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**RUSSIAN ECONOMY IN 2016
TRENDS AND OUTLOOKS
(ISSUE 38)**

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The review provides a detailed analysis of main trends in Russian economy in 2016. The paper contains 6 big sections that highlight single aspects of Russia's economic development: the socio-political context; the monetary and budget spheres; financial markets; the real sector; social sphere; institutional challenges. The paper employs a huge mass of statistical data that forms the basis of original computation and numerous charts.

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□ Gaidar Institute, 2017

2.1. Monetary policy¹

2.1.1. Key monetary policy decisions

In 2016, the Bank of Russia implemented a conservative monetary policy aimed at mitigating inflation. Commercial banks decreased their demand for central bank refinancing as the Reserve Fund was spent, in which case the central bank had to employ a set of instruments to prevent an increase in the money supply. It happened twice over the course of the year – on June 14 and September 19 – that Russia’s central bank cut 0.5 percentage points off the key rate, to 10% p.a. With a declining inflation rate and inflation expectations available during the year, a rather moderate decline in the key rate suggested growth of the real interest rate in the money market. Maintaining a positive real rate in the money market helps prevent prices from hiking upwards as the savings appeal strengthened, although there is risk of economic slowdown. There is another thing to be considered: interest rates in real terms were low in the Russian Federation all the way till 2016, including that Russia had lower rates than other developing countries (see Fig. 1–2).

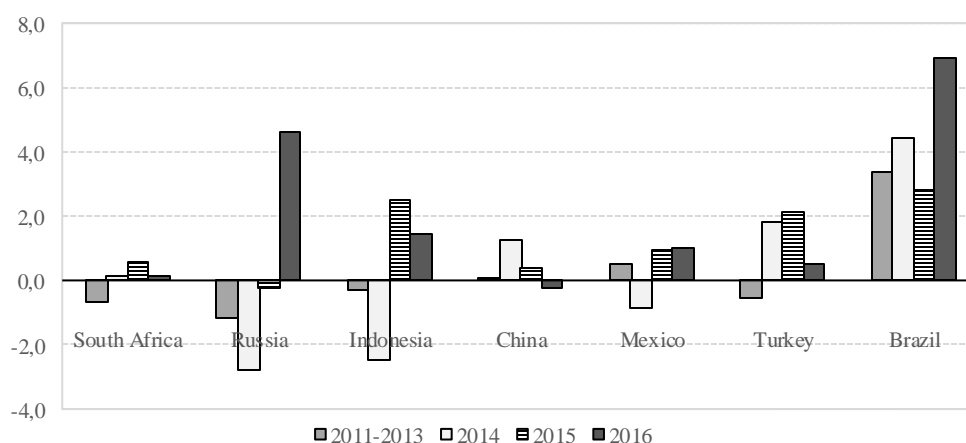


Fig. 1. Real money market rates in countries of emerging markets, G20 member states (% p.a.)

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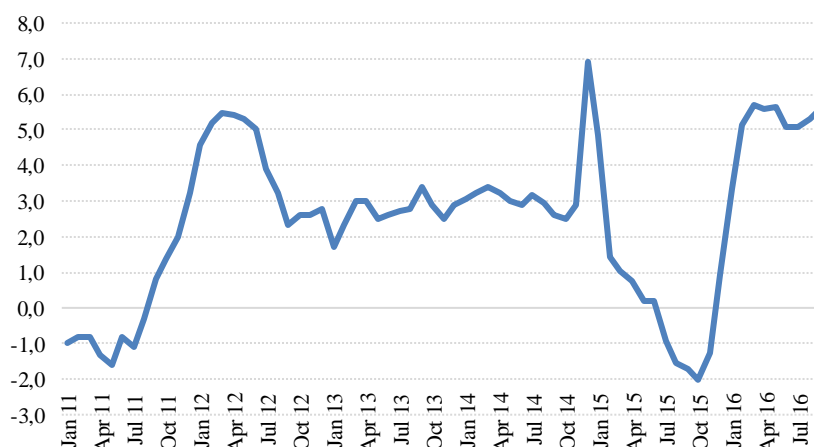


Fig. 2. Real interest rate on legal entity loans with maturities less than 1 year in the Russian Federation, 2011–2016 (% p.a.)

Given still high expectations for inflation, it is not until Q1–Q2 2017 that the Bank of Russia is expected to consider cutting the key rate any further. In 2017, in our view, the central bank will have to figure out how to establish and maintain an uneasy equilibrium between achieving the inflation target and avoiding the adverse effect of the monetary policy on economic activity in the country.

Since January 1, 2016, the refinancing rate has been adjusted for the key rate, thereby making the monetary policy more transparent for domestic and foreign economic agents, raising investors' confidence in Bank of Russia's signals. As a reminder, with an inflation targeting regime in place, the interest rate is the key instrument of monetary policy that influences crediting in volume terms, the monetary base or other macroeconomic indicators. Any change to the key interest rate constitutes a signal to economic agents about relaxing or tightening the monetary policy, which has immediate impact on their expectations. In this context, setting the refinancing rate – that has a more administrative function – equal to the monetary policy rate makes central bank's signals more clear.

As noted above, with a substantial budget deficit and budget financing by spending the Reserve Fund, commercial banks decreased their demand for both ruble and foreign currency refinancing. The Bank of Russia has since April 1, 2016 suspended 12-month foreign currency repo auctions because of lower demand for these instruments and higher demand for 28-day foreign currency repos. As a reminder, the regulator also suspended 365-day foreign currency repos in May 2015 amid a stable situation in the FX market, and it was not until December 2015 that 365-day foreign currency repos were conducted again due to the need for refinancing commercial banks' debt on previous 1-year foreign currency repo auctions, and because Russian companies made scheduled repayments on their external loans, as well as due to an increasing demand for foreign currency in response to a Fed's rate hike in December 2015. With a relatively stable FX market and low demand for refinancing 1-year foreign currency repo auctions, such operations are not expected in the offing. In our view, the regulator in general shouldn't resort to this instrument unless financial stability is exposed to risks, and the ruble exchange rate should stay free floating so that the economy is able to promptly adapt to new terms of trade.

Central bank's decision to sell some of the federal bonds (OFZs) of its own portfolio was responsible for preventing growth in the monetary base. Furthermore, the OFZs sales may facilitate liquidity and depth of the secondary market of federal securities.

In 2016, in an effort to discourage growth of foreign currency denominated liabilities in banks and to promote financial stability, the regulator added 1 percentage point to the required reserves ratio for bank foreign-currency denominated liabilities on April 1 and July 1, and also added 0.75 percentage points on August 1. Furthermore, on August 1, 2016 the Bank of Russia added 0.75 percentage points to the reserve requirements for all types of ruble denominated liabilities of credit institutions. At the same time, note that the increase of the required reserves ratio is a headwind to banking business profits by increasing bank funding through deposit acquisition, which encouraged lower deposit rates that were already on the slide because of liquidity surplus. For instance, the rate on retail ruble denominated deposits with maturities of 1 year or less dropped from 8.53% p.a. in January, to 6.22% p.a. in October 2016 while rates on foreign currency denominated deposits were down from 0.99% p.a. in January, to 0.56% p.a. in October 2016. However, the contraction of deposit rates in real terms was tempered to a certain degree as inflation and inflation expectations subdued. In general, in our view, the hike of the required reserves ratio was quite an efficient measure of constraining growth of the monetary base.

The regulator has since December 23, 2016 raised interest rates on foreign currency swaps that purchase US dollars and Euros for rubles from 0% to a relevant overnight LIBOR rate, and on foreign currency swaps that sell US dollars for rubles from 1.5% to a LIBOR rate plus 1.5 percentage points. The decision was made in response to higher interest rates in external markets due to a tougher Fed's monetary policy. For instance, a U.S. Federal Reserve meeting of December 13–14 decided to add 0.25 percentage points to its federal funds rate target, to 0.5–0.75% p.a.

Finally, one important aspect needs to be emphasized here. The Bank of Russia made its monetary policy more transparent through regular publications of analytical reviews and statistics, including information on inflation expectations, external debt repayment schedule, etc., as well as a series of reports on economic research of pressing issues. In our view, the provision of information concerning objectives and outputs of monetary policy measures, the discussion of the nature of inflation processes are consistent with the information policy practice of central banks in developed economies and contribute to a more efficient monetary policy as a whole. However, note that one of the key issues that narrow considerably the effectiveness of central bank communications is economic agents' insufficient confidence in Bank of Russia's statements. As an illustration, economic agents' projection for inflation rate in 2017 is much higher than 4%. In this context, should the inflation target in 2017 have been achieved, this would significantly raise economic agents' confidence in central bank's commitments, as well as the reputation of the central bank would be improved, and a lower inflation rate would be expected.

