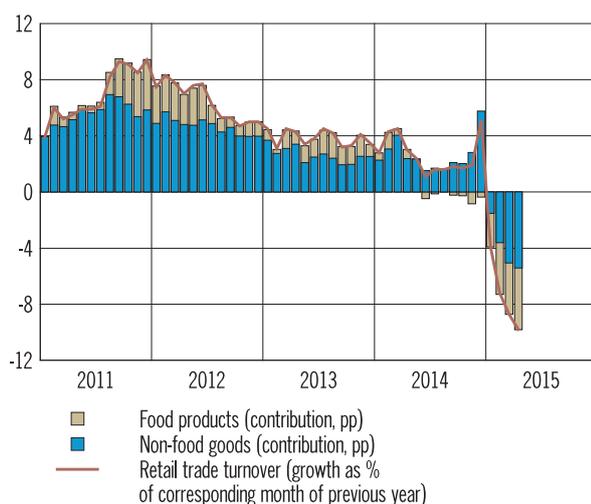
The published statistics are generally in line with Bank of Russia estimates of aggregate demand dynamics (Chart 1.3.2). However, the observed acute contraction in consumer demand was more considerable than expected (Chart 1.3.3). Seasonally adjusted retail trade turnover shrank in this period by a monthly average of 0.3-0.4%. Sales fell both in the food products and in the non-food goods segments (Chart 1.3.4). Meanwhile, the annual reduction in sales of non-food goods outstripped the fall in sales of food products, reflecting a change in consumer preferences towards more necessary goods amid the downturn in households' wellbeing.

Chart 1.3.3  
Real wages and retail trade turnover (growth as % of corresponding month of previous year)



Source: Rosstat.

Chart 1.3.4  
Retail trade turnover



Sources: Rosstat, Bank of Russia calculations.

Survey data also show a change in consumer behaviour of households due to the lower purchasing power. According to the data issued by the Russian Public Opinion Research Centre, a growing number of respondents has opted to purchase cheaper food products in April compared with early 2015 (16% against 24%) or to refrain from buying certain food products entirely (18% against 26%). Respondents mentioned purchasing products for future use, growing their own fruit and vegetables, and spending savings on daily expenses as other ways to adapt to the new economic conditions.

Perceptible changes reflecting a fall in the households' living standards can be seen in the

sale structure of certain food products. According to Rosstat data for 2014, the share of beef in total meat sales fell year-on-year (from 8.9% to 7.3%), while the share of cheaper poultry and pork rose (from 64.4% to 66.3% and from 16.4% to 16.9% respectively). The share of purchases of animal oil with high fat content (which is therefore more expensive) also fell, while purchases of cheaper forms of this product increased (from 32.6% to 41.7%). These trends are likely to continue until the end of 2015.

Consumer demand constraining factors are reduction in real wages (both in the private and the public sector), slowdown in consumer lending growth (see Section 1.2) and increase in households' propensity to save.

Amid the restrictions on wage indexation in the public sector, real wages in this segment will decline until late 2015. In the private sector of the economy, real wages are also expected to contract, albeit at a slower pace. On the one hand, companies are striving to reduce personnel costs and cut expenses by reducing wages and supplements and expanding part-time employment. On the other hand, the limited supply of labour force will exert upward pressure on wage dynamics. The overall fall in real wages in 2015 is estimated to be 9-10% (see 'Labour market' section).

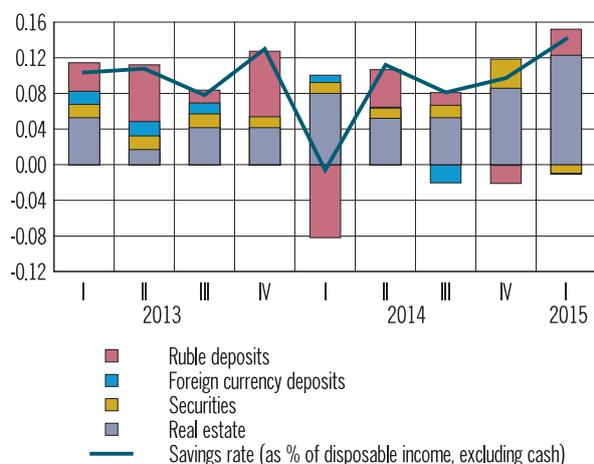
Household lending dynamics will also continue to constrain consumer demand through the end of the year. Relatively high interest rates (for details, see Section 1.2) and increased requirements to borrowers' financial standing and the quality of loan collateral restrict demand for credit resources. Besides, the need to service previously obtained loans amid income contraction is an additional financial burden for households and has a negative impact on disposable income dynamics.

Higher savings rates in Q1 this year were primarily caused by increased investment in non-financial assets (real estate being the key component), which may have been seen by the population as more reliable (Chart 1.3.5). Furthermore, the increase in interest rates on household deposits following the rise in the Bank of Russia key rate contributed to growth in household ruble accounts with commercial banks in Q1.

Given that inflation expectations have stabilised, if real interest rates and the ruble exchange rate

Chart 1.3.5

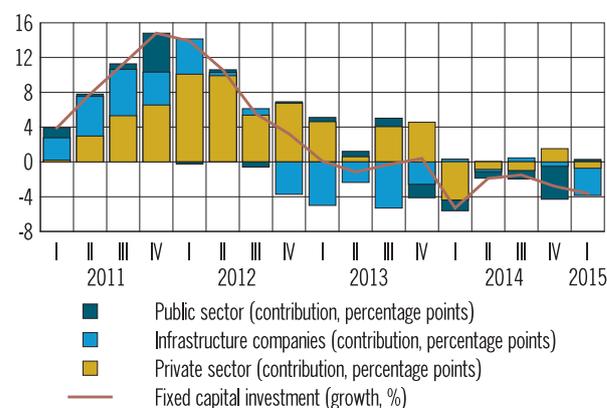
### Contribution of components to savings rate (%)



Sources: Rosstat, Bank of Russia calculations.

Chart 1.3.7

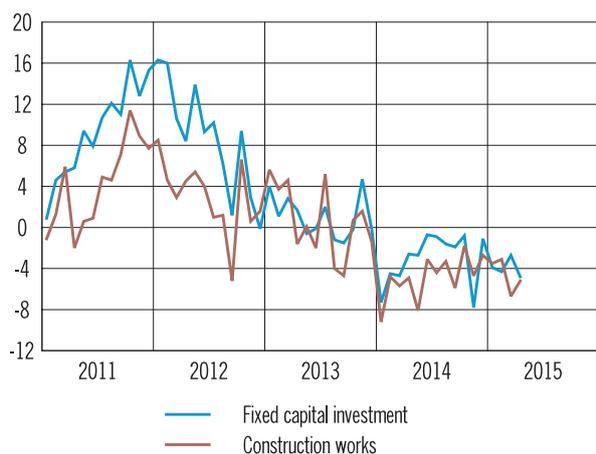
### Fixed capital investment by public, private sector and infrastructure companies (of corresponding quarter of previous year)



Sources: Rosstat, Bank of Russia calculations.

Chart 1.3.6

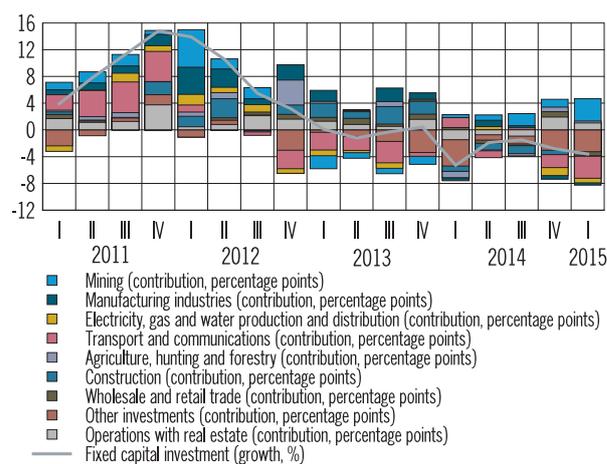
### Fixed capital investment and construction works (growth as % of corresponding month of previous year)



Source: Rosstat.

Chart 1.3.8

### Fixed capital investment by activity type (of corresponding quarter of previous year)



Sources: Rosstat, Bank of Russia calculations.

remain close to the current levels over the coming quarters, we can expect savings rates to remain unchanged.

Thus, taking into account the forecast dynamics of factors affecting consumer demand, a downward trend in household final consumption can be expected to continue until late 2015. The decrease in inventories of retail trade organisations also suggests that these organisations expect the demand to remain low in the short term. In general, according to estimates, annual spending on final consumption in Q2-Q4 will range from 5% to 7%.

In 2015 Q1, the annual decline in fixed capital investments stood at 3.6%, which exceeds the average quarterly rates in 2014 (Chart 1.3.6). The

main factors holding back investment demand were economic agents' negative expectations regarding the development prospects of the Russian economy, Russian companies' limited access to international financial markets, stricter domestic borrowing conditions (as a result of higher loan rates and banks' requirements to the quality of loan portfolio), and the need to settle external debt amid the increased ruble debt burden.

According to preliminary estimates, the decline in investment was the most pronounced in construction. In January-April, the volume of construction work shrank by 4.8% year-on-year.

According to estimates, in 2015 Q1, government investments demonstrated slight growth, while other

sectors showed a downturn in investment activity. Infrastructure sector companies made a significant negative contribution to capital investment dynamics (Chart 1.3.7).

Amid the overall decline in fixed capital investment in Q1 this year, capital investments in mining industry development continued to be positive (Chart 1.3.8). Due to the import substitution, agriculture supported insignificantly the investment activity. Capital investments in these industries grew by 14.8% and 8.6% respectively year-on-year.

The wholesale and retail trade, transport and communications, and electricity, gas, and water production and distribution made a considerable negative contribution to investment activity dynamics.

Fixed capital investment dynamics turned out to be considerably better than previously anticipated. The lower than expected fall in investments could be attributed to higher profits in 2015 Q1 for the economy as a whole (see the box in 'Supply

section). High federal budget spending and the implementation of governmental anti-recessionary measures, such as the preferential mortgage lending programme and suspension of tax burden increase until 2018, may have turned out to be additional factors supporting investment activity. Besides, the launch of construction work on the Power of Siberia gas pipeline supported investments in March.

However, in April 2015, the annual decline in fixed capital investments accelerated to 4.8%. According to estimates, under the influence of these factors, the reduction in fixed capital investments in most economic activities in the private and the public sector could intensify in 2015 Q2-Q4. These dynamics will result primarily from the lack of funding sources. Higher cost of debt servicing (domestic debt as a result of revised lending rates and external debt due to depreciation) will have a negative impact on the private sector, while sequester and regional budget problems will have a negative impact on the public sector.

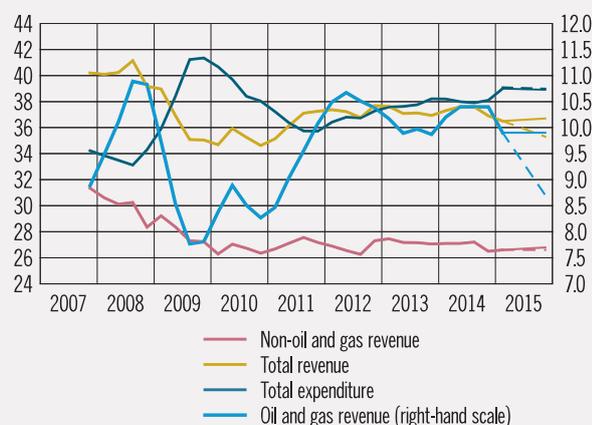
## Budget policy

According to data issued by the Federal Treasury, in 2015 Q1, budget expenditures of the Russian Federation amounted to 39.1% of GDP, which exceeds similar indicators for 2014 Q1 by 3.9 percentage points (Chart 1). The reason behind the increased expenditures is that spending set forth in the draft budget for 2015, including on national defence, is ahead of schedule.

With budget income contracting relative to GDP due to the decline in oil and gas revenue caused by the oil price fall, the federal budget deficit stood at 2.7% of GDP in 2015 Q1 (in 2014 Q1 it showed a surplus of 3.4% of GDP). Moreover, the non-oil and gas deficit increased by 3.6 percentage points to 12% of GDP.

According to estimates, in 2015, the ratio of the Russian Federation's budget income to GDP will fall by 1.6 percentage points relative to GDP compared with 2014. This results from considerable decline in oil and gas revenues due to falling oil prices while oil and gas revenues are stable relative to GDP. Budget expenditures could rise by 0.9 percentage points of GDP, which will cause the deficit to increase by 2.5 percentage points, to 3.7% of GDP. Taking this into account, in 2015, according to Bank of Russia estimates, Reserve Fund spending could reach about 2.0 trillion rubles.

Chart 1  
Russian Federation budget revenue and expenditure  
(moving over last four quarters, as % of GDP)\*



\* Solid line - actual and forecast based on the Budget Policy Guidelines, dash line - baseline forecast of the Monetary Policy Department.  
Sources: Russia's Ministry of Finance, Bank of Russia calculations.

The annual decline in gross fixed capital formation is estimated to be 4.5-6% through the end of 2015.

The fall in aggregate demand and low business confidence is expected to result in further reduction in inventories. In Q2-Q4 2015, the overall trend toward reduced gross capital formation, developed over the last few quarters, will persist.

The only component which made a positive contribution to GDP growth in 2015 Q1 was net exports. The growth in this indicator was conditioned by faster decline in physical goods and services import volumes compared with the reduction in export volumes. In the short term, the decrease in imports is expected to continue due to the recent

ruble depreciation and low domestic demand. However, the increase in oil prices and economic growth of Russia's trading partners will contribute to returning the export growth to near-zero. According to estimates, the contribution of net exports to GDP growth will continue to be positive in 2015 Q2-Q4.

Thus, taking into account the forecast dynamics of demand components through the end of 2015, goods and services output is expected to further decline year-on-year amid a considerably milder decline in GDP quarter-on-quarter in Q2 and slight growth in Q3-Q4 (seasonally adjusted), which results primarily from a slight improvement in terms of trade and the gradual adjustment of the economy to negative external shocks.

### Debt burden indicators in the Russian economy

The analysis of debt burden dynamics in the economy provides important information to the Central Bank, both in terms of monitoring risks to financial stability and assessing the impact of the monetary policy transmission mechanism.

The standard indicator used to measure debt burden is the ratio of private sector debt to GDP. At the end of 2014, in Russia this ratio stood at about 60% for domestic debt and 90% including foreign debt<sup>1</sup>, which is lower than in advanced economies (for most countries it exceeds 100%; the sample average is about 150%). At the same time, the debt-to-GDP ratio in Russia is higher than the figures for most emerging market economies in Europe, Asia and Latin America. However, in 2014 this figure showed the highest growth over the last 6 years (more than 6%), primarily due to the growth in outstanding loans in foreign currency, which resulted from the ruble depreciation.

To assess the balance of changes in the debt burden several approaches can be used. First, the equilibrium value of debt burden can be determined based on the assessment of the sustainable ratio between debt-to-GDP and fundamental factors (real GDP and price growth dynamics) for Russia<sup>2</sup>. From the calculations carried out using this approach, the debt-to-GDP ratio slightly exceeded the equilibrium value at the end of 2013, while in 2014, the actual debt exceeded the equilibrium value the most over the period under review (since 2004) (Chart 1, blue line).

As temporary 'catch-up' growth in lending may be typical of emerging markets during the transition period, the estimates of optimal rates of change in the debt-to-GDP ratio may be overstated for them. In view of this, an alternative approach can be used for these countries which parameterises the equilibrium ratio between debts and key macroeconomic variables based on data for advanced economies and then applies it to individual emerging markets<sup>3</sup>. The results of this method show that after perceptible growth in recent years, in 2014, the debt-to-GDP ratio for Russia reached the levels in line with the median equilibrium value, which was defined taking into account the experience of developed countries and the dynamics of fundamental values for the Russian economy (Chart 1, red line). This suggests that future growth in the debt-to-GDP ratio in Russia should no longer be catching up. Consequently, a balanced path of change, not posing any risk to financial stability, should be determined in accordance with growth in economic activity and should be characterised by more moderate rates of change.

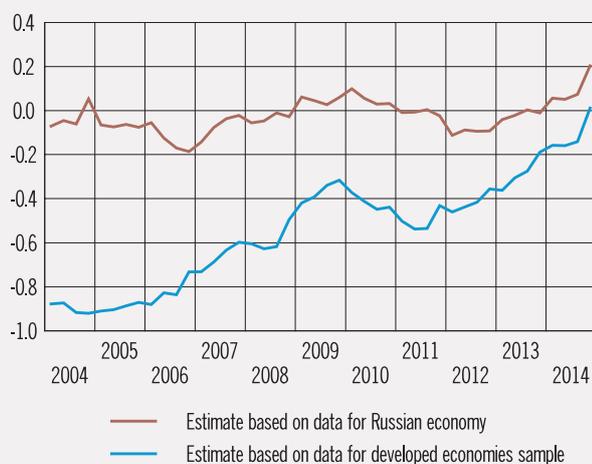
<sup>1</sup> Banks' claims on the private sector of the economy are used as an indicator of domestic credit. External credit is defined as other sectors' external debt in accordance with Russia's balance of payments indicators (under BPM6).

<sup>2</sup> Deryugina E., Kovalenko O., Pantina I., Ponomarenko A. *Disentangling loan demand and supply shocks in Russia* // Bank of Russia. 2015. Working Paper Series No. 3.

<sup>3</sup> Egert B., Backe P., Zumer T. *Credit growth in central and eastern Europe: new (over) shooting stars?* // ECB Working Paper Series. 2006. No. 687.

