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The Central Bank of the Russian Federation

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Comments and suggestions concerning the Review's structure and contents can be sent to *reports@cbr.ru*.

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SUMMARY

1. Global Economic and Financial Markets Risks

Against the background of largest economies growth acceleration, the reporting period saw the growing expectations of normalisation of monetary policy by major central banks – US Federal Reserve, the European Central Bank. Nevertheless, stock prices increased, volatility index of shares included in S&P 500 (VIX) fell to record low levels by the end of September 2017. Capital inflows to emerging market economies (EME) continued, but their volumes contracted at the end of October - beginning of November 2017. Many EMEs saw weakening of national currencies against the US dollar and rise in sovereign bonds' yields. But comparing to other EMEs the situation in Russian markets is more favourable. Despite widening of sanctions regime by the US, premia for sovereign CDS lowered to its minimum level from 2013, the share of non-residents in the Russian government debt market (OFZ) increased to record high of 33.2% as of 1 October 2017. Moreover, the reporting period saw growth of oil prices, due to prolongation of oil production cut agreements by OPEC countries and other largest producers.

The situation in global financial system is remaining stable. But that does not mean that care in policy implementation should not be taken and monitoring of possible risks weakened. The global financial system is still potentially exposed to systemic risks, the materialisation of which is more probable in the medium term. The continuous growth of corporate sector indebtedness (especially in EMEs) gives rise to concerns while risks gradually move from the banking sector to non-bank financial system. In such environment, changes in monetary policies by major central banks can cause unpredictable market adjustments. The measures to support financial stability may be required when current underestimation of risks under stress leads to rapid growth of market volatility, substantial capital outflow from EMEs and significant widening of credit spreads. This can be accompanied by the bursts of “bubbles” in overheated markets, resumption of oil price decline, materialisation of new risks associated with crypto currency market boom.

Previous cycles of monetary policy normalisation in developed economies (as well as taper tantrum in 2013) showed that financial market stability of a single country is mostly determined by the quality of fundamentals: fiscal deficit, current account balance, indebtedness of corporates. Situation in Russia is relatively stable: in January-October 2017, according to preliminary estimates by the Bank of Russia, positive balance of current account amounted to $28.9 billion ($14.9 billion in January-October 2016). Moreover, a transition budget rule is in place which ensures overall balance of budget and at the same time facilitates sustainability of exchange rate. Finally, transition to floating exchange rate in 2014 increased the sustainability of the economy to external shocks.

2. Systemic risks of the financial sector

Situation in banking sector

Profitability level of the banking sector is restoring. That is largely determined by the increase in net interest incomes on retail operations. Although the margin on new loans and deposits decreased somewhat, the increase in income on retail operations is maintained due to growing volumes of loans issuance.

Credit risk, which has remained the main problem for banks in recent years, is gradually lowering amid the recovery of the economy. In Q2-Q3 2017 overdue debt was going down for loans to non-financial organisations (by 0.6 p.p. to 6.6% as of 1 October 2017) as well as for loans to households (by 0.6 p.p. to

7.5%)[1]. Among all the types of economic activities, construction and real estate operations are still those with the largest number of credit risk events. Better quality of household loans portfolio is mostly determined by the lowering of credit risks of unsecured lending based on the substitution of low quality loans issued in 2011-2013 with new issuances to borrowers with favourable credit history.

The level of liquidity risk of the banking sector is overall acceptable which is proved by the high values of liquidity ratios. Situation with FX liquidity in September was less favourable due to some outflow of FX deposits from large banks. At the same time the banking sector has enough FX liquidity to cover expected payments of FX liabilities.

In August-September 2017, two large banks – "Bank Otkritiye" and "Binbank" – faced the deterioration in financial position and liquidity shortage, which were determined by the aggressive and risky nature of their business models. Since their potential failure would entail significant stress for financial system and economy as a whole, taking into account high interconnectedness with other financial organisations, the Bank of Russia decided to implement recovery measures through Banking Sector Consolidation Fund Managing Company ltd. Problems of these two credit institutions didn't have any substantial impact on the banking sector.

Insurance companies

Overall situation in this sector is stable. Nevertheless, there are some areas of special concern for the Bank of Russia. Active growth of life insurance including sales of investment products may be accompanied by the misunderstanding of risks of these investment products and requires further improvements of approaches to consumer rights protection. Negative events in the segment of compulsory motor third party liability insurance (OSAGO) persist in particular due to evolvement of fraudulent practices. The long-standing leader of the market "Rosgosstrakh" faced financial distress and was included in recovery perimeter of "Bank Otkritiye".

Non-government pension funds (NPFs)

The situation in this sector is also stable and doesn't involve systemic risks. However, during the period of 2013-end of Q2 2017 the profitability of pension funds managing companies is lower than that of investments in sovereign bonds of the Russian Federation, although it involves higher risks. Such results of pension funds management are partly determined by the investments in mortgage participation certificates (MPC), closed mutual funds and assets of connected parties. At the same time during Q2-Q3 2017 the structure of NPF investments has been adjusted: against the background of changes in regulatory requirements, NPFs increased the investments in OFZ and reduced the investments in assets of credit institutions.

3. Macroprudential policy of the Bank of Russia

The assessment of current phase of the credit cycle in the Russian economy

The countercyclical capital buffer rate for the means of capital adequacy calculation is kept at zero level by the Bank of Russia. Credit gap (the main reference indicator recommended by the Basel Committee on Banking Supervision), despite gradual recovery, is still negative which indicates that credit activity is below long-term trend. The recovery of credit is heterogeneous across market segments: mortgage portfolio is growing at high rates whereas the growth of unsecured consumer loans became positive only in June 2017. Corporate lending is growing moderately only for ruble portfolio, FX portfolio is contracting.

At the same time, as the experience of other countries suggests, the decision to implement countercyclical capital buffer rate above zero could be justified even against negative credit gap. The main factors that may signal the necessity for buffer implementation are the weakening of credit underwriting stan-

[1] *The data for credit institutions operating by 1 October 2017 (excluding banks with revoked licenses).*

dards, emergence of systemic risks in certain markets. The said imbalances are currently not observed in the Russian financial sector, but the situation requires constant monitoring for timely identification of overheating signals.

Unsecured consumer lending market and measures implemented by the Bank of Russia

Against the background of lowering inflation and deposit rates, the effective interest rate of all types of consumer loans is going down. An additional driver for the reduction in new loans with high effective interest rates is the adjustments of risk weights for consumer loans made by the Bank of Russia in spring 2017. At the same time, since the approach to macroprudential regulation that is based on effective interest rate is dependent on the level of interest rates in the economy, its further use potential could be limited. The mitigation of risks amid relatively low interest rates environment could be achieved by limiting the indebtedness of households (the debt burden indicator is the ratio of payment to income, PTI). The Bank of Russia has developed the concept of calculating this indicator; a new regulation will be issued based on this concept. The next step will be the development of approaches to introduction of PTI into macroprudential regulation of banks and microfinance organisations.

Mortgage lending demonstrates high annual growth rates – 14.1% (as of 1 October 2017). The quality of mortgage portfolio remains high although some weakening of underwriting standards is observed, namely the growth of issuance of mortgages with LTV higher than 80%. Such loans accounted for only 6.8% of all issued debt in Q4 2016, in Q1 2017 – 14.2%, Q2 2017 – 20.6%, Q3 2017 – 29.4%. Mortgage loans with low down payment on average feature higher credit risks. The share of such loans is still marginal but in order to avoid future accumulation of risks and ensure the stability of mortgage sector development, the Bank of Russia decided to increase risk weights for mortgage loans with down payments of less than 20% (to 150%) and less than 10% (to 300%).

Measures to reduce the dollarization of credit institutions' assets and FX liabilities of non-financial organisations

In May 2016 the Bank of Russia increased the risk weights for capital adequacy calculation for FX nominated transactions with legal entities (loans, investments in securities). Increased risk weights are applied to loans to borrowers without sufficient FX revenues because such assets face higher number of default events and also because high correlation between defaults on loans is observed. The reduction of FX lending to companies from non-tradable sector, primarily real estate companies, is a positive trend. Risk weights act as one of the instruments of reducing dollarization of banks and non-financial organisations and, if currency risk aggravates, might be increased again. At the same time the toolkit should not be limited to measures aimed at restriction of domestic FX lending. It should also include tools that impact the overall FX debt burden of non-financial organisations. The Bank of Russia in cooperation with other authorities is developing such a tool.

4. Results of the monitoring of development institutions risks

The rates of recovery and growth of the Russian economy are determined, inter alia, by the effectiveness of development institutions which include Vnesheconombank, Agency for Housing Mortgage Lending (AHML) and the Federal Corporation for Development of Small and Medium Enterprises. There is a possibility for accumulation of excessive risks on the balance sheets of development institutions during the implementation of certain strategic goals and underestimation of potential losses against growth. Considering this and also the need for balanced and predictable growth of development institutions, the Bank of Russia supports the rationale for introducing risk curbing indicators with due regard to the special features of development institutions and preserving the stimulating nature of their operations.

RISK MAP

Figure 1

Russia financial market risk map

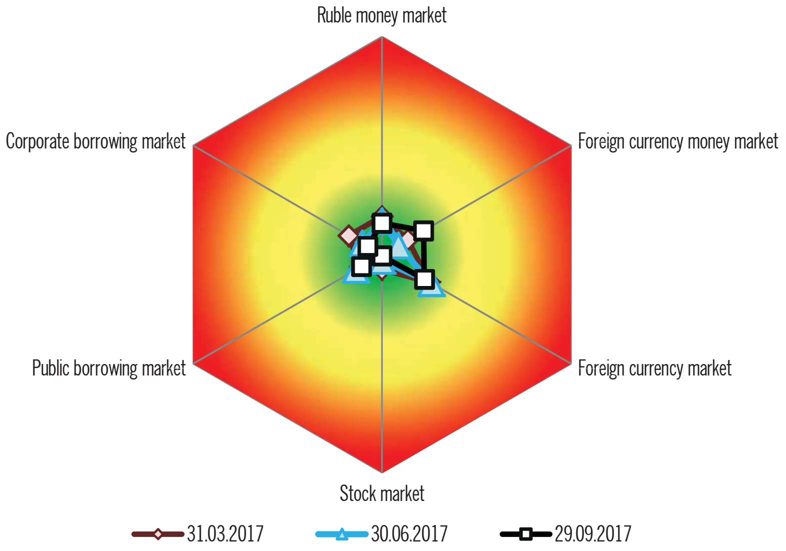
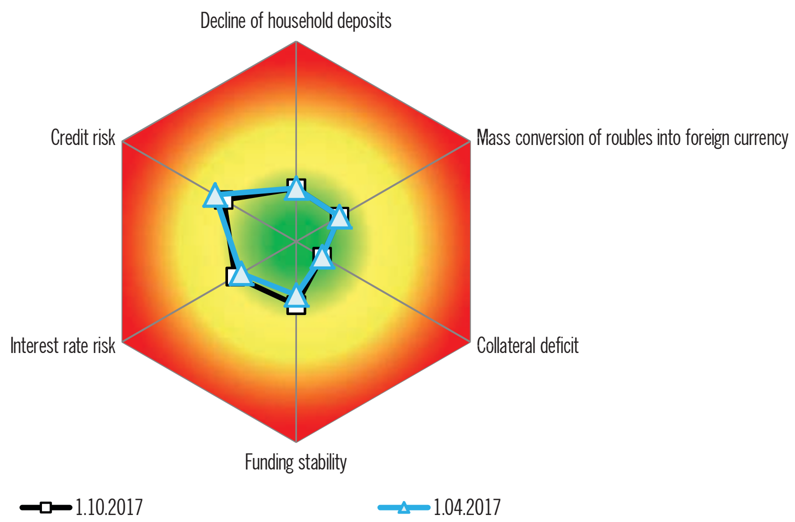


Figure 2

Russia banking sector risk map



1. GLOBAL ECONOMIC AND FINANCIAL MARKET RISKS

During the reporting period the improvement of macroeconomic conditions in leading countries contributed to the growth of the value of shares and retention of capital inflow in EMEs. In this light the IMF increased the predicted growth rate of the global economy in 2017 and 2018 (Table 1). However, in October–November 2017 the situation in EME financial markets has somewhat deteriorated. In particular, a decline in capital inflow in EMEs has been observed along with the growth of volatility of the exchange rates of national currencies against the US dollar. Expectations of normalisation of monetary policy by the leading central banks increased, which increases the exposure of EMEs first of all to potential risks of sell-offs in the markets. The US Federal Reserve announced a gradual reduction of the balance, and the ECB decided to start rolling back the quantitative easing programme.

In Q2–Q3 the volatility indicators of the global financial markets decreased to record low levels (Figure 3). In particular, the implied volatility of the cost of options on shares included in the S&P 500 index fell to its lowest value since 1993. Furthermore, the prices of shares grew significantly. In January–September 2017 the FTSE World index increased by 15%, which is comparable to the growth indicators of the index for the same period in 2013 (Fig-

Table 1

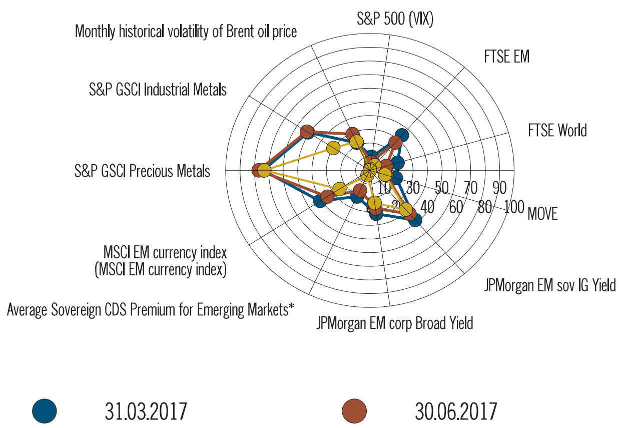
GDP growth rates, IMF forecast for October 2017

	GDP growth rates, %				Deviation from April 2017 forecast, p.p.	
	2015	2016	Forecast for October 2017	Forecast for October 2018	2017	2018
World	3.2	3.2	3.6	3.7	0.1	0.1
Developed countries	2.1	1.7	2.2	2.0	0.2	0.0
USA	2.6	1.5	2.2	2.3	-0.1	-0.2
United Kingdom	2.2	1.8	1.7	1.5	-0.3	0.0
Eurozone	2.0	1.8	2.1	1.9	0.4	0.3
Japan	1.2	1.0	1.5	0.7	0.3	0.1
Emerging markets and developing countries	4.1	4.3	4.6	4.9	0.1	0.1
China	6.9	6.7	6.8	6.5	0.2	0.3
India	7.6	7.1	6.7	7.4	-0.5	-0.3
Russia	-3.7	-0.2	1.8	1.6	0.4	0.2
Brazil	-3.8	-3.6	0.7	1.5	0.5	-0.2
South Africa	1.3	0.3	0.7	1.1	-0.1	-0.5
Mexico	2.6	2.3	2.1	1.9	0.4	-0.1

Source: IMF.

Figure 3

Change in key performance indicators of the global financial market (units)



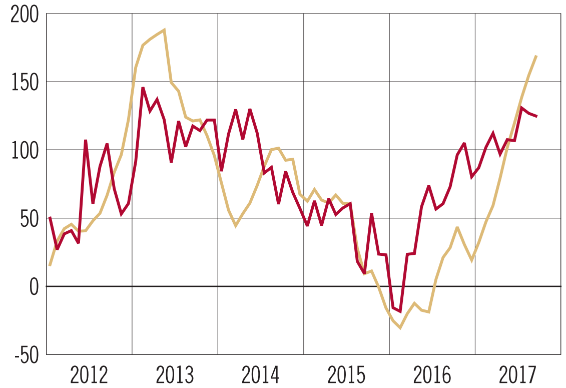
** The sample includes: China, Brazil, South Africa, Indonesia, Philippines, Malaysia, Mexico, Peru, Chile, Turkey, Hungary, Poland.*

Note: scale from 0 to 100 reflects the minimum and maximum value of indicators from 1.01.2012 to 6.10.2017. From centre to periphery - lowering of stock indices, VIX growth, Brent price volatility growth lowering of metal and gold prices, weakening of currencies of EMEs, growth of sovereign and corporate bonds yields, growth of sovereign CDS premia.

Source: Bloomberg.

Figure 4

FTSE World and capital flows in EMEs



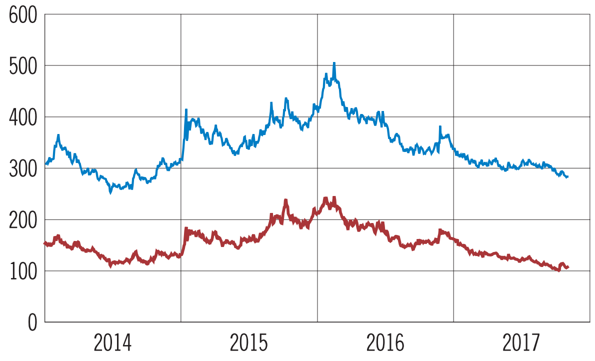
Accumulated net inflow/outflow of capital to/from EME stock and bond funds, USD billion

Change in FTSE World over 9 months, % (right-hand scale)

Source: Bloomberg, EPFR.

Figure 5

Sovereign CDS of EMEs and the spread of yield on EMEs' sovereign bonds to US treasury bonds (b.p.)



Sovereign CDS for 10 EMEs, b.p.

Spread of yield on EMEs' sovereign bonds to yield on US Treasuries, J.P. Morgan EMBI, b.p.

Source: Bloomberg.

Table 2

Change in foreign currency exchange rates and yield on the government bonds of individual EMEs

		Russia	Mexico	Brazil	Turkey	South Africa	China	India
Change in foreign currency exchange rate to USD as of 15 November 2017 ('-' decline of exchange rate), %	1 month	-4.9	-1.1	-4.4	-6.0	-7.4	-0.5	-0.8
	3 months	-1.4	-8.3	-4.9	-9.4	-8.4	1.0	-1.6
Change in the yield on 10-year government bonds in the national currency as of 15 November 2017, b.p.	1 month	19	2	64	102	77	26	28
	3 months	-8	45	40	145	87	34	48

Source: Bloomberg.

ure 4). With the preservation of the rate differential, capital inflows in EMEs continued as well, though in late October–early November 2017 their volume decreased. Many EMEs have been characterised by the weakening of national currencies against the US dollar and by the growth of yield on government bonds in recent months (Table 2). However, in Russia these indicators demonstrate a more favourable trend. In early November 2017, credit spreads—the consolidated index of sovereign CDSs of EMEs and the spread of the yield on EME government bonds against the yield on US treasury bonds—also increased slightly in EMEs (Figure 5). In October 2017 these figures were at their lowest levels since mid-2014.

Furthermore, during the reporting year growth of oil prices was observed (the average price of Brent oil went up from $52.2 per barrel in March 2017 to $55.5 per barrel in September 2017, or by 5.7%). In October and early November oil prices continued to increase (as of 15 November 2017 the price for Brent oil was $61.9 per barrel). Oil prices have been supported by the observance of arrangements on an oil production cut by OPEC countries and other major producers and the extension of the agreement by nine months, until March 2018. The growth of oil prices has been also affected by short-term factors (the effects of hurricanes in the US and the aggravation of conflicts in the Middle East).

