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BANK OF RUSSIA FOREIGN EXCHANGE AND GOLD ASSET MANAGEMENT REPORT

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Bank of Russia foreign
exchange and gold asset
management report
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FOREWORD

This issue of the Bank of Russia Foreign Exchange and Gold Asset Management Report presents the results of asset management in 2017.

Due to global financial markets' high price sensitivity to the actions of major market participants, including the Bank of Russia, data on Bank of Russia operations on foreign exchange and gold asset management are published at least six months after the end of the reporting period.

Information on Bank of Russia assets is also published in the Bank of Russia Annual Report (management of reserve assets in foreign currency and gold) and on the website of the Bank of Russia (data on Russia's international reserves). Please note that any difference in the data provided between the reports is due to data composition and calculation methodologies only.

Terms shown in the text in italics are defined in the glossary.

Please send any feedback, including comments and suggestions regarding the contents of the report and data presentation to reservesmanagement@mail.cbr.ru.

1. PRINCIPLES OF FOREIGN EXCHANGE AND GOLD ASSET MANAGEMENT AND FINANCIAL RISK MANAGEMENT

The Bank of Russia's foreign exchange assets include government and non-government bonds of foreign issuers, deposits and nostro accounts balances, reverse repo operations, Russia's net position with the IMF, Russian sovereign Eurobonds and other claims on counterparties. These assets are denominated in US dollars, euros, pounds sterling, Canadian and Australian dollars, yuans, yen, Swiss francs and *Special Drawing Rights* (SDR) (hereinafter, foreign currencies). Foreign securities purchased by the Bank of Russia through reverse repo transactions are excluded from the total volume of foreign exchange assets.

The objective of foreign exchange asset management is to ensure the best balance between the safety, liquidity and profitability of assets.

Bank of Russia assets in precious metals are managed separately from foreign exchange assets. Bank of Russia gold assets comprise monetary gold, stored at vaults within the territory of the Russian Federation.

For the purpose of management, foreign exchange assets are grouped into single-currency portfolios. To assess the efficiency of the management of single-currency portfolios their returns are compared to *benchmark portfolio* returns.

Foreign exchange asset management takes into account the Bank of Russia's liabilities in foreign currencies (balances on foreign currency accounts of clients, mainly *government funds*). Foreign currency holdings expose the Bank of Russia to financial risks, such as credit risk, foreign exchange risk, interest rate risk and liquidity risk.

Credit risk means the risk of counterparties or issuers defaulting on their obligations to the Bank of Russia. Credit risk is constrained by various limits and requirements for the credit quality of counterparties and issuers, which must have a *minimum credit rating* of A under the Fitch Ratings and S&P Global Ratings classifications and a minimum rating of A2 under the Moody's Investors Service classification.

Foreign exchange risk means the probability of a decrease in the value of net foreign currency assets (assets net of liabilities) due to foreign currency exchange rate movements. The Bank of Russia limits the level of foreign exchange risk by specifying a benchmark currency structure of net foreign exchange assets with target weights of eligible currencies and the limits of their deviations.

Interest rate risk is the probability of a decrease in the value of foreign exchange assets due to any unfavourable changes in interest rates. The level of interest rate risk for the Bank of Russia's assets portfolios is measured by duration. The interest rate risk exposure is limited by setting the minimum and maximum *durations* allowed in each of the eligible currency portfolios. Additionally, the maturities of eligible securities, deposits and repo operations are limited.

Liquidity risk means the risk of losses due to insufficient funds to cover Bank of Russia current liabilities in foreign currencies. In order to lower this risk, the volume of liquid assets in each currency is maintained at a level exceeding the volume of liabilities in the same currency. The most liquid assets are government securities, which are the major component of foreign exchange assets. Sources of liquidity also include nostro account balances, credit lines, short-term deposits and repo operations, as well as cash inflows from coupon payments and redemptions of securities denominated in foreign currencies.

The Bank of Russia pays interest on the foreign currency accounts balances equal to the rate of return on indices composed of foreign countries' bonds. The Bank of Russia makes interest payments in rubles. Since the Bank of Russia has the right to issue currency, these obligations don't expose it to interest rate and liquidity risks.

The Bank of Russia has a multilevel collective system for investment decision-making.

The Bank of Russia Board of Directors sets the objectives of foreign exchange asset management, the list of eligible investment instruments, and the target level of foreign exchange risk.

The Bank of Russia collective body, which is in charge of investment strategy and which reports to the Board of Directors, sets the levels of interest rate and credit risks and approves the lists of eligible counterparties and issuers.