Chart 1

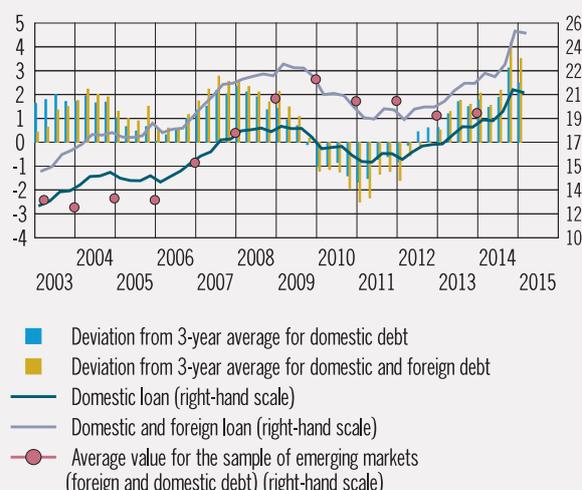
### Estimate of Russian loan-to-GDP ratio deviation from the equilibrium level



Source: Bank of Russia calculations.

Chart 2

### DSR in Russia



Source: Bank of Russia calculations (for 2015 Q1 – preliminary estimate).

Along with the debt-to-GDP ratio the debt service ratio<sup>4</sup> (hereinafter, the DSR) can also be used as an indicator of the debt burden in the economy, which is defined as a ratio between accumulated debt service payments, including both debt redemption and interest payments, and the current revenues. It can be calculated using the formula:

$$DSR_t = \frac{i_t * D_t}{(1 - (1 + i_t)^{-s_t}) * Y_t}$$

where D – denotes an aggregate credit stock,  
i – denotes the average interest rate on the stock,  
s – denotes the average remaining maturity,  
Y – denotes the current income.

This indicator shows a significantly lower spread in a broad sample of countries than the debt-to-GDP ratio, as it accounts for the direct impact of differences in interest rates and loan maturities on the current debt burden. The former are lower and the latter are longer for advanced economies, in part due to sustainably low inflation and a developed financial system, which makes it normal to support a higher debt-to-GDP ratio with comparable DSR levels. Besides, studies show that the DSR can be an informative indicator of risks to financial stability, which can be affected both by the level and the growth rate of the DSR<sup>5</sup>.

The dynamics of the DSR in the Russian economy (Chart 2) are largely comparable with the indicators of a sample of comparable emerging market economies, including in the pre-crisis boom of 2007-2008 and the subsequent adjustment. In 2014, the DSR indicator for Russia showed significant growth, primarily due to the foreign exchange revaluation of foreign currency loans amid the ruble depreciation. As a result, the levels and rates of change reached by the end of the year indicated higher risks to financial stability.

The analysis of debt burden indicators draws a conclusion that lending dynamics in the short term will be held back by both demand-side and supply-side objective factors, and the slowdown in the growth of credit aggregates, even amid the monetary policy easing, can be viewed as a natural phenomenon. According to the Bank of Russia forecast, 2015-2016 will see a gradual reduction in the debt burden and further return of key indicators to medium-term trends.

<sup>4</sup> Drehmann M., Juselius M. Do debt service costs affect macroeconomic and financial stability? // *BIS Quarterly Review*, September 2012. P. 21-35.

<sup>5</sup> Drehmann and Juselius (2012) conclude that a DSR exceeding 20-25% and its drastic increase by 4-6 percentage points relative to the long-term average indicates an increase in risks to financial stability.

## Supply

Contraction of aggregate demand was reflected in the output of goods and services by types of economic activity. The main contribution to the reduction in GDP was made by such industries as construction, wholesale and retail trade, and manufacturing, the output of which was primarily designated for the domestic market.

In February-March 2015, industrial production as a whole showed a moderate decline. Export-oriented production (mining, coke and oil products, metallurgy, chemicals) supported the output. In April, the rate of decline in industrial production accelerated (to 4.5%) mainly due to the downturn in output in internal investment demand-oriented industries (machinery, equipment and electrical equipment), and in low competitive production of non-food consumer goods (textiles and textile products).

The development of the investment and the high-tech sectors of the economy in general is constrained by a series of additional restrictions, mainly technological backwardness of certain manufacturers, high consumption of electricity and materials in manufacturing, imposition of sector-specific sanctions that restrict access to certain foreign technologies and capital, unavailability of financial resources (including for conducting research and development), and high dependence on deliveries of imported components.

However, the development of import substitution processes had a positive influence on output for a number of types of economic activity. The food industry saw a positive growth rate: there was an increase in the output of food products impacted by sanctions (meat and meat products, cheese, animal feed), with a reduction in the share of imports in retail trade resources (Charts 1.3.9, 1.3.10, 1.3.11).

### Financial position of enterprises of the real sector

The development of import substitution in certain market segments, higher profitability of export operations, and measures undertaken by organisations to adapt to the weakening domestic demand had a positive influence on the financial results of organisations' activities in 2015 Q1. The balance of profit and loss of large and medium-sized organisations exceeded the level of 2014 Q1 by 88.9%; the share of loss-making organisations fell by 2.5 percentage points to 34.2% (Chart 1).

For the first time since the crisis of 2008-2009, manufacturing industries became the leader in terms of net profit obtained in Q1, overtaking mining and wholesale and retail trade. In 2015 Q1, its volume grew 12.7-fold year-on-year amounting to 32.4% of the profit and loss balance for the economy as a whole (in 2014 Q1 - 6.4%).

In January-March, all the major manufacturing industries saw the improvement of financial results, especially metallurgy, oil products, chemicals, machinery and food industry. Production and financial indicators in these industries were favourably affected by import substitution, which created the conditions for faster growth in prices of finished goods in comparison with the increase in costs, as well as the increase in export revenues.

The same factors are likely to trigger a noticeable increase (2.8-fold) in the positive profit and loss balance in agriculture. The price factor is likely to have played the main role in the increase in net profits for wholesale and retail trade (by 28.2%).

Profits in mining saw a moderate growth (by 13.3%), which reflected the mixed influence of the ruble depreciation and the reduction in global energy prices.

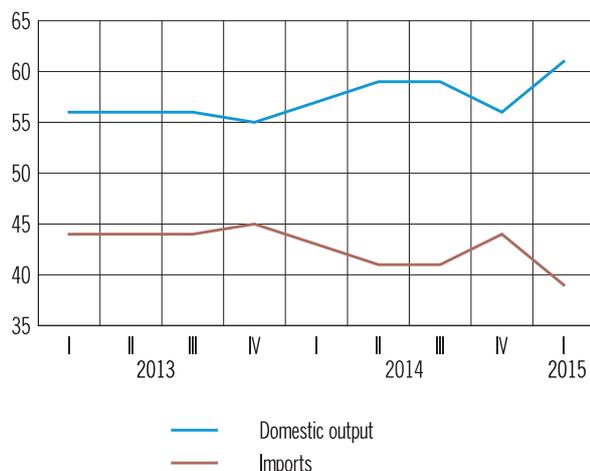
Chart 1  
Net financial result\* of large and medium Russian enterprises in 2013-2015 Q1 (billions of rubles)



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

Chart 1.3.9

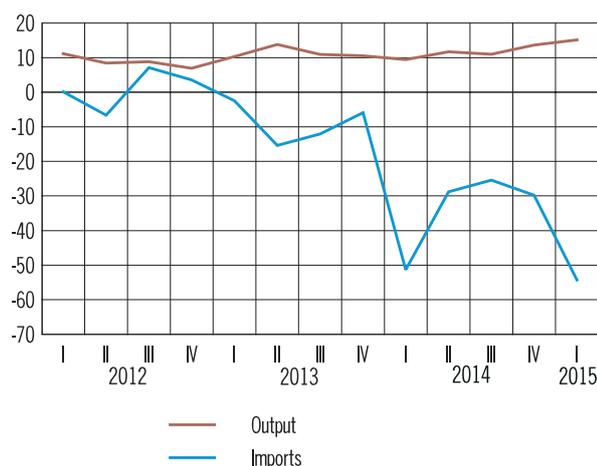
## Structure of retail trade commodity resources (%)



Source: Rosstat.

Chart 1.3.10

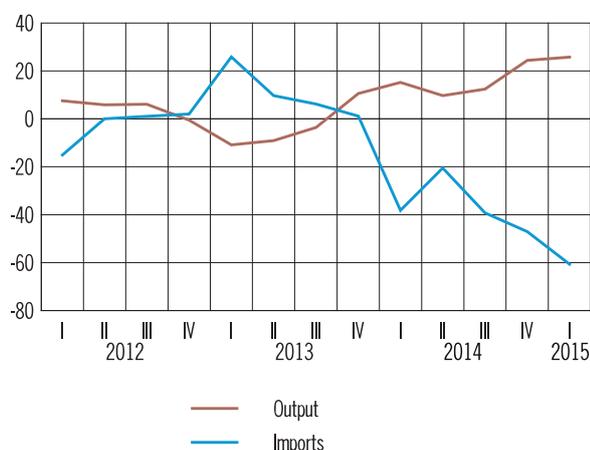
## Meat and meat products imports and output (growth as % of corresponding period of previous year)



Sources: Rosstat, Federal Customs Service, Bank of Russia calculations.

Chart 1.3.11

## Cheese imports and output (growth as % of corresponding period of previous year)



Sources: Rosstat, Federal Customs Service, Bank of Russia calculations.

Import substitution also had a favourable impact on agricultural production.

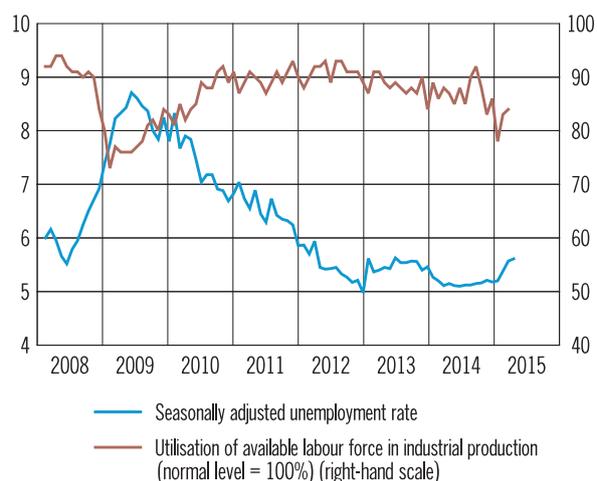
However, the possibilities for import substitution are constrained by higher costs of imported resources and restricted access to lending. Further development of agricultural and food production will depend on the ability to utilise more fully the potential to substitute declining imports with domestic output.

## Labour market

The actual movement of the main labour market indicators met the expectations of the Bank of Russia. In early 2015, the labour market adjusted to the cooling economy. The unemployment rate increased from 5.2% in January to 5.6% in April

Chart 1.3.12

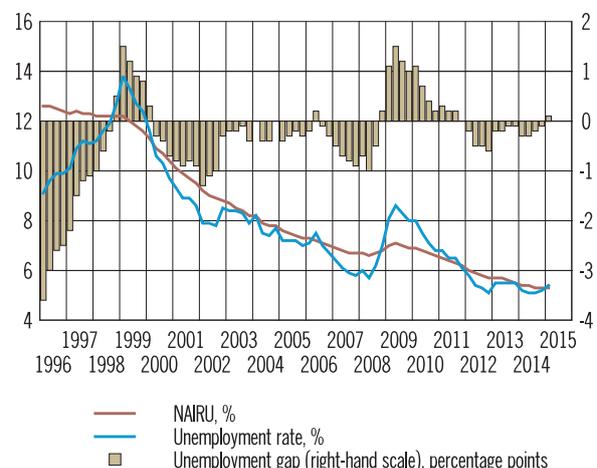
## Unemployment and labour force utilisation



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

Chart 1.3.13

## Non-accelerating inflation rate of unemployment (NAIRU) and unemployment gap



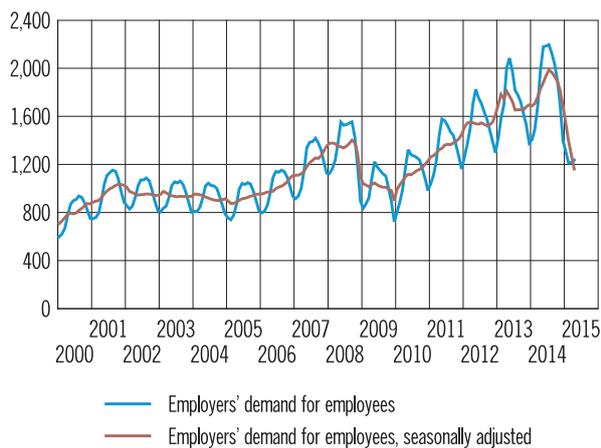
Sources: Rosstat, Bank of Russia calculations.

(seasonally adjusted) (Chart 1.3.12). Despite the growth in unemployment was constrained by the long-term trend toward a reduced labour supply conditioned by demographic factors, the actual unemployment rate exceeded the neutral level, which is currently estimated at 5.2-5.3% (Chart 1.3.13).

Alternative indicators also showed a reduction in demand for labour. In particular, in January-March, labour utilisation in industry was significantly lower than the average level for 2014. A reduction in the number of vacancies declared by employers to the state employment services was noted (Chart 1.3.14). Furthermore, the current decrease in the number of open jobs is comparable with the period of the crisis of 2008-2009.

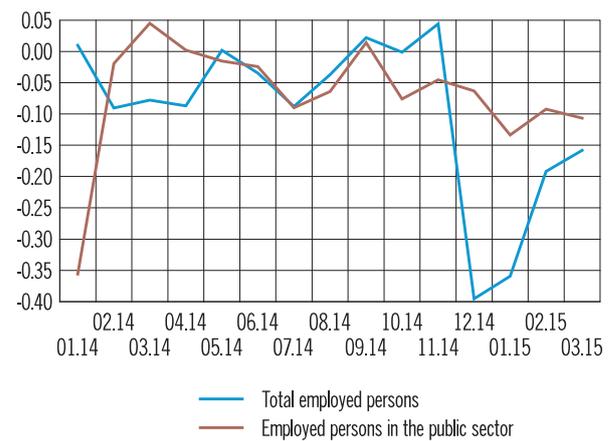
The labour market adapted to the new economic conditions by adjusting wages (Chart 1.3.15). In April 2015, wages fell by 13.2% in real terms year-on-year, which is the maximum value for the period from 2000 to the present. Furthermore, wages in the public sector fell faster due to the decision to cancel wage increase in sectors financed from the federal budget in 2015 along with high inflation. In particular, in March, the nominal wage in the 'State Administration and Defence; Social Security' sector almost entirely financed from the budget, grew by 0.5% year-on-year. However, the number of employees (according to data for January-March) reduced most quickly in the private sector with a small reduction in the public sector (Chart 1.3.16).

Chart 1.3.14  
Employers' demand for employees registered by the state employment service offices, thousand persons



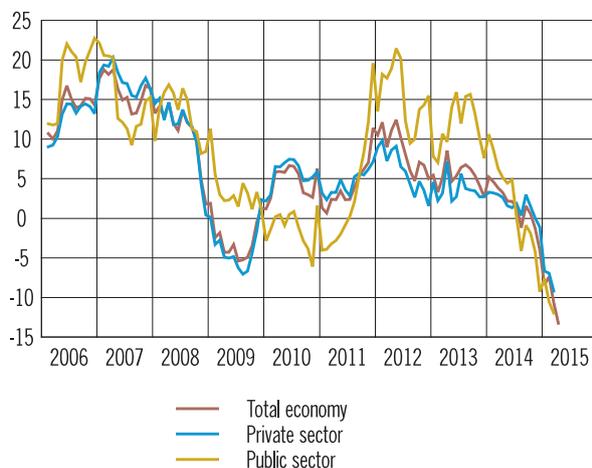
Sources: Rosstat, Bank of Russia calculations.

Chart 1.3.16  
Growth of the employed  
(as % of the previous period, seasonally adjusted)



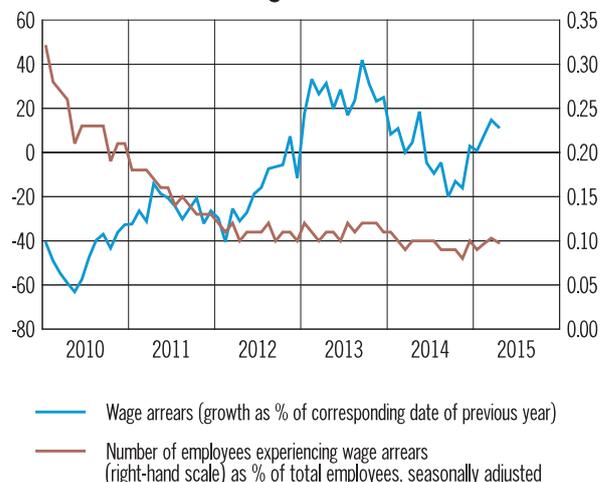
Sources: Rosstat, Bank of Russia calculations.

Chart 1.3.15  
Real wage growth rates  
(as % of corresponding period of previous year)



Sources: Rosstat, Bank of Russia calculations.

Chart 1.3.17  
Wage arrears



Sources: Rosstat, Bank of Russia calculations.

The growth in wage arrears (in April 2015 the amount of wage arrears rose by 11.5% year-on-year) indicates that companies may further adjust personnel costs (Chart 1.3.17).

According to an estimate, in 2015 the reduction in real wages will be accompanied by moderate growth in the unemployment rate (to 6.5% by the end of 2015).