In these conditions the interest of investors in Russia's financial assets has also grown, despite the extension of sanctions by the US (H.R. 3364 – Countering America's Adversaries Through Sanctions Act), which has produced a short-term impact on the Russian financial markets. The premium on Russia's sovereign CDSs decreased to the lowest values since 2013 (to 126 b.p. as of 30 October 2017). The share of non-residents' investments in Russian government stock reached a historical high (33.2% as of 1 October 2017) and is comparable with that of other countries. The implied volatility of 'at-the-money' options on the USD/RUB exchange rate for 1 month in January–September 2017 averaged 12.5% (in 2016 it averaged 18.5%).

The value of shares (MICEX index) during the reporting period went up by 4.1%.

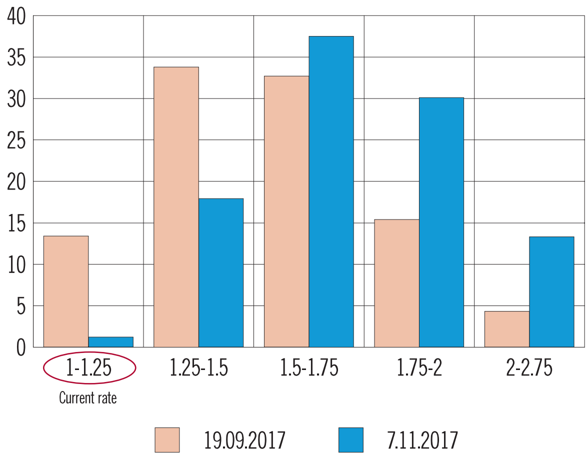
Nevertheless, we must point out global risks that may lead to the deterioration of market conditions and negatively affect the economic growth rates of EMEs.

Increased capital outflow of EMEs amid the toughening of monetary policy

Significant adjustments in the markets may be possible as the monetary policy is stabilised by the leading central banks. The US FRS declared the start of balance reduction following the meeting held in September 2017. Furthermore, in recent months expectations of an increase in the US Federal funds key rate in December 2017 have intensified — the market estimate of its probability has grown from 34% in early September 2017 to 92% as of 15 November 2017. Growth of expectations of a more substantial increase in the Federal funds rate in 2018 has also observed with the further improvement of macroeconomic parameters in the US (Figure 6). At its meeting in October 2017 the ECB announced its plans to roll back the assets repurchase programme (QE). The monthly volume of bonds repurchase will be reduced from 60 billion euro to 30 billion euro starting in January 2018. Based on the results of the meeting held in November 2017, the Bank of England has announced an increase in its key rate for the first time in 10 years (by 0.25 p.p. to 0.5%) amid increased inflation risks.

Figure 6

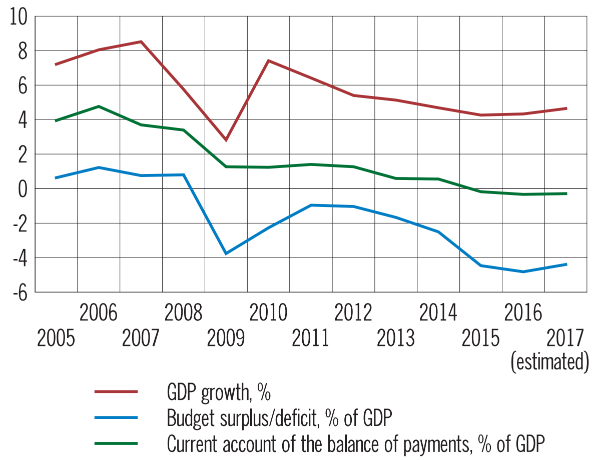
Assessment of the probability of change in the FRS rate by December 2018



Source: Bloomberg.

Figure 7

Certain macroeconomic indicators of developing countries and emerging markets



Source: IMF.

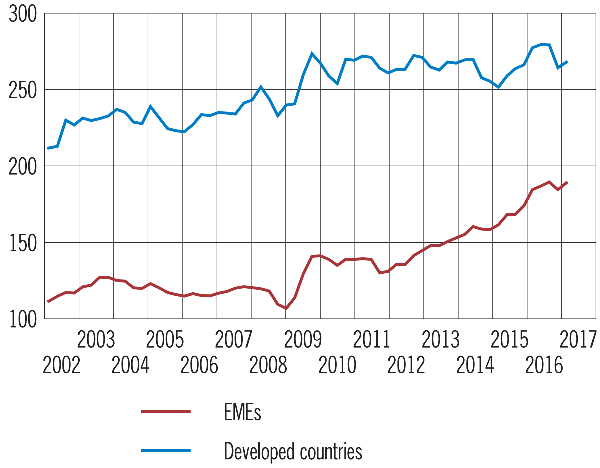
Due to the toughening of the environment on the global financial markets, capital inflows into EMEs may turn out to be the most unstable, considering the continued accumulation of disbalances. Compared with 2013, EMEs demonstrate lower GDP growth rates, a negative current account balance, and less stable budget indicators (Figure 7). The bond markets may turn out to be the most sensitive to changes in interest rates. The sales of assets may lead to an increase in country risk premiums. In Russia, compared to other EMEs, a more favourable situation is observed. In January–October 2017, according to preliminary estimates of the Bank of Russia, the positive current account balance amounted to $28.9 billion (1.9 times greater than in the same period of 2016). Furthermore, a transition budget rule is in effect in Russia which will make it possible to ensure that the budget is balanced overall and will contribute to greater stability of the foreign currency exchange rate.

Continued growth of the debt burden

The problem of a high debt burden and its continued growth, primarily in EMEs, creates potential risks for global financial stability. As reported by the Bank for International Settlements (BIS), over the last five years the debt of the non-finance sector, including non-finance companies and households, on

Figure 8

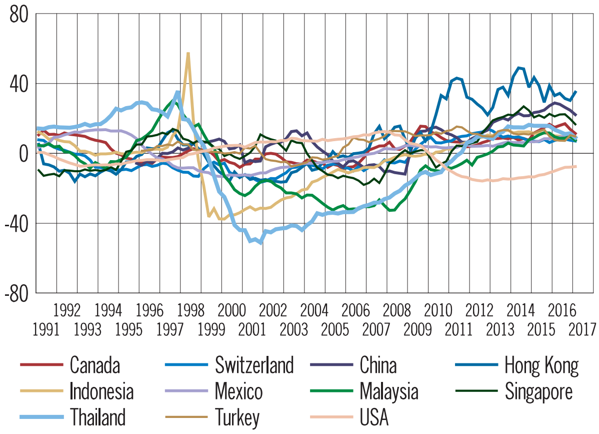
Indebtedness of the non-finance sector (companies and households) from all sectors (% of GDP)



Source: BIS.

Figure 9

Credit-to-GDP gap* in some countries (p.p.)



** Deviation of loans to the private non-finance sector (against GDP) from the long-term trend.*
Source: BIS.

loans from all financial institutions and on bonds issued in EMEs grew by 50 p.p. to 189% of GDP (as of 31 March 2017), while in developed countries the indicator remained at the level of 266.5% of GDP on average (Figure 8). Furthermore, some markets, including China and some countries of Europe and Asia, are already approaching the closing stage of the credit cycle, which is evidenced by the trend of the credit-to-GDP gap, the indicator that characterises the deviation of loans to the private non-finance sector (compared to the GDP) from the long-term trend (Figure 9). The U-turn of the credit cycle may become a source of a risk for financial stability amid the growth of rates and the worsening of lending conditions. A boom in the real estate markets, which has been mostly observed in the big cities of China, Canada, India, Australia, Germany, and other countries, may become a significant source of financial instability.

Furthermore, the deterioration of loan quality continues in some countries of Europe and in China. Regulators are taking active steps to limit risks associated with the growth of non-performing loans (NPLs):

In March 2017 the ECB published a guideline for banks on limiting NPLs, and the European Banking Authority (EBA) suggested the establishment of a single asset management company for the transfer of NPLs. In October 2017 the ECB also proposed the creation of provisions for all poor-quality loans (full prudential provisioning) starting in 2018[1]. In November 2017 the European Commission published a consultation report with a proposal to establish the amount of NPL provisions (percentage of the tier I common equity), depending on the length of time the loan has been considered to be of poor quality and depending on the level of credit security (availability and size of the collateral/guarantee for a specific poor-quality loan). It should be noted that the Bank of Italy has already asked the ECB to soften the new requirements for NPLs, taking into account that about 30% of bad debts on the balances of Italian banks can be attributed to other countries of the Eurozone (while the total amount of NPLs comes to the considerable sum of 915 billion euro). The need to raise additional funds may substantially decrease the profitability figures of the largest banks of Italy.

China is implementing measures which would allow banks to cut NPLs by way of write-off, restructuring, securitisation, or transfer to separate entities. The problem with NPLs in the country is aggravated by the continued growth of the shadow banking sector. As reported by the BIS, as of 31 March 2017 the total debt of the non-finance sector of China, including companies and households, amounted to 257.8% of the GDP.

[1] *For unsecured loans — for two years after the loan is placed in the category of poor-quality loans and for secured loans — for seven years.*

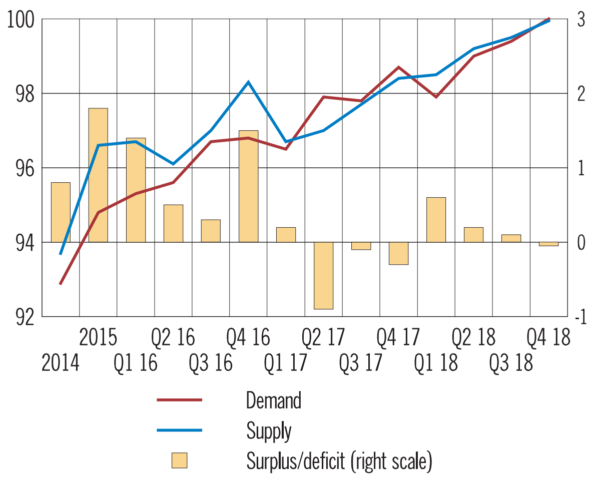
High Uncertainty in the Oil Market

The probability of repeated periods of oil price downturns remains high due to continued uncertainty as to the recovery of the balance of supply and demand in the global oil market. In November 2017 the International Energy Agency (IEA) decreased the oil demand growth forecast in 2017–2018 by 100,000 barrels per day, to 1.5 and 1.3 million barrels per day, respectively. As estimated by the IEA, in 2018 Q1 the oversupply of oil will amount to 600,000 barrels per day, and in 2018 Q2, to 200,000 barrels per day (Figure 10). These estimates are based on the assumption that the oil production volume in OPEC countries will not change and that normal weather conditions will be preserved.

Bloomberg data shows that analysts' forecasts on the price of oil for the next year did not improve in October–November 2017, despite its continued growth (Table 3). The median value remained almost unchanged, but the maximum estimates have decreased noticeably (by $8–15 per barrel). A drastic drop in oil prices may be expected in the case of the concurrent materialisation of supply shock and demand shock. Supply may be increased by a more rapid growth in production of energy resources by US producers and by a number of other countries (Libya and Nigeria). The decline of global demand is possible in the case of renewed risks of a slowdown of economic growth in key countries.

Figure 10

Demand and Supply Forecast in the Global Oil Market (mbpd)



Source: IEA.

Table 3

Predicted oil price

Predicted price for Brent oil as of 15 November 2017 (US dollars per barrel)						
		Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018
Spot	61.9					
Median		56.0	55.0	54.0	56.5	58.0
Max.		65.0	63.0	65.0	65.0	67.0
Min.		48.0	48.0	46.0	43.0	41.0
Forward		60.5	61.4	60.9	60.3	59.5
Change against the forecast as of 2 October 2017 (US dollars per barrel)						
		Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018
Spot	6.0					
Median		2.0	0.1	-0.4	-0.5	0.0
Max.		-5.0	-12.0	-15.0	-11.0	-8.0
Min.		0.0	1.5	1.0	0.0	0.3
Forward		4.6	5.9	5.8	5.4	4.9

The fall of oil prices will have a negative impact first and foremost on countries that export oil (on the income of economic agents, on the state of government finance, and on the possibilities of external debt servicing).

Cryptocurrency Market Risks

Intense activity in the cryptocurrency market, including the bitcoin market, may become one of the sources of risk in the future. The use of cryptocurrencies is becoming more widespread. In particular, the number of transactions with bitcoins is gradually increasing, and the bitcoin exchange rate is growing rapidly (especially during the past year), while volatility remains extremely high. The volume of the market capitalisation of bitcoin has grown more than tenfold over the past two years (at the moment, the capitalisation volume amounts to about $90 billion). The exchange rate of bitcoin against the US dollar as of 15 November 2017 was $7,151 (as of 15 November 2016, $711).

The use of cryptocurrencies entails high risks. The formation of a 'bubble' in the cryptocurrency market may lead to significant losses for consumers. There are also risks of the use of cryptocurrencies in money laundering and the financing of terrorism. The objective of national and supranational regulators is to mitigate these risks by developing coordinated approaches towards the regulation of the cryptocurrency market and limiting possibilities for high-risk investments and operations. The regulators of a number of countries (Japan, Australia, Switzerland) already regulate the cryptocurrency market. Some regulators have started to introduce restrictive measures, wary that cryptocurrencies could undermine financial markets and be used in illegal financing (China, Hong Kong).

The difficulties in regulating the cryptocurrency market mostly arise because this instrument has no definitive status. In accordance with Order of the President of the Russian Federation No. Pr-2132, dated 2 October 2017, the Ministry of Finance of Russia and the Bank of Russia are currently working on amendments to Russian laws which would define the status of digital technologies applicable in the financial sphere, proceeding from the mandatory use of the Russian ruble as the only lawful payment instrument in the Russian Federation.

Aggravation of Geopolitical Tension

Further aggravation of geopolitical tension in the world may also become a destabilising factor, albeit an unlikely one (inter alia, in the case of the aggravation of the situation in the Middle East, the expansion of the conflict with North Korea, the aggravation of political disagreements in Europe, the implementation of a protectionist policy, or the escalation of sanction wars). The growth of geopolitical risks may result in the limitation of international capital flows and turnover in global commerce, the growth of volatility in the global financial markets and the re-allocation of funds of global investors in favour of ‘safe’ assets, and an increase in the sovereign risk premium, especially in emerging markets.

A balanced monetary, fiscal, and macroprudential policy should contribute to the improved resilience of economies and financial systems to possible risks of the growth of volatility in the markets and capital outflow. Measures may include increasing budget stability and reducing debt burden in the corporate sector, including the foreign currency component of the debt. Russia’s position in comparison with other EMEs looks quite stable in this regard. In January–October 2017, based on the preliminary estimate of the Bank of Russia, the surplus of the current account balance grew 1.9-fold against the same period of the previous year and reached $28.9 billion. The increase in the trade balance surplus, which took shape due to a favourable environment for Russia’s main exports, along with a certain slowdown of the pace of recovery of imports, was instrumental in this. In Russia external debt is not accumulating in the private sector (in January–September 2017 the external debt of banks decreased by $12 billion, to $107 billion, while external debt of other sectors increased by $12.9 billion, to $356 billion), and the debt burden in the public sector remains at one of the lowest levels (12.5% of GDP as of 1 July 2017). Furthermore, Russia has adopted a transitional budget rule which will contribute to the overall balance of the budget and economic stability. Finally, a significant amount of international reserves ($426.4 billion as of 10 November 2017) also makes it possible to maintain a relatively high level of resilience to possible disbalances in the global financial markets.

2. SYSTEMIC RISKS OF THE FINANCIAL SECTOR

2.1. The Situation in the Banking Sector

Trends in Loan Portfolio Quality

The period of materialisation of credit risk in the banking sector has passed. At the moment, the share of 'bad'[1] corporate loans has stabilised (at the level of 11.7%) due to the insignificant growth of the cumulative loan portfolio, while in the household lending segment this share is decreasing. In 2017 Q2–Q3 the share of overdue debt also decreased under loans to non-financial organisations (by 0.6 p.p. to 6.6% as of 1 October 2017) and under household loans (by 0.6 p.p. to 7.5%)[2].

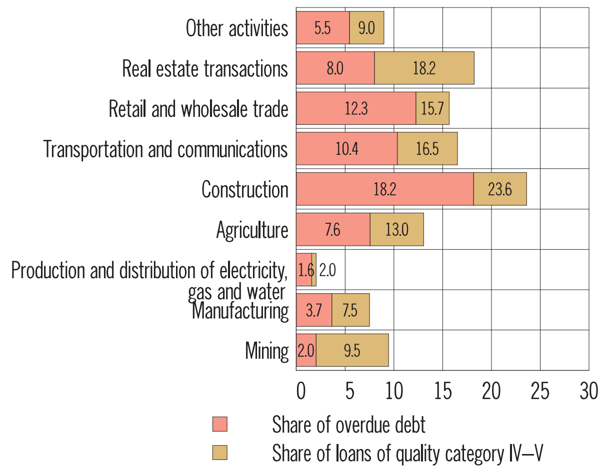
When broken down by sectors, the share of 'bad' loans has decreased for all kinds of economic activity, except real estate operations (which went up 2.9 p.p. to 18.2% from 1 April to 1 September 2017). Construction and related segments are characterised by the highest level of materialised credit risks, both for ruble and foreign currency loans (Figure 11). The foreign currency loan portfolio overall shows a decline in the share of 'bad' loans as well, except for loans issued to construction companies and companies that perform operations with real estate.

The credit quality of the household loan portfolio is gradually improving. The decline in the share of overdue debt was caused both by the improvement of credit quality under the portfolio of unsecured consumer loans and by the growth of the cumulative loan portfolio. The decline of overdue debt under the housing loan portfolio (including housing mortgage loans) was insignificant. The share of 'bad'[3] loans as well as the share of overdue debt mostly decreased in the segment of unsecured consumer lending (by 1.7 p.p. to 14.9% as of 1 October 2017). In the mortgage lending segment the quality of the loan portfolio remains at a high level, and the share of 'bad' loans does not exceed 2.4% as of 1 October 2017.

Figure 11

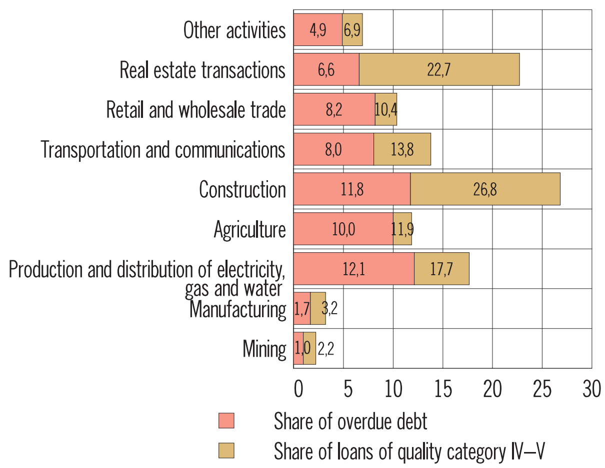
Share of loans of quality category IV–V of credit institutions operating as of 1 September 2017 (%)

Loans in roubles



Source: reporting form 0409303.

