Bank of Russia
Central Bank of the Russian Federation

04
December 2014

Monetary Policy Report

Moscow

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Many thanks in advance for your assistance.

Report is prepared on the basis of data as of 5 December 2014.
Data cut-off date for forecast calculations is 5 December 2014.

An electronic version of the information and analytical report can be found on the of the Bank of Russia website at: http://www.cbr.ru/eng/publ/?Prtid=ddcp.

Please send your suggestions and comments to: monetarypolicyreport@mail.cbr.ru.

Contents

Summary

Deterioration of external conditions in September – early December 2014 presented a new challenge for the monetary policy. Decline in oil price continued against the backdrop of its excess demand in the world market and US dollar appreciation. Under the existing financial sanctions imposed on Russian companies the domestic foreign exchange market demonstrated growing demand for foreign currency. This brought about a considerable depreciation of the ruble against major world currencies, the ruble's volatility grew, depreciation and inflation expectations increased, and there was a significant rise in inflation risks and risks to financial stability.

To stabilise foreign exchange market, the Bank of Russia adopted a set of measures: it introduced refinancing facilities in foreign currency, employed a conservative approach to manage banking sector liquidity, and, among other things, set limits on ruble liquidity provision through FX swaps. Besides, in November 2014, the Bank of Russia abolished its exchange rate mechanism implying the conduct of regular interventions in line with established rules, which, in fact, signified the transition to a floating exchange rate regime. In doing this, the Bank of Russia reserved the right to conduct interventions in case of the emergence of any threats to financial stability. In early December 2014, due to the ruble's significant deviation from the fundamental level and the excessing increase in its volatility posing a threat to financial stability, the Bank of Russia intervened in the FX market on several occasions.

Ruble depreciation observed in August-November 2014 led to a further acceleration in consumer price growth. Restrictions on the import of certain food products imposed in August 2014 spurred inflation as well. These factors caused consumer prices to increase year-on-year from 8.0% in September to 9.1% in November. In early December, the upward trend of the said factors remained. According to Bank of Russia estimates, inflation will be about 10% at end-2014, and the contribution of the accumulated ruble depreciation from end-2013 to the annual consumer price growth might reach 2.6 percentage points. In October 2014, in order to limit the exchange rate pass-through, the Bank of Russia decided to raise the key rate in October and December 2014 by the total of 250 bp to 10.50% p.a. The Bank of Russia stands ready to continue tightening the monetary policy in case of the further aggravation of inflation risks.

Unfavourable external factors hampered the growth of the Russian economy. In view of existing economic uncertainty, restricted access to international capital markets, escalating prices of imported investment goods and tightening lending conditions, fixed capital investment also declined. At the same time, exchange rate dynamics raised the competitiveness of Russian products both in the external and domestic markets, and set the ground for the import substitution. Notwithstanding the drop in the growth rates of households' real income and retail lending, consumer activity demonstrated a slight increase. This was driven by an enhanced demand for certain groups of consumer goods, primarily durable ones, amid increased inflation expectations. Labour force shortage persisted, whereas unemployment remained low due to unfavourable demographic factors.

The Bank of Russia revised the medium-term macroeconomic forecast. The average annual oil price is expected to remain at $80 per barrel till end-2017. The access to foreign capital markets will be restricted for Russian companies in the forthcoming three years. In view of the above, there will be further reductions in the fixed capital investment in 2015-2016. Consumer

activity will remain weak against the backdrop of declining growth in real disposable income and consumer lending. At the same time, exchange rate dynamics will counterbalance reduction in export revenue, and weak domestic demand will bring down import growth rates. As a result, net export contribution to the economic growth will be positive. In line with Bank of Russia forecasts, the annual economic growth will remain close to zero in 2015-2016. In 2017, as financing sources will diversify, import substitution will develop and the competitiveness of Russian exports will improve, the annual economic growth rates are expected to reach 1.0-1.2%.

The Bank of Russia forecasts the start of consumer inflation slowdown in the second half of 2015. Before that, inflation will stay at enhanced level. Its decline will be facilitated by an exhausted impact of the August-November ruble depreciation on prices, subdued aggregate demand, drop in inflation expectations, and Bank of Russia measures adopted in 2014. According to Bank of Russia forecasts, inflation will decrease to the level close to the target in 2017.

At the same time, there exist risks of more significant fall in oil prices. Should oil prices remain at $60 per barrel till end-2017, GDP growth will reduce to -4.5-(-4.7)% in 2015 and -0.9-(-1.1)% in 2016. Further ahead, as the economy will adapt to changes in external conditions, partly facilitated by exchange rate dynamics, the economic growth rates are expected to increase to 5.6-5.8% in 2017. In 2015, inflation will be higher than the baseline scenario. In future, inflation is expected to be under a considerable downward pressure from the weak domestic demand. As inflation and inflation expectations decrease, the transition to more loose monetary policy will become possible. According to Bank of Russia forecasts, consumer price growth will decelerate to the level close to the target in 2017.

I. Macroeconomic conditions

I.1. External economic conditions and balance of payments

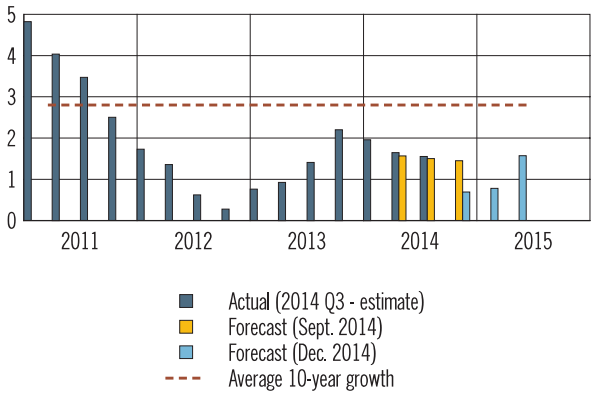
External conditions are less favourable for Russia than expected a quarter ago: GDP growth estimates of Russia's trading partners have been decreased and oil prices have fallen and could remain at a lower level than previously implied. Currently, external conditions are limiting growth in the Russian economy both due to the fall in income from export operations and as a result of the ongoing heightened external economic uncertainty, as well as the limited sources of external financing. However, provided that there are no additional shocks, the external conditions' restraining influence on the Russian economy should weaken. The central banks of a number of largest countries around the world have announced a relaxation of their monetary policy, which will buoy growth in the global economy and commodity prices and to a certain degree, offset the impact of the US Federal Reserve System's tighter policy on the dynamics of financial market indicators. The negative impact of the financial sanctions against Russian companies will level off as the diversification of funding sources, which began in the last few months, starts to intensify. Moreover, the ruble depreciation, despite causing an increase in inflationary pressure, partly offsets the economy's loss of export income from the reduction in oil prices.

Economic activity and inflation abroad

Current economic activity indicators for Russia's trading partners are pointing to a more pronounced slowdown, than previously expected, in aggregate GDP[1] growth rates in the second half of 2014. In particular, aggregate output dynamics in the euro area (including Germany, France and Italy), Ukraine and Japan are turning out to be worse than expected.

Leading business activity indicators also point to slightly weaker growth in the global economy. In recent months, Global PMI indices[2] both for manufacturing and the services sector have dropped relative to the average level in June-August 2014. The fall in the composite PMI index occurred both in advanced and emerging market economies.

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

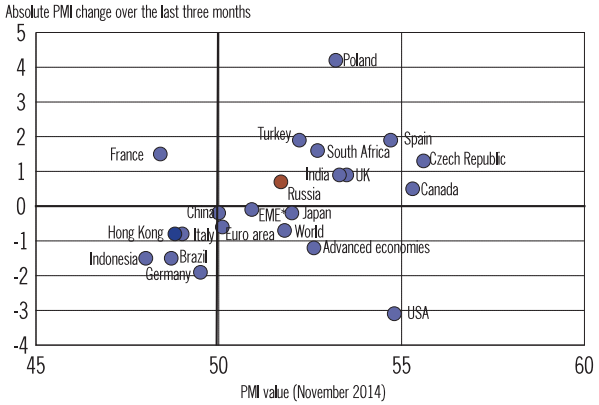


Note: Bank of Russia projections are prepared with consideration of outlooks published by the IMF, World Bank, OECD, European Commission, Asian Development Bank, national central banks, and consensus forecasts produced by Consensus Economics, Bloomberg, and Thomson Reuters.
Sources: national statistics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

[1] *The aggregate GDP growth rate across the 23 foreign trading partners which account for the largest share of Russian exports (countries whose annual share of Russian exports in 2008-2012 was at least 0.9%; the specific weight of each country is determined on the basis of the structure of goods exports to the main trading partner countries). See also Table 9 of the Annex.*

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

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.

In October, the International Monetary Fund (IMF) lowered its estimates and forecast for the global output of goods and services to 3.3% in 2014 and 3.8% in 2015 (in July, the forecasts were 3.4% and 4.0% respectively).

Growth in the global economy continues to be uneven, with this trend only intensifying in the last few months. Relatively high growth rates are being seen in the US and UK economies where private and public sector balances have grown stronger as a result of consolidation processes coming to an end, while in the euro area the risk of stagnation is rising, and Japan entered a technical recession at the end of 2014 Q3.

In 2014 Q3, euro area economic growth rates remained low and GDP growth was 0.2%[3] (0.1% in the previous quarter). The German economy grew by 0.1% and French economy – by 0.3%, while in Italy GDP fell for the second quarter in a row (-0.1%). Short-term indicators suggest that the low economic growth rates will persist in 2014 Q4. The manufacturing PMI index for the euro area on the whole is lingering at a level slightly over 50 (50.1 in November compared with 50.7 in August), while in Italy for the past two months it has been below the neutral mark, indicating a fall in business activity, and in France this has been the case for the last seven months. Consumer confidence indices have also demonstrated a downward trend in the euro area. The main problems holding back economic growth in the region are high levels of unemployment and government debt, the pressure of which is growing amid the sluggish economic growth and deflationary processes in a number of countries.

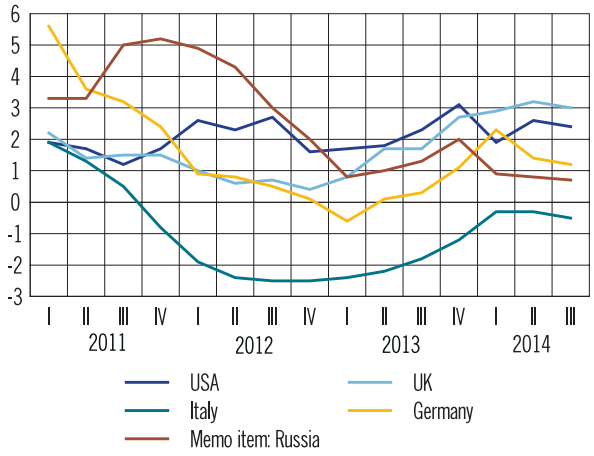
US GDP increased by 1.0% in Q3 after 1.1% growth in the previous quarter. This growth was a result of a stable increase in domestic demand, growth in fixed capital investment, and a rise in goods exports. Short-term indicators point to further economic recovery in 2014 Q4. The manufacturing PMI index remains well above the neutral level and consumer confidence is improving. The fall in fuel prices, low loan interest rates, and improved prospects in the labour market, where unemployment levels dropped to a six-year low of 5.8% in October, are all having a positive impact on domestic demand.

Growth rates in the UK economy continue to be high, despite a slight slowdown in 2014 Q3 compared with the previous quarter (from 0.9% to 0.7%). Economic growth was primarily driven by increased activity in the services sector, whereas growth in the manufacturing sector in 2014 Q3 was at a low for the year (0.4%) due to sluggish economic activity in the euro area and, consequently, decreased export demand. Nonetheless, the manufacturing PMI increased to 53.5 in November (52.6 in August), while unemployment dropped in August-September to its lowest value in the last six years (6.0%).

Japan posted a technical recession in 2014 Q3: output of goods and services fell by 0.5% after a 1.7% drop in the previous quarter. Private consumption remained weak amid decreased real disposable income and worsening consumer confidence. To encourage economic growth, the Japanese government

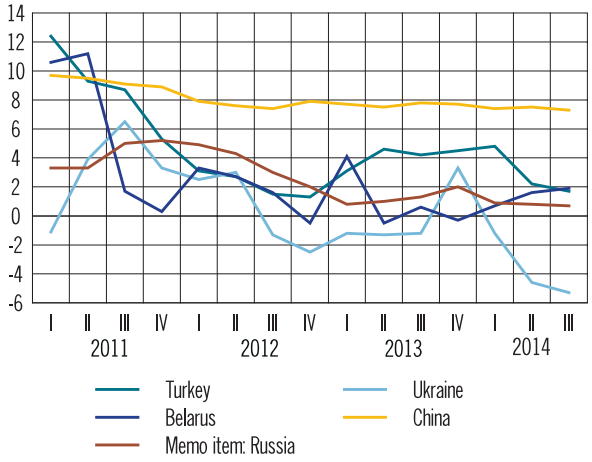
[3] *Hereinafter throughout section I.1, seasonally adjusted growth indicators are given relative to the previous period, unless indicated otherwise.*

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



Sources: national statistics agencies, Eurostat.

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



Sources: national statistics agencies.

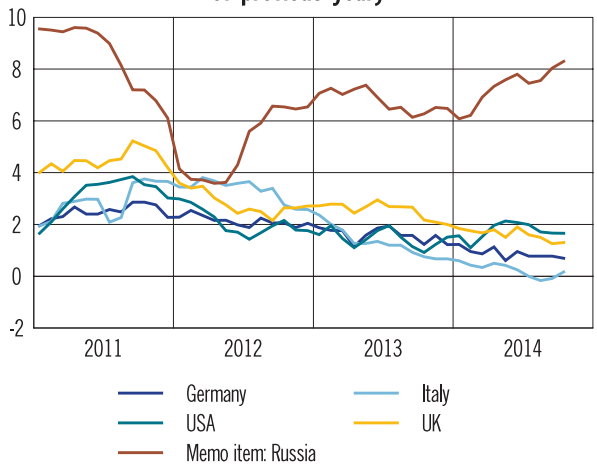
decided to defer the next sales tax hike (from 8% to 10%) from October 2015 to April 2017. The Bank of Japan adopted monetary easing.

On the whole, emerging market economies saw continued weak economic growth due to increased volatility in the global financial market, the presence of structural restrictions, and the restraining influence of low economic activity in trading partner countries. According to IMF estimates, developing countries will grow by 4.4% in 2014 (the estimate was lowered from 4.6% in July).

Although Chinese economic growth rates remain high, growth in this one of the largest global economies continues to slow. Output of goods and services in China increased by 1.9% in 2014 Q3, while GDP growth in Q2 was 2.0%. The slowdown was largely due to relatively low investment activity, primarily in real estate. Growth in retail sales and industrial production also slowed. The situation in the real estate market is characterised by an increased supply of unsold housing and falling prices. Given these circumstances, Chinese authorities are enacting measures to stimulate demand, including by reducing minimum interest rates and deposit requirements to first-time mortgage loans, though these measures have not yet had any significant effect. In addition, in November, the People's Bank of China relaxed its monetary policy by lowering interest rates.

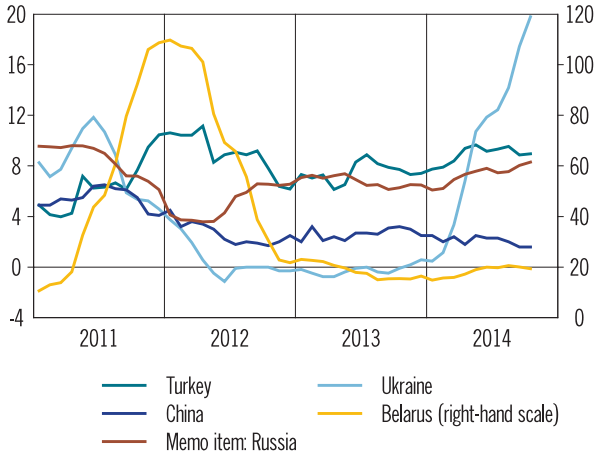
The economic outlook of the CIS countries is also deteriorating. In addition to factors affecting all emerging market economies, the CIS countries are being negatively impacted by low economic growth rates in Russia, the recession in Ukraine, and the drop in global oil prices. In 2014 Q3, the decrease in Ukraine's GDP relative to the same period in 2013 was 5.3% (in Q2 the decrease was 4.6%). Short-term indicators point to a further worsening of the situation: the industrial output index dropped by 16.3% in October 2014 relative to the same period in 2013. According to Bank of Russia estimates, GDP growth in Belarus accelerated in Q3 to 1.9% year-on-year compared with 1.6% in the previous quarter. The relaxation of the National Bank of Belarus' monetary policy is encouraging growth in internal demand, but increased inflation could reduce households' real income and constrain economic growth. According to Bank of Russia estimates, GDP growth in Kazakhstan increased in Q3 by 4.5% relative to the same period in 2013 (in Q2 the growth was 4.0%). However, Kazakhstan saw a fall in industrial production in September-October 2014. Economic growth rates continue

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



Sources: national statistics agencies, Eurostat.

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



Sources: national statistics agencies.

to be well below their 2013 levels and, in view of the fall in global oil prices, they could continue this downward trend.

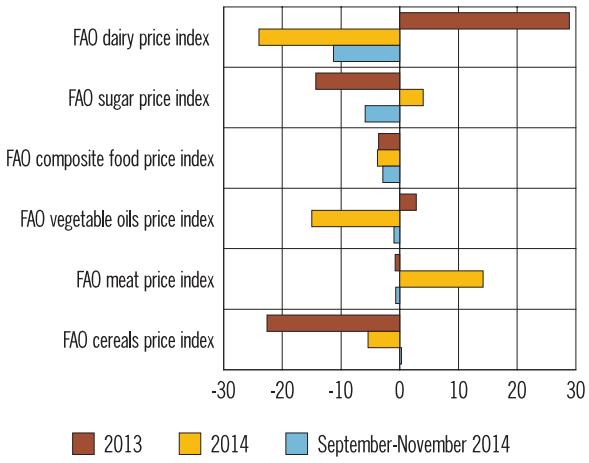
The Bank of Russia expects economic growth to increase globally on the whole and in Russia's trading partners in particular over the coming quarters. This will be buoyed by the accommodative measures introduced by the central banks of the world's largest economies (euro area, Japan, and China) and decreased production costs amid falling global energy prices. At the same time, GDP growth in Russia's trading partners will remain low, while the risks that the situation will deteriorate due to the unfavourable external environment and the impact of structural restrictions will continue to be high.

In the majority of Russia's trading partners **inflation** demonstrated a downward trend in September-October 2014. Inflation approached the zero mark in many European countries, while in Greece, Bulgaria, Hungary, Poland, and Spain price growth was negative in October. Annual inflation growth rates fell in Asian countries (China, the Republic of Korea, and Japan) and the USA over the last few months. These price changes are due to poor economic growth in a large number of regions around the world and decreased global food and energy prices. At the same time, some countries saw inflation accelerate in recent months: the Czech Republic, Finland, Brazil and, most significantly, Kazakhstan and Ukraine. Annual inflation in Ukraine was 19.8% in October 2014 (14.2% in August) amid increased administered tariffs and the weakening of the hryvnia.

Global food prices were on average lower in September-November than in June-August 2014. Increased food production and poor growth in demand amid the global economy's uncertain recovery put pressure on prices. The United Nations Food and Agriculture Organisation's (FAO) food price index decreased over this period by 5.5%. Dairy products saw the largest fall in price (by 17.1%). Prices also dropped for vegetable oil, sugar, and cereals. Meat prices, despite rising by 1.7%, showed significantly less growth than in previous periods in 2014. Prices in the global food market may stabilise over the coming quarters as supply aligns with the weak demand. However, there are still risks that prices will rise due to El Niño[4].

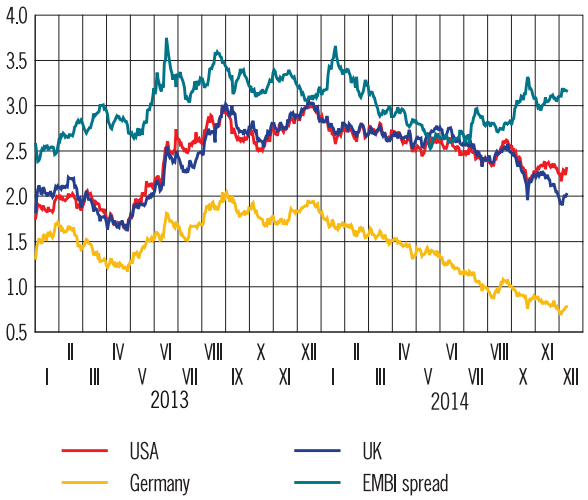
[4] *A temperature anomaly manifested as an increase in surface temperature of the equatorial Pacific, usually occurring once every few years. When El Niño develops, changes occur in the circulation of the atmosphere which can cause a serious deterioration in weather conditions in Southeast Asia, South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

Global food prices (%)*



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

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



Source: Bloomberg.

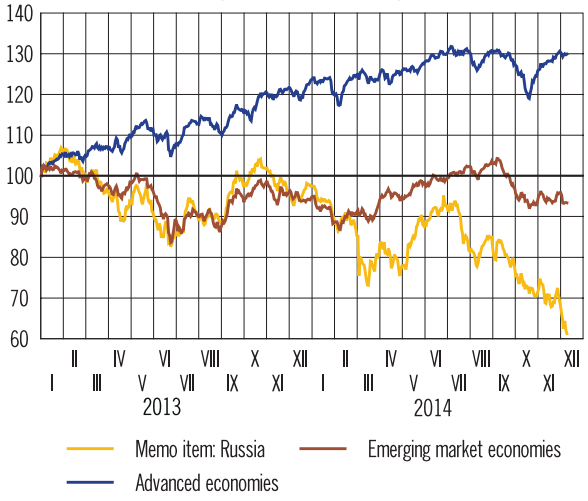
For Russia, the export embargo on certain types of food products from a number of countries continues to offset the general fall in external inflationary pressure. The effect on domestic prices is expected to linger in the short term, but will diminish as Russian production grows and supplies increase from those countries which are not affected by the restrictions.

External financial conditions

The uncertain economic recovery and reduced inflation rates observed in many countries around the world are leaving a mark on the policies of central banks. A number of central banks have implemented new measures to stimulate the economy during this period. The European Central Bank (ECB) reduced its key rate on 4 September, launched a covered bonds purchase programme in October, and started to buy asset-backed securities in the second half of November. The People's Bank of China extended a series of loans to large and medium-sized banks in September-October, and on 21 November, in a move not expected by market participants, reduced its base interest rates for the first time since June 2012 (from 6% to 5.6% on one-year loans, and from 3% to 2.75% on deposits). The Bank of Japan announced an expansion of its asset purchase programme on 31 October. Central banks in Poland, Romania, Bulgaria, Serbia, Chile, the Republic of Korea, and Sweden all reduced their key rates. Furthermore, after the Bank of England reduced its inflation forecast for 2015 in November, market participants shifted their expectations regarding the time frame for the increase in the key rate from the start of 2015 to mid-2015.

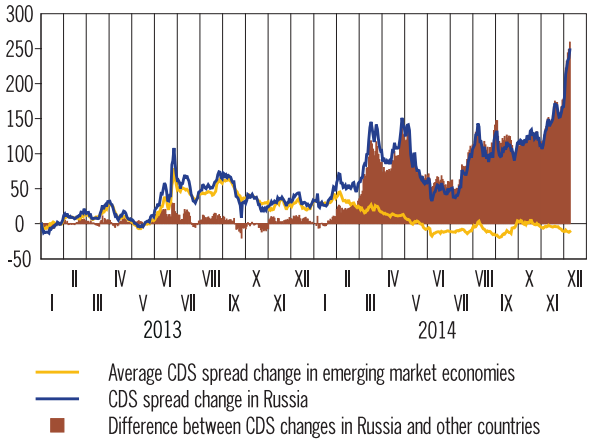
The central banks of those countries facing excessive inflationary pressure chose to increase key interest rates (Brazil, Philippines, and Ukraine).

Global stock indices MSCI (1.01.2013=100%)



Source: Bloomberg.

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



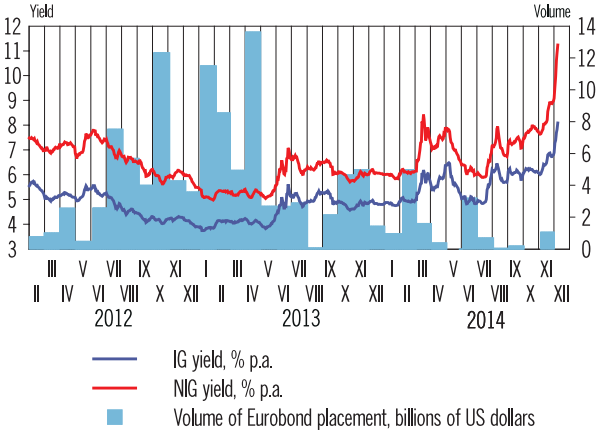
Note: average CDS spread for emerging market economies is based on the data for Brazil, China, Turkey, Mexico, Malaysia, Poland, Hungary, etc.
Source: Bloomberg, Bank of Russia calculations.

Exchange rate indices against the US dollar (1.01.2012 = 100%)

Note: average exchange rate index of emerging market currencies is calculated on the basis of the exchange rates against the US dollar of Hungarian forint, Brazilian real, Turkish lira, Mexican peso, Polish zloty, Romanian leu, Malaysian ringgit, Philippine peso, Indonesian rupiah and Indian rupee. Average exchange rate index of fuel exporting countries is calculated on the basis of the exchange rates against the US dollar of Canadian dollar, Australian dollar, Norwegian krone, Indonesian rupiah, Colombian peso, Kuwaiti dinar and Algerian dinar.
Source: Bloomberg, Bank of Russia calculations.

The loose monetary policy of the majority of central banks helped interest rates remain low in the global financial market. Nevertheless, financial conditions for emerging market economies became tougher in September-November 2014. This is in particular manifested by the widening EMBI spread between the sovereign bond yields of developing countries and the yields of risk-free assets. This change was primarily caused by the policy of the US Federal Reserve System (Fed), which ended its asset purchase programme in October in preparation for an increase in the discount rate in mid-2015 or, according to some expert forecasts, even earlier.

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.

Global stock indices saw a substantial drop in September and the first half of October 2014 amid the signs of a slowdown in global economic growth and the ongoing geopolitical conflicts in a number of regions around the world. The MSCI world stock market index fell by 9%, while the VIX indicator of global investor risk perception more than doubled. However, from the second half of October, indices showed signs of recovery caused by positive statistics for the USA as well as the attempts by monetary authorities in a number of regions around the world to stimulate slowing economies. Index growth occurred for the most part in developed market economies: from mid-October to early December the MSCI index rose by 8.6% for developed countries, the S&P index grew by 10.4%, and the Euro Stoxx index increased by 12.5%. Over the same period, the MSCI index for emerging market economies increased by 1.5%, only slightly clawing back from its previous fall. Overall, for September-November, the general MSCI index fell only slightly (by 2%), while the MSCI index for emerging market economies dropped by 9.7%. Indices fell considerably in Brazil and Russia. It is expected that the relaxation of monetary policy by the ECB and the Bank of

Japan will bolster the global stock market over the coming months.

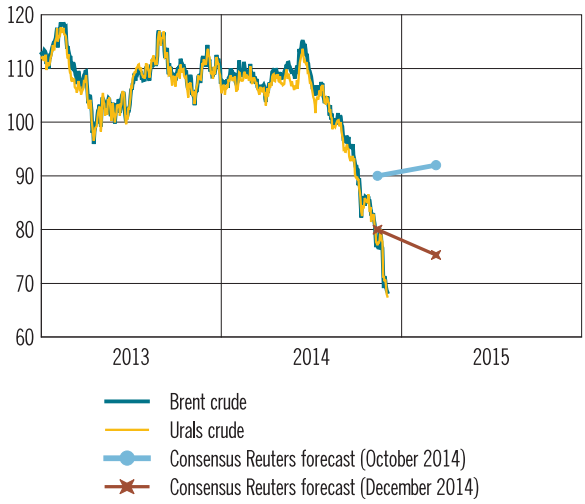
The US dollar continued to strengthen against the majority of global currencies in the global FX market. The index of the US dollar relative to a basket of currencies of developed countries (DXY) rose by 6% in September-November. Virtually all emerging market currencies depreciated against the US dollar, with the Russian ruble sliding more than other currencies.

An important factor underlying the fall in investor demand for Russian assets was the drop in oil prices and the financial sanctions imposed by certain countries against Russian companies. The situation was further complicated toward the beginning of November due to market participants' increasing fears that new sanctions would be introduced as a result of the rise in tensions in Ukraine. Against this backdrop, in September-November 2014, conditions for Russian corporate borrowers in foreign capital markets continued to be complex: borrowing costs were high and the number and amount of loans fell drastically (over the three months, only three Eurobond issues were placed and there was a marked drop in received syndicated loans). Russian borrowers tried to move from Western markets to Asian markets. Over this period, a number of funding agreements were signed between Asian and Russian banks. It is expected that the range of lending markets will continue to diversify further ahead, which will improve financial conditions for Russian corporate borrowers. Nevertheless, in view of low oil prices, sanctions, and persistent external economic uncertainty, external financial conditions will continue to be unfavourable for Russia for the next one to two quarters at least.

Terms of trade

September-November 2014 saw a fall in global prices for Russia's main exports, which, in the context of rising import prices, led to a more significant deterioration in terms of trade than expected in the previous quarter.

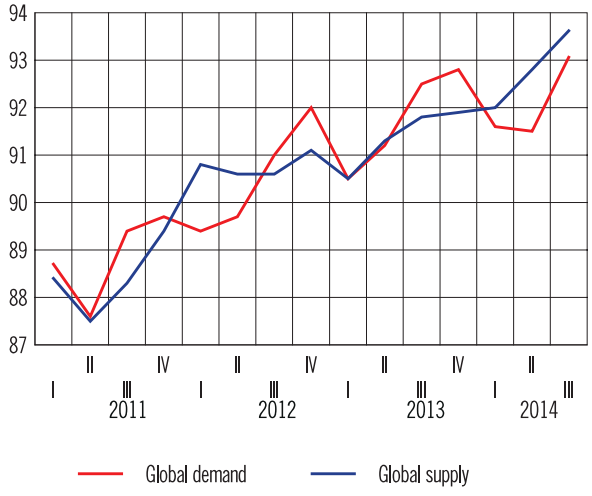
Global oil prices
(US dollars per barrel)



Source: Reuters.

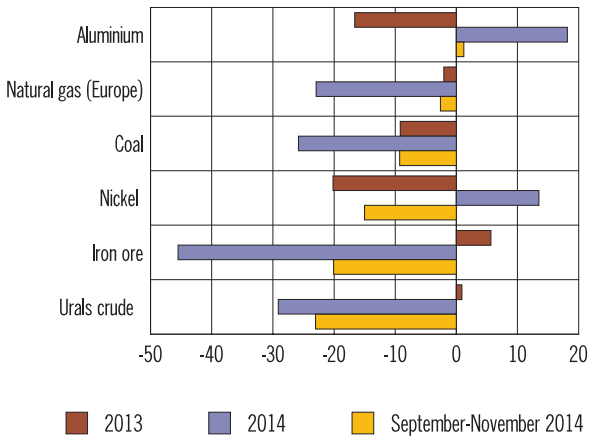
The average price of Urals crude in the period under consideration decreased by 17.3% compared with June-August 2014, from $105.6 to $87.3 per barrel, while the Bank of Russia expected it to remain at around $100 per barrel. In early December 2014, oil prices dropped below $70 per barrel. The fall in oil prices in recent months was caused by the US dollar's appreciation against the backdrop of US monetary policy normalisation and by oil surplus increase, as global oil supply outstripped demand due to considerable

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



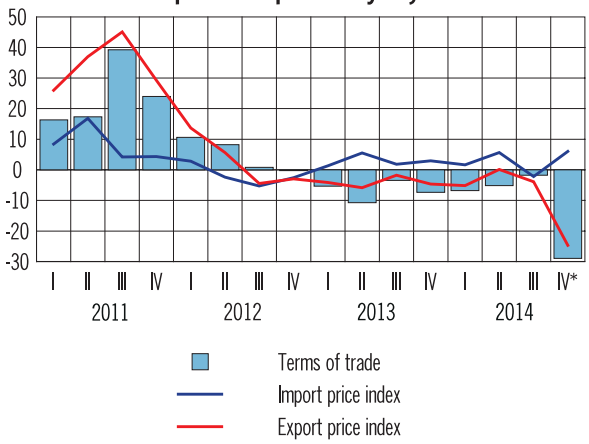
Source: International Energy Agency.