### Okun's law in the Russian labour market

The observed slump in business activity makes it especially important to evaluate the influence of GDP on the unemployment rate. The empirical relationship between these parameters is described by Okun's law (Okun, 1962). The two main types of relationships between unemployment and GDP are usually shown as follows:

$$u_t - u_t^* = \beta \frac{Y_t - Y_t^*}{Y_t^*} + \varepsilon_t, \quad (1)$$

$$u_t - u_{t-1} = a + b g_t + \varepsilon_t, \quad (2)$$

where  $u_t$  and  $u_t^*$  - denote the actual and natural unemployment rate (NAIRU) respectively,  
 $Y_t$  and  $Y_t^*$  - denote the actual and potential production volumes,  
 $g_t$  - denotes the GDP growth rate,  
 $\varepsilon_t$  - denotes a random error.

In order to determine the dependence of cyclical unemployment from output gap, Okun's equation (1) was used to evaluate quarterly data from 2003 Q1 to 2014 Q4. The series of output gaps and unemployment are non-stationary and cointegrated. Autocorrelation of the residuals was adjusted by adding the MA part to the equation.

$$\widehat{u_t - u_t^*} = -0.15^{***} \frac{Y_t - Y_t^*}{Y_t^*}.$$

(Hereinafter, '\*\*\*' over the ratio indicates an estimate at the level of 0.01).

Based on the estimate obtained, it can be concluded that the reduction in output gap by 1 percentage point will increase cyclical unemployment by approximately 0.15 percentage points.

The results of evaluating Okun's equation (2) on quarterly data from 2000 Q2 to 2014 Q4 also shows the presence of a significant inverse relationship between unemployment and production growth rate:

$$\Delta \hat{u}_t = 0.04 - 0.15^{***} g_t, \quad R^2 = 0.21, \quad DW = 1.79$$

Thus, the short-term response of unemployment to 1 percentage point change in the economic growth rate is approximately 0.15 percentage points. It should be noted that estimates of Okun's ratio match in both models. The estimate's soundness is also supported by comparable results (Okun's ratio equal to -0.103) obtained by Gurvich and Vakulenko<sup>1</sup> (2015) with similar econometric methods for the period 1995-2013.

It is important that Okun's Law (in formula 2) manifests itself in full precisely during periods of decline in business activity. An econometric analysis of the model, which assumes that unemployment will respond asymmetrically to positive and negative changes in GDP, showed that a reduction of 1 percentage point in the GDP growth rate leads

<sup>1</sup> E. S. Vakulenko, E.T. Gurvich (2015) *The relationship of GDP, unemployment rate and employment: in-depth analysis of Okun's Law for Russia// Voprosy Ekonomiki. 2015. No. 3. pp. 5-27.*

to 0.35 percentage point increase in unemployment. However, economic growth does not influence unemployment significantly in the short term.

In order to evaluate the long-term relationship between the indicators and a short-term adjustment after deviations from equilibrium, a vector error correction model (VECM<sup>2</sup>) was created. The Johansen test makes it possible to draw a conclusion on the cointegration of unemployment and real GDP time series. The equation for unemployment is as follows:

$$\Delta \hat{u}_t = -0.22^{**}(u_{t-1} + 0.06^{**} \ln Y_{t-1} - 0.58) + 0.09 \Delta u_{t-1} - 0.14^{**} \Delta \ln Y_{t-1} \quad (3)$$

The value of the cointegration relationship in the equation (3) indicates that in the long term, a 1% increase in GDP is linked with a 0.06% reduction in unemployment (Chart 1). The speed of unemployment's adjustment after a deviation from long-term equilibrium is equal to approximately five quarters. At the same time, an analysis based on the switching vector error correction models (TVECM and MTVECM<sup>3</sup>) made it possible to conclude that the speed

of adjustment to long-term equilibrium is statistically insignificant in the event of a negative and positive deviation. The impulse response function<sup>4</sup> enables more detailed research of unemployment changes after an exogenous output shock.

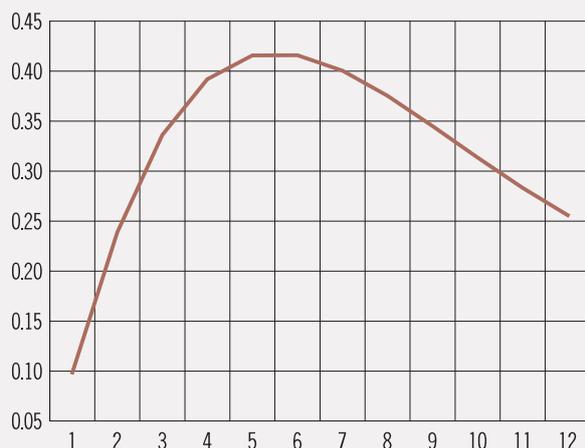
The form of the impulse response function permits the conclusion that the influence of a 1% negative exogenous shock to output is not immediately manifest in unemployment (Chart 1). The instantaneous effect amounts to 0.1 percentage points, but with time the shock effect increases, reaching its maximum value in 18 months. It should be noted that this relationship shows the influence of a one-time shock to output and does not consider possible negative or positive shocks in the future.

Comparing the obtained results with estimates of Okun's ratio for other countries indicates that, when it comes to the unemployment rate adjustment to changes in GDP, the Russian labour market is similar to labour markets of developing countries and that the Russian

economy satisfies Okun's Law. An analysis of various econometric models showed that there is both a relationship between the unemployment rate and GDP in the long term, and between their changes in the short term. However, it should be noted that unemployment growth in Russia is restricted by the long-term trend toward reduced labour supply caused by demographic factors.

Chart 1

### Unemployment response to the exogenous output shock



Sources: Bank of Russia calculations.

<sup>2</sup> Vector Error Correction Model.

<sup>3</sup> Threshold Vector Error Correction Model and Momentum Threshold Vector Error Correction Model respectively.

<sup>4</sup> Shocks were orthogonalised using the Cholesky method. The size of the GDP shock was given as 1% of GDP for 2014 Q4.

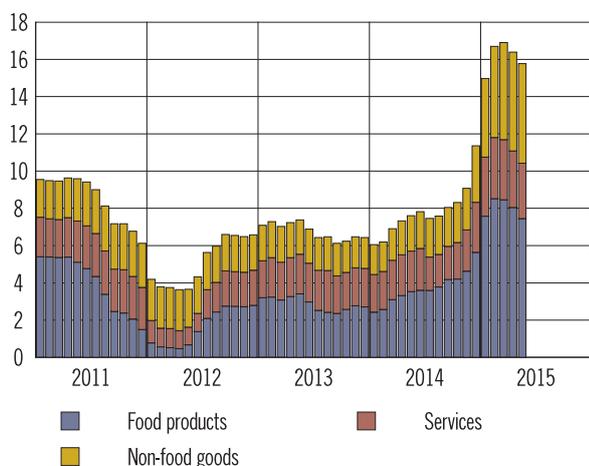
## Inflation and inflation expectations

The actual level of consumer inflation in March-April of the current year turned out to be lower than the Bank of Russia forecast. Having peaked in March (16.9%), the annual consumer price growth

rates started to slide, amounting to 16.4% in April and 15.8% in May (Chart 1.3.18).

The noticeable inflation reduction in April-May 2015 was mainly caused by considerable ruble appreciation which started in the second half of February 2015. According to Bank of Russia estimates, the current year has witnessed stronger

Chart 1.3.18  
Contribution to inflation (of corresponding period of  
previous year, percentage points)



Sources: Rosstat, Bank of Russia calculations.

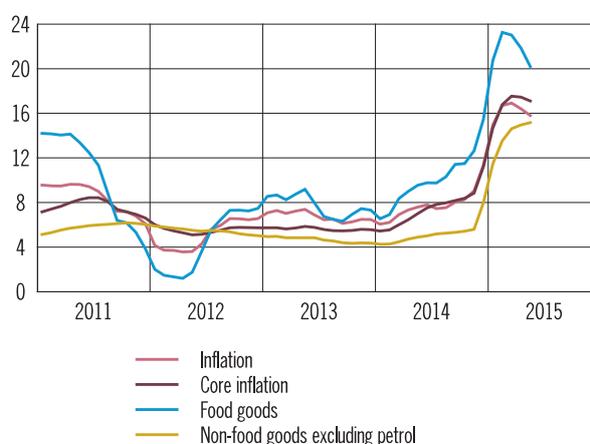
response of consumer price growth rates to both appreciation and depreciation of the ruble. Weaker than expected consumer demand created additional downward pressure on inflation.

Prices for food products (Chart 1.3.19) turned out to be the most sensitive to fluctuations in the exchange rate. In February, their annual growth reached its highest value since July 2001 (23.3%), but in May it declined to 20.2%.

A decrease in price growth rate in the food industry and prices of agricultural producers observed since March 2015, was another factor slowing food price inflation. Downward pressure on food prices was created, in particular, by measures to normalise the situation in the domestic grain market (primarily the duty on wheat exports, which was introduced on 1 February and remained in effect until 14 May), which halted price increases for products derived from grain. Measures taken by large suppliers and retailers to control prices of socially important products also had a definite stabilising influence.

Among food products, the annual price growth for fruit and vegetables showed the most significant reduction in March-May (by 12.3 percentage points). In particular, in April-May, a price decrease (by 3.9% and 5.2% respectively, seasonally adjusted) was observed, this may have been caused by severe demand-side restrictions. In March-May, changes in prices for fruit and vegetables are estimated to have contributed 0.6 percentage points to the decrease in moving annual inflation (which amounted to 0.9 percentage points).

Chart 1.3.19  
Prices of consumer goods and services  
(month on corresponding month of previous year, %)



Sources: Rosstat, Bank of Russia calculations.

An analysis of prices for food products which were banned in 2014 shows that producers and trading organisations have generally adjusted to retaliatory restrictions, and that the embargo had no considerable additional influence on food prices (in March-May the influence did not change and is estimated at around 4 percentage points, month on corresponding month of the previous year).

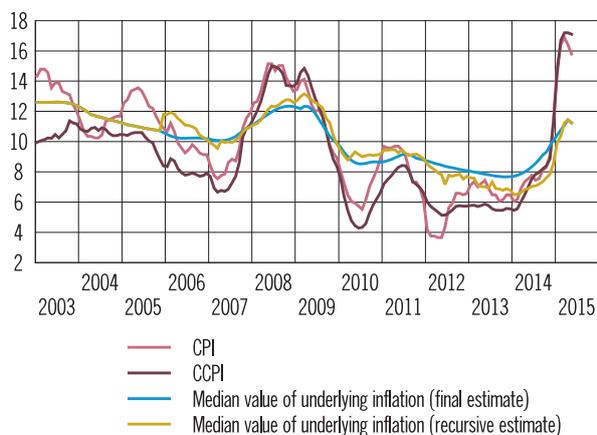
Amid contraction in consumer demand and ruble appreciation, in March this year annual price growth for paid services also started to decline (to 11.6% in May). The response of international tourism prices was especially fast. In May, their contribution to moving annual inflation was 0.3 percentage points less than in January.

The lower indexation of tariffs for utility services played a significant role in constraining inflation. Despite the faster rise in prices for housing services, which was temporary and mainly due to a change in the procedure for financing major repairs, the price increases for housing and utility services were small against the price growth for other consumer goods and services (in May, by 9.7% expressed as a moving annual figure).

As in the period of the global financial crisis (2008-2009), prices for non-food products showed slower response to lower demand and exchange rate movement than food and service prices. The delayed influence of the ruble depreciation from late 2014 to early 2015 continued to affect non-food product inflation in March-May 2015. The annual price growth rate for non-food products amounted to 14.3% in May (the maximum since September

Chart 1.3.20

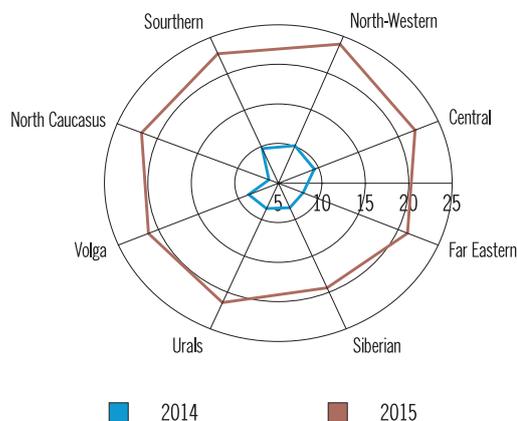
**CPI, CCPI and underlying inflation\* (of corresponding month of previous year, %)**



\* Bank of Russia estimate.  
 Sources: Rosstat, Bank of Russia calculations.

Chart 1.3.22

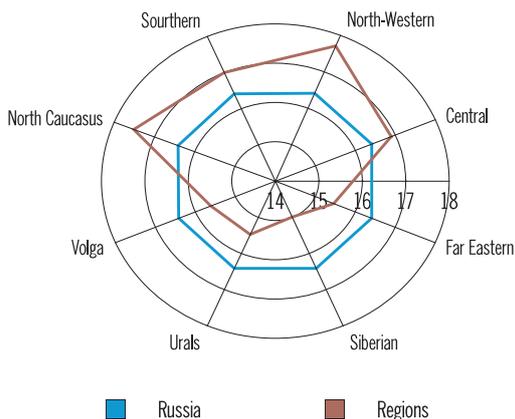
**Food price growth in April by federal district (of corresponding month of previous year, %)**



Source: Rosstat.

Chart 1.3.21

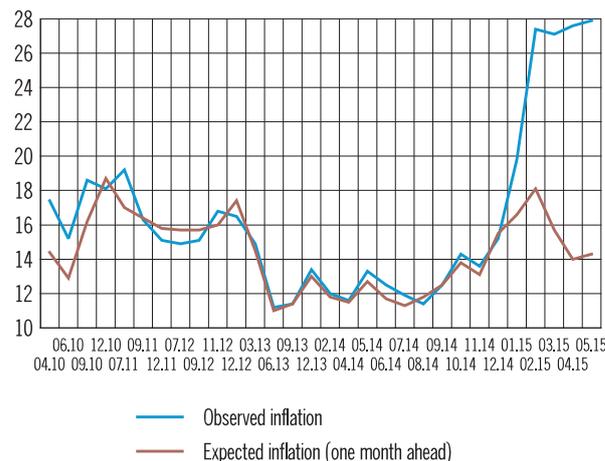
**Inflation by federal district and in Russia as a whole, April 2015 (of corresponding month of previous year, %)**



Source: Rosstat.

Chart 1.3.23

**Direct inflation estimates: median values (%)**



Source: Public Opinion Foundation survey results.

2001). Although the seasonally adjusted monthly rates of price increases for these products declined significantly, the inflationary processes remained more intense than in the comparable periods of 2014.

In May 2015, core inflation stood at 17.1% relative to the corresponding month of the previous year and remained higher than headline inflation, which was noticeably influenced by lower growth rates of utility service and petrol prices. Nevertheless, in May core inflation reduced (by 0.4 percentage points) after having increased since February 2014. This reduction was smaller than the overall inflation slowdown, which is occurring under the influence of a noticeable decline in moving annual price growth rates for groups of products whose prices rose

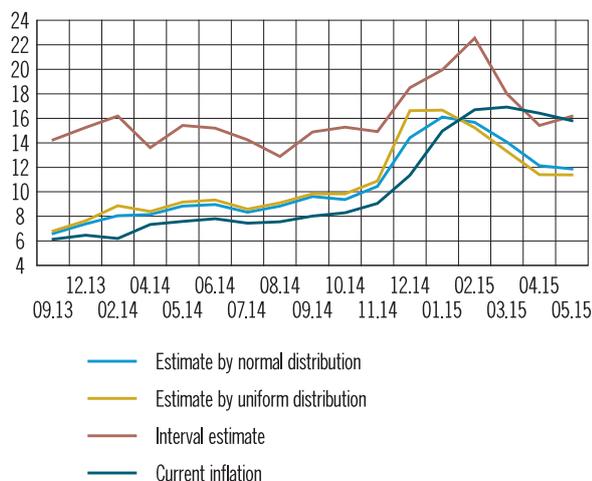
sharply in late 2014 – early 2015 (mainly, fruit and vegetables). The ruble appreciation in March-April and the increase in the output gap will have a more constraining effect on the core inflation.

The gradual weakening of pro-inflationary shocks is indicated by a variety of inflation indicators, adjusted for goods and services, whose prices are the most volatile, and the core inflation adjusted for food products. In April-May, they stabilised at a level of 12-15% relative to the corresponding month of the previous year.

The annual rate of underlying inflation<sup>2</sup> remains relatively stable (Chart 1.3.20). This indicates that

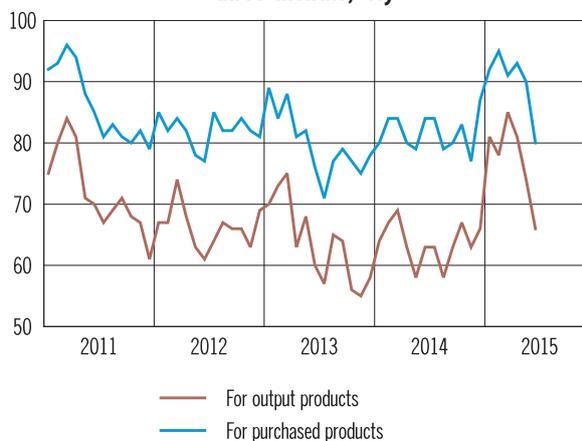
<sup>2</sup> Monetary Policy Report No. 1 (March 2015), p. 45, box 'Assessment of underlying inflation characteristics for Russia'.