Loans in foreign currency



Source: reporting form 0409303.

The Banking Sector Is Recovering Its Profitability

In Q1 and Q2 2017 the profit of the banking sector exceeded its maximum quarterly financial result of 2016 (Figure 12) and reached 339 billion ru-

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[1] *The share of loans of quality categories IV and V.*

[2] *Data is given for credit institutions operating as of 1 October 2017 (excluding banks whose licence has been revoked).*

[3] *Loans overdue for over 90 days.*

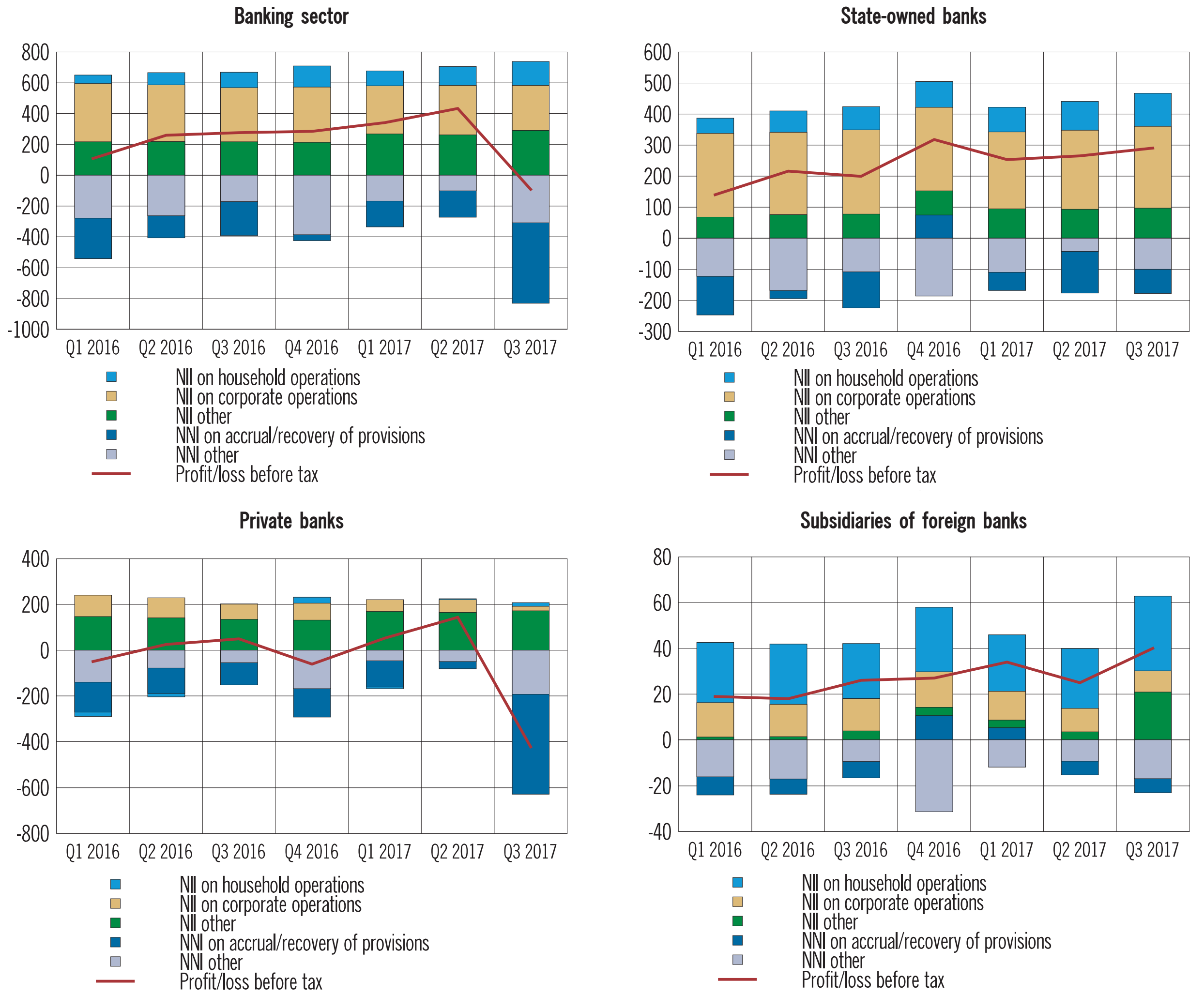
bles and 432 billion rubles, respectively. However, in 2017 Q3 the banking sector recorded a loss in the amount of 96 billion rubles (excluding the data of banks undergoing resolution — a profit in the amount of 389 billion rubles). The profit of the banking sector is expected to come close to 1 trillion rubles as of year-end 2017.

The main factors in the growth of the banking sector's profit in 2017 were the increase of net interest income on operations with individuals (because of the recovery of consumer lending growth rates and the reduction of interest expenses on funds raised from the population) and the growth of other net interest income. The main factor in the increase of banking sector expenses in 2017 Q3 was the growth of non-interest expenditure on accrual of provisions by private banks (including banks whose resolution was started in 2017 Q3).

The structure of the income and expenditure of credit institutions differs depending on the type of ownership. Partially state-owned banks obtain the greatest share of their net income from operations with legal entities; subsidiary banks of foreign banks, from operations with individuals; and private banks, from other operations (such as investments in debt instruments and other invested assets). In 2017 Q2–Q3 partially state-owned banks and private banks increased their expenditures on the provisioning for possible losses compared to 2016 Q2–Q3, which negatively affected their financial result. In contrast, subsidiary banks of foreign banks decreased the amount of such expenditures.

Figure 12

Structure of net income of the banking sector and the breakdown of bank groups by type of ownership (RUB billion)



** Banks under resolution are included in the graphs of the corresponding property type.*
Note: NII - net interest income, NNI - net non-interest income.
Source: Bank of Russia.

The Trend toward a Decline in Interest Margin

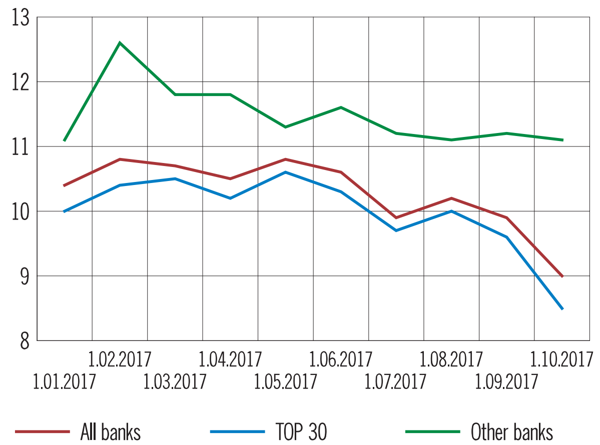
In spite of the sustainable growth of bank income from operations with individuals, a certain decline in the margin under new household loans and deposits is observed. The difference between the rates on household funds placed and raised during the course of a month between 1 April 2017 and 1 October 2017 decreased by 1.52 p.p., and this trend has been typical both for banks from the Top 30 and for other banks.

Since the beginning of 2015 the share of short-term household deposits in the banking sector has increased from 35% to 56%. In 2017 Q2–Q3 this indicator continued to grow. This trend is a result of the policy of banks for optimising interest rate risk during a temporary (mid-term) period of high interest rates. In the event of stress this trend may lead to the materialisation of liquidity risk in the form of a drastic outflow of deposits and may also affect the interest margin negatively. Additional interest rate risks of the banks are associated with the widespread 'optionality' of deposits: the past crisis already showed the risks of replenishable deposits, but they are not becoming less widespread, nor are deposits with the possibility of early withdrawal. In the same way, refinancing mechanisms are being developed in lending, which makes the interest rates on operations of banks with individuals unilaterally fixed.

The margin on new corporate loans and deposits in the group of the 30 largest banks decreased by 0.15 p.p. over 2017 Q2–Q3. In other banks the margin on corporate operations grew by 0.72 p.p.

Figure 13

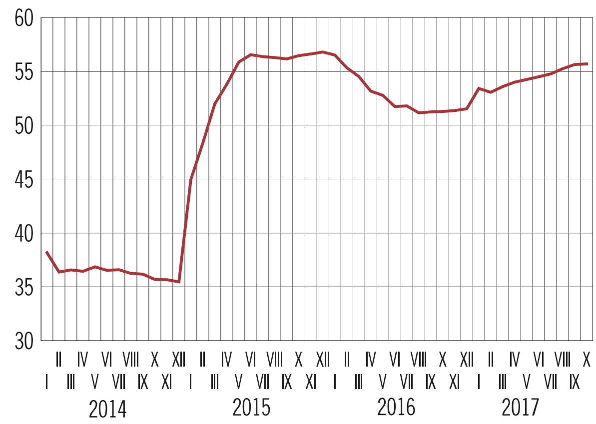
Trend of the difference between the rates on new household loans and deposits (p.p.)



Source: Bank of Russia.

Figure 14

Ratio of household deposits <1 year to total household deposits (%)



Source: Bank of Russia.

Liquidity Risks Remain Moderate amid Structural Liquidity Surplus

Credit institutions comply with the N2 and N3 liquidity ratios: as of 1 October 2017 the average actual value of the N2 instant liquidity ratio in systemically important banks (SIBs) was 151%, and it was 122% for other banks (with a minimum admissible value of 15%); the average value of SIBs' N3 current liquidity ratio was 230%, and it was 157% for other banks (with a minimum admissible value of 50%). From 1 April 2017 to 1 October 2017 the actual values of the N2 and N3 liquidity ratios decreased in the group of other banks, while growth had been positive in both groups of banks during the previous six months. Thus, during the period under review the banks still had a significant liquidity reserve to comply with the ratios.

In addition, SIBs comply with the liquidity coverage ratio N26 (N27), the minimum required numerical value of which in 2017 is 80%[4]. As of 1 October 2017 the actual value of the LCR of systemically important banks is between 83% and 160%.

To maintain the LCR at the required level, systemically important banks replenish their high-quality liquid assets by means of purchasing OFZs, and some banks also include the irrevocable credit lines (ICL) provided by the Bank of Russia in the LCR calculation.

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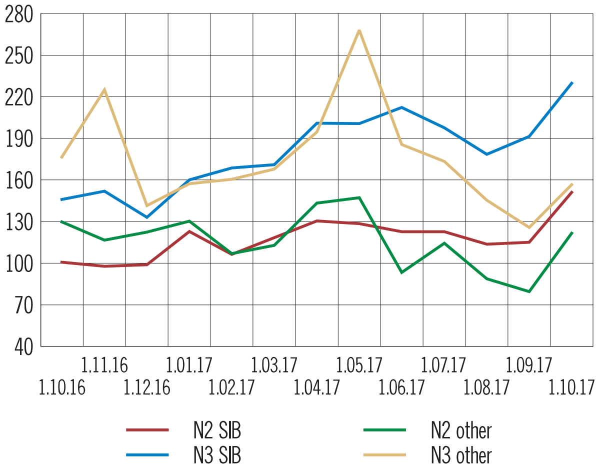
[4] *Starting in 2018 the minimum required level will increase to 90%, and starting in 2019 it will increase to 100%.*

Figure 15

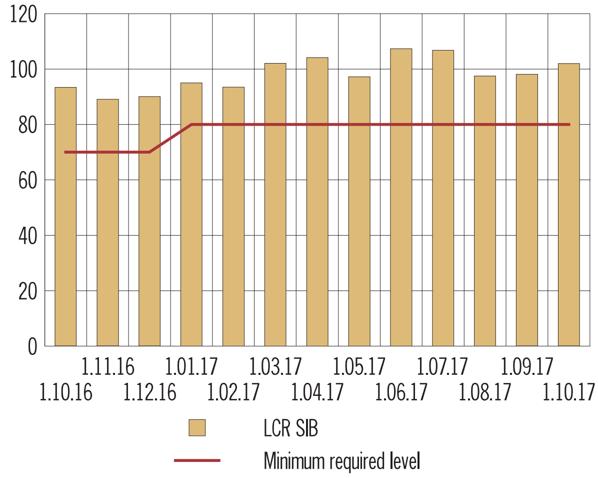
Trend of N2 and N3 ratios in SIBs and other banks (%)



Source: Bank of Russia.

Figure 16

Average LCR value for 10 SIBs (%)



Source: Bank of Russia.

Between 1 April 2016 and 1 October 2017 three banks included the ICL limit in the calculation of the N26 (N27) ratio. The amount ICLs included in the calculation of the ratio has grown from 104 billion rubles to 118 billion rubles during the period under consideration. The aggregate value of the maximum possible limits of ICLs for the banks which have entered into such agreements is 687.8 billion rubles. ICLs reached their highest point in the period under consideration as of 1 July 2017, when banks included ICLs in the calculation of N26 in the amount of 514 billion rubles.

In accordance with BCBS recommendations the Bank of Russia sets a fixed fee for using ICLs to limit excessive inclusion by banks of irrevocable credit lines in the calculation of the ratio to the detriment of the replenishment of high-quality liquid assets.

Upon the introduction of the ICL mechanism the fee was set at 0.15% of the maximum possible limit of irrevocable credit lines. The Bank of Russia is keeping the fee at the same level, as at the moment no distortion in the structure of banks' balance sheets in favour of inclusion of ICLs in the calculation of the ratio is observed.

Nearly 140 banks which are not obliged to comply with the LCR calculate the liquidity coverage ratio on an individual basis[5] and disclose its level to the Bank of Russia for analytical purposes. Between 1 April 2016 and 1 October 2017 the average actual value of the indicator, as reported by banks, grew from 52.8% to 65.3%.

Risks Associated with a Possible Foreign Currency Liquidity Deficit Remain Low

The situation with foreign currency liquidity remains stable in most SIBs. However, a small increase in foreign currency borrowings on the swap market was observed from time to time during the reporting period. In the event of increased demand for foreign currency liquidity, the Bank of Russia uses the foreign currency swap to provide foreign currency to limit the foreign currency liquidity deficit and the increased volatility of interest rates.

The situation with foreign currency liquidity in September was affected by the local peak of external debt repayment: major non-finance companies repaid $4.8 billion[6], and banks repaid $1.2 billion. The next peak of repayment falls on December ($13.2 billion for companies and $2.5 billion for banks)[7]. The foreign currency liquidity situation may also have been determined by purchases of foreign assets by Russian companies.

A gradual decline of the amount of deposits in foreign currency is a long-term factor that affects

[5] *Unlike N26 (N27), the numerator of the Liquidity Coverage Ratio does not include the additional claims (assets) set forth in Bank of Russia Regulation No.510P, dated 3 December 2015, 'On Calculation of Liquidity Coverage Ratios (Basel III) by Systemically Important Credit Institutions.' Furthermore, when there is a banking group, the ratio shall be calculated on a consolidated basis.*

[6] *Calculated based on the data of the schedule for the repayment of external debt by Russian non-finance institutions. Intragroup payments of 30 Russian companies from among the largest borrowers in the external market have been excluded.*

[7] *Evaluation of actual payments on principal debt.*

Table 4

Foreign currency liquidity deficit/surplus of 23 major banks (difference between foreign currency claims and liabilities, USD billion)

	October 2017	November 2017	December 2017	Q1 2018	Q2 2018	Q3 2018
For banks with a liquidity deficit	-0.6	-0.4	-0.6	-1.6	-0.7	-3.5
For banks with a liquidity surplus	0.3	1.5	0.9	1.4	0.9	1.1
Balance	-0.4	1.1	0.4	-0.2	0.3	-2.4

Table 5

Expected change in foreign currency liabilities of banks from 1 October 2017 to 1 July 2018

Liability items	Banks' forecasts	
	USD billion	%
Liabilities to non-resident non-bank organisations	6.2	30
Liabilities to resident non-finance organisations	7.3	35
Interbank liabilities to residents	0.6	3
Interbank liabilities to non-residents	3.1	15
Liabilities to individuals	3.5	17
Total	**20.7**	**100**

Box 1. The mechanism for provision of emergency liquidity assistance

Starting from 1 September 2017 the Bank of Russia provides credit institutions with an additional opportunity to obtain liquidity through the emergency liquidity assistance mechanism (ELAM). In case of emergency, a bank that meets the applicable criteria may request additional liquidity from the Bank of Russia. A similar mechanism is used actively in the operations of the leading foreign central banks. For example, the Bank of England uses ELAM to provide liquidity to individual banks subject to compliance with three conditions: the bank must be important for the preservation of systemic financial stability; must be solvent (financially stable); and must have an effective functioning business model and a clear way out of the liquidity shortage[1]. The ECB provides emergency liquidity assistance at the level of the national central banks and has been using this mechanism actively for Greek banks in recent years[2].

In accordance with international practice the Bank of Russia makes a decision on the emergency provision of liquidity to a bank subject to its financial condition and its ability to repay the money raised under ELAM. A fund-raising request of the bank shall include the predicted schedule of cash inflow and outflow during the expected period of liquidity raising. Compliance with the said conditions is intended to ensure the confidence of market participants in the process of restoring liquidity in the bank and to mitigate the probability of a stigma effect, where a bank's request for emergency assistance from the regulator may be seen as a sign of a threat to the interests of its creditors and depositors.

Under this mechanism liquidity may be requested by systemically important banks and by banks of classification groups 1 and 2 in accordance with Bank of Russia Ordinance No. 4336U. The bank must have no overdue debt to the Bank of Russia and no debt on required reserves, must have no signs of involvement in dubious operations, and must comply with all required ratios, except for the quick liquidity ratio.

Within the framework of ELAM, liquidity is provided in the national currency, in an amount of up to triple the equity amount for up to 90 calendar days, at a rate that exceeds the key rate by 1.75 p.p. The relatively high cost of this instrument makes a request for ELAM expedient only after full utilisation of cheaper sources of fund raising, including Bank of Russia's standard instruments.

Depending on the security offered by the bank, liquidity is provided via repurchase transactions, loan agreements, or pledge agreements. The scope of the security under repurchase transactions in ELAM is much wider than under

[1] *Review of the Bank of England's provision of emergency liquidity assistance in 2008–2009 // Report by Ian Plenderleith, October 2012.*

[2] *ECB approves rise in emergency loans to Greek banks? // Financial Times, June 2015.*

standard instruments used to obtain liquidity from the Bank of Russia. The scope of security also includes the shares of residents, and the list of bonds of residents and non-residents has been extended significantly. As security under loans, credit claims included in the admissible assets in accordance with Bank of Russia Regulation No. 312P may be used, so may other kinds of valuables, including third-parties' sureties, except for the sureties of credit institutions.

the situation with foreign currency liquidity in the banking sector. During 2017 Q2–Q3 the amount of deposits in foreign currency decreased both with respect to household deposits ($-1.1 billion) and corporate deposits ($-30 billion).

For the purpose of evaluating the expected repayment of foreign currency liabilities by the banks, the Bank of Russia surveyed 23 major banks. Banks provided information about the trends of foreign currency claims and liabilities in accordance with contractual terms and about the most probable trends according to their own forecasts (with due regard to the adjustment of planned terms for the expected early repayment and/or prolongation of loans and the withdrawal and/or extension of deposits). According to the results of the survey major banks have enough foreign currency liquidity to cover expected repayments of foreign currency liabilities. The aggregate foreign currency liquidity deficit of banks with a deficit is expected not to exceed $1.65 billion in 2017 Q4. During previous years such a deficit did not result in actual problems with liquidity. The reserve of liquid foreign currency funds of banks as of 1 October 2017 amounted to $39.7 billion (vs. $35.7 billion a year ago).

