

Bank of Russia The Central Bank of the Russian Federation



No.4 December 2015

Information and Analytical Review

MONETARY POLICY REPORT

Moscow

## DEAR READERS,

In order to improve the effectiveness of the Bank of Russia's information policy with regard to its monetary policy, to assess the relevance of and demand for the materials published, we would be grateful if you could answer the following questions.

1. Do you consider there to be an optimal level of detail in the material presented?

- 2. Which subjects, in your opinion, should be illustrated in this report?
- 3. Do you have any other comments or suggestions regarding the report?
- 4. What is your professional field of interest?

Many thanks in advance for your assistance.

The report has been prepared on the basis of data as of 4 December 2015. Data cut-off date for forecast calculations is 4 December 2015.

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

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

# Contents

Summary	3
1. MACROECONOMIC CONDITIONS	5
1.1. External economic and financial conditions Economic activity and inflation abroad External financial conditions Terms of trade	5 9
1.2. Internal financial conditions Money market and Bank of Russia banking sector liquidity management FX market and Bank of Russia operations with foreign currency Asset prices and bond market Bank lending and deposit operations	
1.3. Internal economic conditions Demand Supply Labour market Inflation	26 
2. ECONOMIC OUTLOOK AND KEY RATE DECISION	
2.1. Economic outlook 2.2 Risk assessment	
ANNEX	51
Dynamics of major balance of payments items in 2015 Q3 Balance of payments forecast for 2015-2018	
Changes in the system of monetary policy instruments and other Bank of Russia measures	
Statistical tables	58
List of boxes	
Glossary	
Abbreviations	75

## Summary

In September – early December 2015, global commodity and financial markets remained volatile. After a slight growth in September – first half of October, oil prices dropped again amid the increase in oil supply. Oil prices experienced additional pressure due to new market estimations of the US Fed's interest rate increase probability, which also resulted in the resumption of capital outflow from emerging markets. Nonetheless, in view of certain stabilisation in Ukraine and the expected lift of sanctions imposed on Russia, a downturn in risk premiums paid for Russian assets to levels comparable with the premiums of other oil-exporters was observed. Besides, several large Russian companies managed to place their Eurobonds in foreign markets. For the first time since 2010, a capital inflow was registered in 2015 Q3. In this context, the ruble depreciation was relatively less significant compared with oil price movements. Notwithstanding a somewhat improved perception of the Russian economy by investors, the overall external economic conditions were still unfavourable: trading partners' economic growth rates were persistently low, international capital markets remained virtually closed for Russian businesses, and the terms of trade deteriorated.

The dynamics of most macroeconomic indicators suggested that the Russian economy had passed the acute phase of the recession. However, it is too early to talk about steady trends for the economic activity recovery so far. The industrial output decreased slower than expected, as it was supported by export-oriented sectors and import substitution processes for certain commodity groups. The narrowing of investment demand slowed down as well due to the positive dynamics of capital investment in mining industries. However, high economic uncertainty, weak consumer demand and tight lending conditions hampered investment activity. Decline in consumption continued to accelerate amid falling real wages and retail lending, as well as households' persistently high propensity to save. Weak consumer demand and moderately strict monetary stance limited the price growth. A good harvest also contributed to the inflation slowdown. At the same time, the July-August depreciation of the ruble caused an upward pressure on prices in September-October, hindered the annual inflation deceleration, and kept inflation expectations elevated. Annual consumer price growth reduced from 15.8% in August to 15.0% in November.

Further evolution of the Russian economy will mainly depend on external economic developments and the pace of the economy's adaption to them. The Bank of Russia's medium-term macroeconomic forecast has mainly remained unchanged compared with the Monetary Policy Report released in September and the Guidelines for the Single State Monetary Policy in 2016 and for 2017 and 2018 released in November. However, persisting and even slightly increasing inflation risks in the reviewed period required cautious monetary policy decisions. In October and December, the Bank of Russia decided to keep the key rate at 11.00% p.a. As inflation slows down in line with the forecast and as inflation risks subside, the Bank of Russia will continue with a downward revision of its key rate at one of its forthcoming Board of Directors meetings.

The Bank of Russia still considers the optimistic and risk scenarios along with the baseline one. Oil price dynamics assumptions are the main differences between these scenarios. The baseline scenario assumes the recovery of oil prices to \$50.0 per barrel in the first half of 2016 and their remaining close to this level till end-2018. On the one hand, persistently low oil prices and the ensuing drop in income compared with previous years will limit the recovery capacity of the economy. On the other hand, eventual adaptation to negative external conditions will be attained as a result of the gradual shift of labour and capital resources to more efficient and productive industries, having sufficient capacity for import substitution or exports increase. According to the Bank of Russia's estimate, in 2016, the decline in GDP will continue, though at a slower pace than in 2015: -(0.5-1.0)%. The gradual easing of domestic financial conditions, alleviation of

debt burden, and improved business sentiment in the second half of 2016 will set up prerequisites for the recovery of investment and production activities in 2017. The revival of investment demand will increase the output of investment goods, thus contributing to wage growth. This, along with improved access to funding, will facilitate the recovery of investment demand in 2018. The combination of moderate external demand and stable real exchange rate will condition low growth of exports. Demand for imports is expected to increase in line with the domestic demand growth. As a result, the contribution of the net exports to GDP growth will shrink and become negative in 2018. According to the Bank of Russia's forecast, in 2017-2018, GDP growth will be at 0.0-1.0% and 1.5-2.5% respectively.

Inflation is expected to slow considerably in early 2016 because the consumer price hike of early 2015 will have been excluded from the calculation. According to Bank of Russia estimates, the imposition of external trade restrictions against Turkey from January 2016 will not have significant impact on inflation. Sluggish consumer demand in 2016-2017 and the pursued monetary policy will further contribute to lower consumer price growth. Conservative fiscal policy and low rates of infrastructure companies' administered prices and tariffs indexation will curb price growth as well. Inflation expectations are anticipated to weaken as inflation slows. According to the Bank of Russia's forecast, annual consumer price growth will decline to 5.5-6.5% in late 2016 and to the 4% target in 2017. The Bank of Russia will cut its key rate as inflation slows down in line with the forecast.

At the same time, considerable risks for this forecast currently remain. They arise primarily from the likely fall in oil prices below \$40 per barrel in 2016 and their prolonged persistence at that level. This scenario is possible if the Chinese economy slows considerably, demand for commodities falls, the US dollar appreciates amid accelerated normalisation of the US Fed's monetary policy, and oil supply from OPEC countries and oil extraction from unconventional sources rise. It will result in a more profound and lengthy contraction of the Russian economy and slower inflation reduction. Besides, persistently high inflation expectations put the inflation forecast at risk as well. Inflation decrease can be constrained by fiscal policy easing, including above-plan increase in budget payments and tariffs for services provided by state-owned monopolies. Materialisation of these risks will require tighter monetary policy than envisaged by the baseline scenario.

All scenarios assume the sanctions against Russian companies to remain. In these conditions, the Bank of Russia will continue its FX refinancing operations to ensure the stability of the banking sector and the financial market. Depending on the scenario, the Bank of Russia will determine the volume and terms of funds provision under these operations based on the demand for FX liquidity and the situation in the FX market. In particular, the Bank of Russia decided to resume its 12-month FX repos in November in order to ensure more flexible FX liquidity management by banks. The interest rate on 12-month FX refinancing operations was raised by 50 bp.

### **1. MACROECONOMIC CONDITIONS**

# 1.1. External economic and financial conditions

The situation in the global economy was still varied in September-November. Developed countries continued to be a driver of economic growth, despite signs of a certain (and temporary, according to Bank of Russia estimates) cooling of their economies in Q3. Meanwhile, emerging economies saw relatively low growth rates notwithstanding a slight improvement in the situation over this period.

However, conditions in the global financial and commodity markets changed considerably. In September-October, global investors' concerns about the situation in the Chinese economy abated slightly, which spurred demand for risky assets in all segments of the global financial market, an inflow of capital into emerging market economies and growth in oil prices. However, subsequently, the revaluation by market participants of the likelihood of an increase in the US Fed's rate led to the strengthening of the US dollar, a shift in the stock markets and a fall in oil prices, and unfavourable growth for Russia in the Urals crude's discount against the Brent crude amid the increasing competition among suppliers in the European oil market. In view of recent events, the Bank of Russia has revised its Urals crude forecast and is expecting lower prices over the coming months compared with the scenarios published in the previous Monetary Policy Report (hereinafter, the 'Report'). This could have a restraining effect on the recovery of the Russian economy over the next one to two quarters.

Grounds for a rapid improvement in external economic conditions are still lacking for Russia, but it is evident that the dependence of the Russian economy on external conditions reduced slightly in September-November. For the first time in a long while, Russian companies attracted substantial external loans; and premiums on Russian CDSs and yields on Russian-issued Eurobonds fell rapidly during this period. According to Bank of Russia estimates, over the period under consideration, the ruble's undervaluation (observed in August-September) relative to fundamental values almost disappeared.

# Economic activity and inflation abroad

As assumed in the scenarios in the previous Report, growth rates in developed economies remain relatively stable on the whole. In September-November, these countries continued to recover, although some signs of a slowdown in economic growth started to appear.

US GDP growth stayed high, but slowed in Q3<sup>1</sup>. However, figures for Q2 and Q3 this year were revised upwards as official estimates were refined. High job creation rates and unemployment's drop below average historical levels are key factors underpinning the stable growth in consumer spending, which continues to form the basis for the recovery of the US economy.

High quarterly growth persisted in the euro area economy (although growth in Q3 also slowed) due to the ECB's accommodative policy, the low euro exchange rate and low energy prices. Out of all the main economies in the euro area, only France managed to increase its growth rate, while in Germany, Italy and Spain economic growth slowed. The cooling of the Chinese economy an important trading partner of the euro area continued to have an impact on economic indicators in European countries in Q3. The growth in the UK's GDP also decelerated in Q3. The contraction of the construction sector, where demand is largely generated by non-residents, demonstrates the negative impact of developing and export-oriented countries on the British economy. Japan's economy shrank in Q3 due to falling investment (although consumer spending increased).

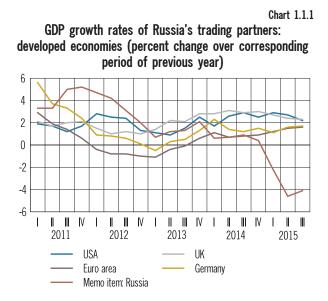
<sup>&</sup>lt;sup>1</sup> Here and throughout Section 1.1, seasonally-adjusted growth indicators are given relative to the previous period, unless indicated otherwise.

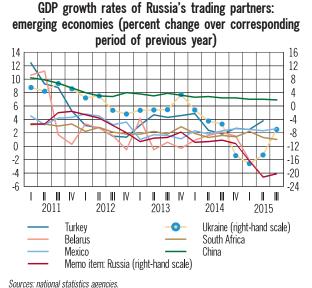
6

Nº4 (12)



Chart 1.1.3



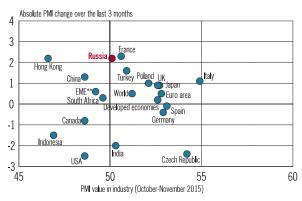


Sources: national statistics agencies, Eurostat.

The Bank of Russia expects current economic growth rates to continue or increase to some degree in the majority of developed economies in 2015 Q4 - 2016 Q1. This is evidenced, among other things, by short-term leading indicators (PMI) for October-November, especially in Germany, Italy and the euro area as a whole, and the UK (Chart 1.1.3). At the same time, in November, the US Manufacturing PMI continued to fall, dropping below 50 points. The assumed contraction of economic activity in Q4 can be explained by the decreased investment in shale oil production and other US industries linked to this sector, in addition to the high US dollar exchange rate, which is worsening exporters' opportunities. As a result, we can expect a certain slowdown in Q4, although growth rates in the US economy will remain relatively high. In Japan, the high PMI suggests that the country's economy could see growth again in Q4. In the short term, the ongoing easy monetary policy in the euro area and Japan and the expected smooth normalisation of monetary policy in the US and UK could lead to a continuation of current growth in the majority of advanced economies (and an increase in Japan).

In the majority of EMEs<sup>2</sup>, economic growth stayed on the downward track in 2015 Q3 (despite the stimulus measures adopted by the central banks in these countries), primarily as a result of the cooling in the Chinese economy. China's annual GDP growth fell in Q3, but quarterly growth remained at Q2 levels. In October, the People's

Changes in economic activity indicators\*



\* 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.
\*\* EME — emerging market economies.

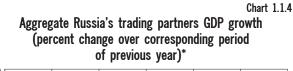
Sources: Bloomberg, Bank of Russia calculations.

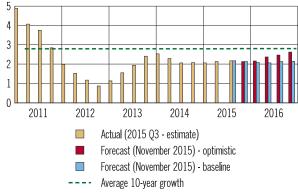
Bank of China cut its key rate for the sixth time in the last year, but data for September and October still point to an ongoing trend of falling exports despite the depreciation of the renminbi in August. Imports, especially commodity imports, decreased even more, which indicates weak demand in key sectors of the economy, including the construction.

However, some signs of an improvement in the economic climate did emerge. The situation in the Chinese stock market stabilised and the total lending to the economy (including the shadow banking sector) stopped falling.

The problems in the Chinese economy depressed economic growth in other Asian countries (excluding India, where GDP growth increased in

<sup>&</sup>lt;sup>2</sup> See the Abbreviations.





\* Bank of Russia forecasts based on forecasts 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.

Q3). Deteriorating expectations regarding Chinese economic growth had a negative effect on the economies of natural resources exporters (including Brazil and Indonesia) as a result of a downturn in raw material prices, the main consumer of which is the Chinese economy.

In 2015 Q4 – 2016 Q1, in view of changes in short-term leading indicators, the Bank of Russia expects the current low (compared with historical values) economic growth rates to persist or even slow further in many EMEs. In particular, Manufacturing PMI in China for November shows a reduction in business activity for the ninth month in a row (though the index value itself increased to 48.6 points from a low of 47.2 points in September). In Brazil (the PMI value at 44.1 points), Indonesia (47.8 points) and South Africa (47.5 points), business activity continues to decline, in part due to low prices for exports. Among the largest emerging economies, India was the only one to see its Manufacturing PMI above the critical 50 point value.

In Q2-Q3 this year, GDP growth rates<sup>3</sup> in Russia's trading partners were in line with the forecasts published in the previous Report, but external demand remained low compared with historical values. Growth rates in Russia's trading partners are set to stabilise at current levels over the coming quarters. The potential positive impact on the aggregate GDP dynamics of Russia's trading partners as a result of the higher figures reported in developed economies (especially in the euro area and US) has been offset by the declining growth in the economies of China, other Asian countries and the CIS (Belarus and Kazakhstan).

The aggregate GDP forecast for Russia's trading partners is fraught with uncertainty, especially in relation to the risk of negative trends intensifying in the Chinese economy, which could have an impact on the GDP dynamics of Russia's other trading partners and lead to a further reduction in prices in the commodity markets. The risk of an accelerated normalisation of the Fed's monetary policy still remains, which could lead to the strengthening of the dollar and a decrease in oil prices, as well as growth in interest rates and enhanced volatility in capital flows (with corresponding negative consequences for EMEs).

The stable and relatively low GDP growth among Russia's trading partners will have rather moderate positive impact on the actual quantities of Russian exports. However, the risks associated with the difficult economic situation in China could have a stronger negative effect on the exports volumes (and on the ruble exchange rate) as a result of the fall in oil prices.

Global commodity prices remained relatively low amid weak demand and subdued global economic growth. Food prices stabilised in September-November 2015 and even increased slightly for the first time in a relatively long period, as expected in the previous Report. Nevertheless, high supply, high levels of reserves, low fuel costs and the strengthening of the US dollar continue to exert a downward pressure on food prices. The UN Food and Agriculture Organisation's (FAO) food price index grew by 1.1% in September-November, but still lingered close to its six-year lows. Sugar and dairy prices saw the greatest increases, while cereals prices decreased slightly (Chart 1.1.5).

Over the coming quarters, the high level of production and reserves, low fuel prices and ongoing concerns of a slowdown in economic growth in China will continue to exert a downward pressure on food prices. However, amid the overall gradual recovery of the global economy and the unfavourable climatic conditions<sup>4</sup>, global prices are

<sup>&</sup>lt;sup>4</sup> Linked to the natural phenomenon El Niño (the fluctuation in the water surface temperature in the equatorial region of the Pacific Ocean, which has a significant impact on the climate), which will remain highly active in the first half of 2016, according to FAO forecasts.

<sup>&</sup>lt;sup>3</sup> See Table 10 in the Annex.

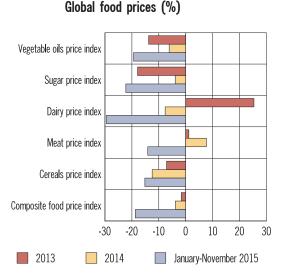


Chart 1.1.5

Source: Food and Agriculture Organisation of the United Nations (FAO).

expected to rise slightly. Nevertheless, food prices will still remain below both 2014 levels and average historical values.

With low global food and energy prices and relatively low economic growth rates, inflation continues to be subdued in the majority of countries around the world compared with historical averages. This is generally in line with the Bank of Russia's expectations in previous Reports. After a moderate acceleration in price growth in August, in September-October 2015 the majority of developed countries saw prices stabilise, some countries witnessed negative price dynamics in September, and year-on-year inflation remained near zero (Chart 1.1.6). The Bank of Russia expects falling oil prices and low economic growth to help keep consumer prices at their current low level, or cause extremely moderate growth in developed countries over the coming quarters despite the stimulus measures adopted by a number of central banks.

In September-October, inflation in a number of EMEs slowed down and in some countries remained at July-August levels. The decline in energy prices led to a reduction in inflationary pressure for the majority of EMEs and transition economies. However, in some regions (primarily, the CIS and Latin America), consumer price growth was persistently high, largely down to the depreciation of national currencies amid the deterioration in terms of trade and strengthening of the US dollar (Chart 1.1.7). The Bank of Russia forecasts a weakening in external inflationary pressure over the coming quarters from the majority of EMEs (including the CIS), as the impact of the depreciation in national currency exchange rates is gradually waning, and internal demand will continue to decelerate inflation. At the same time, inflation in Kazakhstan could

#### Aggregate GDP and inflation in Russia's trading partners

The aggregate GDP growth is calculated for 24 foreign countries (trading partners) which account for more than 1% of Russian exports on average over a 5-year period (2010-2014) (previously, when the figure was calculated for the period 2008-2012, there were 23 countries); the relative weight of each country is determined based on the structure of commodities exported to the main trading partner countries.

The aggregate inflation growth figure is calculated in the same way: 24 foreign countries form the basis for the calculation. These countries account for at least 1% on average of Russia's imports structure annually in 2010-2014. The relative weight of each country is determined based on the structure of imports to Russia from the main trading partner countries.

The aggregate GDP growth and aggregate inflation forecasts for Russia's trading partners compared with the previous Report are calculated without taking into account the Ukrainian economy. Ukraine's share in Russia's foreign trade is falling, and GDP and inflation dynamics in Ukraine are characterised by highly volatile and uncertain economic figures. According to the aggregate figure calculation method, Ukraine's weight is 6.5%, while according to FCS data for January-September 2015, its share in Russian exports was 2.5%. Keeping Ukraine in the list of countries for which aggregate figures are calculated significantly distorts the dynamics of forecast aggregate GDP and inflation figures for Russia's trading partners in 2015-2016. Furthermore, for aggregate GDP, the weights of trading partners were adjusted to take into account the re-exports of Russian energy supplies from the Netherlands, and another country – Lithuania – was added (Hungary and Switzerland were added to calculate aggregate inflation). It is assumed that GDP growth in Russia's trading partners will translate into growth in Russia's GDP as a result of the direct increase in the amount of Russian exports and the improvement in economic agents' sentiments (see Table 10 in the Annex).



Sources: national statistics agencies, Eurostat.

accelerate over the coming months following the transition to the free-floating exchange rate regime at the end of August and the 50% depreciation of the tenge.

Aggregate inflation in Russia's trading partners in 2015 Q3 exceeded overall global inflation. This was down to the persistent high price growth in the CIS countries (especially in Belarus, although from September a slight increase in inflation was registered in Kazakhstan too), and also in Brazil and Turkey.

According to Bank of Russia forecasts, yearon-year price growth in Russia's trading partners in 2015 will be in line with the forecast in the previous Report. In the majority of developed and a number of developing countries, inflation will remain low, as at present, or increase only negligibly, as the fall in oil prices and other raw materials will have a stronger impact on inflation than the acceleration in economic growth.

As a result, external inflationary pressure on the Russian economy will continue to be weak compared with historical averages. In the context of persistently weak price growth in Russia's trading partners and low global food prices, external inflation will exert virtually no upward pressure on prices. However, the effect of low external inflation, which could contribute to a reduction in internal inflation, will be contained by the embargo on imports of a number of foodstuffs (see Section 1.3 for more details). The ruble's exchange rate dynamics and aggregate internal demand will have a stronger impact on price levels.



Sources: national statistics agencies.

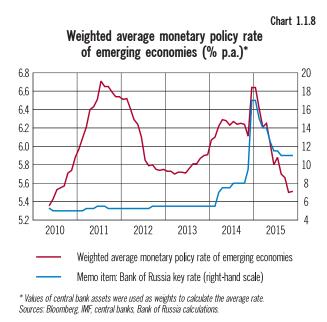
#### **External financial conditions**

Amid the low inflationary pressure and moderate global economic growth, the majority of central banks are continuing to implement an easy monetary policy (Chart 1.1.8). The slowdown in the Chinese economy and stock market collapse in August-September caused a further relaxation of the People's Bank of China's monetary policy, triggering renewed growth in the stock market in October-November this year. In December, the ECB Governing Council decided to reduce deposit rates by 10 bp (to -0.3%) and to extend the quantitative easing programme to March 2017. The Bank of Japan intends to expand its stimulus measures at the start of 2016 if oil prices remain low, which is having a negative impact on the achievement of inflation targets.

In turn, expectations of a faster increase in the Fed's rate intensified in October-November amid positive new job creation and unemployment statistics, supported by statements from a number of Fed officials. As of the end of November, the majority of analysts expect the first rate increase in December 2015 and the second one – in 2016 Q2.

The revised expectations regarding the Fed's policy (and to a lesser degree the ECB's policy) had an impact on all segments of the global financial market, as reflected in exchange rate and stock index dynamics, bond yields and capital flows in EMEs. After the President of the ECB announced the likely expansion and activisation of stimulus measures in the second half of October, the US

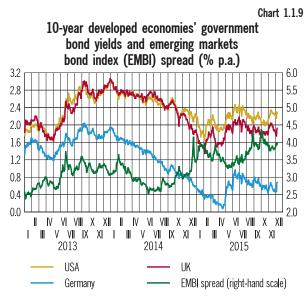




dollar exchange rate started to rally against other currencies. In November, this trend intensified after Fed officials reported a possible increase in rates at the December meeting (Chart 1.1.9). However, the ECB's announced stimulus measures (which were insufficient according to market participants) led to the consolidation of the euro against the dollar and other global currencies. The rallying of the US dollar was faster than expected, but overall fluctuations in its exchange rate remained within the boundaries forecast by market participants and the Bank of Russia.

Over the next two quarters, there may be a further strengthening of the US dollar amid the persisting mismatches in the phases of monetary policy in the US and other countries. The US Fed plans to normalise its monetary policy before others, which helps preserving the favourable (for the US dollar) alignment of interest rates in the US and other developed countries. The US dollar appreciation can lead to new lows in prices for oil and other raw materials, which will have a further negative effect on economic growth in export-oriented countries, including Russia. At the same time, it is likely that by increasing rates in December the Fed may convince the market that the future path of rate increases will be smoother. If the situation develops in this way, the dollar exchange rate could subsequently fall a little.

Yields in government securities markets rose to some extent in October amid the stricter rhetoric from the US Fed, but in November they resumed their downward track. In the next one to two quarters,



Source: Bloomberg.

long-term rates will in all probability remain at the previous level; slight growth is possible, but unlikely, as the process of increasing Fed rates is expected to be gradual. The low inflationary pressure and weak business indicators in the US are limiting the potential for growth in rates.

In September-October, the global stock markets were favourable: stock indices rose amid the release of better macroeconomic statistics than expected by analysts, and market participant risk perception indicators dropped significantly owing to a certain stabilisation of the situation in China. In October, according to EPFR data, a capital inflow into EMEs was recorded for the first time in four months.

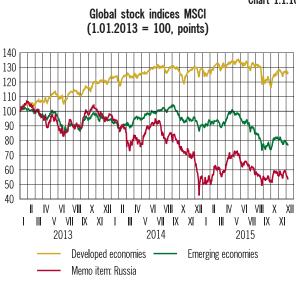
However, October's stock market rally and capital inflow was temporary in nature. Current quotations of corporate equities are at historical highs, while economic growth in the majority of countries is relatively low. In support of this hypothesis, in November global stock markets reacted to the Fed's 'verbal interventions' in the following way: growth in indices stalled and the capital outflow from EMEs resumed. Over the next one to two quarters, provided there are no new shocks, investors' risk perception indicators are expected to be low and major changes in the stock markets are unlikely.