Chart 1.3.24  
Quantified inflation expectations (%)



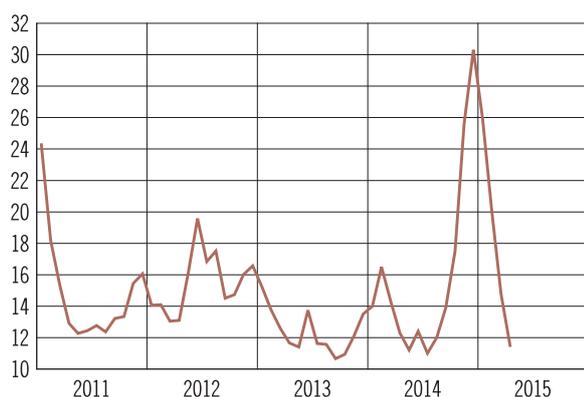
Sources: Public Opinion Foundation survey results, Bank of Russia calculations.

Chart 1.3.25  
Diffusion price index for industrial production, expected changes (share of enterprises showing higher rates over three months, %)



Source: Russian Economic Barometer survey results.

Chart 1.3.26  
Expected changes in prices (tariffs, sale prices) for finished goods (services) of enterprises in the next three months (Russia as a whole, balance of replies)



Source: Bank of Russia.

inflationary pressure in early 2015 did not result in a long-term trend for higher price growth rates for a broad range of goods and services. At the same time, the current level of underlying inflation still exceeds considerably the values corresponding to the medium-term inflation target of the Bank of Russia.

Declining influence of supply-side shocks is accompanied by a higher impact of demand-side restrictions on price processes, which is reflected in price changes not only for consumer goods but also for other assets, such as real estate (for details, see Section 1.2).

The observed slowdown in price growth, as well as measures taken by the Bank of Russia to stabilise the situation in the financial market and

Chart 1.3.27  
Professional analysts' consensus-forecasts of consumer price inflation in 2015 (%)



Sources: Rosstat, Interfax, Bloomberg, Thomson Reuters.

in the banking system, had a positive influence on economic agents' expectations (Table 1). According to inFOM<sup>3</sup> survey data, in April-May 2015, the median expected inflation among households for the forthcoming year was lower than in March (Chart 1.3.23). A similar dynamics was evident in households' inflation expectations, which were estimated using probabilistic quantification methods based on respondents' answers to 'qualitative' questions (Chart 1.3.24).

The data for business surveys conducted by REB and the Bank of Russia in April 2015 in

<sup>3</sup> 'Measuring inflation expectations and consumer sentiment on the basis of household surveys' is published on the Bank of Russia website in the 'Monetary policy' section.

various segments of economic activity generally showed lower expectations of further price rises for produced and purchased products (Charts 1.3.25, 1.3.26).

The May consensus forecasts by professional analysts regarding inflation in December 2015 have decreased (Chart 1.3.27). The median expected inflation in 2015, calculated based on the accuracy

of Bloomberg survey participants' forecast was 12.1% in May.

Further inflation slowdown is forecast by late 2015. Further weakening of inflation risks amid persistent risks of considerable economy cooling will allow the Bank of Russia to ease the monetary policy.

Table 1.3.1

Inflation expectations of economic agents										
Survey	Expectation horizon	2014				2015				
		I	II	III	IV	January	February	March	April	May
Inflation expectations (absolute), %										
Households										
Public Opinion Foundation	next 12 months	11.8	11.7	12.5	15.5	16.6	18.1	15.7	14.0	14.3
Public Opinion Foundation (Bank of Russia calculations)	next 12 months	8.1	9.0	9.6	14.4	16.1	15.7	14.1	12.1	11.9
Professional analysts										
Bloomberg	2015	4.6	4.8	6.0	7.2	10.5	11.0	12.5	12.5	11.5
Interfax	2015	4.9	5.1	6.3	10.9	13.6	12.5	12.5	12.6	12.1
Thomson Reuters	2015	-	-	-	9.2	11.0	12.1	13.0	11.7	11.6
Financial markets										
Bond market	next quarter	7.0	7.3	8.2	8.4	-	-	11.5		
Interbank market	next quarter	7.1	8.7	9.3	9.7	-	-	14.9		
Inflation expectations (balance of replies*)										
Households										
Public Opinion Foundation	next 12 months	84	85	84	83	84	78	76	74	70
Public Opinion Foundation	next month	79	82	76	77	75	71	68	62	59
Enterprises										
Russian Economic Barometer	next 3 months	26	26	32	70	62	48	32		
Bank of Russia	next 3 months	14.3	12.4	13.9	30.3	25.9	20.2	14.8	11.5	
Retail prices (Rosstat)	next quarter	42	41	41	43	-	-	31		
Tariffs (Rosstat)	next quarter	6	5	2	5	-	-	7		

	- inflation expectations improved
	- inflation expectations remain the same
	- inflation expectations deteriorated

\* Balance of replies is a difference in the share of replies of the respondents, who expect that prices will increase and that prices will decrease.

Sources: Public Opinion Foundation survey results, Rosstat, Intefax, Bloomberg, Thomson Reuters, Bank of Russia calculations, Russian Economic Barometer.

### The influence of global oil price fall on inflation in 2014 – January-May 2015

The global oil price fall had a multidirectional influence on price processes in the Russian economy. On one hand, oil prices in global markets influence pricing in the domestic crude oil market. On the other hand, changes in the global energy market impact the ruble exchange rate, which, in turn, influences a broad range of prices for goods and services in the economy, including oil producers' prices.

In 2014, the price for Urals crude in US dollar terms fell by 44.6%. It was accompanied by the ruble depreciation. As a result, the oil price in ruble terms fell by only 6.7%. According to estimates, domestic oil prices respond to changes in global prices with a lag of approximately one month (Chart 1). In January 2015, crude oil producers' prices fell by 19.5% in comparison with January 2014 (i.e. after the fall in global prices over 2014), which constrained cost pressure on price dynamics in the economy as a whole.

It should be noted that producers' domestic prices are generally more volatile than global oil prices in ruble terms. However, their temporary deviation from global prices is eliminated over time. In March-April 2015, domestic mining prices overreacted to the increase in the global oil price in ruble terms. Considering the global price movements in March-May 2015, oil producers' domestic prices should be expected to fall in the upcoming months.

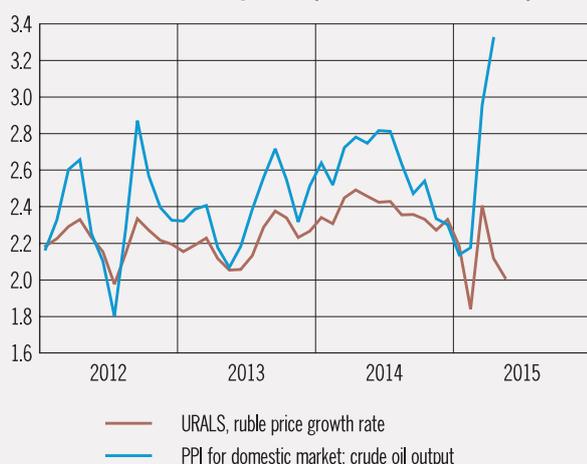
A change in producers' domestic oil price is a determining factor for the movement of producers' prices in oil refining (Chart 2). In turn, petrol price dynamics in the consumer market is largely linked to the trend in the costs of raw hydrocarbons. This may be conditioned by the aspiration of vertically integrated companies, which dominate the retail sale of motor petrol, to ensure stability in a socially important segment of the consumer market.

In early 2015, the petrol price growth rates were constrained by higher headline inflation. In May, the moving annual growth rate of petrol prices was 10.3 percentage points lower than for other non-food products and stood at 4.9%. If petrol price increase were in line with price increase for other non-food products, moving annual inflation would have been estimated 0.5 percentage points higher in May 2015.

However, the influence of the ruble depreciation on inflation exceeded significantly the constraining effect from the global oil price fall. Movements in the exchange rate influence prices for most goods and services in the consumer market, and during significant changes the pass-through effect on inflation is higher. According to estimates, the ruble depreciation contributed up to 7.5 percentage points to annual inflation in May 2015, significantly exceeding the direct constraining influence of low petrol price growth rates.

Chart 1

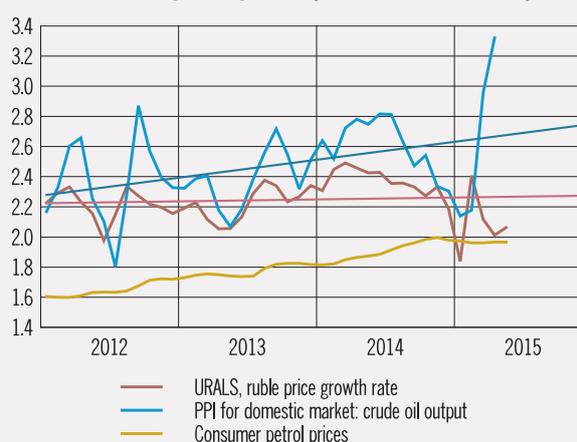
Global oil prices (lag = 1 month) and domestic oil prices (December 2005 = 1)



Sources: Thomson Reuters, Rosstat, Bank of Russia calculations.

Chart 2

Global and domestic oil prices, consumer petrol prices (December 2005 = 1)



Sources: Thomson Reuters, Rosstat, Bank of Russia calculations.

## 2. ECONOMIC OUTLOOK AND KEY RATE DECISION

### 2.1. Economic outlook

*In this Monetary Policy Report, the Bank of Russia considered three macroeconomic development scenarios. The key difference between these scenarios is the assumption made about oil price dynamics. Scenario 1, which assumes gradual growth of the price for Urals crude to \$80 per barrel in 2018, and Scenario 2, which puts oil prices at about \$60 per barrel over the course of 2015-2018, are considered by the Bank of Russia to be equally possible. The stress scenario assumes a fall in the price of Urals crude to \$40 per barrel and preservation of that level in the medium term. The depth and duration of GDP reduction in these scenarios will be determined to a large extent by the path of trading conditions.*

*According to Scenario 1 and Scenario 2, inflation is forecast to decline to the target in 2017 given the potential for monetary policy easing. In the risk scenario, inflation is forecast to fall close to the target only by the end of 2017.*

*The existing inflation risks may also be conducive to fiscal policy easing, revision of the growth rates of administered prices and tariffs planned for 2016-2017, and also to increased inflation expectations. If these risks materialise, the Bank of Russia will take measures aimed at reducing their inflationary aftermath with due account of Russian economic potential.*

In the previous Monetary Policy Report (March 2015), the Bank of Russia considered a baseline scenario that assumed the gradual recovery of the price of Urals crude from \$50-55 per barrel in 2015 to \$70-75 per barrel in 2017.

Oil prices observed from the start of the year are indicative of the need to revise upwards the trading conditions forecast in 2015: the average price for Urals crude in 2015 is expected to be about \$60 per barrel. In the future, considering the predicted moderate rates of global economic recovery and the increased flexibility in supply adjustments in the

world energy market, the Bank of Russia estimates the following options of the world energy market developments as equally likely: (1) gradual recovery of oil prices to about \$80 per barrel by 2018 and (2) preservation of oil prices close to \$60 per barrel in 2016-2018. Accordingly, the Bank of Russia considered two economic development scenarios on the basis of each of these assumptions: Scenario 1 and Scenario 2 respectively (Chart 2.1.1). The assumptions about various paths of energy price changes in the medium term will cause differences in the dynamics of the key macroeconomic indicators starting from 2016.

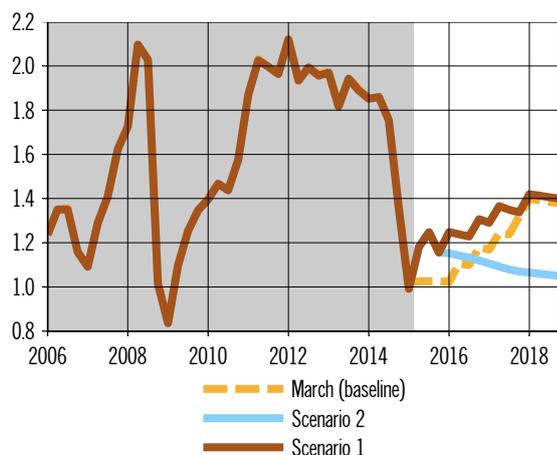
The external financial conditions in both scenarios will constrain Russian economic growth over the entire period under review. As a result of financial sanctions imposed against Russia, companies' and banks' access to global capital markets will remain limited. Given international sanctions and reduced demand for Russian assets, Russian banks and other sectors will be forced to repay their loans, as was the case in 2014 Q4 to 2015 Q1. According to estimates, banks and other sectors will have to make payments in the amount of about \$50 billion in 2015 Q2-Q4, and about \$40 billion<sup>1</sup> in 2016.

The constraining influence of external financial restrictions, according to estimates, will be lower in 2015 than in 2014, and subsequently will gradually decrease as the sources of funds raised in international markets diversify. As was the case earlier, more and more central banks are expected to normalise their monetary policy in the next few years, which will facilitate interest rate growth in foreign markets and, as a consequence, an increase in the cost of borrowing for emerging market economies. However, the significance of this factor for the Russian economy is estimated as lower in comparison with the restricted access to global capital markets.

<sup>1</sup> The estimates are based on the assumption of the possibility to refinance 60% of external debt.

Chart 2.1.1

## Terms of trade



Source: Bank of Russia calculations.

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

The forecast for economic growth in trading partner countries was adjusted somewhat downwards as compared with estimates made in March, primarily due to the worsening economic outlook in the CIS countries. However, a gradual recovery of external demand is expected in the forecast horizon. In 2015-2018, this will support the growth rate of Russian exports.

According to Bank of Russia estimates, fiscal policy in the two scenarios will be countercyclical. In 2015-2016, the general government sector is expected to have a positive effect on aggregate demand (mostly in 2015) given the budget deficit expansion (to about 3.7% in 2015) caused by increased budget expenditures and reduced revenues (relative to GDP) in comparison with 2014<sup>2</sup>. Investing a portion of funds from the National Wealth Fund in the infrastructure projects, whose volumes could amount to 2.0-2.4 trillion rubles in 2015-

2018 taking account of the established regulatory restrictions, will also produce a stimulating effect.

The worsening trading conditions, as compared with 2014, resulting in both reduced income from external trade and economic agents' deteriorating sentiment combined with the need to repay external debt, will hamper investment and consumer activity in 2015. Gross capital formation (due to a fall in both fixed capital investment and inventories) will make the main negative contribution to GDP growth in 2015. Gross fixed capital formation is expected to fall by 4.9% in 2015, and the drop in gross capital formation considering inventories will reach 22%.

In 2015, investment activity will decline against the backdrop of real-sector enterprises reducing the accumulated debt burden, which rose significantly at the end of 2014 due to the foreign currency revaluation of loans issued earlier. The need to reduce real-sector enterprises' debt burden, together with economic agents' negative expectations, will cause low demand for credit resources and, as a result, limited requirement for substitution of external funding sources with internal ones. The growth rate for lending to legal entities and households is forecast in the range of 2-7% in 2015.

External debt repayment amid residents' reduced demand for foreign assets will be the main component of the net private capital outflow in 2015, which, according to estimates, will amount to roughly \$90 billion.

The need to optimise enterprises' compensation of employees amid reduced economic activity will cause a fall in wages in real terms. This will also be facilitated by the decision to cancel wage indexation in the sectors financed from the federal budget in 2015. An additional factor constraining consumer demand will be the cooling of the consumer lending market related to the tightening of bank requirements for new borrowers in previous quarters amid increasing overdue retail loan portfolio. The public's propensity to save, which has been observed to recover in recent months, is not expected to decline amid increased uncertainty and persistent negative consumer sentiment. As a result, household expenditures on final consumption will fall by 5.9% in 2015.

Net exports will make a significant positive contribution to GDP growth in 2015. According to estimates, amid forecast low growth rates of the

<sup>2</sup> Expenditures for 2015-2017 are established in accordance with the 'Guidelines for Fiscal Policy in 2015 and for the Planned Period of 2016-2017'. In 2015, federal budget expenditures have been adjusted to the adopted changes, and in 2016-2017 they are expected to fall by 5% in real terms, in accordance with the target announced by the Ministry of Finance of Russia (Explanatory Note to Federal Law No. 93-FZ, dated 20 April 2015, 'On Amending Federal Law 'On the Federal Budget for 2015 and the Planned Period of 2016-2017'). In 2018, federal budget expenditures are expected to contract evenly in real terms and other budget expenditures are expected to remain at the level of 2017 in real terms. Federal budget revenues – Bank of Russia forecast.

world economy, the growth rates of export quantities will not exceed 1% in 2015, while imports will fall by more than 20% in real terms amid reduced consumer and investment activity.

Imports' significant adjustment and the reduced amount of interest paid on external debt as it is decreasing will cause the current account surplus to increase to \$93 billion in 2015. This will make it possible to repay external debt without any change in the foreign currency reserves.

Thus, given the situation, GDP will fall by 3.2% in 2015 as against 3.5-4.0% predicted earlier. An upward adjustment of the average oil price in 2015 has become the main factor to increase GDP forecast this year. Given the persistent structural factors hampering the economic growth in Russia, such as an unfavourable demographic situation, a high level of fixed assets wearout, and the lack of preconditions to increase labour productivity, the reduced economic activity in 2015 is also cyclical. According to estimates, the negative output gap will amount to 3.5-4.5% in 2015. The output gap estimates for 2015 will be further updated as additional statistical information is obtained.