The adopted investment decisions are implemented by the authorised divisions of the Bank of Russia. External managers are not involved in foreign exchange and gold asset management.

2. MACROECONOMIC TRENDS IN 2017

Throughout the period under review foreign currency exchange rates and government securities yields in major developed economies were primarily driven by the stance of the Fed's monetary policy as well as by the political and economic events in the USA (the outcome of the US presidential elections and the tax reform) and in Europe (official start of the Brexit process and presidential elections in France). Besides, the financial markets were also affected by the quantitative easing (QE) programmes in the euro area and Japan.

USA and Canada

The return to the positive dynamics in the US labour market in late 2016 as well as dissipating expectations of negative spillovers from the China slowdown and the UK Brexit decision made it possible for the FOMC to stay on the tightening track. The Fed raised the Federal funds rate twice, in March and in June 2017, to 1.00-1.25%. Moreover, the Fed announced in September 2017 that the unwinding of its balance sheet would start in October. Strong economic data coupled with rising inflation risks on the back of the anticipated tax reform led to another rate hike in December 2017 – to 1.25-1.50%.

In 1Q-3Q17, the markets reassessed the probability of a large fiscal stimulus coming soon. Coupled with an inflation slowdown, it led to a notable correction in long-term yields and weakened the US dollar. The latter also got hit by the political events in Europe with eurosceptics losing the bid for the French presidency. With the tax reform signed into law in late December 2017 and succession process at the Fed planned for February 2018, the US dollar and long-term yields were little changed in 4Q17.

After depreciating gradually since mid-2016, the Canadian dollar reversed its course abruptly in May 2017 when the expectations of the Bank of Canada to lift the key rate started building up on the back of rising economic activity and fast disappearing labour market slack. These expectations materialised in July 2017 with the Bank of Canada raising the key rate for the first time in 7 years. Positive economic developments led to another rate hike, in September 2017, which caught markets by surprise. With this second rate hike, the Bank of Canada returned the key rate

Chart 1

Changes in exchange rates and gold to the US dollar, as % of start of period

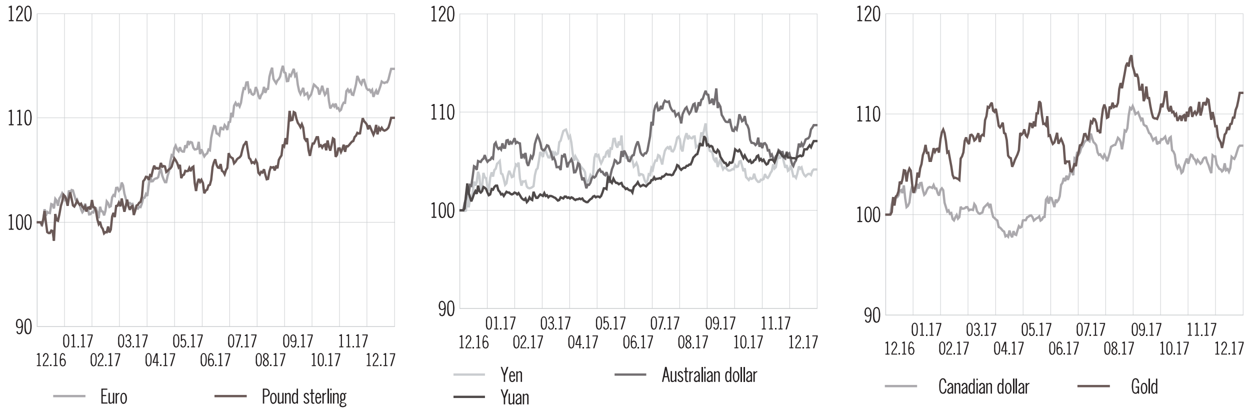


Chart 2

Yields to maturity on 10-year government bonds, % p.a.

to the level last seen at end-2015 thus sending a signal to the markets that the Canadian economy had finally undergone the process of accommodation to the lower oil prices environment. Shrugging off a substantial rise in oil prices the Canadian dollar underwent a correction in September – December 2017 with expectations of further tightening by the Bank of Canada being stabilised. The yields on long-term Canadian government bonds mostly followed the upward path of US Treasury bonds during the period under review, while rising probability of a rate hike pushed them higher in 2Q-3Q17.

Europe

Following the depreciation of the pound sterling, the UK inflation in February exceeded the target level of 2% for the first time since 2014. But the Bank of England noted in its report that current price trends didn't support monetary policy tightening.