2.1.2. Money market

The broad monetary base gained 7.6% in 2016, to Rb 11.9 trillion as of January 1, 2017. Note that in 2015 the monetary base contracted by 2.5%, to Rb 11.0 trillion. In 2016, the monetary base increased basically in response to a shrunken balance on the general government accounts with Russia's central bank as the Reserve Fund was spent. Additionally, the monetary

base increase via this channel was not fully offset by a decline in volumes of Bank of Russia's operations providing liquidity to commercial banks (see *Fig. 3*).

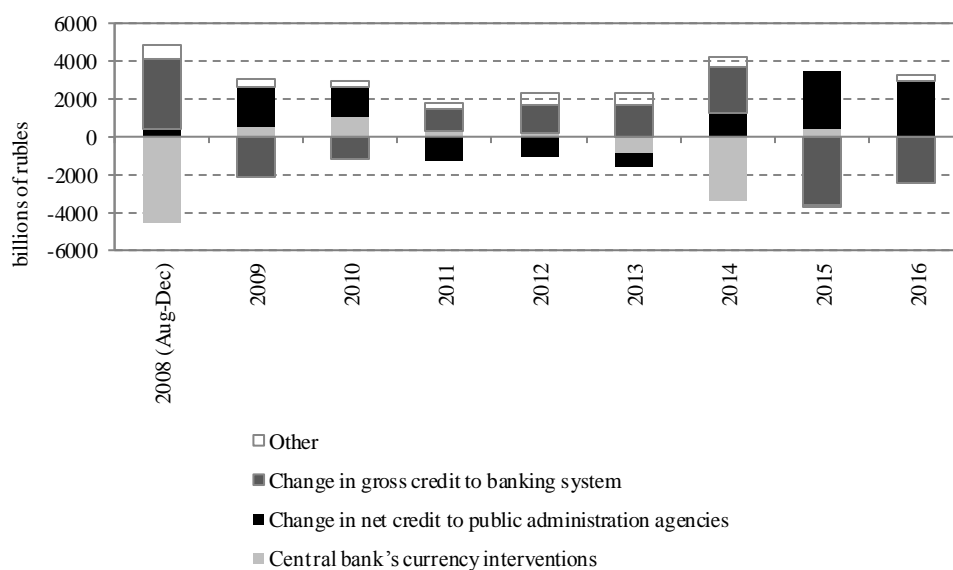


Fig. 3. Key factors that influenced changes to broad monetary base in 2008–2016

Sources: Bank of Russia, Gaidar Institute's own calculations.

All the components of the broad monetary base increased at the 2016 year end. In particular, deposits of credit institutions with the Bank of Russia were up 40.8%, to Rb 785.5bn, bank required reserves rose 31.1%, to Rb 484.7bn, correspondent accounts of credit institutions saw a positive growth of 14.3% (to Rb 1822.7bn), and cash in circulation increased 3.1%, to Rb 8789.8bn. Overall, surplus reserves¹ in M12 2016 contracted in terms of volume by 6.2%, to Rb 2608bn (see *Table 1*).

Table 1

Dynamics of broad monetary base in 2016 (bln Rb)

	01.01.2016	01.04.2016	01.07.2016	01.10.2016	01.01.2017
Monetary base (broad definition)	11,043,8	10,974,5	10,785,6	11,541,2	11,882,7
- cash in circulation, including cash in vaults of credit institutions	8,522,2	7,998,3	8,241,9	8,277,8	8,789,8
- correspondent accounts of credit institutions with the Bank of Russia	1,594,0	2,177,4	1,712,4	2,224,8	1,822,7
- required reserves	369,8	398	394,3	483,9	484,7
- deposits of credit institutions with the Bank of Russia	557,8	400,9	436,9	554,8	785,5
- Bank of Russia's bonds held by credit institutions	0	0	0	0	0
For reference: surplus reserves	2152	2,578	2,149	2,780	2,608

Source: Bank of Russia.

In 2016 the Bank of Russia did not carried out currency interventions under a free-floating exchange rate regime (see *Fig. 4*). Note that with an inflation targeting regime in place, a market-driven exchange rate makes the economy more adaptive to external environment and resilient to adverse shocks.

¹ Surplus reserves in the banking system comprise deposits of credit institutions with the Bank of Russia and correspondent accounts of credit institutions with the Bank of Russia.

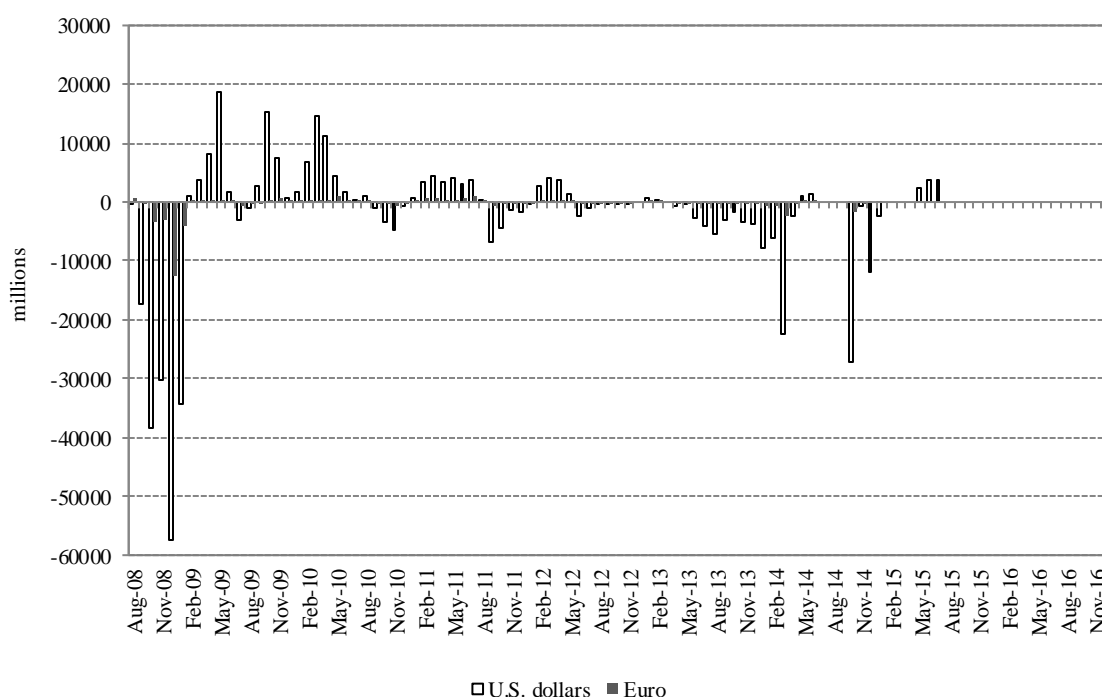


Fig. 4. Bank of Russia's currency interventions (net foreign currency purchases) in 2008–2016

Source: Bank of Russia.

Overall, the Bank of Russia has cut considerably its intervention in the FX market after the global financial crisis, which makes the monetary base dynamics less reliant upon currency interventions.

Russia's international reserve assets increased USD 9.3bn (2.5%) at the 2016 year end, to USD 377.7bn as at early January 2017 (see *Fig. 5*). The FX reserves shrank in terms of volume by USD 2.3bn (0.7%). The monetary gold reserves swelled by USD 11.6bn (24.0%) during the same period compared to the value seen earlier in the year, which was due to a positive revaluation of this asset in H1 2016, totaling USD 15.1bn, and due to a partially offset effect of declining gold prices in global market in some months of H2 2016. As a result, as of January 1, 2017 the foreign currency reserves accounted for 84.1% of the total reserves (86.8% in 2015), and gold made up 15.9% (13.2% in 2015). Russia now holds sufficient reserves to ensure sustainability of its balance of payments, because they cover both 17 months of imports of goods and services in Russia (16 months in 2015) and external debt payments that fall due in 2017. Note that the adequacy of international reserves that have recently seen no change in terms of volume enhances as imports of goods and services contract and the external debt becomes smaller. This allows Russia to ensure its macroeconomic and financial sustainability amid economic problems arising from worsening terms of trade and from Western sanctions freezing Russian economic agents out of global capital markets.