World prices of Russian principal export commodities (%)*



** Last month average to previous period last month average.*
Source: World Bank.

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



** Bank of Russia forecast.*
Sources: Russian Federal Customs Service, Bank of Russia calculations.

growth in oil output and exports from the USA and OPEC members. The weak demand for oil is connected with sluggish economic growth in China and the uncertain recovery of the European economy. In December, the US Energy Information Administration (EIA) lowered the growth forecast for global oil demand in 2015 to 92.3 million barrels per day with the global oil supply expected at 92.8 million barrels per day.

The Bank of Russia expects the price of Urals crude to increase over the coming months as the global economy recovers due to central banks' accommodative measures and postponed oil production projects that are not profitable at current prices. At the same time, the risks that oil prices will stay at current levels or fall further are high in view of the rapid expansion in the production of this energy resource as major producers will strive to preserve their market shares. OPEC's preservation of quotas at 30 million barrels per day, given global demand of 28.3 million barrels per day for OPEC's crude oil in 2015 Q1, will contribute to an increase in oil surpluses.

Prices for other Russian exports also slided down. Natural gas price in Europe dropped in September-November amid high stock levels (89% of storage capacity) and relaxed fears of potential supply disruptions following the signing of an agreement to resume Russian gas exports to Ukraine. Coal continued to fall in price due to surplus supply and the decreased Chinese imports. Metals prices decreased due to high global stocks and production. Despite the ongoing Indonesian export embargo, nickel decreased in price amid higher than expected exports from Philippines and record inventories on the London Metal Exchange. Prices for iron ore continued to fall due to the considerable expansion in low cost production in Australia and high stocks in China. In September-October, aluminium dropped in price due to excess supply in China. However, in November, it increased in price amid improved prospects for growing demand from the USA, the world's second largest consumer of aluminium.

It is worth mentioning that for many Russian export commodities (coal, metals) the fall in prices took place all recent years, while since 2011, marking the start of the armed conflict in Middle Eastern countries (Iraq, Libya), oil prices have remained high and dropped sharply only in recent months as a result of the renewed supply from these countries, as well

World oil supply and demand balance

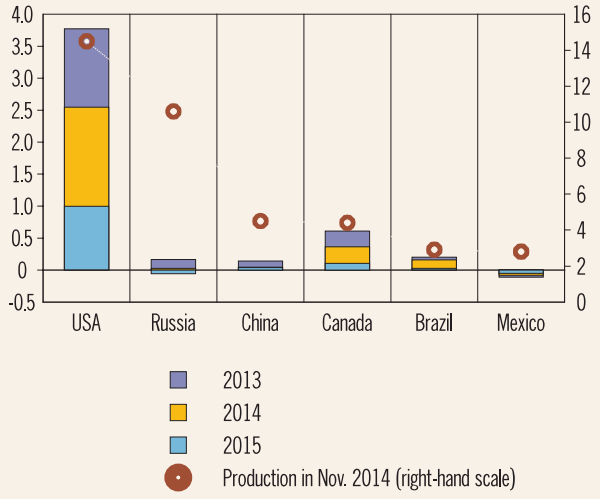
The fall in the oil price by December 2014 to $70 per barrel – a drop of more than $40 per barrel since its peak in June – was largely due to the increase in the oil supply surplus and oil producing countries being unwilling to eliminate it by reducing their market share. The excess was further added to by the rapid build-up of energy resource production in the North America and the resumption of supplies from those OPEC members affected by armed conflicts.

Thanks to the shale revolution, crude oil production in the USA has reached its highest level since 1983. This allowed the USA to reduce its energy imports by one third in 2006-2014 and to boost its exports. In future, the USA may transform from a net importer to a net exporter with an average annual oil production growth of 1 million barrels per day in 2013-2015 and the potential lifting of the ban on crude oil exports. Although the cost of shale oil production (various estimates put it at $50-70 per barrel) in the USA is higher than traditional oil extraction in other countries, with time shale oil extraction technologies will become cheaper and will help expand its supply to the global market. Canada's supply will also increase on account of unconventional sources, namely oil sands.

In the last six months, OPEC oil production has exceeded its quota of 30 million barrels per day. Production may still expand further: the actual spare capacity of OPEC is 3.57 million barrels per day, 76% of which belongs to Saudi Arabia. Libya, which produced 1.65 million barrels per day in 2010, but due to armed conflicts reduced its oil supply to virtually zero, increased its output to 0.62 million barrels per day in November 2014, but has still not restored its supply fully. Iraq, ranked second in OPEC in terms of oil extraction, could expand its production capacity by 1.2 million barrels per day by 2019. Supplies of oil from Iran could increase substantially if the EU and the USA lift their oil sanctions in the second half of 2015. In 2010, prior to the introduction of sanctions, Iran produced 3.8 million barrels per day; in November 2014 this figure was 2.8 million barrels per day. However, one should not ignore the possibility of disruptions in supplies from OPEC, which may occur if the internal conflicts in Libya and Iraq intensify.

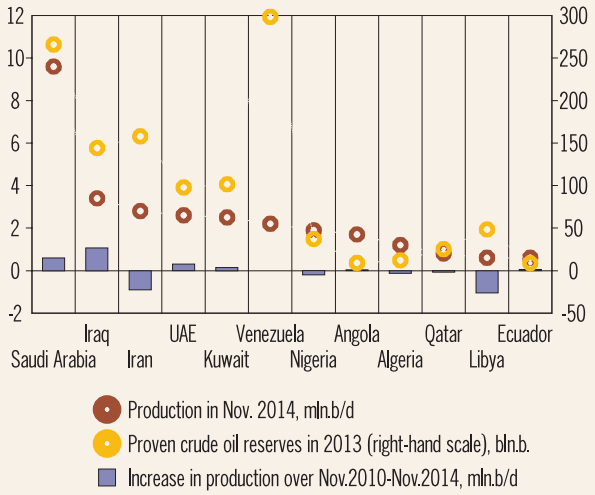
Growth in global oil demand lags behind growth in supply and is largely formed by developing countries. In 2015, according to EIA forecast, as the macroeconomic situation improves globally, growth in global demand will accelerate, but supply will still outstrip demand. Even in China, oil demand growth rates are relatively low (in 2013-2015, slightly over 3%) both due to the slowdown in economic growth (according to IMF forecast, from 7.7% in 2013 to 7.4% in 2014 and 7.1% in 2015) and as a result of the introduction of energy-saving technologies. The slack in economic growth in Brazil and other emerging markets is also constraining growth in the oil demand.

Increase in non-OPEC crude oil and other liquids production by largest producers (millions of barrels per day)



Source: US Energy Information Administration.

Crude oil production and reserves in OPEC members

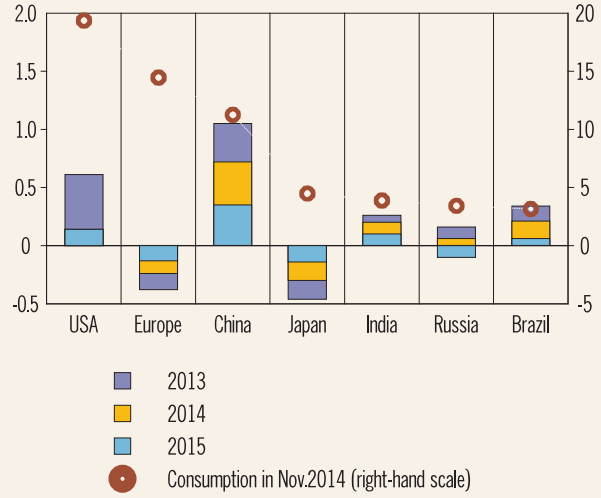


Sources: US Energy Information Administration, OPEC.

In the USA, despite the confident economic recovery, demand for oil is growing slower than its production, due to the substitution of oil by natural gas and the spreading of energy-saving technologies into the transport sector. Oil consumption in Japan is declining as a result of the recession, the re-commissioning of previously closed nuclear power plants, and a re-orientation away from oil in favour of gas and coal for electricity generation. Demand is also falling in Europe amid low business activity and the transition to other sources of energy.

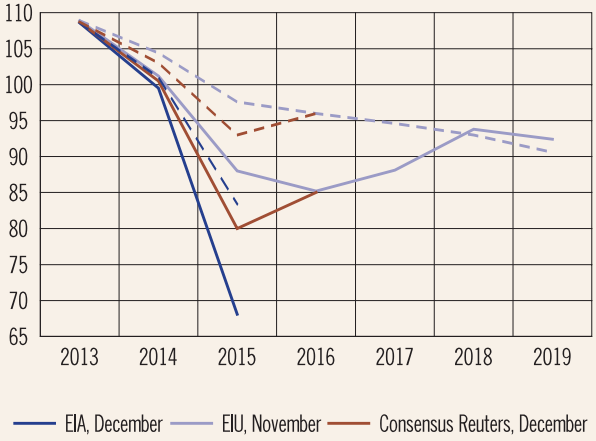
Under such unfavourable circumstances for oil exporters, oil price forecasts are decreasing. The EIA and The Economist Intelligence Unit (EIU) reduced their estimates of Brent crude oil prices in 2014 to $99.5 and $101.2 per barrel respectively. Within the last month, the EIA dropped its forecast for 2015 by 18% to $68.1 per barrel, and the EIU – by 10% to $88.0 per barrel. The EIU is not ruling out the possibility that political risks in oil-producing countries could contribute to short-term price increases. However, according to experts, in the medium term the rapid expansion of supply from the USA, Canada, Brazil, Iraq, Libya and Iran is not expected to allow prices to exceed $100 per barrel.

Increase in oil and other liquids demand in largest consumers (millions of barrels per day)



Source: US Energy Information Administration.

Change in Brent crude price forecasts (US dollar per barrel)



Note: Previous forecast is in dotted line.
Sources: US Energy Information Administration, EIU, Reuters.

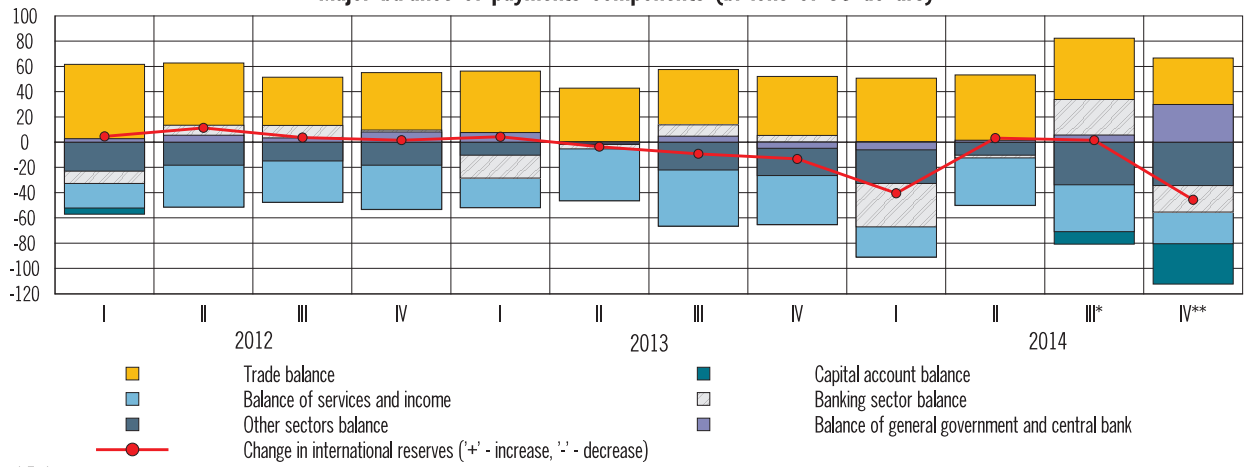
as the resumption of exports from Iran as EU and US oil sanctions were relaxed.

Balance of payments and exchange rate

The main factors shaping the dynamics of balance of payments components in 2014 Q3 were the ruble depreciation and reduction in business activity, as well as the reconsideration by residents and non-residents of the demand structure for Russian and foreign assets in view of the financial sanctions introduced against Russian companies.

As in 2014 Q2, the positive trade balance in Q3 increased compared with the corresponding period of the previous year. However, growth in the trade surplus in 2014 Q3 came not from an increase in exports, as it did in the previous quarter, but from a faster decrease in goods imports compared with exports against the backdrop of the slowdown of the Russian economy, depreciation of the ruble and the impact of the food embargo introduced by Russia. Exports fell due to the reduction both of contract prices for energy products and actual supply quantities. In January-September 2014, actual export quantities of crude oil dropped by 5.1% and of natural gas – by 4.3% relative to the corresponding period of 2013. In 2014 Q3, supplies of gas dropped by 30.6% relative to the corresponding period of the previous year due to the fall in exports to Ukraine. On

Major balance of payments components (billions of US dollars)



* Estimate.
** Forecast.

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

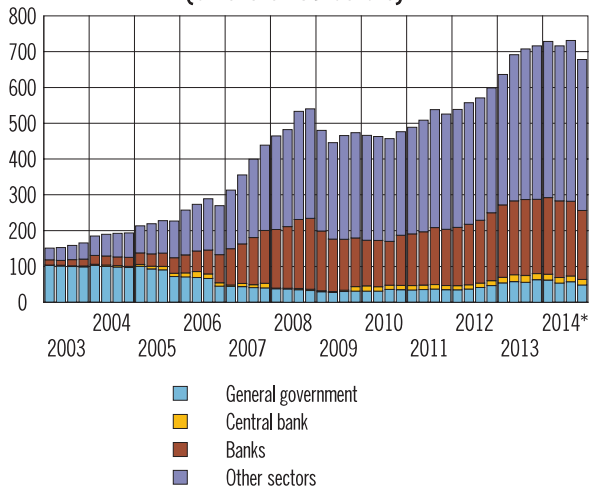
16 June 2014, Gazprom decided to halt gas supplies to Ukraine and to switch all dealings with the company Naftogaz of Ukraine onto a prepayment system. At the same time, with the signing of an agreement between Russia, Ukraine and the EU on 31 October 2014 on the resumption of Russian gas supplies to Ukraine and Ukraine's repayment of its debt for gas, exports of Russian gas are expected to recover in future.

The balances of trade in services, compensation of employees and investment income continued to improve in 2014 Q3 compared with the previous year. The capital account deficit was formed by the writing-off of North Korea's debt for sovereign loan (it was previously recorded to 2014 Q2).

The net outflow of capital by private sector fell in 2014 Q3; however there were some substantial changes to the structure of financial account items. A key trend in this sphere was the reduction in the foreign liabilities of banks and other sectors, reflecting their difficulty in attracting external funding owing to the sanctions as well as the overall drop in foreign demand for emerging market assets amid the normalisation of US monetary policy. The sanctions influenced the dynamics of incoming direct investments: investment inflow dropped to an estimated eight-year minimum. The reduction in banks' foreign assets reached record levels in 2014 Q3. In part, this was connected with the repayment of liabilities and withdrawal of funds from non-bank customer accounts. At the same time, the number of fictitious transactions was low.

According to estimates, the external debt of the private sector dropped over Q3 by $43.6 billion to $614.4 billion. The reduction in the external debt of banks totalled $16.9 billion, and in other sectors it was $26.7 billion. The external position of banks is more favourable than for other sectors, as the foreign assets

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



* As of 1.10.14 - estimate.
Source: Bank of Russia.

of banks exceed their foreign liabilities. At the same time, the restricted access to external markets is not critical at present either to banks or to other sectors in view of the significant volume of liquid foreign assets that can be used to fund payments on external debt.

The significant fall in prices for key export goods over the last few months combined with the need to repay private sector external liabilities led to a sizeable drop in the ruble exchange rate. The growing expectations of further depreciation of the ruble among economic agents, including households, increased the pressure on the ruble. This led to growth in speculative activity in the domestic FX market and increased precautionary FX cash purchases in October-November 2014. After the 5.5% fall in Q3, the nominal effective ruble exchange rate dropped by 5.9% in October and by 9.3% in November 2014, thus deviating substantially from its fundamental dynamics (see box in Section II.1.).

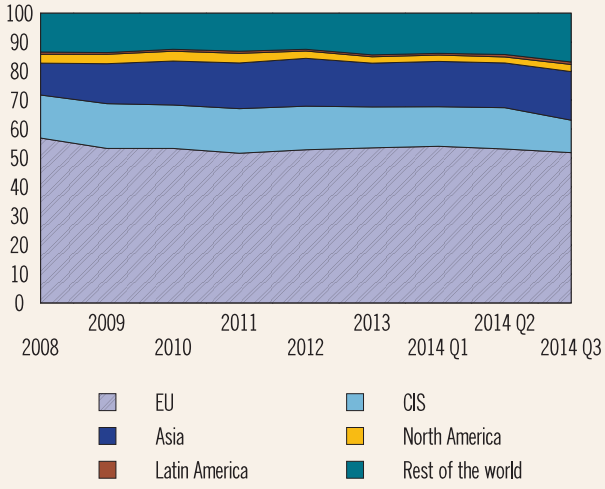
According to Bank of Russia estimates, in 2014 Q4, the current account surplus could increase both relative to the previous quarter and year-on-year due to the faster drop in imports compared with exports and the reduction of the deficit on non-tradable components. The outflow of private capital could increase to a level comparable with 2014 Q1 in view of the ongoing difficulties faced by residents in attracting funding from international markets, as well as growth in speculative demand for foreign currency. The writing-off of Cuba's debt on loans granted during the Soviet era will have a symmetrical impact on the capital account balance and the general government balance.

Change in the structure of Russia's foreign trade relations

The introduction of sanctions against Russia and the measures in response, in particular restrictions on the supply of a number of food products from certain countries, are starting to have an impact on the structure of Russia's foreign trade.

One of the changes in the structure of exports by country is the substantial reduction in the share of exports to CIS countries in July-October 2014, largely accounted for by Ukraine (overall, its share of exports fell from 4.5% in 2013 to 1.8% in July-October 2014). This contraction was caused by the fall in energy export volumes, including natural gas. Out of all exports to Ukraine, this item fell from 71% in

Exports by country groups (%)

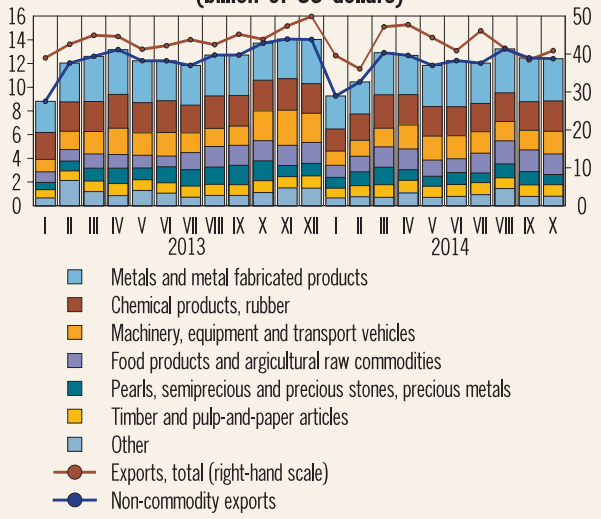


Source: Bank of Russia calculations based on the data of the FCS of Russia.

Growth rates of trading partners' aggregate GDP (as % of corresponding quarter of previous year)

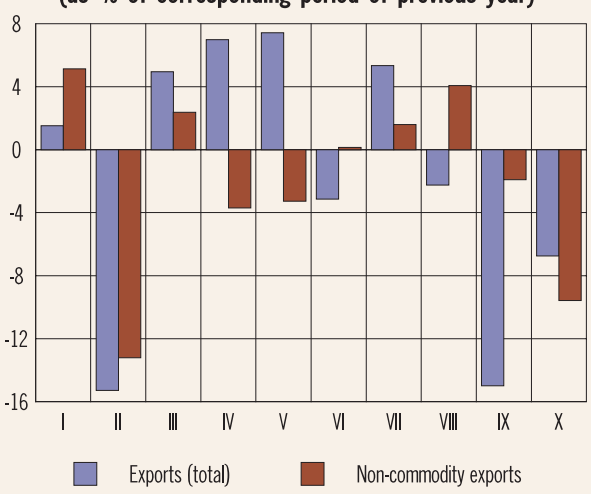
* Q3 - estimate, Q4 - forecast.
Source: Bank of Russia calculations.

Non-commodity exports by product type (billion of US dollars)



Source: Bank of Russia calculations based on the data of the FCS of Russia.

Total exports and non-commodity exports in 2014 (as % of corresponding period of previous year)



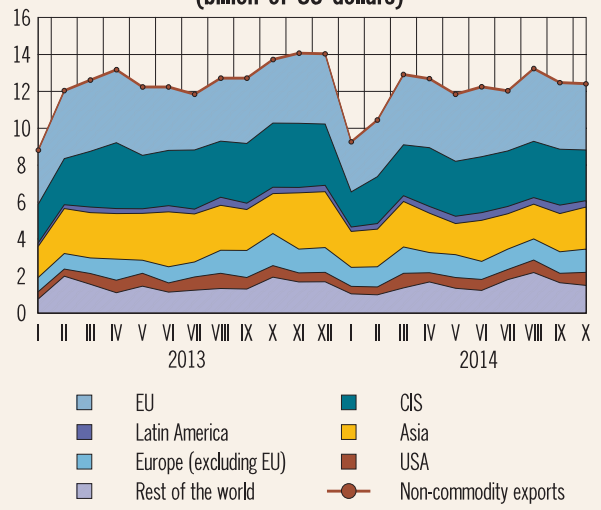
Source: Bank of Russia calculations based on the data of the FCS of Russia.

January-June to 28% in July-October 2014. An assessment of aggregate GDP dynamics for Russia's trading partners taking into account the change in Ukraine's share of exports is provided in Chart 2.

Another trend in the country exports structure is increase in the share of Asian countries, as well as other countries, pointing to a gradual exports diversification. China's share increased from 6.8% in 2013 to 7.6% in July-October 2014.

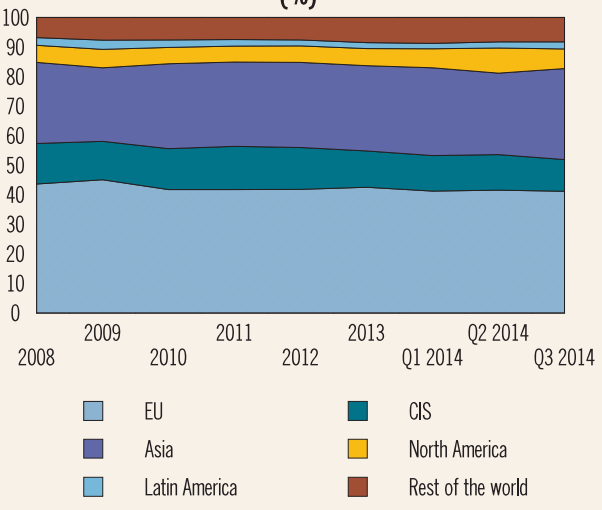
The value of Russia's overall goods exports in January-October 2014 shrank by 1.7% compared with the corresponding period in 2013. Exports of mineral products, including energy commodities, decreased by 1.5%, with a substantial fall in such exports in February and September (more than 15%) relative to the previous year. A large number of other groups of goods also saw a reduction: exports of precious metals, semi-precious and precious stones and related products contracted significantly in January-October 2014 (-16.7% compared with the corresponding period in 2013), the same was true about chemical products and rubber (-5.6%). Growth in exports was registered for food products and agricultural raw materials (21.7%), as well as timber, pulp and paper (8.4%).

Non-commodity exports by country groups (billion of US dollars)



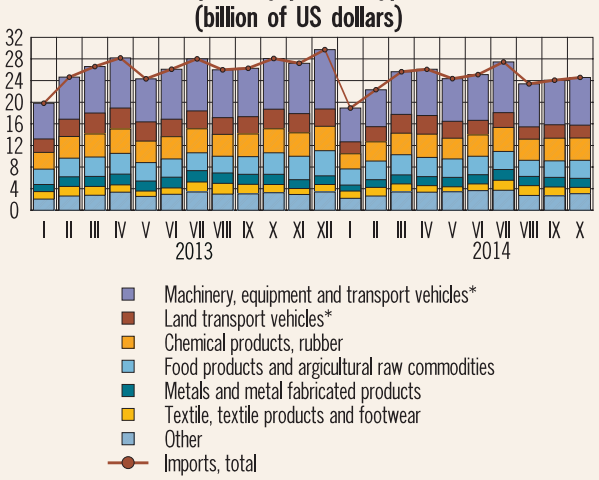
Source: Bank of Russia calculations based on the data of the FCS of Russia.

Imports by country groups (%)



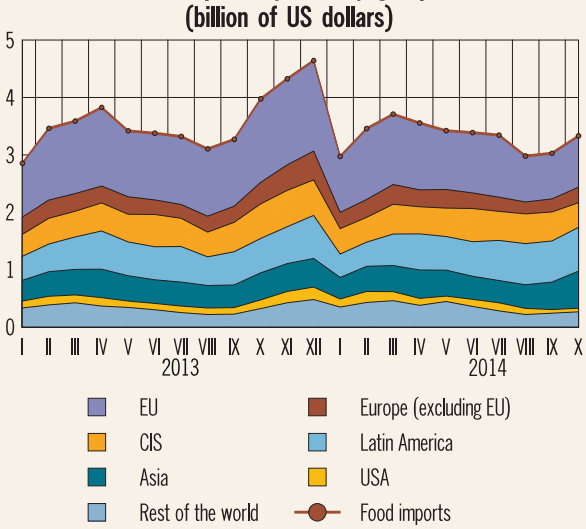
Source: Bank of Russia calculations based on the data of the FCS of Russia.

Imports by product type
(billion of US dollars)



** The category 'Land transport vehicles' excludes railway and tramway rolling stock, their parts and accessories, which are included in the category 'Machinery, equipment and transport vehicles'.*
Source: Bank of Russia calculations based on the data of the FCS of Russia.

Food imports by country groups
(billion of US dollars)



Source: Bank of Russia calculations based on the data of the FCS of Russia.

The share of non-commodity exports[1] in total exports of Russia was 28% on average in January-October 2014, which is the same as in 2013. However, this share increased to 32% in August-October. Analysis of the structure of non-commodity exports by country, using available 2014 data, does not point to any significant change in export trends: compared with 2013, the share of exports to CIS and Asian countries dropped only slightly. The share of exports to EU nations rose, and the same is true of non-EU European countries, Latin American and other countries.

In January-October 2014, total imports to Russia edged down by 6.2% year-on-year, with the fall in imports accelerating in August-October to 10.3% compared with the first half of the year. A reduction in import volumes was seen in virtually all groups of goods. Imports of land transport vehicles decreased considerably: in August-October total imports in this category of goods was 27.7% lower than in the previous year. Imports of textiles, textile products and footwear decreased by 13.3%, metals and metal fabricated products – by 8.2%, machinery, equipment and transport vehicles (excluding land transport vehicles) – by 8.1%, and foodstuffs – by 9.8%.

In the imports structure by country, the share of imports to Russia from CIS countries declined in 2014 Q3. This drop was due to the fall in imports from Ukraine, while the share of other CIS countries in total imports remained at 2013 levels. The share of imports from Asian countries increased, which was largely due to growth in the China's contribution, which rose from 16.9% in 2013 to 18.8% in 2014 Q3. The share of Japan, however, shrank somewhat. The share of European countries and North American countries saw only minor changes in the structure of imports.

After the introduction of restrictions on imports of certain of foodstuffs by Russia in August 2014, both the overall volume of food imports and the share of imports from EU countries saw a substantial reduction. While up to August 2014, the share of these countries was often around the 35% mark, in August-October it was at 27%. The share of food imports from Latin American countries increased from 16.1% to 23% accordingly. The share of Asian countries also rose, from 12.1% to virtually 20% in October 2014.

[1] *Non-commodity exports mean exports of goods excluding mineral products (for the most part, energy-producing minerals, including crude oil, oil products, coal, natural gas and other commodities).*

I.2. Financial conditions

In September-November 2014, the previous months' trends in key segments of the financial market persisted and generally reflected tighter financial conditions. Substantial foreign exchange interventions by the Bank of Russia in October led to an outflow of banking sector liquidity and growth in credit institutions' debt on refinancing operations. However, the increased supply of foreign currency facilitated the stabilisation of the situation with dollar liquidity, and contributed to growth in implied ruble rates on interbank FX swap operations and an increase in overnight ruble interbank rates. Interbank rates reacted to the Bank of Russia key rate hike with a corresponding rise. Given the increase in short-term money market rates and persistent foreign political and economic uncertainty, yields across all segments of the domestic capital market rose in September-November. A rate growth was also witnessed for bank loans to non-financial borrowers. Banks increasing rates and tightening borrower selection criteria together with contracting demand for loans from households and small and medium businesses, amid reduced economic activity, led to a further drop in annual bank lending growth (excluding currency revaluations).

Money market and Bank of Russia banking sector liquidity management

Banking sector liquidity

In September-November 2014, the Bank of Russia's foreign exchange interventions had a major influence on the situation with banking sector liquidity, just as at the end of 2014 Q1. The Bank of Russia's sale of foreign currency in October, as part of the existing exchange rate framework, led to massive ruble liquidity drain from the banking sector. The outflow of funds through the foreign exchange channel was partially offset by Federal Treasury funds placement to deposits at credit institutions and shrinkage of the cash in circulation. Demand for liquidity, which is characterised by balances in credit institutions' correspondent accounts with the Bank of Russia, remained stable.

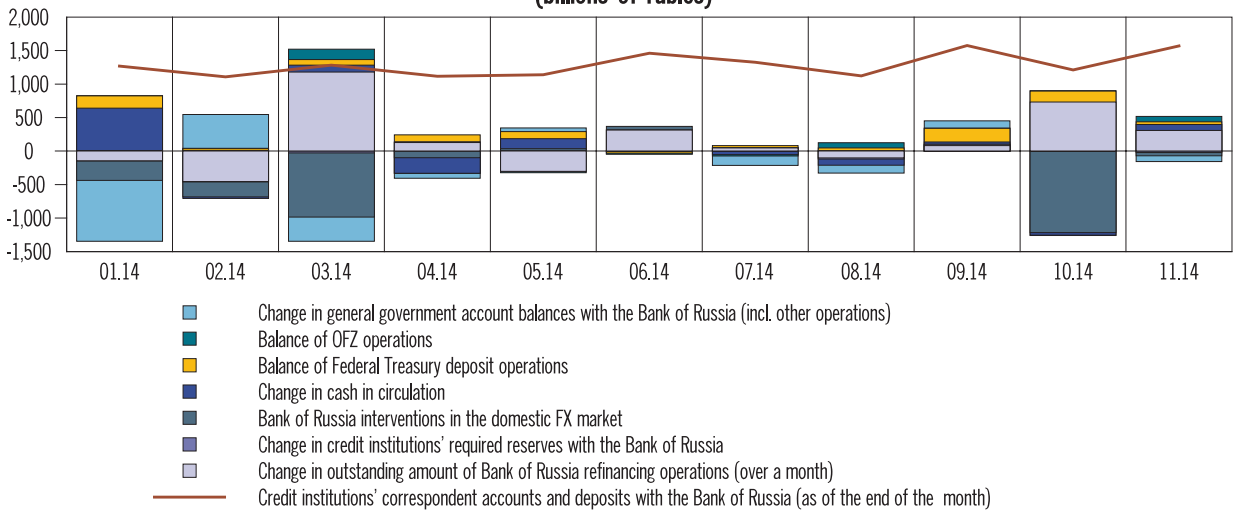
Under these conditions, credit institutions continued to show high demand for Bank of Russia liquidity provision operations, therewith their refinancing needs rose from 5.2 trillion rubles at the start of September to 6.5 trillion rubles by the end of November. Repos and secured loans accounted for roughly equal shares of banking sector refinancing.

The average outstanding amounts on main Bank of Russia operations – one-week repo auctions – rose from 2.2 trillion rubles in September to 2.8 trillion rubles in November. The Bank of Russia also continued to gradually step up allotment amounts at its auctions for loans secured by non-marketable assets: the outstanding amounts on these operations increased over the period under consideration from 2.0 trillion to 2.3 trillion rubles.