The government officially notified the EU of the UK's intention to leave the block on 29 March 2017. In April 2017, the British parliament approved holding snap parliamentary elections on 8 June. Contrary to the initial forecasts, the elections deprived the ruling party of its parliamentary majority and led to political instability in the country, which caused a brief depreciation of the pound sterling.

Moody's cut the UK sovereign rating by one notch to Aa2 in September 2017 pointing to the uncertainty regarding the Brexit talks and the upcoming budget consolidation. This event didn't affect considerably the pound exchange rate and government bond yields since Moody's was the last of the "big three" to lower the UK rating after the Brexit referendum.

The pound sterling appreciated in the second half of 2017 due to accelerating inflation and Bank of England rate hike expectations. The rate was increased from 0.25 to 0.5% on 2 November 2017. In December 2017, two months later than originally planned, the UK reached a preliminary agreement on Brexit with the EU.

In 1H17, the eurosceptic threat in the Netherlands and France, as well as the expected tightening of the monetary stance by the ECB, became the main driver of the euro exchange rate. The election campaign in France elevated political risks and increased the 10-year sovereign spread between Germany and France. Nevertheless, the risks didn't realise and the eurosceptics failed to gain power. This marked the start for the euro appreciation against the US dollar. Strengthening euro and rising government bond yields in the eurozone were further enhanced by growing ECB tightening expectations: despite the fact that the eurozone inflation returned to 1.5% year on year after a brief acceleration in the

1Q. At the end of June 2017, the ECB head M. Draghi expressed confidence that inflation would reach its target level and was optimistic regarding further GDP dynamics.

Monetary tightening expectations put upward pressure on the euro in 3Q17 as well. It was slightly curbed by the growing political uncertainty in Germany where parliamentary elections took place on 24 September 2017. Weakened positions of the German chancellor A. Merkel party urged a major reshuffle of the governing coalition due to significant disagreements on key issues among its member parties.

At the meeting on 26 October 2017, the ECB Governing Council decided to reduce the monthly sovereign bond purchases from 60 to 30 bn euro starting the beginning of 2018. The duration of the programme with the new amount was set to be nine months with a possibility of further extension. The appreciation of the euro stopped in Q4 because ECB actions generally met the market expectations.

Australia and Asia

Since its last decision to cut the key rate by 0.25 pp. in August 2016, the Reserve Bank of Australia was keeping it stable during the whole period under review. Thus, the exchange rate of the Australian dollar and interest rates on government bonds were generally affected not by the RBA's decisions but by macroeconomic data and developments in financial and commodity markets.

Growth of exports (mainly to China) and recovery of iron ore prices provided support to the Australian currency that appreciated in 1Q17. Data on inflation in 4Q16 that was below RBA's target led to decline of interest rates on government bonds in 1Q-2Q17. However, significantly improved unemployment data and RBA's claims that most likely the next key rate decision will be hike instead of cut supported growth of interest rates in 3Q17. In 4Q17, interest rates went down due to weak inflation, which was below the RBA's target again, and due to RBA's comment that key rate decisions will be determined only by the stance of Australian economy not by the arising trend of rate hikes in other countries.

The dynamics of the Australian dollar in 3Q17-4Q17 were mostly determined by iron ore prices. The currency followed the dynamics of iron ore prices with some lag but the reaction on iron ore price developments in 2H17 was stronger than in 1Q17-2Q17, as a result the Australian dollar appreciated for the whole 2017.

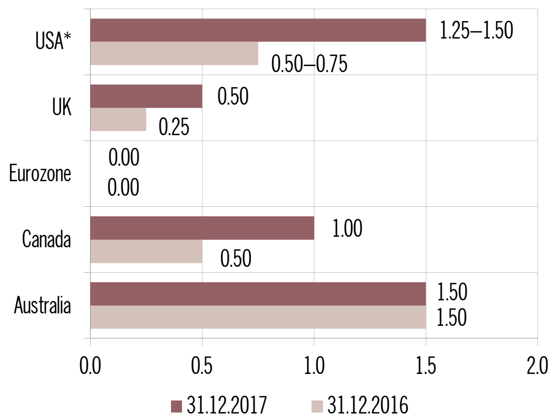
After the Bank of Japan (BoJ) announced the policy of targeting of long-term rates on government bonds in September 2016 the rates left negative zone and for the whole 2017 stayed within 0-0.1% interval, turned negative only once in September for a short while. Short-term interest rates were also relatively stable. For the whole period under review, they were fluctuating near -0.16% but several times they went up approaching the maximum point since the BoJ's announcement of negative rate on its deposits. These periods of approaching the local maximum can be attributed to the growth in expectations of the BoJ's possible tightening following the improving inflation dynamics that accelerated during period under review. More than once, the BoJ made it clear that the policy of Quantitative and Qualitative Monetary Easing whould be stopped only after the inflation reached the BoJ's target (2%).