Liabilities to resident non-financial organisations accounted for the greatest volume of repayment of liabilities by major banks ($7.3 billion, or 35% of the total volume of repaid liabilities). Compared to the period of 1 October 2016 to 1 July 2017, the amount of expected repayment of liabilities by large banks to non-residents has decreased (from $14 billion to $9.3 billion).

2.2. Resolution of Large Credit Institutions

In August–September 2017 the Bank of Russia decided to implement measures for restoring the financial stability of two large credit institutions. As Bank Otkritiye is ranked 8th, and Binbank is ranked 12th by the amount of assets, their potential bankruptcy would cause extremely negative consequences for the whole financial system and the economy of the country; thus, a new resolution mechanism was employed for the first time for these credit institutions. It involved the participation of the Bank of Russia as the main investor using the cash funds of the Banking Sector Consolidation Fund (the 'Consolidation Fund').

Causes of Financial Instability

Over the last three years the business model of both banks was characterised by active acceptance of risks; the banks engaged in merger and takeover deals at the cost of borrowed funds and excessive lending to the business of the owners, without paying enough attention to risk management. Both banks were also special administrators of large troubled credit institutions.

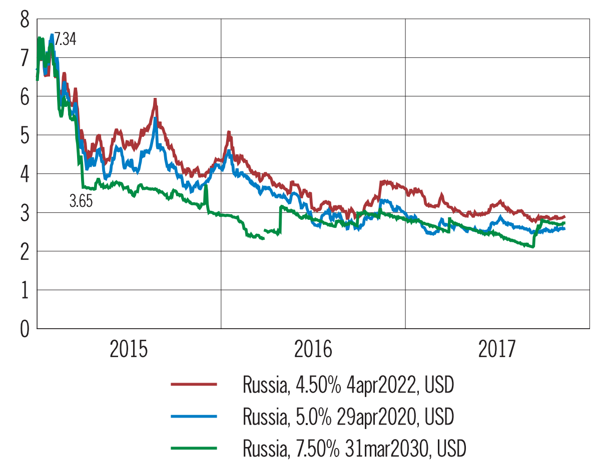
In late 2014 Bank Otkritiye won the tender for participation in the bankruptcy prevention measures of National Bank Trust OJSC, for whose resolution the Bank of Russia extended a loan of 127 billion rubles. Subsequently, the estimated negative value of the assets of the National Bank Trust grew materially, which complicated its resolution for Bank Otkritiye and negatively affected its financial position.

The deal to purchase Rosgosstrakh Insurance Company was approved by the Federal Antimonopoly Service only on 18 August 2017, but in fact, before this deal was settled, Bank Otkritiye started supporting the insurance company, which was suffering considerable financial troubles. As of year-end 2016 the net loss of Rosgosstrakh Insurance Company, the largest company in the OSAGO (third-party liability insurance) market, under IFRS had grown sevenfold to 33.3 billion rubles.

In 2014–2017 the companies of Otkritiye Group acquired 3/4 of the issue of Russia-30 Eurobonds. The acquisition of securities by the bank did not in itself worsen the state of Bank Otkritiye . However, operations with these securities in the market,

Figure 17

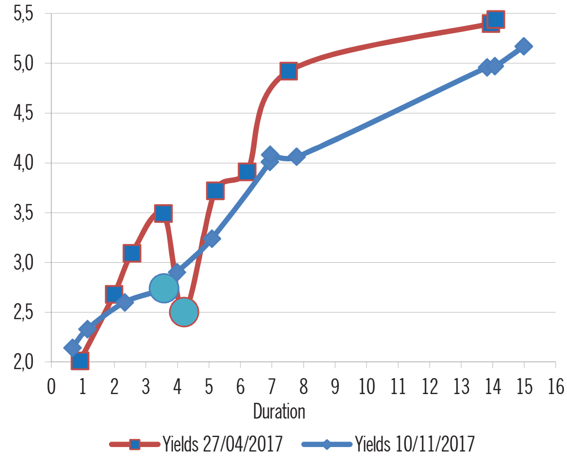
Yield to maturity of Russian Eurobonds (%)



Source: Bank of Russia.

Figure 18

Effective yield on Russian Eurobonds (%)



Source: Bank of Russia.

taking into account the share of Otkritiye Group in the issue, actually made it possible to overrate their value for a long time and thus to distort information about the real financial condition of the credit institution. At the moment, the yield curve of the Eurobonds is regular in shape (Figures 17, 18).

Bank Otkritiye also suffered troubles with liquidity due to non-conformity to the requirements for the credit rating level for raising temporarily available funds of state corporations, the federal budget, and extra-budgetary funds. In July 2017 the bank faced a drastic outflow of corporate and household funds, which exceeded 630 billion rubles over two months. Due to the deterioration of the financial condition of the bank, the main shareholder asked the Bank of Russia for financial support in order to stabilise the situation.

Over the last three years Binbank has also been actively expanding through the accession of seven other credit institutions and by participating in the financial rehabilitation of a number of credit institutions (including MDM Bank, Binbank Digital, and ROST BANK). Starting in August 2016 the Bank of Russia worked with Binbank to prepare a plan for improving the quality of assets qualified as troubled; however, the measures suggested by the bank did not result in real improvement of its financial condition. After a liquidity deficit arose in August–September 2017 the owners contacted the Bank of Russia with a request for financial rehabilitation of the banks.

As estimated by the Bank of Russia, if the alternative scenario occurs — that is, licence revocation or introduction of a moratorium on the satisfaction of creditors' claims, systemic risks could arise for the financial sector. As of 1 July 2017, 39 major banking/financial groups (with cumulative assets of over 200 billion rubles) have invested over 1 trillion rubles in the liabilities of the companies being resolved, of which about 50% comprised unsecured operations (IBL, deposits, bonds, etc.).

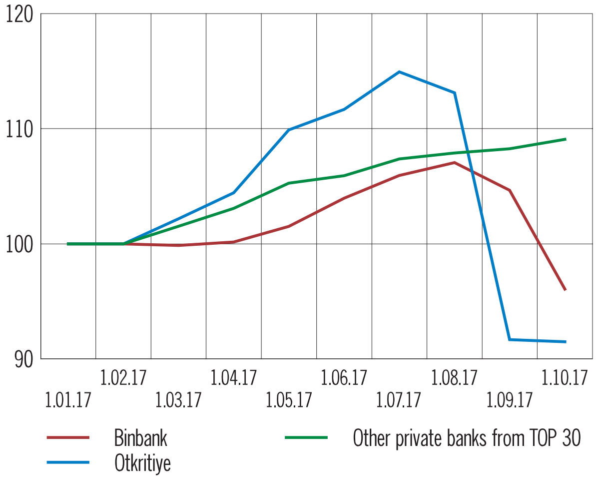
Influence on the Financial Sector

The negative influence of the start of resolution of two major banks on the financial system has been limited. Direct losses associated with investments in shares and liabilities and indirect losses (level of confidence in the financial system and risk appetite of investors) are considered as channels of influence.

As the write-off of senior debt did not apply during the resolution, investors' losses are mostly associated with investments in subordinated bonds and shares the amount of which in their assets was insignificant. The influence of the resolution of Bank Otkritiye and Binbank on the mandatory pension insurance market turned out to be moderately negative. The funds gradually cut their investment in the aforesaid companies during 2017 Q2–Q3 from 10% to 5% of the amount of pension savings. Based on the results of 9 months of 2017, some large NPFs showed a net loss due to the negative revaluation

Figure 19

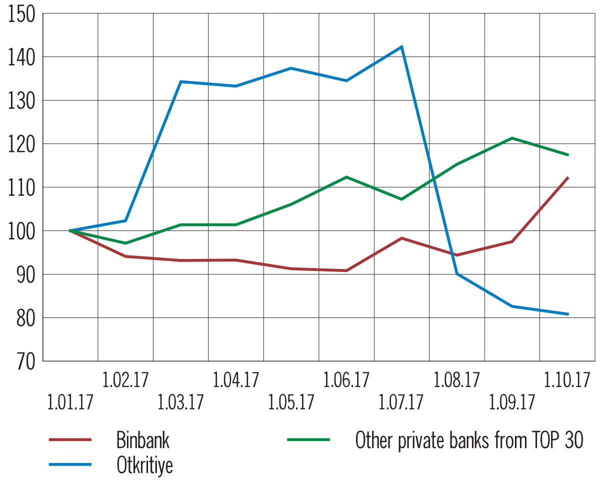
Dynamics of household deposits in rubles (Index 100=1.01.2017)



Source: Bank of Russia.

Figure 22

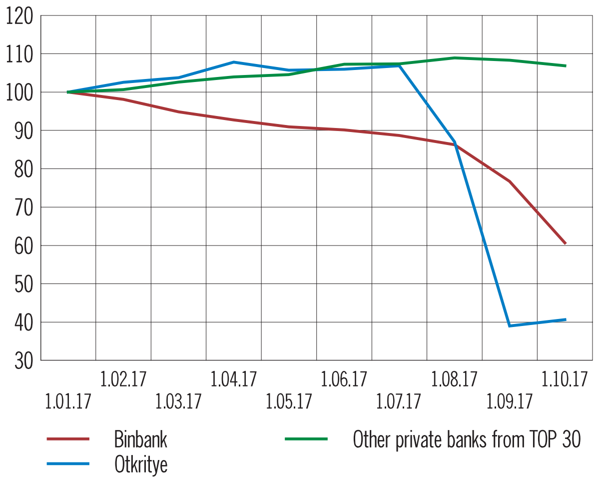
Dynamics of corporate deposits in foreign currency (Index 100=1.01.2017)



Source: Bank of Russia.

Figure 20

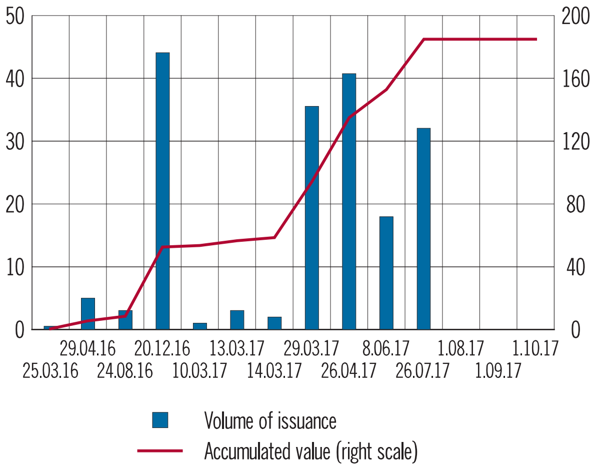
Dynamics of household deposits in foreign currency (Index 100=1.01.2017)



Source: Bank of Russia

Figure 23

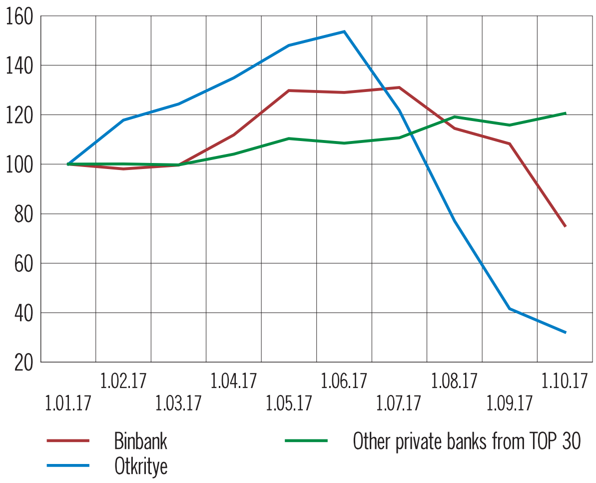
Issuance of subordinated bonds by Russian banks (RUB billion)



Source: Bank of Russia.

Figure 21

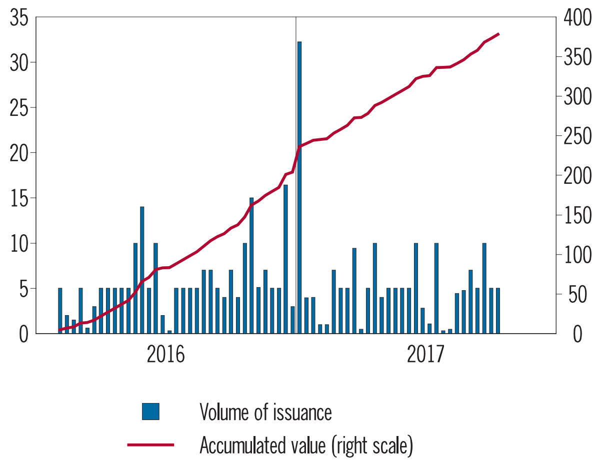
Dynamics of corporate deposits in rubles (Index 100=1.01.2017)



Source: Bank of Russia.

Figure 24

Issuance of bonds by banks (without subordinated bonds, RUB billion)



Source: Bank of Russia.

of securities by a total amount of 24 billion rubles[8]. Those funds suffered the main losses due to investments in the securities of the resolved banks and their subsidiaries. However, the duration of pension investments allows the funds in most cases not to record losses at the present moment but to wait until the possible stabilisation of the situation in the securities market.

As for indirect effects, clients' confidence in large private banks was generally preserved. In spite of the outflow of household and corporate funds in rubles and in foreign currency from Bank Otkritiye and Binbank, an inflow of funds to other major private credit institutions is observed (Figures 19–22).

The problems of the two banks mentioned above barely affected the quotations of shares of other credit institutions, and the return on bonds of other credit institutions in September 2017 has increased and showed rather significant growth, by 100–150 basis points, in some banks. At the same time, the positive trend of the issue of bonds by Russian banks is preserved[9] (Figures 23–24).

New Resolution Mechanism

For the purpose of increasing the effectiveness of the resolution of credit institutions, Federal Law No. 84-FZ, dated 1 May 2017, 'On Amending Certain Legislative Acts of the Russian Federation' was developed and adopted to introduce a new mechanism for the financial rehabilitation of credit institutions which provides for the direct participation of the Bank of Russia in the equity of banks being resolved.

The goals of creating a new plan for financial rehabilitation were:

– To enable quick recovery of the bank's financial condition indicators to an acceptable level and to apply all prudential requirements to the resolved banks immediately after such capital increase;

– To reduce the amount of financing of resolution measures and to reduce the repayment period of invested funds;

– To increase the effectiveness of control over the utilisation of the respective funds

– To create equal competitive conditions for all market participants;

– To exclude the dependence of the financial rehabilitation of a credit institution on the investor's financial condition.

For the purpose of implementing a new mechanism of financial rehabilitation, the Bank of Russia set up a Consolidation Fund consisting of the Bank of Russia's money and created at the cost of allocations made by a decision of the Bank of Russia Board of Directors. The Bank of Russia, as the sole participant, has set up the Management Company of the Banking Sector Consolidation Fund (the 'Management Company'), which acts on behalf of the Bank of Russia and uses the money of the Consolidation Fund in the course of the measures taken to prevent the bankruptcy of banks in accordance with the approved Plan of the Bank of Russia's Participation in Bankruptcy Prevention Measures.

Furthermore, the Bank of Russia also set up the Financial Rehabilitation Department, the main task of which is to perform both new resolutions of banks with the participation of the Bank of Russia and the Management Company and resolutions based on the previous 'credit' plan which are already being performed with the participation of the State Corporation 'Deposit Insurance Agency.'

The implementation of measures to improve the financial stability of Bank Otkritiye and Binbank using the money of the Banking Sector Consolidation Fund is aimed at ensuring their continuous operation in the market of banking services and at the subsequent implementation of all necessary measures for the purpose of the further development of the activity of Bank Otkritiye and Binbank. The current task of provisional administrations is to analyse the financial condition of Bank Otkritiye and Binbank and to ensure their continuous operation in the market of banking services. The expected result is the formation of loss provisions on troubled assets in an amount that would make it possible to cover the existing and potential risks of the said credit institutions, to restore their sustainable financial position, and to return them to common supervision by the Bank of Russia.

In accordance with the law 12 months are allowed for the main financial rehabilitation procedures, but the Bank of Russia plans to finish them before the said time. The participation of the Bank of Russia in the equity of Binbank and Bank Otkritiye is temporary and does not signify an increase in government shareholding in the banking sector.

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[8] *As of the date of the review, 13 November 2017.*

[9] *Not including Sberbank, state-owned banks, Bank Otkritiye, and Binbank.*

The target goal of the administration of banks whose capital has been increased in accordance with the law is to sell them to new owners.

2.3. Risks of Insurance Organisations

The Russian insurance market is generally characterised by the retention of positive trends. Furthermore, the current state of certain market segments along with factors that produce a resonant impact on the development of the entire sector is a special priority for the Bank of Russia.

First, stagnation tendencies were observed in the trend of insurance premiums other than life insurance premiums. Second, the galloping growth rates of investment life insurance, primarily caused by the increased activity of the banking sales channel due to the decline of deposit rates, ensured the leading position of the life insurance segment by share in total premiums, but at the same time they could result in an incomplete understanding by some consumers of the risks of this investment instrument. Third, the level of loss in the OSAGO (third party liability insurance) segment remains high. Rosgosstrakh Insurance Company, the longstanding leader in OSAGO, which is suffering financial difficulties as a result of major losses in this segment, was included in the resolution list of the banking group. The changes in its business profile may affect the financial condition of other market participants. Fourth, incorporation of the national re-insurer has started to have a positive influence on the market structure: the share of premiums that remain on reinsurance in Russia increased, and the number of schematic operations decreased.

Life insurance is developing because of investment products, while other kinds of insurance are generally close to stagnation

Based on the results of 2017 Q2, the cumulative income of insurance companies amounted to 76.7 billion rubles, where five companies accounted for 81.6% of the cumulative income, which is much higher than the concentration by assets (41.6%). The combined loss ratio for insurance other than life insurance reached 97.4%, which was primarily caused by the situation in OSAGO. Life insurers showed positive results: the return on their equity exceeded the average market level considerably (19.1%) and amounted to 68.8%.

Based on the results of the first half of 2017, the total amount of insurance premiums grew by 9.5%. The key source of growth was the life insurance market, first of all, insurance products with an investment component sold via the networks of credit institutions (Box 2). The market of insurance other than life insurance showed almost zero growth (0.8%). An increase in receipts for voluntary health insurance (7.5%) and for the kinds of insurance affected by the growth of retail lending, including insurance against accidents and illness (8.1%), made a positive contribution to the market trend. Negative growth was typical for insurance of other corporate property (-13.8%) and for motor insurance. Receipts for motor hull insurance, despite the revival of sales of new cars, decreased by 6.5%. The combined loss ratio for motor hull insurance as of the end of 2017 Q2 reached 72.7% and was accompanied by the growth of expenditures.