In October-November, the Russian financial market deviated a little from the trends shaping the situation in the global markets. 5-year Russian CDS premiums and Russian-issued Eurobond yields dropped rapidly in September-November. This trend also continued in November, despite a slight

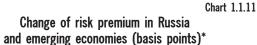
11

MONETARY

POLICY REPORT



Source: Bloomberg



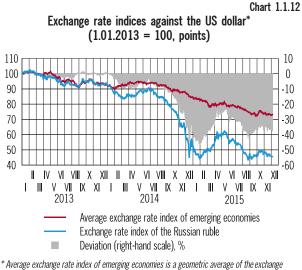


\* Average CDS spread for emerging economies is based on the data for Brazil, China, Turkey, Mexico, Malaysia, Poland, Hungary, etc. Sources: Bloomberg, Bank of Russia calculations.

fall in demand for risky assets in the global financial markets. The existing gap in CDS premiums between Russia and other oil-exporting countries has virtually closed. The fall in CDS premiums was faster than expected, providing some support for the ruble exchange rate. The likely causes of the faster fall in CDS premiums were the certain stabilisation of the situation in Ukraine, the release of better than expected macroeconomic statistics, and the hope among market participants of progress in the lifting of international sanctions against Russia following Russia's intervention in the events in Syria (Charts 1.1.12 and 1.1.13).

With the stabilisation of oil prices, we can expect an insignificant drop in CDS premiums. The fall in

Chart 1.1.10



"Average exchange rate index or emerging economies is a geometric average or the exchang rates of Hungarian forint, Brazilian real, Turkish lira, Mexican peso, Polish zloty, Romanian leu, Malaysian ringgit, Philippine peso, Indonesian rupiah and Indian rupee against the US dollar. Sources: Bloomberg, Bank of Russia calculations.



\* IG and NIG yield and duration are calculated on the basis of indexed portfolio of Eurobonds with investment-grade and non-investment speculative ratings respectively. Source: Cbonds.ru news agency.

risk premiums for Russia (more than expected from the change in oil prices) suggests a more positive view of the Russian economy among investors and strengthens the ruble.

Amid the fall in risk premiums and growing investor demand for EMEs' assets, major Russian companies placed their Eurobond in the international markets in October (Chart 1.1.13). At the same time, the amounts placed were still extremely small by historical standards and the growth was only temporary. For the majority of Russian borrowers, the external capital markets were still closed. The inaccessibility of the external markets is limiting the potential positive effect of the fall in risk premiums for Russia. MONETARY

September-November, Overall, in ruble exchange rate dynamics were mixed. In the period from the start of September to mid-October, the ruble showed signs of strengthening amid growth in oil prices and the decreased risk premiums on Russian assets. However, after the fall in oil prices beginning in the second half of October, the ruble exchange rate dropped; the total depreciation of the ruble against the US dollar was more than 3% since the start of September. The ongoing decline in CDSs protected the ruble from a stronger depreciation. The Bank of Russia does not expect any significant changes in the national currency's exchange rate in the short run, and the main factors shaping exchange rate dynamics will continue to be oil prices and risk premiums.

Nº4 (12)

According to Bank of Russia estimates, the real effective ruble exchange rate was near equilibrium as of November 2015.

#### **Terms of trade**

Global prices for Russia's main exports continued to fall in September-November amid the excess supply and weak demand, leading to a further deterioration in terms of trade.

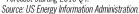
Despite slight growth in September-early October, Urals crude prices dropped from \$54.6 per barrel in June-August 2015 to \$45.6 per barrel in September-November 2015. This decrease was greater than anticipated in the baseline scenario presented in the previous Report.

The fall in oil prices was caused by commercial oil inventories in Organisation for Economic Cooperation and Development member states increasing to their highest values since 1984. Growth in the US dollar exchange rate amid expectations of an increase in the federal funds rate in December 2015 also exerted downward pressure. In addition, the intensifying competition in the European market, linked to the start of oil imports from Saudi Arabia and expectations of renewed supplies of Iranian oil after the lifting of sanctions, contributed to the fall in prices.

Against this backdrop, the Bank of Russia expects oil prices to be lower than forecast in the previous Report over the coming months. If the oil-supply glut continues, at least until the end of 2015, Urals crude will remain close to current levels (Chart 1.1.14). Oil prices could start to gradually recover

Chart 1.1.14 World liquid fuels production and consumption balance (million barrels per day)\*

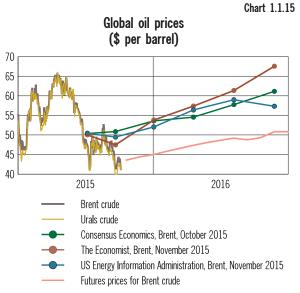


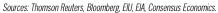


in 2016 Q1 (Chart 1.1.15). A fall in supply outside the Organisation of Petroleum Exporting Countries (OPEC) by 0.3–0.6 million barrels per day on average in 2016 following a fall in investment in oil deposit development and extraction by more than 20% in 2015 will contribute to price growth.

However, the strengthening of the US dollar and competition within the OPEC will go on to exert downward pressure on oil prices. After the lifting of sanctions in the first half of 2016, supplies of crude oil from Iran could increase by 0.5–1.0 million barrels per day by the end of next year compared with current levels, which will exacerbate the problem of excess supply. Other OPEC member states will in all probability keep their production at a high level, trying to maintain and increase their market shares. A significant factor of uncertainty is still the volume of production from unconventional sources. If it persists, it could prevent a reduction in the supply glut and the restoration of balance in the global oil market. In addition, due to the slowing economic growth and the economy's reduced energy consumption, the growth in demand from China, which ranks second globally by oil consumption and first – by growth, will fall. As a result, the risks of downward oil price forecast revision still remain.

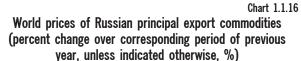
The fall in global prices for other key Russian exports, which has taken place over the last few years, continued in September-November 2015. The price of natural gas in the European market dropped due to high stocks and the adjustment of contract prices tied to oil prices. Global coal and metal prices continued to fall amid sluggish growth

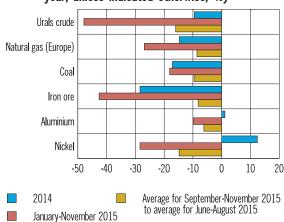




in demand from China, which accounts for roughly half of global demand for coal and metal, and due to the strengthening of the US dollar. Over the coming quarters, as the influence of the aforementioned factors persists, gas, coal and metal prices will remain low (Chart 1.1.16).

The fall in global prices in commodity markets had a negative impact on Russia's foreign trade (see 'Dynamics of major balance of payments items in 2015 Q3' in the Annex). In January-September 2015, the decline in prices for oil, oil products,





Sources: World Bank, for oil – Reuters data.

gas, coal, iron ore and nickel led to a reduction in export earnings in these categories of commodities compared with the same period of the previous year by more than 110 billion US dollars, which made the main contribution to the reduction in total exports. This decrease was only partially offset by the growth in actual quantities of oil exports. The drop in raw material prices is also having a negative impact on budget revenues and Russia's investment appeal.

MONETARY

# 1.2. Internal financial conditions

The financial conditions in the internal market continued to ease in September-November 2015. Security yields, bank loan and deposit rates dropped consistently under the influence of both the already materialised relaxation of monetary policy and the further relaxation expected by market participants. Against this backdrop, the slight revival of corporate lending observed midway through the year continued. However, the growth in banks' corporate lending portfolio remained weak (and the retail lending portfolio continued to drop), which can in part be explained by banks' still high requirements for borrowers and the quality of loan collateral. The relatively strict lending conditions combined with the high debt burden of borrowers and the decline in economic activity will contribute to growth in monetary and credit aggregates remaining moderate. This, in turn, will not create any significant money supply-side pro-inflationary risks.

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

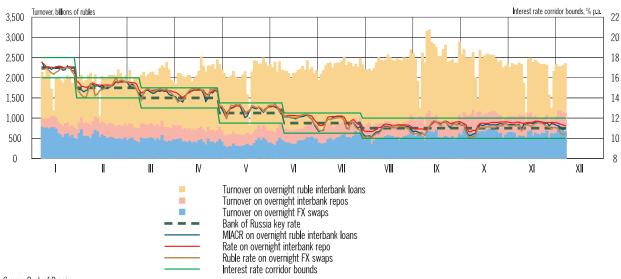
In September-November 2015, money market rates continued to fluctuate within the Bank of

Russia interest rate corridor (Chart 1.2.1). However, the structure of operations of certain money market participants and banking sector liquidity factors shaped the dynamics of the spread between interbank lending rates and the Bank of Russia key rate.

During this period, the banking sector witnessed a liquidity inflow (Chart 1.2.2). The main source of this inflow was Federal Treasury operations to place temporarily unallocated budget funds in bank deposits. The growth in the amount of these operations came about as a result of the Russian Ministry of Finance converting Reserve Fund resources in order to execute the upcoming budget spending at the end of the year amid a forecast federal budget deficit. A further source of the increase in banking sector assets was the transfer of funds from the state corporation Deposit Insurance Agency to rehabilitate troubled banks and pay insurance claims to depositors, operations to invest National Wealth Fund resources, and the placement of local budget and extra-budgetary funds in bank deposits (Chart 1.2.3). The dynamics of changes in cash in circulation were close to the traditional pattern and also led to a minor increase in the amount of liquidity in the banking sector (Chart 1.2.4).

The inflow of funds into the banking sector reduced the amount of liquidity supplied by the Bank of Russia. As a result, the banking sector's total debt under refinancing operations declined from

Chart 1.2.1



Money market interest rates and turnover in 2015

2,500 2,000 1,500 1,000 500 Chart 1.2.2

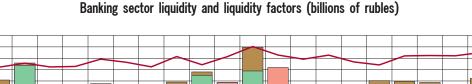
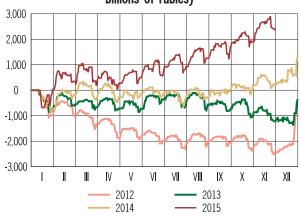


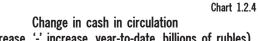


Chart 1.2.3 Change in general government accounts with the Bank of Russia ('+' decrease, '-' increase, year-to-date, billions of rubles)\*

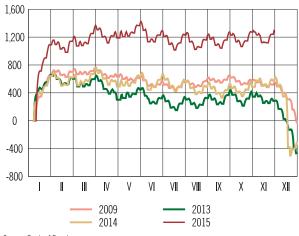


\* Including Federal Treasury deposit operations, Ministry of Finance OFZ operations and other operations. Source: Bank of Russia.

4.3 trillion rubles in early September to 3.3 trillion rubles in late November 2015. Based on estimates of credit institutions' demand for liquidity in 2015 Q4 – 2016 Q1, the Bank of Russia gradually reduced the amount of funds provided through loan auctions secured against non-marketable assets. Over this period, banks' debt on these operations reduced by 0.6 trillion rubles to 2.0 trillion rubles at the start of December. In order to effectively manage banking sector liquidity and influence money market rates, the Bank of Russia still made use of one-week repos. Depending on short-term banking sector liquidity needs, in September-November 2015, banks' debt on these operations ranged between 0.6 and 1.4 trillion rubles, amounting to 1.0 trillion







Source: Bank of Russia.

rubles at the start of December (1.2 trillion rubles at the start of September) (Chart 1.2.5).

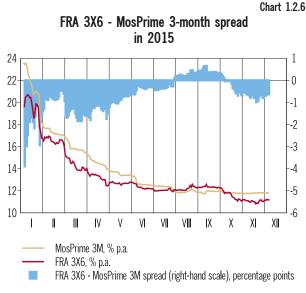
Despite the falling liquidity needs of the banking sector in September-November 2015, banks' demand for Bank of Russia auctions often exceeded the amount of funds provided. This was due to the fact that a substantial number of banks still experience forecasting difficulties, therefore overestimating their own liquidity needs. The heightened demand for Bank of Russia operations from these market participants led to a significant growth in the rates at which funds were borrowed at the auctions. However, banks did not materially increase their use of standing facilities. The main benchmark used by banks borrowing funds at high 15



Source: Bank of Russia.

interest rates was the rate formed on the basis of previous Bank of Russia auctions, rather than the expected cost of attracting funds in the interbank lending market in the week ahead or an objective assessment of the future demand for liquidity. The formation of high cut-off rates based on Bank of Russia auctions did not lead to any significant growth in money market rates. This suggests that the amount of liquidity provided by the Bank of Russia to the banking sector as a whole was sufficient. In most cases, the banks that displayed elevated demand for Bank of Russia auctions subsequently redistributed the funds in the money market. However, these funds were often placed by banks at rates lower than the cost of borrowing from the Bank of Russia. The funds thus redistributed in the interbank lending market satisfied the demand of banks whose bids were below the cut-off rates at auctions.

In these conditions, the average spread of the overnight interbank rate relative to the Bank of Russia key rate over this period was roughly 20 bp, although the spread's dynamics were uneven. After the 10th of each month in September-November, interest rates in the overnight money market segment were predominantly above the Bank of Russia key rate (Chart 1.2.1). This was helped by the fact that major banks satisfied a large proportion of their demand for ruble-denominated liquidity by attracting funds in the overnight money market segment, which repeatedly caused the spread between the interbank rates and the Bank of Russia



Sources: Bank of Russia, Bloomberg.

key rate to widen. Rates tended to have local dips into the lower half of the Bank of Russia interest rate corridor before the 10th of each month, due to the fall in credit institutions' demand for liquidity at the end of the required reserves averaging period<sup>1</sup>.

Upward pressure on interbank rates also came from the redistribution of borrowings by certain banks between interbank lending markets and stock exchange FX swaps. This increased the daily average turnover on overnight interbank loans by roughly 100 billion rubles in September-November compared with June-August 2015. Conversely, the turnover on overnight FX swaps actually fell by the same amount. In addition, against this backdrop, the spread between overnight interbank lending rates and the implied ruble rate on FX swaps also increased over this period, averaging 10 bp (the spread was largely near-zero in previous months in 2015).

Credit institutions' demand for Bank of Russia refinancing operations is expected to increase in December 2015. Compared with the forecast

<sup>&</sup>lt;sup>1</sup> The required reserves averaging mechanism implies maintaining the average balance in banks' correspondent accounts with the Bank of Russia at a level no lower than required reserve ratios over the defined period. Banks strive to observe this ratio in advance by using an additional inflow of liquidity and the possibility of attracting funds in the market at lower rates at the start of the required reserves averaging period, before the tax period. As a result, at the end of the averaging period, at the start of the calendar month, many banks have essentially already performed required reserves averaging and therefore their demand for liquidity at the end of the averaging period reduces and is less stable in nature.

Table 1.2.1

Chart 1.2.7

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

		2013 (fact)	2014 (fact)	2015 <sup>1</sup> (estimation)	l quarter 2016 (forecast)
Total for liquidity factors	1=2+3+4+5	-1.7	-2.6	[3.0; 3.5]	[1.3; 1.5]
of which:					
<ul> <li>change in general government accounts with the Bank of Russia and other operations<sup>2</sup></li> </ul>	2	-0.4	0.9	[1.8; 2.2]	[0.5; 0.7]
<ul> <li>change in cash in circulation</li> </ul>	3	-0.5	-0.3	[0.3; 0.4]	[0.5; 0.7]
<ul> <li>Bank of Russia interventions in the domestic FX market and purchases of monetary gold<sup>3</sup></li> </ul>	4	-0.9	-3.1	[0.8]	[0.1; 0.2]
<ul> <li>change in credit institutions' required reserves with the Bank of Russia</li> </ul>	5	0	-0.1	[0.1]	[0; 0.1]
Change in free bank reserves <sup>4</sup>	6	0	0.2	[0.2; 0.3]	[-0.7; -0.3]
Change in outstanding amount on Bank of Russia refinancing operations	7 = 6 - 1	1.7	2.8	[-3.3; -2.7]	[-2.0; -1.8]
Memo item: outstanding amount on Bank of Russia refinancing operations (as end-year) <sup>5</sup>	8	4.5	7.3	[4.0; 4.6]	[2.0; 2.8]

<sup>1</sup> January-November 2015 – actual, December 2015 – estimation.

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

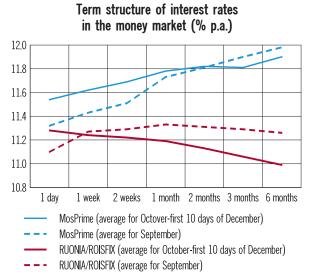
<sup>3</sup> In previous MPR releases these operations were categorised as 'change in general government accounts with the Bank of Russia and other operations'. <sup>4</sup> During the forecast period the demand for free bank reserves is determined on the basis of credit institutions' correspondent account balances with the Bank of Russia (taking into account the average amount of required reserves held in correspondent accounts, banks' need to perform settlements and precautionary motives) and the volume of credit institutions' deposits with the Bank of Russia.

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

Source: Bank of Russia.

presented in the September release of the Monetary Policy Report<sup>2</sup>, the estimated banks' debt on these operations at the end of 2015 was revised to 4.0-4.6 trillion rubles (Table 1.2.1). This is linked to the increased certainty regarding the possible amount of budget expenditures to be financed from the Reserve Fund. With the significant volume of free market collateral held by credit institutions, the Bank of Russia plans to offset the growth in banking sector liquidity needs by increasing the amount of funds supplied through Bank of Russia repo auctions.

Participants in the interest rate derivatives market expect the Bank of Russia key rate to fall by 75–100 bp over the next three months. This is reflected by the spread between the future contract on 3-month Mosprime rate (FRA 3x6) and its current value, which moved into negative territory in October 2015 and stabilised at roughly -80 bp (Chart 1.2.6). In addition, from October to 10 December, 3- and 6-month Mosprime rates dropped compared with September 2015 (Chart 1.2.7) and the OIS (overnight index swap) curve became inverted, which also suggests that money



Source: Bank of Russia.

market participants expect a decrease in the Bank of Russia key rate. According to Bank of Russia estimates, the implied RUONIA rate, which is factored into the current shape of the ROISfix curve (as of 4 December 2015) is to be roughly 10.6% over the three-month horizon.

<sup>&</sup>lt;sup>2</sup> In the September release of the Monetary Policy Report, the estimated end-year demand for liquidity was 4.6-5.6 trillion rubles.

# FX market and Bank of Russia operations with foreign currency

Nº4 (12)

The US dollar-ruble exchange rate fell slightly (Chart 1.2.10) from September to 10 December 2015. The biggest contribution to the exchange rate fluctuations during this period came from external economic factors, in particular oil price dynamics and expectations regarding the imminent tightening of the US Fed's monetary policy and the fall in country risk premiums on yields on rubledenominated financial assets.

The ruble rallied in the first half of October amid oil futures' rise to over \$50 per barrel. It was also buoyed by growth in global investors' appetite for risk, due to increasing expectations that the Fed would defer the federal funds rate increase until 2016. From November to 10 December, with oil prices falling below \$45 per barrel and the US dollar growing in strength in the international market (following announcements by Fed officials about a likely increase in the key rate at the December meeting), the ruble once again weakened. In these conditions, the ruble enjoyed some support from high sales of foreign currency exports earnings and the growing appeal of Russian financial assets amid the consolidation of the stand taken by Western countries and Russia regarding the military operations in Syria. Following the incident with the shooting down of the Russian bomber, geopolitical risks flared up once again. Against this backdrop, and with the OPEC's decision to not set official limits on the volume of oil production and the ever growing expectations that the Fed will increase its policy rate at the start of December the ruble exchange rate reached its lowest value since the first ten days of September 2015.

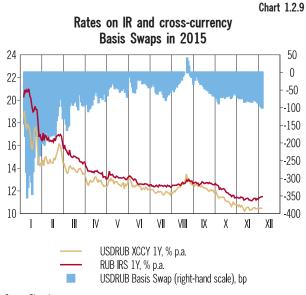
However, both the realised and implied exchange rate volatility predominantly fell over the period under consideration, stabilising between November and 10 December at roughly 20 pp (Chart 1.2.11). This was partly due to the decreased volatility of oil prices and the slight reduction in the elasticity of the ruble exchange rate relative to oil prices between September and 10 December 2015 (to average levels for 2015) after its sharp and somewhat excessive growth in August.

In the medium term, the exchange rate volatility will gradually reduce amid economic agents'

outstanding amount 40 35 30 25 20 15 10 5 0 VIII Х Х Т Ш V V V VI Х Х Х XII 2014 2015 1-week repos 28-day loans\* 12-month loans\* 28-day repos 12-month repos

Bank of Russia FX refinancing facilities

\* Bank of Russia US dollars loans secured by claims on US dollar loans. Source: Bank of Russia.



Source: Bloomberg.

ongoing adaptation to the floating exchange rate and current external economic conditions.

The FX liquidity situation at Russian banks in September-November 2015 remained favourable. In these conditions, credit institutions' demand for Bank of Russia FX refinancing instruments fell. As a result, over this period, the outstanding amounts on Bank of Russia FX repos and Ioan auctions (Chart 1.2.8) reduced by more than \$7 billion to \$23.7 billion by the end of November. In September-November, ruble rates on annual cross currency (XCCY 1Y) and interest rate swaps (IRS 1Y) decreased, but the spread between these rates remained stable within 80 bp (Chart 1.2.9). This also pointed to the lack of dollar liquidity problems at Russian banks.

#### Chart 1.2.8

19

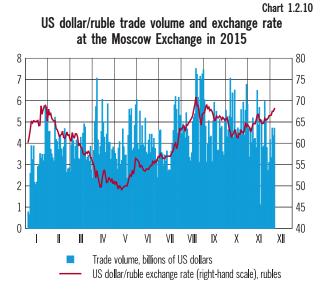
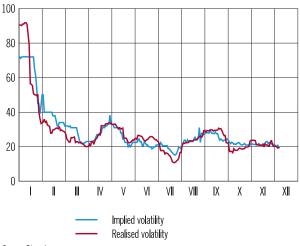




Chart 1.2.11 Implied and realised ruble exchange rate volatility in 2015 (percentage points)



Source: Bloomberg.

According to Bank of Russia estimates, the upcoming payments on Russian banks' and companies' external debts in December 2015 will not exert any significant pressure on the exchange rate. Net revenues in the balance of payments current account in combination with the foreign currency assets accumulated by Russian banks and companies will enable them to make uninterrupted payments without causing any additional pressure on the ruble exchange rate. In addition, to allow banks to more flexibly manage their own FX liquidity, the Bank of Russia decided to resume its 12-month foreign currency repos from 14 December 2015. However, the Bank of Russia reserves the opportunity to redistribute the debt from foreign currency repo auctions across these operations

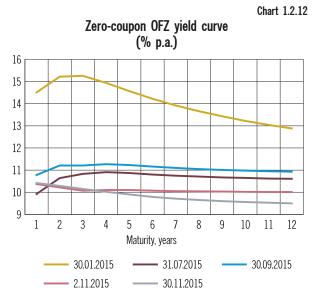
with terms of 1 week, 28 days and 12 months. The Bank of Russia will still take into account the banking sector's foreign currency liquidity needs (including based on balance of payments forecasts) and the situation in the domestic FX market when defining the parameters of its auctions to provide foreign currency on a reverse basis.

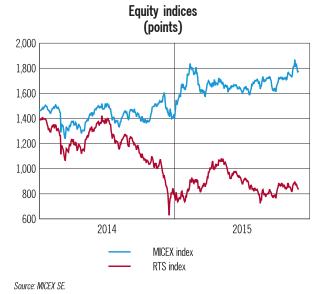
#### Asset prices and bond market

The situation in the Russian securities market was more favourable in September-November 2015 than in the summer months. There were no significant external shocks specifically linked to the negative actions of international agencies regarding Russia's credit rating, and the situation in related segments of the domestic financial market was relatively stable. Market participants' growing expectations in October-November that the Bank of Russia would reduce its key rate in the next quarter had a positive impact on price and trading dynamics in the securities market (Chart 1.2.12). A further strong indicator of changes in market expectations was the Bank of Russia's comments (in the press release featuring the results of the Board of Directors' meeting on 30 October 2015) that it was ready to reduce its key rate at a future meeting as inflation slows in accordance with the forecast.

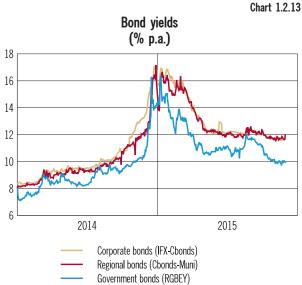
Over this period, bond yields dropped, with the greatest decline witnessed in the government securities segment. In mid-November, OFZ yields in the secondary market dropped to their lowest value since the end of October 2014. The situation in the stock market also improved, with the rubledenominated MICEX index achieving its highest value of the year. By the end of November 2015, government, corporate and regional bond yields reduced compared with the end of December 2014, by 4.4, 4.0 and 3.6 pp respectively (Charts 1.2.13, 1.2.14).