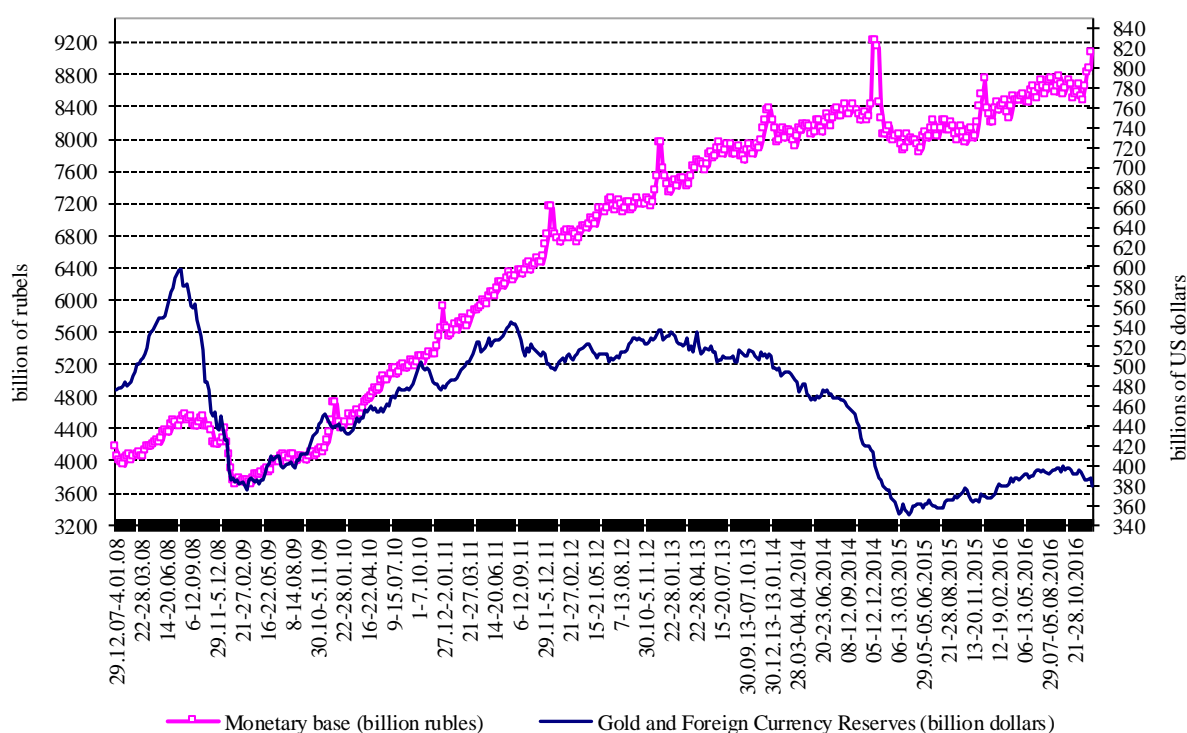


Fig. 5. Dynamics of monetary base (narrow definition) and holdings of foreign currency and gold (international reserves) in 2008–2016

Source: Bank of Russia.

As noted above, the monetary base dynamics in 2016 was largely determined by the debt owed by credit institutions to the Bank of Russia (see Fig. 6). As a reminder, the trend of strong growth of the Bank of Russia’s operations to provide loans to credit institutions has been afoot since 2011. In 2014, amid a restricted access for Russian banks to the international capital market, banks’ debt to the regulator nearly topped peak values seen during the global financial crisis (second half of 2008 – 2009), showing a 2.1-fold increase in 12 months, to Rb 9.3 trillion as of January 1, 2015. In 2015, the trend reversed subsequent to a liquidity inflow to the banking sector via the budget channel: credits, deposits and other funds raised by credit institutions amounted to Rb 5.4 trillion as of January 1, 2016, a 42% decline from 2014. In 2016, banks’ ruble denominated debt to the central bank was halved again, to Rb 2.7 trillion, as spending of the Reserve Fund continued. In this context, the percentage share of credits and deposits of Bank of Russia’s assets dropped 6.9 percentage points, to 11.4% as of early September 2016, whereas it was 30.3% earlier in 2015 (see Table 2).

The decline in Bank of Russia’s lending to commercial banks is fully offset by massive spending of the Reserve Fund due to financing of the federal budget deficit. In particular, capital inflows to the banking sector in response to a shrunken balance on the general government accounts with the Bank of Russia amounted to Rb 3.0 trillion in 2016 (Rb 3.1 trillion in 2015).

In the period between August and December 2016, the Bank of Russia conducted intensively 1–6-day deposit operations aimed at collecting the money received by the banking sector via the budget channel. Rb 280.3bn were lent on average at such auctions, and the average weighted rate stood at 9.98% p.a. Additionally, base the Bank of Russia decided in September 2016 to issue 3-month-coupon bonds with maturities of 3, 6 and 12 months as a supplementary measure

of tempering growth of the monetary base. The regulator intends to make decisions on certain bond issuances as may be required from time to time, with due regard to transiting to a liquidity structural surplus¹ in the banking sector. According to the data as at early January 2017, no bonds were issued by the Bank of Russia.

Table 2

Bank of Russia Balance Sheet in 2015–2016

	January 1, 2015		January 1, 2016		September 9, 2016	
	billions of rubles	% of assets/liabilities	billions of rubles	% of assets/liabilities	billions of rubles	% of assets/liabilities
Funds placed with nonresidents and securities issued by nonresidents	18.378.6	55.9	21.995.2	62.9	20.278.5	61.0
Credits and deposits	9.950.2	30.3	6.400.3	18.3	3.776.1	11.4
Precious metals	2.726.3	8.3	3.647.3	10.4	4.314.7	13.0
Securities	622.5	1.9	719.9	2.1	518.6	1/6
Other assets	186.6	0.6	920.4	2.6	2.682.6	8.1
Total assets	32.897.6	100	34.947.2	100	33.248.6	100
Cash in circulation	8.840.9	26.9	8.522.5	24.4	8.283.5	24.9
Funds in accounts with the Bank of Russia	13.876.0	42.2	12.573.3	36.0	10.311.4	31.0
<i>of which:</i> <i>Russian government funds</i>	9.144.3	27.8	8.130.7	23.3	6.529.5	19.6
<i>funds of resident credit institutions</i>	2.869.7	8.7	2.528.3	7.2	2.657.0	8.0
Float	1.9	0.01	0.4	0.0	4.4	0.0
Outstanding bonds	-	-	-	-	-	-
Liabilities to the IMF	840.8	2.6	1.074.2	3.1	1.553.7	4.7
Other liabilities	100.4	0.3	160.4	0.5	583.6	1.8
Capital	9.054.1	27.5	12.503.7	35.8	12.512.0	37.6
Total liabilities	32.897.6	100	34.947.2	100	33.248.6	100

Source: Bank of Russia.

With a strengthening ruble, banks decreased their demand for central bank FX refinancing over the course of the year. While in 2015 banks owed USD 26.2bn, on average, to the central bank on foreign currency repos, in 2016 their debt decreased considerably, to USD 13.4bn on average. In December 2016, banks' debt averaged USD 7.6bn, including USD 7.2bn (USD 2.6bn on average in December 2015) on 28-day repos and USD 0.1bn (USD 17.1bn on average in December 2015) on 1-year repos (see *Fig. 7*). In 2016, the average weighted rate on 1-year repo auctions stood at 4.2% p.a. (1.7% p.a. in 2015), while the average weighted rate on 28-day repo auctions in 2016 was 2.5% p.a., an increase of 0.9 percentage points from 2015.

As regard to foreign currency swaps, a foreign currency swap to provide foreign currency liquidity to the banking system averaged USD 515.1m in 2016. Note that the rate on the ruble-denominated leg of a swap stood at 9–10.5% and on the foreign currency denominated leg at 22 – 1.5% until December. The former was subsequently raised to equal a LIBOR rate. Despite the fact that banks use foreign currency swaps out of today/out of tomorrow on particular days, the key instrument of FX refinancing is foreign currency repos, which can be explained by comfortable terms of foreign currency denominated credits for the longer term.

¹ As defined by the Bank of Russia, the structural deficit/surplus of liquidity occurs when the banking sector is facing a situation where credit institutions are starving for liquidity through operations with the Bank of Russia. The reverse case – credit institutions have a strong need to deposit money in the Bank of Russia – is the structural surplus of liquidity. The estimated structural deficit/surplus of liquidity is the difference between the debt owed on Bank of Russia's refinancing operations and absorption operations.