After the fall in 4Q16 caused by US presidential elections, the yen appreciated in 1Q17-3Q17 due to the growth of monetary tightening expectations and improving exports. Increase in US rates on government bonds caused the correction of Japanese currency at the end of 3Q17 – the middle of 4Q17.

Statistics on Chinese 4Q16 GDP growth stabilised yuan in January-March 2017 after the fall at the end of 2016. Further positive releases of data on economy growth, which accelerated compared with 2016, strengthened the Chinese currency. At the end of May

Chart 3

Central banks key rates, % p.a.



* *The Fed funds target rate was 0.50–0.75% as of 31 December 2016 and 1.25–1.50% as of 31 December 2017.*

2017, the People's Bank of China (PBoC) announced a modification of its Middle Rate determination mechanism. According to the new rules, significant moves of exchanges rates in the currencies from the SAFE's (State Administration of Foreign Exchange) basket may not be fully passed through to the Middle Rate. The decision led to the appreciation of the yuan against the US dollar. The downgrade in the Chinese sovereign rating in May (by Moody's) and September (by Standard & Poors) to A1 and A+, respectively, did not affect the yuan exchange rate significantly because these decisions were anticipated.

Both the PBoC's policy of monetary tightening that started in 1Q17 from the increase of short-term rates on its liquidity provision facilities and the tightening of control over the banking sector in order to limit the credit growth supported the growth of rates on government bonds during the whole period under review.

Gold

After declining in the final months of 2016, gold prices rose during 1Q17 on the back of rising chances of eurosceptics winning the French presidential elections. Gold then came under the pressure of diminishing expectations of inflation risks stemming from the materialisation of massive fiscal stimulus promised by the new US administration. After neutral dynamics of 2Q17, gold posted substantial gains in 3Q-4Q17 on the back of US dollar weakness.

3. FOREIGN EXCHANGE AND GOLD ASSET MANAGEMENT IN 2017

In the period under review, Bank of Russia foreign exchange and gold assets increased by $48.3 billion to reach $437.8 billion (Table 1). Foreign currency exchange rate movements against the US dollar together with domestic market gold and foreign currency purchases and gold price changes had a positive impact on the value of assets (Charts 1 and 4).

In 2017, the government securities portfolio and the amount of deposits and nostro account balances with the Bank of Russia increased markedly. In the period under review, the amount of claims in foreign currency on Russian credit institutions under repo transactions decreased (Table 1).

The ultra-loose monetary policy of the ECB with the simultaneous tightening of the monetary policy by the Fed has led to an increase in the interest rate differential between assets denominated in the US dollars and euro. For this period, the Bank of Russia had it appropriate to change the currency structure of assets by reducing the share of the euro in favour of the US dollar. As of 31 December 2017, the category ‘Others’ in Chart 5 includes assets in the Canadian dollars (3.1%), yuans (2.8%), Australian dollars (1.0%), as well as assets in yen (0.0%) and Swiss francs (0.0%).

Chart 6 shows the geographical structure of assets by place of residence of counterparties or issuers of securities.

Chart 7 shows the distribution of assets by credit rating. The Chart is based on Fitch Ratings, S&P Global Ratings and Moody’s Investors Service data, with the lowest credit rating grades used.

Table 1

Foreign exchange and gold assets by asset class

Активы	As of 31 December 2016		As of 31 December 2017		Change in 2017, billions of US dollars
	billions of US dollars	share of assets	billions of US dollars	share of assets	
Government securities of foreign issuers*	202.7	52.0	224.7	51.3	22.0
Deposits and account balances with foreign counterparties	65.3	16.8	79.5	18.2	14.2
Gold	59.0	15.1	75.3	17.2	16.4
Non-government securities of foreign issuers**	32.1	8.2	37.0	8.5	5.0
International organisations’ securities	10.8	2.8	9.2	2.1	-1.6
Claims in foreign currency on Russian counterparties and issuers	16.5	4.3	8.3	1.9	-8.3
Reverse repo operations with foreign counterparties	1.2	0.3	2.2	0.5	1.0
Net position with the IMF	1.9	0.5	1.5	0.3	-0.4
Claims on foreign counterparties on foreign currency supply	0.1	0.0	0.0	0.0	-0.1
Total ***	**389.6**	**100.0**	**437.8**	**100.0**	**48.3**