With these shrinking yields, growing investor demand for ruble-denominated financial assets and the ongoing difficulties in attracting external loans, issuing activity in the internal bond market increased in September-November (Charts 1.2.15, 1.2.16). In terms of purchasing volume in the primary market, banks led the market, traditionally showing the greatest interest in OFZs. Second place was taken by NPFs, which significantly increased their

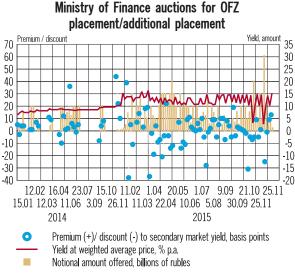




Source: MICEX SE, calculated using the method elaborated together with the Bank of Russia.







Sources: MICEX SE, Cbonds.ru

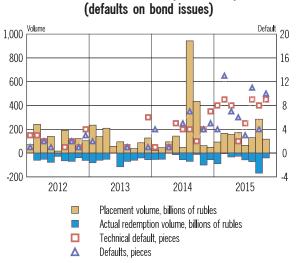
investment in infrastructure bonds. On the whole, banks and NPFs purchased more than two thirds of the total amount of bonds placed in the domestic market. Foreign players increased their investment in corporate and regional bonds, having maintained similar levels of investment in OFZs compared with previous months. Russian securities were of interest to non-residents in part in order to be used in 'carry trade' transactions with the still high yields in the Russian market compared with rates in developed and many emerging markets. The growth of the total market portfolio of outstanding bonds in the domestic market accelerated to 4.1% in September-November (2.7% in June-August) (Chart 1.2.17). Sources: MICEX SE, Bank of Russia calculations.

The increase in the placement of bonds and high demand for securities from credit institutions combined with the Bank of Russia's expansion of the Lombard List and continuation of its bank recapitalisation programme through the OFZ mechanism caused the amount of market collateral held by banks to increase to 8.9 trillion rubles on 1 November 2015 from 6.6 trillion rubles at the start of the year (Chart 1.2.18). The forecast for this figure for the end of 2015 was increased to 9.1 from 8.5 trillion rubles in the September Report.

Despite the positive trends observed, over the coming months we cannot rule out an increase in the volatility of securities quotations in the domestic market. The market will be shaped by expectations Chart 1.2.16

MONETARY

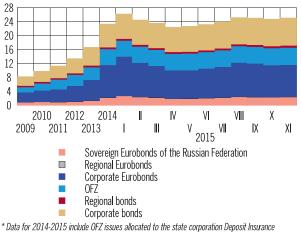
POLICY REPORT

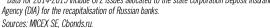


Placement at MICEX SE and redemption of corporate bonds

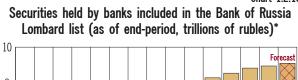
Sources: MICEX SE, Cbonds.ru, Bank of Russia calculations.

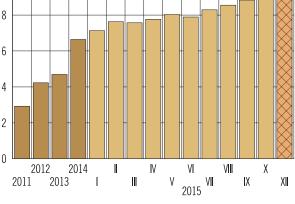
Chart 1.2.17 Volume of Russian bonds outstanding (as of end-period, trillions of rubles)'





and the possible consequences of the Fed's rate decision, the reduction in NPF investments in financial assets linked to the 'freezing' of pension savings from 1 January 2016, the seasonal reduction in trading activity and the review of securities portfolios by market participants at the start of the calendar year. At the same time, the effect of the above mentioned factors will be shortlived and will not lead to any significant adjustment in equity prices or bond yields. According to Bank of Russia estimates, over the longer-term horizon (one year), OFZ market participants expect a fall in short-term (one-year) bond yields to 7.4% p.a., which in part suggests that they still expect the





\* Including securities pledged as collateral under repos Source: Bank of Russia.

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



Sources: Rosstat, Bank of Russia calculations.

Bank of Russia to continue to ease its monetary policy in the medium term.

Household demand for residential real estate remained low in August-September 2015, as reflected in the price dynamics. The rate at which the cost of 1 square metre of living space fell in 2015 Q3 was 1.4%, a twofold increase quarter on quarter. However, annual price growth in the primary and secondary housing markets was near zero in 2015 Q3 (Chart 1.2.19). Current trends in the market were smoothed over slightly by the easing of mortgage lending price conditions (the fall in ruble-denominated mortgage lending and the implementation of the mortgage rate subsidy

programme). However, with subdued economic activity and, in particular, shrinking real disposable household income and falling investment demand, it is highly likely that monthly growth in housing

Nº4 (12)

prices will remain negative up to the end of 2015, and a decrease in prices will be recorded at the end of the year.

#### Extracting expectations regarding future short-term interest rates from current OFZ yields

One of the main theories explaining the term structure of interest rates is the expectations hypothesis. According to this hypothesis, the yield of a bond with a long term to maturity is equal to the average expected yield figures for short-term bonds whose total term to maturity equals the term to maturity of the long-term bond issue.

Despite the fact that this expectations hypothesis intuitively offers a clear explanation of the term structure of interest rates, it ignores an important component: the risk premium. Since the nominal yield of a long-term bond is often associated with a significant degree of uncertainty, investors include an additional term premium (risk premium) alongside the expected yield of short-term bonds. Thus, to extract expectations regarding future short-term securities yields from current OFZ yields, we need to decompose the yield curve into its expectations and risk premium components.

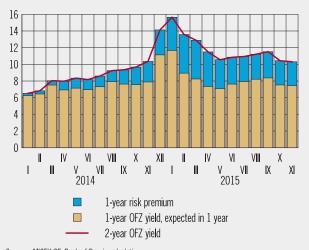
To empirically estimate the expected OFZ yield, an arbitrage-free term structure model that had been expanded to account for Russian-specific features was used [Cochrane and Piazzesi, 2009]<sup>1</sup>. This model includes four factor state variables: level, inclination and curvature (which describe<sup>2</sup> the shape of the yield curve at each moment in time), and a factor forecasting 'excess returns' (risk premium).

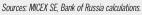
Based on the model estimates for the period from 2014 to the present, the two-year OFZ yield was decomposed (according to the main tenets of the expectations hypothesis, it represents the yield from short-term (one-year) OFZs after one year) into the expected yield and risk premium.

In summary, the model estimates suggest that in 2015 market participants expected a reduction in short-term OFZ yields over the medium- and long-term horizons. However, from June onwards they revised their estimates of the scale of the reduction in yields. These changes were shaped by both the Russian financial market's current climate and the Bank of Russia's announcements regarding monetary policy.

Thus, in August-September 2015, the upward leap in expected short-term OFZ yields reflected the increased external and internal economic risks (including inflation) and the views of market participants regarding the







gradual waning of the potential for the Bank of Russia to reduce its key rate. From October to the first half of November, confidence improved in the absence of negative external and internal news. In addition, many participants viewed the press release published after the October meeting of the Bank of Russia Board of Directors as a clear signal that the reduction in the key rate might resume in an upcoming meeting. These expectations lingered in the second half of November and at the start of December. As a result, their estimates of short-term yields reduced over the medium-and long-term horizons. However, the risk premium, which dropped in line with expectations, remains relatively high, reflecting the increased uncertainty still reigning in market expectations.

<sup>&</sup>lt;sup>1</sup> Cochrane J., Piazzesi M. (2009). Decomposing the Yield Curve // AFA 2010 Atlanta Meetings Paper.

<sup>&</sup>lt;sup>2</sup> The dynamics of the factor state variables are described by a VAR (1) process whose parameters are estimated retrospectively on a sample of monthly observations since 2003 to the present time. Unlike in the article [Cochrane and Piazzesi, 2009], the sample of 'market risk prices' used to parametrise the discount factor is obtained by other means. The calculation does not involve the simplifying assumption that the risk premium depends on changes in only one of the four factor variables.

# Bank lending and deposit operations

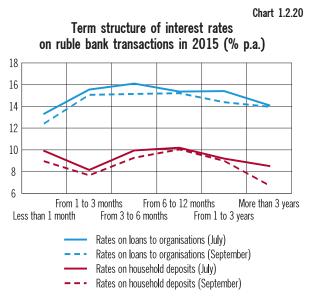
In August-September, interest rates in the main segments of the lending and deposit markets continued to fall (Chart 1.2.20). However, the rate of this decline gradually slowed as the effect of the Bank of Russia's cutting its key rate waned.

In the deposit segment, short-term deposit rates fell rapidly, as forecast (see Monetary Policy Report, September 2015). Compared with July, in September, the average short-term ruble-denominated household deposit rate dropped by 0.4 pp, while the long-term rate fell by 0.25 pp, causing the spread between these rates to continue shrinking. Rates also fell in the corporate deposits segment.

The fast decline in short-term household deposit rates could be a sign both of the certain weakening of expectations regarding the mediumterm reduction in rates and of the persistent interest exhibited by banks in establishing sustainable longterm liabilities. Competition between banks in the long-term segment of the deposit market, which intensified after a large-scale overflow in household funds into short-term deposits at the start of 2015, remains high.

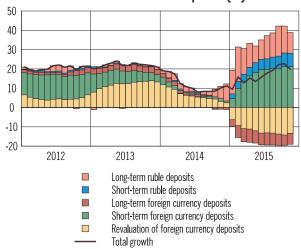
The relatively higher appeal of long-term deposits contributed to a further inflow of household funds into these instruments. Nonetheless, monthly growth rates for long-term deposits were far inferior to the equivalent figures for short-term deposits, which preserved the trend of the falling share of long-term deposits in bank's liabilities (Chart 1.2.21), originally emerged at the start of the year, till August-October. This change in the structure of deposit operations can be explained by the continued medium-term uncertainty and propensity among households depositing funds to strike a balance between long-term yields and the liquidity of their savings.

With the nominal depreciation of the ruble in August and September, depositors demonstrated a slight revival of their interest in foreign currency deposits. Monthly growth rates for household foreign currency deposits during this period exceeded the equivalent figure for rubledenominated deposits. In October, in the absence of a pronounced ruble depreciation trend, rapid growth in ruble-denominated deposits once again



Source: Bank of Russia.

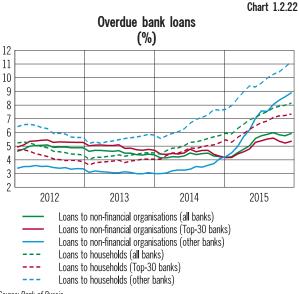
Chart 1.2.21 Contribution of various components to the annual growth rate of household bank deposits (%)



Source: Bank of Russia.

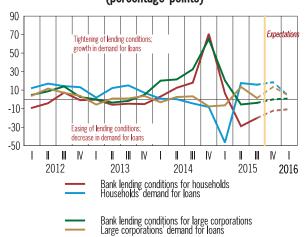
picked up. As a result, at the end of the August-October period, growth rates for ruble-denominated and foreign currency household deposits were comparable; the minor growth in dollarisation was caused predominantly by the revaluation of foreign currency deposits.

From the end of 2015 to the start of 2016, we can expect current trends to continue. Short-term household deposit rates will fall rapidly, while transitory episodes of rate hikes are also possible in the long-term deposits segment (predominantly driven by New Year eve promotional sales). As a result, if the overall trend of falling deposit rates persists, the spread between short- and long-term rates will continue to narrow. In this situation, growth



Source: Bank of Russia.

Chart 1.2.23 Lending conditions and demand for loans indices (percentage points)



Source: Bank of Russia.

in long-term deposits is expected to accelerate and, in the medium term, the said deposits could substitute short-term ones.

As in previous periods, where rates were on the downward track in the Russian economy, in 2015 they fell slower in the credit market than in the deposit market. Eventually, the full effect of the reduction in lending rates in the first six months of the year materialised to a lesser degree, and in August-September the change in credit market rates was more pronounced than in the deposit market. Compared with July, September rates for both short- and long-term corporate loans fell by 0.7 pp. As a result, the term structure of lending rates, which returned to normal midway through the

Chart 1.2.24 Contribution of various components to the annual growth rate of banks' loan portfolio (%)

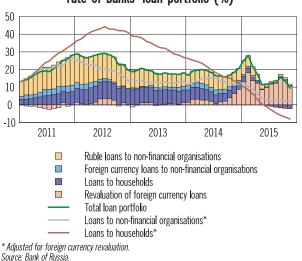
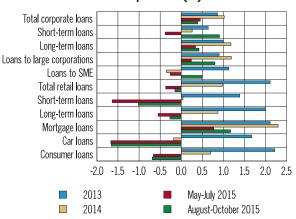


Chart 1.2.25 Average monthly growth rates of certain components of bank loan portfolio (%)\*

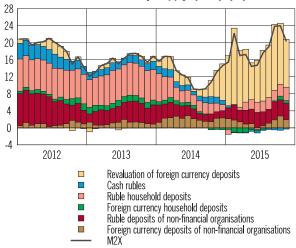


\* Adjusted for revaluation of foreign currency loans. For mortgage loans, car loans and other consumer loans - average monthly growth not adjusted for revaluation of foreign currency loans. Source: Bank of Russia.

year (long-term rates exceeding short-term ones), remained unchanged.

As expected, amid the fall in lending rates, banks retained their strict criteria for borrowers and the quality of loan collateral, which had been established in previous quarters. The stricter selection of new borrowers helped bring an end to the deteriorating quality of the corporate lending portfolio (Chart 1.2.22). The share of overdue debt in retail lending continued to increase in August-October, with its growth rate down almost twofold compared to April-July.

The reduction in interest rates facilitated further growth in demand for loans (Chart 1.2.23). Moreover, the end of decline in the lending portfolio quality



Source: Bank of Russia.

helped increase the supply of loans slightly, leading to further growth in the bank lending portfolio. In August-October, the average monthly growth rate of the corporate lending portfolio was 0.4%, as in May-July. The retail lending portfolio continued to contract, but the average monthly rate of its decline in August-October fell by twofold compared with the equivalent figure for May-July (Chart 1.2.25).

With the stabilisation of the lending portfolio quality, the trends characteristic of the end of 2014 and first half of 2015, in which more risky lending was substituted by less risky lending, were not so obvious. The average monthly growth in lending to small and medium businesses returned to positive territory and growth in lending to a number of industries also saw a revival (chemical, metallurgical and food industries) having fallen significantly in the first half of 2015. These dynamics can be explained by the following factors. On the one hand, by optimising their credit portfolios, certain banks started to return to segments of the loan market associated with higher risks. In turn, bank customers also gradually adapted to the changing situation and partially restored their demand for borrowed funds. On the other hand, the bank recapitalisation programme, which included a requirement that the recapitalised banks expand socially significant areas of lending, began to have an effect.

In the retail lending segment, where overdue debt continued to rise, these shifts were less

pronounced. The car loan and other consumer lending portfolios still shrank.

From the end of 2015 to the start of 2016, we can expect a small reduction in lending rates. The bulk of the effect from the July reduction in the key rate (decision as of 31 July 2015) has already taken hold, but there still exists some potential for a further reduction in rates. Together with the gradual decrease in the cost of servicing bank liabilities, due to the maturing of high-interest-rate deposits which were opened at end-2014 - early 2015, this could lead to a fall in lending rates by 0.3-0.6 pp by the start of 2016 Q2. Although the decrease in rates could help reinvigorate lending, it will be held back by the relatively high debt burden of borrowers. With conditions as they are, moderate growth in corporate lending is expected to continue (0.3-0.6% per month), with growth in the retail lending portfolio gradually returning to positive territory.

As expected, weak lending activity still supressed growth in money supply. However, the increase in budget spending compared with the same period in 2014 and, accordingly, annual growth in the bank system's net claims on the general government ultimately led to an increase in money supply. The annual growth in ruble-denominated money supply (M2 aggregate) and broad money supply (M2X aggregate), adjusted by foreign exchange revaluation, increased slightly in October compared with July, approaching mid-2014 levels (Chart 1.2.26). Nonetheless, the growth in money supply still lagged behind the growth in nominal GDP and the money supply to GDP ratio (monetisation) remained below long-term trends.

Over the coming quarters, money supply growth is not expected to accelerate significantly, given that lending growth, which has made the biggest contribution to growth in money supply in most of the recent years, will remain moderate. The current and expected credit and monetary aggregate dynamics, which are comparable with the growth in nominal GDP, do not suggest any significant pro-inflationary risks from the money supply in the medium run, which fact, among other things, was considered by the Bank of Russia when making its decision to change the key rate. The annual rate of GDP decline decreased in 2015 Q3, and was slightly less than estimated by the Bank of Russia. The economic downturn slowed as a result of higher growth in net exports and a perceptibly slower decline in investment demand compared with the previous quarter.

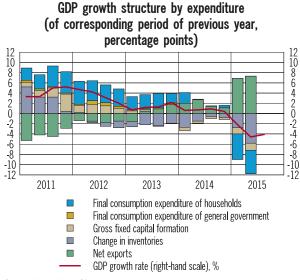
In August-September, the majority of economic indicators pointed to the end of this active phase of economic decline. However, it would be premature to speak of a revival in economic activity at this stage. In October, output indicators in various sectors of the economy were mixed, just as components of aggregate demand were. Given the better-thanexpected positive results of Q3, the estimated GDP growth for 2015 was shifted towards the upper bound of the range defined by the Bank of Russia in the previous Monetary Policy Report, i.e. -(3.7– 3.9%). In early 2016, the annual rate of GDP decline will continue to slow to an estimated -(1-2%).

In September-October, consumer price dynamics were shaped, on the one hand, by the pro-inflationary lag effect of the ruble's depreciation, which was transitory in nature, and, on the other hand, by the restrictions posed by shrinking demand. The result was the renewed reduction of annual inflation; however, inflation expectations among economic agents remained unstable. A further weakening of the exchange rate effect, a moderate-to-tight monetary policy, and the 'high base' effect will cause a slowdown in consumer price growth at end-2015 – early 2016. At the end of 2015, inflation will be roughly 13%. In 2016 Q1, inflation is estimated to be at 7.5-8.0%.

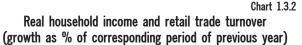
#### Demand

In 2015 Q3, the annual rate of GDP decline was 4.1% compared with 4.6% in the previous quarter (Chart 1.3.1), which was a little higher than Bank of Russia estimates.

The slight increase in external demand in 2015 Q3 compared with the previous quarter had a positive impact on growth in goods and services output. The depreciation of the ruble in August-September, which favourably affected the competitive advantages of certain types of export-



Sources: Rosstat, Bank of Russia calculations.





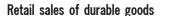
Sources: Rosstat, Bank of Russia calculations.

oriented industries<sup>1</sup>, also supported growth in the export quantities of goods and services (see Subsection 'Supply', in Section 1.3). Thus, annual growth in gas exports in Q3 was 17.9%, crude oil – 4.9% and ferrous metals – 7.4%. High growth was also observed in export quantities of certain types of non-ferrous metals. The weak ruble and low income of all economic agents meant that the high rate of decline in import quantities of goods and services persisted (roughly 30%). As a result, the positive contribution of net exports to GDP growth increased. According to estimates, this trend in net export dynamics will remain in 2015 Q4.

<sup>&</sup>lt;sup>1</sup> Annual growth in the output of raw materials and intermediate materials increased in August-October to 0.7%.

180 12 -1708 160 150

Chart 1.3.3

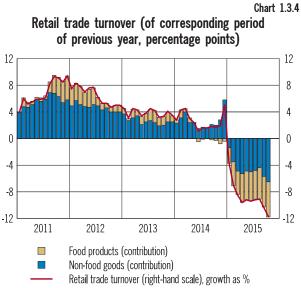




Sources: Rosstat, Bank of Russia calculations.

The negative contribution of spending on final consumption in GDP increased in Q3 compared with the previous quarter. The annual rate of decline in household spending on final consumption was 8.7-8.9% in Q3, according to estimates. In October, the contraction in consumer demand continued, as shown by the decline in retail trade turnover (to 11.7%). The main reason for this reduction in consumer activity is the fall in real household income<sup>2</sup>, in particular wages (both in the public and private sector) and pensions (Chart 1.3.2). The relatively tight lending conditions restricted households' abilities to purchase goods and services using borrowed funds (see Sub-section 'Bank lending and deposit operations', Section 1.2). Another factor holding back consumer spending was the high propensity to save.

The transition to a savings-oriented behaviour can be explained by the public's desire to establish a 'safety cushion' in these times of high economic uncertainty. Record high savings rates<sup>3</sup> in Q1



Sources: Rosstat, Bank of Russia calculations.

(17%, the highest since 2010) were in many ways caused by the balance of outstanding amounts on loans shifting to positive territory (loan repayments exceeded loans issued; the same situation was seen in the 2008–2009 crisis) and the growth in household deposits at banks (see Sub-section 'Bank lending and deposit operations', Section 1.2). In Q2 and Q3, amid the fall in deposit rates, seasonallyadjusted savings rate contracted to 15.7% and 14.5% respectively, according to estimates. In the short run, savings rate will continue to fall to its longterm average value (roughly 11%). However, the speed of this fall will be restricted by the persistent negative consumer sentiment.

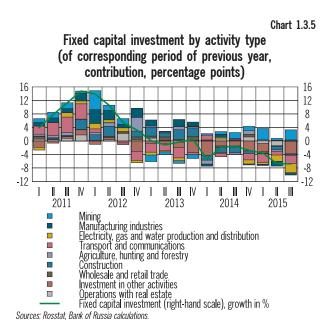
A fall in household income purchasing power causes the consumption structure to change in favour of less expensive alternatives to the usual products, as well as a refusal to purchase durable goods (Chart 1.3.3), shifting preferences toward essential products.

As a result, in September-October 2015, the fall in non-food goods sales made a more substantial negative contribution to retail turnover dynamics than foodstuffs (Chart 1.3.4). The motivation of 'for future use' consumption, which was observed in July-August when the ruble depreciated, was shortterm, as expected.

These trends will continue until the end of 2015. However, the fall in retail sales in November-December relative to the corresponding period of the previous year will likely accelerate due to the high base effect of the previous year. By the end of the year, household spending on final consumption

<sup>&</sup>lt;sup>2</sup> The real income figure is the weighted average growth in real wages and real accrued pensions, taking into account the income structure, relative to the corresponding period in the previous year. The figure covers roughly 65% of the household income structure and is less volatile than the real disposable income figure calculated by Rosstat.

<sup>&</sup>lt;sup>3</sup> Savings rate means the ratio of savings (includes growth (drop) in deposits, acquisition of securities, change in funds in the accounts of individual entrepreneurs, change in outstanding amounts on loans, acquisition of real estate, and purchasing of livestock and poultry by households) to disposable income (income excluding tax and duties payments, insurance payments, and contributions to social and cooperative organisations and interest paid by households on loans).



will shrink by 9.0–9.4%, according to Bank of Russia estimates, which is in line with the forecast published in the previous issue of the Report. In 2016 Q1, this decline is expected to reduce to 3-4% (relative to 2015 Q1).

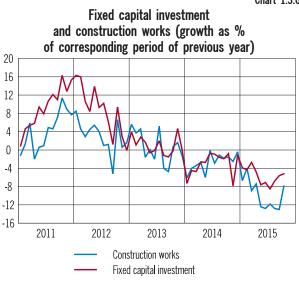
As opposed to consumer demand, investment demand saw its decline slow. In August-October, decline in fixed capital investment slowed down compared with previous months, and annual production of capital goods demonstrated gradual recovery. This suggests that the active phase of the investment slump is largely over.

Among the main types of economic activity, some support for investment came from positive capital investment dynamics in the mining sector. The production and distribution of electricity, gas and water, transport and communications made a substantial negative contribution to investment dynamics (Chart 1.3.5).

In 2015 Q3, construction works reduced by 12.5% compared with the corresponding period of the previous year. In October, the decline in this figure slowed to 7.9%, which was still higher than the overall slump in investment activity (5.2%) (Chart 1.3.6).

Out of all the economic sectors, the infrastructure sector made the largest contribution to the fall in investment compared with the public and private sectors (Chart 1.3.7).

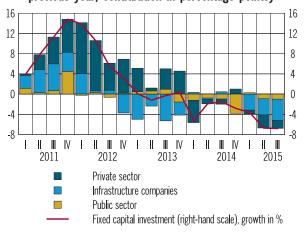
Though the most acute phase of the investment crisis has been overcome, it is still too early to speak of positive trends in capital investment dynamics. Over the next two quarters, investment activity



Source: Rosstat.



Fixed capital investment by public, private sector and infrastructure companies (of corresponding period of previous year, contribution in percentage points)



Sources: Rosstat, Bank of Russia calculations.

will continue to be restricted by the high economic uncertainty, weak consumer demand and unstable financial position of businesses.

Extending the moratorium on the funded component of pensions in 2016 will partially reduce the supply of long-term resources in the domestic market. In addition, the adjustment resulting from the 'tax manoeuvre' (the decision not to reduce oil export duties in 2016) could contribute to the reduction of capital investment in the oil sector by 'withdrawing' a portion of oil companies' capital and transferring it to the state budget. Public sector investment has also seen little activity amid the severe budget constraints. As a result, the decline in gross fixed capital formation in 2015 Q4 will be close to the previous quarter's value (7–8%).

#### Chart 1.3.6

29

The reduction in inventories will also slow down: the process of optimising the inventories in these new economic conditions has been under way since 2013 and at present their levels are relatively low. The good harvest also offered some support for inventory dynamics.

By the end of 2015, gross capital formation could fall by as much as 30%. In 2016 Q1, this decline is forecast to be 5–8% (year on year).