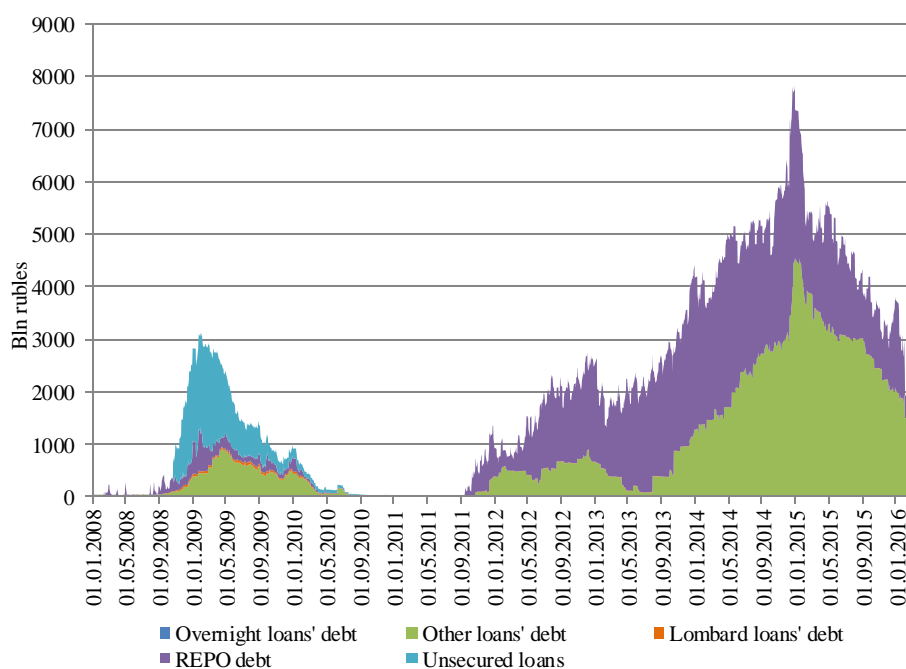


Fig. 6. Commercial banks' ruble-denominated debt (under key instruments) to the Bank of Russia in 2008–2016

Source: Bank of Russia.

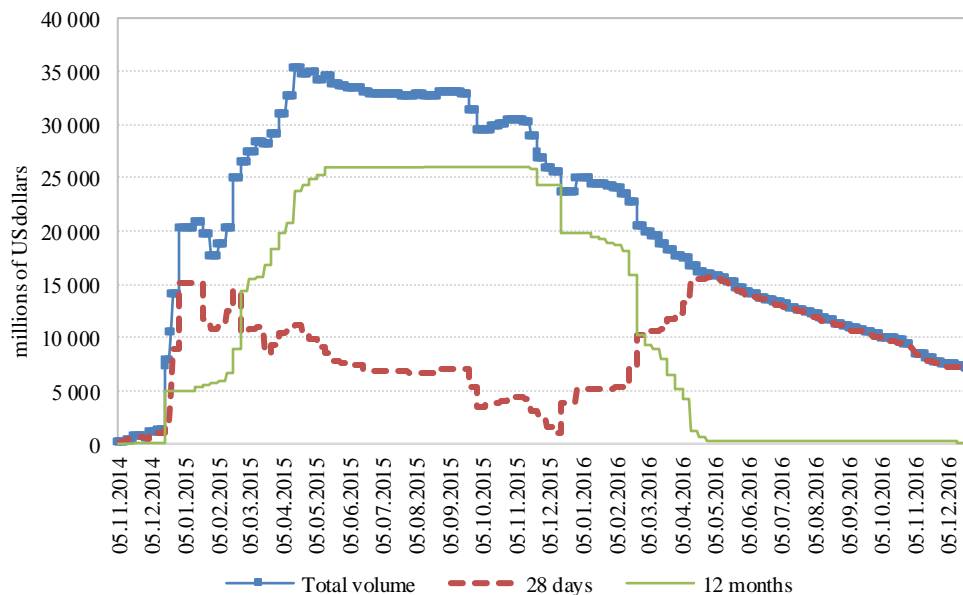


Fig. 7. Amounts to be repaid by credit institutions in 2nd leg of foreign currency repos in 2014–2016

Source: Bank of Russia.

In 2016, as noted above, the banking sector decreased its demand for ruble and foreign currency refinancing from the central bank. The massive capital inflows to the banking sector due to the spending of the Reserve Fund facilitated a surplus in the money market that was facing a liquidity deficit subsequent to the global financial crisis. The interbank interest rate¹ lost 0.9 percentage points in 2016 (from 11.0% p.a. on average in January 2016, to 10.1% p.a. on average in December 2016). Overall, over the course of 2016 the interbank interest rate was staying within the boundaries of the band set by the central bank, hitting its lower boundary from time to time, which was also because the banking sector shifted to a liquidity surplus and due to subdued demand for the central bank liquidity provision. The average MIACR on ruble denominated interbank overnight loans loosened from 12.7% in 2015, to 10.5% p.a. in 2016 (see Fig. 8). Overall, the Bank of Russia 2015–2016 interest rate policy proved efficient in terms of achieving the operational goal of narrowing the gap between interbank interest rates and the key rate. This is related to a money market stabilization, a more predictable Bank of Russia’s interest rate policy that allows economic agents to revise their expectations beforehand.

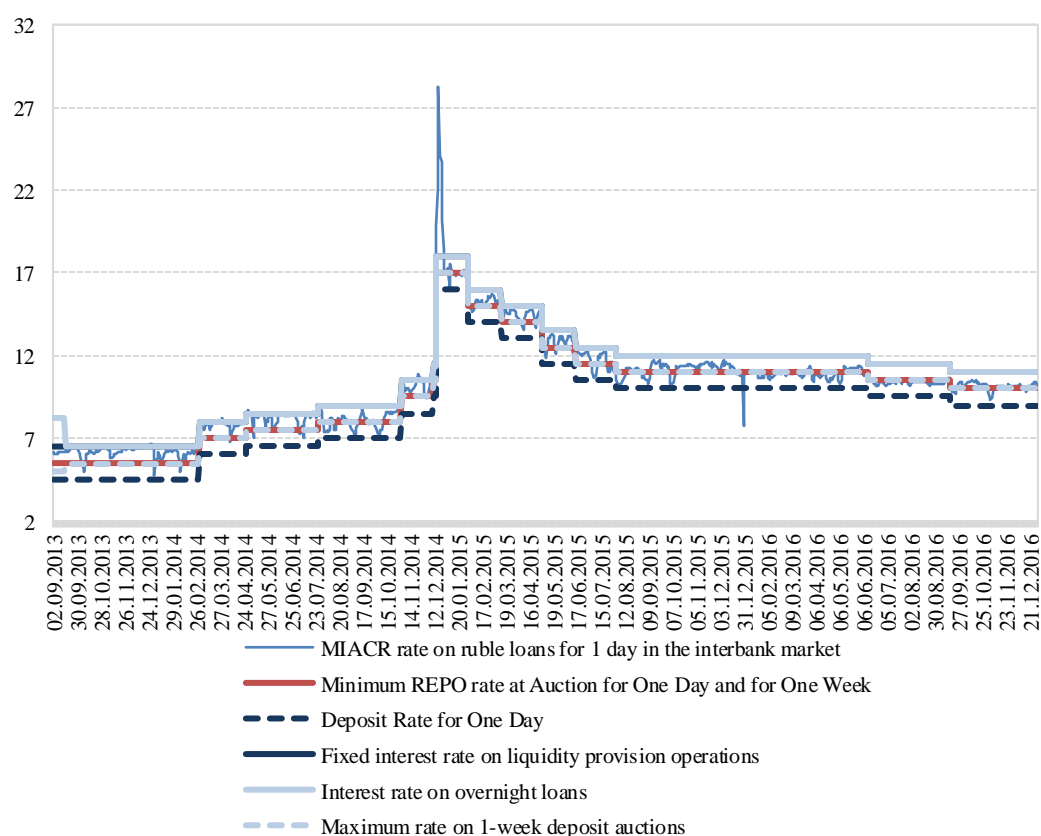


Fig. 8. Bank of Russia’s interest rate band, and dynamics of interbank lending market in 2013–2016

Sources: Bank of Russia, Gaidar Institute’s own calculations.

¹ Interbank interest rate (Moscow InterBank Actual Credit Rate) is monthly average MIACR on overnight interbank ruble-denominated loans.

In 2016, the annualized M2 was growing by an average of 11.3% (7.4% in 2014, 6.5% in 2015). In the period between January and December 2016, the monetary base saw an average increase of 11.4% year-over-year, while the money multiplier underwent no change. The money multiplier (the M2 to Monetary Base ratio) averaged 3.3 in the period between January and December 2016, (3.2 in 2014, 3.3 in 2015). The money multiplier value was equal to the average for developing economies (Ukraine, Belarus, Kazakhstan), whereas it tends to vary within a range of 5–8 in developed countries. Note that the money multiplier rose in Eastern Europe countries over the past two decades as their banking system advanced further. For example, the Poland’s money multiplier increased from 3.1 to 6.8 in the period between 1993 and 2016.

In the period between 1999 and 2015, the level of monetization of the Russian economy (the M2 to GDP ratio) tripled, to 63.8% in 2015, reaching for the first time the degree seen in Central and Eastern Europe countries that are traditionally characterized by a higher degree of monetization. For example, the ratio of M2 to GDP in Poland stood at 64.6% in 2015 (40.6% in 1999). For comparison, the ratio of M2 to GDP during the same period increased by 2.2 times, to 37.6%, by 3.1 times, to 42.1%, in Kazakhstan in 2014, by 3.0 times, to 50.2%, in Ukraine. Developed countries have even higher GDP monetization owing to a more advanced financial system: e.g., Germany reached 166% in 2015.