Scenario 1 envisages investment activity to recover already in 2016, considering the expected slight improvement in trading conditions. The recovery of inventories will proceed faster than expected due to expectations of further consumer demand growth formed by real-sector enterprises (historically, inventories are a leading indicator for a phase of the economic cycle). Lending dynamics are expected to provide additional support to investment activity. The reduced debt burden caused by the external debt repayment, together with the eased internal lending conditions, will ensure the recovery of demand for loans in 2016-2018. The lending growth rate is expected to increase to 4-9% in 2016 and to 10-15% and 8-13% in 2017-2018 respectively.

Consumer demand will remain low, given the moderate wage indexation forecast in both the private and public sectors, and the reduction in the general level of household wealth. The annual growth rate of final consumption expenditures will only become positive in 2017.

Net exports' positive contribution to GDP dynamics will gradually decrease as import growth rates recover amid increased domestic demand. However, the annual growth rate of exports in

2016-2018 will be about 2%. Starting from 2017, net exports' contribution will become negative.

Considering the described changes in export and import quantities, and given the expected oil price growth, the current account surplus is forecast to gradually increase to nearly \$120 billion in 2018. At the same time, a reduction in the annual volumes of net capital outflow is expected, caused by reduced external debt payments and a decrease in international investors' distrust of Russian assets.

If the situation develops in line with Scenario 1, the Bank of Russia will conduct a policy aimed to ensure that credit institutions reduce debt on foreign currency refinancing instruments.

During the forecast period the Bank of Russia also plans to gradually build up foreign currency reserves by purchasing foreign currency in the domestic FX market in small amounts, so that not to exert any influence on the exchange rate. According to Bank of Russia estimates, a comfortable level for international reserves, which will allow stabilising the balance of payments amid a prolonged stress situation, will be equal to about \$500 billion. This gives rise to the need for the Bank of Russia to purchase foreign currency over a long period of time, which could last from five to seven years.

Thus, according to estimates, given slightly improved trading conditions and moderate recovery of external demand, GDP will increase by 0.7% in 2016. As the economy adjusts to the negative effects of external factors, GDP growth is forecast to rise to 1.7%-2.4% in 2017-2018. This will ensure the negative output gap to gradually close, though it will not be completely closed by the end of 2018.

Weak domestic demand will have a constraining effect on inflation over the entire forecast period. After peaking in March of this year, annual inflation will continue to decline. Moreover, in 2015, temporary pro-inflationary factors will be exhausted. In particular, import restrictions' influence on annual inflation was fully realised in 2015 Q1, and amounted to, according to estimates, 1.5 percentage points (it will be removed from the calculation in 2015 Q4). Beginning in 2015 Q2, the exchange rate dynamics' contribution to annual inflation started to decline. The slowdown in actual inflation together with the constrained rate of wage indexation in both the private and public sectors (including due to the cancelation of wage indexation in sectors financed from the federal budget in 2015)

will create preconditions necessary for reducing inflation expectations.

According to estimates, inflation will slow to 10-11% by the end of 2015. By June 2016, annual inflation will be lower than 7% and will achieve the medium-term target of 4% in 2017 (Chart 2.1.2).

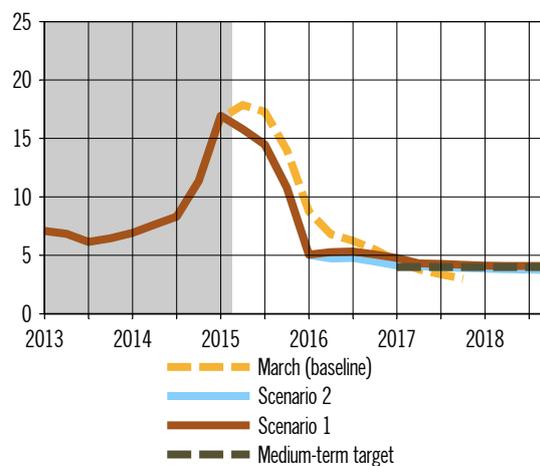
Changes in the labour market in response to the cooling economic activity will be limited. Unemployment is expected to rise to 6.5% by the end of 2015 exceeding the neutral level, which is currently estimated at 5.3%. Cyclical unemployment growth will be limited by unfavourable demographic trends: according to the Federal State Statistics Service (FSSS), an optimistic scenario envisages a decrease in the number of working-age population until 2024<sup>3</sup>. According to Bank of Russia estimates, the potential to compensate for the reduction in the number of working-age people by increasing the population's economic activity is essentially exhausted. In addition, the labour market will also adjust through an increase in part-time employment, which is manifest in reduced working hours and increased number and duration of unpaid leaves. The subsequent recovery of economic activity will be accompanied by a gradual reduction in the unemployment rate to 5.6%-5.8% in 2018, which is consistent with the forecast small negative output gap.

The developments under Scenario 2 will be less favourable. As oil prices remain relatively low, output will also continue to decrease in 2016 (by 1.2%). The domestic demand growth rates will remain negative (gross fixed capital formation will fall by 1.1%, final consumption expenditures by 2.0%). Given the lack of improvement in trading conditions, a structural rearrangement of the economy will be necessary for economic growth to recover. The ruble real exchange rate dynamics, a reduction in the constraining influence of external financial conditions, as well as monetary policy easing will create conditions for gradual structural changes. As a result, Scenario 2 predicts GDP growth at 1.7% in 2018. Unemployment under this scenario is expected to increase to 6.6-6.7% in 2016-2017 and to fall to 6.2-6.4% in 2018.

<sup>3</sup> The middle and pessimistic forecast variants presume a more prolonged reduction, until 2028 and 2031 respectively.

Chart 2.1.2

### Inflation (as % over last 12 months)



Source: Bank of Russia calculations.

As under Scenario 1, economic growth recovery at the first stages is expected to be caused primarily by increased investment activity. Gross fixed capital formation will go up to 1.3% in 2017, and 3.2% in 2018. Consumer demand will recover somewhat later, after the real wage growth rate becomes positive as corporate demand for labour increases. Final consumption expenditures will drop by 0.8% in 2017, while they are forecast to grow by 2.9% in 2018. Given comparable growth rates in export quantities and weaker domestic demand leading to slower recovery of imports, net exports' positive contribution in 2016 will be more significant under this scenario as compared with Scenario 1, but it will also become negative in 2017-2018.

However, if Scenario 2 materialises in 2016, the current account surplus will be at approximately the same level as in Scenario 1, despite the lower oil prices, and will amount to nearly \$100 billion. In 2017-2018, on the contrary, under stable oil prices assumed in Scenario 2, the current account surplus will be significantly lower than in Scenario 1.

Given the current account dynamics and the approximately comparable volumes of net private capital outflow in 2016-2018 if the situation develops in line with Scenario 2, the Bank of Russia also considers it possible for the banking sector to reduce debts on refinancing foreign currency operations. Under this scenario, the Bank of Russia's potential to build up foreign currency reserves is estimated to be lower.

The long-term worsening of trading conditions, together with the protracted pause in investment, will

most likely lead to a fall in the economic potential, which will cause a narrower negative output gap in 2016 than in Scenario 1. However, according to estimates, the negative output gap will take just as long to close as in Scenario 1, and by the end of 2018 will also remain slightly negative. Under these conditions, and taking into account the need to reduce inflation to the medium-term target, the potential for monetary policy easing is estimated to be lower than in Scenario 1.

The downward revision of the inflation forecast in 2015-2016, together with the persistent unfavourable economic outlook, caused the Bank of Russia to make a decision to cut the key rate again by 1 percentage point on 15 June 2015. The Bank of Russia will be ready to continue reducing the key rate as inflation risks diminish and inflation slows down further in accordance with the forecast. However, the potential for further monetary policy easing in the next few months is limited by the inflation risks highlighted in Section II.2.

Table 2.1.1

**Main indicators of Bank of Russia forecast**  
(%, unless indicated otherwise)

	2014 (actual)	2015		2016			2017			2018	
		Scenario 1/ Scenario 2	March (baseline)	Scena- rio 1	Scena- rio 2	March (baseline)	Scena- rio 1	Scena- rio 2	March (baseline)	Scena- rio 1	Scena- rio 2
Urals crude price (annual average), US dollars per barrel	98	60	50-55	70	60	60-65	75	60	70-75	80	60
Inflation, December on December of previous year	11.4	10.8	12.0-14.0	5.1	4.5	5.5-7.5	4.2	4.0	3.0-5.0	4.0	4.0
Gross domestic product, YoY, %	0.6	-3.2	-(3.5-4.0)	0.7	-1.2	-(1.0-1.6)	2.4	0.0	5.5-6.3	1.7	1.7
Final consumption expenditure	0.9	-5.6	-(4.6-4.8)	-0.4	-2.0	-(1.0-1.4)	2.9	-0.8	4.8-5.3	2.4	2.9
– by households	1.3	-5.9	-(5.5-5.7)	-1.2	-2.1	-(1.5-2.0)	3.5	-1.9	6.5-7.0	2.9	3.2
Gross capital formation	-7.3	-22.0	-(35.0-38.0)	4.9	-4.1	-(3.0-4.0)	6.1	4.3	16.0-19.0	0.3	1.5
– gross fixed capital formation	-2	-4.9	-(10.0-12.0)	1.1	-1.1	-(0.5-1.5)	6.4	1.3	3.6-4.1	1.6	3.2
Net exports	29.8	73.3	104.0-109.0	0.9	15.4	4.0-5.5	-13.1	-2.3	-(20.0-24.0)	-2.3	-10.1
– exports	-0.1	0.9	-(2.2-2.5)	2.2	1.0	0.5-0.9	2.0	1.3	2.4-2.9	1.6	1.8
– imports	-7.9	-21.7	-(34.0-36.0)	2.6	-3.5	-1.0-0	6.7	2.4	9.0-11.0	2.8	5.5
Money supply in national definition, annual growth	2.2	2-7	2-7	4-9	0-5	2-7	10-15	2-7	20-25	8-13	7-11
Monetary base in narrow definition, annual growth	2.7	0-2	0-5	2-4	(-2)-2	1-5	9-11	(-1)-3	16-20	7-9	4-8
Lending to non-financial organisations and households in rubles and foreign currency, annual growth	25.9	2-7	4-9	4-9	0-5	2-7	10-15	2-7	20-25	8-13	7-11

Table 2.1.2

**Russian balance of payments indicators  
(billions of US dollars)**

	2014 (actual)	2015		2016			2017			2018	
		Scenario 1/ Scenario 2	March (baseline)	Scenario 1	Scenario 2	March (baseline)	Scenario 1	Scenario 2	March (baseline)	Scenario 1	Scenario 2
Current account	59	93	64	104	101	90	117	81	119	121	72
Balance of trade	190	187	141	185	186	159	206	169	186	212	158
Exports	498	411	362	440	415	380	490	414	443	538	418
Imports	-308	-223	-221	-255	-228	-221	-284	-244	-257	-326	-260
Balance of services	-55	-43	-18	-36	-40	-18	-39	-41	-16	-38	-43
Exports	66	52	57	58	53	58	59	55	65	63	55
Imports	-121	-96	-75	-94	-93	-76	-98	-96	-82	-101	-98
Balance of primary and secondary income	-75	-51	-60	-45	-46	-51	-51	-47	-50	-53	-43
Capital account	-42	0	0	0	0	0	0	0	0	0	0
<b>Balance of current and capital accounts</b>	<b>17</b>	<b>93</b>	<b>64</b>	<b>104</b>	<b>101</b>	<b>90</b>	<b>117</b>	<b>81</b>	<b>119</b>	<b>121</b>	<b>72</b>
<b>Financial account (except reserve assets)</b>	<b>-134</b>	<b>-93</b>	<b>-114</b>	<b>-78</b>	<b>-78</b>	<b>-90</b>	<b>-74</b>	<b>-68</b>	<b>-83</b>	<b>-68</b>	<b>-58</b>
General government and central bank	29	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3
Private sector (including net errors and omissions)	-154	-90	-111	-75	-75	-87	-71	-65	-80	-65	-55
<b>Change in FX reserves ('+' - decrease, '-' - increase)</b>	<b>108</b>	<b>0</b>	<b>50</b>	<b>-26</b>	<b>-23</b>	<b>0</b>	<b>-43</b>	<b>-13</b>	<b>-36</b>	<b>-53</b>	<b>-14</b>

\* Excluding revaluation, through operations recorded in the balance of payments.

## 2.2. Risk assessment

The Bank of Russia still considers the fall in oil prices and their preservation at a low level in 2016-2018 to be the main external economic risk. The Bank of Russia continues to view as a stress scenario of macroeconomic development the one, which assumes that the price of Urals crude will fall to \$40 per barrel by 2015 Q4 and remain close to that level until the end of 2018.

A significant worsening of trading conditions together with other negative factors described in Scenarios 1 and 2 will lead to a more serious fall in GDP in 2015, by 5.7%. Oil prices remaining at a low level for a long period of time may cause the economy's potential to contract. In this case, negative GDP growth rates could be observed in 2016-2017 against the backdrop of high inflation. Thus, the inflation risks are estimated as being higher under this scenario. In such conditions, the Bank of Russia will be forced to pursue a tougher monetary policy than in Scenarios 1 and 2 in order to reduce inflation to the medium-term target. However, the Bank of Russia will make monetary policy decisions with due account of the predicted downturn in the economy. According to forecasts, under such developments, inflation will fall to 8-9% by the end of 2016 and to a level close to the medium-term target only by the end of 2017.

A significant fall in domestic demand will cause imports to decline more than exports, which will lead to an increase in the current account balance in 2016-2018. Net private capital outflow is expected to exceed its indicators in Scenarios 1 and 2 as a result of economic agents' additional demand for foreign assets given the increased uncertainty. Moreover, the stabilisation of oil prices at a low level will influence non-residents' long-term review of the attractiveness of investing in the Russian economy and promote further reduction in foreign investment.

If this scenario materialises, the Bank of Russia deems it possible to extend the effect of facilities used to provide FX liquidity for a longer period and, if necessary, is ready to sell foreign currency in order to maintain financial stability.

The Bank of Russia also considers the possible preservation of economic agents' high and stable inflation expectations (which could occur even if actual inflation falls, due to a high degree of inertia), the potential easing of fiscal policy, and an increase in the natural monopolies' tariff indexation rates in 2016-2017 as the main inflation risks for Scenarios 1 and 2. If these risks materialise, the Bank of Russia will take measures aimed at reducing their inflationary aftermath with due account of Russian economic potential. The Bank of Russia will be forced to pursue a tougher monetary policy than that assumed in Scenarios 1 and 2.

## GLOSSARY

### **Asset-backed securities (ABS)**

Bonds or other securities backed by pooled assets which usually generate predictable cash flows and which are formed by banks or other credit institutions.

### **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 interbank lending market participants.

### **Averaging of required reserves**

The right of a credit institution to meet reserve requirements set by the Bank of Russia by maintaining a share of required reserves not exceeding the averaging ratio in 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 x (share of banks reporting a moderate tightening of lending conditions, as a percentage) – 0.5 x (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). 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 on 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.

### **Basis point**

One hundredth of a percentage point.

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

Total amount of cash in circulation and funds of the Russian Federation residents (nonfinancial 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.

### **CBOE crude oil volatility index**

The Chicago Board Options Exchange (CBOE) index calculated by applying the VIX methodology and reflecting the market's expectations of 30-day volatility of crude oil prices.

**CDS spread**

Premium paid by the CDS buyer to the seller, usually expressed in basis points of the nominal value of the debt and paid with a certain periodicity.

**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 as 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.

**Covered bonds**

Bonds secured by payments on mortgage loans or government debt obligations. The difference between covered bonds and asset backed securities lies in the fact that covered bonds remain on the issuer's balance sheet after the issue, therefore making the issuer liable for the credit risk on the assets which back the bonds.

**Credit default swap (CDS)**

A contract under which the seller of the contract commits to pay a pre-set sum to the buyer if a certain credit event occurs.

**Cross-currency basis swap**

Currency interest rate swap under which floating interest rate payments in different currencies are swapped. The price of this swap reflects the premium to one of the floating rates.

**Current liquidity deficit**

An excess of banking sector demand for liquidity over the liquidity supply on a given day. 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).

**Factors of banking sector liquidity**

Changes in the central bank balance sheet affecting banking sector liquidity, but which do not result from central bank liquidity management operations. These 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.

### **Fiscal stress indicator**

An approach developed by the IMF experts using an integral early crisis warning indicator, calculated on the basis of signals from three complementary groups of variables: basic fiscal variables; long-term fiscal trends; and, asset and liability management (12 variables in total). For each variable a threshold is calculated, which, if exceeded, signals the threat of a crisis in the following year. A signal strength showing the weight of each variable in the fiscal stress indicator is also estimated. 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**

According to the IMF classification, under the floating exchange rate regime the central bank does not set targets, including operational ones, for the level of, or changes to, the exchange rate, allowing it to be shaped under the impact of market factors. However, the central bank reserves the right to influence the domestic FX market occasionally in order to smooth out the ruble's exchange rate volatility and prevent its excessive deviations.

### **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, the interest rate applied to the loans previously provided at a floating interest rate will be adjusted by the change of the key rate with effect from the corresponding date.

### **Foreign exchange swap**

A deal which consists of two legs: one party of the deal initially exchanges a certain amount in domestic or foreign currency for an equivalent amount in another currency provided by the second party of the deal. Then, once the deal term has expired, the parties make a reverse transaction (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 and foreign currency (US dollars).

### **Forward rate agreement (FRA)**

A forward interest rate contract under which one party of the contract pays a fixed interest on a specified notional amount in future. Parties of the contract commit to make compensation payments on the effective date in case the interest rate on such date differs from the fixed rate.

### **Free bank 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 in general government's accounts**

Funds in 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 FX swaps.