Given the better-than-expected positive results of Q3, the estimated overall GDP growth for 2015 was revised upwards to the upper bound of the range defined by the Bank of Russia in the previous Monetary Policy Report, i.e. to -(3.7-3.9%). In 2016 Q1, the annual rate of GDP decline will continue to slow to -(1-2%).

#### **Fiscal policy**

According to data from the Russian Federal Treasury for 2015 Q1-Q3, the Russian Federation's budgetary expenditures amounted to 38.2% of GDP, 3.8 pp higher than the same indicators for 2014. This growth in expenditures took place amid more intensive use of funds earmarked for 'National Defence' and 'Social Policy' (Chart 1).

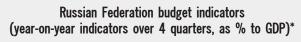
Budget income for 2015 Q1-Q3 was 36.8% of GDP, which is 0.6 pp below the same indicator for 2014. The 2 pp reduction in oil and gas revenues relative to GDP was offset by an increase in oil and gas income, in part through growth in profit tax receipts (amid continuing favourable corporate performance in the non-financial sector) and value added tax receipts.

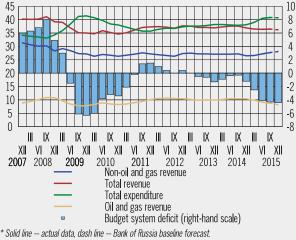
The budget deficit for 2015 Q1-Q3 was 1.4% of GDP (in the same period in 2014, there was a surplus of 3.0% of GDP). The non-oil and gas deficit increased by 2.2 pp compared with the same indicator for 2014, to 9.9% of GDP.

According to a report of the Russian Federal Treasury, the federal budget income for January-September 2015 fell by 1.7 pp compared with 2014, to 19.1% of GDP. Federal budget expenditures over this period were 20.4% of GDP, registering an increase of 1.9 pp compared with 2014. The federal budget deficit for January-September 2015 was 1.2% of GDP.

According to Bank of Russia estimates, given the revised budget forecasts, by the end of 2015 the budget system deficit may be 4.3-4.5% of GDP. The federal budget deficit is expected to be 2.7-3.0% of GDP. This could require spending 2.4-2.6 trillion rubles from the Reserve Fund to finance the budget deficit in 2015. In view of the increased budget deficit, the implementation of anti-recession budgetary policy measures and the investment of a portion of National Wealth Fund resources within the Russian economy, the public sector is expected to make a positive contribution to aggregate demand dynamics in 2015. In this context, the current and planned conservative wage and social security indexation policy should have a moderating impact on inflation, reducing the potential inflationary effect of the growing budget deficit.

In 2016, the budget system deficit is expected to remain at roughly 4.0% of GDP and the federal budget deficit – at 2.8-3.0%. Given the long-term slump in oil







and gas revenues, maintaining a relatively conservative policy of budget expenditures that assumes an ongoing reduction in spending in real terms is a necessary condition to guarantee the long-term stability of public finances. In this situation, the role of measures designed to improve budget expenditure structure and raise the effectiveness of controls over the use of funds is growing. Overall, in 2016, given the forecast change in both budget expenditures and income and the distributed over time impact of previous periods' indicators, the contribution of the public sector to aggregate demand dynamics will be near-zero, according to Bank of Russia estimates.

#### Supply

MONETARY

Production dynamics in the key industries in August-October 2015 suggest that the period of the most profound economic decline is largely over (Chart 1.3.8). Mining, transport and agriculture demonstrated positive output dynamics. The fall in production volume in the manufacturing industry slowed. The main factors behind the stabilisation of supply were growth in external demand, import substitution and the good harvest.

Nº4 (12)

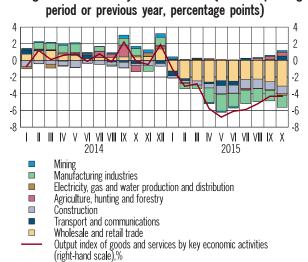
For the most part, the increased exports are linked to the growth in output in the mining and intermediate goods sectors registered in August-October (Chart 1.3.9). In particular, gas, oil, coal, ferrous and non-ferrous metals, fertilisers, nonmetallic minerals, textiles, paper, cardboard and packaging output all rose. The increase in exports was held back by a slump in the production of certain types of engineered products, such as washing machines and vehicle spare parts.

The growth in output of export-oriented industries contributed to the increase in freight turnover, especially by pipeline and railway transport.

Import substitution was the dominant factor underpinning the increase in agricultural output. The growth in production was also assisted by the favourable weather, which allowed for better cereal and vegetable harvests. In turn, this supported growth in the output of animal fodder, pesticides, certain types of fertilisers, the production of their components, and limited the slump in agricultural equipment production.

The enhanced demand for domestic products led to increased output of a whole range of foodstuffs (see Box 'Import substitution in the food market') and constrained the slump in the output of equipment and replacement parts for the food industry. Import substitution was also a leading factor behind the growth in the output of consumer chemicals (cosmetics, detergents and drugs) and the slowing of the decline in footwear production.

The improvement in capital goods output dynamics was also to a large degree linked to the evolving import substitution processes. Together with the depreciation of the ruble, the trade sanctions against Russia introduced by a number of countries in the second half of 2014 (bans on providing Russia with certain types of technologies, information, military and dual-use items, high-tech



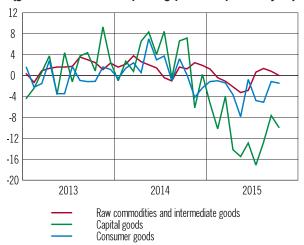
GDP growth structure by main activities (of corresponding

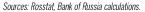
Sources: Rosstat, Bank of Russia calculations.



Chart 138







deep-sea oil extraction equipment, etc.) contributed to this, as well as the policy of reducing Russia's dependence on imports, including in the defence sector. In particular, the gradual revival in output in the 'Ship, airborne and space craft and other vehicle production' sub-industry may be linked to the growing investment in oil and gas production equipment. Efforts to expand the component base of the micro-electronics sector helped buoy electrical equipment output, as well as the extraction of nonmetallic minerals. Import substitution amplified the positive impact of the growth in exports on output dynamics in paper, cardboard and packaging production and raw textile materials.

MONETARY

POLICY REPORT

The fall in passenger car manufacturing slowed year on year, due largely not to shifts in the market structure but to the effect of base.

However, the foundations for sustainable growth in the industrial production are not yet in place: internal demand is still weak. The positive impetus from the demand structure's shift toward domestic production will be limited by existing conditions. Moreover, import substitution is only taking place in certain segments of the domestic market, and opportunities to expand exports are limited. In October this year, annual industrial production decreased by 3.6% (by 0.1% compared with the previous month, seasonally adjusted). Output by key industries<sup>4</sup> shrank by 4.3% and, according to Bank of Russia estimates, the rate of decline will remain close to current levels.

#### Import substitution in the food market

The introduction of the food embargo in August 2014, depreciation of the ruble at the end of 2014 – start of 2015 and increased volatility of the ruble in certain periods in 2015 led to a fall in food imports and created the necessary conditions for growth in domestic output. The supply of poultry, pork, potatoes, certain types of fish, and whey all rose, contributing to a reduction in inflationary pressure. Supply fell across other groups of goods affected by the sanctions. In addition, import substitution was far from taking place in all the segments of the food market affected by the embargo.

To study the development of import substitution in the food market, the Bank of Russia evaluated changes in the supply of certain groups of food products in the domestic market and the market structure. Supply was approximated by the flow of domestically produced and imported products less exports. As for reserves, it was assumed that their structure would on the whole be in line with the supply structure (given the high turnover of reserves, their structure should not significantly affect the overall conclusions).

Table 1

Fish (fresh, refrigerated fish, filet) and crustacean	Import substitution in effect	Frozen fish
Fresh and frozen vegetables		Pork
Beef		Poultry
Apples		Potatoes
Majority of dairy produce		Whey
Sausage and meat products		
Supply reduced		Supply increased
Live fish	Import substitution not in effect	Salted and smoked fish
Dried vegetables and mushrooms		
Dried milk		
Mollusks	Impo	

#### Food market change after the embargo imposition

Source: Bank of Russia calculations.

<sup>4</sup> The goods and services output index is calculated based on data on changes in the output quantities in agriculture, mining, manufacturing, electricity, gas, and water production and distribution, as well as construction, transport, retail and wholesale trade.

#### Table 2

#### Change in commodity Change in imports share, Change in exports Percentage of Change in output, growth supply, growth as % of as percentage points of share, growth as % of imports in domestic as % of corresponding corresponding period of corresponding period of corresponding period of commodity supply period of previous year previous year previous year previous year Beef -42 89 -5 25 5 -7 9 Frozen beef -41 87 25 Butter, dairy spreads and -15 24 -15 6 8 other dairy fats Fresh and chilled fish -14 4 -15 -5 -44 Unprocessed vegetables -10 34 -7 3 161 Sausage products -5 1 -1 -4 -9 -4 10 -4 Apples 78 \_ -1 -15 Cheese and curd 11 -13 15 Poultry: meat and edible 6 3 6 -5 11 meat offal Pork: fresh, chilled and 7 12 -8 18 7 frozen Whey 11 16 -3 15 71 25 Potatoes 19 7 -4 6

Overview of supply by product groups under the food embargo (January-September 2015, Bank of Russia estimates)

Source: Bank of Russia calculations.

Data were compared for January-September 2014 and 2015 (this timeframe made it possible to take into account the performance of the agricultural industry this year). Figures for August and September 2014, when the food embargo was already in effect, were included in the comparative base as it was assumed that their inclusion would not create any considerable distortions, because in the initial months after the introduction of the embargo, in view of the relatively long production cycle in crop cultivation and livestock rearing, the majority of agricultural and production businesses were not yet able to fully react to the expansion of the sales market.

The results of the analysis suggest that in many segments of the food market the fall in imports generated by the combined impact of the food embargo and the depreciation of the ruble was at least partially replaced by growth in domestic output (Tables 1 and 2), causing an increase in its share in the overall market supply. This share increased perceptibly (by 6–19 pp) in the markets for fish products (fish fillets, shellfish, fresh and frozen fish), fresh and frozen vegetables, dairy produce (cheese, butter), pork and frozen beef. A moderate increase in the share of domestic goods (by no more than 5 pp) was seen in the supply of poultry, fresh and chilled beef, apples, potatoes, whole-milk and fermented milk products, and sausage products.

In some market segments, the growth in domestic production not only replaced the missing imports (it made the market structure shift toward Russian goods), but actually ensured growth in total supply. In particular, the advance in import substitution led to a significant increase (by 6–19%) in the size of the market for poultry, pork and potatoes. Growth in supply (up to an estimated 5%) through the expansion of domestic production was recorded in the markets for frozen, smoked and salted fish. In the cheese market, the increased output of domestic products managed to almost entirely restore the former size of the market before its contraction. The leaders in terms of supply growth also include whey (11% growth), which is a by-product of milk processing (including cheese production).

However, in the majority of food market segments, domestic production was not enough to fully make up for the newly formed supply deficit. Although the share of Russian products in these segments increased, the size of the market (including domestic and imported products) fell. According to estimates, total supply in the beef, fresh and frozen vegetables, butter, fresh and chilled fish and fish fillet market segments decreased notably (by 10–50%). Marketable sausage products, apples, smoked meat products, and whole-milk and fermented milk products suffered a moderate reduction (by 1–5%).

The structure of certain segments did not undergo any significant changes despite total supply falling (live fish, milk powder, certain vegetables).

Against the backdrop of the increased competitiveness of many Russian products from a price perspective, exports increased, but their impact on the size of the internal market was negligible.

\_\_\_\_

32

#### Financial position of organisations

In January-September 2015, the total positive financial result (profit minus loss) of organisations<sup>1</sup> exceeded the same indicator for 2014 by 29.7%. Among key industries, the manufacturing industry saw the largest growth in its net profit (by 55.3%), followed by the agricultural industry (by 46.7%) and wholesale and retail trade (by 30.3%). The improved financial performance was primarily due to growth in revenue outstripping growth in expenditures.

In May-August, net profit was lower than in the same months in 2014, due to growth in demand-side restrictions in the economy. In addition, according to estimates, in Q3 the deficit of extraordinary income and expenses once again started to widen under the influence of the accelerating depreciation of the ruble. Despite this, in September net profits exceeded the same figure for 2014, largely under the influence of the low base effect: in September last year, profits shrank amid the accelerating decline in global energy prices and tighter borrowing conditions.

Financial performance dynamics are not expected to improve before the end of the year compared with the 'low base' of 2014 Q4. However, it is too early to speak of any improvement in the financial position of businesses – the necessary conditions are not yet in place.

<sup>1</sup> Excluding small businesses, banks, insurance companies and budget-financed organisations.

## Estimates of potential output dynamics based on 'replacement' cost dynamics for key production assets in the Russian economy

Studying the production potential of the Russian economy would not be complete without examining the state and dynamics of key facilities making up the material foundation of the reproduction process.

The problem, however, lies in the fact that in Russian accounting and statistics the value of fixed assets is recorded at the book value, which involves an estimate of the cost of assets at mixed prices: some companies revalue assets using current market prices and report them at their replacement cost, while others do not revalue them and their assets continue to be recorded on the balance sheet at their initial cost. With prices in the economy growing, a gap is forming between the replacement cost and initial cost of assets, and the book value is generally understated. This leads to the undervaluation of depreciation deductions and, as a result, a shortage of resources for investment and a contraction in production potential.

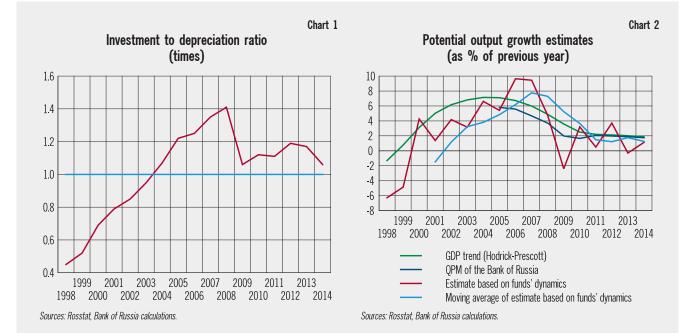
An accurate reflection of the condition and dynamics of fixed assets is obtained with the help of the estimate of their replacement cost, i.e. current market value. In the absence of reporting data, Russian researchers estimated the replacement cost of fixed assets in different periods using various methods<sup>1</sup>. The main flaw of these estimates is primarily their one-time and punctuated nature, while time series is required for practical needs.

In order to obtain a sufficiently long and easily extendable time series of the value of fixed production assets in estimated replacement prices, fit for econometric modelling, among other things, the following simplified approach based on regularly published statistics was used. The calculation is based on data on the book value of fixed assets as of 1 January 1998; in 1997 the value of fixed assets was converted into the prices of the base period (as of 1 January 1997). After this, the replacement cost was iteratively calculated forward based on data on fixed capital investments and depreciation calculated from the recovered cost. These estimates of the gap between the replacement and book values, taking into account the differences in the economy during the Soviet era<sup>2</sup>, can be compared with the results of calculations presented in works by Russian researchers.

Thus, the full book value of fixed assets is seriously underestimated relative to the replacement cost. According to estimates, due to inadequate depreciation funds, until 2004 fixed capital investments did not cover the wear and tear

<sup>&</sup>lt;sup>1</sup> Kopylova N. V. Estimating the replacement cost of fixed assets and the profitability of Russian industry in 2001 – 2004 // Statistical matters. 2008. No. 11). p.32 – 41; Kopylova N. V. Khanin G. I. Alternative estimates of the replacement cost of fixed assets and Russian industry in 2005 – 2008 // EKO. 2011. No. 1. p.83 – 99; Pogosov I. A. Net domestic product as the basis for an analysis and forecast of economic growth // Forecasting matters. 2013. No. 4. p.15 – 25; Saifieva S., Ermilina D. Financial sources of reproducing fixed capital // The Economist. 2012. No. 11. p.21 – 37; Khagin G. I., Fomin D. A. Consumption and gross fixed capital formation in Russia: an alternative assessment // Forecasting matters. 2007. No. 1. p. 26–51.

<sup>&</sup>lt;sup>2</sup> The calculations were carried out by V. E. Manevich, L. K. Nikolaev, and V. V. Ovsienko (see Saifieva, Ermilina, 2012).



of fixed assets. In 2005–2008, the situation improved, but in recent years investment again started to fall relative to depreciation, and by 2014 the excess was almost zero (Chart 1).

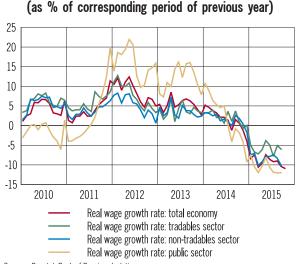
The dynamics of replacement costs for fixed assets can be used to assess the production capacity of the economy, which represents output under normal use of existing production assets. It is important to note that this output does not create additional inflationary pressure and is therefore inflation-neutral. This output must be analysed and forecast for monetary policy purposes. Estimates of actual asset utilisation and asset yield in the economy as a whole, which are needed for the calculations, are based on data from Rosstat and the Russian Economic Barometer.

Despite the very crude approach to assessing potential output, it can be said that the trends in potential output dynamics, which were calculated using the replacement cost of assets, are in line with dynamics estimated using other methods (Chart 2). Thus, we can assert with a relatively high degree of certainty that there has been a significant change in potential output growth rates in recent years. In 2015, with the fall in investment, which affected the reduction in the value of fixed assets, this trend is expected to continue.

#### Labour market

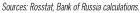
In Q3 2015, the labour market continued to adapt to the new economic conditions, primarily through a reduction in real wages. The high proportion of variable incomes (premiums, bonuses, etc.) characteristic of the Russian labour market in total wages was conducive to this adjustment to current economic conditions.

The deterioration in companies' financial performance from May 2015 and their intent to optimise spending caused a slowdown in the growth of nominal compensation payment, which together with the increase in inflation accelerated the slump in real wages in Q3 and October 2015 (Chart 1.3.10). The reduction in real wages was 10.9% in real terms in October compared with the



Real wage growth rates

Chart 1.3.10



La	abour market						
Indicators		20	)14			2015	
Indicators	I		III	IV	I	II	111
Employment and unemployment (seasonally adjusted)	'						
Unemployment rate, %	4.9	5.2	5.3	5.2	5.2	5.8	5.7
Employed to unemployed ratio	18.7	18.2	18.3	18.3	18.0	16.3	16.9
Aggregate labour market indicator	5.0	4.5	4.1	4.3	5.2	6.1	
PMI Composite Employment Index	48.2	47.4	48.2	46.6	44.8	46.0	47.4
Wages (as %, year-on-year)							
Nominal wages	11.1	10.2	8.3	7.7	5.7	5.9	4.9
Real wages	4.4	2.4	0.6	-1.7	-9.0	-8.5	-9.3
Wage arrears	6.2	5.7	-11.9	-10.2	7.9	22.6	38.6
Part-time employment							
Number of part-time employees (as % of previous period, seasonally	adjusted)						
Total	-4.3	1.0	6.8	-1.4	-3.7	6.2	3.2
Part-time employment	7.8	-4.2	-3.4	4.6	11.9	2.7	-3.5
Part-time employment at employer's initiative	14.9	-0.8	-8.0	10.6	18.3	23.9	-3.4
Part-time employment upon mutual agreement	-1.4	2.6	0.5	1.4	3.1	2.8	4.8
Idle employees	2.9	0.0	10.5	-6.7	2.9	-0.7	-4.1
Unpaid leave	-0.9	-0.3	1.6	0.0	0.0	1.8	-0.4
Part-time employees, as % of headcount							
Total	9.0	9.5	10.4	10.3	9.4	10.4	11.0
Part-time employment	2.2	2.1	2.0	2.2	2.4	2.5	2.4
Part-time employment at employer's initiative	0.3	0.3	0.2	0.3	0.4	0.4	0.4
Part-time employment upon mutual agreement	1.9	1.8	1.8	1.9	2.0	2.1	2.0
Idle employees	0.7	0.6	0.6	0.8	0.8	0.7	0.5
Unpaid leave	6.1	6.8	7.8	7.3	6.2	7.2	8.1
Alternative indicators of part-time employment							
Working hours per employee (year-on-year)	0.3	0.4	0.2	-0.1	-0.3	-0.4	-0.5
Labour force utilisation in industrial production (normal level=100)	87.7	86.7	89.0	85.7	81.7	86.7	87.7

Change compared with previous 12 months:

- situation improved (more than 1 standard deviation)

- situation improved (less than 1 standard deviation)

- situation remains unchanged (±0.2 standard deviations)

- situation deteriorated (less than 1 standard deviation)

- situation deteriorated (more than 1 standard deviation)

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

corresponding period last year and was higher than expected by the Bank of Russia.

The decrease in real wages was particularly pronounced in the non-tradables<sup>5</sup> sector of the

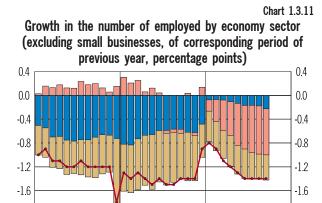
economy: according to data for September 2015, wages in this sector fell by 10.2% compared with the corresponding period of the previous year, whereas in the tradables<sup>6</sup> sector, real wages shrank by 6% over the same period (Chart 1.3.10). This imbalance in wage dynamics caused labour resources to continue to flow from the non-tradables sector into

<sup>&</sup>lt;sup>5</sup> Here, the non-tradables sector refers to: electricity, gas and water distribution, construction, wholesale and retail trade, vehicle, motorcycle, household appliance and personal appliance repairs, hotels and restaurants, transport and communications, financial activity, real estate, leasing and services, and other communal, social and personal services.

<sup>&</sup>lt;sup>6</sup> Here, the tradables sector refers to: agriculture, hunting and forestry, fishery, mining and manufacturing.

-2.0

2015



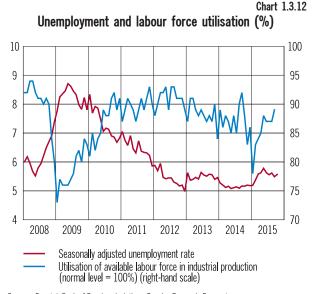
Nº4 (12)

2013 2014 Tradables sector Non-tradables sector Public sector

Growth of the employed number (right-hand scale), % -

Sources: Rosstat, Bank of Russia calculations.

-2.0



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

export-oriented raw materials sectors, as reflected by the structure of the growth in the employed by economy sector (Chart 1.3.11).

However, the rate of decline in employee wages in the public sector continues to outstrip the decline in earned income in the private sector (Chart 1.3.10), due to the abolition of indexing civil servants' wages this year and low indexation in other sectors.

With the accelerating decline in real wages, the seasonally-adjusted unemployment remained relatively stable in Q3 and October 2015 (Chart 1.3.12, Table 1.3.1), in line with the Bank of Russia's expectations. Unemployment's weak reaction to the unfavourable economic conditions could be linked to companies' disinclination to lose qualified

workers given the lower cost of labour in real terms and in anticipation of a future revival in economic activity. In addition, the labour supply deficit, caused by demographic factors, combined with the outflow of migrants whose income fell significantly as a result of the ruble's depreciation, had a moderating impact on growth in unemployment.

Opportunities to adjust the labour market to the low level of economic activity by reducing real wages will be limited at the end of 2015 - start of 2016. According to estimates, there may be a slight increase in unemployment figures during this period. However, in 2016 the extension of regional programmes may render some support for employment figures.

#### Inflation

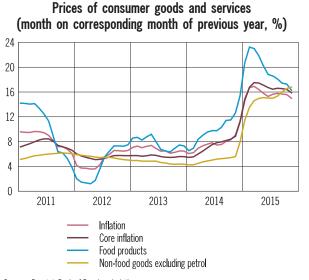
In September-November 2015, two key factors affected inflation. On the one hand, the August depreciation of the ruble put increased pressure on prices. On the other hand, weak demand and moderate-to-tight monetary conditions constrained inflation. These opposing effects were roughly equal in magnitude in September-October, but in November the impact of demand came to the fore. According to estimates, after a surge in August, monthly growth in seasonally adjusted consumer prices stabilised in September-October and dropped in November.

The differences in price dynamics for food products, non-food goods and services over this period can be explained by differences in the scale and the pass-through effect of the exchange rate on prices.

In September-November, monthly (seasonally adjusted) price growth for services (excluding utility tariffs) fell. Service prices were shaped primarily by the swift reaction of foreign tourism service prices to the depreciation of the ruble in August, and the subsequent decrease in response to the demandside restrictions. In September-October, there was a slight acceleration in price rises for domestic tourism services, possibly as a result of a shift in demand. During these months, price growth also increased for medical services, which has also been guick in the past to respond to exchange rate dynamics. In November, the growth in prices for medical services started to slow.

POLICY REPORT

#### Chart 1.3.13



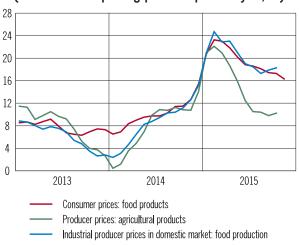
Sources: Rosstat, Bank of Russia calculations.