* *Securities issued by a foreign government or foreign issuers with explicit government guarantee.*

** *Securities of foreign issuers that are expected to almost certainly receive government support due to the special role or importance of their organisations in the economy of the country or region (implied guarantee).*

*** *The total value may differ from the sum of asset classes values due to rounding.*

Chart 4

Changes in foreign exchange and gold assets in 2017, billions of US dollars

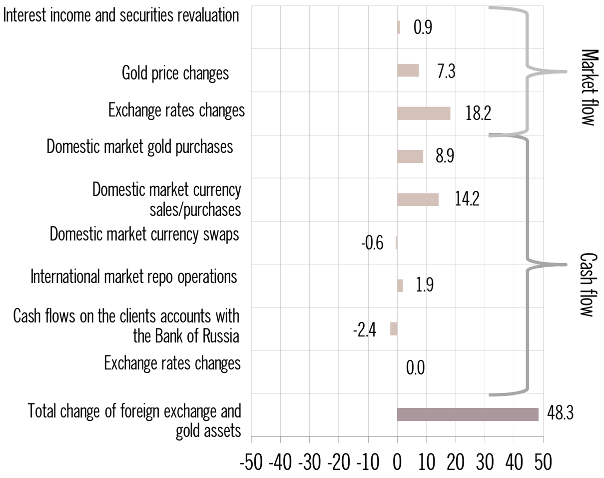


Chart 6

Geographical structure of Bank of Russia foreign exchange and gold assets, %

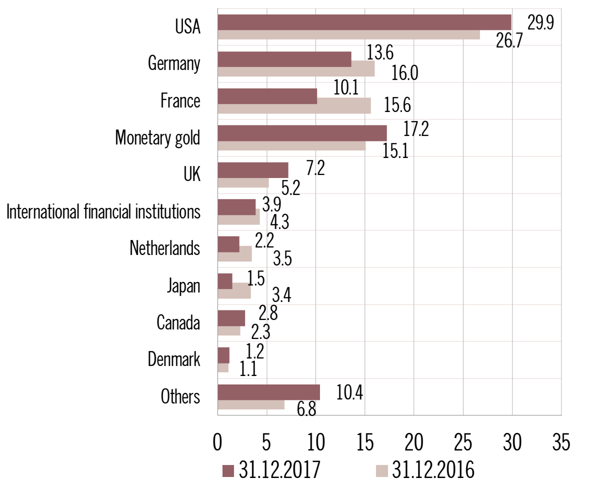
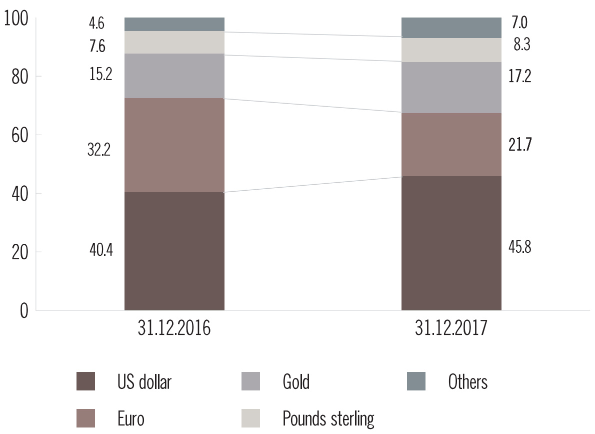


Chart 5

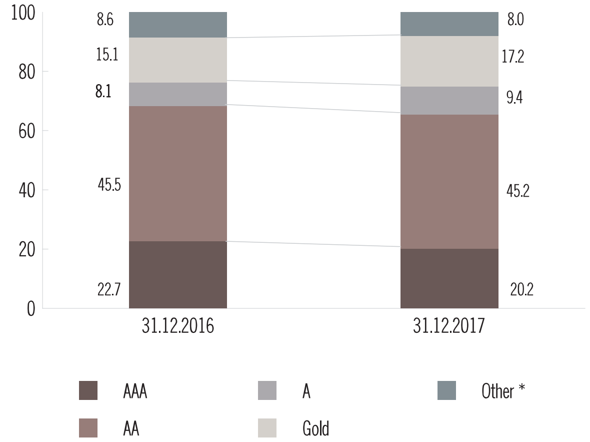
Bank of Russia foreign exchange and gold assets by currency*, % of market value



** The distribution takes into account unsettled conversion transactions as of 31 December 2016 and 31 December 2017.*

Chart 7

Bank of Russia foreign exchange and gold assets by credit rating, %



** Mainly claims on Russian counterparties and issuers and Russia's net position with the IMF.*

Table 2

Return on Bank of Russia foreign exchange assets in 2017, % p.a.