To reduce the effect of the growing outstanding amount on Bank of Russia refinancing operations – the volume of which was increasing in line with growth in the structural liquidity deficit – on the maturity of credit institutions' liabilities, the maximum term for auction-based loans was raised from 12 to 18 months. The first auction for loans with this term was conducted in November and the total allotment amounted to 150 billion rubles. In addition, in December 2014, the Bank of Russia plans to hold a Lombard loan auction with a 36-month term at a floating interest rate tied to the key rate; the maximum allotment amount is set equal to 700 billion rubles. The Bank of Russia will continue to use these instruments on an irregular basis, unlike its monthly 3-month auctions.

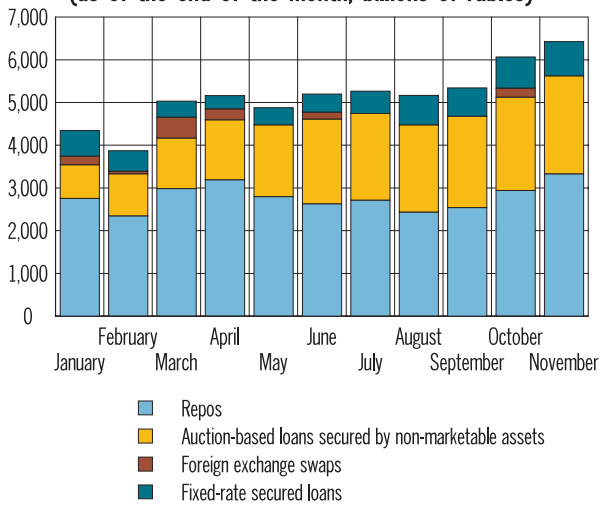
In November, after the transition to a floating exchange rate framework to suppress FX market participants' speculative sentiment, the Bank of Russia adopted a more conservative approach to determining the volumes of

Banking sector liquidity and liquidity factors (billions of rubles)



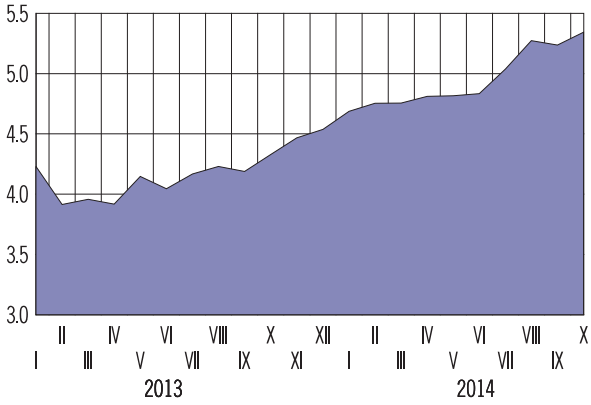
Source: Bank of Russia.

Bank of Russia refinancing operations in 2014 (as of the end of the month, billions of rubles)



Source: Bank of Russia.

Volume of securities held by credit institutions included in the Bank of Russia Lombard list (as of the end of period, trillions of rubles)*



** Including securities pledged as collateral under repo transactions.*
Source: Bank of Russia.

liquidity to be provided through auction-based operations. As part of this approach a maximum allotment amount of ruble liquidity provision through FX swap operations was introduced in November. In the period from 12 November to 14 December 2014, it was set at the equivalent of $2 billion.

The Bank of Russia's increased volume of refinancing operations has intensified the collateral burden. Under these conditions, in October-November 2014, the Bank of Russia continued its efforts to expand the Lombard List, which from September to November included a further 56 securities issues amounting to a total issue value of over 800 billion rubles[1]. In December, the Lombard List was further expanded through the inclusion of several large issues of corporate bonds[2].

Banks' demand for refinancing is expected to grow right up to the last decade of December 2014, rising to 6.9-7.5 trillion rubles as a result of the accumulation of funds in general government accounts with the Bank of Russia

[1] *The total value of the Eurobonds issues was calculated using the USD/RUB exchange rate as of 1 December 2014.*

[2] *In particular, several issues of Rosneft OJSC corporate bonds were included in the Lombard List, worth a total of 625 billion rubles.*

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

		2013	2014 (forecast)[1, 2]	2015 (forecast)
Total for autonomous factors	1 = 2 + 3 + 4 + 5	-1.7	[-2.9; -2.4]	[-1; -0.5]
of which:				
- change in general government accounts with the Bank of Russia (incl. other operations)	2	-0.4	[0.2; 0.6]	[-0.5; 2.1]
- change in cash in circulation	3	-0.5	[-0.2; -0.1]	[-0.5; 0]
- Bank of Russia interventions in the domestic FX market	4	-0.9	[-2.9]	[-2.6; 0][3]
- change in credit institutions required reserves with the Bank of Russia	5	0	0	0
Change in free bank reserves[4]	6	0	[0.0; 0.1]	[0.0; 0.1]
Change in outstanding amount of Bank of Russia refinancing operations	7 = 6 - 1	1.7	[2.4; 3]	[0.6; 1.1]
Memo item: outstanding amount of Bank of Russia refinancing operations (as of the end of the year)[5]	8	4.5	[6.9; 7.5]	[7.8; 8.3][6]

[1] January-November – fact, December 2014 – forecast.
[2] The forecast does not include the impact on the banking sector liquidity exerted by Bank of Russia interventions in the domestic FX market.
[3] Estimates of volume of Bank of Russia foreign currency sell/buy operations in the domestic FX market due to the operations related to accumulation (expenditure) of sovereign funds in foreign currencies by the Federal Treasury.
[4] 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 at correspondent accounts, banks' need to perform settlements and precautionary motives) and the volume of credit institutions' deposits with the Bank of Russia.
[5] Excluding the subordinated loan of Sberbank of Russia and bonds of certain credit institutions in the Bank of Russia portfolio.
[6] The medium forecast refinancing requirement as of late 2014 was used to calculate the refinancing requirements in 2015.

Source: Bank of Russia calculations.

for budget spending, the increase in issue of cash in circulation before the long holidays, and credit institutions' seasonal growth in demand for liquidity. It is more likely that liquidity demand will be closer to the bottom of this range by the end of 2014.

After a short-term fall in demand for refinancing due to the inflow of funds through the fiscal channel between the end of December 2014 and the start of January 2015, the credit institutions' debt under refinancing operations will continue to rise. Depending on whether the baseline or stress[3] scenario of economic growth is realised, demand for liquidity will reach 7.8-8.3 trillion rubles by the end of 2015.

To satisfy credit institutions' demand for refinancing, the Bank of Russia will continue to predominantly use repo auctions, while medium-term demand for liquidity will be regulated by changing the amount of liquidity provided through auction-based loans secured by non-marketable assets.

Money market and foreign exchange market

In September-November 2014, the situation in the money market developed amid a persistent foreign currency liquidity deficit induced by Russian organisations' limited access to external markets.

Credit institutions' increased demand for dollar liquidity contributed to average implied ruble-denominated rates on overnight FX swaps falling to the lower bound of the Bank of Russia's interest rate corridor in September 2014. Under these conditions, short-term interest rates in the interbank market and interbank repo market also dropped. The rate on overnight ruble-denominated interbank loans stabilised close to the Bank of Russia key rate, and the average spread between the overnight interbank repo rate and the Bank of Russia key rate was 0.3 pp.

The Bank of Russia's substantial sales of foreign currency as part of the existing exchange rate policy mechanism in October 2014 led to a slight improvement in the situation with dollar liquidity. Given a growing

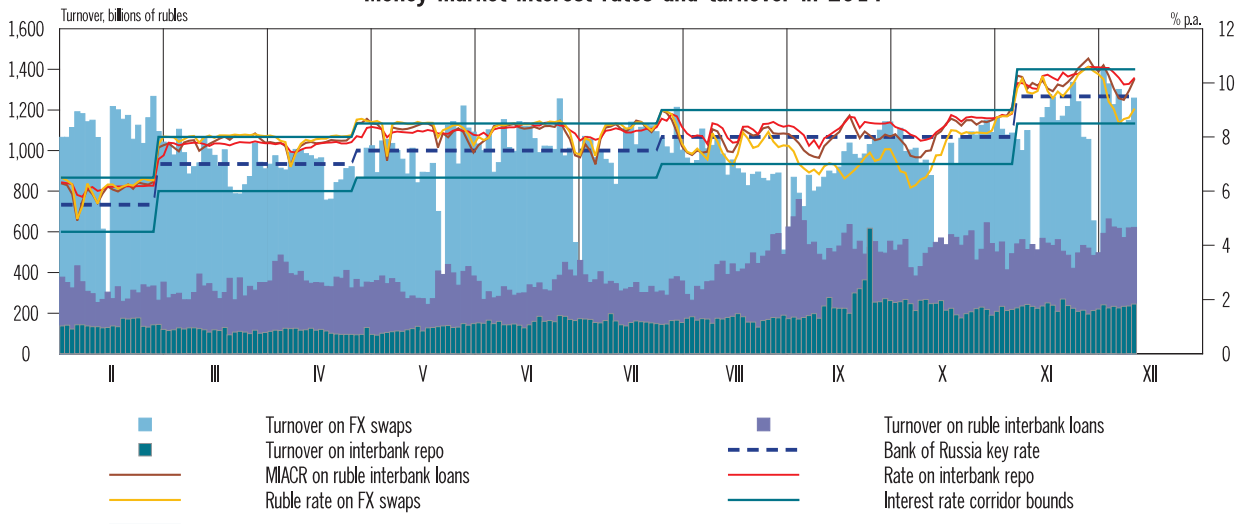
[3] The stress scenario is presented in Section II.2.

supply of foreign currency, implied ruble rates on FX swap operations rose, and starting from the second decade of October 2014, money market ruble rates were mostly in the upper half of the Bank of Russia's interest rate corridor.

The measures undertaken by the Bank of Russia to stabilise the exchange rate, including the adoption of a more conservative approach to determine the amount of funds to be provided at auctions and a period of tax payments, were conducive to establishing short-term money market rates approaching the upper bound of the Bank of Russia's interest rate corridor at the end of November 2014.

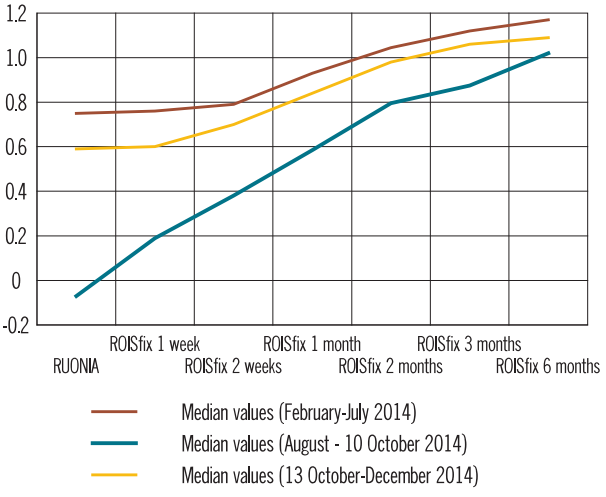
Following the emergence of the foreign currency liquidity deficit, since August 2014, the turnover structure of the overnight segment of the money market has changed significantly. Banks with foreign stockholding that are net creditors in the money market increased their lending in the interbank market by reducing the supply of liquidity in the FX swap segment, resulting in no substantial change in their aggregate net position. The total amount

Money market interest rates and turnover in 2014



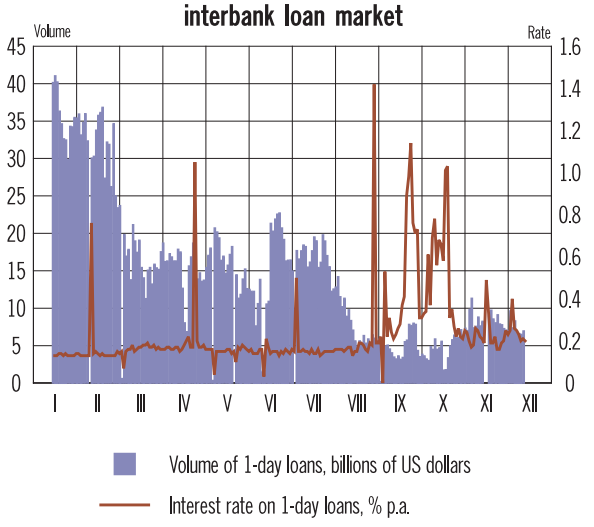
Source: Bank of Russia.

Term structure of spreads between ROISfix rate and the key rate



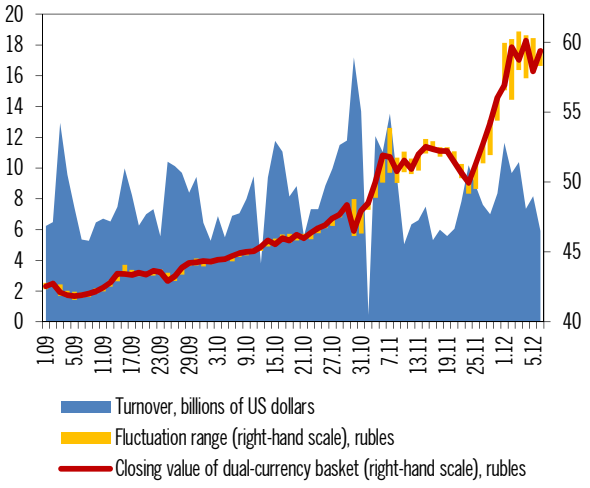
Source: Bank of Russia.

Rates and volumes in the US dollar interbank loan market



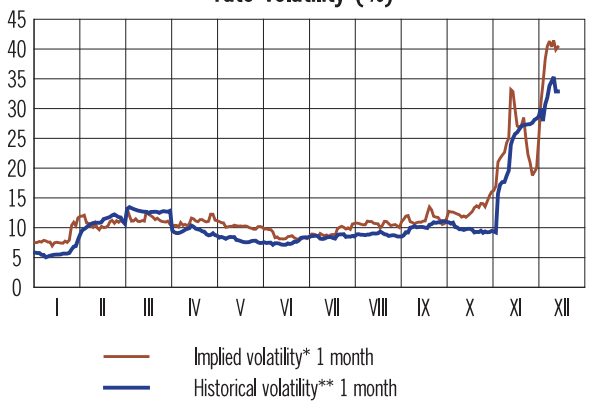
Source: Bank of Russia.

Value of dual-currency basket and US dollar and euro trade turnover at the Moscow Exchange



Source: Moscow Exchange.

US dollar / ruble exchange rate volatility (%)



** Implied volatility is a measure of expected market volatility of the exchange rate calculated on the basis of FX options.*

*** Historical volatility is an exchange rate volatility (standard deviation in its change) calculated on the basis of historical data for a set period.*

Source: Bloomberg.

of ruble borrowing in the money market by state-controlled banks rose, mainly due to borrowings in the interbank market.

The change in short-term interest rates in August-November 2014 affected the term structure of money market interest rates. From September to the first decade of October 2014, the ROISfix curve shifted downward in line with short-term rates, reflecting banks' expectations that the foreign currency liquidity deficit would persist and the ruble money market rate would go down in the medium term. Since the second half of October 2014, as the foreign currency liquidity situation settled down the ROISfix curve shifted upward, following short-term interest rates.

As a result of the restrictions on Russian banks' access to external markets, the interbank market of loans in foreign currency showed a substantial drop in turnovers and increase in interest rates in August-September 2014. Following the Bank of Russia's interventions in the FX market in October 2014, the situation normalised somewhat: turnover increased and rates stabilised.

The high demand from credit institutions and their customers for foreign currency liquidity, including for the repayment of foreign debts, combined with the considerable drop in oil prices in 2014 Q4, was one of the main reasons of the ruble depreciation over the period under review. These factors resulted in the ruble value of the dual currency basket rising since September 2014 by more than 30%, and for 2014 as a whole, the growth exceeded 50%.

In this conditions, from October to early November 2014, as part of its exchange rate policy the Bank of Russia sold a total of $30.3 billion at the borders of the dual currency basket's operational band. The considerable volume of these interventions led to the Bank of Russia being the main net seller of foreign currency in the market during this period, with market participants' demand for foreign currency distributed relatively evenly.

The increased supply of foreign currency liquidity from the Bank of Russia contributed to growth in daily trading volumes of US dollars and euros in the domestic market by an average of $2 billion, to $9.6 billion. The increase in turnover in the FX market was largely due to banks with significant foreign currency purchases and sales and near-zero average net positions.

Following the cancellation of the Bank of Russia's regular interventions on 10 November 2014, trading volumes in the domestic FX

market dropped significantly due to the reduced supply of foreign currency liquidity and limited incentives for speculation by market participants. At the same time, given the low market liquidity, exchange rate volatility remained high.

Asset prices and bond market

From September to early December 2014, the situation in the Russian stock market was shaped by persistent external political and economic risks, as well as policy actions undertaken by the Bank of Russia.

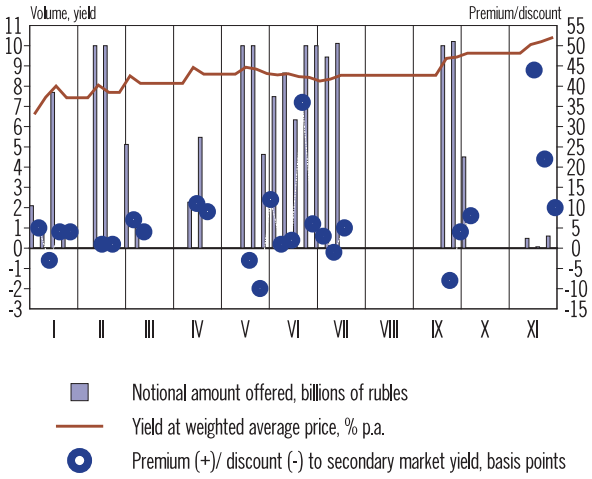
The limited access to external funding, the downgrading of Russia's sovereign rating by international credit ratings agencies, the deteriorating situation in the global oil market, the ruble depreciation, rising inflation risks, and increased money market interest rates all contributed to investors reassessing the value of investments in Russian financial assets and growth in securities yields.

Investor interest in bonds and issuing activity in the domestic bond market varied considerably over the period under consideration. From September to the first half of October, despite the persistently high price of borrowing, Russian issuers actively placed and promoted new bond issues.

From the second half of October to early December, due to the significant fall in global oil prices and increased volatility in the ruble exchange rate, yield increases accelerated and domestic bond market activity dropped. For a large part of this period, the Russian Ministry of Finance refrained from holding OFZ (federal government bond) auctions and only entered the new issue market three times (in the second half of November), also reducing the maturity of lending. Placement of corporate Eurobonds in the foreign capital market was irregular.

In late November 2014, compared with the end of August, the combined portfolio of

Ministry of Finance auctions for OFZ placement/ additional placement in 2014



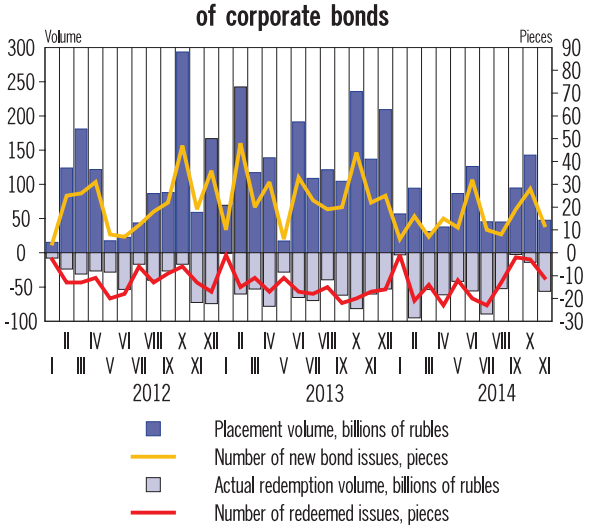
Sources: MICEX SE, Bank of Russia calculations.

government, regional, and corporate bonds outstanding in the domestic market rose by 2.2% and the portfolio of corporate Eurobonds outstanding in the foreign market shrank by 4.4% (in ruble terms, it increased by 25.5%).

In the first ten days of December 2014, bond yields in various segments of the secondary market increased relative to the end of August by 3.0-5.0 pp, to 12.6-15.1% p.a. The spread between corporate and regional bond yields and OFZ yields also expanded significantly.

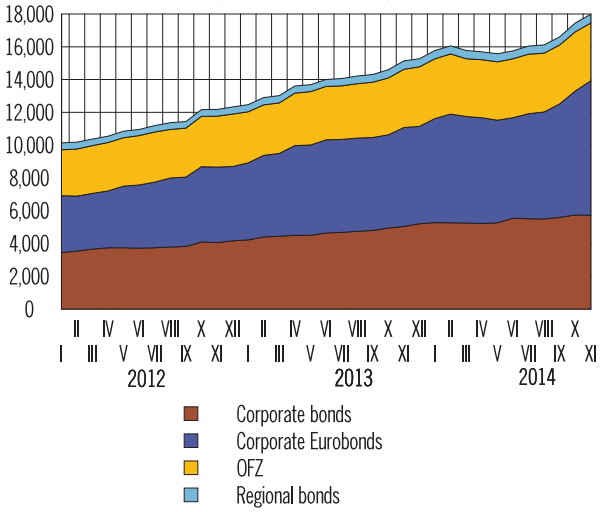
Despite worsening borrowing conditions, the majority of issuers continued to service their bond debts in full and on time and the

Primary placement on MICEX SE and redemption of corporate bonds



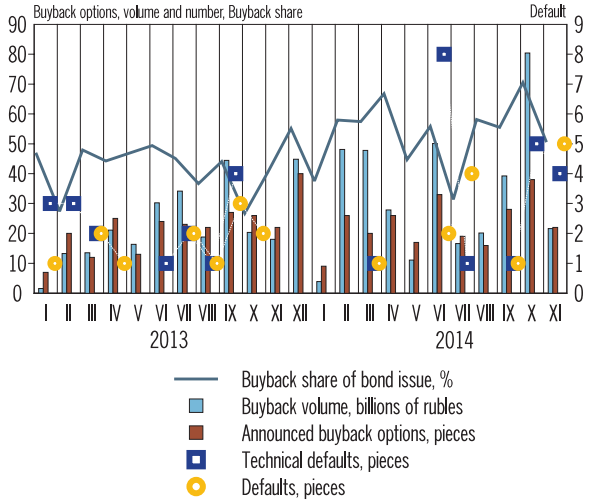
Sources: MICEX SE, Cbonds.ru, Bank of Russia calculations.

Volume of Russian bonds outstanding (billions of rubles)



Sources: MICEX SE, Cbonds.ru.

Buyback options and defaults on corporate bond issues



Sources: Cbonds.ru, Bank of Russia calculations.

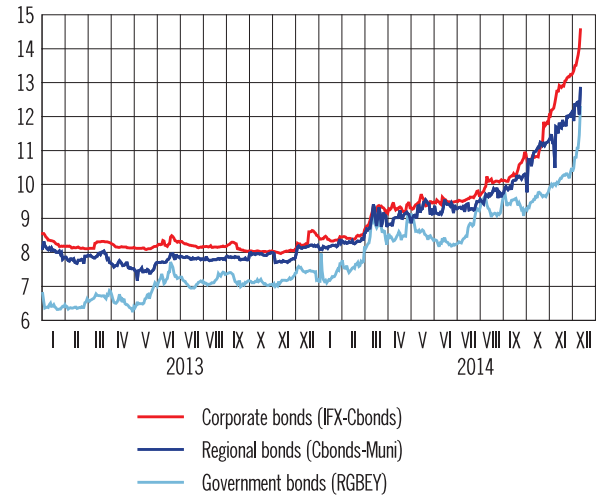
total number of defaults on corporate issues in September-December 2014 was comparable with the equivalent figure for June-August.

The OFZ yield curve responded to the Bank of Russia key rate hike (beginning 5 November 2014) with a higher increase in the yield of medium-term bonds relative to short-term and long-term papers. The ruble depreciation and market participants' growing inflation expectations significantly affected yields. As a result, the OFZ yield curve, which had a normal rising form until October 2014, became a humped yield curve characterised by an inversion in its long part. This may indicate that market participants are expecting rates to fall in the long term.

Conflicting trends caused by changes in the ruble exchange rate have been seen in the ruble-denominated MICEX index and the dollar-denominated RTS index since the end of October. Equity price indices had a mute response to the Bank of Russia's key rate hike in November. In the first ten days of December, the MICEX index rose by 6.1% relative to the end of August, to 1,486.85 points and the RTS index dropped by 28.2% to 855.05 points.

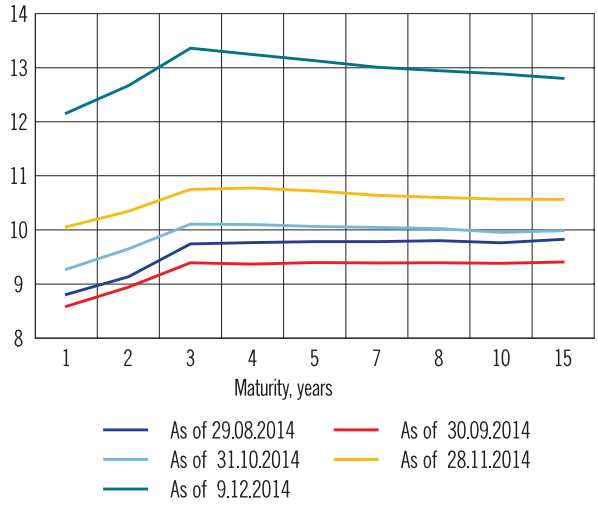
The situation in the domestic capital market is not expected to improve substantially

Bond yields (%, p.a.)



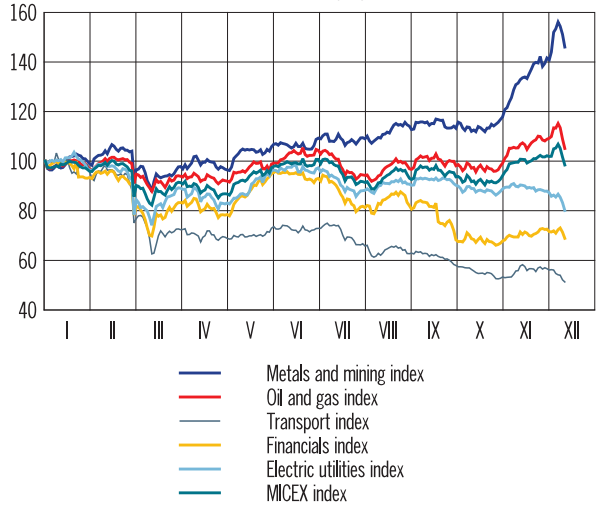
Sources: MICEX SE, Cbonds.ru.

OFZ yield curve (%, p.a.)



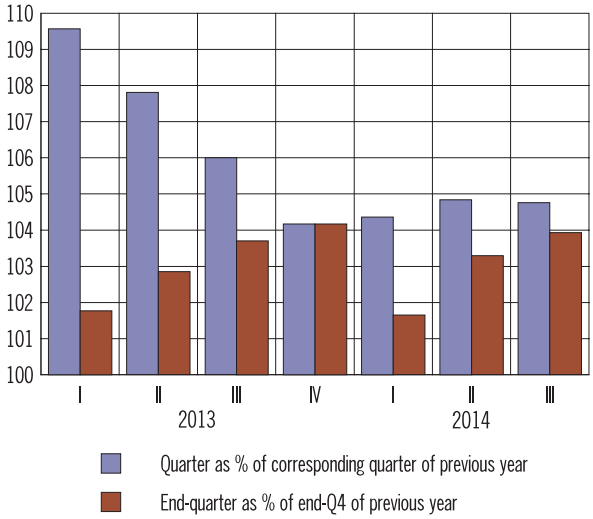
Source: Bloomberg.

Moscow Exchange equity indices growth rates in 2014 (%)



Sources: MICEX SE, Bank of Russia calculations.

Housing market price indices

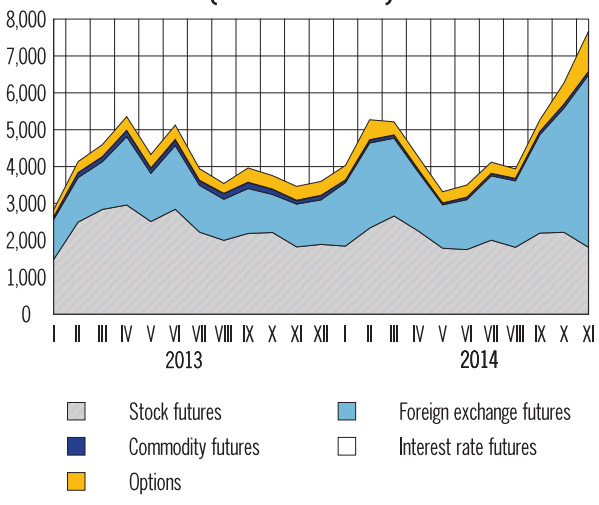


Sources: Federal State Statistics Service, Bank of Russia calculations.

before the end of 2014. The negative effect of sanctions and the persistent external political and economic uncertainty will prevent any recovery in Russian securities prices in 2015 Q1. Faced with increasing borrowing costs, domestic bond market participants will prefer to reduce the maturity of issued bonds, which, among other things, will help keep the inversion in the long part of the bond yield curve.

In September-November, in view of the increase in the value of the dual currency basket, interest rose substantially in FX derivatives used both to hedge exchange rate risk and to engage in speculative transactions and arbitrage. In November, the total value of currency futures and options rose 2.6-fold and 47.5-fold relative to August, to 4.7 and 0.8 trillion rubles respectively. Market participants' awareness of the need to hedge the risks of exchange rate fluctuations and a further increase in derivatives market turnover will smooth out the negative impact of a possible rise in exchange rate volatility on their financial position.

Exchange-traded derivatives turnover by underlying assets (billions of rubles)



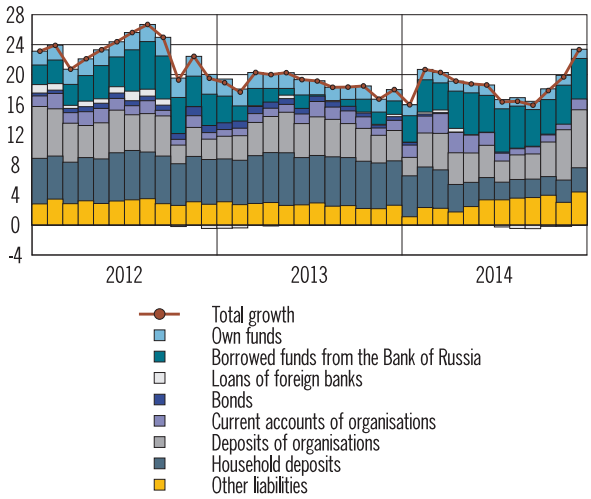
Sources: Moscow Exchange, Bank of Russia calculations.

Households' interest in residential property as an investment instrument remained high, though real estate price growth has slowed somewhat. Price indices in the primary and secondary housing markets increased less than the consumer price index. One of main driving forces behind the growth in real estate prices continued to be the mortgage market expansion, as well as the lack of any substantial changes in mortgage lending conditions (requirements to borrower and collateral criteria).

Bank lending and deposit operations

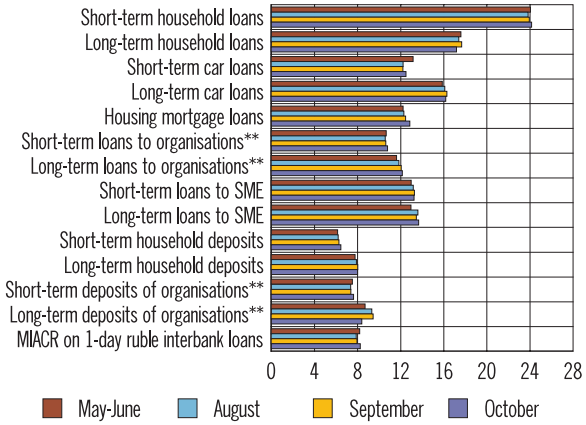
In September-November 2014, the trends pointing to a change in the structure of bank funding, which were observed at the start of Q3, persisted. With the growing foreign

Contributions of various components to the annual growth rates of banking sector liabilities (%)



Source: Bank of Russia.

Interest rates in the Russian lending and deposit market in 2014* (% p.a.)



** Average rates on ruble denominated loans granted (deposits received) during the reported month.*
*** Excluding banks and financial organisations.*
Source: Bank of Russia.

political uncertainty and limited access to external markets, Russian credit institutions' interbank liabilities to foreign banks decreased. The contraction of this source of funding suppressed growth in the Russian banking sector's assets over Q3 and Q4.