The pass-through effect of exchange rate dynamics on non-food goods price dynamics is more protracted. The growth in these goods prices reached a local peak in September, before starting to fall. In November, non-food inflation (seasonally adjusted) was already below the August levels. Prices for durables rose the most in the autumn months (electronic goods and other household appliances, television and radio electronic goods), which possibly also reflected an element of shortterm elevated demand accompanying the faster depreciation of the ruble.

The national currency depreciation was the main factor affecting the dynamics of food prices. Their price growth in September-November (seasonally adjusted) exceeded the August levels. Accelerated price growth was mostly seen in product markets with a high proportion of imports (fruits and citrus fruits, tea and coffee).

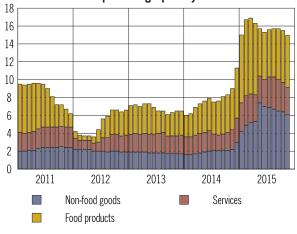
Furthermore, the rise in global cereal, vegetable oil and sugar (including raw sugar) prices and the insufficient raw material stocks in a number of industries (in particular, as a result of the low sunflower and sugar beet harvest in 2014) had an impact on food inflation. Together with exchange rate dynamics, these factors had an impact on the accelerating growth in producers' prices (Chart 1.3.14) and, consequently, consumer prices on pasta, certain groats, vegetable oils and confectionery markets. The continuing trend of increasing global prices for cocoa beans is amplifying the effect of exchange rate dynamics





Source: Rosstat.

Chart 1.3.15 Contribution to inflation (month on corresponding month of previous year, percentage points)



Sources: Rosstat, Bank of Russia calculations.

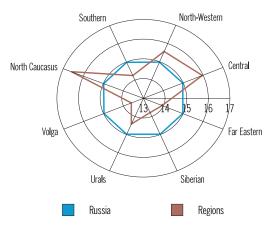
on producers' prices and consumer prices for chocolate-based goods.

Annual inflation fell from 15.8% in August to 15.0% in November (Chart 1.3.13), slightly exceeding the Bank of Russia's forecast. However, the annual growth dynamics of certain components of the consumer basket were varied.

Year-on-year inflation in the food market continued its fall observed since March to 16.3% in November (Charts 1.3.15, 1.3.16, 1.3.17). This reflected the market's adaptation to the lower demand. Furthermore, in autumn this year, the lower price growth for certain types of food than in the comparable period in 2014 may have resulted 38

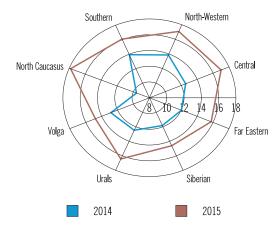


Nº4 (12)



Source: Rosstat.

Chart 1.3.17 Inflation by region (food products, November to November of previous year, %)

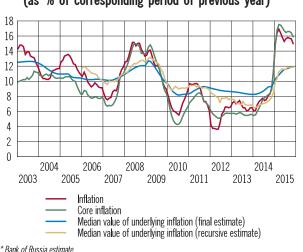


Source: Rosstat.

from a seasonal change, in part linked to the food embargo (see Box 'Change in the seasonal price dynamics for certain food products linked to changes in the market supply structure').

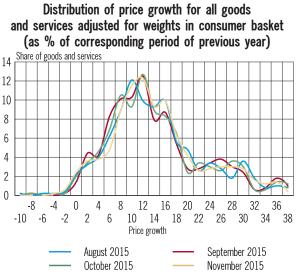
The 'high base' effect of the housing and insurance services segment was a contributor to the fall in the year-on-year price growth for services in September-November (to 11.9%). In 2014, the faster price growth in housing services was linked to reforms in funding for capital repairs and corresponding changes to legislation. Overall, prices for services over the year rose less than for food and non-food goods; the increase in administered prices and tariffs for housing and utilities services, transport and communications was less significant;

Chart 1.3.18 Inflation, core inflation and underlying inflation (as % of corresponding period of previous year)\*



Sources: Rosstat, Bank of Russia calculations.

Chart 1.3.19



Source: Bank of Russia calculations.

and price growth for market services was held back by low demand.

Conversely, in the absence of favourable base effects, annual growth in non-food goods prices continued to increase (to 15.7% in November), although, according to estimates, monthly rates (seasonally adjusted) were on average in line with price growth rates for food products.

The fall in CPI sub-indices points to the overall weakening of monetary inflationary pressure. In September-November, core inflation (seasonally adjusted), core inflation excluding food, and price growth for non-food goods excluding petrol all fell. Year-on-year core inflation in November also fell.

Chart 1322

Chart 1.3.20 Direct inflation estimates: median values (%) 28 26 24 22 20 18 16 14 12 10 8 VII Х VI IX XI V V XII X III X ٧ Ш VII IX XI VI XI IX XI VI XI IV VI VIII X XII II IV VI VIII X X IV 2010 2011 2012 2013 2014 2015 Observed inflation Expected inflation (12 months ahead)

**1.3. INTERNAL ECONOMIC CONDITIONS** 

Source: Public Opinion Foundation survey results.

24

22

20

18 16

14 12

10 8

> 6 4

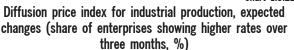
Quantified inflation expectations (%) Х V V VIII χ Х V V VIII χ IX 2013 Х V VII Х V V Х Х 1 2014 2015 Estimate by normal distribution Estimate by uniform distribution Interval estimate Current inflation

Chart 1.3.21



Estimates of annual rates of underlying inflation (Chart 1.3.18) in September-November remained stable (at 11.5–12%). However, if these price and monetary aggregate trends continue, we can assume that current underlying inflation estimates are peak values and expect them to decline gradually.

Nevertheless, a high degree of uncertainty still remains in price dynamics. In November 2015, the trend observed in recent months continued leading to the increase in the share of goods and services with high (10 to 20%) annual price growth (Chart 1.3.19). The inflation expectations of economic agents remained high, while the Bank of Russia assumed that they would fall in line with inflation.



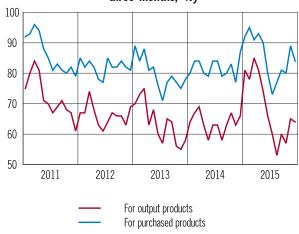
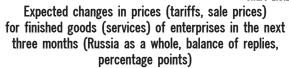
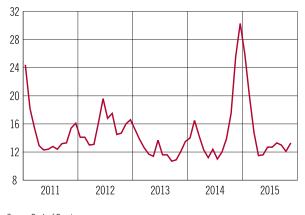




Chart 1.3.23







The accelerated price growth for certain consumer goods and services, even in cases when it was only seasonal in nature, had a negative impact on public confidence amid heightened uncertainty. Although the current level of inflation perceived by the public (based on data from surveys carried out by inFOM) in October-November fell to its lowest value since February this year, inflation expectations for the month and year ahead worsened (Charts 1.3.20, 1.3.21). According to estimates made using various statistical methods, household inflation expectations also rose in November.

Businesses and professional financial market participants also revised their own future inflation estimates upwards. According to the results of

2
<u></u>
co.
_
p
9.

			Ц	flation	expec	tations	Inflation expectations of economic agents	nic agent	s							
CHMINI	Exmandation boxison		2014	4							2015					
da v inc		_	=	=	ر ا	January	February	March	April	May	June	July	August	September	October	November
Inflation expectations (absolute). %																
Households																
Public Opinion Foundation	next 12 months	11.8	11.7	12.5	15.5	16.6	18.1	15.7	14.0	14.3	15.0	13.9	14.8	16.0	15.3	15.8
Public Opinion Foundation (Bank of Russia calculations)	next 12 months	8.1	9.0	9.6	14.4	16.1	15.7	14.1	12.1	11.9	12.4	12.8	13.9	14.6	13.8	15.0
Professional analysts																
Bloomberg	2015	4.6	4.8	6.0	7.2	10.5	11.0	12.5	12.5	11.5	12.6	12.0	12.5	12.6	13.0	12.9
Interfax	2015	4.9	5.1	6.3	10.9	13.6	12.5	12.5	12.6	12.1	11.3	11.8	12.3	12.6	12.6	12.7
Thomson Reuters	2015	1	1		8.4	10.1	11.5	12.6	12.4	11.5	11.2	11.5	11.6	12.5	12.7	13.0
Financial markets																
0FZ-IN	next 8 years											5.8	6.5	6.4	5.8	5.6
Bond market	next quarter	7.1	7.2	8.1	8.7	ı	ı	11.4		ī	16.1	ı	ı	15.0		
Interbank market	next quarter	7.2	8.2	8.6	10.0	1	1	14.7	1	1	17.4	ı	ı	15.0		
Inflation expectations (balance of replies*)	ies*)															
Households																
Public Opinion Foundation	next 12 months	84	85	84	83	84	78	76	74	70	72	74	73	80	80	82
Public Opinion Foundation	next month	79	82	76	77	75	71	68	62	59	60	63	67	71	73	79
Enterprises																
Russian Economic Barometer	next 3 months	26	26	32	70	62	48	32	20	9	20	14	30	28		
Bank of Russia	next 3 months	14.3	12.4	13.9	30.3	25.9	20.2	14.8	11.5	11.6	12.7	13.3	13	12.1	13.2	
Retail prices (Rosstat)	next quarter	42	41	41	43	ı	ı	31	1	ı	28	ı	I	30		
Tariffs (Rosstat)	next quarter	9	5	2	5	1	1	7	1	ı	9	ı	ı	2		
Change compared with provious 10 months:	ontho.															

Change compared with previous 12 months:

- inflation expectations improved (more than 1 standard deviation)

- inflation expectations improved (less than 1 standard deviation)

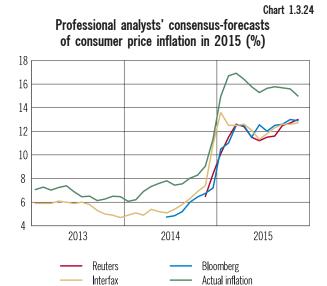
- inflation expectations remain the same  $(\pm 0.2 \text{ standard deviations})$ 

- inflation expectations deteriorated (less than 1 standard deviation)

- inflation expectations deteriorated (more than 1 standard deviation)

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

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



Sources: Rosstat Interfax Bloomberg Reuters

surveys carried out by the Bank of Russia, in October 2015 businesses' inflation expectations grew compared with the previous month (Charts 1.3.22, 1.3.23).

In November, professional analysts forecast inflation range for December 2015 at 12.7–13.0% (Chart 1.3.24, table 1.3.2).

According to Bank of Russia estimates, by the end of 2015, annual inflation could be roughly 13%, and 7.5–8% in 2016 Q1. To a large degree, the fall in annual inflation is linked to the reduction in the cumulative contribution of exchange rate dynamics. In November 2015, this contribution was estimated to be up to 6 pp, and in March 2016 estimates put it at roughly 2 pp.

Since the process of adapting the economy to the sanctions imposed on Turkey from 1 January 2016 will in many ways depend on the speed and efficiency of efforts to organise alternative supplies of banned imports, inflation estimates for Q1 2016 are fraught with high uncertainty. Given this proinflationary risk and the high inertia of inflation expectations, the Bank of Russia decided to keep its key rate unchanged in October and December 2015.

## Change in the seasonal price dynamics for certain food products linked to changes in the market supply structure

The depreciation of the ruble and the food embargo were reflected in the changing supply structure in the markets for a number of food products (see Box 'Import substitution in the food market'). The growth in the share of domestic products could have an effect on changes in the seasonal price dynamics in the consumer market.

To identify these changes, the seasonal model was assessed using two overlapping samples, one of which does not include the period of sanctions and the accelerated depreciation of the ruble (August 2010 – July 2014), while the second one does (November 2014 – October 2015). The seasonal component was assessed by an X-12-ARIMA filter which employed the following instruments: distributed lags of the ruble's real effective exchange rate and a variable accounting for the period when the reciprocal sanctions were in place.

In recent years, changes in seasonal consumer price dynamics have been observed in the markets for certain food goods where import substitution has grown actively. These are primarily the meat and meat product (especially pork) and fish product markets. In particular, the significant growth in the proportion of domestic products in the pork market was accompanied by the emergence of new seasonal peaks (in March, May and August) and a notable seasonal price reduction in January-February. The seasonal surge in fish product price dynamics also increased.

During several years, the seasonal amplitude of price dynamics for fruits and citrus fruits has increased. This may be linked both to growth in the proportion of domestic products in the markets for certain fruits and the fact that EU countries' segment of imports has in part been replaced with neighbouring CIS states with less effective preservation technologies and a less developed greenhouse-based infrastructure for growing vegetables.

It is important to pay attention to these differences in seasonality when analysing price dynamics. At the same time, not all of these can be ascribed to the impact of the changing structure of market supply, as import substitution has been in place for a little more than a year.

#### Short-term inflation forecasting using the combined forecast method

The Bank of Russia's introduction of the inflation targeting regime raised the requirements on the accuracy of its forecasting. Short-term forecasts (with a two-quarter horizon) are a reference point for medium-term forecasts, which the Bank of Russia uses in its monetary policy decision-making. One of the short-term inflation forecasting methods employed by the Bank of Russia is the combined forecast method.

A key advantage of this method is the ability to use large data sets in the forecasts<sup>1</sup>. The simultaneous inclusion of all variables in a single forecast can have a negative impact on its quality, while using different combinations of variables in several models and subsequently combining the results can eliminate these shortcomings and therefore allow the maximum possible data to be taken into account.

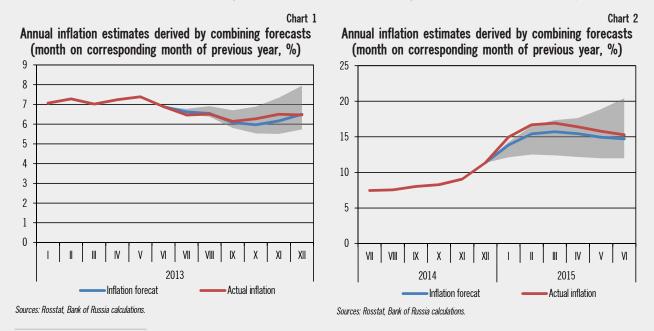
Another important argument in favour of using combined forecasts is their flexibility in the presence of structural shifts<sup>2</sup>. While detecting a structural shift when using a single model requires a large amount of observations and revaluation of its dependence, the combined method involves constant revision of weights of different forecasts, which allows quickest possible adjustment to structural shifts.

And finally, the combination method can increase accuracy by averaging out errors of individual forecasts<sup>3</sup>.

This approach to price forecasting is widespread in the central banks of countries pursuing inflation targeting (e.g., the central banks of Turkey, Norway, Switzerland and the ECB).

The essence of the combined forecast method used by the Bank of Russia is as follows.

In the first stage, forecasts for the main CPI sub-indices<sup>4</sup> are produced using both unconditional models and models based on scenarios proposed by the Bank of Russia. Unconditional models include the random walk model with drift, autoregression with a linear trend, and the unobserved components model. Only inflation dynamics for previous periods are used for forecasting in these models. Vector autoregression models (standard, Bayesian) and



<sup>&</sup>lt;sup>1</sup> H. C. Bjornland, A. S. Jore, C. Smith, L. A. Thorsrud (2008), 'Improving and evaluating short term forecasts at the Norges Bank', Norges Bank Staff Memo, N4.

- <sup>2</sup> K. Akdogan, S. Baser, M. G. Chadwick, D. Ertug, T. Hulagu, S. Kosem, F. Ogunc, M. U. Ozmen, N. Tekatli (2012), 'Short term inflation forecasting models for Turkey and a forecast combination analysis', Central Bank of the Republic of Turkey, Working paper N12/09.
- <sup>3</sup> A. Timmermann (2006), 'Forecast combinations', in G. Elliot, C. W. J. Grangerand A. Timmermann, Handbook of Economic Forecasting, Vol. 1.
- <sup>4</sup> CPI is broken down into the following sub-indices: food products (meat and fish products; eggs and dairy products; confectionery, tea, coffee; farinaceous products; fruit and vegetables; other food products), non-food goods (clothing, medical goods and detergents, goods with regulated prices, furniture and construction materials, equipment and vehicles, other non-food goods), and services (personal services, educational services, tourism services, passenger transport services, housing and utilities services, medical and other services).

42

POLICY REPORT

linear regression models employ all possible linear combinations of the chosen exogenous variables adopted as scenario conditions in the Bank of Russia's forecasts.

For each model, the accuracy of its out-of-sample forecast is estimated to be the inverse of the standard deviation of actual inflation from forecast inflation. The results obtained are aggregated into the final forecasts for each CPI subindex with weights proportional to their accuracy. In the final stage, the inflation forecast is calculated by aggregating data for all CPI sub-indices with their weights in the consumer basket.

In order to determine the time interval over which the forecast accuracy is assessed, so as to then determine its weight, the dependence of the combined forecast's accuracy on the interval length was examined. The results showed that a two-month time interval ensures the maximum accuracy. The adopted approach is therefore flexible as the minimum time interval to assess the weights ensures rapid revaluation, taking into account the economic developments.

In periods when economic conditions were relatively stable (e.g., in the second half of 2013), the inflation forecast was relatively accurate and the range of estimates was narrow (Chart 1). In 2015, when economic uncertainty intensified, the inflation forecast error and range of estimates increased. Nonetheless, the quality of the weighted average inflation forecast generated using the combined forecast method was still acceptable (Chart 2).

Nº4 (12)

## 2. ECONOMIC OUTLOOK AND KEY RATE DECISION

In this Monetary Policy Report, the Bank of Russia considers three development scenarios for the Russian economy. The key difference between these scenarios is the assumption made about oil price dynamics. The baseline scenario assumes that Urals prices will stabilise around \$50 per barrel in 2016–2018. The optimistic scenario is based on the premise that oil prices will grow to \$75 per barrel by the end of 2017. The risk scenario expects oil prices to fall to \$35 per barrel in 2016 and remain low in the medium term.

The depth and duration of GDP reduction in these scenarios will be largely determined by the terms of trade. The baseline and optimistic scenarios forecast inflation to fall to the target level in 2017, provided that there is a potential for monetary policy easing, which will be unlocked at varying paces.

Possible further deterioration of the external economic climate on the back of persistently low oil prices, monetary policy normalisation by key central banks and continuing slowdown of the Chinese economy remains the main source of inflation risks. These trends are reflected in the Bank of Russia's risk scenario. Furthermore, prolonged persistence of high inflation expectations, revision of the 2016– 2017 increase in administered prices and tariffs, social security payments and general fiscal policy easing could impede the decline in inflation.

In October 2015, these risks persisted. In November – early December 2015, some of them aggravated. In particular, oil prices fell, anticipation of the US Fed's monetary policy normalisation increased, and inflation expectations rose, even though they were forecast to fall. In these conditions, in October and December 2015, the Bank of Russia decided to keep its key rate at 11.00% p.a. As inflation slows in line with the baseline forecast and provided that inflation risks abate, the Bank of Russia will resume its downward revision of the key rate at one of its forthcoming Board of Directors meetings.

### 2.1. Economic outlook

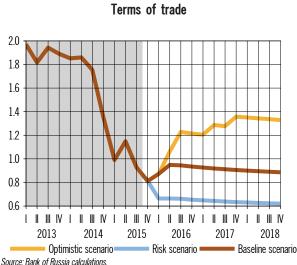
In the previous Monetary Policy Report, the Bank of Russia considered a baseline scenario where Urals prices fluctuated between \$45 and \$50 per barrel in 2015 Q3-Q4 and remained at the average of \$50 per barrel over the forecast period. In the recent months, actual oil prices continued to be characterised by high volatility, and amid the ongoing glut and weak demand in the global market, average levels were slightly below that forecast (see Sub-section 'Terms of trade' in Section 1.1). However, the Bank of Russia sees prerequisites for oil prices to return to \$50 per barrel in the first half of 2016 and further remain at this level, and still views this scenario as the baseline one.

A gradual rise in demand for energy as the global economy grows and a fall in production following the major slump in investment will drive slight recovery in oil prices from the current levels. The increased cost of extracting raw materials from conventional sources will limit the potential for oil price fall. At the same time, a surge in oil prices well above \$50 per barrel will be curbed by the growing exports from Iran in 2016 after the sanctions are lifted, as well as a flexible supply-side response from companies extracting from unconventional sources in the event that prices start to rise. The likely appreciation of the US dollar following the normalisation of the US Fed's monetary policy will also exert some downward pressure.

A possible deviation from the baseline scenario will primarily be down to the expected external economic activity dynamics, in particular the growth of the Chinese economy, about which there is still heightened uncertainty. However, the Bank of Russia estimates the risk of oil price fall to increase somewhat given the observed changes in the energy market environment and expected developments in demand- and supply-side factors Chart 2.1.1

MONETARY

POLICY REPORT



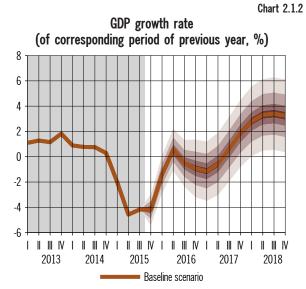
Note: terms of trade are approximated by

Urals crude price index in real terms (oil prices adjusted for foreign inflation).

in the global market. It makes the risk scenario more likely to materialise and decreases the likelihood of the optimistic scenario. In its risk scenario, the Bank of Russia considered a drop in oil prices to \$35 in 2016 with prices remaining at this level for an extended period.

In all the scenarios, the external financial conditions will constrain the growth of the Russian economy over the entire forecast period, but their impact will gradually abate. Amid the current financial sanctions against Russia, companies and banks will continue to repay previously obtained external loans. Total external debt repayments will go down as companies find external funding sources unaffected by the sanctions (e.g., in Asian markets) and due to the reduction in total debt.

According to the Bank of Russia's estimates, the economy still needs at least one year to adapt to the negative external conditions. During this period, labour and capital resources need to be redistributed to the sectors of the economy which have the potential for import substitution or which offer products competitive in the external market. Given the existing structural restrictions, including those linked to the demographic situation and inadequate workforce mobility, this process may be temporarily coupled with additional costs for companies and changes in labour productivity following the transfer of resources into new segments. This may have a moderating influence on the economic growth and increase producer prices. However, in the medium term, this adaptation should result in recovery of the



Source: Bank of Russia calculations.

balanced growth in the Russian economy and its heightened resilience to external shocks.

With respect to internal demand, the baseline scenario predicts that the persistently negative household and business sentiment in 2016 combined with the moderately tight monetary conditions will result in relatively conservative consumer and investment decisions of economic agents. Taking these factors into account both for supply and demand, GDP growth rates in 2016 will continue to be negative, in the range of -(0.5-1.0)%. The most considerable slowdown in the annualised output drop will be seen in 2016 Q1-Q2 on the back of the low base effect from 2015. However, quarterly seasonally adjusted output growth rates may remain negative in the second half of 2016. The baseline scenario assumes that GDP growth rates will move into the positive territory in 2017, followed by a renewed acceleration in growth to 1.5-2.5% in 2018.

Lending conditions in the economy will remain relatively tough in 2016 following the persistence of moderately tight monetary policy of the Bank of Russia aimed at reducing inflation to 4% in the medium term and the need to make adjustments to the heightened debt burden in the real sector of the economy. Growth in lending to the economy and money supply will range from 3% to 7% in 2016. Going forward, as monetary policy conditions relax in line with the reduction of the Bank of Russia key rate and as the debt burden reduces and borrowers' financial positions improve, lending growth and, 46

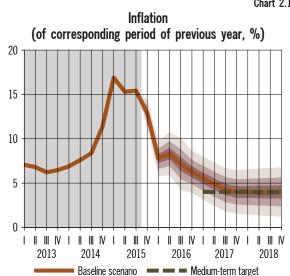
consequently, money supply will start to recover. At the same time, internal lending sources will partially substitute for the external ones in the funding structure of real sector businesses.

Nº4 (12)

In the breakdown of GDP components, the output contraction in 2016 will result from a decrease both in consumer spending and fixed capital investment. Low growth in household income will remain the main factor behind the further squeeze in consumer demand. Persistently modest indexation of public sector wages and social security payments amid the limited opportunities to finance the budget deficit will be an important factor affecting incomes (see Box 'Fiscal policy' in Section 1.3). As for the income of private sector employees, the situation will be shaped by a slight reduction in competition for labour (amid the slump in production activity and the fall in competitive demand from the public sector in the labour market), which will be reflected both in a dwindled growth in nominal wages and a slight rise in unemployment. Amid the increased uncertainty over household income dynamics, the propensity to save will continue to be elevated, which will also moderate growth in consumer demand. The reduction in household spending on final consumption is forecast to range between 3.5% and 4.0% in 2016.

In 2016, investment demand dynamics will be more favourable than consumer demand: the reduction in fixed capital investment is expected to slow to -(0.5-1.0)% and inventory dynamics are expected to make a positive contribution to GDP growth. Stabilisation of business sentiment and expectations amid no negative shocks from the external sector and gradual easing of monetary conditions should form the basis for this. The prerequisites for investment demand recovery in the second half of 2016 will stem from the currently observed positive corporate performance dynamics in the real sector, the reduction in companies' debt burden amid moderate growth in lending, and the optimisation of the structure of expenses on labour and infrastructure services.