2.1.3. Inflation processes

In December 2016, the inflation rate stood at 5.4% over December 2015, which was much higher than the 2015 level 2015 (12.9%). In 2016, after reaching peak levels in January (+10.0%), the M12 inflation subsequently fell over the course of the year (see *Fig. 9*). As a result, the inflation rate hit a new all-time low at the year end, the previous all-time low was 6.1% (2011).

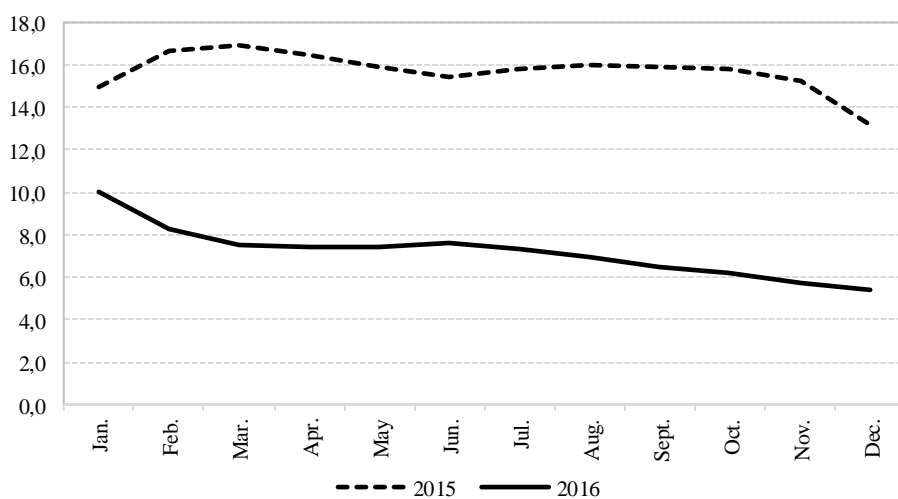


Fig. 9. CPI growth rates in 2014–2016 (12-month % change)

Sources: Rosstat, Gaidar Institute’s own calculations.

The inflation rate slowed down in 2016 subsequent to the inflation upsurge of 2015 in response to a double depreciation of the Russian ruble, which, amid a stable ruble exchange rate, was driven by a stagnation in economy and a moderately tough monetary policy of

Russia's central bank. In M12 2016, for instance, the key rate was up as little as 1 percentage points, while the inflation rate (% change, month over month) was down by 7.5 percentage points. In this context, despite the high inertia of inflation expectations (12.4% in December 2016) as well as low degree of economic agents' confidence in the inflation targets, it is very likely Russia's central bank will achieve its medium-term inflation target by 2017.

As shown in *Table 3*, in period between January and December 2016, consumer goods prices saw a slower growth rate over 2015 (4.6% in December 2016 over December 2015 vs. 14.0% in December 2015 over December 2014) (see *Fig. 10*). The growth in prices of butter (+20.5%), milk and dairy products (+9.5%), fish and seafood (+8.6%), grains and legumes (+6.4%), alcoholic beverages (+6.4%) contributed most to the growth in food prices as a whole. A stronger ruble and the bumper crop of 2016 slowed down the growth in food prices.

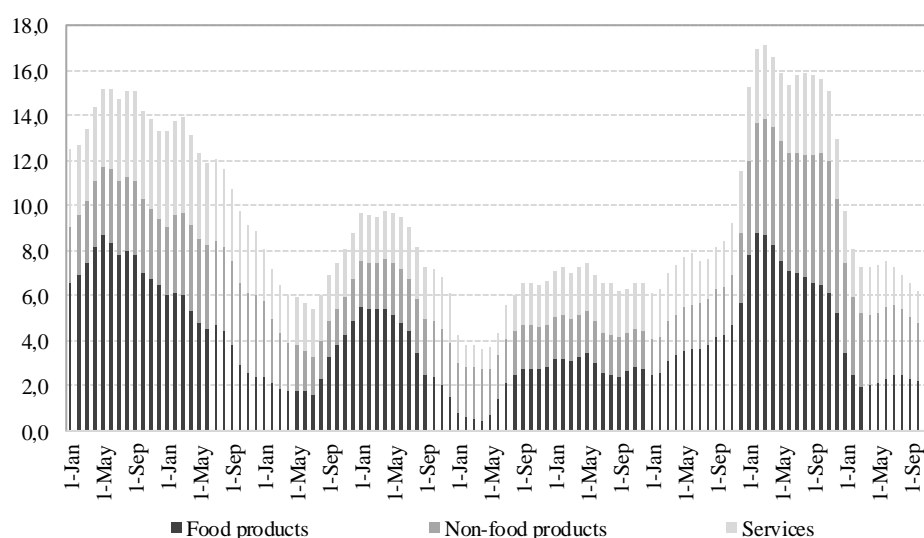


Fig. 10. Structure of inflation in 2008–2016
(% change vs. same month previous year)

Sources: Rosstat, Gaidar Institute's own calculations.

Table 3

**Annual growth rate of prices of certain consumer goods and services
in 2012–2016 (% change, December over December)**

	2014	2015	2016	2014–2016 ¹
1	2	3	4	5
CPI	11.4	12.9	5.4	32.6
Food products	15.4	14.0	4.6	37.6
Grains and legumes	34.6	15.5	6.4	65.4
Butter	14.5	10.6	20.5	52.6
Sunflower oil	5.0	37.2	3.4	49.0
Pasta-based food products	8.4	19.5	4.5	35.4
Milk and dairy products	14.4	11.5	9.5	39.7
Eggs	4.6	9.8	-0.7	14.0
Bread and bakery products	7.5	13.2	5.9	28.9
Meat and poultry	20.1	4.3	1.6	27.3
Fish, other seafood and products thereof	19.1	20.9	8.6	56.4

¹ Inflation rate in 2013–2016.

Cont'd

1	2	3	4	5
Fruits and vegetables	22.0	17.4	-6.8	33.5
Alcoholic beverages	13.7	10.7	6.4	33.9
Non-food products	8.1	13.7	6.5	30.9
Textiles	7.4	19.7	7.6	38.3
Clothing and underwear	6.2	12.8	7.3	28.5
Textile goods	6.2	13.0	7.5	29.0
Footwear	5.7	15.1	9.2	32.9
Washing and cleaning agents	9.2	22.4	6.3	42.1
Medicaments	13.1	19.6	4.9	41.9
Motor gasoline	8.6	4.8	3.8	18.1
Tobacco products	27.1	26.6	17.8	89.6
Services	10.5	10.2	4.9	27.7
Utility services	9.4	10.1	5.4	27.0
Medical services	9.2	11.1	7.8	30.8
Early childhood education services	15.6	16.8	9.3	47.6
Health and leisure services	7.6	14.4	7.3	32.1
Passenger transport services	7.3	10.7	6.6	26.6
Cultural organizations services	9.9	7.2	5.8	24.6

Source: Rosstat.

The continuing ban on food imports from EU countries, Norway, the U.S.A., Canada and Australia that the Russian government introduced in late June 2015 had no stronger effect on the dynamics of prices of the sanctioned goods, because manufacturers and retailers almost adapted to the ban, as was evident from slowing growth of prices of the relevant types of products.

Prices of nonfood products were growing at a slower pace, from 13.7% in 2015 to 6.5% in 2016. Prices of tobacco products rose faster (+17.8%) than of other products in the same group due to an excise tax lift and depreciation of the ruble. A point of note is growth in prices of footwear (+9.2%), textiles (+7.6%), textile goods (+7.5%), clothing and underwear (+7.3%), washing and cleaning agents (+6.3%). Overall, nonfood prices saw a considerably slower growth rate in response to a stable FX market and a slightly stronger ruble amid heavy reliance of the Russian nonfood market on foreign supplies.

In December 2016, the price of paid services to individuals increased 4.9% over December 2015. The growth in prices of early childhood education services (+9.3%), medical services (+7.8%), health and leisure services (+7.3%), passenger transport services (+6.6%) was highly responsible for the growth in prices of paid services as a whole.

According to OOO INFOM's public opinion polls that are published monthly by the Bank of Russia, the median one-year ahead expected inflation rate in 2016 was much higher than the actual inflation rate over the prior 12 months (by 5.7–7.4 percentage points), nearing short of just 1.6 percentage points of the actual inflation rate of 2015. This result proves the inertia nature of inflation expectations. Note that both high inflation expectations and the inertia nature thereof are headwinds to a softer monetary policy by slowing the inflation downward pace.

Finally, we will compare consumer price growth rates in Russia with other countries (see Table 4).