**Implied volatility**

A measure of exchange rate volatility that reflects current market prices of FX options under Black-Scholes model (as a rule, at-the-money).

**Inflation targeting regime**

A monetary policy framework which considers 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.

**Managed floating exchange rate regime**

Under the managed floating exchange rate regime the central bank does not interfere in the trends of ruble dynamics which are shaped by fundamental macroeconomic factors. No fixed limits or targets are set for the ruble rate, with the central bank seeking to smooth out exchange rate fluctuations in order to support economic agents' gradual adaptation to changes in external economic environment.

**MICEX index**

MICEX index is the composite index of the Russian stock market calculated by CJSC MICEX Stock Exchange (hereinafter, the Exchange) based on the ruble prices of trades executed in most highly capitalised liquid securities admitted to trading on the Exchange.

**MSCI indices**

Group of indices calculated by Morgan Stanley Capital International. These are calculated as indices for individual countries (including Russia) and as global indices for various regions, for developed/emerging markets and 'world' index.

**Monetary aggregate M1**

Total amount of cash in circulation and funds of the Russian Federation residents (nonfinancial 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 (nonfinancial 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, investments by credit institutions in Bank of Russia bonds (at prices fixed as of the start of the current year, and credit institutions' claims on the Bank of Russia under the ruble leg of FX swaps on US dollars provision for rubles).

### **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. It is 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, requirements to collateral 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, and 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 the potential level are called cyclical fluctuations.

### **Outstanding amount on Bank of Russia refinancing operations**

Outstanding amount on loans extended by the Bank of Russia to credit institutions against the collateral of securities, non-marketable assets, guarantees, and gold, as well as repo auctions and FX swaps.

### **Overnight index swap (OIS)**

An interest rate swap where fixed-rate payments are swapped for floating-rate payments set on the basis of overnight money market rates over a respective period of time.

### **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.

**Realised volatility**

Exchange rate volatility measure calculated on the basis of historical data taken for a given period of time. As a rule, the sum of squared daily logarithmic returns of the exchange rate is assumed to be its realised volatility.

**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-neutral measure**

A theoretical measure of probability derived from the assumption that the current value of an option is equal to the mathematical expectation of its future payoff discounted at the risk-free rate.

**Risk premium on 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).

**RTS index**

RTS index is the composite index of the Russian stock market calculated by the Exchange based on the US dollar prices of trades executed in most highly capitalised liquid securities admitted to trading on the Exchange.

**Shadow banking sector**

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

**Standing facilities**

Operations to provide and absorb liquidity carried out by the Bank of Russia at the initiative of credit institutions.

**Structural liquidity deficit**

The state of the banking sector characterised by a stable demand by credit institutions for Bank of Russia liquidity provision operations. 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 overall budget deficit, excluding oil and gas revenues, net interest payments, one-off budget revenues, and other items directly dependent on changes in economic activity.

**Volatility smile**

Implied volatility dependence on the option strike price. Each strike price has a respective option delta which is equal to the first option value derived from the underlying asset price and which reflects an approximated probability, relative to the risk neutral measure, of at-the-money option.

## ANNEX

### Dynamics of major balance of payments items in 2015 Q1

The fall in exports, which ended in February following the stabilisation of world oil prices, and the greater than expected drop in imports in 2015 Q1 led to the current account balance being noticeably higher than the forecast. The current account surplus in 2015 Q1 fell year-on-year. The decrease in the balance of trade was only partially offset by a reduction in the negative contribution of non-tradable components and the balance of services (Chart 1).

The balance of trade surplus dropped by 20%<sup>1</sup>, despite the rapid reduction in the imports of goods as compared with exports. The value of exports fell by 30%, mainly due to the reduced prices for commodities. Exports of crude oil, petroleum products, and gas declined by 37% and exports of other goods fell by 13%, while the ruble depreciation supported non-commodity exports.

On the other hand, the export quantities of both crude oil and petroleum products increased by 13% and 24% respectively in 2015 Q1 year-on-year owing to a reduction in export duties (and partly due to the ruble depreciation). However, this was not enough to compensate for the effect of the fall in prices. The export quantities of Russian natural gas decreased by 20% (by 10.7 billion m<sup>3</sup>) due to the fall in deliveries to the EU by 7.2 billion m<sup>3</sup> and to Ukraine by 3.5 billion m<sup>3</sup>, despite a slight increase in deliveries as compared with 2014 Q4.

On 14 May 2015, the European Commission started an anti-dumping investigation regarding the import of cold-rolled steel from Russia and China and introduced temporary duties on imports of transformer steel from Russia (and a number of other countries: the US, China, Japan and South Korea). Before that, at the end of 2014, anti-

dumping duties had been introduced by the USA on hot-rolled steel and in January 2015 by the EU on the import of steel pipes. According to data for 2015 Q1, this has not yet produced any significant effect on export quantities. The potential influence on the total exports is also extremely small: the share of products subject to the duties and anti-dumping measures amounts to less than 3% of the total export volume.

The reduction in the import of goods by 36% was due to lower consumer activity (see Section 1.3 for more details). The significant ruble depreciation and restrictions on the import of certain types of products into Russia also exerted a downward pressure on imports.

The deficit of the non-tradable components' balance decreased mainly due to the fall in investment income payable. The reduction in the total volume of obligations to non-residents along with debt repayment contributed to the decline in the volume of interest payments. Moreover, a significant part of these payments were denominated in rubles, so their US dollar equivalents shrank with the ruble depreciation.

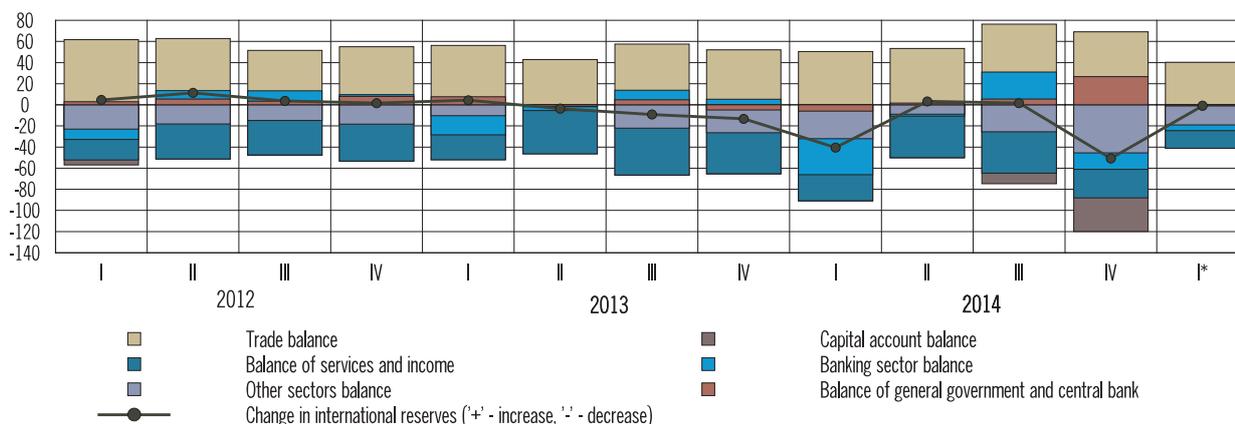
In turn, the financial account balance was close to the predicted level, despite the extremely volatile and heterogeneous dynamics of its certain components. Net private sector capital outflow in 2015 Q1 decreased to \$32.6 billion, or by a factor of 1.5 compared with the same period in 2014 (\$47.7 billion) and by a factor of 2.4 compared with the record high outflow in the previous quarter (\$77.4 billion). Unlike previous years, when the private sector capital outflow was mainly the result of asset growth, in 2015 Q1 it was practically entire the result of reduced external obligations.

The reduction in private sector foreign obligations by \$29.8 billion was the result of the external debt repayment by companies and banks amid shrinking opportunities to refinance debt due to the EU and US financial sanctions. In 2015 Q1, private sector external debt fell by \$36.0 billion, to \$509.0 billion (Chart 2). Banks reduced foreign assets and

<sup>1</sup> Here and below in the Balance of Payments section, changes in indicators are shown on a year-on-year basis.

Chart 1

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



\* Estimate.

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, operations on resident banks' correspondent accounts with the Bank of Russia; item 'Other sectors balance' includes item 'Net errors and omissions' (according to BPM5).

Source: Bank of Russia.

obligations faster than had been assumed by the forecasts, which were based on the external debt repayment schedule, while other sectors did so more slowly. Despite the impact of negative external factors, an influx of capital was recorded in 2015 Q1 in certain components of other sectors' obligations. Thus, companies were able to obtain net direct investments for more than \$3 billion.

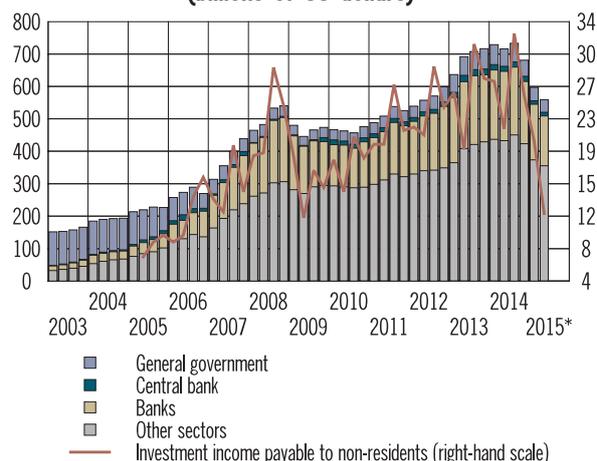
Banks repaid their external debts by both using the funds from the sale of foreign assets, which decreased by \$9.7 billion, and owing to liquidity provided by the Bank of Russia on a reverse basis in the amount of \$6.5 billion. Unlike banks, other sectors increased their foreign assets by \$6.8 billion, mainly through direct investment.

Moreover, in comparison with the previous quarter, the value of external debt payments decreased and the household demand for foreign currency fell. Other sectors' foreign assets in foreign currency cash fell by \$4.3 billion in 2015 Q1, while in the previous quarter they had increased by \$15 billion. All this contributed to reduced capital outflow. Net private sector capital outflow adjusted to the volume of foreign currency liquidity provided by the Bank of Russia to credit institutions on a reverse basis and other Bank of Russia<sup>2</sup> operations fell from \$60.8 billion in 2014 Q1 to \$23.4 billion in

<sup>2</sup> Adjusted to the volume of foreign currency liquidity provided by the Bank of Russia to credit institutions on a reverse basis, to the amount of operations in resident banks' correspondent accounts with the Bank of Russia, and also to the amount of foreign currency funds received by the Bank of Russia as part of FX swap operations.

Chart 2

## External debt of the Russian Federation (billions of US dollars)



\* As of 1.04.2105 - estimate.

Source: Bank of Russia.

2015 Q1. The Bank of Russia expects that in the next few quarters the capital outflow will not exceed the level of the corresponding periods of 2014.

## Forecast for 2015-2018

The Bank of Russia is considering three macroeconomic development scenarios (Scenarios 1 and 2, and a risk scenario), which differ in their assumptions about oil price dynamics and other macroeconomic indicators. In the first and second scenarios, the price of oil is assumed to remain at \$60 per barrel in 2015. Under Scenario 1, the price of oil then rises smoothly to \$80 per barrel in 2018, while Scenario 2 assumes that over the entire

period under review the price of oil will fluctuate about \$60 per barrel.

A significant fall in the price of oil in 2015 as compared with 2014 will exert a strong downward pressure on exports. The impact of the ruble exchange rate dynamics will be insufficient to compensate for it. This will cause exports to fall by almost 20% in US dollar terms. The import quantities will contract even faster under the influence of slowing economic growth and the depreciated ruble, and also under the influence of international financial and trade sanctions. As a result, the balance of trade surplus will remain approximately at the last year's level, but the current account balance will grow from \$60 billion to \$93 billion due to an improvement in the balance of services and the balance of non-tradable components, primarily a decrease in investment income receivable.

In 2016-2018, under Scenario 1, the increase in oil prices and GDP growth recovery in trading partner countries will be conducive to an increase in export quantities. Imports will grow at a comparable rate as domestic demand recovers. External debt repayment will lead to a reduction in debt servicing payments. As a result, the deficit in the balance of non-tradable components will not grow significantly after the reduction in 2015-2016. Thus, the current account surplus will also increase after 2015, to a level higher than \$100 billion in 2017-2018. As compared with the forecast's published baseline scenario, estimates of the current account surplus have gone up in 2015, primarily as a result of revising the forecast price of oil in 2015.

Under Scenario 2, with stable oil prices export quantities will not increase in 2016-2018, while imports will start growing in 2017, as domestic demand recovers. As a result, the current account surplus will fall after 2016, but it will still remain at a high level: about \$80 billion in 2017 and \$70 billion in 2018.

During the entire forecast period, the Bank of Russia expects a historically high volume of private capital outflow, but there will be noticeable changes in its structure. In the first part of the forecast period, the main factor for capital outflow will be the reduction in obligations to non-residents as external debt is repaid amid the restricted access to global financial markets. As compared with the previous forecast, both scenarios have adjusted the expected volume of capital outflow in 2015-2016

downwards, out of caution, due to the decreased forecast of net contraction in external obligations and reduced demand for foreign assets. In the future, accumulation of foreign assets will come to the fore again among the capital outflow factors. Given a more favourable economic situation in 2017-2018, the volume of foreign assets accumulated in these years under Scenario 1 will be somewhat higher than under Scenario 2.

A difficult access to external lending sources under both scenarios will lead to the companies' inability to refinance a significant portion of external debt due in 2015-2018, unlike the past years. According to estimates, the value of external debt payments by the private sector in 2015 will amount to \$120 billion and, taking account of on-call debt, to more than \$150 billion. The Bank of Russia expects that a part of the debt may be refinanced successfully in external markets, and another part covers residents' obligations to non-residents making up a group of companies (intragroup loans). According to Bank of Russia estimates, nearly 60% of this amount will be repaid directly. As compared with the previous forecast, the estimate of the capital outflow volume in the form of repayment of external obligations in 2015 is somewhat lower. The current data show that Russian companies are even demonstrating growth in obligations on certain items. The reduction in external obligations under 'forced' debt repayment will be the main factor for capital outflow in the next few years. This effect will peak in 2015-2016 and then start to weaken as companies find external financing sources not covered by the sanctions (for example, in Asian markets). Moreover, a fall in total debts will facilitate a reduction in the volume of annual repayments of obligations.

In 2017-2018, as the economic situation normalises, accumulation of foreign assets will come to the fore again among the capital outflow factors. Demand for foreign assets has a dual nature. On the one hand, under normal economic conditions it fluctuates approximately in accordance with the residents' income dynamics: a part of income is invested in foreign assets due to the desire to diversify. On the other hand, during periods of instability residents (primarily the general public) increase investment in foreign assets, even when incomes are falling, since these assets are considered to be more stable. Given increased

volatility in the FX market, the demand for foreign assets rose sharply in the second half of 2014. As a result of the stabilisation of the situation in the financial market and as economic growth recovers in the second half of 2015, the impact of this channel of demand for foreign assets will weaken. Owing to the quick normalisation of the situation in the FX market in February-May 2015, under both scenarios demand for foreign assets in 2015 is somewhat lower as compared with the previous forecast. In turn, due to the relatively low rates of economic recovery (and the recovery of economic agents' income), the growth of demand for foreign assets will also be slow, reaching a level comparable to 2014 only by 2017-2018 under both scenarios.

Higher oil prices and economic growth rates in Russia in 2017-2018 under Scenario 1 will cause higher volumes of foreign asset accumulation in this period as compared with Scenario 2. As a result, net capital outflow under both scenarios will amount to about \$90 billion in 2015 and will further decline gradually, since the reduction in outflow in the form of repayment of obligations will be faster than the growth in capital outflow in the form of foreign asset accumulation. Under Scenario 1, due to the somewhat higher demand for foreign assets in 2017-2018, the reduction in capital outflow will be slower. In 2018, the volume of capital outflow under Scenario 1 will amount to \$60-70 billion; under Scenario 2, it will be \$50-60 billion.

Given these levels of capital outflow, the size of the current account balance in 2015 will make it possible to repay external debt and make other payments to non-residents without any significant increase in the amount of Bank of Russia funds provided on a reverse basis (including the amount already provided). The further increase in the current account surplus in 2016-2018 will allow the Bank of Russia in 2016 to start reducing the volume of foreign currency provided to credit institutions through FX repo operations and gradually increase the volume of foreign currency reserves by

purchasing foreign currency in the open market. Under Scenarios 1 and 2, the ratio between the current and financial accounts will allow the volume of international reserves to grow in the long term (in the course of 5-7 years) to a comfortable level of \$500 billion.

## Forecast risks

The stress scenario, which assumes a fall in the price of oil to \$40 per barrel by the end of 2015 and its preservation at about \$40 per barrel until the end of 2018, expects a deeper and more prolonged drop in GDP than in the baseline scenario. A significant reduction in the ruble real effective exchange rate as compared with Scenarios 1 and 2 is also likely. Under the influence of these factors, imports will fall more significantly than exports, even despite the fall in oil prices. As a result, the current account balance will be higher than in Scenarios 1 and 2. The current account balance will exceed \$100 billion in 2015 and will grow in subsequent years.

The fall in the price of oil to \$40 per barrel in 2015 will be accompanied by an increased uncertainty with regard to the economic outlook, which will lead to growth in capital outflow in 2015 (and to a lesser extent in subsequent years) in the form of investment in foreign assets. Moreover, the stabilisation of oil prices at a low level will encourage non-residents to conduct a long-term review of the attractiveness of investing in the Russian economy and promote further reduction in foreign investment.