In September-November, household deposits, one of the largest sources of bank funding, continued to lose its share of banking sector liabilities. On 1 December 2014, this indicator was 26.1% versus 27.6% as of 1 September 2014, and 29.5% at the start of the year[4]. Under these conditions, competition between banks in the household deposits market intensified and deposit rates continued to grow. In August-October 2014, the average rate on long-term ruble household deposits was 8.0% p.a., 25 bp higher than the corresponding rate in May-July. With the reduced access to external funding, banks engaged in an active price competition in the household foreign currency deposits market. Average rates on long-term household deposits in US dollars and euros over the same period increased by 27 bp (to 3.2% and 2.9% p.a. respectively). In November, following the Bank of Russia key rate hike, price competition between banks intensified. According to estimates, for the ten largest Russian banks operating in the deposit market, the average rate for one-year ruble deposits over 100,000 rubles increased from 9.2% at the end of October to 10.1% in early December.

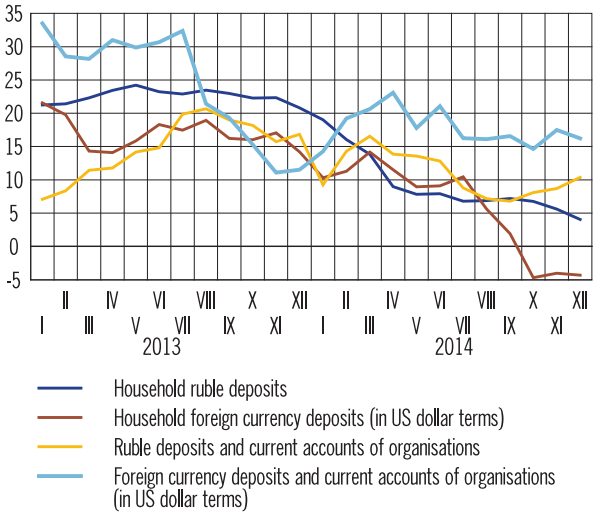
With growing competition in the household deposit market, banks started using other internal sources of funding. In particular, the average rate on long-term corporate deposits in August-October was 40 bp higher than in May-July. Several large banks raised their rates for savings certificates considerably.

Growth in nominal ruble rates in key deposit market segments was accompanied by an increase in real rates[5], which, combined with the easing in non-price deposit conditions by a number of banks (reducing the minimum deposit amount, simplifying early withdrawals), brought an inflow of funds into corporate ruble deposits (in September-November, the growth in balances of such deposits increased from 6.8% to 10.4% p.a.). Growth in household ruble deposits continued to slow (4.1% on 1 December 2014 versus 7.2% on 1 September

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

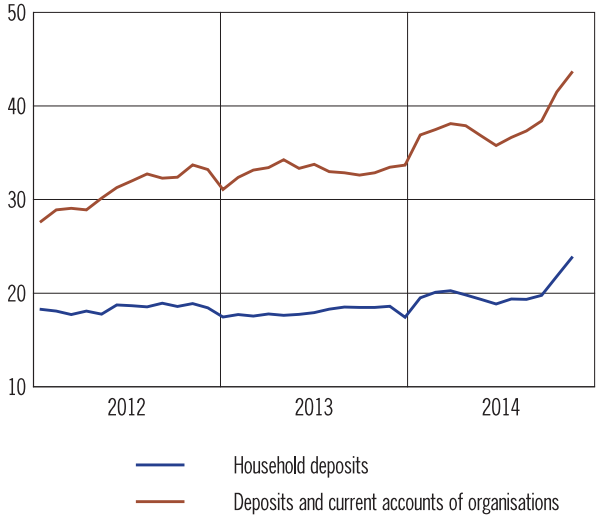
[5] *Hereinafter, real rates are estimated using the method advocated by IMF specialists in the section 'Perspectives on global real interest rates' in the 'World Economic Outlook' report for April 2014.*

Annual growth rates of bank deposits (%)



Source: Bank of Russia.

Dollarisation of bank deposits (%)



Source: Bank of Russia.

2014), while the inflow of household funds into savings certificates accelerated (from 8.6% on 1 September 2014 to 19.6% on 1 December 2014).

Opposite trends were seen in the amount of deposits by certain groups of bank customers in the foreign currency segment. Non-bank entities continued to steadily build up their foreign currency deposits at banks. The annual growth for such deposits in dollar terms was 16.2% on 1 December 2014 (16.6% on 1 September 2014). Coupled with the nominal depreciation of the ruble in September-November, this caused significant growth in the dollarisation of corporate current accounts and deposits at banks.

At the same time, households continued to withdraw foreign currency deposits in September-November. Over three months, balances in these deposits shrank by the equivalent of $3.3 billion, and their annual growth became negative (-4.3% as of 1 December 2014 versus 1.9% in early September). As a result, the growth in household deposit dollarisation registered in September-November was caused exclusively by the revaluation of foreign currency deposits.

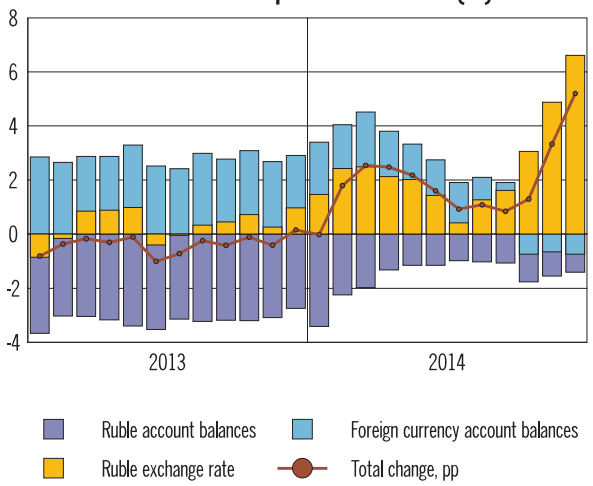
The growing cost of bank funding contributed to the increase in rates on bank asset operations. In September-November, many large Russian banks raised their baseline rates on standardised loan products (mortgage and consumer loans, small and medium business lending programmes).

However, the ongoing macroeconomic uncertainty and impaired quality of the household loan portfolio, which is manifesting itself through growth in the proportion of overdue debt, triggered a further revision of bank lending policies aimed at risk mitigation, including by formulating more strict requirements to borrowers. Based on the results of a bank survey[6] conducted in 2014 Q3, credit institutions coupled lending rate increases with tighter requirements to borrower credit quality and loan collateral. Banks attributed the higher lending rate and tighter non-price lending conditions to the restricted access to external and domestic funding, as well as to the unstable situation in the non-financial sector. Banks expect that they will continue to employ a conservative lending policy at the end of 2014 and in early 2015.

Banks' more stringent lending requirements restricted access to credit for risky borrowers,

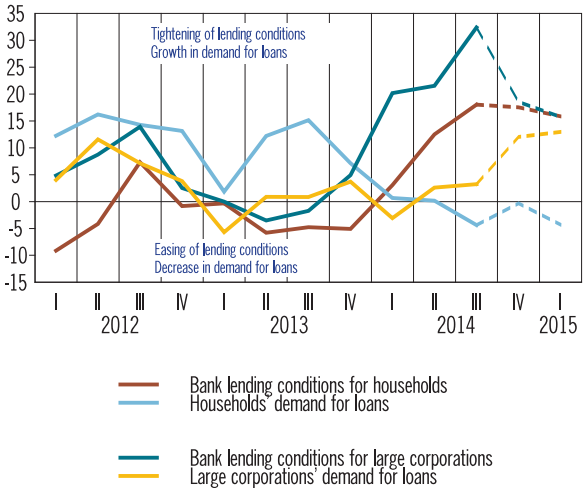
[6] *Bank lending conditions are assessed on the basis of data from quarterly surveys of credit institutions conducted by the Bank of Russia. The assessment method and survey results are published on the Bank of Russia website in the section Monetary Policy.*

Contributions of various factors to annual change in household deposit dollarisation (%)



Source: Bank of Russia.

Lending conditions indices (points)



Source: Bank of Russia.

which often obtain loans at the highest interest rates. This resulted in a decrease in the number of high-risk loans being issued and suppressed growth in mid-market lending rates. In August-October, the average long-term ruble lending rate to non-financial organisations was 12.0% p.a., 43 bp higher than over the three previous months. The average rate on mortgage housing loans in August-October rose by 31 bp compared with May-July. In those market segments associated with higher credit risk, banks more actively increased their rates. This meant that the long-term rate on small and medium business loans in August-October was 61 bp higher than in May-July, and long-term car loan rate was 40 bp higher. Real rates in key loan market segments also increased.

The faster increase in rates on high-risk loans combined with the stricter requirements to borrowers changed the structure of banks' loan portfolios. More risky lending was replaced by less risky loans. In particular, annual growth rates for consumer and car lending dropped steadily in the retail segment of the market amid moderate growth in this indicator for mortgage lending[7]. As a result, as a percentage of banks' total claims on households, mortgage loans rose from 30.7% as of 1 September 2014 to 31.4% as of 1 November 2014. Consumer and car lending being replaced by mortgage loans, which typically have relatively low rates, could be one of the reasons for the slight drop in the average household long-term ruble lending rate over the period under consideration.

In the corporate lending segment, banks replaced higher risk loans to small and medium businesses with loans to large companies. The latters' share in the overall corporate lending portfolio continued to grow. This replacement was also stimulated by large mining companies, who had faced some difficulties in obtaining funding in foreign markets, returning to the domestic market.

The change in the structure of banks' loan portfolios contributed to a perceptible improvement in the corporate portfolio's credit quality. As a percentage of all loans issued to non-financial organisations, overdue loans decreased from 4.49% as of 1 September 2014 to 4.18% as of 1 December 2014. Overdue debt under household loans continued to grow, amounting to 5.94% as of 1 December 2014 versus 5.55% at the start of September.

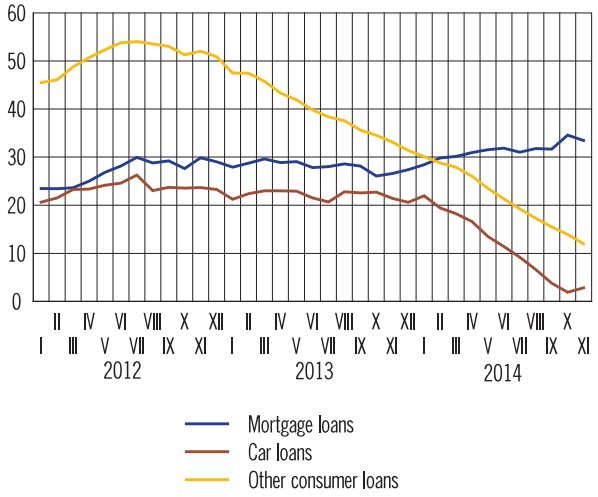
The trends pointing to a change in the currency and maturity structure of the loan portfolio observed in the previous period persisted during the analysed period. Both

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

Overdue loans (% of loan portfolio)

Source: Bank of Russia.

Annual growth rates of retail loan portfolio components (%)



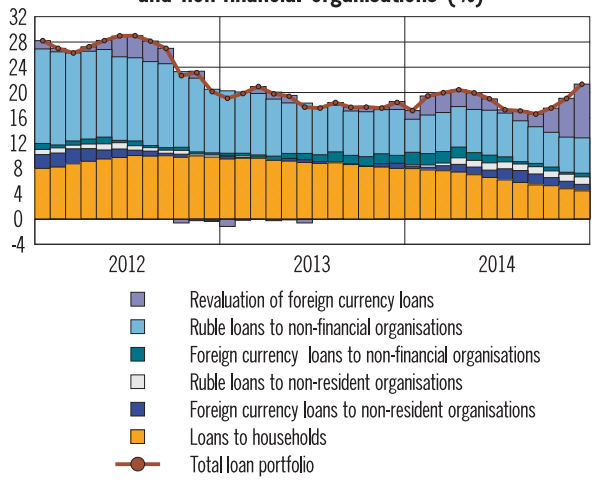
Source: Bank of Russia.

in the corporate and retail segments of the market, the loan portfolio's increase was predominantly due to issuing long-term loans, which account for a steadily growing share in bank portfolios.

At the same time, banks replaced foreign currency loans with ruble loans. In September-November, the portfolio of ruble loans to non-financial organisations rose by 4.2%, while the foreign currency loan portfolio (in dollar terms) reduced by 1.5%. As a result, while as of 1 September 2014, annual growth rates for both portfolios were comparable (12.9% for the ruble corporate loan portfolio and 13.1% for the foreign currency portfolio), as of 1 December 2014, a gap emerged between these two figures (12.6% and 8.2% respectively). The slowdown in foreign currency corporate lending may be due to the difficulties banks face in borrowing foreign currency liquidity given limited access to external capital markets.

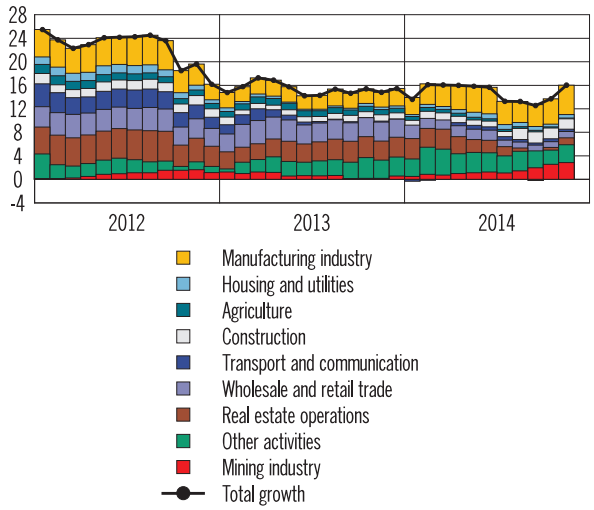
Decreased demand for loans demonstrated by some borrowers, due to slowing economic growth and general uncertainty, and the limited access to loans for the highest risk category borrowers were offset by growth in lending

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



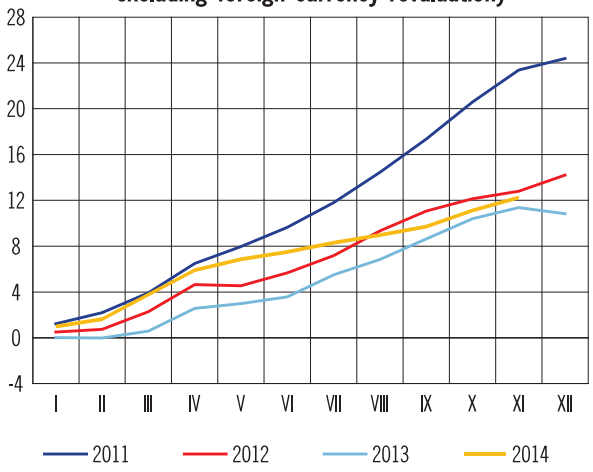
Source: Bank of Russia.

Contributions of various industries to the annual growth rates of portfolio of loans to resident organisations (%)



Source: Bank of Russia.

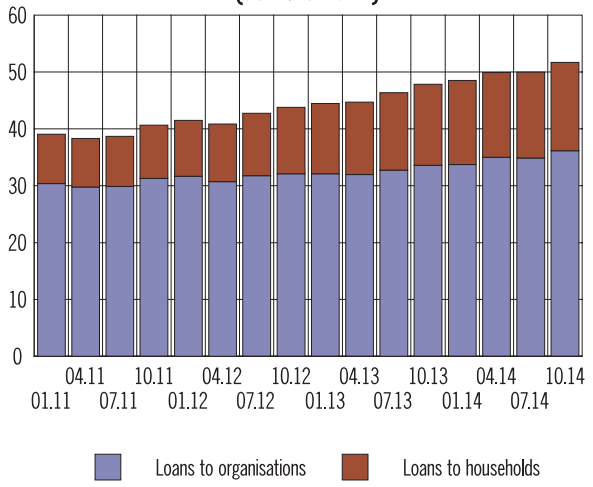
Growth of portfolio of loans to non-financial organisations (as % of the beginning of the year, excluding foreign currency revaluation)



Source: Bank of Russia.

to major companies whose ability to obtain funding in the global market was restricted. Overall, the annual growth rate of the corporate and household loans portfolio was 21.3% as of 1 December 2014 versus 16.6% as of 1 January 2014, meanwhile, excluding the currency revaluation, growth rates dropped to 12.8% versus 14.6%. The ratio of bank loan portfolios to GDP continued to grow and, according to preliminary data, amounted to 51.7% as of 1 October 2014 versus 50.8% as of 1 September 2014 and 48.5% at the start of the year.

Bank loan portfolio (as % of GDP)



Source: Bank of Russia calculations.

In the short term, we can expect the trends seen in September-November to continue. As the value of higher-rate deposits will increase, the average value of bank liabilities will also grow which limits opportunities for price competition in the market and will exert upward pressure on lending rates. As in previous periods of increased uncertainty, we can expect banks to maintain a relatively conservative lending policy, which will have a positive impact on the quality of the loan portfolio, but restrict its potential for growth.

Monetary aggregates

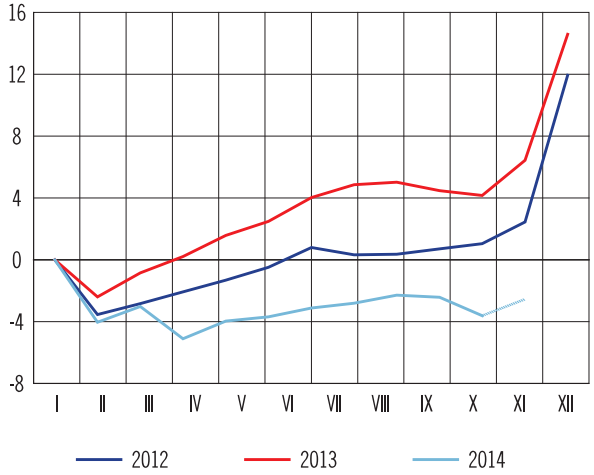
In September-November, annual money supply[8] growth rates fluctuated with a predominantly downward trend. According to preliminary estimates, as of 1 December 2014, the annual growth of money supply was 4.8% compared with 6.6% at the start of September and 14.6% at the start of the year. Annual growth of broad money (the M2X aggregate) over the analysed period accelerated markedly, reaching 14.3% as of 1 December 2014 versus 9.1% as of 1 September 2014, but this growth was predominantly due to the revaluation of foreign currency deposits.

The structure of money supply in September-November did not change significantly. The share of household deposits in the M2 monetary aggregate, according to preliminary data, was 44.4% as of 1 December 2014 versus 44.9% in early September. The share of corporate deposits over the same period increased by 0.5 pp (to 32.9%), while the share of cash increased by 0.1 pp (to 22.8%). The changes in the structure of broad money are more pronounced, but this is mainly due to the revaluation of foreign currency deposits.

The structure of money supply sources experienced certain changes in September-November. The banking system's net foreign assets' contribution to the annual growth of the broad money shrank considerably. The

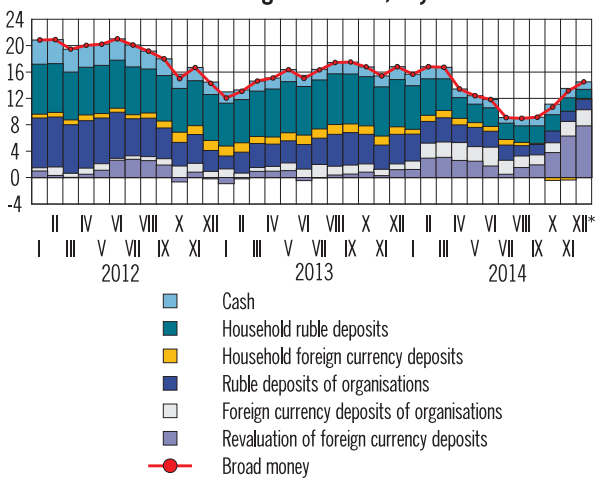
[8] *The national definition of M2 aggregate.*

Money supply growth (M2 as % of beginning of the year)



Source: Bank of Russia.

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

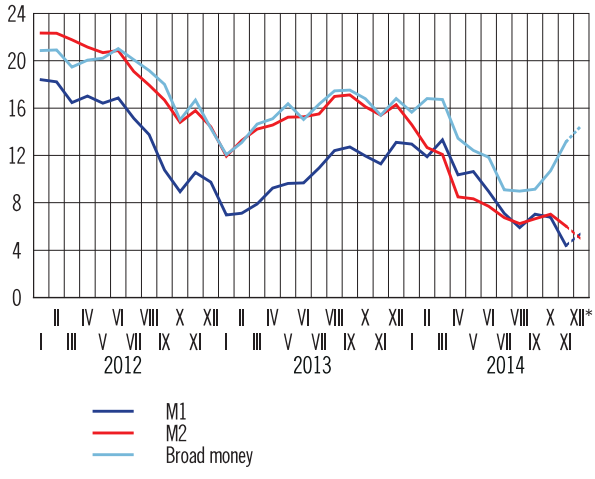


** According to preliminary data.*
Source: Bank of Russia.

decrease in net foreign assets was replaced by further growth in Russian banks' domestic assets: lending to the economy and, to a lesser degree, net claims on the general government.

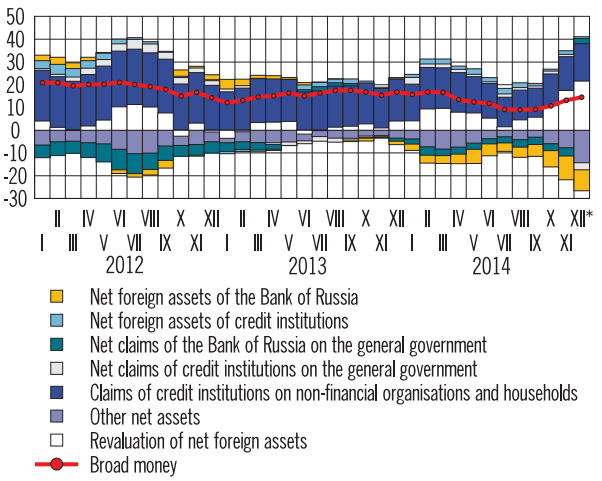
If in 2014 as a whole the components of money supply growth maintain the annual cycle that has been seen in recent years, over few remaining months this year we can expect a further reduction in the general government's account balances at the Bank of Russia and, as a result, growth in the money supply. With the Bank of Russia refraining from regular interventions in the FX market and, consequently, a smaller change to net foreign assets, it could maintain existing money supply growth rates unchanged in the medium term. However, the non-financial sector's redemption of liabilities not matched by a replacement with corresponding internal credit resources will suppress growth in the money supply. As the exchange rate of the ruble stabilises, annual growth rates in the M2 and M2X monetary aggregates will converge.

Monetary aggregates (as % of corresponding date of previous year)



** According to preliminary data.*
Source: Bank of Russia.

Banking system assets and broad money (annual growth, %)



** According to preliminary data.*
Source: Bank of Russia.

I.3. Internal economic conditions

In Q3 and October 2014, economic activity continued to be low, but higher than expected. At the same time, a slight increase in consumer activity was recorded amid the ruble weakening and increase in inflation expectations. Fixed capital investment continued to fall at a moderate rate. The main positive contribution to GDP growth was made by net exports. Given higher than expected results of Q3 and the impact of short-term demand-side factors, GDP growth estimates were raised from 0.4% to 0.6% in 2014. After relatively moderate behaviour in July-August, in September-November 2014, consumer price growth again accelerated as a result of the ruble depreciation, as well as the impact of specific factors in certain markets, including the restrictions on food imports introduced in August. In view of the greater than previously expected ruble depreciation, short-term inflation forecasts were raised; it is expected that inflation will be roughly 10% by the end of 2014.

Economic activity

In 2014 Q3, annual GDP growth was 0.7%, which is higher than the Bank of Russia's estimates (0.2%) made in September this year. According to estimates (seasonally adjusted) the economy grew in Q2 and Q3 by 0.2% and 0.4% respectively (after the sharp fall of 0.5% in Q1). Estimates of the output gap compared with the previous forecast changed somewhat. In Q3 this year, the output gap was smaller but still negative (ranging from -0.3% to -1%, according to various estimates).

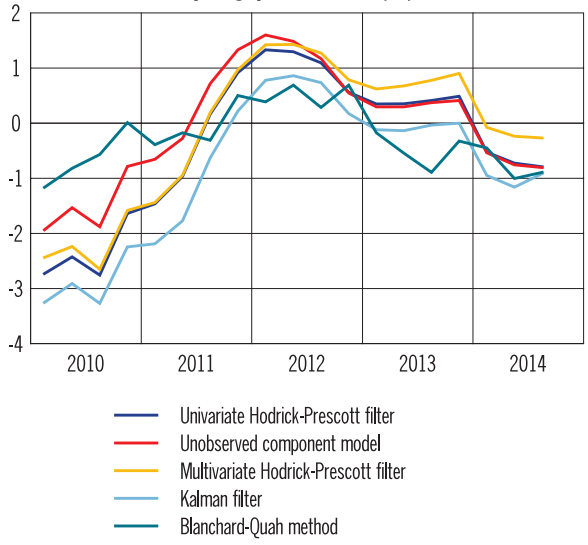
According to our estimates, potential GDP growth dropped faster than actual GDP growth, which caused the reduction in the negative output gap.

Since September 2014, the fall in global oil prices has accelerated markedly. According to estimates, in the short run the impact of oil price changes on economic growth is minor. Over the short-term horizon, the consequence of the price drop for energy products was a faster depreciation of the ruble. On the one hand, increase in relative import prices and price competitiveness of domestic products facilitated import substitution. Moreover, the increase in export proceeds in ruble terms offset the loss of income from the fall in dollar prices for export goods.

On the other hand, the ruble depreciation led to increased prices on imported goods and services and brought down purchasing power of economic agents. In addition, limited access to external capital markets, persistent geopolitical tension and internal structural problems all continued to have a negative impact on economic growth in Russia.

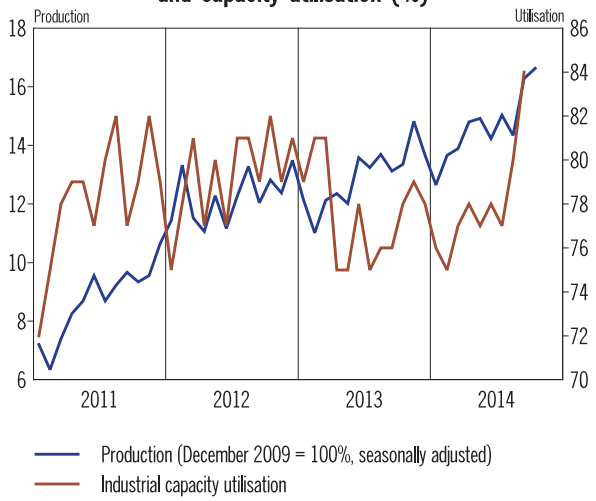
In 2014 Q3, in terms of output, the main contribution to economic growth came from manufacturing industries, mining, agriculture, and retail trade. Annual growth in industrial production in September and October accelerated to 2.8% and 2.9% respectively (in Q3 this indicator dropped to 1.5% from 1.8% in Q2). Imports' reduced price competitiveness and the restrictions introduced in August on the import of certain food goods both contributed to an increase in the food industry's output in September-October, especially in the

Output gap estimates (%)



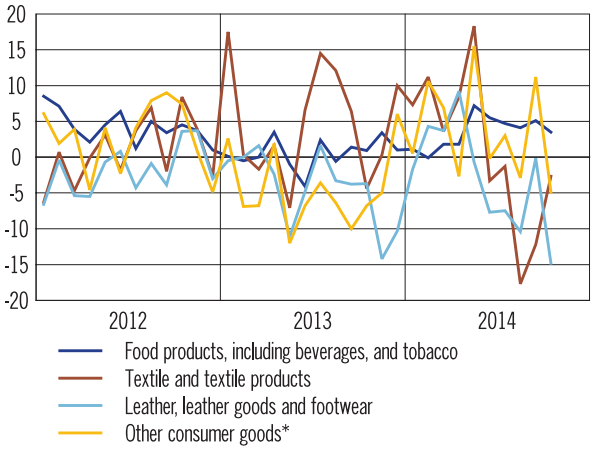
Source: Bank of Russia calculations.

Industrial production growth and capacity utilisation (%)



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

Production growth by consumer-oriented industries (as % of corresponding period of previous year)



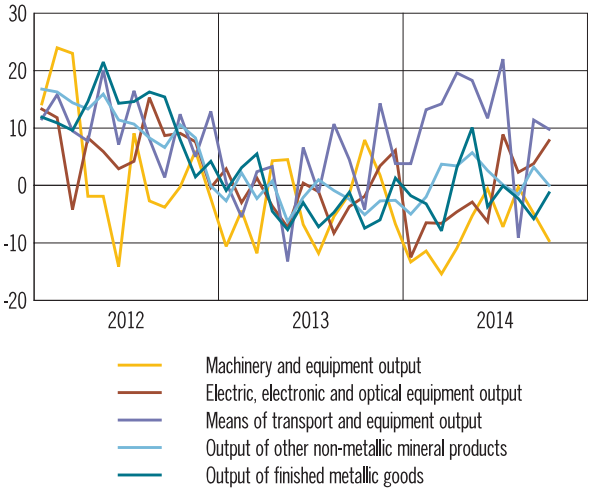
** Furniture, jewellery, musical instruments, sports goods, games and toys, household goods, interior design items, small wares and other consumer goods.*
Source: Rosstat.

production of meat, meat products, certain types of canned goods, dairy produce, and fodder. The weak ruble enhanced price competitiveness and positively affected the output of export-oriented manufacturing industries. In particular, the production of coke, petroleum products, and metals all rose. Moreover, growth was seen in the production of certain investment goods: electrical and radio equipment, transport vehicles and equipment.

In September-October, output accelerated in mining and quarrying. In particular, the production of associated petroleum gas increased due to the filling of gas storages in Russia.

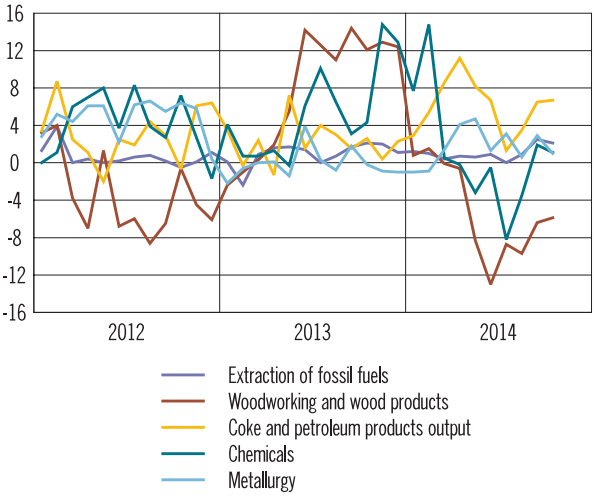
This year's high harvest figures and stable moderate growth in the livestock output contributed to an 11% increase in agricultural production in Q3 (relative to the corresponding quarter in 2013). In October, agricultural production contracted due to a shift in seasonality in 2013. Considering the high base level of the last few months of 2013, in 2014 Q4, the agricultural industry's contribution to economic growth is assessed as negative.

Production growth by investment-oriented industries (as % of corresponding period of previous year)



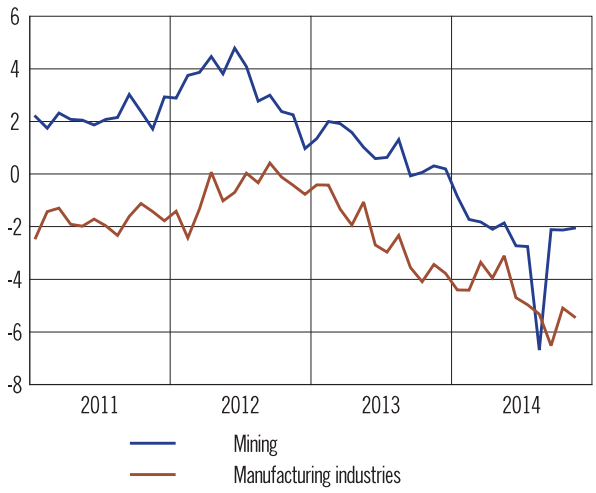
Source: Rosstat.