The OSAGO segment shows a high level of loss

Based on the results of the first half of 2017, the amount of OSAGO insurance premiums decreased by 4.0% against the same period of the previous year due to the decline of the average premium by 11.0% combined with an increase of the number of concluded contracts. The decline of the average premium may, in particular, result from the misconduct of policyholders during mandatory sales of OSAGO electronic policies: policyholders started to enter inaccurate data related to the territory of vehicle use in order to decrease the cost of the policy.

The combined loss ratio for OSAGO in 2017 Q2 amounted to 118.5%. The problem of increased payments by insurers associated with the activity of legal agents in some regions remained important: based on the data for the first six months of 2017, in 15 regions the average payment exceeded 100,000 rubles, compared to the average amount of 78,600 rubles in Russia overall. The ratio of judicial expenses to the primary claim amounted to 110% on average in Russia.

Insurers are starting to settle losses with priority on compensation in kind. The effect of this measure has not manifested itself in full as of yet, as compensation in kind is provided for with regard to contracts concluded after 28 April 2017. Insurers

Box 2. Investment life insurance

Investment life insurance (ILI), the formation of which was started in Russia in 2010–2012, replaced borrowers' insurance in 2015 as the driver of the life insurance market, and in 2016 – the first half of 2017 it became the key source of growth of the insurance market as a whole. Over six months of 2017, insurers received 88.4 billion rubles under ILI, showing 92.1% growth against the same period of 2016[1]. Unfortunately, for now increased demand for this instrument is associated not with growing demand for long-term saving instruments but with the decline of deposit rates, including foreign currency deposits, and with the growing interest of intermediary banks in commission income with no need to increase their liabilities.

ILI products are mostly planned for 3–5 years and are structured so that the customer is guaranteed the safety of the amount of the investment, while additional yield depends on the selected strategy and may be absent in the event of an unfavourable result: in particular, for some five-year ILI agreements that expire in 2017 the yield is close to zero under a number of popular strategies, the prices for the underlying assets of which have decreased significantly over this period (e.g., the RTS index and gold). The insurance form of the product is provided by the inclusion of longevity risk as well as the risk of death or accident.

ILI products are mostly sold by insurers via the networks of credit institutions. Remuneration to the intermediary banks varies from 3.3% to 18.2% of the insurance premium; on average insurers pay 8.2% of the amounts of contributions[2], and a trend towards growing competition has been observed by insurers.

ILI policies, which used to be positioned as an instrument for diversification of the investments of bank depositors with a high income level and a high level of financial literacy are transitioning to a more mass segment: the minimum entrance limit for this product usually amounts to 10,000–15,000 rubles, and payment is made on a one-time basis. Banks have also started promoting combinations of their own products and insurance products, in particular, those providing for an increased deposit rate subject to the one-time purchase of an ILI policy from a partner insurer.

Increased demand for ILI products and its re-orientation towards a wider circle of investors is accompanied by the growth of the risks of consumer misselling and, as a result, loss of confidence in the sector in the event of negative results. In particular, incomplete awareness of policyholders about the non-guaranteed receipt of investment income and overrated expectations of its amount were observed. The policyholder is not always well informed of material losses in the event of early contract termination: the surrender value for the first year of policy validity may amount to 70% of the contribution amount. Another important piece of information is that currently there is no compensation fund similar to the Deposit Insurance Fund for life insurers.

These risks may be reduced by way of qualitative improvement of the approaches towards information disclosure by insurers. In the near future the insurance community plans to develop basic standards for the protection of the rights and interests of individuals and legal entities who receive financial services provided by the members of a self-regulated organisation and to settle operations in the financial market, which will be close to the requirements for the management companies of UIFs. An important problem is the level of competence and conscientiousness of agents, the need for whose accreditation is also subject to discussion[3].

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[1] *Data of the analytical survey 'Results and Prospects of the Development of the Life Insurance Market in Russia' prepared by Expert RA.*

[2] *Poll data of the Bank of Russia for 2016.*

[3] *Consultation Paper 'Proposals for the Development of Life Insurance in the Russian Federation,' Bank of Russia, 2017 (http://www.cbr.ru/analytics/ppc/Consultation_Paper_ 171003_02.pdf).*

also point out the difficulties in organising work with car-care centres as regards the compliance of the repair conditions with the new legislative requirements for the terms and quality of work and with the procedure for the application of the uniform damage calculation method in the new conditions.

The Bank of Russia supports the opinion on the need to update the uniform methodology and started developing a new version of it. The Bank of Russia is also considering variants for further changes in the OSAGO system, including rate-making issues; however, the decisions will depend on the effectiveness of the measures that are already being implemented and will be based on the results of actuary calculations.

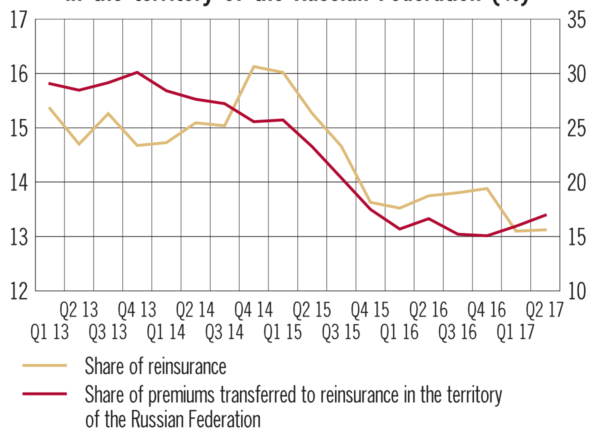
The dominant share of OSAGO in the portfolio and the associated growth of judicial expenses resulted in a material deterioration of the financial stability of the leading insurer in this segment, Rosgosstrakh Insurance Company, which was subsequently included in the resolution list of Bank Otkritiye (Section 2.2). Based on statistical reporting data, the share of Rosgosstrakh in the OSAGO market following the results of the first six months of 2017 amounted to 20.3% of the cumulative premium in the OSAGO segment, having decreased by 14.5 percentage points over the last two years. Based on the data of the Russian Association of Motor Insurers, in July–August 2017 the share of the company decreased even more and did not exceed 11% of premiums. Re-allocation of this amount of premiums to other insurers decreases concentration risks and the problem with the availability of policies, on the one hand, but may also increase the load on the operating activity of these companies and (in the absence of positive changes in the OSAGO system) produce a significant impact on their financial stability.

The reinsurance market is changing drastically due to the entry of the Russian National Reinsurance Company (RNRC)

The share of reinsurance[10] decreased overall due to the strengthening of the ruble exchange rate and the decline of corporate property insurance premiums as well as due to the increase of net retention by insurers (Figure 25). Furthermore, owing to the RNRC the share of premiums reinsured in Russia increased, and the value of schematic operations decreased. Over six months of 2017 RNRC has taken 3rd place among Russian reinsurers by the total amount of incoming reinsurance premium (16.6%) and has become the leader by incoming premium in the territory of the Russian Federation (25.4%). In the domestic market the reinsurer has huge potential due to the subsequent implementation of the obligation for 10% cession: the RNRC received 4.9% of the outgoing premium of insurers, as they are entitled to finalise obligatory contracts with other partners concluded before 1 January 2017.

Figure 25

Share of reinsurance and share of premiums transferred to reinsurance in the territory of the Russian Federation (%)



**Without life insurance (reinsurance).*
Source: Bank of Russia.

In 2017 Q2 the RNRC was awarded an international credit rating at the sovereign level. The main risks of the RNRC are associated with the potentially misconduct of counterparties; the re-insurer points out a significant number of proposals with the signs of non-market operations.

The Bank of Russia is elaborating strategic initiatives to enhance insurance market stability.

To protect the interests of policyholders and ensure the stability of the insurance market, the Bank of Russia is working together with the Ministry of Finance of Russia on introducing a mechanism for the resolution of insurance organisations. Resolution of insurance organisations is planned similar to credit institutions starting in June 2017 (Section 2.2). The Management Company of the Banking Sector Consolidation Fund LLC will be the management company, but the fund for the insurance sector will be built up separately from that for the banking sector.

To ensure the financial stability of insurers, the Bank of Russia is preparing for the implementation of a risk-oriented approach towards the regulation of the Russian insurance market under Solvency II. For example, the Bank of Russia developed the Concept of the Risk-Oriented Approach to Insurance Sector Regulation in the Russian Federation[11], in which the core goals and priority areas of activity in the course of transition to the use of a risk-oriented approach are established, and prom-

[10] The share of reinsurance is the ratio of the amount of insurance premiums transferred to reinsurance over the last 12 months preceding the reporting date to the total amount of insurance premiums over the last 12 months preceding the reporting date; the share of insurance premiums transferred to reinsurance in the territory of the Russian Federation is calculated out of the total amount of insurance premiums transferred to reinsurance over the last 12 months preceding the reporting date.

[11] Published on the Bank of Russia website on 18 August 2017 (http://www.cbr.ru/Content/Document/File/16975/concept_of_implementation.pdf).

ising areas for further development of this approach are defined. The document was developed based on the analysis of the best international practices and principles[12] and employed the provisions of Directive 2009/138/EC of the European Parliament and of the Council of the European Union dated 25 November 2009 on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II).

2.4. Risks of NPFs

The profit earned from the management of pension assets of an NPF is lower than the profit earned under the government bonds of the Russian Federation, despite a higher level of accepted risk.

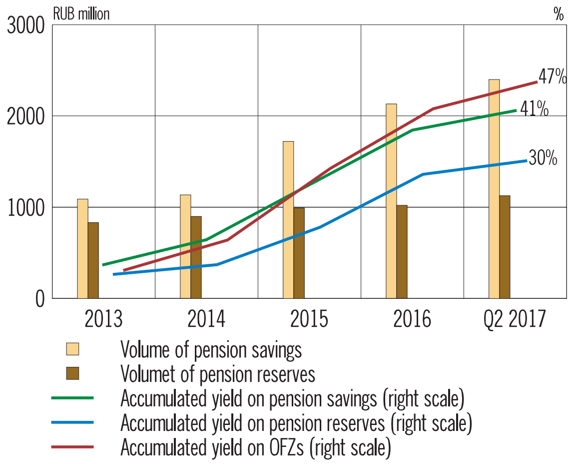
The situation in the sector is fairly stable and does not bear any systemic risks. However, the problem of profitability should be mentioned. The weighted average profitability of an NPF for six months of 2017 for pension savings amounted to 6.3% per annum, and for pension reserves it amounted to 4.7% per annum. All funds showed positive profitability for pension savings. As a result of the decline of the stock market in 2017 Q2, the funds that mostly invested in debt instruments have become the leaders in profitability.

At the same time, during the period from 2013 to the end of 2017 Q2 NPFs showed results of the management of pension funds lower than the return of the government bonds of the Russian Federation, despite a higher level of accepted risk. For example, the accumulated return for 4.5 years on pension savings amounted to 41%, and on pension reserves it amounted to 30%, which is 6 p.p. and 17 p.p. below the accumulated return on OFZs[13], respectively (Figure 26). The results of the management of pension funds are partially caused by investment in low-yield assets, such as MPCs and CUIFs (Box 3), and in the assets of related parties.

For the purpose of the enhanced transparency of the investment process, in September 2017 the Bank of Russia developed a draft ordinance[14] in accordance with which funds will have to disclose the structure of their pension savings portfolio down to the specific securities emission.

Figure 26

Dynamics of accumulated yield on pension savings, pension reserves, and OFZs



Source: Bank of Russia.

Amid the financial troubles of the banks that were going through the resolution procedure with the participation of the Banking Sector Consolidation Fund, NPFs increased their investment in OFZs

Over the course of 2017 Q2–Q3 the structure of the pension savings portfolio by credit ratings[15] (Figure 27) improved due to the increase of the share of OFZs by 8 p.p. to 13%, the decline of the share of unrated assets by 1 p.p. to 6%, and the reduction of investment in the assets of the banks undergoing resolution — Bank Otkritiye and Binbank — by 127 billion rubles to 99 billion rubles. As of 29 September 2017 the investment of NPFs in the aforesaid banks amounts to 4% of the aggregate pension savings of NPFs.

In the mid-term prospect the asset structure of the pension savings of NPFs may change significantly due to the adoption of ratings under the national scale from accredited rating agencies. Ac-

[12] *Including those used by the insurance market regulators in Germany, Poland, Switzerland, Mexico, the PRC, and the SAR.*

[13] *The accumulated profitability on OFZs was calculated using the values of a one-year curve of zero-coupon yield on government bonds.*

[14] *The draft Ordinance 'On the Procedure and Terms of Information Disclosure by a Non-Governmental Pension Fund on Its Official Website and on the Additional Requirements for the Scope of Information Disclosed by a Non-Governmental Pension Fund about its Activity.'*

[15] *The calculation was made using the ratings of the credit rating agencies Moody's, S&P, Fitch, ACRA (JSC), and Expert RA converted into the Moody's scale in accordance with the comparison scale.*

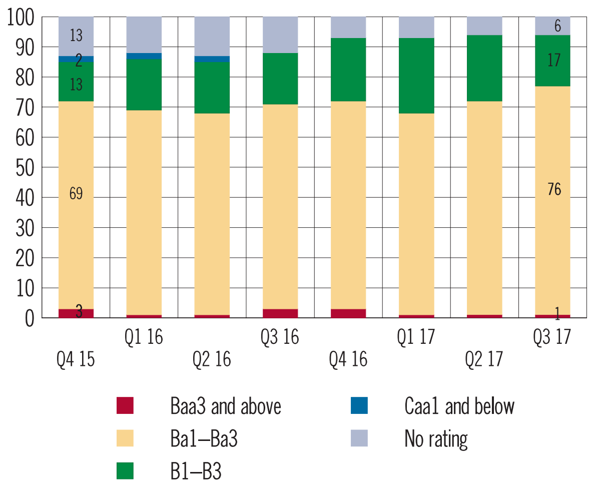
Table 6

Share of assets with credit ratings in the pension savings portfolio as of 29 September 2017

Asset class	International rating agencies			Russian rating agencies		
	Moody's	S&P	Fitch	RA Expert	ACRA	ACRA+Expert
Bonds of state corporations	94	94	67	0	100	100
Deposits	98	63	65	45	65	100
Funds held in bank accounts	100	95	43	69	43	99
Bonds of constituent territories of the RF	50	55	83	9	70	79
MPCs	0	0	0	64	0	64
Corporate bonds	65	58	45	22	25	45
Mortgage-backed bonds	20	3	18	0	15	15
Municipal bonds	0	0	100	0	0	0
Bonds of federal state unitary enterprises	0	0	100	0	0	0
Bonds of an external bond loan	100	100	100	0	0	0
Federal loan bonds	100	100	100	0	0	0
Total	**74**	**68**	**58**	**22**	**25**	**44**

Figure 27

Credit rating trends (pension savings)



Source: Bank of Russia.

cording to the Bank of Russia Ordinance No. 4489U, dated 11 August 2017[16], bonds acquired after 13 July 2017 and not rated by the Russian agencies ACRA (JSC), or Expert RA may be only held in the pension savings portfolios of NPFs until the end of the current year. Bonds acquired by the funds before 13 July 2017 which do not meet the new requirements may be held in the pension savings portfolio to their maturity. As of the end of 2017 Q3 ratings of the Russian rating agencies cover 45% of all corporate bonds in the pension savings portfolios of NPFs (Table 6).

Change in the regulatory requirements for NPFs creates the need for risk management development in the funds

In September 2017 the Bank of Russia prepared a draft Ordinance 'On Amending Bank of Russia Ordinance No. 4060U, dated 4 July 2016, "On Requirements for Organising the Risk Management System of a Non-Governmental Pension Fund,"' which provides for additional conditions and specific aspects of stress-testing by pension funds. In accordance with this draft document an NPF shall perform stress testing to verify the sufficiency of assets for the discharge of its obligations. Furthermore, this draft ordinance introduces quantitative indicators for the stress testing of pension funds: during the period through 30 June 2018 the amount of assets of a fund shall be recognised as sufficient for the discharge of its obligations if assets are found to be adequate in no less than 20% of Monte Carlo tests under each scenario; starting 1 July 2018, in no less than 35%; starting 1 January 2019, 50%; starting 1 July 2019, in no less than 75% of tests under each scenario.

[16] *Bank of Russia Ordinance No 4489U, dated 11 August 2017, 'On Amending Bank of Russia Regulation No. 580P, dated 1 March 2017, "On Setting Additional Limitations on the Investment of Pension Savings of a Non-Governmental Pension Fund Providing Compulsory Pension Insurance, Cases Where Management Companies Acting as Trustees for Pension Savings May Enter into Repo Agreements, and Requirements Aimed at Mitigating Risks, in Compliance with Which Such Management Company May Enter into Agreements Which Are Derivative Financial Instruments, and Additional Requirements for Credit Institutions Which Deposit Pension Savings and Savings for Housing Provision for Servicemen, and Additional Requirements Which Management Companies Must Meet during the Term of Trust Agreement Related to Pension Savings Management for the Funded Pension."'*

Box 3. Trends of Investments in CUIFs

Investments in closed unit investment funds (CUIFs) continue to generate interest among qualified investors. Most funds are set up for a limited circle of unitholders. The largest unitholders of CUIFs as of 30 June 2017 are banks, which hold 16% of the CUIF market (383 billion rubles); non-resident legal entities, 16% (381 billion rubles); NPFs[1], 10% (233 billion rubles); and development institutions, 7% (175 billion rubles). Among other holders, individuals comprise 28% (679 billion rubles), and other resident legal entities, 23% (548 billion rubles).

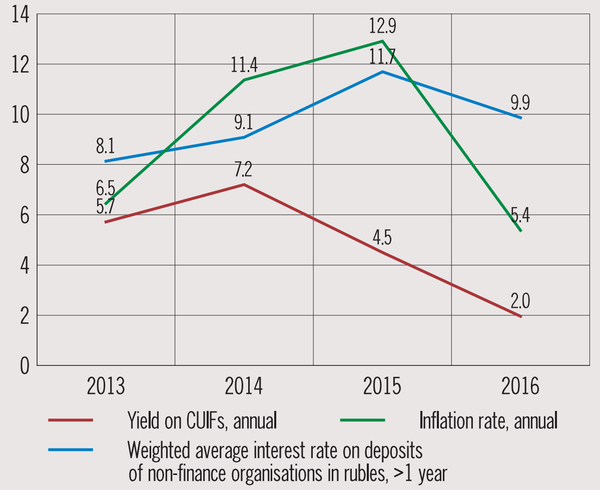
The CUIF market is characterised by high concentration with regard to unitholders. For example, five banks in the banking sector comprise 10.6% out of the 16% of investments of all banks in units of CUIFs (251 billion rubles); five funds in the pension market account for 9.1% out of the 10% of investments of all NPFs in units of CUIFs (211 billion rubles). Investments of pension funds in CUIFs make up 17% of the aggregate portfolio of pension reserves, but in some NPFs this share reaches 40%. At the same time, taking into account the long-term nature of liabilities of funds and their weak exposure to liquidity risks as regards non-governmental pension support activity, at the present time investments in CUIFs do not threaten the financial stability of NPFs.

It should be noted that in 2013–2016 CUIFs showed a profitability level much lower than the weighted average interest rate on deposits for non-financial organisations: the difference was from 1.9 p.p. to 7.9 p.p. as of the end of each year of the said period (Figure 28). In 2016 the weighted average yield of CUIFs[2] amounted to only 2.0%, while the average deposit rate was 9.9%.