The contribution of net exports to GDP growth in 2016 will continue to be positive, but will shrink perceptibly compared with 2015 given the high base and persistence of relatively stable ruble exchange rate in real terms. Given the stabilising oil prices, forecast growth in physical exports and imports will preserve the surplus in the current account of the



Source: Bank of Russia calculations.

balance of payments in 2016 at \$56 billion, or 4–5% of GDP.

In 2017–2018, as the overall uncertainty continues to fall and producer confidence recovers (given the gradual monetary easing), the investment activity will subsequently go up. Gross fixed capital formation growth is forecast to be 1.5–2.0% and 2.2–3.1% in 2017 and 2018 respectively. However, investment growth is likely to be seen primarily in sectors whose products can compete in external markets as well as in sectors whose products can replace imported goods in the domestic market. The first group includes mining, intermediate goods production (including textiles, timber, basic chemicals, metallurgy and components for transport engineering). The second group covers food industry, chemical industry and agriculture.

Investment demand recovery will drive production of investment goods, demand for labour, and higher labour productivity, creating conditions for a revival in wage growth. Along with the increase in accessibility of borrowed resources as monetary policy eases, this will help raise incomes in the economy and boost consumer demand. The growth in household spending on final consumption is expected to move into the positive territory in 2018.

The contribution of net exports to GDP will fall (to negative values in 2018) guided by the recovery of internal consumption and investment amid the persistently moderate growth in external demand and relatively stable real ruble exchange rate. Based on the expected growth of physical

47

Table 2.1.1

## Key parameters of the Bank of Russia's baseline forecast

(as % o	f previous	year, unles	s indicated	otherwise)	

	2014	20	15	20	16	20	17	20	18
	(actual)	December	GSSMP <sup>1</sup>	December	GSSMP	December	GSSMP	December	GSSMP
Urals price, average for the year, US dollars per barrel	98	52	53	50	50	50	50	50	50
Inflation, % in December year-on-year	11.4	12.8-13.0	12.0-13.0	5.5-6.5	5.5-6.5	4.0	4.0	4.0	4.0
Gross domestic product	0.6	-(3.9-3.7)	-(4.4-3.9)	-(1.0-0.5)	-(1.0-0.5)	0.0-1.0	0.0-1.0	1.5-2.5	2.0-3.0
Final consumption expenditure	0.9	-(6.9-6.5)	-(6.9-6.2)	-(2.7-2.2)	-(1.4-1.0)	-(1.7-1.2)	(-0.7)-0.3	0.9-1.8	1.5-2.5
– households	1.3	-(9.6-9.2)	-(9.4-9.0)	-(4.0-3.5)	-(2.0-1.0)	-(2.5-2.0)	-(0.9-0.0)	1.0-2.1	1.8-2.9
Gross formation	-7.3	-(30.3-29.9)	-(32.0-27.0)	3.6-4.1	-(6.6-3.2)	5.5-6.0	(-0.5)-2.5	6.0-7.1	5.5-7.2
– gross fixed capital formation	-2.0	-(7.8-7.4)	-(8.0-7.0)	-(1.0-0.5)	-(3.8-2.8)	1.5-2.0	(-0.5)-0.5	2.2-3.1	4.0-5.0
Net exports	29.8	89.0-91.0	89.5-106.5	6.0-7.0	8.5-10.5	0.0-1.0	8.5-10.5	-(8.0-3.0)	-(7.0-5.0)
– exports	-0.1	1.9-2.3	1.5-2.5	-(1.0-0.5)	0.0-1.0	2.8-3.3	1.0-2.0	3.0-4.0	1.9-2.8
– imports	-7.9	-(25.8-25.4)	-(30.0-26.0)	-(3.3-2.8)	-(2.5-1.5)	3.5-4.0	(-1.0)-0.5	5.0-7.0	4.5-6.0
Money supply in national definition, % annual growth	2.2	9-11	5-8	4-7	4-7	8-10	8-11	10-12	13-16
Monetary base in narrow definition, % annual growth	2.7	(-2)-1	(-1)-1	2-5	1-4	3-6	2-5	5-8	5-8
Loans to non-financial organisations and households in rubles and foreign currency, % annual growth	25.9	4-7	4-7	3-6	4-7	7-9	8-11	9-11	13-16

<sup>1</sup> Guidelines for the Single State Monetary Policy in 2016 and for 2017 and 2018.

Table 2.1.2

#### Russia's balance of payment indicators - baseline scenario (billions of US dollars)<sup>1</sup>

	2014	20	15	20	16	20	17	20	18
	(actual)	December	GSSMP	December	GSSMP	December	GSSMP	December	GSSMP
Current account	58	63	65	56	61	51	61	49	55
Balance of trade	190	147	150	136	143	132	141	130	136
Exports	498	348	346	337	336	338	335	344	348
Imports	-308	-201	-197	-201	-194	-206	-194	-214	-212
Balance of services	-55	-37	-39	-39	-37	-40	-38	-45	-44
Exports	66	52	51	53	52	54	52	56	54
Imports	-121	-90	-91	-91	-89	-95	-90	-101	-98
Primary and secondary income balance	-76	-48	-45	-41	-44	-41	-42	-36	-38
Capital account	-42	0	0	0	0	0	0	0	0
Current and capital account balance	16	63	65	56	61	51	61	49	55
Financial account (net of reserve assets)	-130	-58	-73	-56	-61	-51	-61	-49	-55
General government and the central bank	29	-5	-3	-3	-3	-3	-3	-3	-3
Net private capital outflow	-159	-53	-70	-53	-58	-48	-58	-46	-52
Net errors and omission	6	0	0	0	0	0	0	0	0
Change in FX reserves ('+' - decrease, '-' - increase)	108	-4	8	0	0	0	0	0	0

<sup>1</sup> The forecast is based on data as of October 2015 inclusive, data cut-off date is 4 December 2015.

exports and imports and stable nominal oil prices, in 2017–2018 the surplus in the current account of the balance of payments is expected to gradually decline (see Section 'Balance of payments forecast for 2015–2018' in the Annex). At the same time, the reduction in external debt payments will gradually curtail capital outflow. In these conditions, banks will not have to increase their debt under Bank of Russia FX refinancing instruments in 2016-2018

and zero change is expected in the FX reserves in the balance of payments.

Nº4 (12)

The baseline scenario forecasts a slowdown in consumer price growth amid demand-side restrictions and the fading effect of exchange rate shocks. Quarterly growth is expected to return to the values of early 2014 in all segments of the consumer market. The introduction of a ban on Turkish food imports from 1 January 2016 poses risks of a surge in food inflation due to the higher costs associated with a change in geography of supplies. Food prices are estimated to grow by 0.5-1.1 pp, which corresponds to the overall consumer price increase by 0.2-0.4 pp. The contribution to inflation of the restrictions on Turkey is estimated to materialise in one to two quarters of 2016.

Given the base effect, the slowdown in quarterly price growth will cause a marked reduction in annual inflation in 2016 Q1 to 7.5-8.0% year-onyear. In 2016 Q2, annual inflation is estimated to be slightly higher: 7.8-8.3% (due to the low price growth in 2015 Q2). The fall in annual inflation will then continue: in December 2016 it will stand at 5.5-6.5%. Weak consumer demand and moderately tight monetary conditions will be the main factor contributing to disinflation up to the end of 2016. Provided that there are no large-scale external shocks, exchange rate dynamics will not create any significant inflationary pressure.

Stabilisation of inflation expectations and restrained consumer demand amid the moderately tight monetary policy and conservative fiscal policy will contribute to a further reduction in inflation to 4% by the end of 2017. The baseline scenario does not predict any notable impact of inflationary factors resulting from external conditions and producer costs over the forecast period.

Thereby, the Bank of Russia's baseline forecast has not changed significantly compared with the forecast published in September 2015 in the Monetary Policy Report and in November 2015 in the Guidelines for the Single State Monetary Policy in 2016 and for 2017 and 2018. However, the persistence of inflation risks in October 2015 and their increase in November - early December 2015 made it necessary to pursue a prudent monetary policy. In October and December 2015, the Bank of Russia decided to keep the key rate at 11.00% p.a.

However, as inflation slows in line with the baseline forecast and if inflation risks abate, the Bank of Russia will resume its downward revision of the key rate at one of the forthcoming Board of Directors meetings.

According to the optimistic scenario, the improvement in external economic conditions will ensure earlier recovery of the economic activity: positive GDP growth is expected as early as 2016.

The demand for Russian exports – both primary and non-primary exports - will be higher than under the baseline scenario on the back of a steadier growth in the global economy. The growth in income from export operations and improved producer sentiment will drive faster recovery of investment activity and subsequently consumer demand. The growth in gross fixed capital formation and household spending on final consumption will be positive in 2016.

The surplus in the current account of balance of payments in 2016-2018 will exceed the equivalent figure in the baseline scenario. If this scenario materialises, the Bank of Russia expects the current account surplus to sustainably exceed the capital outflow. In these conditions, banks will be able to pay off their debts on FX refinancing operations to the Bank of Russia over the forecast period. In addition, under the optimistic scenario, the combination of favourable external climate and high foreign currency supply in the domestic market will create conditions for the Bank of Russia to purchase foreign currency to replenish its international reserves.

Better terms of trade will provide fundamental conditions for real equilibrium appreciation of the ruble, which will create additional prerequisites for inflation slowdown. In these conditions, the Bank of Russia will be able to cut the key rate more quickly than stipulated by the baseline scenario. However, as in the baseline scenario, inflation is expected to fall to the target level in 2017.

The faster monetary easing will boost demand for lending. At the same time, as inflation goes down and stabilises, the declining interest rates on loans to ultimate borrowers as well as longer maturities will smooth the effect of the increased debt burden caused by the accelerated lending growth.

Under the risk scenario, more unfavourable external developments in comparison with the baseline and optimistic scenarios will bring about a more dramatic and prolonged recession in 2016– 2017. The adverse impact of the external economic climate on the Russian economy will manifest itself in a drop in export revenues, a decrease in the solvency of borrowers who have outstanding debt denominated in foreign currency, a decline in attractiveness of investment in the Russian economy for Russian and foreign investors, and a restriction of possibilities to finance budget expenditures.

At the same time, the trends observed in 2015 suggest that the Russian economy is gradually adapting to the unfavourable external economic conditions. In particular, the slump in industrial output, ignoring the stable production of fossil fuels, is being alleviated by the increased production of exportable intermediate goods (see Section 1.3). In addition, import substitution is observed in the food and chemical industries. These processes have largely become possible thanks to the floating exchange rate. Its dynamics smoothes the negative impact of external factors on the Russian economy by increasing the competitiveness of exports and creating incentives for import substitution. It used to be extremely difficult to assess the opportunities to fine-tune the economy using these channels due to the specifics of the exchange rate mechanism in previous periods.

Thereby, this year's experience shows that a fall in Urals prices to \$35 per barrel should not lead to such significant losses in output as previously forecast by the Bank of Russia. In view of the above, the fall in GDP in the risk scenario will be 2.0–3.0% in 2016.

However, the higher level of uncertainty in external and internal developments in this scenario will cause further (compared with the baseline scenario) restrictions on raising funds from external markets and persistence of negative producer sentiment. In addition, the internal monetary conditions will continue to be stricter than envisaged by the baseline scenario, in part due to the growing risk premium in the internal financial market. As a result, investment demand will still be weak. Inventories will also continue to make a negative contribution to GDP growth.

Low demand for labour will cause the reduction in real wages to continue at rates comparable with those observed in 2015. Nominal wage growth will be near-zero and unemployment is likely to increase slightly.

These trends in the labour market and in the household income will restrict consumer demand.

Net export dynamics will curb the fall in GDP in 2016: even with an extremely moderate reduction in physical exports, imports are still forecast to fall significantly in real terms as a result of the reduction in internal demand and the fall in the ruble's real effective exchange rate.

In addition, possible increased volatility in the financial markets will lead to a sharp deterioration in exchange rate and inflation expectations, which significantly increases inflation and financial stability risks; inflation will be higher than in the baseline and optimistic scenarios, at roughly 7% by the end of 2016.

In order to prevent these risks from snowballing, the Bank of Russia can use either interest rate policy measures or other instruments. The Bank of Russia key rate will be reduced slower than under the baseline and optimistic scenarios. In addition, the Bank of Russia will be ready to significantly increase the amount of FX refinancing operations and, if necessary, to carry out direct sales of foreign currency in the domestic FX market.

In all of these scenarios, there is a possibility of further risks which could impact inflation dynamics. At the current stage, the Bank of Russia believes that risks are distributed asymmetrically across possible price dynamics and largely lean towards inflation, which makes it necessary to take a relatively conservative approach to monetary policy-making.

Another risk previously irrelevant to the inflation forecast is the imposed restrictions on imports from Turkey which come into effect from 1 January 2016. The Bank of Russia estimates their direct impact on inflation as negligible and short-lived. At the same time, there is still uncertainty over the introduced measures' impact on inflation expectations of economic agents and the speed with which food imports will be replaced with supplies from other countries. If events turn out for the worse, the impact

on inflation could be more tangible than envisaged by the baseline scenario.

Nº4 (12)

The traditional risk for the inflation forecast is the fluctuation of food prices (which are distinguished by their high volatility) depending on the harvest of particular crops. Changes in fiscal and tariff policies not envisaged by the considered scenarios could also have an inflationary effect if the currently adopted parameters (as set out in the draft budget and decisions of the Government of the Russian Federation) are revised. External risks from geopolitical factors still remain and may affect prices by changing exchange rates.

The acceleration of annual inflation under the influence of the above factors is usually shortlived, i.e. as the influence is exhausted after 12-18 months, inflation begins to slow. In this case, inflation will return to a path that is consistent with the 4% target in the medium term, without any additional change in the monetary policy. However, if such factors begin to influence prices for a wide range of goods and services and if inflation expectations begin to rise, the Bank of Russia will pursue tighter monetary policy.

### ANNEX

## Dynamics of major balance of payments items in 2015 Q3

The current account surplus in 2015 Q3 decreased compared with the corresponding period of the previous year<sup>1</sup> following the 38% reduction in the trade surplus, which was more sizeable than the fall in the negative contribution of the balance of services and non-tradable components (Chart 1). Out of all the non-tradable current account components, the balance of investment income deficit reduced the most amid the external debt repayment of the private sector.

The above the forecast decline in the positive trade balance was primarily linked to import dynamics. The imports fell less than expected by the Bank of Russia amid the higher than forecast ruble exchange rate and the weaker internal demand contraction. However, the fall in imports remained high (about 38%) on the back of slack consumer and business activity. Machinery, equipment and vehicles were the main contributors to the reduction in goods imports. The contribution of food affected by the embargo Russia introduced in 2014 against the US, EU, Canada, Australia and Norway to the reduction in total imports fell from 6% in Q2 to 3% in 2015 Q3.

The ban on some Turkish imports from 1 January 2016 will have insignificant impact on Russia's total imports. In January-September 2015, foods from the groups covered by the restrictions accounted for only 0.4% of Russian imports. At the same time, the share of banned goods in bilateral trade is relatively high. In January-September 2015, products from the banned groups imported from Turkey accounted for 19% of Russian imports from that country. For certain goods, Russia's dependence on Turkish supplies is high: 67% of physical imports of apricots, 55% of tomatoes and 45% of grapes. The ban on imports of certain Turkish products could lead to interruptions in fruit and vegetable supplies to Russia. However, as the banned foods are replaced with supplies from other countries and Russian goods, the impact of these restrictions will abate.

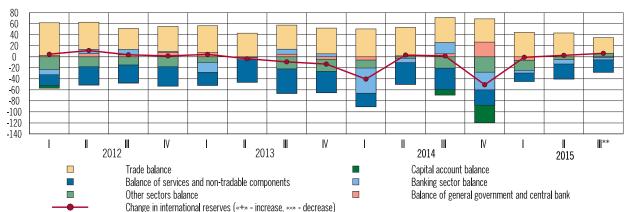
However, the contraction of value exports jumped to 38% in 2015 Q3 (compared with 31% in Q2) and was above the forecast on the back of the on-going fall in global oil and other commodity prices. The value exports of energy fell more significantly than those of other goods. Exports of crude oil reduced by 47% and those of oil products fell by 54% following the twofold drop in Urals prices. Non-oil and gas exports shrank by 25%. As a result, the Russian export pattern changed considerably. In January-September 2015, the weight of crude oil in the export pattern fell from 32% to 27% year-on-year (in value terms) and that of oil products dropped from 24% to 21%. At the same time, 5% growth in the physical exports of crude oil supported exports in 2015 Q3. Conversely, the physical exports of oil products fell by 13%. However, the physical exports of natural gas increased by 25% thanks to the expansion of supplies to Europe. As a result, the value exports of Russian gas changed only negligibly, despite the 26% fall in gas prices in the European market amid the growing reserves.

Ukraine, the key transit country for Russian gas, did not import any gas from Russia in 2015 Q3, as in 2014 Q3. However, in late September, Russia, Ukraine and the EU agreed on the conditions for winter gas supplies and on 12 October OJSC Gazprom resumed gas exports to Ukraine. However, by 25 November Naftogaz of Ukraine had taken the entire amount of the prepaid Russian gas (2.4 billion cubic metres) and failed to make an advance payment for the new supplies. OJSC Gazprom responded with supply suspension until new payments were made. Thereby, despite the increase in physical exports of Russian gas in 2015 Q3, the prospects of supplying the third Russian export goods (in value terms) remain unfavourable.

<sup>&</sup>lt;sup>1</sup> Here and below in this section, changes in indicators for 2015 Q3 are shown on a year-on-year basis, unless indicated otherwise.

Nº4 (12)

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



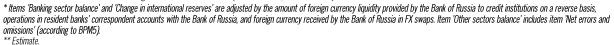
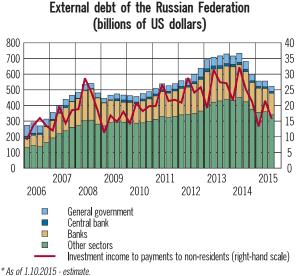


Chart 2

Source: Bank of Russia.



Source: Bank of Russia.

Risks still remain for the transit of Russian gas to Europe in the coming winter. Additional risks are posed by the suspension of negotiations on the construction of the Turkish Stream gas pipeline (an alternative to transiting Russian gas through Ukraine).

In 2015 Q3, net inflow of private capital was recorded for the first time since 2010 Q2. Adjusted for the operations to provide FX liquidity and other Bank of Russia operations<sup>2</sup>, in 2015 Q3 it amounted

to \$1.8 billion (unadjusted, net private capital inflow amounted to \$5.3 billion). For comparison, net outflow of \$0.1 billion (adjusted) was recorded in 2014 Q3 (unadjusted, net private capital outflow was \$7.4 billion).

The structure of net private capital inflow in 2015 Q3 suggests that companies have managed to increase their liabilities to non-residents despite the sanctions. As a result, external liabilities of other sectors reduced slower than set out in the external debt repayment schedule. At the same time, external borrowing was still complicated, especially for Russian banks. Given restricted opportunities to refinance debt due to the financial sanctions, in Q3, as in 2015 as a whole, banks decreased their liabilities faster than set out in the debt repayment schedule. Banks covered the repayment of their external debts in part through sales of foreign assets.

## **Balance of payments** forecast for 2015-2018

The Bank of Russia is considering three macroeconomic development scenarios which differ in their assumptions about oil price dynamics and forecasts of other key macroeconomic indicators. All three scenarios expect the average Urals price to persist at \$40 per barrel in December 2015. Thereafter, according to the baseline scenario, oil prices will recover to \$50 per barrel in the first six months of 2016 and fluctuate around this level over

<sup>&</sup>lt;sup>2</sup> Adjusted for the FX liquidity provided by the Bank of Russia to credit institutions on a repayable basis, the amount of operations in resident banks' correspondent accounts with the Bank of Russia, and also the amount of foreign currency received by the Bank of Russia under FX swap operations.

Major balance of payments components (baseline scenario forecast, billions of US dollars) 300 200 100 0 -100 -200 -300 -400 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 Trade balance Capital account balance Balance of services and non-tradable components Banking sector financial account balance Other sectors financial account balance Financial account balance of general government and central bank Change in international reserves («+» - increase, «-» - decrease)

Source: Bank of Russia.

the entire period under consideration. The optimistic scenario assumes that prices will gradually grow to \$75 per barrel by the end of 2017, and the risk scenario predicts a fall in oil prices below \$40 per barrel in early 2016, with prices remaining low until the end of 2018.

#### Forecast for 2015

Compared with the previous forecast published in the Monetary Policy Report in September, the trade surplus forecast was revised significantly downwards for 2015, primarily due to the higher than expected import of goods in 2015 Q3. The trade surplus in 2015 is forecast to be about \$145 billion, which is 23% lower than the previous year. However, the substantial reduction in the trade surplus caused by the sharp downturn in average annual oil prices will be almost entirely offset by improvements in the balance of services and balance of non-tradable components. As a result, the current account surplus at the end of the year is expected to be only slightly higher than the surplus in 2014 – \$63 billion against \$58 billion.

In 2015, the capital outflow will almost entirely comprise repayments on external liabilities amid restricted access to Western financial markets and fewer opportunities for companies to refinance their debt. The contribution of asset accumulation to the capital outflow is expected to be nearzero. Compared with the previous release of the Monetary Policy Report, the capital outflow forecast for 2015 has been revised significantly downwards. This change is linked primarily to other sectors' liabilities decreasing slower than assumed in the previous release of the Monetary Policy Report, and the weaker rate of foreign asset accumulation. In view of the actual dynamics, estimates of the net reduction in private sector liabilities have been revised downwards both in Q4 and for the year as a whole. Given intra-group loans and borrowings and partial debt refinancing, the net reduction in private sector liabilities is forecast to be about 50% of the total amount of external debt due for repayment. It is noteworthy that despite the nominally significant amount of external debt repayments due in December, the Bank of Russia does not expect any perceptible growth in external debt payments this month as the actual amount of external debt payments in December is often less than stipulated in the repayment schedule. In addition to the factors mentioned above (loan refinancing and intra-group loans), this trend is linked to the traditional shift of all payments with undefined maturities to December.

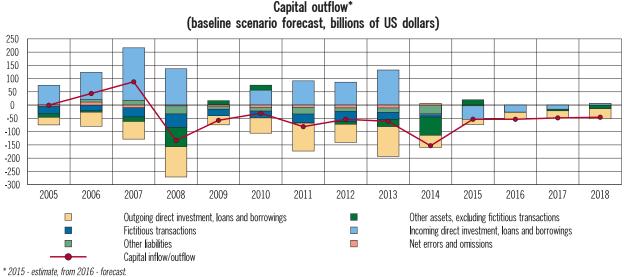
The stabilisation of the situation in the FX market and the significant amount of accumulated FX liquidity have enabled banks to start reducing debts on reverse transactions to provide foreign currency. In view of this trend, the Bank of Russia is not expected to have to expand operations to provide FX liquidity through the end of the year. Thus, the ratio of the current account surplus to the capital outflow this year will bring about a net growth in international reserves of about \$4 billion.

Chart 3

MONETARY

POLICY REPORT

Nº4 (12)



Source: Bank of Russia.

#### Forecast for 2016–2018

#### Current account and capital account

In 2016-2018, under the baseline scenario oil prices will stabilise at a slightly lower level than the average annual price in 2015. As a result, the value exports of goods and services for most of the period under consideration will be below the current year's levels. In turn, imports of goods and services will start to grow steadily as domestic demand recovers. Repayment of external debt will lead to lower debt payments. As a result, the deficit of non-tradable components will steadily decline over the entire period under consideration. This means that in 2016-2018 the current account surplus will gradually shrink to slightly below \$50 billion (in 2018). Overall, the expected dynamics of current account operations in 2016-2018 are in line with the forecast published in the September release of the Monetary Policy Report.

The optimistic scenario expects growth in the current account surplus over the entire forecast horizon given a revival in oil prices. The economic recovery will boost imports, but nominal exports will increase at a faster pace. Conversely, under the risk scenario, the current account surplus will fall considerably in 2016 due to a sharp reduction in the average annual oil price. The drop in imports caused by the ruble depreciation and the slump in business activity will be insufficient to offset the negative change in exports.

## Financial account and change in international reserves

The restricted access to external lending will result in companies' inability to refinance a sizeable share of their external debt maturing in 2016–2018, as seen this year. This 'forced' reduction of liabilities to non-residents will make a significant contribution to the aggregate capital outflow in 2016. The reduction in liabilities is expected to subsequently abate as companies find external funding sources unaffected by the sanctions (e.g., in Asian markets) and the total debt shrinks. According to the Bank of Russia's estimates, under the baseline scenario the total net external debt repayments by the private sector could reach about \$30 billion in 2016 and \$15 billion in 2017, while in 2018 the change in external liabilities will be near-zero or even positive. Meanwhile, as the economy adapts to the new conditions, the accumulation of external assets is expected to grow gradually. However, the growth in demand for foreign assets will be slower than the reduction in net repayments on liabilities to nonresidents. As a result, the capital outflow from the private sector will gradually reduce over the forecast period to roughly \$45 billion in 2018. However, the share of asset accumulation in the total outflow will grow, while the reduction in liabilities will play an even smaller role.