Production growth by export-oriented industries (as % of corresponding period of previous year)



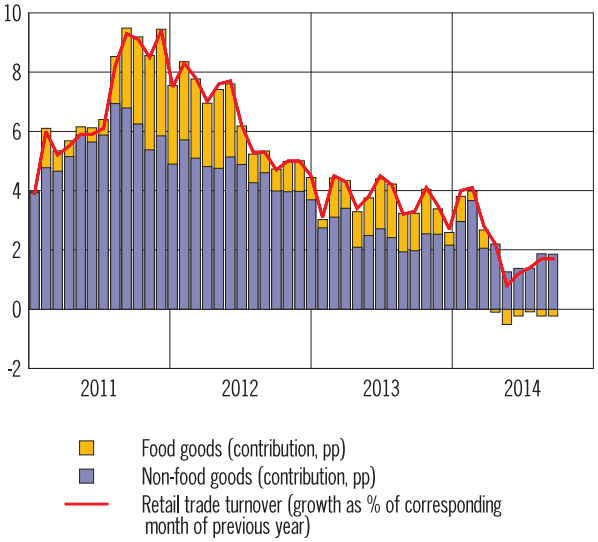
Source: Rosstat.

Business confidence indices by activity type (seasonally adjusted)



Sources: Rosstat, Bank of Russia calculations.

Retail trade turnover

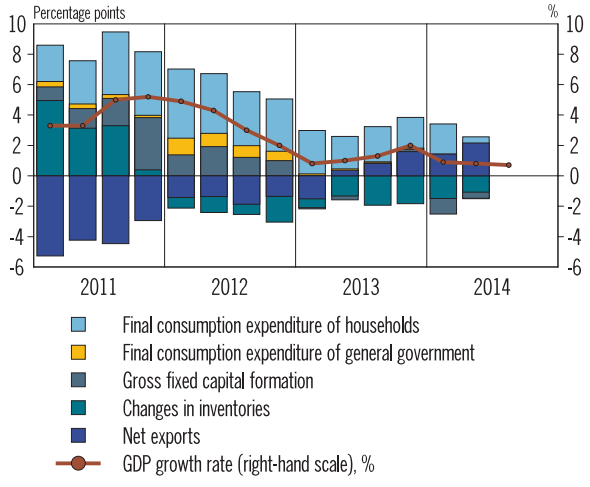


Sources: Rosstat, Bank of Russia calculations.

According to estimates, in terms of GDP structure by expenditure, the low level of economic activity in Q3 resulted from ongoing weakening of consumer demand. This was shaped by the further slowing of growth in real wages, caused by the slowdown of nominal wage growth coupled with high inflation and the saturation of the consumer lending market. The fall in consumer confidence indices (Rosstat) and consumer sentiment indices (Public Opinion Foundation) is indicative of consumer demand cooling in the economy. Annual growth in retail trade turnover slowed in Q3 relative to the previous quarter (from 1.9% to 1.4%).

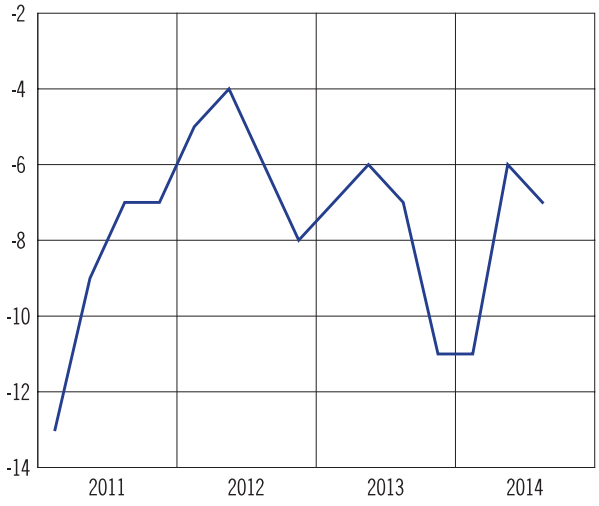
Surge in the volatility of the ruble exchange rate, its considerable depreciation, and growth in inflation expectations triggered a temporary increase in household demand in September-October. In October, as in the previous month, retail sales rose by 1.7% year-on-year, including in the non-food goods segment by 3.5%. The increase in consumer activity was accompanied by a slight outflow of household funds from bank deposits. Demand for non-food goods was bolstered by the vehicle utilisation

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



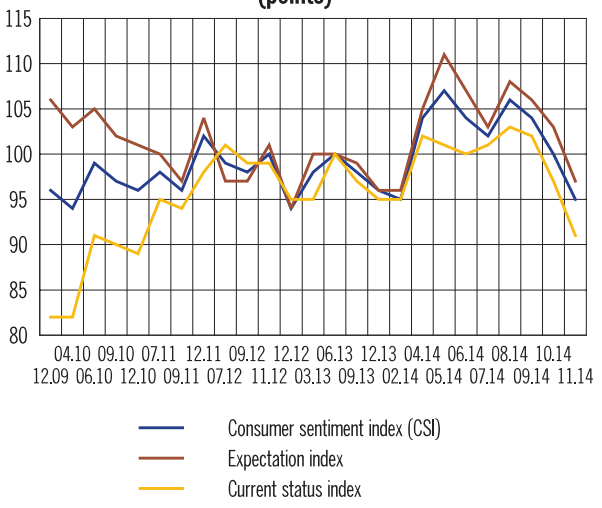
Sources: Rosstat, Bank of Russia calculations.

Consumer confidence index (%)



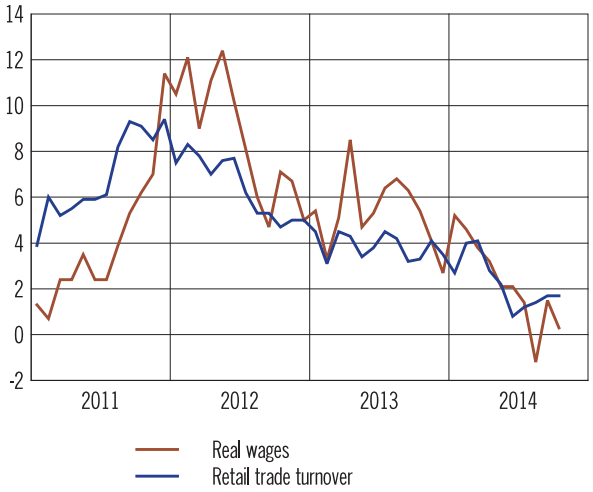
Source: Rosstat.

Consumer sentiment (points)



Source: Public Opinion Foundation survey results.

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



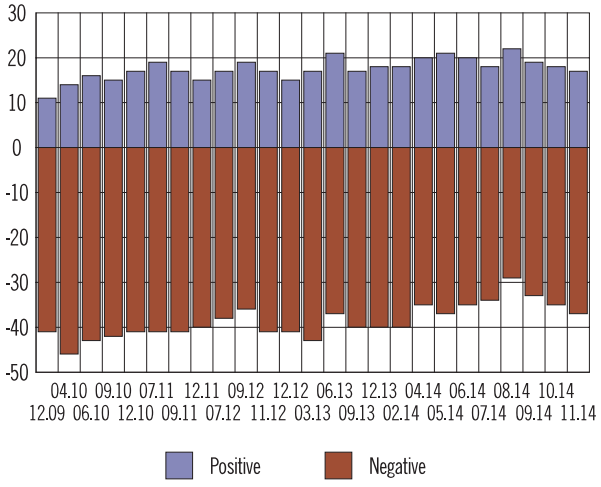
Source: Rosstat.

programme re-launched in September, which yielded a partial recovery in vehicle sales in September-October after a substantial mid-year drop. This factor is likely to continue to have an impact until the end of 2014.

In Q3 and October of this year, food goods sales continued to decrease both as a result of the fall in household purchasing power caused by considerable acceleration in the annual inflation of food prices (from 9.8% in July to 11.5% in October) and the shift in consumer preferences towards cheaper food products (for example, from meat to poultry). According to the Levada-Centre surveys, buyers have become more likely to choose domestic substitutes instead of more expensive imported food. The results of surveys carried out by the ROMIR research holding on changes in household preferences shows that Russians are looking for cheaper alternatives to their usual brands and prefer to stockpile certain goods purchased at bargain prices.

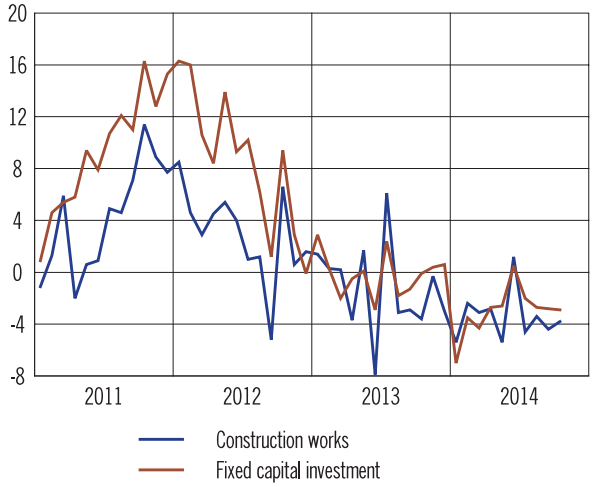
Amid growing inflation expectations, households will probably continue to demonstrate high demand for goods until the end of 2014. In 2014 Q4, annual growth in final consumption expenditure of households is estimated to be up to 1%. In 2015 Q1, the

Do you consider current situation to be generally positive or negative to save up? (data as % of all respondents)



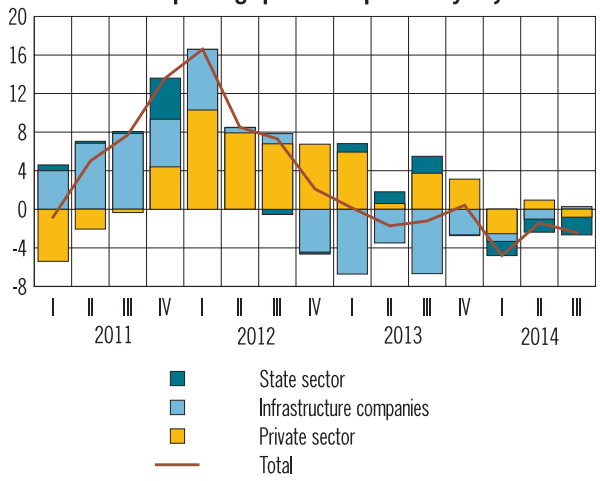
Source: Public Opinion Foundation survey results.

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



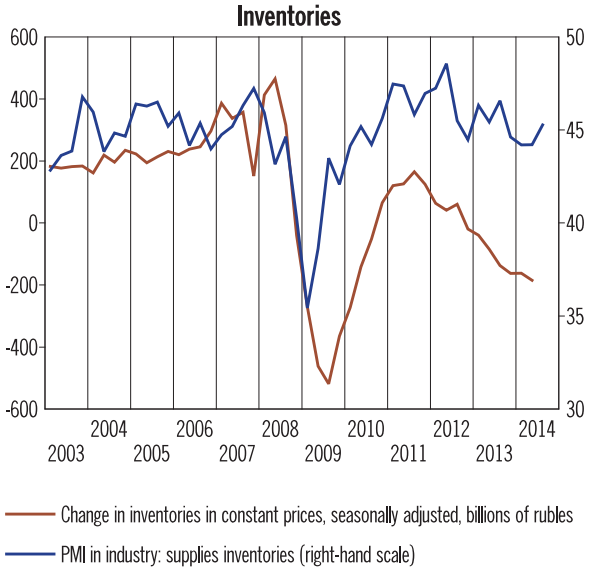
Source: Rosstat.

Fixed capital investment by state, private sector and infrastructure companies (growth as % of corresponding quarter of previous year)



Sources: Rosstat, Bank of Russia calculations.

Inventories

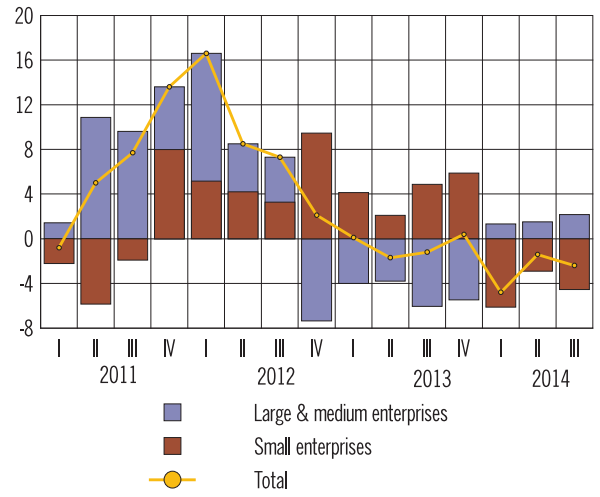


Sources: Rosstat, Markit Economics.

consumption level will be close to that of 2014 Q1. However, low growth rates in household income will cool down consumer demand. Other factors underlying the fall in household income purchasing power included the continuing growth in household debt and the reduced opportunities to refinance short-term debt due to the higher price of lending and stricter lending conditions. Moreover, banks' increase of household deposit rates under conditions of economic uncertainty may increase the households' propensity for organised savings and limit spending on goods and services.

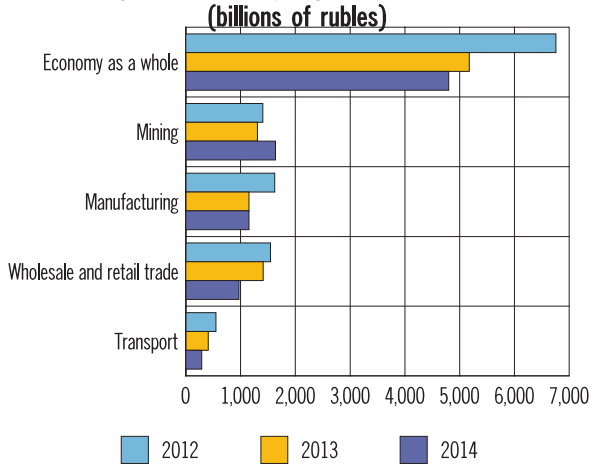
Persistent geopolitical tensions and investors' growing economic uncertainty caused a further drop in fixed capital investment. In addition, rising prices on imported investment goods and the restricted opportunities to substitute missing external funding sources by domestic ones influenced the weakening of investment demand. According to estimates, the tightening of price lending conditions by Russian banks had relatively little influence on investment dynamics. In Q3, fixed capital investment shrank year-on-year by 2.4%, and in October – by 2.9%. The reduction in gross fixed capital formation in Q4 is estimated to

Fixed capital investment by enterprise size (growth as % of corresponding quarter of previous year)



Sources: Rosstat, Bank of Russia calculations.

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



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

be around 3%. A further deterioration in the economic situation amid the limited nature and increasing cost of borrowings as well as the reduction in own capital (in Q3 the total financial result of organisations fell by more than 40% according to estimates) will force companies to reduce their capital expenditure and rely on government support for large-scale investment projects.

The increased demand for certain types of industrial goods had a positive impact on business confidence indices (particularly in mining), which, according to estimates, contributed to a slight increase in inventories (indicated by the increase in the PMI 'Inventories' sub-index). In addition, stocks of finished products were replenished by agricultural organisations that had a good harvest this season. However, according to estimates, the overall contribution of gross capital formation to economic growth over the coming two quarters will remain negative.

Net exports made the main positive contribution to GDP growth in 2014 Q3, as in the previous quarter. Given the imposed import restrictions on certain food items, the ruble depreciation, and weak domestic demand, imports have fallen off faster. Export quantities also shrank, but at much slower rates than imports.

Given the higher than expected actual economic growth in Q3 as well as the temporary increase in consumer demand amid intensified depreciation and inflation expectations, GDP growth estimates for 2014 were revised upward from 0.4% to 0.6%. In 2015 Q1, it is highly probable that annual GDP dynamics will become negative.

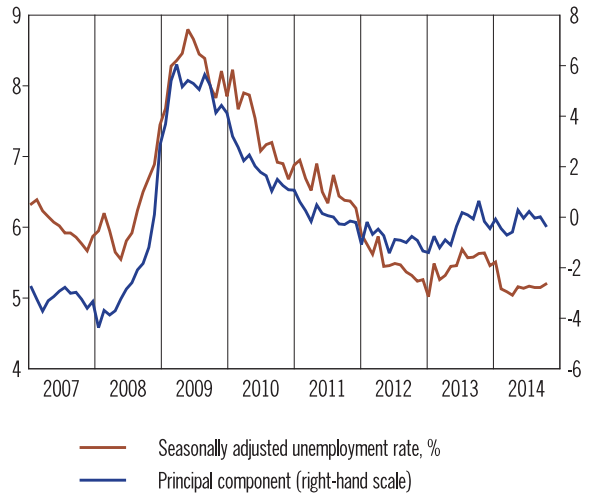
Labour market

In September-October, just as in all of 2014, unemployment remained low despite the slowdown in economic activity: 4.9% in September and 5.1% in October (5.2% seasonally adjusted).

The aggregate labour market indicator[1], which is most closely correlated with labour force utilisation indicators, shows that on the whole the situation has not changed compared with the previous year. The low unemployment rate was in part due to unfavourable demographic factors. Since 2006, the working-age population has been shrinking (from 90.2 million in early 2006 to 86.1 million in early 2013). According to the Federal State Statistics

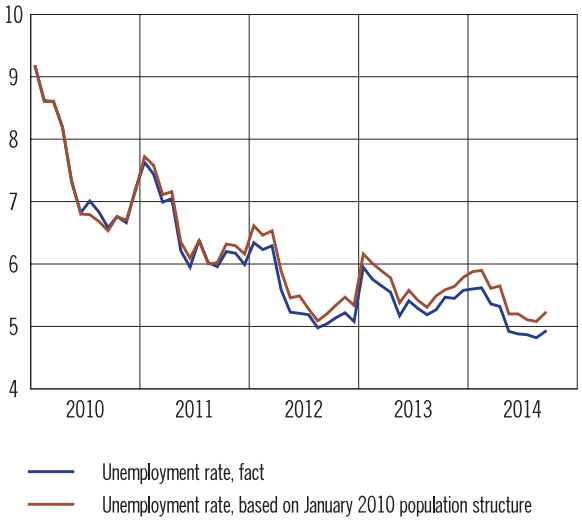
[1] *The principal labour market component is calculated using the method set out in the work: Hakkio, C., Willis, J., Assessing Labor Market Conditions: The Level of Activity and the Speed of Improvement, The Macro Bulletin, FRB Kansas City, 2013. The following labour market indicators are used in the calculation: available labour force utilisation (Russian Economic Barometer, hereinafter, REB), employment diffusion index (industry, expected changes, REB), employment diffusion index (industry, actual changes, REB), ratio of employed to population aged 15-72 years (Rosstat), HSBC PMI (employment component, HSBC Markit), total number of hours worked (Rosstat), share of employed working more than 41 hours per week (Rosstat), share of unemployed searching for work for less than 1 month (as % of all unemployed, Rosstat), number employed by key industries based on a business activity survey (current month data, Rosstat), number of employed by key industries based on a business activity survey (prospects for change in the coming 3 months, Rosstat), wage diffusion index (industry, actual changes (share of businesses with an indicator that has grown over 1 month, REB), wage diffusion index (industry, expected changes (share of businesses with an indicator that has grown over 3 months, REB), economic activity level (Rosstat), number of employed (compared with the month of the previous year, %, Rosstat), real disposable income (compared with the month of the previous year, %, Rosstat), real accrued per employee wage (compared with the month of the previous year, %, Rosstat), share of employed working less than 20 hours per week (as % of all employed, Rosstat), nominal accrued per employee wage (compared with the month of the previous year, %, Rosstat), wage diffusion index (industry, actual changes, share of businesses with an indicator that has grown over 1 month (as % of the month of the previous year, REB), employment diffusion index (industry, actual changes in the share of businesses with an indicator that has grown over 1 month as % of the month of the previous year, REB), wage diffusion index (industry, expected changes (share of businesses with an indicator that has grown over 3 months, as % of the month of the previous year, REB), employment diffusion index (industry, expected changes (share of businesses with an indicator that has grown over the last 3 months as % of the month of the previous year, REB), HSBC PMI (employment component as % of the month of the previous year, HSBC, Markit).*

Unemployment rate and principal component of labour market indicators



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

Unemployment rate (%)



Sources: Rosstat, Bank of Russia calculations.

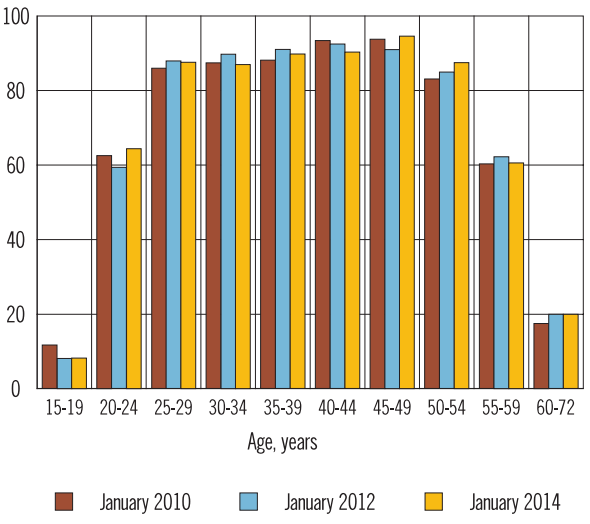
Service's estimates, this figure is expected to continue to decline until 2031 (in three different forecasts: low, middle, and high).

The negative impact of the working-age population's decrease on economic growth is partially offset by the increase in the economic activity of population. The ratio of the economically active population to the total population aged 15-72 years increased from roughly 64% in 2001-2002 to nearly 70% in 2014 (the growth in the population's economic activity was largely due to people in the older age ranges (45-72).

The reduction in the number of potential labour force has not yet affected employment figures: following the decline in 2013 (relative to the corresponding period of the previous year), this figure has shown signs of growth since the beginning of 2014.

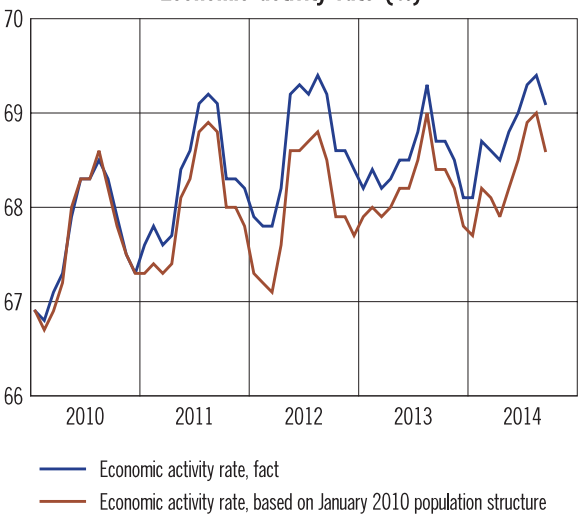
The relevance of unfavourable demographic trends for economic activity levels should not be exaggerated. According to Bank of Russia estimates, if the population's age structure had remained unchanged since January 2010, roughly 0.3 pp would have been added to actual unemployment rate in 2014.

Economic activity by age group (%)



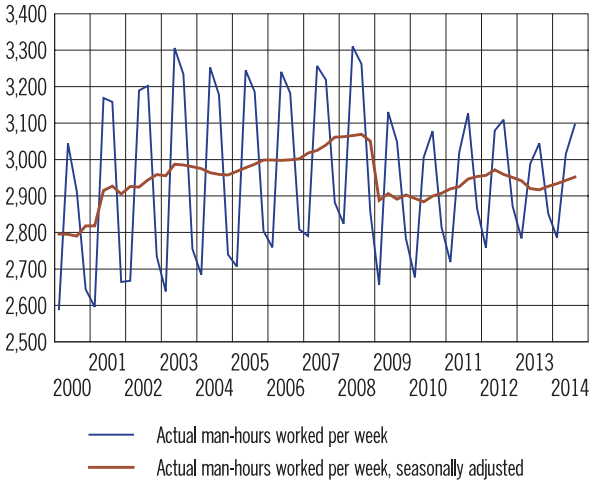
Sources: Rosstat, Bank of Russia calculations.

Economic activity rate (%)



Sources: Rosstat, Bank of Russia calculations.

Number of man-hours worked in main and additional employment (million)



Sources: Rosstat, Bank of Russia calculations.

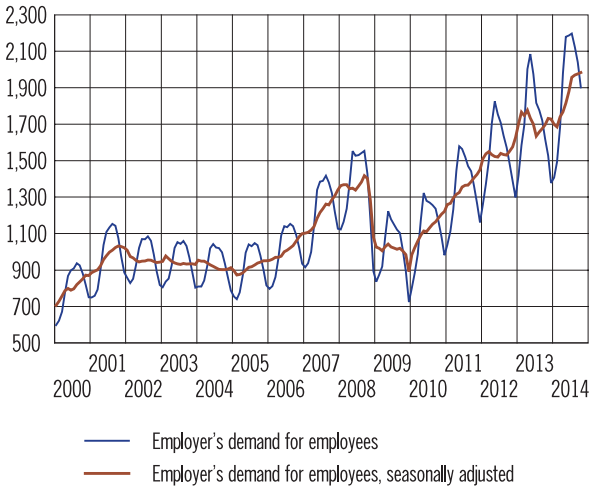
A similar picture can be seen in the dynamics of economically active population. Even with a fixed population structure (January 2010), we are seeing an increase in economic activity (due to other factors).

The increase in the number of available jobs (according to data from regional employment services) also suggests that the demand for labour remains high.

The low unemployment rate and the population's high economic activity are indicative of a labour market shortage.

The labour shortage combined with continued relatively high production capacity utilisation is evidence of only a small negative output gap (output gap estimates calculated using statistical methods range from -0.3% to -1%). However, the total number of hours worked per week in main and additional employment stabilised at a level lower than those seen before the 2008-2009 crisis, which indirectly confirms that the output gap is still negative.

Number of available jobs (thousand persons)



Sources: Rosstat, Bank of Russia calculations.

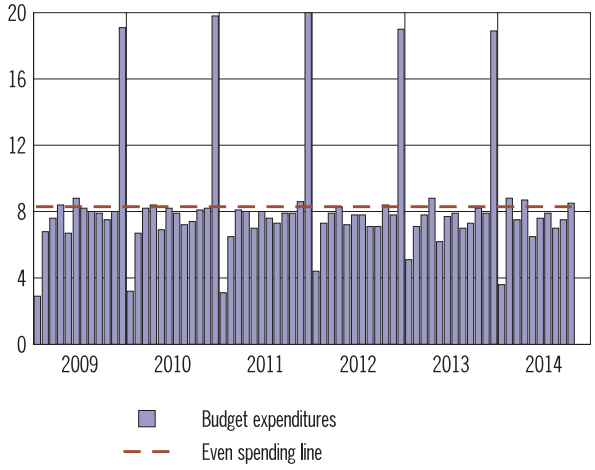
It is worth noting that the number of man-hours worked has stabilised below pre-crisis levels amid growing demand for labour (according to official statistics) and growth in overall employment figures. This paradox can be explained by increased informal employment, in which the work day is not regulated and to which statistical measurement is not easily applied. For example, as a percentage of total employment, informal employment rose from an average of 16.6% in 2010 to an average of 20.2% in January-September 2014.

This consistently high labour force utilisation is accompanied by reduced labour productivity growth rates, which largely reduces the positive effect of increased labour force utilisation on economic growth (labour productivity growth dropped from 1.8% in 2013 to an estimated less than 1% in 2014). Aside from increased informal employment, the fall in labour productivity might be also largely caused by the high level of equipment depreciation (and the resulting inability to effectively use such equipment). In recent years, the level of fixed asset tear-and-wear has grown from 45% at the end of 2007 to 47.7% at the end of 2013.

Fiscal policy

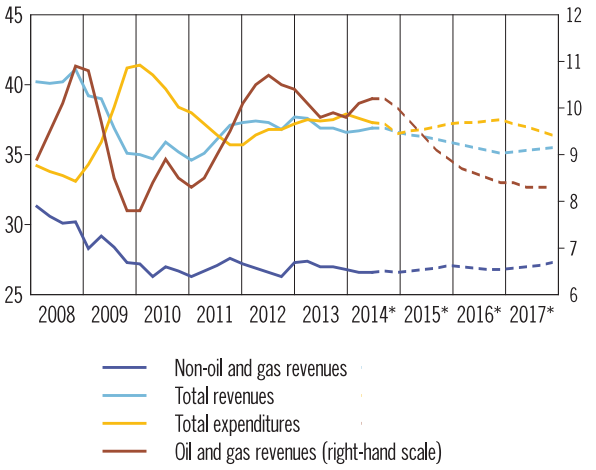
According to data from the Russian Treasury and the Russian Ministry of Finance, in January-October 2014 the Russian Federation's budgetary expenditures amounted to 33.7% of GDP and non-interest expenditures were 32.9% of GDP, which is respectively 0.4 pp and 0.5 pp lower than the same indicators for the corresponding period in

Russian federal budget expenditures by month (as a share of total non-interest expenditures)



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

Russian Federation budget revenues and expenditures (moving over last four quarters, as % of GDP)



** Bank of Russia forecast.*
Sources: Federal Treasury, Ministry of Finance, Rosstat, Bank of Russia calculations.

2013. In particular, this was due to a spending cut of 0.2 pp on social security. The uniformity of budgetary spending improved slightly relative to the previous year (in January-October 2014, 73.6% of annual non-interest expenditure compared with 73.2% for the same period in 2013).

With budget income rising relative to GDP due to the rise in oil and gas revenues caused by the ruble depreciation, the budget surplus in the budget system increased relative to the corresponding period in 2013 by 0.6 pp, to 2.7% of GDP, whereas the non-oil-and-gas primary deficit decreased by 0.2 pp to 6.9% of GDP.

According to Bank of Russia estimates, in 2014 the income-to-GDP ratio will remain at 2013 levels, while expenses-to-GDP will fall by 1.4 pp. As a result, the surplus and structural non-oil-and-gas primary deficit will be at 0.1% and 9.3% of GDP, representing an increase relative to 2013 of 1.4 pp and 1.5 pp respectively. In 2015, it is expected that budget income will shrink by 0.7 pp relative to GDP, which can be explained by the negative dynamics of oil-and-gas receipts due to the forecast drop in Urals crude prices to $80 per barrel. At the same time, non-oil-and-gas revenue will likely rise due to the elimination of the upper limit on the base used to calculate compulsory medical insurance contributions. This will be accompanied by a spending increase of 0.7 pp relative to GDP. As a result, the total deficit and the structural non-oil-and-gas primary deficit will increase to 1.3% and 9.7% of GDP respectively.

According to Bank of Russia estimates, in 2014 the general government's influence on aggregate demand is expected to be negative close to 0.3 pp. In 2015, the increase in budget spending, including investments (by 0.1 pp of GDP), will make it possible to expect this influence on aggregate demand to be positive around 0.1 pp. The plan to use some National Wealth Fund resources to support top-priority investment projects could have an additional impact on economic growth (in 2015, this impact might be within 0.2 pp lowering to near-zero level impact in the investment period's subsequent years).

Assessments of government finance stability, which were prepared using fiscal stress indicator, show that basic risks persist in the group of indicators characterising long-term budget trends (increased government expenditures on pension payments and the age distribution of the population). In 2014 Q3, the negative trend continued for the majority of figures making up this indicator, which is explained by the further deterioration of the

economic outlook. The forecast of the interest rate for public debt, adjusted for GDP growth, which determines how the public debt value will change, became positive and approached the threshold value. In addition, as a percentage of total public debt the public debt maturing this year increased as a result of corresponding changes both on a federal and regional level. However, the majority of indicators are still far from their threshold values, which suggests that Russia's government finance will remain highly stable over the short-term horizon.

In 2014, according to Bank of Russia estimates, the gross placement of government securities totalling 400 billion rubles will increase the Reserve Fund roughly by 200 billion rubles. This estimate also takes into account a minor reduction in oil-and-gas revenues and growth in non-oil-and-gas revenues relative to the amounts set forth in 2014-2016 federal budget law (as amended). The amount of funds transferred to the Reserve Fund may decline relative to the said amount depending on the situation with finding sources to fund the deficit.

Inflation

In August 2014, after a slight drop in July, inflation continued to rise again. In November, it reached 9.1% (relative to the same month of the previous year) with core inflation at 8.9%. These are the highest three-year values.