As a result, capital outflow in 2015 is estimated at about \$110 billion. In 2016-2018, it will decrease somewhat (as the situation in the FX market stabilises and the economy adjusts to the new external conditions), but it will be higher than in Scenarios 1 and 2 for the entire forecast horizon. If this scenario materialises, the Bank of Russia deems it possible to extend the effect of facilities used to provide FX liquidity for a longer period and, if necessary, is ready to sell foreign currency in order to maintain financial stability.

## Changes in the system of instruments and other monetary policy measures

Table 1

### Changes in the system of instruments and other monetary policy measures

Change in average required reserve ratio	The Bank of Russia decided to raise the average ratio used by banks to calculate the averaged amount of required reserves from 0.7 to 0.8 from 10 September 2015. For non-bank credit institutions engaged in deposit and lending operations this ratio will be raised from 0.7 to 1.0 from the same date. For settlement non-bank credit institutions and non-bank credit institutions, which are entitled to transfer funds without opening bank accounts, and to conduct other related bank operations the averaging ratio remains unchanged at 1.0. This measure is aimed at increasing the efficiency of the required reserves averaging mechanism and expanding credit institutions' ability to manage their liquidity. This decision will redistribute funds between credit institutions' required reserves accounts and correspondent accounts with the Bank of Russia and will not exert any material pressure on these institutions' need for Bank of Russia refinancing operations.
Expansion of the Bank of Russia Lombard List	In order to increase the amount of market collateral held by credit institution, the Bank of Russia took decisions to include new securities issues in the Bank of Russia Lombard List on three occasions in March-May 2015 (from 18 March, from 15 April and from 7 May). The totality of 40 bond issues worth 250.4 billion rubles was included in the Bank of Russia Lombard List. During this period, the Bank of Russia also cut discounts and raised correction ratios used to adjust the value of assets taken as collateral.
Increase in eligible collateral on Bank of Russia specialised refinancing instruments	In May 2015, the Bank of Russia started to accept as collateral on loans extended to JSC MSP Bank in the framework of the specialised refinancing programme, claims on ear-marked loans issued to microfinance organisations on purposes linked with lending of small and medium-sized business.
Increase in minimum interest rates on auction-based FX provision operations	Taking into account changes in the FX market, in March-April 2015, the Bank of Russia raised minimum interest rates on auction-based foreign currency provision operations on a reverse basis on three occasions (from 30 March, from 13 April, and from 21 April). As a result, from 21 April 2015, these operations have the following rates: <ul style="list-style-type: none"> <li>– minimum interest rates on FX repo auctions are equal to LIBOR, in respective currencies and for respective terms, plus 2.00 pp for 1 week and 28 days (until 30 March 2015 – plus 0.5 pp), and plus 2.50 pp for 12 months (until 30 March 2015 – plus 0.5 pp);</li> <li>– minimum interest rates on auctions to provide FX loans secured by claims on FX loans are equal to LIBOR, in respective currencies and for respective terms, plus 2.25 pp for 28 days (until 30 March 2015 – plus 0.75 pp), and plus 2.75 pp for 365 days (until 30 March 2015 – plus 0.75 pp).</li> </ul>
Suspension of FX repo auctions for 364 days	In view of credit institutions' reduced need for foreign currency, the Bank of Russia decided to suspend 364-day FX repo auctions from 1 June 2015.
Bank of Russia operation in the domestic FX market to replenish international reserves	The Bank of Russia decided to conduct regular foreign currency purchases in the domestic FX market from 13 May 2015 in order to replenish international reserves. These operations will be conducted daily in the amount of 100-200 million US dollars. These purchases will be distributed evenly during trading hours to minimise their impact on the exchange rate dynamics. In case of any significant changes in the FX market the volume of operations may be adjusted.
Change in the regime of anti-crisis measures aimed at maintaining the Russian financial sector stability <sup>1</sup>	The Bank of Russia decided to extend the period of application of the following banking regulation measures till 1 October 2015: <ul style="list-style-type: none"> <li>– possibility for credit institutions to refrain from decreasing debt service quality rating irrespective of the assessment of financial standing of a borrower (due to loan currency change, change of the loan maturity (principal amount of debt and/or interests) and the interest rate if the change of financial standing occurred as a result of sanctions);</li> <li>– a temporary right to use the fixed exchange rates when calculating prudential requirements for operations in five foreign currencies, with setting the following exchange rates against the ruble from 1 July 2015: US\$ — 45 rubles, euro — 52 rubles, pound sterling — 70 rubles, Swiss franc — 47 rubles and 100 Japanese yen — 38 rubles.</li> </ul> A temporary moratorium on the recognition of negative revaluation of securities portfolios of credit institutions and non-bank financial organisations will be supposedly cancelled from 1 July 2015.

<sup>1</sup> See the Bank of Russia's press release, dated 17 December 2014, 'On Bank of Russia measures to maintain stability of Russian financial sector' ([http://www.cbr.ru/press/PR.aspx?file=17122\\_014\\_171\\_432dkp2014-12-17T17\\_02\\_49.htm](http://www.cbr.ru/press/PR.aspx?file=17122_014_171_432dkp2014-12-17T17_02_49.htm)) and dated 15 May 2015, 'On anti-crisis measures in banking regulation' ([http://www.cbr.ru/press/PR.aspx?file=15052\\_015\\_104\\_527if2015-05-15T10\\_43\\_19.htm](http://www.cbr.ru/press/PR.aspx?file=15052_015_104_527if2015-05-15T10_43_19.htm)).

## Statistical annex

Table 1

### Interest rates on Bank of Russia operations (% p.a.)

Purpose	Type of instrument	Instrument	Term	From 16.12.14	From 2.02.15	From 16.03.15	From 5.05.15	From 16.06.15
Liquidity provision	Standing facilities (fixed interest rates)	Overnight loans, FW swaps (ruble leg), Lombard loans; repo	1 day	18.00	16.00	15.00	13.50	12.50
		Loans secured by gold	1 day	18.00	16.00	15.00	13.50	12.50
			from 2 to 549 days <sup>1,2</sup>	18.50	16.50	15.50	14.00	13.00
		Loans secured by non-marketable assets or guarantees	1 day	18.00	16.00	15.00	13.50	12.50
	from 2 to 549 days <sup>1,2</sup>		18.75	16.75	15.75	14.25	13.25	
	Open market operations (minimum interest rates)	Auctions to provide loans secured by non-marketable assets	from 1 to 3 weeks, 3 months <sup>3</sup> , 18 months <sup>3,4</sup>	17.25	15.25	14.25	12.75	11.75
Lombard loan auctions		36 months <sup>3</sup>	17.25	15.25	14.25	12.75	11.75	
Repo auctions		from 1 to 6 days <sup>5</sup> , 1 week	17.00 (key rate)	15.00 (key rate)	14.00 (key rate)	12.50 (key rate)	11.50 (key rate)	
Liquidity absorption	Open market operations (maximum interest rates)	Deposit auctions	from 1 to 6 days <sup>5</sup> , 1 week <sup>6</sup>	17.00 (key rate)	15.00 (key rate)	14.00 (key rate)	12.50 (key rate)	11.50 (key rate)
	Standing facilities (fixed interest rates)	Deposit operations	1 day, call	16.00	14.00	13.00	11.50	10.50
<b>Memo item</b>								
Refinancing rate				8.25	8.25	8.25	8.25	8.25

<sup>1</sup> From 30 June to 15 December 2014, loans for up to 90 days were provided at a fixed interest rate, loans for 91 to 549 days - at a floating interest rate linked to the Bank of Russia key rate. From 16 December 2014, loans for 2 to 549 days are provided at a floating interest rate linked to the Bank of Russia key rate.

<sup>2</sup> Until 30 June 2014, loans were provided for 2 to 365 days.

<sup>3</sup> Loans provided at a floating interest rate linked to the Bank of Russia key rate.

<sup>4</sup> Until 16 October 2014, loans were provided for 12 months.

<sup>5</sup> Fine-tuning operations.

<sup>6</sup> Faced by structural liquidity deficit, the Bank of Russia holds repo auctions. See press release at [http://www.cbr.ru/press/PR.aspx?file=19012\\_015\\_154523if2015-01-19T15\\_41\\_11.htm](http://www.cbr.ru/press/PR.aspx?file=19012_015_154523if2015-01-19T15_41_11.htm).

Source: Bank of Russia.

Table 2

## Operations to provide and absorb ruble liquidity

Purpose	Type of instrument	Instrument	Term	Frequency	Bank of Russia claims on liquidity provision instruments, Bank of Russia obligations on liquidity absorption operations, billions of rubles				
					1.01.15	1.04.15	1.05.15	1.06.15	
Liquidity provision	Standing facilities	Overnight loans	1 day	daily	0.0	1.2	0.2	0.6	
		FX swaps to buy USD & euro for rubles			121.6	16.6	11.5	0.0	
		Lombard loans			3.7	11.6	13.7	14.0	
		Repo			96.2	107.0	58.7	43.3	
		Loans secured by gold	1 day		1.2	0.6	0.6	0.5	
			from 2 to 549 days						
		Loans secured by non-marketable assets or guarantees	1 day	from 2 to 549 days		2055.9	598.0	654.3	361.0
	Open market operations	Auctions to provide loans secured by non-marketable assets	from 1 to 3 weeks	occasionally	2,370.9	2,892.0	2,612.1	2,643.2	
			3 months	monthly					
			18 months <sup>1</sup>	occasionally					
Lombard loan auctions		36 months	occasionally	-	-	-	-		
	Repo auctions	from 1 to 6 days <sup>2</sup>	occasionally	2,727.6	1,910.8	2,133.0	1,782.7		
		1 week	weekly						
Liquidity absorption	Open market operations	Deposit auctions	from 1 to 6 days <sup>2</sup>	occasionally	0.0	0.0	0.0	0.0	
			1 week <sup>3</sup>	weekly					
	Standing facilities	Deposit operations	1 day, call	daily	804.6	292.2	313.9	246.8	

<sup>1</sup> Until 16 October 2014, loans were provided for 12 months.

<sup>2</sup> Fine-tuning operations.

<sup>3</sup> Faced by structural liquidity deficit, the Bank of Russia holds repo auctions. See press release at [http://www.cbr.ru/press/PR.aspx?file=19012\\_015\\_154\\_523if2015-01-19T15\\_41\\_11.htm](http://www.cbr.ru/press/PR.aspx?file=19012_015_154_523if2015-01-19T15_41_11.htm).

Source: Bank of Russia

Table 3

## Required reserve ratios

Liability type	Ratio, %
To non-resident legal entities	4.25
To households	
Other liabilities	

Source: Bank of Russia.

Table 4

## Average required reserve ratio

Types of credit institutions	Ratio
Credit institutions, excluding settlement non-bank credit institutions and non-bank credit institutions, which are entitled to transfer funds without opening bank accounts, and to conduct other related bank operations	0.7
Settlement non-bank credit institutions and non-bank credit institutions entitled to transfer funds without opening bank accounts and to conduct other related bank operations	1

Source: Bank of Russia.

Table 5

## Operations to provide foreign currency

Instrument	Term	Frequency	Minimum auction rate as spread to LIBOR <sup>1</sup> , pp; fixed interest rate for FX swaps <sup>2</sup> , % p.a.				Bank of Russia claims, millions of USD			
			Beginning of 2015	from 30.03.15	from 13.04.15	from 21.04.15	as of 1.01.15	as of 1.04.15	as of 1.05.15	as of 1.06.15
Repo auctions	1 week	weekly	0.50	1.00	1.50	2.00	209.7	1,565.6	88.8	10.2
	28 days		15,075.1	9,298.2	9,916.6	7,614.5				
	12 months		0.50	1.00	1.80	2.50	4,960.0	18,231.0	24,886.6	25,995.1
Loan auctions	28 days	monthly	0.75	1.25	1.75	2.25	-	-	451.0	-
	365 days		0.75	1.25	2.00	2.75	-	2,766.8	2,766.8	2,766.8
FX swaps to sell USD for rubles	1 day	daily	1.50	1.50	1.50	1.50	1,600.0	0.0	23.4	0.0

<sup>1</sup> In respective currencies and for respective terms.

<sup>2</sup> For dollar leg; ruble leg rate corresponds to the key rate less 1 percentage point.

Source: Bank of Russia.

Table 6

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

	Inflation	Core inflation	Food	Food <sup>1</sup>	Vegetables and fruit	Non-food goods	Non-food goods excluding petrol <sup>2</sup>	Services
<b>2013</b>								
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
May	0.7	0.3	1.0	0.3	6.5	0.3	0.3	0.8
June	0.4	0.3	0.5	0.2	3.0	0.2	0.2	0.6
July	0.8	0.3	0.0	0.4	-3.0	0.1	0.1	3.1
August	0.1	0.5	-0.7	0.6	-11.3	0.5	0.3	0.9
September	0.2	0.7	0.0	0.8	-7.6	0.5	0.4	0.1
October	0.6	0.6	1.1	0.9	3.6	0.5	0.5	-0.1
November	0.6	0.6	0.9	0.7	3.0	0.4	0.5	0.2
December	0.5	0.4	0.8	0.5	2.8	0.2	0.3	0.6
Total for the year (December to December)	6.5	5.6	7.3	7.1	9.3	4.5	4.4	8.0
<b>2014</b>								
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
May	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
September	0.7	0.9	1.0	1.2	-1.2	0.6	0.5	0.3
October	0.8	0.8	1.2	1.0	2.8	0.6	0.6	0.6
November	1.3	1.0	2.0	1.3	8.7	0.6	0.6	1.2
December	2.6	2.6	3.3	2.2	12.9	2.3	2.5	2.2
Total for the year (December to December)	11.4	11.2	15.4	14.7	22.0	8.1	8.0	10.5
<b>2015</b>								
January	3.9	3.5	5.7	3.7	22.1	3.2	3.5	2.2
February	2.2	2.4	3.3	2.7	7.2	2.1	2.3	0.8
March	1.2	1.5	1.6	1.6	1.2	1.4	1.6	0.3
April	0.5	0.8	0.3	0.9	-3.7	0.9	0.9	0.0
May	0.4	0.6	0.1	0.2	-1.0	0.5	0.6	0.5

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

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

Sources: Rosstat, Bank of Russia calculations.

Table 7

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

	Inflation	Core inflation	Food	Food <sup>1</sup>	Vegetables and fruit	Non-food goods	Non-food goods excluding petrol <sup>2</sup>	Services
<b>2013</b>								
January	7.1	5.7	8.6	7.8	16.1	5.1	4.9	7.8
February	7.3	5.7	8.7	7.8	16.8	5.3	5.0	8.2
March	7.0	5.6	8.3	7.7	13.8	5.2	4.9	7.9
April	7.2	5.7	8.8	7.7	18.3	5.1	4.9	8.1
May	7.4	5.9	9.2	8.0	19.1	5.0	4.8	8.3
June	6.9	5.8	8.0	7.9	8.2	4.9	4.9	8.1
July	6.5	5.6	6.8	7.4	1.3	4.8	4.6	8.4
August	6.5	5.5	6.5	7.2	0.8	4.9	4.6	8.7
September	6.1	5.5	6.3	7.2	-1.4	4.7	4.4	7.8
October	6.3	5.5	6.9	7.2	4.4	4.5	4.3	7.7
November	6.5	5.6	7.5	7.3	8.9	4.5	4.4	7.9
December	6.5	5.6	7.3	7.1	9.3	4.5	4.4	8.0
<b>2014</b>								
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
May	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
September	8.0	8.2	11.4	12.0	6.1	5.5	5.3	6.9
October	8.3	8.4	11.5	12.1	5.3	5.7	5.4	7.6
November	9.1	8.9	12.6	12.8	11.1	5.9	5.6	8.7
December	11.4	11.2	15.4	14.7	22.0	8.1	8.0	10.5
<b>2015</b>								
January	15.0	14.7	20.7	18.4	40.7	11.2	11.4	12.3
February	16.7	16.8	23.3	20.8	43.5	13.0	13.5	12.8
March	16.9	17.5	23.0	21.1	38.0	13.9	14.6	12.6
April	16.4	17.5	21.9	20.8	30.0	14.2	15.0	11.8
May	15.8	17.1	20.2	19.5	25.7	14.3	15.2	11.6

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

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

Sources: Rosstat, Bank of Russia calculations.