Under the baseline scenario, the Bank of Russia expects that the ratio of the current account to the financial account will not allow to reduce the amount

POLICY REPORT

of foreign currency provided to credit institutions on a repayable basis in 2016–2018. At the same time, the Bank of Russia sees no prerequisites for expanding FX refinancing over the entire forecast period. Thus, the net change in international reserves in 2016–2018 is expected to be near-zero.

Conversely, under the optimistic scenario, the Bank of Russia expects the current account surplus to persistently exceed capital outflow on the back of oil price growth. As a result, banks will be able to fully repay their debt on reverse transactions to provide foreign currency. In addition, the combination of the favourable external climate and high supply of foreign currency in the domestic market following the growth in external trade revenue will be likely to enable the Bank of Russia to purchase foreign currency to accumulate the international reserves. If oil prices plummet, as assumed under the risk scenario, in 2016 the Bank of Russia may have to significantly increase its reverse transactions to provide foreign currency, and, if necessary, to resort to direct interventions in the FX market to support financial stability in the event of excessive volatility of the ruble exchange rate. However, the Bank of Russia does not expect any serious increase in the capital outflow in 2016 compared with the baseline scenario. Provided that oil prices continue to fall, the accelerated repayment of foreign liabilities amid the restricted opportunities for external borrowing will be offset by lower asset accumulation on the back of the falling incomes of economic agents.

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

Table 1

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

Changes in approaches for averaging credit institutions' required reserves	Starting 2016, the schedule of required reserve averaging will be sinchronised with the schedule of one-week auctions - key Bank of Russia operations to manage liquidity. At the same time, the required reserves averaging periods will be a multiple of 4-5 weeks. An arithmetic mean formula (instead of the current chronological average formula) will be applied to calculate the average balances in correspondent accounts and subsidiary accounts of credit institutions with the Bank of Russia to check their compliance with required reserve averaging. These changes are aimed at shaping a more sustainable credit institutions' demand for funds in correspondent accounts with the Bank of Russia during the periods of required reserves averaging. In addition, these measures will contribute to lower volatility of money market rates in certain periods when the settlement date for main Bank of Russia operations does not coincide with the completion of the required reserve averaging period. The schedule of required reserves averaging periods in 2016 is published in the section Monetary Policy on the Bank of Russia's website.
Expansion of the Bank of Russia Lombard List	In order to increase the amount of marketable collateral held by credit institutions, the Bank of Russia took three decisions to expand the Lombard List in September-November 2015 (3 September 2015, 2 October 2015 and 5 November 2015). The total of 38 bond issues worth 314.5 billion rubles were included in the Bank of Russia Lombard List during this period. The Bank of Russia largely raised discounts on certain securities issues and cut correction ratios used to adjust the value of assets eligible as collateral.
Improved chance for credit institutions to use Bank of Russia refinancing operations against the pledge of loans provided to small and medium enterprises (SME)	Credit institutions with capital exceeding 100 billion rubles and partner banks of JSC SME Bank were enabled to use Bank of Russia refinancing operations for their SME loans classified under 2nd quality grade according to Bank of Russia Regulation No. 254-P, dated 26 March 2004, 'On the Procedure for Making Loss Provisions by Credit Institutions for Loans, Loan and Similar Debts'.
Increase in eligible collateral on Bank of Russia specialised refinancing instruments	The Bank of Russia started to accept as collateral on loans extended to JSC SME Bank in the framework of the specialised refinancing programme, claims on loans to leasing companies on purposes linked with leasing property to SMEs.
	The Bank of Russia decided to resume holding 12-month FX repo auctions from 14 December 2015 in compliance with the applicable schedule and set the following interest rates:
	<ul> <li>minimum interest rates at 12-month FX repo auctions equal to LIBOR in corresponding currencies and for the comparable terms plus 3.00 pp (currently, 2.50 pp);</li> </ul>
On the auctions to provide foreign currency	<ul> <li>minimum interest rates at auctions to provide 365-day loans in foreign currency secured by the pledge of claims on loans in foreign currency equal to LIBOR in corresponding currencies and for the comparable terms plus 3.25 percentage points (currently, 2.75 percentage points).</li> </ul>
	The Bank of Russia finds it possible that the total amount outstanding on FX repos may be redistributed among these operations for one-week, 28-day and 12-month terms, which will allow credit institutions to manage their FX liquidity more flexibly.
	The Bank of Russia decided to extend till 1 January 2016 the following banking regulation measures:
Change in the use of anti-crisis measures aimed at maintaining the stability of the Russian financial	- credit institutions are allowed not to downgrade the quality assessment of loan debt servicing in case of changes in the currency of loans, and also changes in the loan maturity (payment of the principal and(or) interest) and interest rates, if changes in borrowers' financial standings were caused by sanctions.
sector <sup>1</sup>	<ul> <li>when calculating prudential requirements on FX operations credit institutions have a temporary right to use fixed interests rate against the ruble for five foreign currencies. From 1 October 2015, these interest rates are the following:</li> <li>US dollar - 55 rubles, euro - 64 rubles, pound sterling - 86 rubles, Swiss franc - 58 rubles, and 100 yen - 46 rubles.</li> </ul>

<sup>1</sup> See Bank of Russia press releases 'On Bank of Russia measures to maintain stability of the Russian financial sector', dated 17 December 2014, at 'On anticrisis measures in banking regulation', dated 15 May 2015, at http://www.cbr.ru / press / PR.aspx?file=15 052 015\_104 527if2015-05-15T10\_43\_19. htm, http://www.cbr.ru / press / PR.aspx?file=17 122 014\_171 432dkp2014-12-17T17\_02\_49.htm, 'On anti-crisis measures in banking regulation', dated 21 September 2015, at http://cbr.ru/press/PR.aspx?file=21092015\_150032if2015-09-21T14\_56\_45.htm.

		and absorb ru	and absorb ruble liquidity in 2015 (% p.a.)	(% p.a.)						
Purpose	Type of instrument	Instrument	Term	Frequency	From the beginning of the year	From 2.02.2015	From 16.03.2015	From 5.05.2015	From 16.06.2015	From 3.08.2015
		Overnight loans; FX swaps (ruble leg); Lombard loans; repos	1 day		18.00	16.00	15.00	13.50	12.50	12.00
			1 day		18.00	16.00	15.00	13.50	12.50	12.00
	Standing facilities	LOANS SECURED BY GOID	from 2 to 549 days <sup>1</sup>	daily	18.50	16.50	15.50	14.00	13.00	12.50
		Loans secured by non-marketable assets or	1 day		18.00	16.00	15.00	13.50	12.50	12.00
		guarantees	from 2 to 549 days <sup>1</sup>		18.75	16.75	15.75	14.25	13.25	12.75
l iquidity provision		-	from 1 to 3 weeks	occasionally						
		Auctions to provide loans secured by non-marketable assets	3 months <sup>1</sup>	monthly	17.25	15.25	14.25	12.75	11.75	11.25
			18 months <sup>1</sup>							
	Open market operations (minimum interest rates)	Lombard loan auctions	36 months <sup>1</sup>	Uccasionany	17.25	15.25	14.25	12.75	11.75	11.25
			1 week	weekly						
			from 1 to 6 days <sup>2</sup>							
		FX swap auctions	from 1 to 2 days <sup>2</sup>	occasionally	17.00 (kev rate)	15.00 (kev rate)	14.00 (kev rate)	12.50 (kev rate)	11.50 (kev rate)	11.00 (kev rate)
	Open market operations		from 1 to 6 days <sup>2</sup>		(and Carl	(and fair)		(and fair)	(and fair)	(and Carl)
Liquidity absorption	(maximum interest rates)	Deposit auctions	1 week <sup>3</sup>	weekly						
	Standing facilities	Deposit operations	1 day. call	daily	16.00	14.00	13.00	11.50	10.50	10.00
			Memo item							
Refinancing rate <sup>4</sup>					8.25	8.25	8.25	8.25	8.25	8.25 <sup>5</sup>
<sup>1</sup> Loans provided at a	<sup>1</sup> Loans provided at a floating interest rate linked to the Bank of Russia key rate.	e Bank of Russia key rate.								

10
key
Russia
2
of Ru
Bank
the
to
linked
rate
s provided at a floating interest rate linked to the Bank of F
floating
ta
ded a
provi
S

<sup>2</sup> Fine-tuning operations.
<sup>3</sup> Faced by structural liquidity deficit, the Bank of Russia holds repo auctions. See press release at http://www.cbr.ru/press/PR.aspx?file=19012015\_154523if2015-01-19715\_41\_11.htm
<sup>4</sup> From 01.01.2016, the value of the Bank of Russia refinancing rate equals its key rate as of respective date. From 01.01.2016, no individual values are set for the refinancing rate.

<sup>5</sup> Before 31.12.2015. Source: Bank of Russia.

Table 2

Interest rates on Bank of Russia operations to provide

Nº4 (12)

№4 (1**2**)

## **Statistical tables**

#### Table 1

#### Operations to provide and absorb ruble liquidity

Purpose	Type of instrument	Instrument	Term	Frequency		ıssia claims gations on l bil		orption instr	
					1.01.15	1.04.15	1.07.15	1.10.15	1.12.15
		Overnight loans			0.0	1.2	4.0	0.0	0.7
		FX swaps	4 4		121.6	16.6	49.9	0.0	0.0
		Lombard loans	1 day		3.7	4.1	4.0	4.1	3.8
		Repos			96.2	107.0	275.9	289.3	90.0
	Standing facilities	Loans secured by gold	1 day from 2 to 549 days	daily	1.2	0.6	0.5	0.6	0.5
Liquidity provision		Loans secured by	1 day						
		non-marketable assets or guarantees	from 2 to 549 days		2,055.9	598.0	335.1	122.7	110.3
		Auctions to provide	from 1 to 3 weeks	occasionally monthly					1,967.9
		loans secured by non-marketable	3 months		2,370.9	0.9 2,892.0	2,685.0	2,438.8	
	On an analysis	assets	12 and 18 months	occasionally					
	Open market operations	Lombard loan auctions	36 months	occasionally	-	-	-	-	-
		Repo auctions	1 week	weekly	2,727.6	1,910.8	1,572.3	912.0	951.8
		•	from 1 to 6 days						
		FX swap auctions	from 1 to 2 days	occasionally <sup>1</sup>	-	-	0.0	0.0	0.0
Liquidity	Open market operations	Deposit auctions	from 1 to 6 days 1 week	weeklv <sup>2</sup>	0.0	0.0	0.0	0.0	0.0
absorption		Deposit operations	1 day, call	daily	804.5	292.2	293.1	280.5	417.6

<sup>1</sup> Fine-tuning operations.

<sup>2</sup> Faced by structural liquidity deficit, the Bank of Russia holds repo auctions. See press release at http://www.cbr.ru/press/PR.aspx?file=19012015\_1545 23if2015-01-19T15\_41\_11.htm.

Source: Bank of Russia.

#### Table 2

MONETARY POLICY REPORT

#### **Required reserve ratios**

DECEMBER 2015

Liability type	Ratio, % p.a.
To non-resident legal entities	
To households	4.25
Other liabilities	-
Source: Pank of Puscia	

Source: Bank of Russia.

#### Table 3

#### Required reserve averaging ratio

Types of credit institutions	As of the beginning of 2015	From 10.09.2015
Banks	0.7	0.8
Settlement non-bank credit institutions and non-bank credit institutions entitled to transfer funds without opening bank accounts and to conduct other related bank operations	1.0	1.0
Non-bank credit institutions performing deposit and lending operations	0.7	1.0

Source: Bank of Russia.

Table 4

#### Bank of Russia operations to provide foreign currency in 2015

Instrument	Term Fr	Frequency				ead to LIB0 swaps²,%	7117			of Russia c ns of US d	,	
			Beginning of 2015	From 30.03.15	From 13.04.15	From 21.04.15	From 14.12.15	As of 1.01.15	As of 1.04.15	As of 1.07.15	As of 1.10.15	As of 1.12.15
Repo auctions <sup>3</sup> 1 week 28 days 12 months <sup>4</sup>		0.50	1 00	4 50	0.00	0.00	209.7	1,565.6	18.3	1.7	0.0	
	28 days	weekly	0.50	1.00	1.50	2.00	2.00	15,075.1	9,298.3	6,832.6	3,418.0	2,430.7
	12 months <sup>4</sup>		0.50	1.00	1.75	2.50	3.00	4960.0	18,222.7	25,978.1	25,975.5	24,390.7
Lean quatiene	28 days	m a mthlui	0.75	1.25	1.75	2.25	2.25	-	-	441.0	444.0	0.0
Loan auctions	365 days	monthly	0.75	1.25	2.00	2.75	3.25	-	2,766.8	2,766.8	2,766.8	2,766.8
USD/RUB sell/buy FX swaps	1 day	daily	1.50	1.50	1.50	1.50	1.50	1,600.0	0.0	0.0	0.0	0.0

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

<sup>2</sup> For dollar leg; the rate for ruble leg is equal to the Bank of Russia key rate less 1 pp.

<sup>3</sup> Credit institutions' outstanding amounts under the first leg of repos.

<sup>4</sup> From 1 June through 14 December 2015, 12-month FX repo auctions were suspended.

Source: Bank of Russia.

#### ANNEX

Nº4 (12)

#### Table 5

#### Bank of Russia specialised refinancing facilities<sup>1</sup>

Purpose of indirect bank lending	Maturity	Collateral	Interest rate in January-November 2015, % p.a. <sup>2</sup>	Bank of R	ons, billions	Limit as of 1 December 2015 billions of			
				1 January 2015	1 April 2015	1 July 2015	1 October 2015	1 December 2015	rubles
Non-commodity exports	Up to 3 years <sup>3</sup>	Claims under loan agreements secured by contracts of insurance of JSC EXIAR	9.00	-	0.52	10.41	16.53	31.18	50
Large-scale Up to investment projects <sup>4</sup> 3 years	Claims under bank loans for investment projects secured by the government guarantees of the Russian Federation	9.00	-	-	3.68	26.25	50.05	100	
	3 years	Bonds placed to fund investment projects and included in the Bank of Russia Lombard List	9.00	2.85	2.85	2.85	2.85	2.85	100
	Up to 3 years <sup>3</sup>	Claims under loan agreements of JSC SME Bank <sup>5</sup>		23.26	23.80	23.93	30.32	37.50	
Small and medium- sized enterprises	Up to 3 years	Guarantees of JSC Russian Small and Medium Business Corporation issued under the Programme for Encouraging Lending to Small and Medium- sized Enterprises	6.50	-	-	-	-	-	50
Military mortgage	Up to 3 years	Mortgages issued under the Military Mortgage programme	10.75	-	7.45	10.00	19.65	19.65	30

<sup>1</sup> Specialised refinancing facilities are Bank of Russia instruments aimed at encouraging bank lending to certain segments of the economy whose development is hampered by structural factors. Under these facilities, the Bank of Russia provides funds to credit institutions at lower rates and for longer maturities compared with standard Bank of Russia operations. Specialised refinancing facilities are temporary Bank of Russia instruments, which will be valid until conditions for their replacement with market instruments are created in the financial market. The provision of funds under the specialised facilities is restricted, because their application should not distort the stance of the monetary policy and hamper the achievement of its key objective of ensuring price stability.

<sup>2</sup> For more information on the interest rates on the Bank of Russia's specialised instruments see the section Monetary Policy on the Bank of Russia's website.

<sup>3</sup> Until 1 June 2015, the maturity of Bank of Russia loans was one to 365 days. From 1 June 2015, the maturity of Bank of Russia loans was extended to three years.

<sup>4</sup> Projects are selected in compliance with the rules established by Regulation of the Government of the Russian Federation No. 1016, dated 14 December 2010, 'On Approving the Rules to Select Investment Projects and Principals for the Provision of Government Guarantees of the Russian Federation for Loans or Bonded Loans Attracted to Implement Investment Projects' or Regulation of the Government of the Russian Federation No. 1044, dated 11 October 2014, 'On Approving the Programme to Support Investment Projects Implemented in the Russian Federation on the Basis of Project Financing'.

<sup>5</sup> Claims under loans issued to banks and microfinance organisations partnering with JSC SME Bank under the Programme for Financial Support of Small and Medium-sized Enterprises Development for lending to SMEs and claims under loans issued to leasing companies partnering with JSC SME Bank for leasing property to SMEs.

Source: Bank of Russia.

61

Table 6

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

I			-		-			
	nflation	Core inflation	Food	Food <sup>1</sup>	Vegetables and fruit	Non-food goods	Non-food goods excluding petrol <sup>2</sup>	Services
			201	3				
January	1.0	0.5	1.8	1.2	7.4	0.4	0.4	0.6
February	0.6	0.4	0.8	0.6	2.8	0.4	0.4	0.4
March	0.3	0.4	0.4	0.5	0.1	0.4	0.4	0.2
April	0.5	0.4	0.7	0.4	3.6	0.4	0.4	0.5
Мау	0.7	0.3	1.0	0.3	6.5	0.3	0.3	0.8
June	0.4	0.3	0.5	0.2	3.0	0.2	0.2	0.6
July	0.8	0.3	0.0	0.4	-3.0	0.1	0.1	3.1
August	0.1	0.5	-0.7	0.6	-11.3	0.5	0.3	0.9
September	0.2	0.7	0.0	0.8	-7.6	0.5	0.4	0.1
October	0.6	0.6	1.1	0.9	3.6	0.5	0.5	-0.1
November	0.6	0.6	0.9	0.7	3.0	0.4	0.5	0.2
December	0.5	0.4	0.8	0.5	2.8	0.2	0.3	0.6
Total for the year	6.5	5.6	7.3	7.1	9.3	4.5	4.4	8.0
(December on December)			2014	4				
January	0.6	0.4	1.0	0.5	5.8	0.3	0.3	0.5
February	0.7	0.5	1.2	0.7	5.1	0.4	0.4	0.4
March	1.0	0.8	1.8	1.3	5.3	0.7	0.6	0.5
April	0.9	0.9	1.3	1.2	2.3	0.6	0.6	0.7
May	0.9	0.9	1.5	1.3	2.4	0.5	0.5	0.8
June	0.6	0.8	0.7	1.1	-2.8	0.4	0.4	0.9
July	0.5	0.6	-0.1	1.0	-8.1	0.4	0.3	1.4
August	0.2	0.6	-0.3	0.9	-10.7	0.5	0.4	0.7
September	0.7	0.9	1.0	1.2	-1.2	0.6	0.5	0.3
October	0.8	0.8	1.2	1.0	2.8	0.6	0.6	0.6
November	1.3	1.0	2.0	1.3	8.7	0.6	0.6	1.2
December	2.6	2.6	3.3	2.2	12.9	2.3	2.5	2.2
Total for the year	11.4	11.2	15.4	14.7	22.0	8.1	8.0	10.5
(December on December)	11.4	11.2			22.0	0.1	0.0	10.5
	0.0	0.5	201	-	00.4		0.5	0.0
January	3.9	3.5	5.7	3.7	22.1	3.2	3.5	2.2
February	2.2	2.4	3.3	2.7	7.2	2.1	2.3	0.8
March	1.2	1.5	1.6	1.6	1.2	1.4	1.6	0.3
April	0.5	0.8	0.3	0.9	-3.7	0.9	0.9	0.0
May	0.4	0.6	0.1	0.2	-1.0	0.5	0.6	0.5
June	0.2	0.4	-0.4	0.2	-5.0	0.3	0.3	1.0
July	0.8	0.4	-0.3	0.3	-4.2	0.5	0.3	3.0
August	0.4	0.8	-0.7	0.5	-9.8	0.8	0.7	1.3
September	0.6	0.8	0.4	0.7	-2.3	1.1	1.1	0.0
October	0.7	0.7	1.0	0.8	2.9	1.0	1.1	-0.1
November	0.8	0.6	1.2	0.7	5.6	0.7	0.8	0.2

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

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

Sources: Rosstat, Bank of Russia calculations.

Table 7

	· · · · · · · · · · · · · · · · · · ·			-	evious year, s	•		
	Inflation	Core inflation	Food	Food <sup>1</sup>	Vegetables and fruit	Non-food goods	Non-food goods excluding petrol <sup>2</sup>	Services
			2	013				
January	7.1	5.7	8.6	7.8	16.1	5.1	4.9	7.8
February	7.3	5.7	8.7	7.8	16.8	5.3	5.0	8.2
March	7.0	5.6	8.3	7.7	13.8	5.2	4.9	7.9
April	7.2	5.7	8.8	7.7	18.3	5.1	4.9	8.1
Мау	7.4	5.9	9.2	8.0	19.1	5.0	4.8	8.3
June	6.9	5.8	8.0	7.9	8.2	4.9	4.9	8.1
July	6.5	5.6	6.8	7.4	1.3	4.8	4.6	8.4
August	6.5	5.5	6.5	7.2	0.8	4.9	4.6	8.7
September	6.1	5.5	6.3	7.2	-1.4	4.7	4.4	7.8
October	6.3	5.5	6.9	7.2	4.4	4.5	4.3	7.7
November	6.5	5.6	7.5	7.3	8.9	4.5	4.4	7.9
December	6.5	5.6	7.3	7.1	9.3	4.5	4.4	8.0
			2	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
Мау	7.6	7.0	9.5	9.5	10.1	5.1	4.9	8.4
June	7.8	7.5	9.8	10.5	3.9	5.3	5.0	8.7
July	7.5	7.8	9.8	11.2	-1.5	5.6	5.2	7.0
August	7.6	8.0	10.3	11.5	-0.8	5.5	5.3	6.7
September	8.0	8.2	11.4	12.0	6.1	5.5	5.3	6.9
October	8.3	8.4	11.5	12.1	5.3	5.7	5.4	7.6
November	9.1	8.9	12.6	12.8	11.1	5.9	5.6	8.7
December	11.4	11.2	15.4	14.7	22.0	8.1	8.0	10.5
			2	2015	-			
January	15.0	14.7	20.7	18.4	40.7	11.2	11.4	12.3
February	16.7	16.8	23.3	20.8	43.5	13.0	13.5	12.8
March	16.9	17.5	23.0	21.1	38.0	13.9	14.6	12.6
April	16.4	17.5	21.9	20.8	30.0	14.2	15.0	11.8
Мау	15.8	17.1	20.2	19.5	25.7	14.3	15.1	11.6
June	15.3	16.7	18.8	18.4	22.8	14.2	15.0	11.7
July	15.6	16.5	18.6	17.5	27.9	14.3	15.0	13.4
August	15.8	16.6	18.1	17.0	29.1	14.6	15.3	14.1
September	15.7	16.6	17.4	16.4	27.7	15.2	16.0	13.8
October	15.6	16.4	17.3	16.2	27.9	15.6	16.6	13.1
November	15.0	15.9	16.3	15.5	24.3	15.7	16.7	11.9

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

<sup>1</sup> Excluding vegetables and fruit. <sup>2</sup> Paper of Puppin estimate

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

Sources: Rosstat, Bank of Russia calculations.

62

63

Table 8

	Industrial production <sup>1</sup>	Agriculture	Construction	Freight turnover	Retail trade turnover	Fixed capital investment	Consumer expenditure	Output index of goods and services by key industries <sup>2</sup>	GDP <sup>3</sup>
				2013	3				
January	-1.1	-2.7	3.1	-1.1	0.4	-1.8	0.4	0.0	
February	-1.0	0.8	-1.5	0.1	-0.1	-1.2	0.5	-0.3	
March	1.0	0.0	1.0	-0.3	0.5	0.5	0.3	0.6	0.2
April	0.3	0.0	-1.9	1.1	0.4	-1.7	0.6	0.0	
Мау	-0.3	0.3	2.6	-0.5	0.2	-0.6	0.2	-0.3	
June	1.4	0.6	-2.9	-0.9	0.5	0.0	0.3	0.8	0.7
July	-0.3	-0.6	2.3	0.5	0.2	-0.5	0.3	-0.5	
August	0.4	3.8	-2.0	1.4	0.2	-0.8	0.1	0.0	
September	-0.5	-2.9	1.3	1.6	0.2	-0.5	-0.1	-0.6	0.3
October	0.2	1.1	-2.7	1.4	0.3	-0.4	0.1	1.1	
November	1.9	3.2	2.3	-3.1	0.3	2.7	0.0	0.3	
December	-2.1	-2.3	-2.0	2.1	0.4	-3.4	-0.2	-1.2	0.6
				2014	1	1			
January	0.3	1.3	-2.0	-0.1	0.3	0.1	-0.3	0.0	
February	1.1	0.3	0.9	-1.9	0.7	0.7	2.4	1.2	
March	-0.2	0.2	0.3	-1.0	0.2	-0.7	0.0	-0.4	-0.9
April	1.5	0.7	-0.9	0.2	0.0	0.3	-0.2	0.7	
Мау	0.2	0.4	-0.1	1.5	-0.2	0.2	-0.2	0.2	
June	-0.8	0.0	0.6	0.2	-0.3	-0.1	-0.1	-0.6	0.8
July	0.3	1.9	-0.9	-2.3	-0.2	-0.1	-0.1	0.1	
August	-0.9	-1.2	-0.1	0.1	-0.3	-0.4	0.0	-0.6	
September	1.3	2.4	-1.5	1.2	-0.5	-1.1	0.1	0.1	0.3
October	0.1	-19.1	0.6	0.1	-0.5	0.4	0.0	-0.8	
November	-1.4	21.3	-1.3	-0.2	-0.5	-2.2	0.0	-0.3	
December	1.7	1.1	-0.5	-0.7	4.5	0.7	0.2	0.1	0.1
				2015	5				
January	-2.0	-0.3	-2.2	-0.7	-6.1	-0.7	-8.1	-1.2	
February	-0.8	0.2	0.1	0.5	-1.2	-0.7	-0.1	-0.9	
March	0.3	0.3	-1.9	0.9	-1.0	-0.2	-0.1	-0.3	-2.7
April	-1.6	0.0	-0.2	-1.3	-1.1	-0.7	0.0	-1.2	
Мау	-0.5	0.1	-2.0	-0.9	-0.8	-0.9	0.0	-0.4	
June	-0.1	0.2	-0.8	0.7	-1.1	-0.8	0.0	-0.4	-2.2
July	0.0	-0.5	-0.5	2.7	-0.9	-0.5	0.0	0.1	
August	-0.3	0.9	-1.1	-0.9	-1.0	0.0	-0.1	-0.1	
September	0.6	0.7	-1.0	1.0	-1.2	-0.3	-0.2	0.3	0.6
October	-0.1	-1.4	0.4	2.2	-1.2	0.0	-0.2	-0.1	

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

<sup>1</sup> Rosstat estimate. <sup>2</sup> Goods and services output index by key industries.