In 2016, Russia was ranked 3rd among CIS countries for consumer price growth rate, after Azerbaijan, Ukraine, Belarus, Kazakhstan and Tajikistan. The inflation rate in Russia in 2016 was, on average, 16 times the inflation rate in developed countries. Overall, the Russian Federation continued facing a high inflation rate compared with both developed countries and emerging market economies.

The aggregate demand recovery is one of the sources of risks of inflation in 2017 that, all else being equal, may lead to an uptrend for consumer goods prices. In particular, nominal wages were up 7.7% in Q1 and Q2 2016, and 8.1% in Q3 compared to the same periods of 2015. In the period between September and December 2015, nominal wages increased by an average of just 3.4% year-over-year. In 2017, pensions were indexed to the actual inflation rate of 2016 (5.4%), as well as financing of the expenses required to attain target wages in certain industries, as set forth by the Presidential Executive Orders issued in May 2012, continued.

Table 4

**Consumer prices dynamics in various countries
in 2013–2016, % a year**

	2014	2015	2016	2014–2016
Azerbaijan	-0.1	7.6	15.7	24.4
Armenia	4.6	-0.1	-1.1	3.3
Belarus	16.2	12.0	10.6	43.9
Kazakhstan	7.4	13.6	8.5	32.4
Kyrgyzstan	10.5	3.4	-0.5	13.7
Moldova	4.7	13.6	2.4	21.8
Russia	11.4	12.9	5.4	32.6
Tajikistan	7.4	5.0	6.1	19.6
Ukraine	24.9	43.3	12.4	101.2
Germany	0.9	0.2	0.5	1.6
France	0.5	0.0	0.2	0.7
United States	1.6	0.1	1.3	3.0
The Netherlands	1.0	0.6	0.3	1.9

Sources: Interstate Statistical Committee of the Commonwealth of Independent States (CIS STAT) (<http://www.cisstat.com/>), OECD database (<http://stats.oecd.org/>).

An extra source of the higher inflation risk in 2017 is accelerated growth rates of the M2 by increasing the monetary base as the Reserve Fund is spent to cover a budget deficit. The increase in the monetary base by spending the Reserve Fund is higher than its decline driven by thinning banks' debt to the central bank, as well as by Bank of Russia's deposit auctions. In this context, interest rates were on the slide in Q1-Q2 2016, despite that the key rate was constant until mid-June. In particular, rates on retail ruble denominated deposits with maturities of 1 year or less dropped from 8.53% p.a. in January, to 7.0% p.a. in November 2016 (in September 2016, the rate fell to 6.18% p.a., the lowest in 2016).

Furthermore, one should avoid neglecting exchange rate risks that may arise in response to a possible worsening of terms of trade. The ruble may depreciate due to uncertainty about the dynamics of crude oil prices (including the issues facing China's economy), as well as a tougher Fed's monetary policy.

The foregoing (the inertia nature of inflation expectations, budget deficit, consumer demand recovery) pose risks of the central bank failing to achieve the target inflation rate at the 2017 year end. At the same time, the inflation rate is still slowing in favor of reaching the target rate. Therefore, in our view, the central bank will continue a policy of slowly declining key rate until the bank officials are sure that the target inflation rate will be reached.

2.1.4. Balance of payments and exchange rate

Through much of 2016, the ruble's nominal exchange rate strengthened against both the US dollar and the euro. Having reached peak values of 83.59 and 91.18 rubles on the January 22nd, the exchange rate of the US dollar and the euro against the Russian ruble dropped to lows of respectively 62.05 and 67.50 rubles by the October 26th (see *Fig. 11*) after Fed's officials

deferred a federal funds rate raise, as well as the economic downturn slowed down in Russia. The ruble depreciated in early 2016 in response to a Fed’s federal funds rate hike, as well as in August in response to a higher volatility of global crude oil prices and the shrunken trade balance of Russia, to USD 4.9bn, lowest since April 2009. The strengthening of the ruble exchange rate against the US dollar since mid-November 2016 was driven a series of factors, including the results of the US presidential elections, as well as an OPEC meeting on the November 25th and 30rd, when country-members reached an agreement to cut crude oil production by 1.2 million b/d, to 32,5 million b/d. The year-end ruble’s nominal exchange rate strengthened against the US dollar and the Euro by respectively 12% and 15.6% over December 2015.

Through much of 2016, the Russian ruble strengthened against the national currency of other trade partners. Having touched the lowest since June 2003 in February 2016, the ruble real effective exchange rate saw a strong strengthening. With the dynamics of consumer prices slowing at a steady pace, the upward trend was driven first of all by a stronger ruble’s nominal exchange rate. As a result, the ruble real effective exchange rate rose by the end of the year, gaining more than 31.1% over February 2016 and 20.8% over December 2015. Although the devaluation effect of 2014 is not over yet after two years, a strengthening ruble nominal exchange rate tempers a positive effect of a softer inflationary pressure.

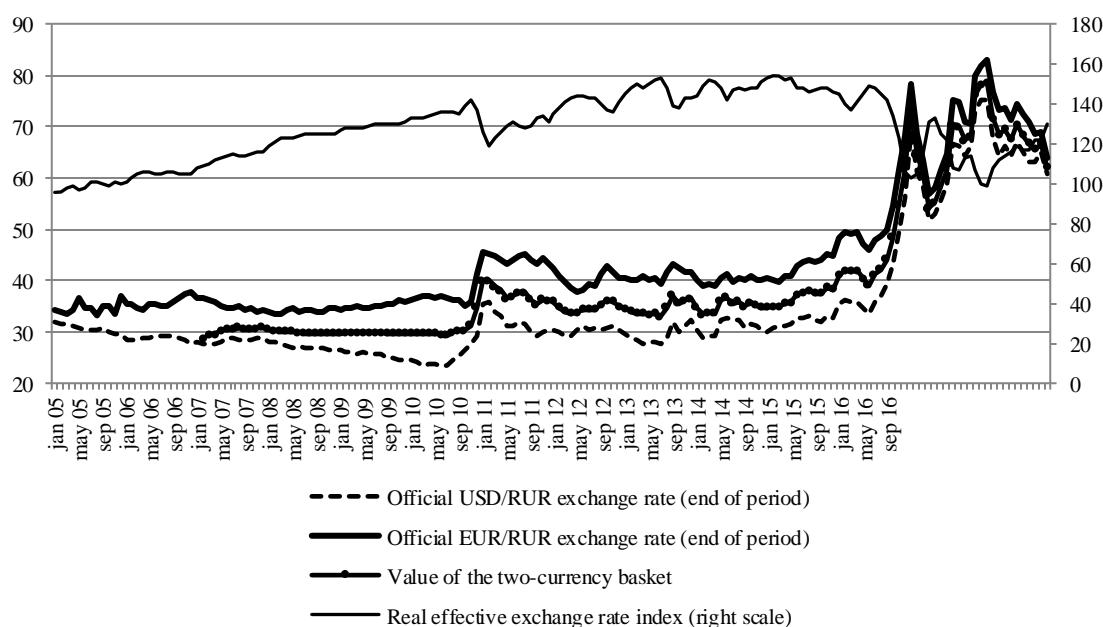


Fig. 11. Dynamics of Russian ruble exchange rate in 2003–2016

Sources: Bank of Russia, own calculations

It is critical – in terms of both the Bank of Russia exchange rate policy and the regulator’s medium-term plans – that the volatility of the ruble exchange rate against both the US dollar and the Euro continued declining in 2016. For instance, the average intramonth volatility of the

US dollar and Euro exchange rate against the Russian ruble¹ dropped in 2016 to 1.6% compared to 2.7% in 2015 and to 1.8% compared to 2.7%, respectively. Note that all the developing countries saw exchange rate volatility decrease steadily as economic agents adapted to a new exchange rate mechanism subsequent to an upsurge by shifting to a free floating exchange rate.

The overall situation in the Russian FX market in 2016 shows, first, that Russian economic agents have adapted to a new environment created after the regulator introduced a free floating exchange rate, and, second, the ruble exchange rate has become less reliant on market trends of global crude oil prices.

The BoP data for 2016 show a substantial decline in current account surplus compared with 2015. At the same time there was massive slowdown of net private capital outflows due to slower rates of repayment of loans, thus facilitating a stronger ruble at the 2016 year end.

According to the Bank of Russia's preliminary assessment of the balance of payments (BoP) for 2016, the current account balance stood positive at USD 22.2bn, a decline of USD 46.8bn (-68%) over 2015. The decline of USD 58.1bn (from USD 148.5bn in 2015 to USD 90.4bn in 2016) in a positive balance of trade was highly responsible for that.