The main factors underlying the acceleration in consumer price inflation were the ruble depreciation and reduced imports of certain food items. Inflation was constrained by weak demand, tight restrictions on increases in administered prices and tariffs on goods and services offered by infrastructure monopolies, and the good harvest of a number of agricultural products in Russia. However, pro-inflationary factors dominated.

In July 2014, the ruble resumed its depreciation after some strengthening in Q2. Since September the decline in global oil prices accelerated, substantially increasing the speed of the ruble's slide. Exchange rate dynamics contribution to annual consumer price inflation in December is projected at roughly 2.6 pp.

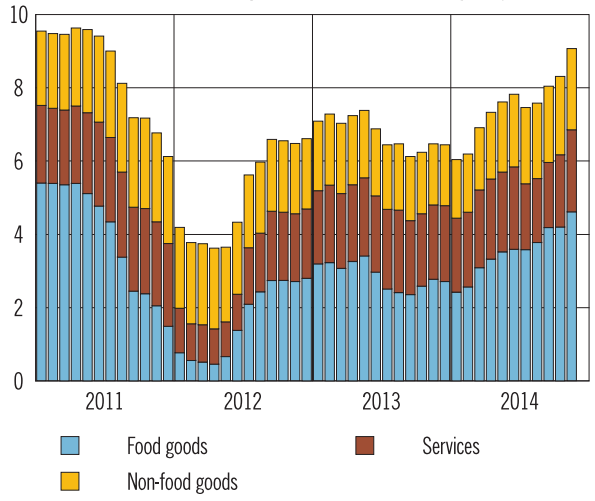
The slump in global hydrocarbon prices did not just have an effect on exchange rates. It was also accompanied by a marked slowdown in producer price inflation in mining of energy producing minerals (from 16.6% in July 2014 relative to the corresponding month in 2013 to 0.3% in October). In addition, with the tariff restrictions in place, producer price inflation was small for the production and distribution of electricity, gas, and water (year-on-year rates were 3.9% in October). Overall, industrial producer prices were 5.1% higher in October than the year before (in July, 9.0% higher). Increase in freight transportation charges by railway was low (in October, it was up 2.3% relative to October 2013). All of this contained cost pressures.

The deterioration of the situation in a number of food markets had a marked pro-inflationary influence in 2014. In the first half of the year, the accelerated inflation for specific food products was largely linked to domestic supply-side shocks and import restrictions introduced to protect the Russian market from inferior quality products (see Monetary Policy Report. Issue No. 2 (6). June 2014).

From August 2014, the temporary ban on imports of a rather numerous of foodstuffs started to have a significant impact on the domestic food market. Aside from meat and fish products, certain types of which had trade restrictions imposed at the start of the year, imports of a broad range of diary, fruit, and vegetable products were affected by the ban. The response sanctions influenced both fall in the supply and increase in producer and retailer costs.

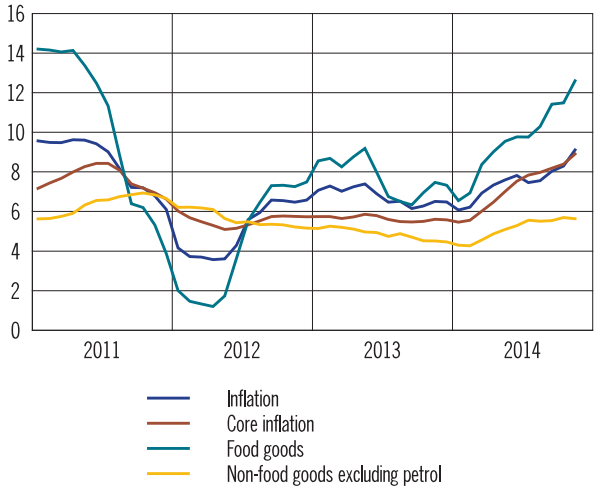
The deterioration of the situation in the meat market was the most perceptible during the observed period of 2014. Growth in livestock producer prices accelerated from 5.5% in January 2014 relative to the corresponding month of the previous year to

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



Sources: Rosstat, Bank of Russia calculations.

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



Sources: Rosstat, Bank of Russia calculations.

17.3% in October. Meat and meat product producer prices were 2.3% lower in January year-on-year, while in October they were 25.0% higher. In the consumer market, year-on-year increase in meat prices was highest among the main food categories (from 0.7% in January to 17.6% in November). Since the end of 2013, milk and dairy prices rose quickly (in November 2014, they were 14.3% higher than the year before).

On the whole, the deterioration of the situation in specific food markets over the last period is expected to add roughly 2.3 pp to year-on-year inflation in December 2014.

In contrast, high figures for the new harvest of cereals and other crops improved the situation in the food market. In October 2014, crop producer prices were 0.9% lower year-on-year.

Overall, the consumer price inflation for food products over the past period markedly accelerated, reaching 12.6% in November (relative to November 2013).

The ruble depreciation exerted an upward pressure on prices for non-food goods and services. In addition, the accelerating inflation for certain services (housing, insurance, and educational) was caused by specific factors (see Monetary Policy Report. Issue No. 3 (7). September 2014). In particular, the accelerated growth of tariffs for housing services was largely due to the launch of the new mechanism for funding capital repairs of shared property in apartment residential buildings. In November 2014, these tariffs were 17.1% higher than in November 2013. The increase in tariffs for utility services was significantly less than in 2013, at 5.3% in November (relative to November 2013).

Over the coming months, we can expect food prices to continue to increase faster than prices for non-food goods and services due to support from low price elasticity of demand for food, as well as exchange rate dynamics and imbalances in supply and demand in certain markets. With the low price elasticity of demand for food, the worsening dynamics of household real income and overall consumer demand will constrain consumer price inflation for non-food items.

At the end of 2014, inflation may be roughly 10%. The impact of the ruble depreciation is estimated at 2.6 pp, of the sanctions – at roughly 1.3 pp, and the impact of other food product supply-side factors – at up to 1 pp (according to estimates, these factors' total contribution to annual inflation will equal about 4.9%).

Over the coming months, the main pro-inflationary risks will be associated with

exchange rate dynamics. The ruble's return to the level determined by fundamentals will be accompanied by a slowdown in consumer price inflation, amid restrained growth, and a generally balanced situation in the domestic and global food markets.

Exchange rate fluctuations pass-through effect on import dynamics: general issues and key research areas

Research of the exchange rate pass-through effect on import dynamics is important, especially in terms of conducting monetary and exchange rate policy. Analysing the potential consequences of fluctuations in the national currency's exchange rate for the economy as a whole is also crucial. The said problem is particularly relevant for the Russian economy. Its relevance stems from the considerable impact of external shocks on the Russian economy due to the persistently high levels of uncertainty, Russia's import restrictions on a number of food products in combination with measures to implement an import substitution programme, as well as continued high contribution of structural factors into Russian economic growth amid trade sanctions. Estimates of imports' sensitivity to exchange rate movements can provide additional insight into organisational features of internal and external commodity markets.

Current research employs several empirical approaches to assess the exchange rate pass-through effect on imports. One of the most widespread methods is econometric estimation of the import demand equation as a cointegration relationship between imports and economic activity variables, exchange rate, and other possible variables, which generally takes the following form:

$$import_t = \alpha_0 + \alpha_1 \times Y_t + \alpha_2 \times reer_t + \alpha_3 \times Z_t + \varepsilon_t ,$$

where

$import$ is the quantity of import goods and services in real terms;

Y is scale variable that captures economic activity, change in household income, and therefore the demand for imported goods[1];

$reer$ – the real effective exchange rate index of the ruble relative to foreign currencies (growth in this figure implies depreciation);

Z is other variables that determine the behaviour of imports. These variables account for, among other things, the specifics of the importer country's economy (fixed capital investments, final consumption by households, capital flows, balance of payments indicators for trading partner countries, labour productivity, and other indicators);

$\alpha_0, \alpha_1, \alpha_2, \alpha_3$ are unknown estimated parameters;

ε_t is random error.

The methodology described above is quite simple and generally used as an intermediate step when addressing more complex tasks, such as estimating the medium-term equilibrium exchange rate using the trade balance method, forecasting key macroeconomic indicators and certain balance of payments components, financial programming, and other tasks. The limitations of this approach

[1] *Traditionally, GDP or industrial production, retail trade turnover, or real disposable household income is used as the corresponding variable if the import equation is parameterised using monthly data.*

are firstly due to the exogeneity of the explanatory variables relative to imports, which is an extremely tentative assumption in practice. Secondly, this approach is simplistic because it uses aggregate indicators and generally disregards the specificity of production and consumption structure for different groups of goods in both importing and exporting countries. Nonetheless, the results obtained with the help of this approach are regarded as tentatively useful.

Research of the relationship between imports and exchange rates carried out for the Russian economy based on the described equations demonstrate that there is a difference between imports sensitivity to exchange rate fluctuations in normal periods, on the one hand, and periods of sharp depreciation, on the other hand. Estimates of imports sensitivity to fluctuations in the real effective ruble exchange rate relative to foreign currencies in the context of moderate changes in the exchange rate show that, other things equal, a 1% weakening of the ruble exchange rate in real terms leads to a 0.6-0.8%[2] drop in imports. This is generally consistent with similar estimates for other emerging markets.

It should be noted that in the event of a sharp depreciation of the national currency, the above given elasticity can peak sharply. However, this largely depends on the potential ability to substitute imports with domestic products. In addition, imports sensitivity to exchange rate fluctuations presumably varies depending on the time frame under consideration. This question alone is the subject for a further independent study.

[2] *Tokarick, Stephen, A Method for Calculating Export Supply and Import Demand Elasticities//IMF Working Papers, Vol., 2010, July 2010, pp. 1-40.*
Nadezhda Ivanova. Estimation of the Equilibrium Real Exchange Rate in Russia: Trade-Balance Approach [R]//CEFIR/NES Working Paper series, Working Paper, No 102.

Factors underlying meat and meat product price dynamics

The ban on pork imports from Europe (in effect since February 2014[1]) and the foreign trade restrictions introduced in August[2] had a negative impact on imports of meat and meat products. In particular, imports of pork and by-products dropped in February-September 2014 by more than 40% relative to the same period in 2013. After the ban took effect in August, imports of poultry reduced more than twofold in September relative to September 2013. However, import substitution in the Russian meat market started long before the restrictions were introduced. The industry's accelerated growth since 2006 led to the share of imported products falling from 35% to 21% in 2013.

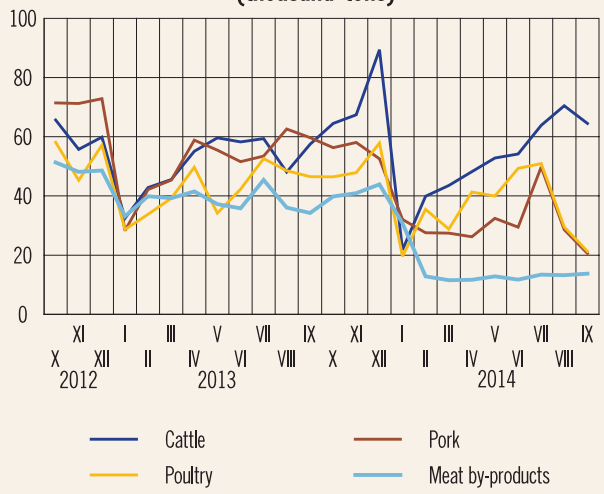
In the first half of 2014, the decline in imports led to an increase in demand for domestic pork, poultry, and – since August – a broad range of meat products. However, the rate at which production increased in the livestock industry was limited by technological aspects (increased production requires investment and time to raise cattle). In addition, the aftermath of the 2012 poor harvest affected production in 2014, leading to growth in fodder prices, cost increase, reduction of cattle population, decreased productivity and overall output, and the deterioration of financial activity indicators. Overall in 2014, output in the livestock farming and processing industries continued to rise, although its growth rates dropped.

Growth in the output of livestock and poultry in slaughter weight across all categories of farms (on a live weight basis) was 4.1% in January-September 2014 relative to the same period in 2013, which is 2.2 pp lower than during first nine months in 2013; for the output of meat and meat products these figures were 7.0% and 1.3 pp respectively. In particular, growth in pork output slowed considerably

[1] *Letters from the Federal Service for Veterinary and Phytosanitary Surveillance No. FS-SA-7/1275, dated 29 January 2014, No. FS-EN-7/1310, dated 30 January 2014, and No. FS-EN-8/1644, dated 5 February 2014*

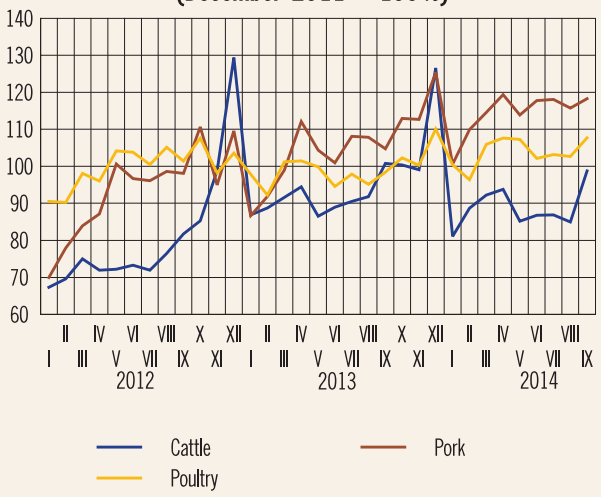
[2] *Resolution of the Government of the Russian Federation No. 778, dated 7 August 2014, 'On Measures to Implement Decree of the President of the Russian Federation No. 560, Dated 7 August, 'On the Application of Certain Special Economic Measures to Ensure the Security of the Russian Federation'.*

Meat and meat by-product imports to Russia (thousand tons)



Sources: Federal Customs Service, Bank of Russia calculations.

Livestock and poultry for slaughter in Russia (December 2011 = 100%)

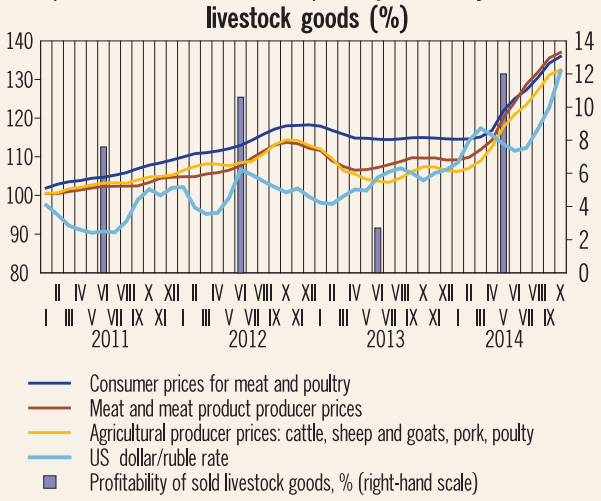


Sources: Rosstat, Bank of Russia calculations.

to 11.8% compared with 31.5% in January-September 2013. Nevertheless, it is worth noting the increased production rates for meat and poultry food by-products (increase by 7.4% versus 4.3% in January-September 2013), fat from cattle, sheep, goat and pork (increase by 55.3% versus 15.4%) and the increased output of sausage products (compared with their decrease in January-September 2013).

The imbalance between supply and demand pushed prices upwards. The rather high concentration of production in the Russian pork and poultry market also contributed to their growth. In 2013, the market share of the largest pork producer was 13.7% and the total combined share of three top companies was 25.5%. A similar situation is observed in the poultry market: the market leader accounts for 15% of production in the market and three top producers account for 31%. Beef meat in Russia accounts for the smallest share of the meat market (in January-September 2014, it accounted for 10.8% of the total production of livestock and poultry in slaughter weight), with virtually the entire production volume coming from culled dairy animals. Specialised beef cattle farming is still at an early stage of development, accounting for less than 5% of total production. As a result, there is more competition in the beef market: the three leaders of the industry account for roughly 7% of total output.

Meat and poultry prices, US dollar exchange rate (December 2010 = 100%) and profitability of sold livestock goods (%)



Sources: Rosstat, Bank of Russia calculations.

Under these conditions, in 2014 producer price inflation accelerated in the livestock farming and meat processing industry. The producer price inflation was accompanied by increased profitability of the goods sold in the livestock farming.

In the consumer market, the rise in prices for meat products was the highest among the main food categories (in November 2014, prices increased by 17.6% relative to November 2013), with meat by-products, pork and poultry rising in price by more than 20%. The price increase for beef was relatively small: 8.0%. However, we do not see a strong dependence between price increases and changes in the ruble exchange rate. Fluctuations in the ruble value in 2011-2013 did not affect price dynamics,

meaning that the sharp rise in prices for meat and poultry in March-October 2014 was caused primarily by market supply/demand imbalances, rather than exchange rate fluctuations.

Should this imbalance persist, meat price growth rates will be high in the near term. Increased profitability and government support measures will help expand production, saturate the market, and slow price growth over the medium-term horizon.

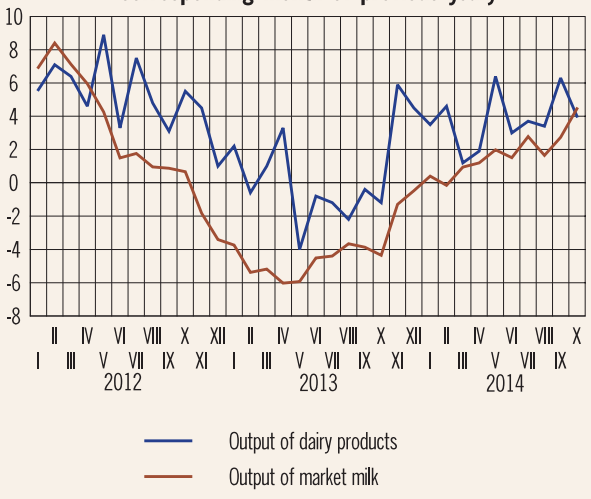
Materials from Rosstat, the Russian Ministry of Economic Development and the Federal Customs Service were used.

Factors underlying milk and dairy product price dynamics

Increased dairy production in Russia is determined by raw milk output in the dairy farming industry (in 2011-2013, in Russian milk processing the average share of domestic inputs in inputs milk equivalent was 95.7%[1]). From 2013 to early 2014, milk production, like the meat industry, was subject to aftereffects of the poor 2012 harvest. However, producer price hikes created the conditions for the situation to improve since the middle of 2013. The ruble depreciation as well as the import restrictions on milk processed products introduced in August has encouraged import substitution. The expansion of raw milk supply was hampered by inefficient production at a large number of farms (only about 3% of agricultural organisations achieved average annual milk yields comparable with those of leading raw milk producing countries[2]) and the high level of investment required for production.

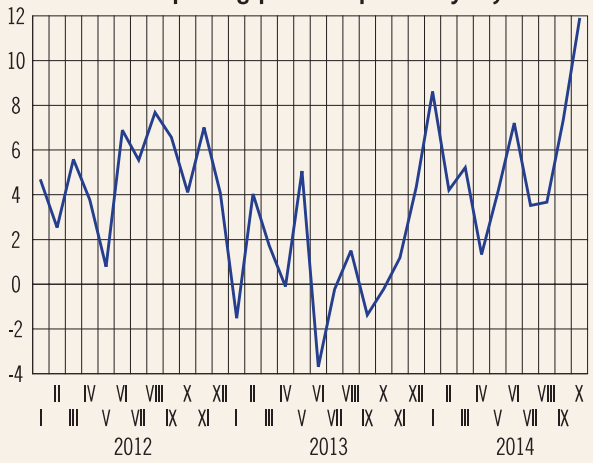
According to Rosstat data, in the first nine-month period of 2014, the decrease in milk production across all categories of farms slowed to 0.6% relative to the comparable figure for the previous year (for January-September 2013 it was 4.4%). Milk product output for this period rose by 3.2% (in January-September 2013 it dropped by 0.2%). Spare capacities at milk processing enterprises and favourable weather contributed to a rise in milk product output[3].

Resource supply and production output (growth as % to corresponding month of previous year)



Sources: Rosstat, Bank of Russia calculations.

Growth in the output of dairy products with a high share of imports in the Russian market (as % to corresponding period of previous year)



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

[1] *Source: Bank of Russia calculations based on data from Rosstat and the Federal Customs Service.*

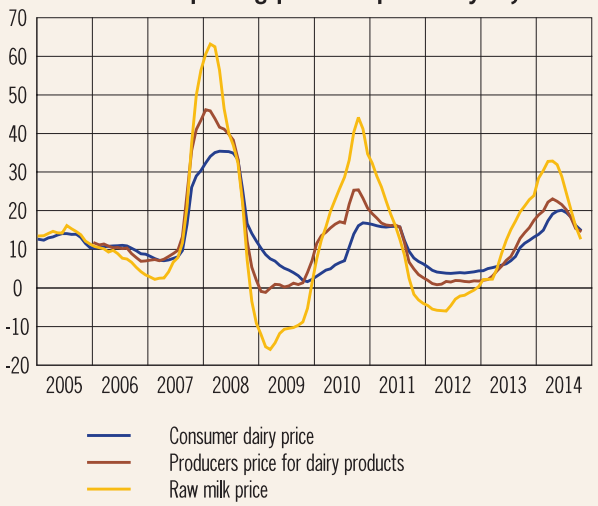
[2] *According to data from the FAO's Investment Centre.*

[3] *According to Soyuzmoloko estimates, capacity utilisation is at 55% (source: www.souzmoloko.ru).*

An important factor underlying the production expansion was import substitution: a marked acceleration in output could be seen across product types whose share of imports in the market was highest among dairy products (yoghurt, butter, cheese).

The overcoming of the consequences of supply-side shocks and the increasing production were accompanied by a slowdown in producer and consumer price inflation for milk and dairy products. In April 2014, year-on-year growth in producer prices for raw milk from cattle reached 32.9% (the highest value since January 2011) and year-on-year growth in producer prices for dairy products was up by 23.1% (the highest value since November 2013); and then they began to fall (to 13.0% and 14.7% in October 2014, respectively).

Market milk and finished products price growth (as % to corresponding period of previous year)



Source: Rosstat.

Consumer price dynamics largely matched price dynamics for raw milk and producer price inflation in meat processing. This is attributed to the fact that raw milk cost constitutes a substantial part of the price of dairy products (in milk – roughly 50%, in cheese – 70-80%[4]), and this cost can be carried over into the prices of finished products since the milk processing market is highly concentrated: the three top processing companies account for more than half of all dairy products made in Russia.

Consumer price inflation for cheese peaked in April (22.9%) and for milk and dairy products – in June 2014 (20.1%), after which dropped to 16.2% and 14.3% in November respectively. Contribution of these products' to inflation reached 0.8 pp in May-June and dropped to 0.6 pp in November (up by 0.1 pp compared with December 2013).

In the coming months, inflation for milk and dairy products is not expected to slow significantly. This is related to limited opportunities to increase raw milk output, rising ruble prices for fodder (primarily, fodder grain), and the increased cost of importing productive cattle and raw materials (dried milk and whey), and finished products.

[4] *Source: Bank of Russia calculations based on Rosstat data.*

Exchange rate pass-through effect and its characteristics under inflation targeting regime

Availability of information on the nature and scale of the exchange rate pass-through effect on prices is of vital importance to any central bank. The relationship between exchange rate dynamics and inflation is one of the key elements of the economy's transmission mechanism and is directly linked to the task of inflation forecasting over the time horizon shaped by the central bank's monetary policy. Generally speaking, the notion of an exchange rate 'pass-through effect' on inflation can be defined as a percentage change in the level of prices within a country (or, in a more narrow sense, import prices) as a result of a 1% change in the national currency's exchange rate relative to the currencies of trading partners.

As a rule, the exchange rate pass-through effect on inflation can be calculated using a wide range of methods, including both structural macroeconomic models and more simplified empirical approaches. In practice, estimates can be obtained simultaneously for both short-term and long-term horizons. However, in case of emerging markets, any estimate of the long-term pass-through effect

entails a relatively high degree of uncertainty due to the relatively low stability in the behaviour of macroeconomic indicators.

Certain theoretical studies assert that there are a number of objective structural factors underlying price formation that generally complicate estimating the impact of exchange rate dynamics in emerging markets. This is primarily due to the goods and services markets operating under conditions of imperfect competition, which allows producers to adjust their mark-ups on products as opposed to what is dictated by the change in costs due to exchange rate fluctuations (the concept of 'pricing to market'). Prices and wages' low sensitivity to changes in supply and demand, caused by the stated circumstances, combined with a number of additional factors (for instance, high transaction costs, trade barriers), often implies unstable estimates of both the exchange rate's quantitative impact on inflation and the duration of the impact. Additionally, when analysing the pass-through effect, it is important to take into consideration possible circumstances such as different scales of price changes due to the national currency depreciation or appreciation (pass-through effect 'asymmetry') and the presence of structural gaps in statistical data, sometimes caused by a change in monetary policy.

In terms of Russia's monetary policy, many modern economists support the assertion that the transition to a floating exchange rate and inflation targeting can help reduce the 'pass-through effect'. In particular, observations of a number of emerging market economies that are traditionally sensitive to external shocks indicate a relatively stronger relationship between inflation and exchange rates in these countries. However, as pointed out by Taylor (2000)[1], as certain emerging markets transitioned to a floating exchange rate and inflation targeting in the second half of the 1990s, the pass-through effect gradually started to decline, despite most countries' highly dependence on fluctuations in external economic conditions.

The reduced pass-through effect resulting from the introduction of inflation targeting is explained by the specific properties of this regime, which considers price stability as the main goal of monetary policy, followed by other goals, among which are reducing and keeping inflation at a low level that corresponds to the specific current economic development levels, ensuring that the central bank's monetary policy is independent and transparent, monitoring inflation expectations, and creating a favourable institutional environment for economic agents. Low inflation and the implementation of a policy aimed at price stability helps reduce the level of uncertainty in the economy, even with temporarily high fluctuations in the exchange rate and, as a result, in the exchange rate pass-through effect on inflation.

A number of empirical studies assessing the pass-through effect on cross-country statistical data prior to and after the introduction of inflation targeting in the majority of these countries show that the pass-through effect decreases as the exchange rate flexibility is rising. In this regard, the studies carried out by Beirne, Bijsterbosch (2009)[2] and Mihaljek, Klau (2006)[3] are rather comprehensive. The authors' empirical calculations based on panel data for 15 emerging market economies point to an overall reduction in the exchange rate pass-through effect on inflation for the majority of countries that adopted inflation targeting.

It should be noted that the results of the aforementioned cross-country studies should be interpreted with the utmost caution, because these methods are often based on a number of assumptions. This is due to the simplified specifications of the models, which in the majority of cases used panel data, the differing volatility of macroeconomic indicators and economic structures of certain countries, assumptions about the exogeneity of the exchange rate relative to prices, as well as the specific properties of the central bank's monetary policy and how much confidence economic agents have

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[1] *Taylor, J.B. (2000). Low Inflation, Pass-Through, and the Pricing Power of Firms//European Economic Review, 44, 1389-1408.*

[2] *Beirne, John & Bijsterbosch, Martin (2009). Exchange Rate Pass-through in Central and Eastern European Member States// Working Paper Series 1120, European Central Bank.*

[3] *Mihaljek, D. and Klau, M. (2006). A note on the pass-through from exchange rate and foreign price changes to inflation in selected emerging market economies//BIS Papers, No 8, November.*

in the policy. Nevertheless, the published results of these empirical studies are useful in terms of obtaining basic idea of how the pass-through effect evolves during changes in monetary policy.

A number of estimates by the Bank of Russia confirm that prices are less sensitive to exchange rate fluctuations in the Russian economy in recent years, in which the central bank has enacted measures to increase the flexibility of the exchange rate and move to inflation targeting. Our calculations show that over the last few years the nominal effective ruble exchange rate pass-through effect on inflation dropped from 0.2-0.3 in 2009-2010 to 0.13-0.15 as of the end of 2014[4].

[4] *For more details see also Monetary Policy Report No. 3 (7), September 2014.*

Inflation expectations

Households

In November 2014, according to Bank of Russia estimates, household inflationary expectations continued to rise. According to inFOM data, direct estimates of observable annual inflation and inflationary expectations for the forthcoming year dropped, but they remained high. Inflation expectations for next month worsened again. The number of respondents experiencing a negative impact from the restrictions on imports of certain food products was virtually unchanged relative to October. Households identified the ruble depreciation and the coming New Year holidays as the factors having the greatest impact on inflation.

According to Bank of Russia estimates[2], in November 2014, inflation expectations continued to rise. At the same time, in October, inflation expectations were virtually unchanged relative to September according to our estimates, while in November they rose by more than 1 pp. Inflation estimates for the forthcoming year are 10.9% using a normal distribution or 10.4% using a uniform distribution (versus 9.8% and 9.4% in October). Estimates using a non-central Student's distribution rose sharply from 12.6% in October to 16.4% in November, exceeding the interval estimate (14.9%).

According to a household survey by inFOM, in November 2014 the median inflation expected among households for the forthcoming year dropped, but still remained high. Inflation estimates for the year also reduced, which contradicts actual consumer price changes.

However, a qualitative analysis points to deterioration in the public's perception of the last 12 months' inflation and expectations of future inflation. The share of respondents who saw a step-up in inflation continued to rise (to 41%). After a fall in September-October, in November of this year the share of respondents who indicated that inflation might accelerate over the coming year again increased. At the same time, the share of those who expect inflation to slow down remained unchanged.

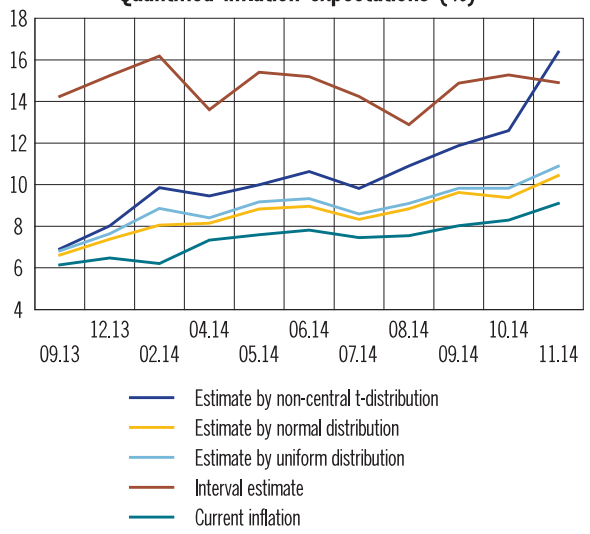
With respect to the one-month horizon, the share of respondents expecting prices to rise increased (to 78%), primarily due to respondents who believe that prices will rise 'significantly' (their share increased by 3 pp to 26%). The proportion of those respondents who saw prices rise within the last month was unchanged and remained the highest (94%) in the entire observation period.

Opinions about inflation inertia, the ruble depreciation, and the approach of the New Year holidays dominated in the responses to an open question about possible causes of the inflation.

In November, the public's concern over rising prices for products affected by the sanctions (meat and poultry, cheese, sausages, fruit and vegetables, fish and sea food) dropped markedly. This was also reflected in respondents' answers to the

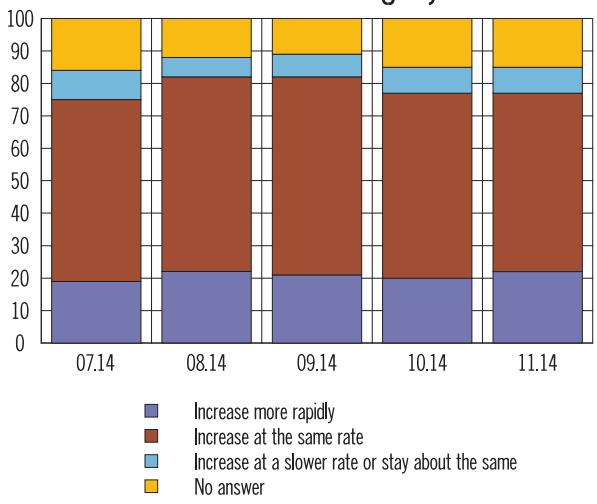
[2] *Based on inFOM survey data.*

Quantified inflation expectations (%)



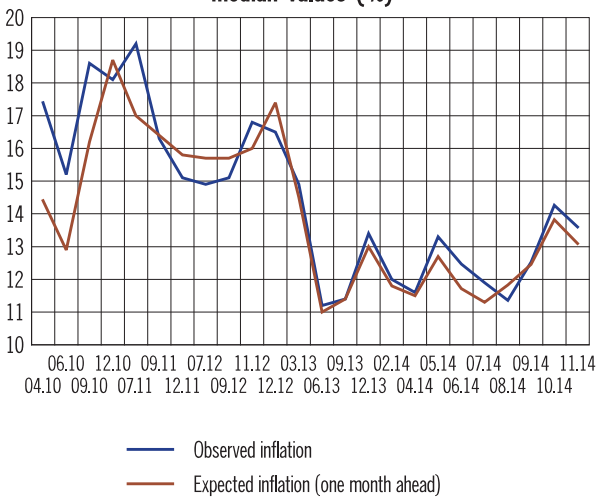
Sources: Public Opinion Foundation survey results, Bank of Russia calculations.