Stock funds (12.8%) and long-term direct investment funds showed the highest yield in 2016. Funds of art treasures (-24.5%) and credit funds (-19.4%) showed the worst results. The yield of real estate funds was -1.8% (Figure 29).

Figure 28

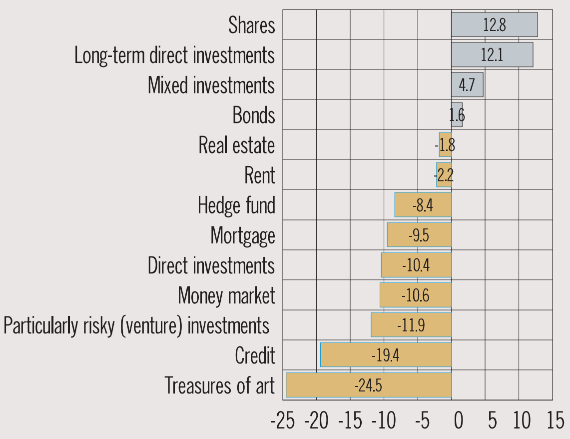
Yield on CUIFs (%)



Source: Bank of Russia.

Figure 29

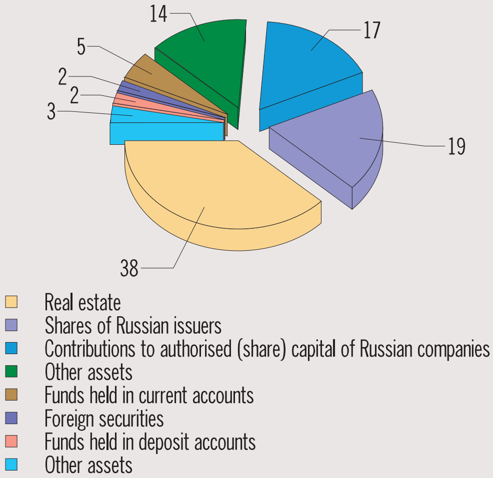
Yield on CUIFs broken down by categories of funds as of 31 December 2016 (%)



Source: Bank of Russia.

Figure 30

Structure of CUIF assets as of the end of Q2 2017 (%)



Source: Bank of Russia.

[1] Investments in CUIFs are present in the portfolios of pension reserves, equity, and funds intended to maintain the statutory activity of NPFs.

[2] Change in the cost of a unit.

The biggest share in the structure of CUIF assets is held by real estate (38%), shares of Russian issuers (19%), and contributions to the authorised (share) capitals of Russian organisations (17%) (Figure 30).

The Bank of Russia classifies CUIFs as high-risk investment instruments and imposes certain limitations on the activity of organisations under its control which is associated with the acquisition of units. For example, the share of CUIF units and other high-risk instruments in the pension savings portfolio of NPFs may not exceed 10%[3]. For pension reserves the limitation on the share of CUIF units not admitted to trading is 5%[4]. Credit institutions that have CUIF units in their assets[5] shall form loss provisions in accordance with the quality of assets included in the funds.

[3] *In accordance with Bank of Russia Regulation No. 580P, dated 1 March 2017, 'On Setting Additional Limitations on the Investment of Pension Savings of a Non-Governmental Pension Fund Providing Compulsory Pension Insurance, Cases Where Management Companies Acting as Trustees for Pension Savings May Enter into Repo Agreements, and Requirements Aimed at Mitigating Risks, in Compliance with Which Such Management Company May Enter into Agreements Which Are Derivative Financial Instruments, and Additional Requirements for Credit Institutions Which Deposit Pension Savings and Savings for Housing Provision for Servicemen, and Additional Requirements Which Management Companies Must Meet during the Term of Trust Agreement Related to Pension Savings Management for the Funded Pension.'*

[4] *In accordance with Resolution of the Russian Government No. 63, dated 1 February 2007, 'On Approving the Rules for the Placement of Pension Reserves of Non-Governmental Pension Funds and Control of their Placement.'*

[5] *In accordance with Bank of Russia Regulation No. 283P, dated 20 March 2006, 'On the Procedure for the Formation of Loss Provisions by Credit Institutions.'*

3. BANK OF RUSSIA MACROPRUDENTIAL POLICY

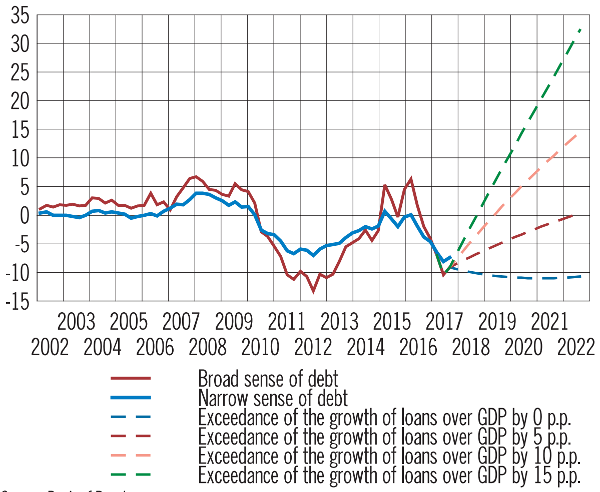
3.1. Assessment of the Current Phase of the Credit Cycle in the Russian Economy

The value of the national countercyclical buffer remains at the level of zero per cent of risk-weighted assets. In the event of accelerated lending growth rates, reduction of underwriting standards, or excessive growth of the share of dividend payments, the Bank of Russia may consider the possibility of establishing a positive buffer.

The lending activity indicator (credit-to-GDP gap)[1] recommended by the Basel Committee on Banking Supervision (BCBS) as a key indicator for making a decision on the countercyclical buffer remains negative. This shows that lending activity remains below the long-term trend for now. Amid the recovery of lending activity in some lending segments, negative values of credit-to-GDP gaps are decreasing gradually (by 1.3 p.p. to -9.1 p.p. in the broad sense and by 0.7 p.p. to -7.4 p.p. in the narrow sense)[2]. BCBS recommends setting a non-zero value of the countercyclical buffer if the value of the credit-to-GDP gap exceeds[3] 2.0 p.p.

Figure 31

Trend of the credit-to-GDP gap in the broad and narrow sense (p.p.)



Source: Bank of Russia.

The analysis of a possible credit-to-GDP gap trend depending on the growth rate of the debt burden showed that even subject to lending growth rates outstripping GDP growth by 10 p.p. the credit-to-GDP gap in the broad sense will only reach 2 p.p. 1 July 2019 (Figure 31).

However, along with this formal trigger, many regulators, including the Bank of Russia, also take into account the trend and speed of lending activity recovery in some economy sectors, changes in underwriting standards, profitability and reserve of the banking sector capital, and other important factors.

The experience of countries that announced the introduction of a countercyclical buffer shows that in many of them the credit-to-GDP gap value was negative (Table 7). A decision to introduce a buffer was made due to accelerated lending activity growth in at least one of the lending segments, along with the weakening of lending standards, or subject to accumulation of systemic risks in individual markets[4]. Furthermore, the Bank of Iceland, based on historical analysis, states that if one follows the BCBS recommendations, the period between the date of introduction of a non-zero buffer and the date of its establishment at a maximum level (2.5%) is less than one year, and therefore the banking sector will not have enough time to build up the capital buffer. Therefore, introduction of a non-zero buffer may be expedient even in conditions of gradual lending activity recovery, provided that it does not produce a significant impact on the recovery growth of lending to the economy. The experience of the Bank of Iceland also shows the need to monitor not only devia-

[1] The credit-to-GDP gap is defined as the deviation of the actual value of the ratio of loans to GDP from its long-term trend (Guidance for national authorities operating the countercyclical capital buffer, December 2010).

[2] The credit-to-GDP gap in its broad sense takes into account the debt of individuals to banks and the internal and external debt of non-financial organisations, inter alia, under debt securities. The credit-to-GDP gap in its narrow sense takes into account the debt of individuals and non-financial organisations only to credit institutions that are residents of the Russian Federation.

[3] The credit-to-GDP gap is calculated as the deviation of the 'loans to GDP' ratio from its long-term trend.

[4] For example, in the real estate market.

Table 7

European countries that announced the introduction of a countercyclical buffer

Country	Date of the decision on the introduction (modification) of a CB*	Announced value of the CB	Inflation, YoY	Lending to non-finance organisations, YoY	Mortgage lending, YoY	Consumer lending, YoY	Loans/GDP, %	Credit-to-GDP gap, p.p.
Czech Republic	December 2015	0.50	0.10	8.80	7.70	-0.70	90.00	3.4
	May 2017	1.00	2.00	6.00	9.40	4.90	92.50	0.3
Iceland	March 2016	1.00	2.20	2.80	3.20		170	-50
	November 2016	1.25	1.80	2.80	3.70		167	-70
Slovakia	June 2016	0.50	0.90	-1.00	11.00		54	2.04
	July 2017	1.25	1.00	15.00	14.00		58	4.96
United Kingdom	March 2016**	0.50	0.6	-0.50	3.40		141	-22.53
	June 2017	0.50	2.6	9.40	4.70		146	-14.21
Norway	December 2013	1.00	2.40	6.90	7.30		187	1.19
	June 2015	1.50	2.00	5.10	6.50		191	-0.4
	December 2016	2.00	3.60	Н/Д	6.30		193	-3.97
Sweden	September 2014	1.00	-0.10	3.30	5.70		147	8.13
	June 2015	1.50	0.10	2.50	6.60		148	6.32
	March 2016	2.00	1.30	4.20	7.50		148	5.24

** For example, in real estate market.*

*** Because of Brexit voting results in June 2016, the decision on setting the buffer was cancelled.*

Sources: European Systemic Risk Board, national central banks.

tions of the debt burden (loans to GDP) of the economic subjects from its long-term trend but also the speed of the change in the debt burden.

In Russia recovery growth of lending activity is not uniform among lending segments. In unsecured consumer lending in March–August 2017 the monthly growth rates of outstanding loans became positive, while in previous periods the debt had decreased. From the beginning of the year the increase in outstanding loans amounted to 7.3% (6.7%), for 12 months, 6.1% (5.2%)[5] as of 1 October 2017.

A certain increase in lending activity has also been observed in the mortgage lending segment in 2017 Q3. The annual growth rates for the said period increased by 2.0 p.p. to 14.4% (by 2.1 p.p. to 14.1%) as of 1 October 2017.

In the segment of lending to non-financial organisations the growth of lending activity remains moderate. As of 1 October 2017 the increase in outstanding loans under the portfolio of ruble-denominated loans to non-financial organisations from the beginning of the year amounted to 5.9% (4.2%); the increase over 12 months amounted to 5.3% (3.4%)5. Net of the foreign currency revaluation factor, the portfolio of foreign currency loans to non-financial organisations for January–September 2017 decreased by 3.8% (5.6%); the decrease over 12 months amounted to 7.0% (8.8%).

When analysing lending activity, the Bank of Russia also takes the lending terms into account. In 2017 Q1 and Q2 some easing of requirements for borrowers in the mortgage lending segment was observed[6]. This trend was observed in a wide range of banks. In 2017 Q1 the share of newly extended mortgage loans with a down payment less than 20% increased from 6.8% to 14.2%; in Q2, to 20.6%; and in Q3, to 29.4%. In the segment of unsecured consumer lending no easing of lending standards is observed at the moment. The share of loans extended to borrowers with a high debt burden (payment/income ratio above 60%) decreased by 0.7 p.p. to 22.8% in Q1 and by 4.4 p.p. to 18.4% in Q2.

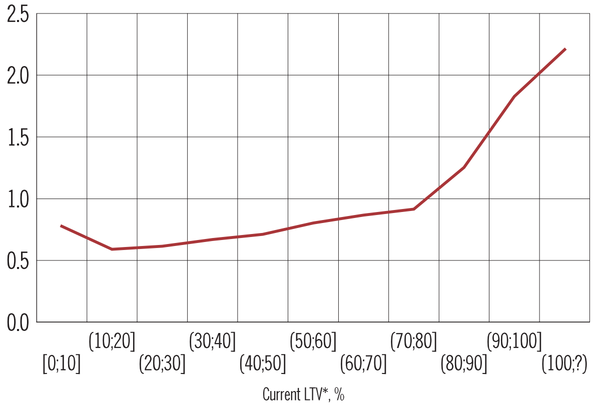
Analysis of historical data shows that mortgage loans with a small down payment are generally characterised by a higher level of the borrow-

[5] Calculation of the growth rates is given in two methodologies:
1. Without brackets – for credit institutions operating as of the last reporting date, including previously reorganised banks (not including banks whose licence has been revoked).
2. In brackets – for credit institutions operating as of the respective reporting date (including banks whose licence has been revoked).

[6] Based on a quarterly survey of banks accounting for over 70% in aggregate of outstanding household loans.

Figure 32

Probability of overdue debt arising during the month under a rouble-denominated mortgage loan (%)



** Current value of LTV is calculated as the ratio of mortgage debt on the date of calculation to fair value of real estate on the date of loan extension.*

Sources: Sberbank, VTB 24, GPB Bank, DeltaCredit.

er's credit risk (Figure 32). At present, the share of such loans in banks' portfolios is insignificant and does not bear systemic risks; however, to prevent risk accumulation in future and for the purpose of sustainable development of the mortgage segment, the Bank of Russia decided to increase the risk ratios on mortgage loans with a down payment below 20% (to 150%) or below 10% (to 300%). Increased risk ratios will apply to mortgage loans issued after 1 January 2018 and are of a preventive nature. The influence of these measures on the lending activity of banks will be limited. Based on the data for 2017 Q2, the share of extended loans with a down payment less than 10% varies from 0% to 4% in different banks.

In conditions of lending activity recovery and growth of the financial result of the banking sector, accumulation of profit in the capital of banks contributes to enhanced banking sector stability. During the period from January to July 2017 the share of dividends accrued by banks to their financial result before tax for 2016 amounted to 25.4%. Over 90% of dividends accrued in January–July 2017 were accrued by 10 banks. Retention of a substantial share of the profit for 2016 as part of retained profit contributed to the increase of the cumulative capital adequacy ratio of the banking sector over 12 months, from 12.3% to 13.1% as of 1 August 2017.

Thus, the trend of the indicators taken into account by the Bank of Russia when making a decision on the value of the national countercyclical buffer indicates the expediency of leaving it at zero.

3.2. The Situation in the Unsecured Consumer Lending Market and Measures Taken by the Bank of Russia

The market of unsecured consumer lending in 2017 Q2–Q3 was characterised by steady recovery of demand from individuals for loans and by an increase in the credit quality of portfolios and the profitability of banks specialising in unsecured consumer lending. The annual growth rates of outstanding loans in the banking sector entered the positive zone starting in May 2017 and reached 5.2% as of 1 October 2017. Given the observed growth rates of household nominal income (2.0% for October 2016–October 2017), the growth of unsecured loans within the bounds of 5% per year may be regarded as balanced.

The share of 'bad' loans[7] in the sector for 12 months decreased by 2.4 p.p. to 14.9%, and for the group of banks specialising in unsecured consumer lending,[8] by 4.6 p.p. to 27.5% (Figure 33). The steady decline of risks for the unsecured loan portfolio is caused by the replacement of the vintages of loans from 2011–2014, which are characterised by a high debt burden of borrowers, with new disbursements. The lending quality of loan vintages extended in May–September 2016 shows the lowest risk level since 2010: the expected share of bad loans in these vintages by the 12th month from the issue date is 4% (compared to 10%–12% in 2015). Early quality indicators of loans issued in the first half of 2017 (the share of bad loans by the 3rd month from the issue date) also show improvement of the payment discipline of individuals.

Recovery of positive growth rates of cumulative debt along with the maintenance of lending underwriting standards have become an additional factor in the decline of the share of 'bad' loans in credit institutions' portfolios in mid-2017.

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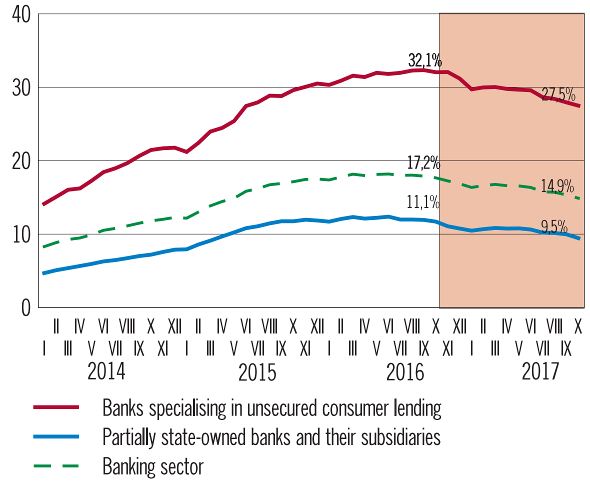
[7] Loans overdue for over 90 days.

[8] Criteria for categorisation as banks specialising in unsecured consumer lending:
- *The total amount of unsecured loans is over 10 billion rubles;*
- *The ratio of the amount of unsecured loan to assets is over 20%;*
- *The share of interest income from retail loans is over 35% of total interest income.*

Figure 33

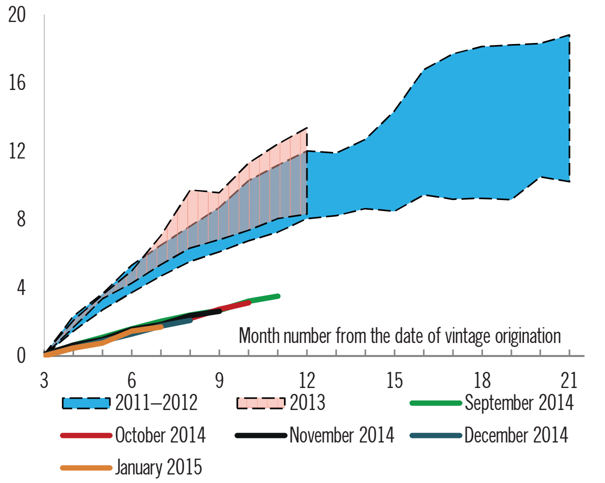
Share of bad loans broken down by types of credit institutions (%)



Source: Bank of Russia.

Figure 34

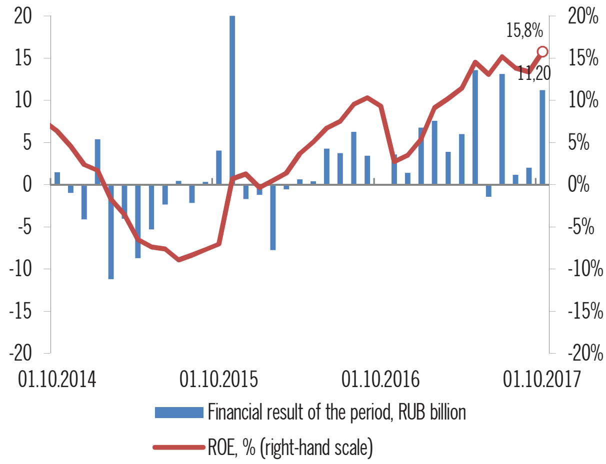
Dynamics of the share of bad loans by loan vintages* (%)



** Calculated with the data of NBCH, scope – more than 50% of the market.*

Figure 35

Financial result (RUB billion) and ROE (right-hand scale) of banks specialising in unsecured lending



Source: Bank of Russia..