Exports of goods dropped in terms of value basically in response to a decline in the average annual price of crude oil (in 2016, average export prices of supplies to foreign countries were USD 289.2 per ton (compared to USD 365 per ton in 2015) and the resulting decline of average annual prices of petroleum products (in 2016, average export prices of supplies to foreign countries were USD 294.5 per ton (compared to USD 393 per ton in 2015) and natural gas (in 2016, average export prices of supplies to foreign countries were USD 157.4 per thousand cubic meters (compared to USD 226 per thousand cubic meters in 2015) (see Fig. 12). As a result, exports of crude oil, petroleum products and natural gas accounted for 54% of total exports, down 4.3 percentage points compared with 2015 (see Fig. 13).

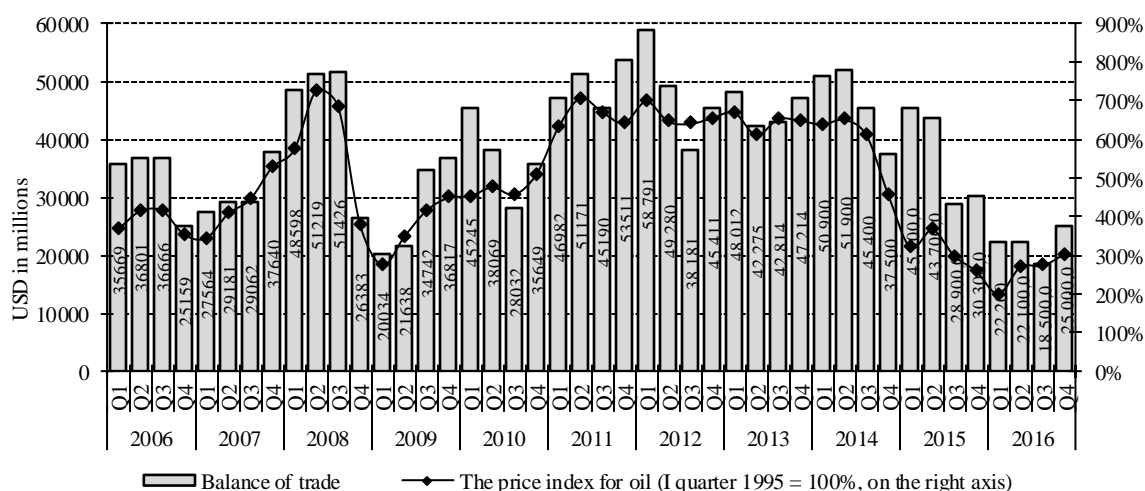


Fig. 12. Russia balance of trade and global oil price index (Q1 1995 = 100%) in 2006–2016

Sources: Bank of Russia; EIA; Gaidar Institute's own calculations.

¹ Intramonth volatility of the ruble exchange rate against foreign currencies is calculated using daily official exchange rates and is expressed as a percentage ratio of exchange rate standard divergence to its average monthly value.

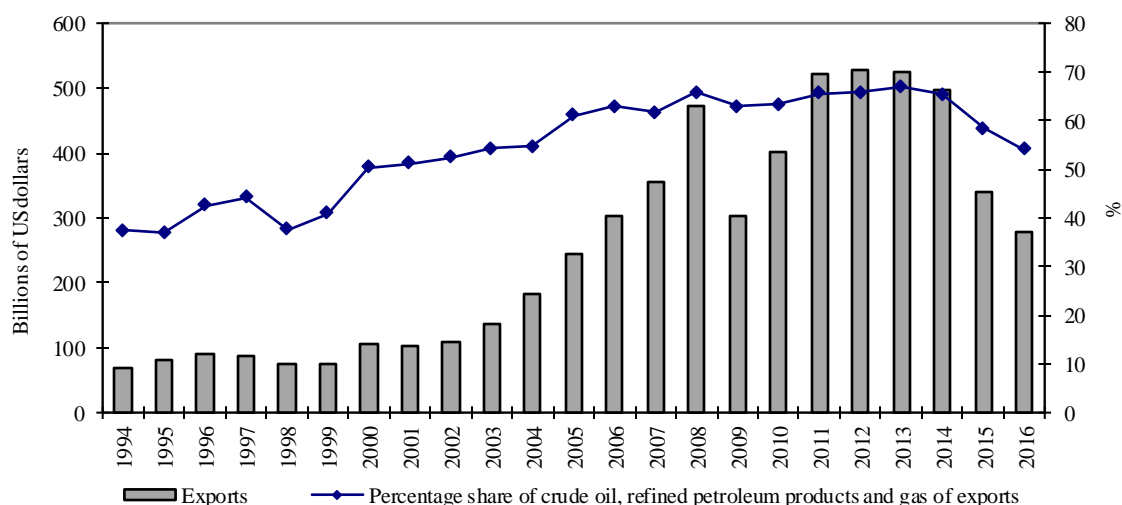


Fig. 13. Dynamics of exports of goods and of percentage share of fuel and energy sector products in 1994–2016

Source: Bank of Russia.

Russia’s fuel and energy exports in terms of value dropped USD 50.1bn (-23.2% compared with 2015) while the rest of exports fell USD 7.8bn (-6.1% compared with 2015). Non-energy exports contracted due to falling prices of wheat, metals, fertilizers, as well as because the Russian manufacturing industry failed to increase supplies in terms of physical volume.¹

Stabilization of the ruble's real exchange rate was a reason that caused stagnation of non-resource exports: according to the Bank of Russia, the index of ruble’s real effective exchange rate against foreign currencies stood at -0.4% in January-December 2016 compared to the same period of 2015. The ruble’s real exchange rate saw minor changes on average in 2016 compared to the rate reported in 2015, which kept imports almost at the same level in value terms. Imports declined by USD 1.6bn (-0.8%), although they started to recover gradually: while Q1 2016 imports (in value terms) accounted for 85% of the level recorded in Q1 2015, they were up to 108% in Q4 2016.

At the same time, imports of services saw a decline of USD 14.3bn (from USD 88.6bn in 2015 to USD 74.3bn in 2016), which was in part due to contraction of imports of transport services, but it was mostly because individuals cut back on their international travel (- USD 11.2bn).

The same level (about USD 50bn) of exports of services and the decline in imports of services together were responsible for the reduction of a negative balance of trade in services, from -USD 36.9bn in 2015 to -USD 24.3bn in 2016. The compensation of employees balance underwent minor changes (-USD 2.5bn in 2016 compared with -USD 5.1bn in 2015). The balance of compensation of employees saw minor changes (-USD 2.5bn in 2016 compared to -USD 5.1bn in 2015). The rest of the current account components remained almost unchanged: the investment income balance was at about -USD 32bn, the balance of secondary income at about -USD 32bn, and the balance of rent at about 0.

¹ For details see A. Knobel, A. Firanchuk. Specifics of Russia’s exports and imports in January-August 2016 //Economic Development of Russia. 2016. Vol. 23. No. 11. PP. 15–21.

Therefore, the balance of trade in services and the balance of trade, whose balance depends largely on the dynamics of hydrocarbons prices, are the key factors that determine a current account balance.

The current account surplus declined along with a comparable contraction of the financial account deficit, which ran at USD 12.3bn in 2016 (compared to USD 70.9bn in 2015) (see *Table 5*). Russian economic agents' liabilities to foreign economic agents shrank by USD 3.4bn at M12 (-USD 72.2bn as at 2015 year-end). Residents' foreign asset holdings (foreign economic agents' liabilities to Russian peers) increased USD 8.9bn in 2016 (2015 saw a USD 1.4bn decline in this indicator).

Table 5

**Balance of payments' principal accounts, and dynamics of external debt
in 2013–2016 (bn USD)***

Indicator	2014					2015					2016				
	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4*	Year
Balance of current accounts and of capital accounts	25.5	11.8	-3.9	-17.8	15.5	30.0	16.3	7.8	14.5	68.7	12.3	0.4	0.5	7.6	20.8
Financial account (excluding reserve assets)**	22.5	16.9	0.1	-15.9	23.5	37.5	19.4	2.6	11.3	70.9	7.0	-2.2	-0.3	7.8	12.3
Change in foreign exchange reserves ('+' denotes an increase, '-' denotes a decrease in reserves)	-27.4	-10.3	-5.7	-64.2	-107.5	-10.1	-2.2	9.7	4.3	1.7	2.6	4.4	3.1	-1.8	8.2
Net errors and omissions	-3.0	5.1	4.0	1.9	8.0	-2.6	0.9	4.5	1.1	3.9	-2.7	1.8	2.4	-1.6	-0.1
Change in Russia's external debt ('+' denotes an increase, '-' denotes a decrease of debt)	-13.0	16.9	-51.9	-81.0	-129.0	-43.7	-0.6	-19.1	-18.1	-81.5	2.2	3.3	-4.5	-0.8	0.2
Change in Russia's sovereign external debt	-8.1	3.5	-7.7	-7.8	-20.1	-8.1	2.9	-4.1	-1.8	-11.1	1.5	3.9	4.4	-2.9	6.9
Change in Russian private sector's external debt	-4.4	12.6	-43.8	-68.0	-103.5	-36.0	-2.3	-15.0	-17.5	-70.9	1.6	-0.4	-9.0	1.2	-6.5

* – preliminary estimate; ** – excluding foreign currency reserves.