In your opinion, how will the prices develop in the next 12 months (year)?



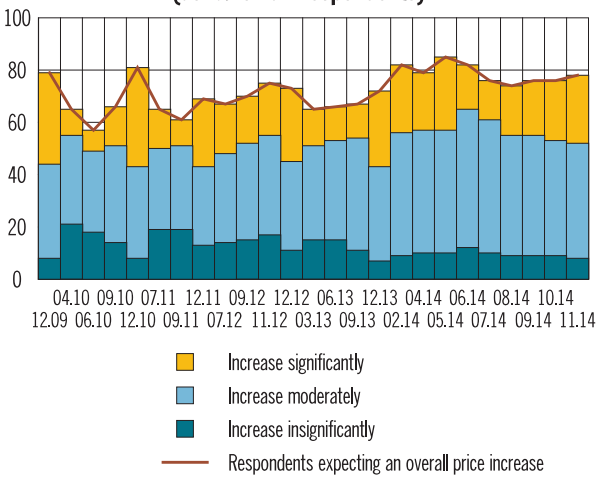
Source: Public Opinion Foundation survey results.

Direct inflation estimates: median values (%)



Source: Public Opinion Foundation survey results.

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



Source: Public Opinion Foundation survey results.

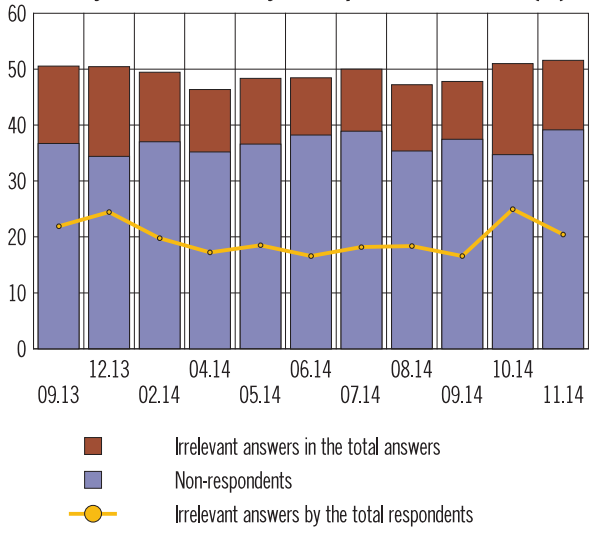
question regarding the import restrictions' effect on their lives. The share of respondents reporting that they were 'significantly impacted' by the restrictions now and would be influenced by them in the future dropped relative to the results of October's survey. Additionally, the scale of the sanctions' impact on food prices for the month remained virtually unchanged. In November, 67% of those surveyed thought that prices had increased 'very significantly or moderately' after the ban and 60% thought that the growth would continue. Similar results were obtained through a similar survey by the Levada-Centre.

However, the share of respondents seeing accelerating inflation for cereals, pasta, eggs, sugar, and salt increased considerably, reflecting the actual price increases for these goods in November this year.

In November, as in the previous month, respondents identified meat and poultry, cheese, sausage, clothing, and footwear as goods that they would have to cut down because of diminished purchasing power of their income.

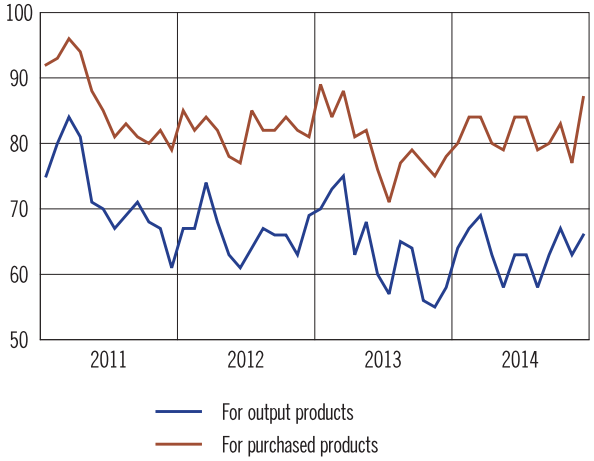
The results of the survey by ROMIR research holding indicate that propensity to save has increased significantly in family

Analysis of consistency of respondents' answers (%)



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

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



Source: Russian Economic Barometer survey results.

budgets over the last two years. According to survey participants, the most popular method of countering the rising prices was redistributing the budget in favour of foodstuffs and the most essential non-food goods (in November 2014, 32% of those surveyed responded this way versus with 20% in 2012). The proportion of respondents who replied that they had to refrain from purchasing certain types of food products doubled over the last two years (to 19%).

Businesses

Surveys of businesses from various economic segments have generally suggested moderate growth in inflation expectations for produced and purchased products. Businesses in certain industries feared certain unit costs would rise as a result of accelerated price increases for purchased products compared with output price increases.

According to REB surveys, in September 2014 business leaders tended to view prices for output products as stable for the coming three months. The price increases observed toward the end of the year correspond to seasonal price changes. The majority of businesses reported more pronounced price increases for purchased products as compared with output price dynamics. (64% of respondents reported price increase for purchased products, while only 15% reported output price increase.) Representative from the chemical, food, and metallurgical industries were most concerned about an unfavourable shift in relative prices.

According to the surveys conducted by the Bank of Russia in October, respondents' concerns were again dominated by expectations of price rise. The largest growth in the share of businesses that believe prices for finished products (services) will rise in the next three months was seen among businesses producing electrical and optical equipment, and textile, sewing, chemical and metal products.

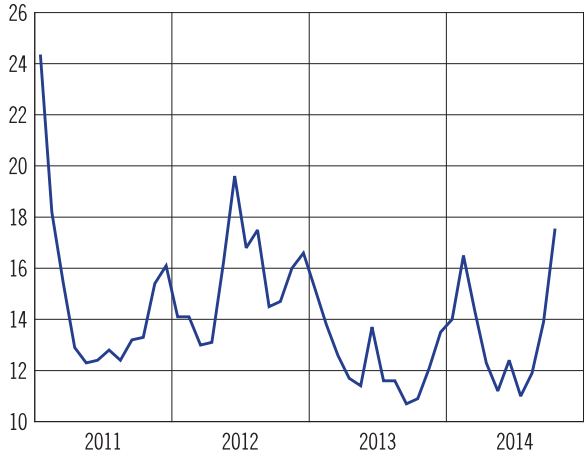
Professional analysts

In November, professional analysts' inflation forecasts for the end of 2014 continued to rise in view of the considerable ruble depreciation and the accelerated inflation observed for certain categories of goods. Experts' inflationary expectations for 2015 also rose considerably.

This November, professional analysts continued to make upward revisions of their 2014 inflation forecasts. The revision of these estimates was primarily influenced by the ruble's accelerating depreciation (fed by geopolitical instability and falling oil prices).

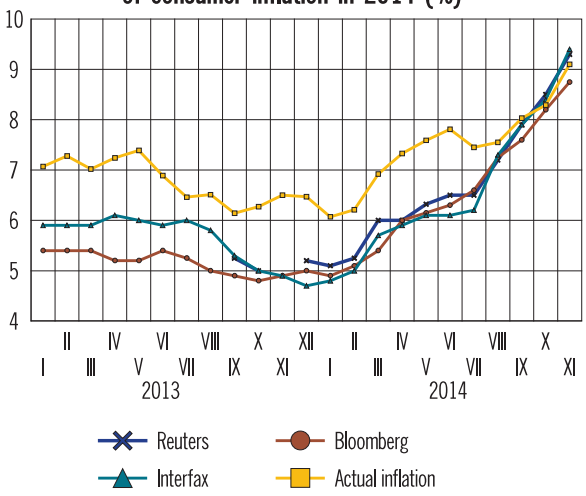
November's consensus forecasts for 2014 inflation ranged between 8.8% and 9.4%,

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



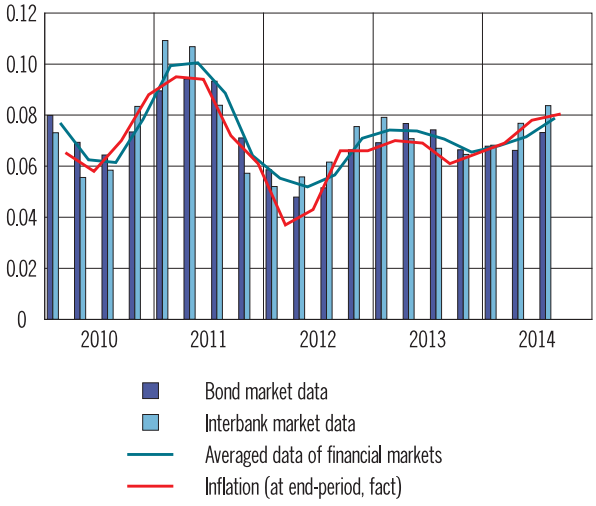
Source: Bank of Russia.

Professional analysts' consensus-forecasts of consumer inflation in 2014 (%)



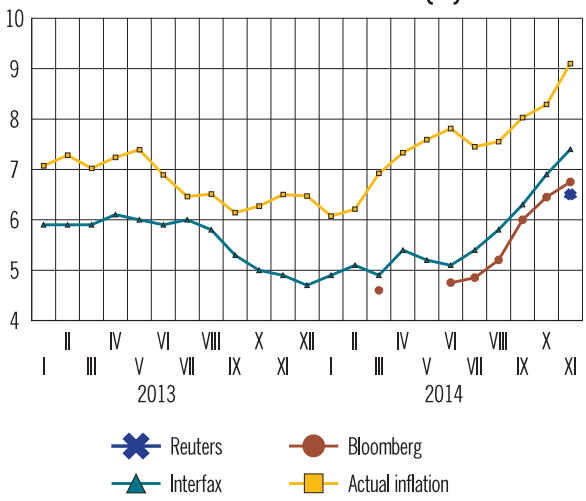
Sources: Rosstat, Interfax, Bloomberg, Reuters.

Inflation expectations (estimate derived from financial market data, %)



Source: Bank of Russia calculations.

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



Sources: Rosstat, Interfax, Bloomberg, Reuters.

significantly exceeding October's estimates. End-2014 median expected inflation, calculated based on the accuracy of Bloomberg survey participants' forecasts, was 8.4%. The fact that the median value is lower than consensus forecasts could mean that experts are taking into consideration the impact of factors that constrain price increases, such as sluggish demand, good harvest, generally favourable situation in global agricultural markets, and the moderating influence of falling oil prices on costs.

Short-term inflationary expectations, which were calculated using financial market data, also pointed toward accelerating inflation expectations for the next quarter in 2014 Q3.

Experts also continued to revise their inflation forecasts upward for 2015. According to estimates, inflation forecasts are around 7% (the previous month they were around 6%).

According to surveys of professional experts conducted by the Development Centre Institute regarding the price dynamics outlook through 2020, the elevated inflation is temporary: after increasing to 8.6% this year and 7.3% next year, it is expected to return to its gradual slowing path.

II. Economic outlook, risk assessment and monetary policy decisions

II.1. Economic outlook in 2015-2017

In the 'Guidelines for the Single State Monetary Policy in 2015 and for 2016 and 2017', the Bank of Russia considered five economic development scenarios that differed in their assumptions regarding changes in oil prices and the duration of the sanctions. Current trends in global energy markets suggest that the Russian economy is developing similarly to IIIb scenario. At the same time, a number of trends observed in the global economy and in the domestic foreign exchange market in recent months are calling for certain key assumptions of this scenario to be reconsidered.

Foreign economic conditions will have a restraining influence on the Russian economy over the coming years. Compared with the last quarter's estimate, the forecast of the external economic climate has become even less favourable.

In October-November, oil, coal, and metal prices continued to fall, making it necessary to adjust the oil price forecast downward and downgrade the forecast of terms of trade on the whole for 2014 Q4 and 2015 (even relative to the IIIb scenario). At present, the Bank of Russia's baseline scenario establishes an average annual oil price in 2015-2017 of roughly $80 per barrel. The price of Urals crude may increase somewhat over the coming quarters as the global economy and demand for oil recovers. This should be helped by central banks' stimulus measures (in the euro area, Japan, and China). Oil prices could also be supported by falling output from OPEC countries, which still cannot be ruled out despite OPEC's decision taken on 27 November to keep quotas unchanged (current prices are uncomfortable for many countries), as well as the freezing of alternative oil extraction projects which are not profitable at current prices.

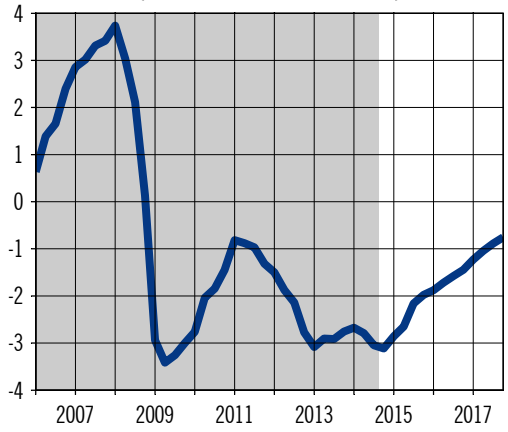
The fall in oil and other commodity prices relative to previous years will lead to a deterioration in terms of trade and a drop in income from exports. A slight revival in global economic growth (and demand for Russian exports) will not be enough to offset this effect.

The normalisation of monetary policy in the medium term by a larger number of central banks in advanced countries will lead to a gradual rise in interest rates in external markets and a higher cost of borrowing for all emerging market economies. In addition, the consequences of the sanctions introduced against Russian companies will be felt over the entire period under consideration. The sanctions will primarily manifest themselves through poor access to borrowing in the financial markets of advanced countries and the suspension of a number of investment projects dependent on foreign technologies.

Foreign economic conditions will be most constraining in 2015. Then the situation is expected to improve gradually as the diversification of sources of funding, which began in recent months, starts to intensify and new suppliers and logistics chains begin to emerge. However, compared with 2012-2014, the external economic situation will be less favourable over the entire forecast period.

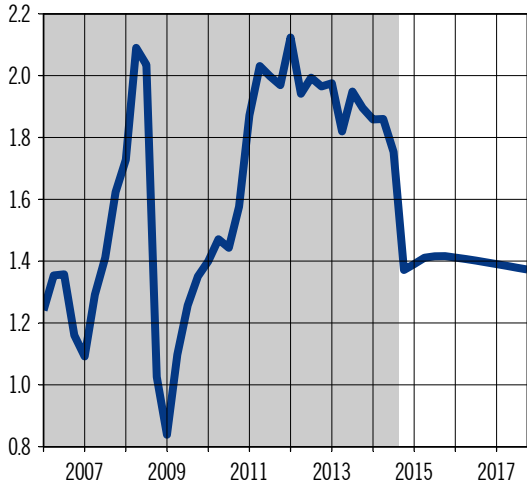
Thus, foreign economic conditions will continue to be a factor restricting economic growth in Russia. In contrast, the change in the exchange rate mechanism creates the necessary conditions for the Russian economy to adapt more quickly to the changed external environment. In addition, the fiscal policy implemented under budget rules will make a

External sector output gap (as % of equilibrium level)



Note: estimates are based on the output gap in the euro area (Eurpean Commission and IMF estimates) adjusted by the expected output dynamics in Russia's main trading partners.
Sources: European Commission, IMF, Bank of Russia calculations.

Terms of trade



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

moderate positive contribution to aggregate demand dynamics, partially offsetting the restraining influence of external conditions on the economy, thus maintaining a countercyclical stance.

In this environment, the Russian economy's growth rate is expected to fall moderately. According to Bank of Russia's estimates, GDP growth will be close to zero in 2015, as a fall in average annual oil prices (relative to 2014) will be offset by ruble exchange rate fluctuations (including the ruble depreciation already observed at the end of 2014). In the future, as the stimulatory effect of exchange rate fluctuations is exhausted, and with average annual oil prices remaining stable, the slowdown in Russian economic growth will be more severe: GDP could drop by 0.6-0.8% in 2016. In 2017, as import substitution processes develop and output of export goods in the non-oil-and-gas sector increases, Russian economic growth rates are expected to recover to 1.0-1.2%.

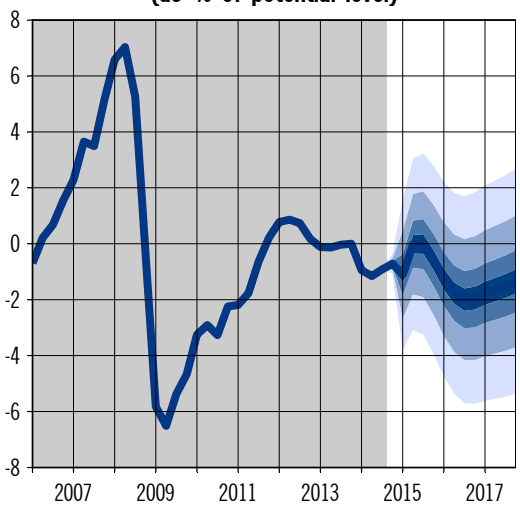
Economic agents' decelerated income growth combined with slower consumer lending, and the renewed propensity to save will cause consumer demand to cool. According to forecasts, household final consumption expenditure will fall by 0.2-0.4% in 2015 and by 0.8-1.0% in 2016. In 2017, as economic activity recovers household income growth rates are likely to rise. A slowdown in inflation will also help to restore income purchasing power. Household expenditure is forecast to increase by 0.9-1.0% in 2017.

Investment activity is expected to remain weak with oil prices lower than in 2014 and external financing harder to access. Despite government support (planned measures to fund infrastructure projects through the National Wealth Fund, the federal budget's increased investment spending in 2015) and the start of a large investment project as part of a long-term cooperation with China to expand gas exports, a lower fixed capital investment is expected to continue in 2015-2016. The rate at which gross fixed capital formation decreases is forecast at 5.0-5.5% in 2015-2016. In 2017, fixed capital investment is expected to grow by 1.5-2%.

According to the estimates, net exports will make a significant positive contribution to economic growth in 2015-2016 as the result of a significant slowdown in import growth due to weak domestic demand.

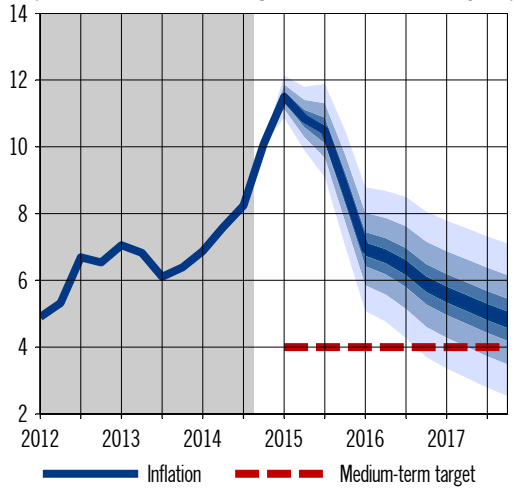
In the coming years, oil prices remaining below the levels of 2012-the first half of 2014 will produce the conditions for a structural slowdown of economic growth in Russia. With slower potential GDP growth rates, the negative

Output gap
(as % of potential level)



Source: Bank of Russia calculations.

Inflation
(as % of corresponding period of previous year)



Source: Bank of Russia calculations.

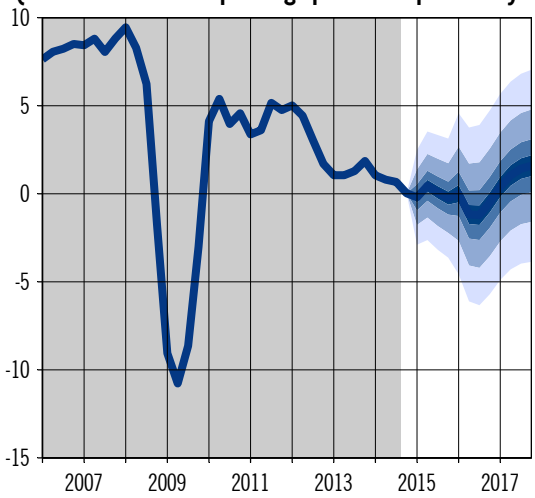
output gap will not exceed 2% in 2015-2016, and beginning from 2017 the output gap will start to close gradually.

As the slowdown in economic growth in 2015-2016 will be influenced not only by cyclical, but structural factors, a significant downward pressure on inflation from demand is not expected. Inflation will remain high in the first half of 2015 as a result of the ruble depreciation occurred in 2014 Q4, as well as the persistent effect of import restrictions introduced in August 2014 (which is expected to abate). According to the estimates, inflation could reach 11.5% in 2015 Q1 and will start to drop thereafter. The velocity at which inflation falls will largely be determined by whether the inertia formerly characteristic of inflation processes and the adaptive way in which inflation expectations form persist under such drastically changing conditions. If the import restrictions remain, inflation is forecast to approach its target of 4% only by the end of 2017.

These conditions form the incentives for a tight monetary policy in 2015. In 2016-2017, as the impact of pro-inflationary factors wanes, inflation and inflationary expectations are predicted to fall, which will allow a looser monetary policy.

If the baseline forecast is realised, we can expect a moderate weakening of demand for borrowed funds from the non-financial sector and stabilisation of the loan-to-GDP ratio at the current level in 2015-2016. In this case, annual growth rates in bank lending to the economy will be between 5% and 10% during this period. With the relatively stable ruble exchange rate, deposits in the national currency as a percentage of bank liabilities will not change significantly, and growth rates for ruble money supply (M2 aggregate) will be close to lending growth rates. Higher economic growth in 2017 will raise demand for loans, including that

GDP growth rates
(as % of the correcponding quarter of previous year)



Source: Bank of Russia calculations.

resulted in the deferred demand of the two previous years, which will slightly increase the annual growth rates of credit aggregates and money supply (to 8-11%).

Balance of payments

Lower oil prices will cause a 6-8% fall in export volumes in dollar terms in 2015. Ruble exchange rate dynamics are not expected to be enough to significantly bolster exports. However, a decrease in the current account surplus will be smaller: imports in dollar terms are expected to drop by 5-7% as a result of the slowdown in economic growth and the ruble depreciation. The current account will reduce from $64 billion in 2014 to $56 billion in 2015. In 2016, the current account surplus is expected to remain virtually unchanged ($55 billion) given persistently low economic growth (which will continue to constrain imports), stable oil prices, and the lack of significant opportunities to raise physical volumes of both oil-and-gas and non-oil-and-gas exports. In 2017, a slight decrease in the current account surplus (to $49 billion) is expected following rapid growth in imports amid the recovery of domestic demand.

The financial sanctions introduced against Russia will have a strong impact on banks' and other sectors' foreign liabilities. Hampered access to external borrowings means that, unlike in previous years, companies will not be able to refinance a significant proportion of their debts due for repayment in 2015-2017 and they will have to pay them off immediately.

Total private sector payments on external debt in 2015 are estimated to be roughly $120 billion, including interest payments. Payments on banking sector debts make up roughly 35% of this amount and the remainder is made up of payments by the non-financial sector. A small share of external debt is expected to be successfully refinanced in international markets. In addition, according to Bank of Russia estimates based on polls of major companies, a little more than 10% of the total external debt is debt owed by residents to non-residents in a single company group (intra-group loans). The remaining maturing debts will have to be repaid. Total repayments of external debt in 2015 are expected to be about $70 billion. The forced reduction in external debt will be the main component of capital outflows over this period. Residents may make payments from a buffer of accumulated liquid foreign exchange assets, current revenues from foreign trade, and Bank of Russia's FX liquidity provision operations on a reverse basis.

In addition, the sanctions, together with the immediate deterioration of the Russian economy's growth prospects, will lead to a decrease in demand for direct and portfolio investments by non-residents in Russian assets, with a downward forecast for these items as well.

At the same time, lower estimated economic growth rates will cause companies' financial standing to deteriorate further, which will help to reduce capital outflow in the form of investments in foreign assets, primarily direct ones. This will partially offset the deterioration of non-resident investments in Russian assets. As a result, the private sector's net capital outflow is forecast to be roughly $120 billion in 2015, about $75 billion in 2016, and around $55 billion in 2017.

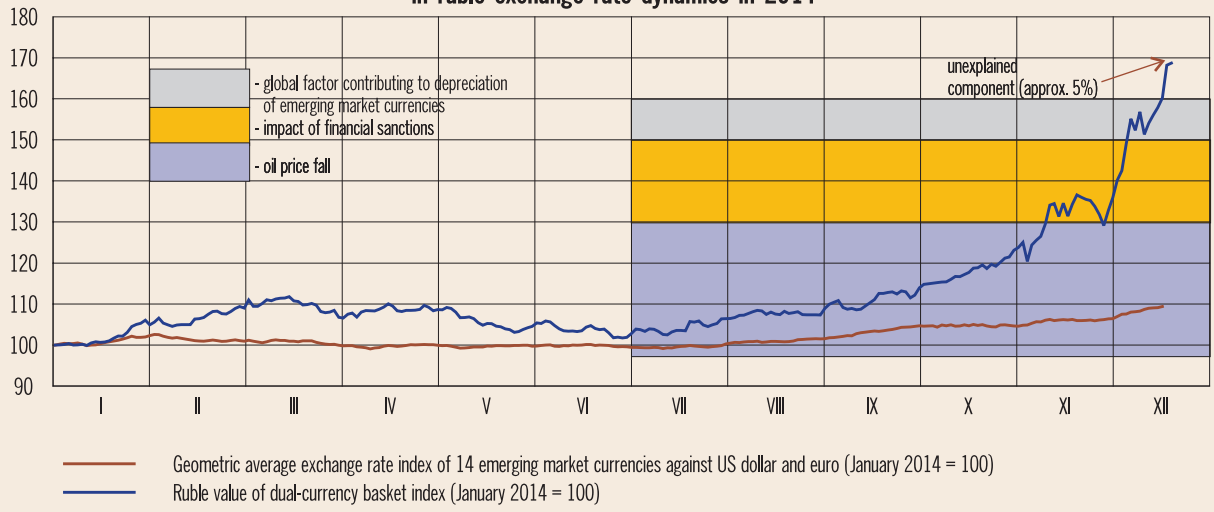
Ruble exchange rate fluctuations in 2014 and the fundamental equilibrium exchange rate

The fundamentally justified national currency exchange rate means the rate determined by supply and demand in the foreign exchange market, taking into account a wide range of macroeconomic factors that characterise internal and external economic conditions. The main factor underpinning the exchange rate formation in the Russian economy tends to be fluctuations in oil prices. However, for the majority of 2014, the ruble exchange rate has been depreciating, highly volatile, and largely determined not only by the terms of trade, but also by a number of other factors. In particular, the greatest impact on ruble exchange rate fluctuations came from the capital outflow from emerging markets due to the tapering of quantitative easing monetary policy in the USA, as well as investors' reassessment of economic risks in Russia following the introduction of sanctions.

According to empirical results, the sensitivity of exchange rate fluctuations in Russia to changes in oil prices has considerably increased in recent years. This is due to the Bank of Russia's transition to the floating exchange rate, as well as the specific correlation between the exchange rate and its major fundamental factors amid financial sanctions. The contribution of different factors to ruble exchange rate fluctuations in 2014 was evaluated using the modified model of the ruble behavioral equilibrium exchange rate. Current estimates show that the absolute contribution of lower oil prices to the depreciation of the national currency from early 2014 approaches to 30 pp. The contribution of financial sanctions against the Russian economy is assessed at over 20 pp, while that of the depreciation of the currencies of emerging markets against major global currencies on the whole at about 10 pp. The portion of the unexplained component of ruble exchange rate fluctuations is estimated at 5 pp. The contribution of speculative motives to the depreciation of the national currency from early 2014 is attributable to each of the above factors and stands at around 8-10 pp, according to our estimates.

In view of the above, the ruble exchange rate against most global currencies has now depreciated considerably relative to its fundamental equilibrium level. As of mid-December 2014, the foreign exchange rate gap ranged from 10% to 20%, according to estimates. However, if oil prices stabilise in the near future, the necessary prerequisites for the appreciation of the national currency will occur.

Model estimates of contributions of various factor groups in ruble exchange rate dynamics in 2014



Sources: Thomson Reuters, Bank of Russia calculations.

II.2. Risk assessment

There are risks of a more substantial downturn in oil prices due to the high uncertainty in the estimates of the cost of extracting oil from "unconventional" sources. If a large number of projects continue to be profitable with oil prices below $70 per barrel and plans to increase production are implemented in 'old' export countries, competition between traditional suppliers and new sources could lower oil prices in 2015-2017 to $60 per barrel. Therefore, the Bank of Russia has also considered the Russia's economic development stress scenario in which oil prices are roughly $60 per barrel in 2015-2017.

The fiscal policy implemented under budget rules will somewhat mitigate the negative effect of a plunge in oil prices. Accumulated sovereign funds will be used for budgetary stimulation in the event of a sharp decline in government revenue and limited access to all sources of deficit financing. However, in view of the lingering economic impact of other negative factors, economic growth rates are expected to fall to the estimated 4.5-4.7% in 2015 and about 1.0% in 2016.

Persistent low oil prices will lead to a drop, substantially larger than forecast in the baseline scenario, in potential output growth rates in 2015. However, these rates are expected to recover rapidly in future. On the one hand, this will be due to a lower base in 2015. On the other hand, it will be the result of more active economic restructuring under stress conditions.

As the economy adapts to the changing foreign economic conditions, which will be facilitated by the new exchange rate regime, an increase in economic growth is expected as a result of import substitution processes and the higher competitiveness of Russian exports, including non-oil-and-gas exports. Economic growth will show signs of a recovery, so short-term GDP growth rates are likely to significantly exceed the values that could potentially be achieved in the medium term. As a result, economic growth rates could reach 5.6-5.8% in 2017.

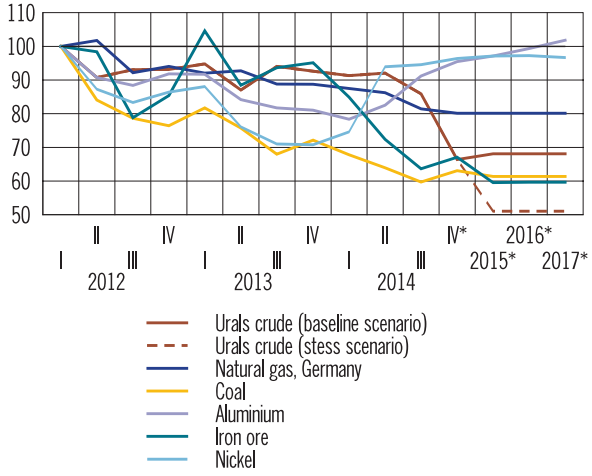
A fall in household final consumption expenditure is expected to reach 6.3-6.5% in 2015. Consumer demand is forecast to recover by 2017 by up to 4.7-4.9%.

Investment demand is expected to be weak in 2015-2016. Fixed capital investment is estimated to fall by 10.1-10.3% in 2015 and by 1.1-1.3% in 2016. In 2017, assuming that the favourable competitive environment for Russian producers continues, which is being supported among other things by ruble exchange rate dynamics, investment activity is expected to recover to 5.1-5.3%.

A steady change in the ratio between prices for domestic and imported goods will make it possible to satisfy growing domestic demand without a commensurate increase in imports. As a result, net exports' contribution to economic growth is expected to be positive in 2015-2016 and slightly negative in 2017.

Exchange rate dynamics combined with the impact of the sanctions introduced in August 2014 will preserve relatively high consumer price growth in the first half of 2015. Weak domestic demand is expected to exert significant downward pressure on inflation in 2015-2016. As a result, inflation will drop to

Forecasts of global prices on main Russian export commodities (2012 Q1 = 100)



** Forecast.*
Sources: IMF, on oil: Reuters data, Bank of Russia forecast.

the medium-term target of 4% by the end of 2017, which will be possible given a significant loosening of monetary policy.