The improvement of the credit quality of portfolios allowed retail banks to maintain their return on equity at the level of 15% in 2017 Q2–Q3 (while a minimum value of -8.8% was reached in June 2015). Profit earned by these banks based on the results of 2017 Q3 amounted to 16.3 billion rubles (Figure 35), which allowed the group of retail banks to maintain their capital adequacy ratios at the level of 2016 while the size of the unsecured loan portfolio remained unchanged (annual growth rates amounted to 2% as of 1 October 2017).

Apart from the increase in the share of serviced loans, 2017 Q2–Q3 have also been characterised by a considerable decline in effective interest rate for all kinds of unsecured loans. This trend was facilitated by the cheapening of household deposits (-1 p.p. for April–September 2017) and by enhanced competition for solvent borrowers and the limitation on the maximum effective interest rate in accordance with Federal Law No. 353-FZ, dated 21 December 2013, 'On Consumer Loans (Borrowings).' The cumulative effect of these factors caused the weighted average value of the effective rate on newly issued loans to reach 17.9% in a key market segment (cash loans) for the first time since the date effective interest rate statistical data was collected (since 2014).

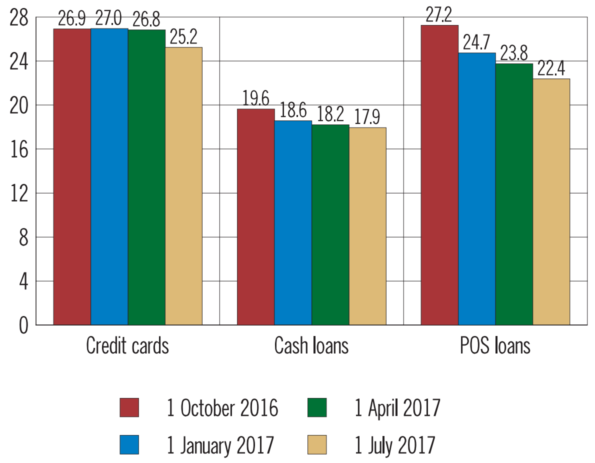
Revision of the scale of increased risk ratios (Figure 38) made by the Bank of Russia in March 2017 was an additional factor for the decreased extension of loans with a high effective interest rate.

This revision produced the highest impact on the segment of loans with an effective interest rate of 30%–35%: the growth of the risk ratios from 1.1 to 3 resulted in the reduction of the attractiveness of this segment and in the decline of its share in the total volume of loan disbursements by retail banks from 25% to 10%. At the same time, the amount of disbursements by banking MFOs in this segment increased.

In conditions of a rather slow decline of the actual household deposit attraction rate (during October 2016–September 2017: from 7.3% to 6.1%, while the effective interest rate declined by 4.1 p.p.) (Figure 38), further decline of the effective interest

Figure 36

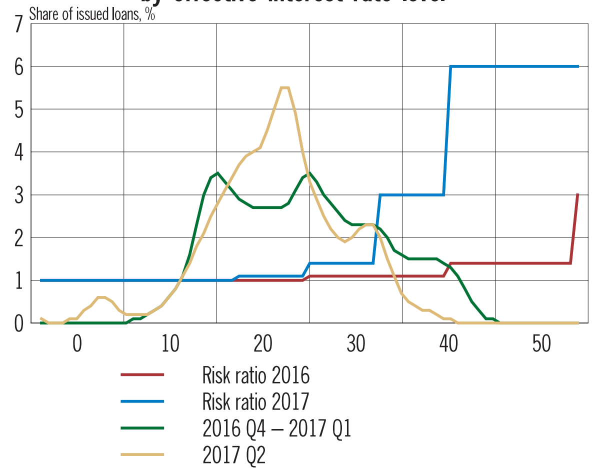
Dynamics of the effective interest rate broken down by categories of loans (%)



Source: Bank of Russia.

Figure 37

Distribution of unsecured loans provided by the group of retail banks in 2016 Q4 – 2017 Q2 by effective interest rate level



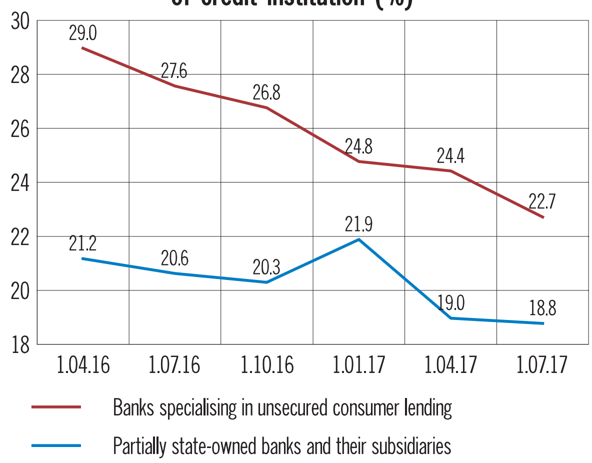
Source: Bank of Russia

rate on newly issued loans may result in the decline of return on the retail portfolios of some banks. To overcome this trend, retail banks will have to maintain the credit quality of portfolios, optimise operating expenses, or update existing business models.

As the effective interest rate-based approach towards credit risk regulation depends on the level of interest rates in the economy, the potential of

Figure 38

Dynamics of weighted average effective interest rate for unsecured loans broken down by types of credit institution (%)



Source: Bank of Russia.

its further use may be limited. For the purpose of developing macroprudential regulation and for the evaluation of borrowers' debt burden, the Bank of Russia is developing a methodology for calculating the debt burden (debt burden indicator is the ratio of payment to income, PTI) of individuals. This indicator will make it possible to limit the risks on household loans even in the case of relatively low interest rates in the economy.

In October 2017 the Bank of Russia published the concept of PTI calculation[9]. Based on the results of its discussion, the Bank of Russia will prepare a corresponding regulatory act, and after collecting and analysing the relevant statistical data, the procedure for using PTI in regulation will be determined.

The debt burden indicator takes into account the borrower's liabilities to all credit and microfinance organisations. A draft text of amendments to Federal Law No. 218-FZ, dated 30 December 2004, 'On Credit Histories' has been prepared for the correct calculation of borrower's liabilities to all creditors. These amendments will allow financial institutions to obtain information on the cumulative debt burden of an individual requesting a loan.

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[9] *The concept of PTI calculation, http://cbr.ru/analytics/fin_stab/171020_00.pdf.*

Box 4. MFO market trends (risks of regulatory arbitration)

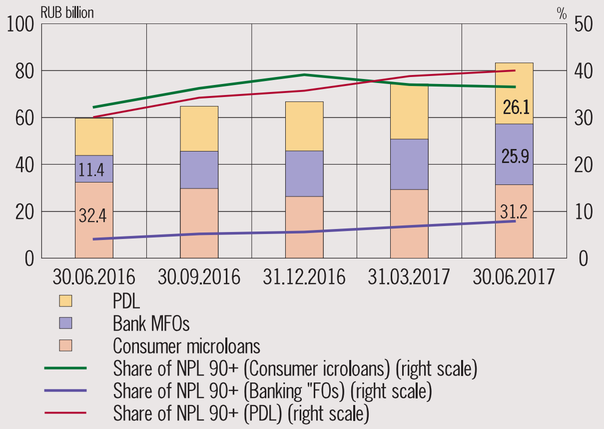
Since the beginning of 2017 the market of consumer microfinancing shows relatively uniform growth in all segments, having increased in Q2 by 12% to 83.3 billion rubles (Figure 39). Banking MFOs1 still retain high growth rates and remain one of the key market drivers.

A low level of refusals along with the speed of application approval causes increased demand in the PDL2 segment, which makes it possible to maintain high growth rates (+11% for the quarter, to 26.1 billion rubles). As of 30 June 2017 the share of NPL 90+3 in the PDL segment amounted to 40%, having increased by 1.2 p.p. over the last quarter. Furthermore, MFOs specialising in PDL microloans assign their claims under cession on a quarterly basis in the amount of 8%–10% of their portfolio (up to 2% quarterly on average in the MFO market). Such a high value is associated, among other things, with a high turnover in this segment of microloans. The significant share of defaults is reflected in the nominal effective interest rate value, which is the highest in the microfinancing market and averages 600% (Figure 40).

The last two quarters have been characterised by the recovery growth dynamics of consumer microloans4, which is probably explained by the re-distribution of the customers of MFOs that left the register in 2016 Q3 and Q4 (with a portfolio volume of 7 billion rubles). The upsurge of effective interest rate values under consumer microloans in 2017 Q1 and Q2 (Figure 40) may be

Figure 39

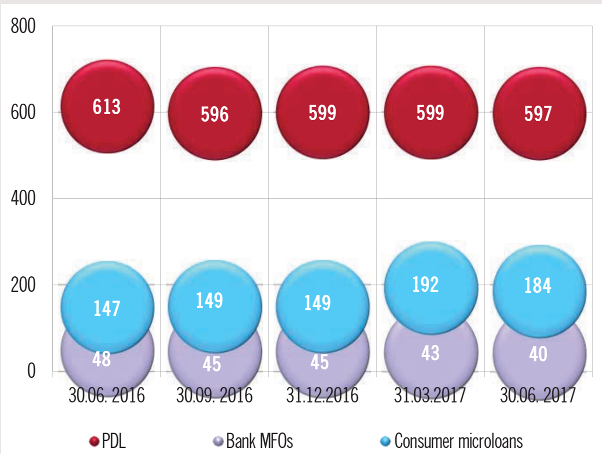
Dynamics of consumer microfinance market by outstanding debt



Source: Bank of Russia.

Figure 40

Dynamics of change in the weighted average effective interest rate by segments*

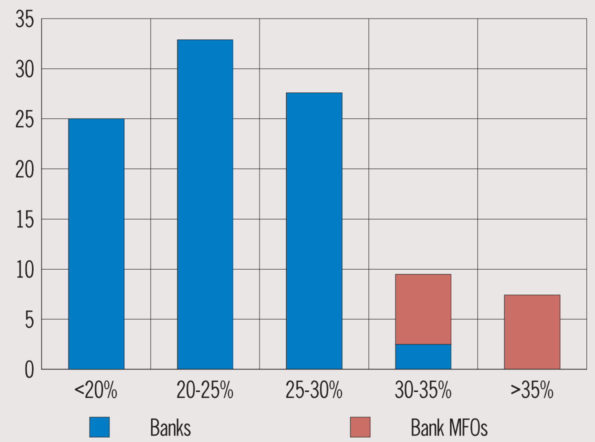


* *Weighted value of effective interest rate for consumer microloans and bank MFOs were calculated in the same way as the Bank of Russia Ordinance No. 3249-U dated 29.04.2014 'On the process of identification of the categories of consumer loans by the Bank of Russia and on the process of quarter calculation and publication of market average value of effective interest rate of the loan' except for the limitation of the number of creditors in each category.*

Source: Bank of Russia.

Figure 41

Distribution of the disbursement volume by effective interest rate amount for 2017 Q2 between banks and affiliated MFOs (%)



Source: Bank of Russia.

[1] *Banking MFOs are a segment of consumer microloans (including POS microloans), except for payday loans (PDL) issued by microfinance organisations affiliated with retail banks.*

[2] *PDLs = payday loans.*

[3] *Non-performing loan 90+ = non-performing loans with debt more than 90 days overdue.*

[4] *Consumer microloans — the segment of consumer microloans of other MFOs.*

associated with the change of the business models of some MFOs which did not comply with the new limitations on the amount of interest income accrual5 by way of replacing 'lost profit' with interest income accrual in an accelerated mode (at the expense of turnover of microloans with a higher effective interest rate within permissible limits).

Gradual recovery of lending activity in retail banks may have facilitated the re-distribution of the part of the customers of the banks with increased risk to the microfinance sector, which could have been one of the causes of the increase in loan extensions by affiliated MFOs (+39% over the quarter) and of the growing share of troubled assets in the said segment (+1.1 p.p. over the quarter). Furthermore, as in banks, a trend toward the decrease of effective interest rate is also observed in this microfinance segment (-3 p.p. over the quarter).

Based on supervisory reporting data, in 2017 Q2 the main volume of disbursements of bank MFOs was in the form of microloans with an effective interest rate above 35% (Figure 41). In this segment of effective interest rate there is a maximum risk ratio (600%) applicable for the purpose of calculating banks' capital adequacy ratios. The main volume of disbursements by banks themselves in 2017 Q2 (86%) was characterised by an effective interest rate range with a risk ratio not exceeding 140%. In 2017 Q2 bank MFOs issued about 12% of the total lending amount of banks and affiliated MFOs (or 0.6% of the total consumer lending amount of the banking sector). This fact proves the absence of significant risks of regulatory arbitration between the banks under analysis and their affiliated MFOs at the present time. The Bank of Russia will continue monitoring the trends in the KPIs of banks and their affiliated MFOs.

[5] *In accordance with Federal Law No. 407-FZ, dated 29 December 2015, 'On Amending Certain Legislative Acts of the Russian Federation and on Invalidating Certain Provisions of Legislative Acts of the Russian Federation,' starting 1 January 2017 a limitation on the accrual of interest income in an amount greater than three times the initial contract price was introduced, so was a limitation on the accrual of interest income for overdue microloans in an amount greater than twice the outstanding debt amount, until the debt and/or interest is partially repaid.*

3.3. Measures for Reducing the Dollarization of the Assets and Liabilities of Credit Institutions and the Level of Foreign Currency Debt of Non-Bank Companies

For the purpose of limiting FX risks of the economy and the financial system[10], the Bank of Russia successively implemented a number of measures in 2016 to encourage banks to reduce their transactions denominated in foreign currency. In April–August 2016 the required reserve ratio on banks' foreign currency liabilities to organisations was increased (to 7%). Starting 1 May 2016 the risk ratios for calculating capital adequacy on corporate loans and on securities transactions in foreign currency were increased (to 110% and 130%). The increase in the risk ratios along with the gradual re-orientation of banks on ruble lending to borrowers whose revenues are not denominated in (or tied to) foreign currency resulted in a gradual reduction of outstanding corporate FX loans in[11] to banks. From 1 May 2016 to 1 October 2017 the corporate FX loan portfolio decreased by 1,253.9 billion rubles, or by $21.6 billion (-12.5%) (hereinafter, net of foreign currency revaluation in banks operating as of 1 October). For 9 months of 2017 the reduction amounted to 342.6 billion rubles, or $5.9 billion (3.8%), mainly due to the reduction of indebtedness under loans extended to non-resident corporates by $4.3 billion.

The decline of outstanding FX loans in sectors where borrowers conduct their activity in the domestic markets and do not have enough foreign currency revenue is a positive trend. The aggregate reduction in these sectors (real estate operations, transport and communications, construction, production and distribution of electricity, gas, and water) during the period from 1 February 2017[12] to 1 September 2017 amounted to 91.3 billion rubles ($1.6 billion). Out of this amount, 70.5 billion rubles ($1.2 billion) was from real estate operations. FX

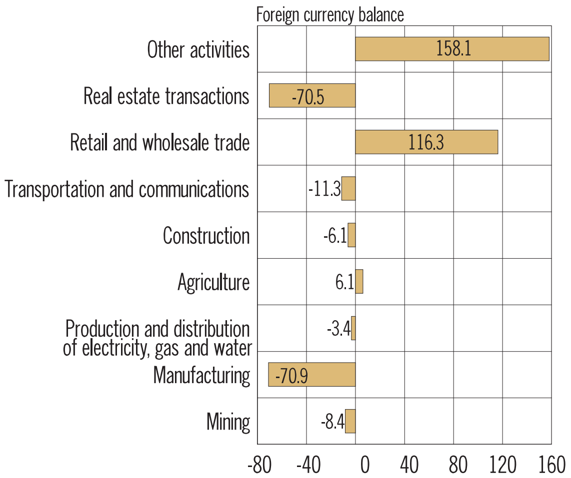
[10] *Detailed information about the risks associated with the increased dollarisation of the economy is available in the analytical note of the Financial Stability Department 'The Role of Macroprudential Policy in the Context of the Correlation of Commodity Cycles with Capital Flows and the Financial Cycle' (August 2017): http://cbr.ru/Content/Document/File/16743/ana-lytic_note_170808.pdf*

[11] *Legal entities, excluding banks.*

[12] *Analysis of data starting 1 February 2017 is a result of a change in the OKVED (economic activity classification codes).*

Figure 42

Change in outstanding corporate FX loans from 1 February to 1 September 2017 (net of foreign currency revaluation factor, RUB billion)



** Based on credit institutions active on 1 September 2017.*

Source: reporting form 0409303.

loans to the companies of this segment are characterised by the highest level of materialised credit risk: the share of loans of quality categories IV–V amounts to 22.7% as of 1 September 2017[13].

At the same time, the decline of FX lending is also observed in manufacturing (-70.9 billion rubles, or $1.2 billion), which is mainly explained by the fact that a number of exporters replaced foreign currency loans of Russian banks with funding (inter alia, in the form of pre-export loans) received from non-residents or from banks that are subsidiaries of Russian credit institutions.

Growth of domestic foreign currency lending is observed in wholesale and retail commerce (+116.3 billion rubles, or $2 billion). A more detailed analysis showed that the increase is explained mainly by lending to commercial companies that are a part of the groups of oil and gas export companies. The biggest increase in the loan portfolio denominated in foreign currency is observed in the category 'other activities.' This growth is mostly associated with the issuance of loans to financial agents.

As of 1 October 2017 about a fourth of the corporate loan portfolio (excluding credit institutions) in foreign currency (2,847.4 billion rubles) is characterised by increased risk ratios. The estimated influence of increased risk ratios on the actual adequacy ratio of the cumulative capital of the banking sector (N1.0) amounts to 0.02 p.p. (as of 1 October 2017).

FX loans to companies with insufficient foreign currency revenue for timely debt servicing are characterised not only by an increased level of the borrower's probability of default but also by a high correlation between defaults on such loans, as they have a common risk factor — that is, the foreign currency exchange rate. FX loans are also characterised by a significant correlation between the probability of default and the creditor's losses in the event of default, as the debt in foreign currency is revalued, while the value of the collateral under the loan usually changes insignificantly. Thus, changes in the foreign currency exchange rate may produce an adverse impact on the credit quality of bank portfolios. In the event of a potential increase of these risks the Bank of Russia will decide to further increase the risk ratios for the foreign currency assets of credit institutions.

At the same time, measures aimed solely at limiting internal FX lending may result in re-orientation of borrowers to external financing. For this reason, the list of possible instruments that may be activated in the event of excessive accumulation of foreign currency risks should also include limitations directly applicable to company balances. The experience of some countries shows[14] that requirements are established for the foreign currency liquidity position and the foreign currency debt burden of companies.

The ratio of FX debt of non-financial organisations to GDP in Russia has one of the highest values compared with other countries (above 22%). The share of the foreign currency component in the cumulative debt is at a moderately high level (44%).