Indicator	US dollar*	euro	pound sterling	Canadian dollar	Australian dollar	yuan
Return on actual single-currency portfolios of foreign exchange assets	0.82	-0.55	-0.04	0.31	1.89	1.40
Return on benchmark single-currency portfolios of foreign exchange assets	0.71	-0.74	-0.08	0.19	1.70	0.69**

** A significant excess of the actual return over benchmark return is due to the fact that the profitability of the instruments included in the actual portfolio (Russian Eurobonds, repo transactions and loans in foreign currency with Russian credit institutions) exceeds the return on the instruments of the corresponding benchmark portfolio.*

*** A valuation is carried out taking into account the costs (associated with the settlement procedure in yuan and wide bid-ask spreads) that would arise from making regular rebalancing transactions in an actual portfolio against a corresponding benchmark portfolio. The return on yuan benchmark portfolio excluding these costs was 1.47% p.a.*

Decrease in the share of assets with 'Other' rating as of 31 December 2017 was partly due to the reduction of credit institutions refinancing in foreign currency.

Data on the return on the actual and benchmark single-currency portfolios of Bank of Russia foreign exchange assets are shown in Table 2.

GLOSSARY

Benchmark portfolio	A set of financial instruments in each reserve currency taken in appropriate percentage. Benchmark portfolios reflect the target distribution of Bank of Russia assets in each foreign currency.
Central bank key rate	A rate set by a central bank to impact interest rates in the economy. Usually, a change to the key rate is a major monetary policy tool.
	Examples of key rates used by the leading central banks include: • US Federal Reserve System (Fed) – A target for an interest rate at which depository institutions lend reserve balances to other depository institutions overnight; • European Central Bank (ECB) – A minimum rate at ECB repo auctions; • Bank of England – An interest rate on commercial bank reserves deposited with the Bank of England; • Bank of Canada – A target for an interbank loan rate; • Reserve Bank of Australia – A target for an interbank loan rate; • Bank of Japan (BoJ) – BoJ is targeting an annual amount of asset purchases (since 2013), the level of 10-year JGB yields (since 2016) and is applying a negative interest rate to the reserves of financial institutions held in BoJ accounts (since 2016).
Credit rating	A rating agency's assessment of the creditworthiness of a borrower and its ability to fulfill its financial obligations.
Currency swap	An agreement pursuant to which counterparties exchange payments in different currencies. The Bank of Russia enters into currency swap operations in order to supply Russian credit institutions with ruble funds using foreign currency funds as collateral.
Duration	A measure of the relative sensitivity of the value of a fixed-income instrument or a class of instruments to changes in the corresponding interest rates by one percentage point.
Government funds	The Reserve Fund and the National Wealth Fund of the Russian Federation including their foreign currency deposits with the Bank of Russia (in US dollars, euros and pounds sterling).
Quantitative and qualitative easing (QQE)	A monetary policy used by central banks to stimulate the economy. To carry out quantitative easing, a central bank purchases government securities or other securities from the market or provides funds collateralised by financial assets in order to increase money supply. Qualitative easing refers to the shift in the composition of assets on the central bank's balance sheet to less liquid and more risky assets, given the overall balance of the central bank does not change.
Repo (reverse repo) transactions	Securities sale (purchase) transactions with an obligation of their repurchase (resale) at future date at a stated price. These are mainly executed to borrow money and to simultaneously place corresponding amounts of money at higher interest rates.
Return on Bank of Russia foreign exchange assets	The holding period return is calculated using chain index based on a daily return. Daily return on a single-currency portfolio is calculated as the ratio of aggregate (realised and unrealised) returns on the portfolio to its market value as of the end of the previous day.
SDR (Special Drawing Rights)	An international reserve asset created by the IMF to supplement the existing official reserves of member countries. It is a potential claim on the freely usable currencies of IMF members. The SDR rate is determined based on the dollar value of a five-currency basket made up of the US dollar, euro, yen, pound sterling and yuan (from 1 October 2016).