Table 8

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

	Industrial production <sup>1</sup>	Agriculture	Construction	Freight turnover	Retail trade turnover	Fixed capital investment	Household consumer expenditure	Output of goods and services by key industries <sup>2</sup>	GDP <sup>3</sup>
<b>2013</b>									
January	-1.1	1.4	3.1	-1.1	0.4	-1.7	0.4	-0.1	
February	-1.0	-0.1	-1.5	0.1	-0.1	-1.2	0.5	-0.3	
March	1.0	0.0	1.0	-0.3	0.6	0.5	0.3	0.7	0.2
April	0.3	0.5	-1.9	1.1	0.5	-1.6	0.6	0.0	
May	-0.3	0.3	2.6	-0.9	0.2	-0.7	0.2	-0.3	
June	1.4	-0.2	-2.9	-0.9	0.6	0.0	0.3	0.8	0.7
July	-0.3	0.7	2.3	1.0	0.2	-0.5	0.3	-0.5	
August	0.4	-0.2	-2.0	1.2	0.1	-0.7	0.1	0.0	
September	-0.5	1.2	1.3	1.5	0.1	-0.4	-0.1	-0.6	0.3
October	0.2	1.1	-2.7	1.4	0.2	-0.5	0.1	1.1	
November	1.9	-0.4	2.3	-3.1	0.5	2.7	0.0	0.3	
December	-2.1	-1.6	-2.0	2.1	-0.5	-3.3	-0.2	-1.3	0.7
<b>2014</b>									
January	0.4	1.3	-2.0	-0.1	0.0	0.2	-0.3	-0.2	
February	1.2	-0.2	0.9	-1.9	1.1	0.7	2.4	1.3	
March	-0.2	-0.2	0.3	-1.0	0.5	-0.7	0.0	-0.4	-0.9
April	1.6	0.7	-0.8	0.3	0.1	0.4	-0.2	0.7	
May	-0.6	-0.2	-1.0	1.1	0.1	-0.2	-0.1	0.1	
June	-0.7	0.3	0.6	0.3	-0.1	-0.3	-0.1	-0.8	0.7
July	0.5	0.9	-0.7	-1.5	0.3	-0.1	0.0	0.4	
August	-0.8	-0.4	0.0	-0.2	0.1	-0.2	0.0	-0.6	
September	1.4	22.3	-1.4	0.9	0.0	-1.0	0.1	0.5	0.4
October	0.1	-19.7	0.8	-0.1	0.0	0.5	-0.1	-0.8	
November	-1.3	2.1	-1.0	-0.2	-0.1	-2.0	0.0	-0.3	
December	1.8	0.6	-0.2	-0.7	0.7	0.9	0.2	0.0	0.3
<b>2015</b>									
January	-2.0	-0.8	-0.3	-0.7	-8.4	-0.6	-8.3	-1.5	
February	-0.8	0.5	-0.4	0.5	-0.8	-0.7	-0.1	-1.1	
March	0.4	0.5	-1.4	0.9	-0.3	-0.2	-0.1	-0.4	-3.1
April	-1.6	-0.3	0.2	-1.6	-0.4	-0.7	0.0	-1.4	

<sup>1</sup> Rosstat estimate.

<sup>2</sup> Output index of goods and services by key industries.

<sup>3</sup> Quarterly data.

Sources: Rosstat, Bank of Russia calculations.

Table 9

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

	2014	2015					Memo item: 2015
	January	January	February	March	April	January-April	January-April
Output of goods and services by key industries	0.5	-1.1	-3.1	-2.8	-5.8	-3.2	0.4
Industrial output	1.7	0.9	-1.6	-0.6	-4.5	-1.5	1.4
Agricultural output	3.7	2.8	3.2	4.2	3.3	3.5	2.9
Fixed capital investment	-2.7	-3.9	-4.3	-2.7	-4.8	-3.7	-4.5
Construction	-4.5	-3.5	-3.1	-6.7	-5.2	-4.8	-5.9
Retail trade turnover	2.7	-3.9	-7.2	-8.7	-9.8	-7.5	3.6
Household real disposable money income	-0.7	-0.9	-1.7	-1.8	-4.0	-2.2	-2.1
Real wage	1.3	-8.4	-7.4	-10.6	-13.2	-10.2	4.1
Number of unemployed	-6.0	-2.1	1.5	8.7	8.8	4.1	-4.8
Unemployment (as % of economically active population)	5.2	5.5	5.8	5.9	5.8	5.8	5.5

Sources: Rosstat, Bank of Russia calculations.

Table 10

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

		Forecast of GDP growth in 2015, %		Memo item: country's share in aggregate GDP of trading partners
		June 2015	March 2015	
Total		1.4	1.8	100
1	Netherlands	1.5	1.3	15.7
2	Italy	0.5	0.5	8.7
3	Germany	1.7	1.2	8.0
4	China	7.0	7.1	7.0
5	Ukraine	-7.9	-3.9	6.5
6	Turkey	2.9	3.4	6.4
7	Belarus	-2.0	0.2	5.9
8	Poland	3.4	3.4	4.9
9	United Kingdom	2.5	2.6	3.5
10	USA	3.1	3.3	3.5
11	Finland	0.4	0.8	3.4
12	Kazakhstan	1.6	2.3	3.4
13	Japan	1.1	1.4	3.3
14	France	1.1	0.9	3.2
15	Republic of Korea	3.1	3.4	2.8
16	Switzerland	0.7	1.2	2.6
17	Latvia	2.4	2.8	1.9
18	Hungary	2.6	2.5	1.8
19	India	7.5	6.1	1.7
20	Belgium	1.1	1.1	1.5
21	Czech Republic	2.4	2.5	1.5
22	Slovakia	2.9	2.6	1.5
23	Spain	2.6	2.0	1.3

Source: Bank of Russia.

Table 11

## Monetary policy rates in various countries

Country	Policy rate name	Current level	Date of last change	Previous level	Change	No. of rate changes during last 12 month	Inflation	Current level (%)	12-month change, pp
Poland	target rate	1.50	04.03.2015	2.00	-0.50	2		-1.1	-1.40
Hungary	base rate	1.65	26.05.2015	1.80	-0.15	5		-0.3	-0.20
Czech Republic	repo rate (14 days)	0.05	01.11.2012	0.25	-0.20	0		0.5	0.40
Romania	base rate	1.75	06.05.2015	2.00	-0.25	7		0.7	-0.56
Bulgaria	base rate	0.02	01.06.2015	0.01	0.01	6		0.5	2.10
Serbia	key policy rate	6.50	11.05.2015	7.00	-0.50	5		1.8	-0.30
Israel	target overnight rate	0.10	23.02.2015	0.25	-0.15	3		-0.5	-1.49
Brazil	target rate	13.75	03.06.2015	13.25	0.50	6		8.2	1.89
Chile	monetary policy rate	3.00	16.10.2014	3.25	-0.25	4		4.1	-0.20
	lending rate (1 year)	5.10	11.05.2015	5.35	-0.25	3		1.5	-0.30
China	deposit rate (1 year)	2.25	11.05.2015	2.50	-0.25	3			
	reserve requirements rate	18.50	20.04.2015	19.50	-1.00	2			
	reverse repo rate	7.25	02.06.2015	7.50	-0.25	3		4.9	-3.61
India	repo rate	6.50	05.06.2015	6.25	0.25	4			
Indonesia	target rate	7.50	17.02.2015	7.75	-0.25	2		7.2	-0.17
Republic of Korea	base rate	1.75	13.03.2015	2.00	-0.25	3		0.5	-1.20
Malaysia	target overnight rate	3.25	10.07.2014	3.00	0.25	1		1.8	-1.60
Mexico	target rate	3.00	06.06.2014	3.50	-0.50	0		3.1	-0.44
Philippines	monetary policy rate	4.00	12.09.2014	3.75	0.25	2		1.6	-2.90
Russia	repo auction rate (1-6 days)	12.50	05.05.2015	14.00	-1.50	7		15.8	8.20
South Africa	repo rate	5.75	17.07.2014	5.50	0.25	1		4.5	-1.60
Thailand	repo rate	1.50	29.04.2015	1.75	-0.25	2		-1.3	-3.89
Turkey	repo rate (7 days)	7.50	24.02.2015	7.75	-0.25	4		8.1	-1.57
USA	fed funds rate's interval (upper bound)	0.25	16.12.2008	1.00	-0.75	0		-0.2	-2.20
Euro area	refinancing rate	0.05	04.09.2014	0.15	-0.10	1		0.3	-0.20
UK	base rate	0.50	05.03.2009	1.00	-0.50	0		-0.1	-1.90
Japan	overnight rate	0.10	19.12.2008	0.30	-0.20	0		0.6	-2.80
Canada	target overnight rate	0.75	21.01.2015	1.00	-0.25	1		0.8	-1.20
Australia	overnight rate	2.00	05.05.2015	2.25	-0.25	2		1.3	-1.60
New Zealand	overnight rate	3.50	24.07.2014	3.25	0.25	2		0.1	-1.40
Denmark	lending rate	0.05	20.01.2015	0.20	-0.15	1		0.4	-0.10
	certificate of deposit rate	-0.75	06.02.2015	-0.50	-0.25	5			
Switzerland	3m LIBOR - min	-1.25	15.01.2015	-0.75	-0.50	2		-1.1	-1.10
	3m LIBOR - max	-0.25	15.01.2015	0.25	-0.50	1			
Sweden	repo rate	-0.25	18.03.2015	-0.10	-0.15	4		0.5	0.22
Norway	key deposit rate	1.25	11.12.2014	1.50	-0.25	1		2.0	0.20

Note: Colour is used to highlight changes occurred from the time of the previous release of the Monetary Policy Report.

Source: Bloomberg.

Table 12

**Balance of payments of the Russian Federation  
(billions of US dollars)**

	2013					2014					2015
	I	II	III	IV	Total	I	II	III	IV	Total	I <sup>1</sup>
Current account	25.0	1.8	-0.7	8.0	34.1	25.9	12.2	6.0	15.4	59.5	23.5
<i>Current account, YoY, %</i>	-36.4	-88.8	-87.3	-23.0	-52.2	3.4	577.6	-959.9	92.4	74.5	-9.1
Trade balance	48.6	42.8	43.7	46.8	181.9	50.5	51.7	45.3	42.3	189.7	40.3
<i>Trade balance, YoY, %</i>	-17.3	-13.1	14.5	3.1	-5.1	3.9	20.8	3.6	-9.7	4.3	-20.2
Exports of goods	125.2	127.3	131.0	139.8	523.3	123.0	132.3	125.7	116.7	497.8	86.6
<i>Exports of goods, YoY, %</i>	-4.5	-3.0	4.6	-0.2	-0.8	-1.7	3.9	-4.0	-16.5	-4.9	-29.6
crude oil	43.2	40.7	44.0	45.7	173.7	38.8	42.3	40.3	32.5	153.9	22.9
<i>crude oil, YoY, %</i>	-6.4	-10.5	3.1	-2.0	-4.0	-10.1	3.8	-8.4	-28.9	-11.4	-41.0
oil products	25.5	29.3	27.1	27.4	109.3	27.5	30.6	31.8	26.0	115.9	19.1
<i>oil products, YoY, %</i>	-0.5	10.9	7.5	3.9	5.5	8.0	4.3	17.4	-5.2	6.0	-30.6
natural gas	18.1	13.9	16.4	18.8	67.2	17.7	16.3	9.9	11.4	55.2	10.8
<i>natural gas, YoY, %</i>	-1.8	3.4	22.9	10.3	7.9	-2.4	17.5	-39.7	-39.6	-17.9	-38.9
other	38.3	43.3	43.6	47.9	173.0	39.0	43.2	43.7	46.8	172.8	33.8
<i>other, YoY, %</i>	-6.2	-5.6	-0.8	-4.1	-4.2	1.8	-0.3	0.3	-2.2	-0.1	-13.3
Imports of goods	-76.6	-84.5	-87.3	-93.0	-341.3	-72.5	-80.6	-80.5	-74.4	-308.0	-46.2
<i>Imports of goods, YoY, %</i>	6.0	3.2	0.3	-1.7	1.6	-5.3	-4.6	-7.8	-20.0	-9.8	-36.3
Balance of services	-10.5	-13.7	-19.8	-14.4	-58.3	-11.1	-14.4	-18.6	-11.2	-55.2	-9.4
<i>Balance of services, YoY, %</i>	26.4	34.5	28.8	13.2	25.1	5.4	4.9	-6.1	-22.2	-5.3	-15.1
Exports of services	15.2	17.9	18.4	18.6	70.1	15.1	17.3	17.8	15.5	65.8	11.7
<i>Exports of services, YoY, %</i>	15.8	13.8	12.6	8.6	12.4	-0.7	-3.1	-3.0	-16.6	-6.1	-22.5
Imports of services	-25.7	-31.5	-38.2	-33.0	-128.4	-26.2	-31.7	-36.4	-26.7	-121.0	-21.2
<i>Imports of services, YoY, %</i>	19.9	21.5	20.4	10.5	17.9	1.8	0.7	-4.6	-19.0	-5.8	-19.0
Compensation of employees	-2.9	-2.9	-3.6	-3.9	-13.2	-2.7	-2.6	-2.7	-2.1	-10.1	-1.2
Investment income	-8.7	-23.2	-17.8	-17.5	-67.2	-9.1	-21.8	-14.5	-11.8	-57.2	-5.5
Receivable	10.5	8.2	9.5	9.6	37.9	12.5	10.8	11.0	8.3	42.6	6.3
Payable	-19.2	-31.4	-27.4	-27.1	-105.1	-21.6	-32.6	-25.5	-20.2	-99.8	-11.8
Rent	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0
Secondary income	-1.5	-1.3	-3.3	-3.1	-9.3	-1.8	-0.7	-3.6	-1.7	-7.9	-0.7
<b>Nontradable components</b>	<b>-13.1</b>	<b>-27.4</b>	<b>-24.7</b>	<b>-24.5</b>	<b>-89.6</b>	<b>-13.6</b>	<b>-25.1</b>	<b>-20.7</b>	<b>-15.7</b>	<b>-75.0</b>	<b>-7.4</b>
<i>Nontradable components, YoY, %</i>	<b>17.0</b>	<b>19.1</b>	<b>42.9</b>	<b>9.9</b>	<b>21.4</b>	<b>3.7</b>	<b>-8.3</b>	<b>-16.3</b>	<b>-36.0</b>	<b>-16.3</b>	<b>-45.5</b>
<b>Capital account</b>	<b>0.0</b>	<b>0.0</b>	<b>-0.2</b>	<b>-0.1</b>	<b>-0.4</b>	<b>-0.2</b>	<b>-0.1</b>	<b>-10.0</b>	<b>-31.8</b>	<b>-42.0</b>	<b>0.0</b>
<b>Balance of current and capital accounts</b>	<b>25.0</b>	<b>1.8</b>	<b>-0.9</b>	<b>7.9</b>	<b>33.7</b>	<b>25.7</b>	<b>12.1</b>	<b>-4.0</b>	<b>-16.4</b>	<b>17.4</b>	<b>23.5</b>
<b>Financial account (except reserve assets)</b>	<b>-13.3</b>	<b>-7.8</b>	<b>-4.5</b>	<b>-19.3</b>	<b>-45.0</b>	<b>-47.2</b>	<b>-27.8</b>	<b>-6.0</b>	<b>-52.9</b>	<b>-133.8</b>	<b>-27.9</b>
<b>Net incurrence of liabilities</b> ( <sup>+</sup> - increase, <sup>-</sup> - decrease)	<b>86.2</b>	<b>19.1</b>	<b>8.0</b>	<b>12.5</b>	<b>125.8</b>	<b>2.6</b>	<b>7.8</b>	<b>-23.1</b>	<b>-38.0</b>	<b>-50.7</b>	<b>-30.7</b>
Federal government, local governments, and central bank	8.0	-0.2	4.1	-2.2	9.7	-6.5	2.2	-3.4	-4.4	-12.2	-0.9
Banks and other sectors	78.2	19.4	3.8	14.8	116.0	9.2	5.6	-19.7	-33.6	-38.5	-29.8
<b>Net acquisition of financial assets, excluding reserve assets</b> ( <sup>+</sup> - decrease, <sup>-</sup> - increase)	<b>-99.5</b>	<b>-27.0</b>	<b>-12.5</b>	<b>-31.8</b>	<b>-170.8</b>	<b>-49.8</b>	<b>-35.6</b>	<b>17.1</b>	<b>-14.8</b>	<b>-83.1</b>	<b>2.8</b>
General government and central bank	-0.3	-1.2	0.6	-2.6	-3.6	0.5	-0.5	8.8	31.2	40.0	-0.2
Banks and other sectors	-99.2	-25.8	-13.0	-29.3	-167.3	-50.3	-35.0	8.3	-46.1	-123.1	2.9
<b>Net errors and omissions</b>	<b>-6.8</b>	<b>1.6</b>	<b>-1.9</b>	<b>-3.8</b>	<b>-10.8</b>	<b>-5.9</b>	<b>5.3</b>	<b>4.2</b>	<b>5.1</b>	<b>8.8</b>	<b>-5.7</b>
<b>Change in FX reserves</b> ( <sup>+</sup> - decrease, <sup>-</sup> - increase)	<b>-4.9</b>	<b>4.4</b>	<b>7.4</b>	<b>15.2</b>	<b>22.1</b>	<b>27.4</b>	<b>10.3</b>	<b>5.7</b>	<b>64.2</b>	<b>107.5</b>	<b>10.1</b>
<b>Net capital import/export by banks and enterprises</b>	<b>-28.2</b>	<b>-5.5</b>	<b>-10.4</b>	<b>-16.9</b>	<b>-61.0</b>	<b>-47.7</b>	<b>-21.9</b>	<b>-7.2</b>	<b>-77.4</b>	<b>-154.1</b>	<b>-32.6</b>
<b>Certain indicators adjusted by the amount of FX swaps between the Bank of Russia and resident banks, the amount of FX funds provided by the Bank of Russia to resident banks on a reverse basis, as well as funds in resident banks' correspondent accounts with the Bank of Russia</b>											
<b>Change in FX reserves</b> ( <sup>+</sup> - decrease, <sup>-</sup> - increase)	<b>-4.3</b>	<b>3.6</b>	<b>9.2</b>	<b>13.3</b>	<b>21.8</b>	<b>40.5</b>	<b>-3.2</b>	<b>-1.6</b>	<b>50.8</b>	<b>86.5</b>	<b>0.9</b>
<b>Net capital import/export by banks and enterprises</b>	<b>-28.9</b>	<b>-4.6</b>	<b>-12.2</b>	<b>-15.0</b>	<b>-60.7</b>	<b>-60.8</b>	<b>-8.4</b>	<b>0.1</b>	<b>-64.0</b>	<b>-133.1</b>	<b>-23.4</b>

<sup>1</sup> Estimate (according to BPM5).

Source: Bank of Russia.

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