<sup>3</sup> Quarterly data.

Sources: Rosstat, Bank of Russia calculations.

Nº4 (12)

	2014						2015						Memo item: 2014
	Total	January	February	March	April	Мау	June	July	August	September	October	January- October	January- October
Output of goods and services by key industries	0.5	-1.1	-3.1	-2.8	-5.8	-6.8	-6.1	-5.9	-5.2	-4.3	-4.3	-4.6	0.4
Industrial output	1.7	0.9	-1.6	-0.6	-4.5	-5.5	-4.8	-4.7	-4.3	-3.7	-3.6	-3.3	1.7
Agricultural output	3.7	2.8	3.2	4.2	3.3	2.7	1.6	-1.9	2.3	4	7.7	3.0	3.8
Fixed capital investment	-2.7	-3.9	-4.3	-2.7	-4.8	-7.6	-7.1	-8.5	-6.8	-5.6	-5.2	-5.7	-2.3
Construction	-2.3	-6.7	-4.0	-8.9	-7.4	-12.4	-12.8	-11.8	-12.8	-13	-7.9	-10.3	-2.6
Retail trade turnover	2.7	-3.6	-7.0	-8.5	-9.6	-8.9	-9.2	-9.1	-9.1	-10.4	-11.7	-8.8	2.4
Household real disposable money income	-0.7	-0.7	-1.6	-1.6	-3.9	-6.3	-3.0	-2.0	-5.3	-4	-5.6	-3.5	0.4
Real wage	1.2	-8.4	-7.4	-10.6	-9.6	-7.4	-8.6	-9.2	-9	-10.4	-10.9	-9.3	2.2
Number of unemployed	-6.0	-2.1	1.5	8.7	8.8	13.5	8.6	7.9	8.9	6.6	8	6.9	-6.3
Unemployment (as % of economically active population)	5.3	5.5	5.8	5.9	5.8	5.6	5.4	5.3	5.3	5.2	5.5	5.5	5.1

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

Sources: Rosstat, Bank of Russia calculations.

Table 10

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

	Forecast of GDP g	rowth in 2015, %	Memo item: country's share in aggregate GDP of trading partners				
	November 2015	August 2015	New shares	Old shares			
Fotal	2.1 <sup>*</sup>	1.3	100.0	100.0			
1 The Netherlands	2.2	1.9	6.72	15.7			
2 Italy	0.7	0.6	8.95	8.7			
3 Germany	1.5	1.6	13.67	8.0			
4 China	6.9	7.0	8.93	7.0			
5 Ukraine	-9.6	-9.5	0.00	6.5			
6 Turkey	2.8	2.7	6.62	6.4			
7 Belarus	-3.5	-2.7	4.84	5.9			
8 Poland	3.5	3.5	4.92	4.9			
9 United Kingdom	2.4	2.6	3.65	3.5			
10 United States	2.6	2.6	4.08	3.5			
11 Finland	0.2	0.2	3.33	3.4			
12 Kazakhstan	1.4	1.7	3.58	3.4			
13 Japan	0.7	1.1	4.42	3.3			
14 France	1.2	1.2	3.89	3.2			
15 Korea, Republic of	2.5	2.7	3.79	2.8			
16 Switzerland	0.8	0.6	2.48	2.6			
17 Latvia	2.4	2.3	2.44	1.9			
18 Hungary	2.8	2.9	1.68	1.8			
19 India	7.4	7.6	1.67	1.7			
20 Belgium	1.4	1.2	4.50	1.5			
21 Czech Republic	4.1	3.1	1.44	1.5			
22 Slovakia	3.2	3.0	1.54	1.5			
23 Spain	3.2	2.9	1.42	1.3			
24 Lithuania	1.8	-	1.44	-			

*in this report, the aggregate GDP forecast excludes the economy of Ukraine, includes the economy of Lithuania, and provides new shares derived on* the basis of the re-exports of Russian energy commodities from the Netherlands. Source: Bank of Russia.

Country	Policy rate	Current level	Date of latest	Previous level	Change	Number of rate	Current level, %		12-month change,
			change			changes over the past 12 months			dd
Poland	target rate	1.50	04.03.2015	2.00	-0.50	-	-0.5		0.10
Hungary	base rate	1.35	21.07.2015	1.50	-0.15	5	0.1		0.50
Czech Republic	repo rate (14 days)	0.05	01.11.2012	0.25	-0.20	0	0.2		-0.50
Romania	base rate	1.75	06.05.2015	2.00	-0.25	4	-1.6		-3.08
Bulgaria	base rate	0.01	01.08.2015	0.02	-0.01	ę	-0.6		-0.20
Serbia	key policy rate	4.50	14.10.2015	5.00	-0.50	7	1.4		-0.40
Israel	target overnight rate	0.10	23.02.2015	0.25	-0.15	-	-0.7		-0.41
Brazil	target rate	14.25	29.07.2015	13.75	0.50	9	9.9		3.34
Chile	monetary policy rate	3.25	15.10.2015	3.00	0.25	-	4.0		-1.70
	lending rate (12 months)	4.35	26.10.2015	4.60	-0.25	5	1.3		-0.30
China	deposit rate (12 months)	1.50	26.10.2015	1.75	-0.25	5			
	required reserve rate	17.50	26.10.2015	18.00	-0.50	4			
	reverse repo rate	6.75	29.09.2015	7.25	-0.50	4	5.0		0.38
India	repo rate	5.75	29.09.2015	6.25	-0.50	4			
Indonesia	target rate	7.50	17.02.2015	7.75	-0.25	-	6.3		1.42
Korea, Republic of	base rate	1.50	11.06.2015	1.75	-0.25	2			-0.30
Malaysia	target overnight rate	3.25	10.07.2014	3.00	0.25	0			-0.30
Mexico	target rate	3.00	06.06.2014	3.50	-0.50	0	nfla 2.5		-1.82
Philippines	monetary policy rate	4.00	12.09.2014	3.75	0.25	0			-3.90
Russia	repo auction rate (7 days)	11.00	03.08.2015	11.50	-0.50	7	15.6		7.30
South Africa	repo rate	6.25	19.11.2015	6.00	0.25	2	4.7		-1.20
Thailand	repo rate	1.50	29.04.2015	1.75	-0.25	2	-0.8		-2.25
Turkey	repo rate (7 days)	7.50	24.02.2015	7.75	-0.25	2	7.6		-1.38
United States	federal funds rate (upper bound)	0.25	16.12.2008	1.00	-0.75	0	0.2		-1.50
Euro area	refinancing rate	0.05	04.09.2014	0.15	-0.10	0	0.1		-0.30
United Kingdom	base rate	0.50	05.03.2009	1.00	-0.50	0	-0.1		-1.40
Japan	overnight rate	0.10	19.12.2008	0.30	-0.20	0	0.3		-2.60
Canada	target overnight rate	0.50	15.07.2015	0.75	-0.25	2	1.0	_	-1.40
Australia	overnight rate	2.00	05.05.2015	2.25	-0.25	2	1.5	_	-0.80
New Zealand	overnight rate	2.75	10.09.2015	3.00	-0.25	e	0.4		-0.60
1.000	lending rate	0.05	20.01.2015	0.20	-0.15		0.2		-0.10
	certificate of deposit rate	-0.75	06.02.2015	-0.50	-0.25	4			
Curitzorlond	3m LIBOR - min	-1.25	15.01.2015	-0.75	-0.50	2	-1.4		-1.40
IZELIAIIU	3m LIBOR - max	-0.25	15.01.2015	0.25	-0.50	-			
Sweden	repo rate	-0.35	02.07.2015	-0.25	-0.10	3	0.9		0.58
Norway	key deposit rate	0.75	24.09.2015	1.00	-0.25	ę	2.5		0.50

Monetarv policv rates in various countries

Table 11

65

Nº4 (12)

Table 12

|||<sup>2</sup>

5.4

9.8

5.5

2.9

-13.3

#### 2014 2015 Ш IV Total Ш Ш L L Current account 58.4 28.7 25.8 12.1 6.2 14.3 15.8 50.5 51.7 189.7 28.2 Trade balance 45.3 42.3 44.3 43.0 Trade balance, YoY, % 4.0 20.7 3.6 -9.7 4.3 -12.3 -16.8 -37.7 Exports of goods 123.0 132.3 125.7 116.7 497.8 89.5 91.1 78.5 Exports of goods, YoY, % -1.7 4.0 -4.0 -16.5 -4.9 -27.2 -31.2 -37.6 crude oil 38.8 42.3 40.3 32.5 153.9 22.7 25.4 21.4 crude oil, YoY, % -10.2 3.7 -8.4 -28.9 -11.4 -41.5 -39.9 -46.9 oil products 27.5 30.5 31.8 26.0 115.9 20.0 19.1 14.5 oil products, YoY, % 7.9 4.2 17.5 -5.2 6.0 -27.4 -37.5 -54.4 17.7 16.3 9.9 10.4 natural gas 11.3 55.2 11.4 17.2 -39.7 -39.6 -35.5 -36.3 -0.9 natural gas, YoY, % -2.4 -17.8 39.0 43.2 43.7 172.8 35.3 36.2 32.8 other 46.8 -2.2 -25.0 other, YoY, % 1.8 -0.2 0.4 -0.2 -9.4 -16.2 Imports of goods 72.5 80.6 80.5 74.4 308.0 45.3 48.2 50.3 Imports of goods, YoY, % -5.3 -4.5 -7.8 -20.0 -9.8 -37.5 -40.2 -37.5 Balance of services -11.1 -14.4 -18.6 -11.2 -55.3 -8.4 -9.7 -12.1 Balance of services, YoY, % 5.8 5.3 -6.1 -21.6 -5.1 -24.1 -32.5 -34.9 Exports of services 15.1 17.3 17.8 15.5 65.7 11.7 13.1 13.4 -0.9 -24.4 -24.9 Exports of services, YoY, % -3.1 -3.0 -16.9 -6.2 -22.5 26.2 31.7 36.4 26.7 121.0 20.2 22.7 25.5 Imports of services 0.5 -22.8 -30.0 Imports of services, YoY, % 1.8 -4.6 -18.9 -5.7 -28.4 -2.7 -2.6 -2.7 -2.1 -10.1 -1.3 -0.7 Compensation of employees -1.4 Investment income -92 -21.9 -14.3 -12.5 -4.7 -14.7 -7.8 -57.9 Receivable 8.1 12.4 10.3 10.9 8.5 42.2 6.8 8.6 32.2 16.0 21.6 25.2 100.1 21.5 Payable 21.1 13.3 Rent 0.0 0.0 0.1 0.0 0.1 0.0 0.0 0.0 Secondary income -1.8 -0.7 -3.6 -2.0 -8.2 -1.1 -1.5 -2.1 Non-tradable components -13.7 -25.2 -20.5 -16.7-76.0 -7.2 -17.5 -10.7 Non-tradable components, YoY, % 4.4 -7.9 -15.2 -31.3 -14.5 -47.3 -30.5 -47.8 Capital account -0.2 -0.1 -10.0 -31.8 -42.0 0.0 -0.2 0.0 Balance of current and capital accounts 25.6 12.1 -3.8 -17.4 16.4 28.7 15.6 Financial account (except reserve assets) 47.1 27.8 6.0 49.4 130.2 37.3 18.7 Net incurrence of liabilities («+» - increase, «-» - decrease) 2.6 7.0 -23.3 -35.2 -48.9 -38.2 -8.6 -16.1 Federal government, local governments, and central bank -6.5 2.2 -3.4 -4.4 -12.2 -6.2 0.9 -1.0 4.8 -19.9 -32.0 -15.1 Banks and other sectors 9.1 -30.8 -36.7 -9.5 Net acquisition of financial assets, excluding reserve assets 49.7 34.8 -17.3 14.2 81.3 -1.0 10.1 -13.2 («+» - decrease, «-» - increase) General government and central bank -0.5 0.5 -8.8 -31.1 -39.9 0.2 0.7 0.1

#### Balance of payments of the Russian Federation<sup>1</sup> (billions of US dollars)

Net errors and omissions -5.9 5.4 4.1 2.7 6.2 -1.5 0.9 7.1 Change in FX reserves («+» - decrease, «-» - increase) -27.4 -10.3-5.7 -107.5-10.1 -2.2 9.7 -64.2 Net capital inflow/outflow by banks and enterprises 47.6 21.8 7.4 76.2 153.0 32.3 18.0 -53 Certain indicators adjusted by the amount of FX swaps between the Bank of Russia and resident banks, FX liquidity provided by the Bank of Russia to credit institutions on a reverse basis, and funds in resident banks' correspondent accounts with the Bank of Russia. Change in FX reserve assets («+» - decrease, «-» - increase) -40.5 3.2 -50.8 -86.5 -0.9 2.6 6.2 1.6 Net capital inflow/outflow by banks and enterprises 60.7 8.3 0.1 62.8 132.0 23.0 13.3 -1.8

34.3

-8.5

45.3

121.2

-1.1

94

50.1

<sup>1</sup> According to BPM6.

Banks and other sectors

<sup>2</sup> Estimate.

Source: Bank of Russia.

## LIST OF BOXES

Aggregate GDP and inflation in Russia's trading partners	8
Extracting expectations regarding future short-term interest rates from current OFZ yields	22
Fiscal policy	29
Import substitution in the food market	31
Financial position of organisations	33
Estimates of potential output dynamics based on 'replacement' cost dynamics for key production assets in the Russian economy	33
Change in the seasonal price dynamics for certain food products linked to changes in the market supply structure	41
Short-term inflation forecasting using the combined forecast method	42

Nº4 (12)

## **GLOSSARY**

#### Asset-backed securities (ABS)

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

#### 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) – 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 indicator for the monetary policy stance. It is set by the Bank of Russia Board of Directors.

#### Bank of Russia Lombard List

A list of securities eligible as collateral for Bank of Russia refinancing operations.

#### Basis point

One hundredth of a percentage point.

#### Broad money (monetary aggregate M2X)

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

#### **Butterfly**

An option position including options with the same maturity, whose quotation is calculated according to the formula: BF=(CALL+PUT-2\*ATM)/2, where CALL and PUT are implied volatility values for call and put options with the respective deltas, and ATM is an implied volatility value for at-the-money option. This quotation means that the implied distribution of expectations of future exchange rate fluctuations has fatter tails relative to the risk neutral measure.

#### Carry trade

A strategy in which money is borrowed at a low interest rate in order to invest in higher-yielding assets. This strategy is employed by FX and stock market players to benefit from the positive differentials between active and passive interest rates in different currencies or for different maturities.

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

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

#### CDS spread

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

#### Consumer price index (CPI)

The CPI measures changes over time in the overall price level of goods and services purchased by households for private consumption. This index is calculated by the Federal State Statistics Service as the ratio of the value of a fixed set of goods and services in current prices to the value of the same set of goods and services in prices 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, telecommunications services, and the majority of housing and public utility services).

#### **Countercyclical currency**

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

#### **Covered bonds**

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

#### Credit default swap (CDS)

An insurance contract protecting from default on reference obligations (sovereign or corporate securities with fixed yields). It is a credit derivative allowing the buyer of the contract to get insured against a certain credit event of the reference obligation issuer by paying an annuity premium (CDS spread) to the insurance seller.

#### Cross-currency basis swap

Currency interest rate swap which implies an exchange of nominal values and interest payments in different currencies. The price of this swap reflects the premium to one of the floating rates.

#### **Current liquidity deficit**

An excess of banking sector demand for liquidity over the liquidity supply on a given day. A reverse situation, called 'current liquidity surplus', is an excess of the liquidity supply over demand on a given day.

#### **Dollarisation of deposits**

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

#### **Dual-currency basket**

Ruble exchange rate index calculated as the sum of 0.55 US dollars and 0.45 euros in rubles.

#### Factors of banking sector liquidity

Nº4 (12)

Changes in the central bank balance-sheet items affecting banking sector liquidity, but which do not result from central bank liquidity management operations. These factors include changes in cash in circulation, changes in balances of general government accounts with the Bank of Russia, Bank of Russia operations in the domestic foreign exchange market (excluding operations regulating banking sector liquidity), as well as changes in required reserves deposited by credit institutions in required reserve accounts with the Bank of Russia.

#### Fiscal stress index

Conceptual approach developed by IMF experts proposes an aggregate index which provides early warning signals of risks. The index is calculated on the basis of the study of the signals produced by three complementary sets of variables: basic fiscal variables, long-term fiscal trends, and asset and liability management (the total of 12 variables). Thresholds are calculated for all variables. By exceeding its threshold, the variable signals an upcoming crisis in the following year. Besides, each variable is assigned signaling power which shows its weight in the fiscal stress index. For more information on the approach see 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 purchase foreign currency to replenish international reserves or to influence the domestic FX market occasionally 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 in the key rate with effect from the corresponding date.

#### Foreign exchange swap

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

#### Forward rate agreement (FRA)

A forward interest rate agreement on a certain future obligation, according to which the parties are bound, as of the effective date, to compensate for the differences in the amount of interest payments calculated on the basis of the agreed and actual rates and the agreed nominal value.

#### 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 (USD/RUB and EUR/RUB swaps).

#### Implied volatility

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

#### Inflation-neutral output

Total output in economy which may be produced and allocated without setting grounds for changing the price growth rate. Besides, the volume of inflation-neutral output is not linked to any specific level of inflation, it only signals the existence/absence of conditions for its acceleration/deceleration.

#### Inflation targeting regime

A monetary policy framework which considers price stability as the final target of the central bank. Under this regime a quantitative inflation target is set and announced. The central bank is responsible for achieving this target. Typically, under an inflation targeting regime, the monetary policy affects the economy through interest rates. Decisions are made primarily on the basis of economic forecasts and inflation dynamics. An important feature of this regime is regular explanations to the public of decisions adopted by the central bank, which guarantees its accountability and transparency.

#### Interest rate corridor

See Bank of Russia interest rate corridor.

#### Managed floating exchange rate regime

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

#### **MICEX** index

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

#### **MSCI indices**

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

#### Monetary aggregate M1

Total amount of cash in circulation and funds of the Russian Federation residents (non-financial and financial organisations (excluding credit ones) 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 of the Russian Federation residents (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 (monetary aggregate M2), 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, investments by credit institutions in Bank of Russia bonds (at prices fixed as of the start of the current year), and credit institutions' claims on the Bank of Russia under the ruble leg of FX swaps (USD/RUB swaps).

#### Net private capital inflow/outflow

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

#### Nominal effective ruble exchange rate index

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

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

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

#### Non-price bank lending conditions

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

#### **Open market operations**

Operations carried out on the initiative of a central bank. They include auction-based refinancing and liquidity-absorbing operations (repo auctions, deposit auctions, etc.), as well as purchases and sales of financial assets (government securities, foreign currency, and gold).

#### Output gap

Deviation of GDP from potential output, expressed as a percentage. Characterises the balance between demand and supply and may be regarded as an aggregate indicator of the effect which the demand factors have on inflation. If the actual output is larger than the potential output (positive output gap), all else equal, inflation is expected to accelerate. A negative output gap is an indicator of an expected slowdown in price growth. Output fluctuations around the potential level are called cyclical fluctuations.

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

Outstanding amount on loans extended by the Bank of Russia to credit institutions against the collateral of securities, non-marketable assets, guarantees, gold, repo operations, and FX swaps (USD/RUB and EUR/ RUB swaps).

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

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

#### **PMI index**

An indicator of business activity based on company surveys. A PMI of more than 50 represents an expansion of business activity, a reading under 50 represents a contraction.

#### **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.

#### **Realised volatility**

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

#### **Repo operation**

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

#### **Required reserves**

Funds maintained by credit institutions in correspondent accounts with the Bank of Russia and accounts to record required reserves in order to fulfill reserve requirements. The latter comprises required reserve ratios and a required reserve averaging ratio.

#### **RGBEY** index

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

#### **Risk-neutral measure**

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

#### Risk premium on market securities portfolio

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

#### **Risk reversal**

An option position, whose quotation is calculated as a difference between implied volatility values for call and put options with the respective deltas and same maturities (an option delta is roughly equal to the market participants' estimate of at-the-money option probability). This quotation reflects an asymmetric distribution of expectations of future exchange rate fluctuations relative to the risk-neutral measure.

#### **RTS index**

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

#### Ruble real effective 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 ruble real effective exchange rate index reflects changes in the competitiveness of Russian goods in comparison to those of Russia's main trading partners.

POLICY REPORT

#### Shadow banking sector

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

#### Standing facilities

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

#### Structural liquidity deficit

The state of the banking sector characterised by a stable demand by credit institutions for Bank of Russia liquidity provision operations. The reverse situation, characterised by a stable demand by credit institutions to deposit funds with the Bank of Russia, is a structural liquidity surplus. A calculated level of structural liquidity deficit/surplus is a difference between amounts outstanding on Bank of Russia refinancing and liquidity-absorbing operations.

#### Structural non-oil and gas primary budget deficit

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

#### **Underlying inflation**

Inflation indicator cleared of all shocks which are irrelevant for the monetary policy. The underlying inflation indicator used by the Bank of Russia is calculated on the basis of dynamic factor models.

#### US dollar index (DXY)

The DXY is a weighted geometric mean of the US dollar's value relative to a basket of six foreign currencies (EUR, JPY, GBP, CAD, SEK, CHF).

#### Volatility smile

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

## ABBREVIATIONS

#### AHML – Agency for Housing Mortgage Lending

BLC — bank lending conditions

bp - basis points (0.01 pp)

BPM6 — the 6th edition of the IMF's Balance of Payments and International Investment Position Manual

Cbonds-Muni —municipal bond index calculated by Cbonds

- CCPI core consumer price index
- CIS Commonwealth of Independent States
- CPI consumer price index

DSR — debt service ratio (the ratio of the cash flow available to pay current debt obligations, including principal and interest, to current income value)

- ECB European Central Bank
- EME emerging market economies
- EU European Union
- Fed US Federal Reserve System
- FOM Public Opinion Foundation
- FPG fiscal policy guidelines
- GDP gross domestic product
- GFCF gross fixed capital formation
- IBL interbank loans
- IFX-Cbonds corporate bond index
- MC-management company
- MIACR Moscow Interbank Actual Credit Rate (weighted average rate on interbank loans provided)

MIACR-B — Moscow Interbank Actual Credit Rate-B-Grade (weighted average rate on interbank loans provided to banks with speculative credit rating)

MIACR-IG — Moscow Interbank Actual Credit Rate-Investment Grade (weighted average rate on interbank

- loans provided to banks with investment-grade rating)
- MICEX SE MICEX Stock Exchange

MPD — Monetary Policy Department of the Bank of Russia

MTVECM, TVECM — Momentum Threshold Vector Error Correction Model, Threshold Vector Error Correction Mode

- NPF non-governmental pension fund
- OFZ federal government bonds
- OFZ-IN federal government bonds with inflation-indexed nominal value
- OFZ-PD permanent coupon-income federal government bonds
- OFZ-PK variable coupon-income federal government bonds
- OJSC open joint-stock company

OPEC — Organisation of the Petroleum Exporting Countries

PJSC — public joint-stock company

PMI — Purchasing Managers' Index

- QPM quarterly projection model of the Bank of Russia
- REB Russian Economic Barometer

RGBEY— Russian Government Bonds Effective Yield until Redemption (calculated by the Moscow Exchange)

RUONIA — Ruble OverNight Index Average (reference weighted rate of overnight ruble deposits on the

Russian interbank bond market, calculated by Cbonds)

SMB — small and medium-sized businesses

TVP FAVAR — Time-Varying Parameter Factor-Augmented Vector Auto-Regression

- USA United States of America
- VCIOM Russian Public Opinion Research Centre
- VEB Vnesheconombank
- VECM Vector Error Correction Model