If the stress scenario is realised in 2015, demand for loans from the non-financial sector is expected to weaken significantly. Consequently, annual lending growth will not exceed 5%. As economic growth recovers, annual lending growth rates are estimated to increase to 4-8% in 2016 and 13-18% in 2017. Due to the changed dollarisation of bank liabilities, ruble money supply growth rates (M2 aggregate) will lag behind lending growth in 2016-2017.

Balance of payments

A fall in oil prices greater than in the baseline scenario (by nearly 40% against about 20% in the baseline scenario) will lead to a significant (more than 25%) decline in export volumes. However, a drop in the import of goods and services (by over 20%) caused mainly by a sharp reduction in domestic demand will help to maintain the current account surplus. Under the risk scenario, the current account surplus will be slightly less than $40 billion in 2015. A small current account surplus is forecast to further remain due to a certain increase in non-oil-and-gas exports and the activation of import substitution processes through the adjustment of relative prices.

As in the baseline scenario, Russian companies and banks are expected to have to repay external debts in the amount of about $70 billion in 2015. At the same time, lower total income in the economy will reduce demand for foreign assets. As a result, the private sector's net capital outflow is forecast to be roughly $115 billion in 2015, about $70 billion in 2016, and around $60 billion in 2017.

In addition, international reserves will need to be reduced to compile the balance of payments with the ruble exchange rate at a level that does not threaten financial stability. Under this scenario, the Bank of Russia is assumed to actively conduct FX repos and operations to convert Reserve Fund resources in the domestic foreign exchange market. Under the risk scenario, the Reserve Fund expenditure is forecast to be far larger than in the baseline scenario, which could lead to lower demand for Bank of Russia repos when converting funds in the market.

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

Over the period under consideration, the Bank of Russia conducted its monetary policy amid an unstable situation in the domestic foreign exchange market. FX liquidity scarcity following the introduction of financial sanctions against a number of Russian banks and companies led to a significant drop in the spread between FX swap rates and the Bank of Russia's key rate, which affected the adjacent market of unsecured interbank lending in rubles. This made it difficult for the Bank of Russia to achieve its operational goal of keeping money market interest rates close to the key rate. It also engendered risks to the regularity of payments.

To limit the downward impact of FX swap rates on other money market segments and to support the stable functioning of the domestic financial market, the Bank of Russia decided to conduct FX swaps to sell US dollars for rubles beginning 17 September 2014. Operations were conducted to provide funds for 1 day with 'today/tomorrow' and 'tomorrow/day-after-tomorrow' settlements and interest rates fixed at the key rate minus 1 pp on the ruble leg and 1.50% p.a. on the foreign currency leg. The value of operations was limited to $1 billion and $2 billion per day for 'today/tomorrow' and 'tomorrow/day-after-tomorrow' transactions respectively. These parameters were based on the goal of new operations which, like Bank of Russia other standing facilities, were aimed at limiting fluctuations in money market interest rates and preventing non-payments among market participants in case of a short-term FX liquidity deficit, and not providing funds to refinance existing external debts.

With growing tensions in the financial markets, the Bank of Russia also provided foreign currency through repos. Beginning 29 October 2014, operations were introduced with terms of 28 days and 1 week, and since 17 November - with a term of 12 months. The minimum interest rates were initially set at the LIBOR rates in the corresponding currencies for comparable terms, plus 2.25 pp and 2.00 pp respectively for 28-day and 1-week terms. However, the Bank of Russia soon set a single spread of 1.50 pp on market rates for all terms for foreign currency allotment. Since 4 December 2014, the Bank of Russia reduced this spread to 0.50 pp to make foreign currency provision operations more efficient. In December, the Bank of Russia added the ability for borrowers to early withdraw from FX repos. In addition, work was completed to revise how to account for Eurobonds when accepting them as collateral against Bank of Russia operations, which allowed credit institutions to use them when borrowing foreign currency from the Bank of Russia on a reverse basis.

The set of measures the Bank of Russia adopted to stabilise the situation in the domestic foreign exchange market and adjacent money market segments was supplemented by using a conservative approach to provide ruble liquidity. In particular, under this decision, beginning 11 November 2014 the Bank of Russia started restricting the provision of ruble funds during refinancing auctions and set a limit on FX swaps to purchase US dollars and euros at an equivalent of $2 billion.

Through these changes to its monetary policy, the Bank of Russia enhanced the role of FX provision operations on a reverse basis. The Bank of Russia plans to continue expanding its instruments to supply foreign currency. The possibility of providing funds secured against foreign currency loans (similar to granting ruble loans in accordance with Regulation No. 312-P, dated 12 November 2007, 'On the Procedure for Extending by the Bank of Russia Loans Secured by Assets or Guarantees to Credit Institutions') is currently being considered. Compared with foreign exchange interventions, these operations

allow the Bank of Russia to have a presence in the domestic foreign exchange market by exerting a less direct influence on exchange rate dynamics. These reforms were made as part of the transition to the new exchange rate policy regime, i.e. the floating exchange rate.

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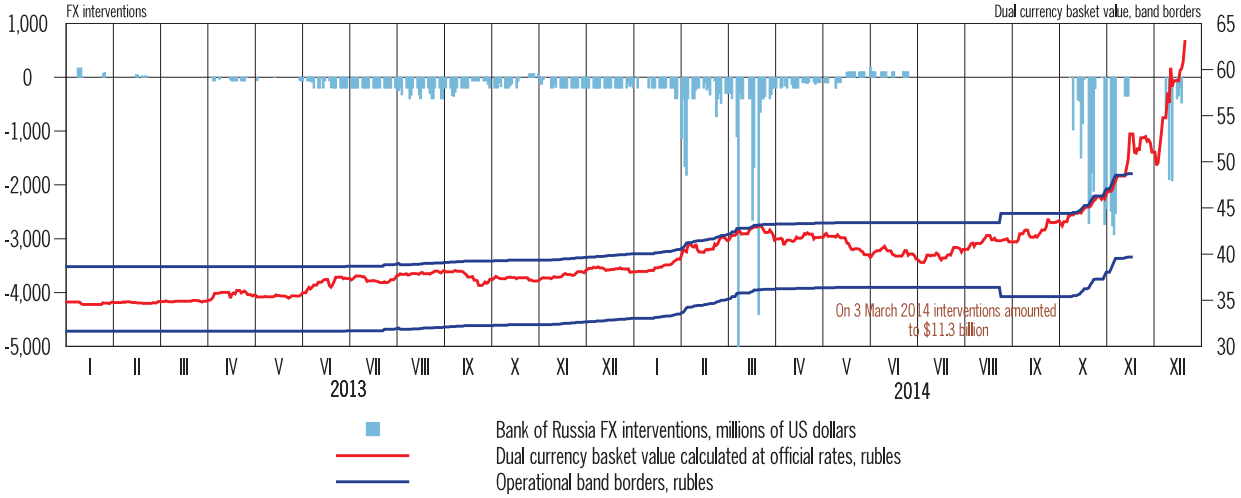
The start of 2014 Q4 saw the ruble becoming more volatile against major global currencies in the domestic foreign exchange market. The Bank of Russia adhered to the previous exchange rate policy, which called for foreign exchange interventions only when the value of the dual currency basket reached the operational band's borders, with no restrictions on the size of interventions. In October, the Bank of Russia conducted significant foreign exchange interventions, but these operations only helped to curb the ruble depreciation for a short time. Considering the relatively small size of cumulative interventions required to shift the band, current conditions contributed to increased speculative activity: exchange trading volumes rose considerably in October 2014. In addition, the predictability of the behavior of the Bank of Russia, which had been acting in accordance with a previously announced rule, reduced the market risks of the game against the ruble. On the whole, these factors led to the exchange rate significantly exceeding the level justified by macroeconomic factors. This effect still persists: the Bank of Russia estimates that the ruble exchange rate deviates from the fundamental equilibrium value by about 10-20%.

To reduce speculative activity and prevent the excessive depreciation of the national currency, beginning 10 November the Bank of Russia abolished the previous exchange rate policy by eliminating the band of the ruble value of the dual currency basket and regular foreign exchange interventions at the borders of the band and beyond it. This change actually corresponds to the Bank of Russia's introduction of a floating exchange rate, which was planned as part of the transition to inflation targeting by 1 January 2015. Reducing incentives for speculation by domestic foreign exchange market participants contributed to a decrease in exchange trading volumes. Moreover, the volatility of the intra-day ruble exchange rate increased and the national currency depreciated further. Under these conditions, to avoid any risks to financial stability, since the beginning of December the Bank of Russia conducted interventions to sell $5.4 billion in total as part of the new policy.

As a result of the transition to the floating exchange rate regime, the Bank of Russia's

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



Source: Bank of Russia calculations.

monetary policy, which is aimed at ensuring price stability, should become more efficient through the strengthening of the transmission mechanism's interest rate channel. This will also help to ensure that the economy adapts more quickly to changes in external conditions, thereby increasing its resilience to negative shocks such as those observed at present.

Foreign currency provided by central banks: global experience

Foreign currency provided by a central bank to credit institutions is not a traditional monetary policy instrument. Often such operations are a temporary and extreme measure to make up a foreign currency deficit in the economy. Unlike foreign exchange interventions, refinancing in foreign currency is not strictly aimed at influencing exchange rates, but rather at stabilising the situation in the financial market as a whole.

In the most acute phase of the financial crisis, central banks in both developed and developing countries used instruments to provide foreign currency. Between the end of 2007 and the beginning of 2010, when access to international markets became limited, demand for foreign currency rose, primarily in those countries with a significant imbalance in bank foreign currency assets and liabilities, and in countries that depended on external financing. Refinancing in foreign currency allowed credit institutions with a foreign currency liquidity deficit to continue servicing their previously incurred liabilities. It also played an important stabilising role by giving the market a signal that the central bank would maintain the necessary level of foreign currency liquidity, thereby limiting speculative attacks on the national currency.

During the financial crisis, the instruments used most widely by central banks to supply foreign currency refinancing were US dollar and euro repos and FX swaps. These instruments were used both on an auction basis (Australia, Denmark, Sweden, South Korea, Mexico) and at fixed rates without an upper limit on the amount of funds provided (euro area, Switzerland, Great Britain, Japan).

Instruments used by central banks to provide foreign currency

Secured loans or repos	Great Britain, euro area, Switzerland, Philippines, Turkey, Brazil, Vietnam, Argentina, South Korea.
FX swaps	Australia, New Zealand, Canada, Denmark, Sweden, Norway, South Korea, Brazil, Mexico, Singapore, euro area, Switzerland, Great Britain, Hungary, Japan, Hong Kong, India, Indonesia, Poland, Serbia, Chile.
FX refinancing for non-financial organisations	– India (secured loans provided for oil refineries);
	– Indonesia (a special export financial agency was set up to provide exporters with guarantees and foreign currency loans);
	– South Korea (the government provided 3-year guarantees on foreign currency loans, the central bank and the government provided loans directly to exporters);
	– Hungary (the government provided foreign currency loans to the state development bank for subsequent lending to businesses);
	– Brazil (the central bank provided secured US dollar loans directly to companies for a term of 1 year).
Swap agreements between the central bank and banks (swap lines)	– Australia, Canada, euro area, Japan, Singapore, Norway, New Zealand, Denmark, Sweden, Switzerland, Great Britain, Brazil, Mexico, South Korea with the USA;
	– China with Japan and South Korea;
	– Hong Kong with the Netherlands;
	– Estonia with Sweden;
	– Hungary with the euro area;
	– Iceland with Denmark, Norway, Sweden and Finland;
	– Poland with Switzerland and euro area.

Sources: IMF, materials of foreign central banks.

Central banks in a number of countries relaxed collateral requirements to expand opportunities for secured refinancing in foreign currency, increased limits, reduced interest rates, extended the maturity

of granted loans, and simplified documentation to obtain foreign currency loans. Some central banks in emerging market economies also offered foreign currency refinancing directly to the corporate sector and exporters. To reduce pressure on the exchange rate, the central banks of Brazil, Turkey, Chile, Columbia, and Mexico conducted foreign exchange interventions as part of their floating exchange rate policy in addition to using instruments to provide foreign currency.

Given limited international reserves, central banks in a number of countries signed swap agreements (swap lines) with the US Federal Reserve to provide US dollars and with the European Central Bank to expand euro supply. Swap lines between the Fed and the central banks of different countries were established on similar conditions: the minimum interest rate was USD OIS+100bp (in November 2011, the rate was reduced to USD OIS+50bp) and the terms for dollar provision were 1 day, 1 week, 1 month, and 3 months.

In May 2010, when pressure on the foreign exchange market intensified again, foreign currency was again supplied in a number of countries (euro area countries, Great Britain, Switzerland, Canada, Japan). These programmes are expected to end in 2014.

Glossary

Autonomous 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 autonomous factors include changes in cash in circulation, changes in general government account balances with the Bank of Russia, Bank of Russia operations in the domestic foreign exchange market (excluding operations regulating banking sector liquidity), as well as changes in required reserves deposited by credit institutions in required reserve accounts with the Bank of Russia.

Average rate on interbank loans

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

Broad money (monetary aggregate M2X)

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

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

Consumer price index (CPI)

The CPI measures changes over time in the overall price level of goods and services purchased by households for private consumption. This index is calculated by the Federal State Statistics Service 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.

Current liquidity deficit

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

Dollarisation of deposits

A share of deposits denominated in foreign currency in total deposits in the banking sector.

Dual currency basket

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

Fiscal stress indicator

An approach developed by the IMF experts using an 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 operation

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

Free 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.

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.

Monetary aggregate M1

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

Monetary policy stance

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

Monetary policy transmission mechanism

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

Money supply

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

Money supply in the national definition (monetary aggregate M2)

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

Net credit of the Bank of Russia to credit institutions

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

Net private capital inflow/outflow

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

Nominal effective ruble exchange rate index

The nominal effective ruble exchange rate index reflects changes in the exchange rate of the ruble against the currencies of Russia's main trading partners. 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, collateral requirements and the financial standing of the borrower.

Open market operations

Operations carried out on the initiative of a central bank. This type of operations includes auction-based refinancing and liquidity-absorbing operations (repo auctions, deposit auctions, etc.), as well as purchases and sales of financial assets (government securities, currency, 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 against the collateral of securities, non-marketable assets, guarantees, and gold, as well as repo auctions and FX swaps.

Potential output

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

Procyclical currency

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

Real effective ruble exchange rate index

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

Repo operation

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

RGBEY index

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

Risk premium on market securities portfolio

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

Shadow banking sector

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

Standing facilities

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

Structural liquidity deficit

The state of the banking sector characterised by a stable demand by credit institutions for 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.

Statistical annex

Table 1

Operations to provide and absorb ruble liquidity

Purpose	Type of instrument	Instrument	Term	Frequency	Interest rate since 12.12.14, % p.a.	Bank of Russia claims on credit institutions (at the beginning of the day), billions of rubles					
						1.10.13	1.01.14	1.04.14	1.07.14	1.10.14	1.12.14
Liquidity provision	Standing facilities (fixed interest rates)	Overnight loans	1 day	daily	11.50	0.0	0.0	0.0	0.0	5. 1	0.4
		FX swaps (ruble leg)				259.7	278.7	488.2	166.0	0.0	0.0
		Lombard loans				4.9	6.6	2.0	1.0	0.4	1.2
		REPO				8.0	14.1	27.5	57.8	138.3	536.4
		Loans secured by gold[1]	1 day		11.50	0.2	0.4	0.6	0.4	0.6	0.5
			from 2 to 549 days[2]		12.00						
		Loans secured by non-marketable assets or guarantees[1]	1 day		11.50	205.9	600.5	370.9	420.5	651.6	800.3
			from 2 to 549 days[2]		12.25						
	Open market operations (minimum interest rates)	Loans secured by non-marketable assets, auctions[3]	3 months	monthly	10.75	306.8	691.8	1184.5	1982.5	2139.3	2293.3
			12 and 18 months[4]	occasionally							
		REPO auctions	from 1 to 6 days[5]	occasionally	10.50 (key rate)	2397.3	2883.4	2956.1	2570.7	2402.3	2794.1
			1 week	weekly							
Liquidity absorption	Open market operations (maximum interest rates)	Deposit auctions	from 1 to 6 days[5]	occasionally	10.50 (key rate)	0.0	0.0	0.0	0.0	0.0	0.0
			1 week	weekly							
	Standing facilities (fixed interest rates)	Deposit operations	1 day, call	daily	9.50	143.7	517.6	118.7	89.0	216.1	188.8

[1] From 30 June 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.

[2] Until 30.06.14 loans were provided for 2 to 365 days.

[3] Loans provided at a floating interest rate, linked to the Bank of Russia key rate.

[4] Until 16.10.14 loans were provided for 12 months.

[5] Fine-tuning operations.

Source: Bank of Russia.

Table 2

Required reserve ratios

Liability type	Ratio since 1.03.13, %
To legal entities	4.25
To households	
Other liabilities	

Source: Bank of Russia.

Table 3

Average required reserve ratio

For credit institutions	0.7
For non-bank institutions	1

Source: Bank of Russia.

Table 4

Operations to provide foreign currency

Type of instrument	Instrument	Term	Frequency	Interest rate since 4.12.14, % p.a.	Bank of Russia claims on credit institutions (at the beginning of the day), millions of US dollars		
					1.10.14	1.11.14	1.12.14
Open market operations (minimum interest rates)	FX repos	1 week	weekly	Libor[1]+0.50	–	–	3.7
		28 days			–	201.2	512.3
		12 months	monthly		–	–	87.7
Standing facilities (fixed interest rates)	USD/RUB sell/buy FX swaps	1 day	daily	9.50[2] (ruble leg), 1.50 (dollar leg)	581.4	0.0	0.0

[1] In respective currencies and for respective terms.
[2] Bank of Russia key rate less 1.00 percentage point since 12.12.14.

Source: Bank of Russia.

Table 5

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

	Inflation	Core inflation	Food	Food[1]	Vegetable and fruit	Non-food goods	Non-food goods, excluding petrol[2]	Services
2012								
January	0.5	0.5	0.8	0.6	2.8	0.4	0.5	0.2
February	0.4	0.4	0.7	0.5	2.1	0.3	0.4	0.0
March	0.6	0.5	0.8	0.6	2.7	0.5	0.5	0.4
April	0.3	0.4	0.2	0.3	-0.4	0.4	0.4	0.3
May	0.5	0.2	0.6	0.0	5.8	0.4	0.3	0.7
June	0.9	0.4	1.6	0.3	13.4	0.2	0.2	0.8
July	1.2	0.5	1.1	0.8	3.5	0.3	0.3	2.7
August	0.1	0.6	-0.5	0.8	-10.8	0.4	0.4	0.6
September	0.6	0.7	0.1	0.8	-5.6	0.7	0.6	1.0
October	0.5	0.6	0.5	0.8	-2.2	0.7	0.6	0.1
November	0.3	0.5	0.5	0.6	-1.3	0.4	0.4	0.0
December	0.5	0.4	0.9	0.7	2.4	0.3	0.3	0.4
Total for the year (December to December)	6.6	5.7	7.5	7.1	11.0	5.2	5.0	7.3
2013								
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
2014								
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

[1] *Excluding vegetables and fruit.*
[2] *Bank of Russia estimate.*

Sources: Rosstat, Bank of Russia calculations.

Table 6

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

	Inflation	Core inflation	Food	Food[1]	Vegetable and fruit	Non-food goods	Non-food goods, excluding petrol[2]	Services
2012								
January	4.2	6.0	2.0	6.3	-30.5	6.2	5.9	4.7
February	3.7	5.7	1.5	5.8	-30.8	6.2	5.8	3.9
March	3.7	5.5	1.3	5.5	-29.9	6.2	5.7	3.9
April	3.6	5.3	1.2	5.2	-29.1	6.1	5.6	3.7
May	3.6	5.1	1.7	4.9	-23.8	5.6	5.5	3.7
June	4.3	5.2	3.6	5.1	-10.8	5.4	5.4	3.8
July	5.6	5.3	5.5	5.6	1.7	5.5	5.5	5.9
August	5.9	5.5	6.5	6.1	8.0	5.3	5.5	6.2
September	6.6	5.7	7.3	6.7	13.1	5.4	5.4	7.3
October	6.5	5.8	7.3	7.0	10.1	5.3	5.2	7.2
November	6.5	5.8	7.3	7.0	9.8	5.2	5.1	7.2
December	6.6	5.7	7.5	7.1	11.0	5.2	5.0	7.3
2013								
January	7.1	5.7	8.6	7.8	16.1	5.1	4.9	7.8
February	7.3	5.7	8.7	7.8	16.8	5.3	5.0	8.2
March	7.0	5.6	8.3	7.7	13.8	5.2	4.9	7.9
April	7.2	5.7	8.8	7.7	18.3	5.1	4.9	8.1
May	7.4	5.9	9.2	8.0	19.1	5.0	4.8	8.3
June	6.9	5.8	8.0	7.9	8.2	4.9	4.9	8.1
July	6.5	5.6	6.8	7.4	1.3	4.8	4.6	8.4
August	6.5	5.5	6.5	7.2	0.8	4.9	4.6	8.7
September	6.1	5.5	6.3	7.2	-1.4	4.7	4.4	7.8
October	6.3	5.5	6.9	7.2	4.4	4.5	4.3	7.7
November	6.5	5.6	7.5	7.3	8.9	4.5	4.4	7.9
December	6.5	5.6	7.3	7.1	9.3	4.5	4.4	8.0
2014								
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

[1] *Excluding vegetables and fruit.*
[2] *Bank of Russia estimate.*

Sources: Rosstat, Bank of Russia calculations.

Table 7

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

	Industrial production[1]	Agriculture	Construction	Freight turnover	Retail trade turnover	Fixed capital investment	Household consumer spending	Output of goods and services by key industries[2]	GDP[3]
2012									
January	0,7	-4,8	1,7	2,9	0,2	0,0	-1,2	0,0	
February	1,7	4,6	-0,6	-2,1	1,0	1,0	2,1	0,2	
March	-1,6	-0,3	-0,2	1,3	0,1	0,2	0,4	0,0	0,9
April	-0,4	1,7	1,6	-0,5	0,4	0,0	0,2	0,5	
May	1,1	2,3	-1,2	-0,9	0,7	0,9	0,9	0,4	
June	-1,0	-2,2	0,9	0,0	0,4	0,4	0,8	0,1	0,5
July	1,0	2,0	-2,2	0,9	0,1	-0,6	-0,1	-0,2	
August	0,9	4,7	2,2	0,4	0,3	0,2	0,4	0,6	
September	-1,1	-0,4	-1,3	0,8	0,6	0,0	0,7	-0,5	0,3
October	0,7	-17,2	2,2	-2,7	0,2	0,5	0,4	-0,1	
November	-0,4	19,9	-2,1	1,7	0,2	-1,1	0,4	-0,2	
December	1,0	-1,5	1,3	0,6	0,4	0,0	0,4	1,1	-0,1
2013									
January	-1,2	1,6	0,0	-1,2	0,4	1,7	0,5	-0,3	
February	-1,0	-0,2	-0,8	0,1	-0,2	-1,2	0,1	-0,3	
March	1,0	0,0	0,3	-0,1	0,6	0,0	0,5	0,5	0,3
April	0,2	0,5	-1,5	0,8	0,4	-0,6	0,6	-0,1	
May	-0,3	0,2	1,6	-0,8	0,1	0,1	0,2	-0,2	
June	1,4	-0,2	-7,4	-0,8	0,6	-0,8	0,4	0,5	0,5
July	-0,3	0,5	8,2	1,0	0,3	0,9	0,6	0,1	
August	0,4	-0,2	-2,4	1,3	0,2	-0,8	0,2	-0,1	
September	-0,5	1,2	0,3	1,6	0,0	-0,1	0,0	-0,4	0,5
October	0,2	0,7	-0,6	1,5	0,2	0,0	0,2	0,6	
November	1,3	0,7	0,7	-3,2	0,4	0,2	0,2	0,4	
December	-1,0	-1,3	-1,2	1,9	0,1	-0,4	0,2	-0,8	0,5
2014									
January	-0,9	-0,2	-0,7	-0,3	0,0	-1,6	-0,2	-0,3	
February	0,9	-0,1	0,4	-1,9	0,4	0,8	0,5	0,7	
March	0,2	-0,2	-0,5	-0,8	0,2	-0,5	0,1	-0,1	-0,5
April	0,8	-0,1	-0,2	-0,2	0,0	0,2	0,0	0,2	
May	0,1	-0,6	-0,7	1,3	0,1	-0,1	-0,1	0,3	
June	-0,6	-0,2	-0,6	0,5	-0,1	0,0	0,0	-0,4	0,2
July	0,7	0,7	0,0	-1,5	0,2	-0,5	0,0	0,5	
August	-0,6	-0,9	0,1	-0,1	0,1	-0,1	0,1	-0,1	
September	1,7	22,6	-0,9	1,1	0,2	-0,7	0,2	0,8	0,4
October	0,3	-20,3	0,0	-0,1	0,1	0,0	0,1	-0,6	

[1] *Rosstat estimate.*
[2] *Output index of goods and services by key industries.*
[3] *Quarterly data.*

Sources: Rosstat, Bank of Russia calculations.

Table 8

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

	2014											Memo item: January-October 2013
	January	February	March	April	May	June	July	August	September	October	January-October	
Output of goods and services by key industries	-0.5	1.1	0.4	0.6	0.7	0.0	0.3	-0.5	2.2	-0.1	0.4	0.9
Industrial output	-0.2	2.1	1.4	2.4	2.8	0.4	1.5	0.0	2.8	2.9	1.7	0.2
Agricultural output	0.8	1.0	1.3	1.8	1.8	1.4	8.5	4.7	16.6	-12.4	4.5	5.5
Fixed capital investment	-7.0	-3.5	-4.3	-2.7	-2.6	0.5	-2.0	-2.7	-2.8	-2.9	-2.5	-0.5
Construction	-5.4	-2.4	-3.1	-2.8	-5.4	1.2	-4.6	-3.4	-4.4	-3.8	-3.3	-1.4
Retail trade turnover	2.7	4.0	4.1	2.8	2.2	0.8	1.2	1.4	1.7	1.7	2.2	3.9
Household real disposable money income	-0.5	0.5	-6.9	2.0	6.6	-2.8	2.5	3.4	0.6	2.1	0.8	3.8
Real wage	5.2	4.6	3.8	3.2	2.1	2.1	1.4	-1.2	1.5	0.3	2.2	5.7
Number of unemployed	-6.6	-2.5	-5.4	-4.7	-5.2	-9.8	-7.8	-7.5	-6.8	-6.6	-6.3	-1.1
Unemployment (as % of economically active population)	5.6	5.6	5.4	5.3	4.9	4.9	4.9	4.8	4.9	5.1	5.1[1]	5.5[1]

[1] *At end-period.*
Sources: Rosstat, Bank of Russia calculations.

Table 9

Change in Bank of Russia forecasts of GDP growth of Russia's main trading partners in 2014-2015 (%)

		Forecast of GDP growth				Memo item: country's share in aggregate GDP of trading partners
		2014		2015		
		December	September	December	September	
Всего		**1.5**	**1.7**	**2.3**	**2.5**	**100**
1	Netherlands	0.8	0.6	1.4	1.4	15.7
2	Italy	-0.3	0.3	0.6	1.0	8.7
3	Germany	1.4	2.0	1.3	1.8	8.0
4	China	7.3	7.4	7.1	7.2	7.0
5	Ukraine	-6.8	-5.0	0.2	0.7	6.5
6	Turkey	3.0	2.5	3.7	4.0	6.4
7	Belarus	1.3	1.1	2.1	2.1	5.9
8	Poland	3.3	3.3	3.2	3.4	4.9
9	UK	3.0	3.0	2.6	2.6	3.5
10	USA	2.3	2.5	3.0	3.1	3.5
11	Finland	-0.2	0.1	0.8	1.2	3.4
12	Kazakhstan	4.4	5.6	4.9	5.4	3.4
13	Japan	0.6	1.3	1.0	1.2	3.3
14	France	0.4	0.8	0.8	1.1	3.2
15	Republic of Korea	3.6	3.7	3.8	3.8	2.8
16	Switzerland	1.5	2.0	1.8	2.2	2.6
17	Latvia	2.6	3.5	3.3	4.1	1.9
18	Hungary	3.0	2.3	2.3	2.0	1.8
19	India	5.3	5.1	6.2	5.9	1.7
20	Belgium	1.0	1.3	1.4	1.6	1.5
21	Czech Republic	2.4	2.0	2.6	2.7	1.5
22	Slovakia	2.4	2.5	2.9	3.1	1.5
23	Spain	1.3	1.1	1.8	2.0	1.3

Source: Bank of Russia.

Table 10

Russian balance of payments forecast (billions of US dollars)

	2013 (fact)	2014 (estimate)	2015		2016		2017	
			baseline	stress	baseline	stress	baseline	stress
Urals crude price (average for year), US dollars per barrel	108	98	80	60	80	60	80	60
Current account	**34**	**64**	**56**	**39**	**55**	**22**	**49**	**33**
Trade balance	182	188	163	129	160	126	157	134
Exports	*523*	*500*	*460*	*371*	*465*	*377*	*472*	*390*
Imports	*-341*	*-312*	*-296*	*-243*	*-304*	*-251*	*-315*	*-255*
Services balance	-58	-52	-42	-35	-41	-40	-41	-34
Exports	*70*	*69*	*69*	*62*	*68*	*58*	*70*	*67*
Imports	*-128*	*-121*	*-111*	*-97*	*-109*	*-98*	*-111*	*-101*
Primary and secondary income account	-90	-72	-65	-55	-64	-64	-67	-67
Capital account	**0**	**-42**	**0**	**0**	**0**	**0**	**0**	**0**
Current and capital accounts balance	**34**	**22**	**56**	**39**	**55**	**22**	**49**	**33**
Financial account (excl. reserve assets)	**-56**	**-103**	**-121**	**-118**	**-78**	**-73**	**-56**	**-61**
General government and central bank	*6*	*31*	*-3*	*-3*	*-3*	*-3*	*-3*	*-3*
Private sector (incl. net errors and omissions)	*-62*	*-134*	*-118*	*-115*	*-75*	*-70*	*-53*	*-58*
Change in FX reserves ('+' -decrease, '-' - increase)	**22**	**81**	**65**	**80**	**23**	**51**	**6**	**27**

Note: Total values may differ from totals for individual items due to rounding.

Source: Bank of Russia.

Table 11

Main indicators of Bank of Russia forecast

	2013 (fact)	2014 (estimate)	2015		2016		2017	
			baseline	stress	baseline	stress	baseline	stress
Urals crude price (average for year), US dollars per barrel	108.3	98	80	60	80	60	80	60
Gross domestic product, year on previous year, %	1.3	0.6	0.0	-4.6	-0.7	-1.0	1.1	5.7
Inflation, December on December of previous year, %	6.5	10.1	8.2-8.7	9.3-9.8	5.5-6.0	5.8-6.3	4.0-4.8	3.5-4.3
Money supply in national definition, as % of annual growth	14.6	4-6	6-8	less than 5	8-10	3-6	8-11	11-15
Monetary base in narrow definition, as % of annual growth	8.0	4-6	7-9	less than 5	6-8	3-6	6-8	10-12
Loan to non-bank organisations and households in rubles and foreign currency, as % of annual growth	17.1	20-22	5-8	less than 5	7-10	4-8	8-11	13-18

Source: Bank of Russia.

Table 12

GDP usage (fixed prices, as % to previous period)

	2013 (fact)	2014 (estimate)	2015		2016		2017	
			baseline	stress	baseline	stress	baseline	stress
GDP	1.3	0.6	0.0	-4.6	-0.7	-1.0	1.1	5.7
Final consumption expenditure	3.5	0.9	0.1	-4.5	-0.2	-1.4	0.9	3.8
–households	4.7	1.3	-0.3	-6.4	-0.9	-2.5	0.9	4.8
Gross accumulation	-6.1	-9.0	-6.2	-20.0	-5.5	-3.5	2.6	15.0
–gross fixed capital accumulation	-0.1	-3.3	-5.1	-10.2	-5.0	-1.2	1.7	5.2
Net exports	5.7	33.5	22.6	52.6	11.6	14.3	-1.5	-7.5
-exports	4.2	0.2	0.0	-1.0	0.5	0.5	1.2	4.0
-imports	3.7	-8.5	-5.9	-15.0	-2.4	-3.1	1.9	7.0

Source: Bank of Russia.

List of boxes