Source: Bank of Russia.

Federal government agencies' external liabilities increased USD 3.2bn in 2016 as foreign asset holdings dropped USD 0.6bn. In 2016, the growth in monetary regulators' commitments, USD 0.1bn, was offset by an equal decline in foreign asset holdings.

Net capital outflows in the non-public sector amounted to USD 15.4bn in 2016, which is 3.7 times less than the amount recorded in 2015 (see *Fig. 14*). Much of the capital outflow dynamics was owed to operations in the banking sector. In particular, the amount of net capital outflows fell by 6.5 times, from USD 34.2bn to USD 5.3bn. A slowdown in the repayment of bank external debts and liabilities had the strongest effect on the dynamics of the balance of banks' operations with the rest of the world. In 2016, banks' liabilities to non-residents dropped by USD 27.4bn, while they were down USD 60.0bn in the previous year.

Banking sector’s external debts and liabilities were partially repaid through selling foreign assets. For instance, banks’ foreign asset holdings declined by USD 22.1bn in 2016 (-USD 25.8bn in 2015). Additionally, banks’ repayment of foreign currency loans on repos with the Bank of Russia (USD 9.8bn as at 2016 year-end) was responsible for the shrinkage of foreign asset holdings in the banking sector.

Net capital outflows from other sectors were 2.3 times less than in 2015, to reach USD 10.1bn in 2016. The non-bank sector saw its external liabilities increase USD 21.0bn, whereas they dropped by USD 5.8bn in 2015. At the same time, the inflow pattern of non-bank sector’s foreign debts and liabilities underwent some changes: direct investment inflows were USD 25.8bn (USD 5.9bn in 2015), portfolio investment inflows amounted to USD 0.7bn (-USD 4.7bn in 2015), loans and credits dropped by USD 7.5bn (-USD 4.8bn in 2015) while other liabilities increased USD 4.3bn (outflow of USD 2.2bn in 2015 was followed by inflow of USD 2.1bn in 2016). Such a great increase in direct investment inflows most likely stemmed from a deal on selling a 19.5% stake in Rosneft worth EUR 10.5bn. Overall, a positive increase in foreign liabilities is indicative of the fact that in 2016 the non-bank sector managed to raise much more funds than was needed to repay its external debts. This was also facilitated by the non-bank sector successfully refinancing its external debts despite limited access to the global capital market due to the continuing sanctions against Russia.

Russia’s foreign debt remained nearly unchanged in 2016, running at USD 518.7bn as of January 1, 2017. Note that in 2016 Russian private sector’s foreign debt shrank by USD 6.5bn (-USD 70.9bn in 2015) (see *Table 5*). Russia’s foreign debt increased USD 6.9bn in 2016, whereas it was down USD 11.1bn in 2015.

According to the data on January-September 2016, banks’ assets swelled USD 6.2bn through cash foreign currency transactions with nonresidents (a decline of USD 7.8bn in the same period of 2015). Banks’ foreign currency asset holdings dropped USD 8.1bn (a USD 0.6bn decline in Q1–Q3 2015) in response to cash foreign currency buy/sell transactions with individuals at money exchanges, as well as due to closing/opening of foreign currency deposits at bank foreign exchange offices. As a result, according to Bank of Russia’s estimates, foreign currency cash in hand increased USD 3.2bn, to USD 43.6bn, in the period between January and September 2016. According to the Russian BoP data, the nonfinancial sector transferred USD 5.1bn (compared to USD 11.3bn in January-September 2015) to foreign contracting parties in Q1–Q3 2016.

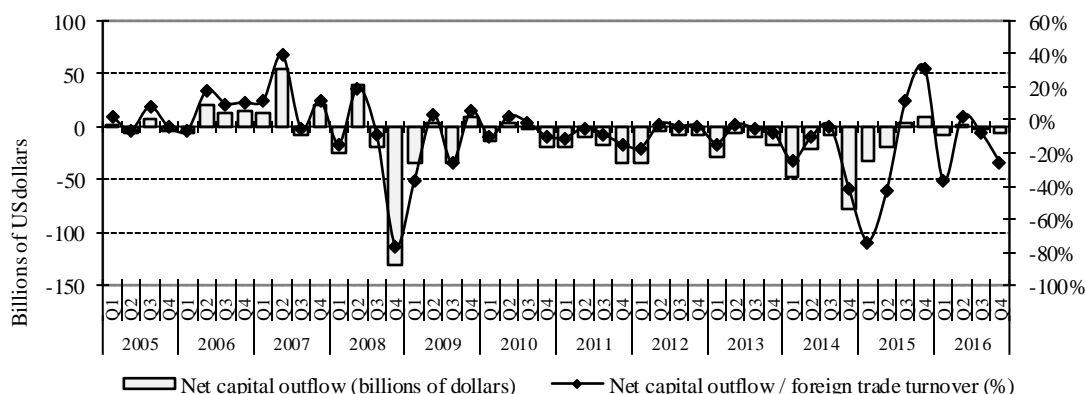


Fig. 14. Dynamics of net capital outflows in 2005–2016

Sources: Bank of Russia; Gaidar Institute’s own calculations.

At the 2016 year end, the 2015 capital flight (see Fig. 15) worth, according to our estimates, USD 3bn gave way to an inflow of USD 2.3bn¹.

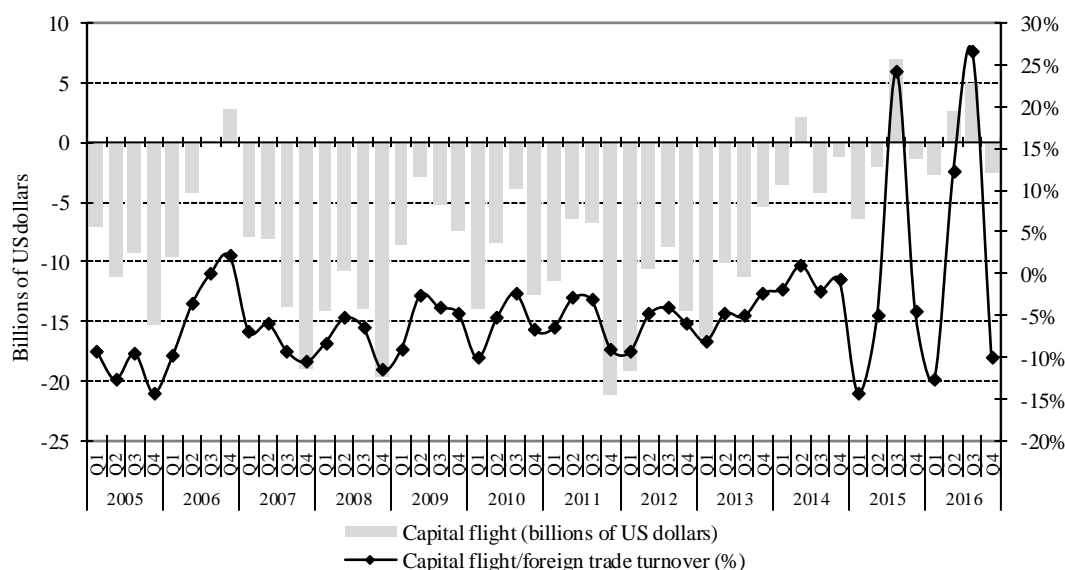


Fig. 15. Dynamics of capital flight in 2005–2016

Sources: Bank of Russia; Gaidar Institute’s own calculations.

In 2017, with global crude prices staying at what they are now (about USD 55 per barrel) and the ruble’s nominal exchange rate at 60 rubles per US dollar, one should expect the ruble’s real exchange rate to strengthen, exports to increase in value terms by 25–40%, and imports to grow by 10–15% compared to 2016. It appears that an increase in the current account balance will be offset by the Bank of Russia purchasing foreign currency for the Ministry of Finance under a provisional budget rule within a volume of federal budget revenues generated if crude oil is traded USD 40 per barrel. Although this measure will in part alleviate the effect of oil price fluctuations on the ruble’s nominal exchange rate, it may force the ruble to weaken in the short term. Risks of ruble devaluation are above all attributed to a possible worsening of terms of trade as well as potential tightening of Fed’s monetary policy, which may spur capital outflows from emerging markets.

¹ We use the IMF method to measure capital flight, that is, the sum of “trade credits and advances”, “dubious operations” and “net errors and omissions.”