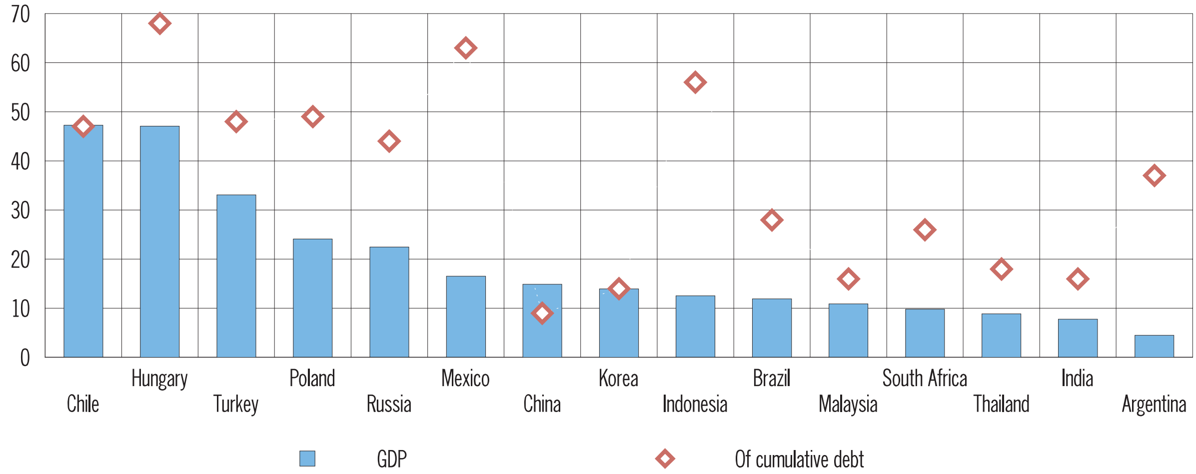
The greatest volume of FX loans is traditionally held by companies from tradable industries which hedge their foreign currency debts with foreign currency inflows from their export activity. However, natural hedging is effective only at a moderate foreign currency debt level. Evaluation of the debt burden of exporting companies showed the following. In the oil and gas sector, where the level of cumula-

[13] *Source: Reporting form 0409303 'Information on loans granted to legal entities.'*

[14] *Detailed information is available in the analytical note of the Financial Stability Department 'The Role of Macroprudential Policy in the Context of the Correlation of Commodity Cycles with Capital Flows and the Financial Cycle' (August 2017): http://cbr.ru/Content/Document/File/16743/analytic_note_170808.pdf.*

Figure 43

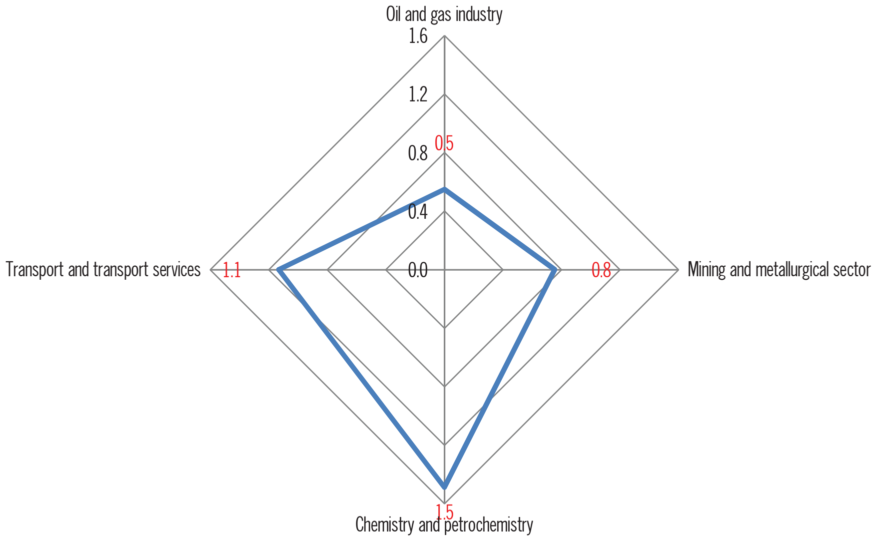
Foreign currency debt of non-financial organisations broken down by countries (%)



Source: BIS data as of 31.01.2017.

Figure 44

Foreign currency debt burden of non-financial organisations broken down by individual sectors



tive debt burden is low[15] (taking into account ruble liabilities and foreign currency liabilities), the level of foreign currency debt burden compared with foreign counterparts is somewhat higher and has quite high values in some companies.

The aggregate debt to revenue indicator calculated for six Russian oil and gas companies based on the latest financial reports published is 0.4, which corresponds to a medium level among Western counterparts. At the same time, the average foreign currency debt burden[16] amounts to 0.6 and is even close to 1 in some companies, which corresponds to an increased level. In the mining and metallurgical segment the companies mostly have a balanced debt burden compared with similar foreign companies, but the level of foreign currency debt in a considerable part of the companies appears to be increased (the foreign currency debt

[15] Debt burden is defined as the ratio of a company's debt liabilities to EBITDA (earnings before interest, tax, depreciation, and amortisation).

[16] Foreign currency debt burden is defined as the ratio of the foreign currency liabilities of a company (credit facilities and loans, down payments under commodity supply contracts, net liabilities under financial derivatives with foreign currency risk) and foreign currency revenue calculated on a cumulative total basis for 12 months.

to revenue ratio equals or exceeds 1). The petrochemical sector is the sector with the biggest gap between foreign currency debt and foreign currency revenue: the average level of the foreign currency debt burden is 1.5.

A high level of debt burden in companies/individual sectors is a factor in increased volatility of the ruble exchange rate, which particularly showed itself in 2014 Q4. The volatility originates from external and internal debts denominated in foreign currency. Increased risks are associated with excessive debt, a non-uniform schedule of debt repayment, and with the possible presentation of claims for early repayment by non-residents. To limit the aforesaid risks, measures taken with regard to credit institutions (increased risk ratios for capital adequacy calculation) shall be supplemented with measures aimed at stimulating the reduction of the aggregate foreign currency debt burden (including external liabilities) which apply directly to non-financial organisations.

Box 5. Risks of foreign currency lending to non-financial organisations

Corporate lending in foreign currency is one of the sources of systemic risk of the banking area. In conditions of high volatility of the ruble exchange rate the cumulative loss (PD – expected loss + UL – unexpected loss) under the foreign currency loan portfolio of banks starts depending not on the loan portfolio quality but on the exchange rate dynamics:

$$Risk_{RUR} = Risk_{USD} * USD_T \quad (1)$$

where USD_T is the ruble exchange rate value in USD as of the date of default;

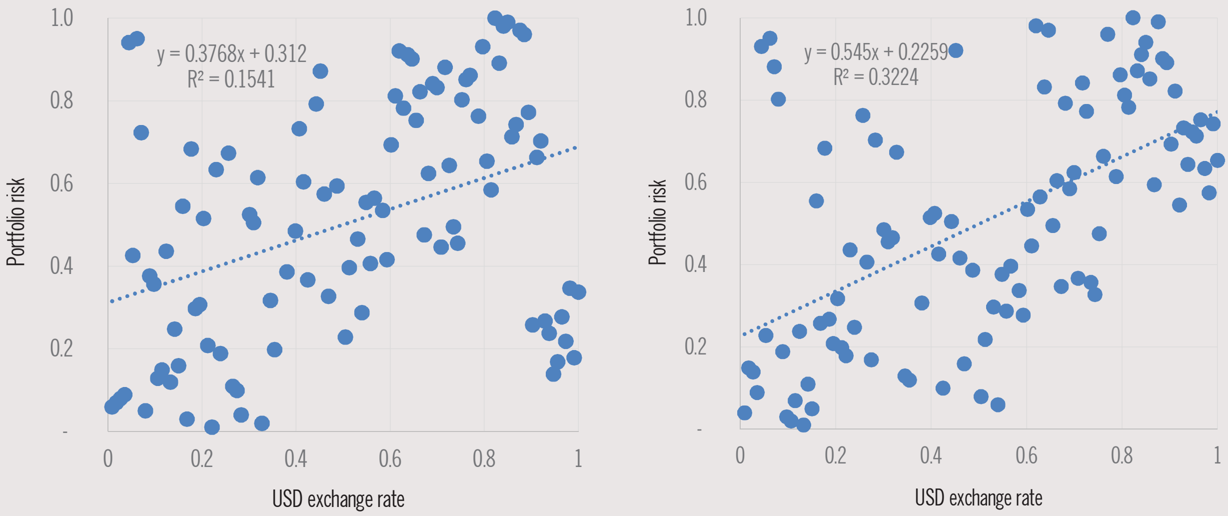
$Risk_{usd}$ is the portfolio risk value in the basic currency; described by the Vasicek model[1]:

$$Risk_{USD} = F(x, PD, \rho) = N\left(\frac{\sqrt{1-\rho} * N^{-1}(x) - N^{-1}(PD)}{\sqrt{\rho}}\right) \quad (2)$$

where N^{-1} is the reverse normal standard distribution.

Figure 45

Rank correlation of the increase in the share of non-serviced foreign currency loans to non-financial companies and the growth of the USD exchange rate for the export (left) and non-export (right) sectors of the economy



[1] See the Regulation on the Calculation of Risk Ratios Based on Internal Ratings, No. 483-p, dated 6 August 2015.

Figure 46

Gaussian copula generator (left) for different correlation ratios [0, 0.75] and the respective random distribution (right)

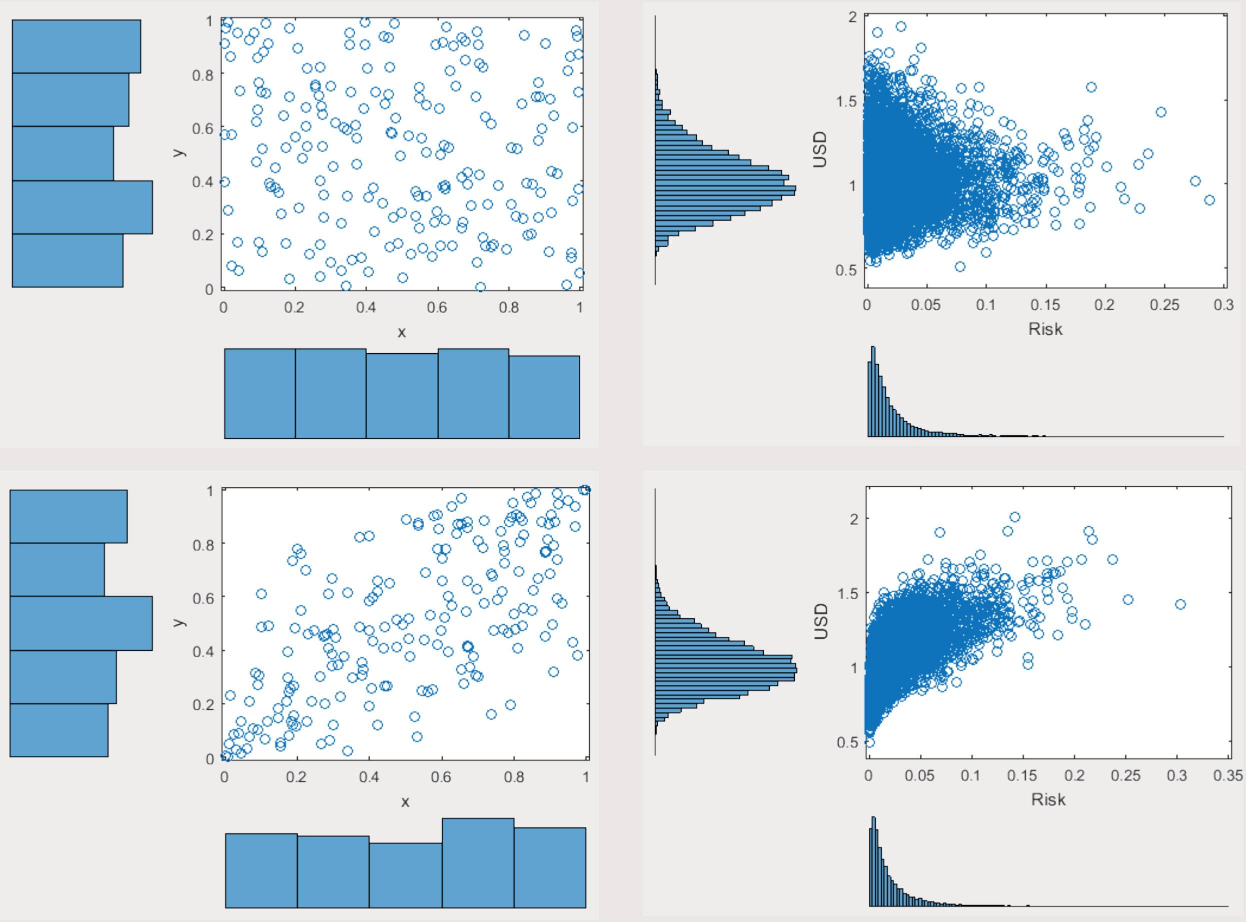
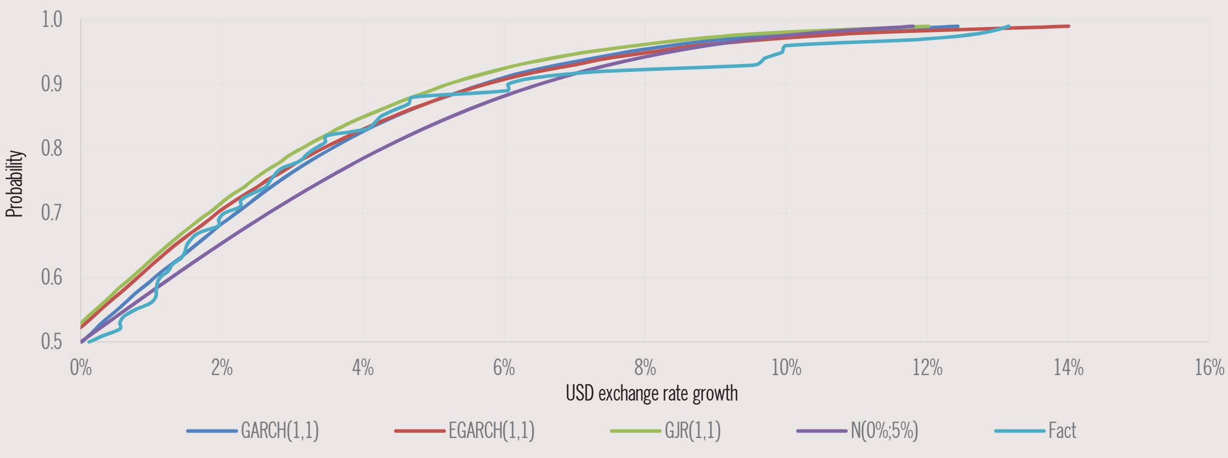


Figure 47

Actual (March 2009–August 2017) and model distributions of the probability of growth of the USD/RUB exchange rate within 1 commercial month



Furthermore, the growth of the foreign currency exchange rate leads to simultaneous revaluation of the credit claim (LGD*USD $\in [0;\infty)$[2], and not [0;1] in case of ruble lending) and the growth of PD as a result of the increased debt burden of borrowers. Analysis of the data provided in Form 0409302 indicates a high (above 0.5) correlation between the growth of the share of non-performing FX loans and the USD exchange rate.

Evaluation of the effect of the correlation of credit risk and the foreign currency exchange rate on the amount of unexpected loss under a portfolio may be performed based on a Gaussian copula numerical simulation and marginal distributions of the portfolio risk in the basic currency (2) and of the foreign currency exchange rate.

Within the framework of this model, the mathematical expectation of losses under the foreign currency portfolio in the case of any correlation parameter remains equal to PD, and unexpected losses UL start depending on the distribution of USD and on the Risk/USD correlation value.

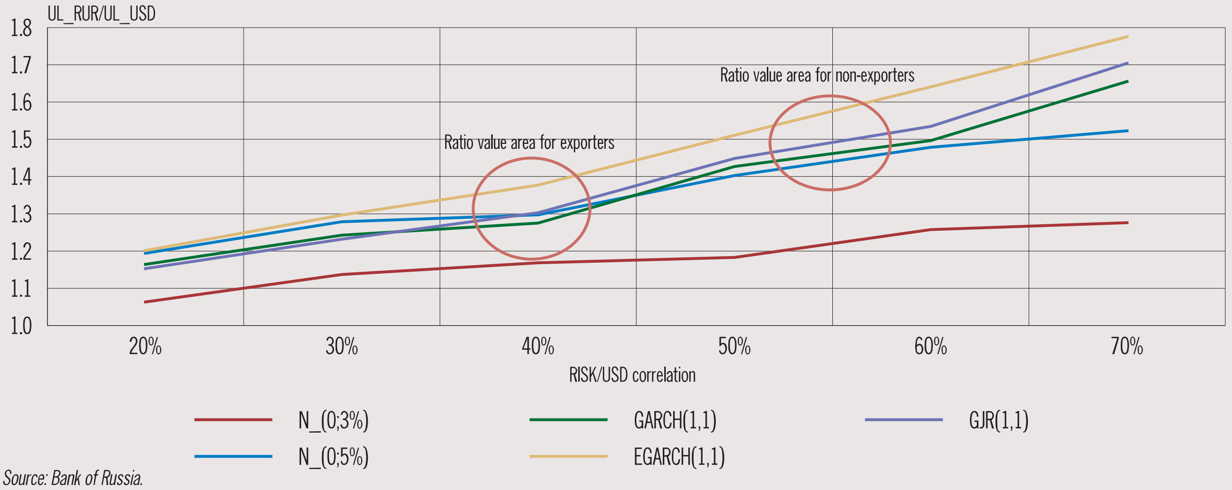
For the purpose of obtaining sustainable UL estimates, the distribution of the foreign currency exchange rate was simulated based on 4 different models of time series: RW, GARCH(1,1), EGARCH(1,1), GJR(1,1). Parameters of the models were evaluated based on the historical data of daily closing prices for the foreign currency pair USD/RUB from March 2009 through September 2017. These distributions have been zero-centred for the purpose of eliminating the effect of the systematic weakening of the ruble exchange rate in the period under consideration.

By applying the said marginal distributions of the foreign currency exchange rate and varying the Risk/USD correlation value and PD value in the basic currency, we obtained estimates of the increased risk ratio on foreign currency loans to non-financial organisations which equal the ratio of unexpected loss UL for FX and ruble lending.

The results of the numerical simulation show a high sensitivity of the value of unexpected loss UL to the Risk/USD correlation value and robustness to the application of different exchange rate dynamics models and the PD level. The amount of unexpected loss in the case of FX lending to companies that do not have foreign currency revenue amounts to 1.45–1.6 of the unexpected loss under the same portfolio but without foreign currency revaluation. For export companies this indicator is 1.2–1.35.

Figure 48

Evaluation of the increased risk ratio on corporate foreign currency loans under different values of correlation and PD



Source: Bank of Russia.

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[2] *LGD are the bank losses in foreign currency in the event of borrower default.*

4. RESULTS OF THE MONITORING OF THE RISKS OF DEVELOPMENT INSTITUTIONS

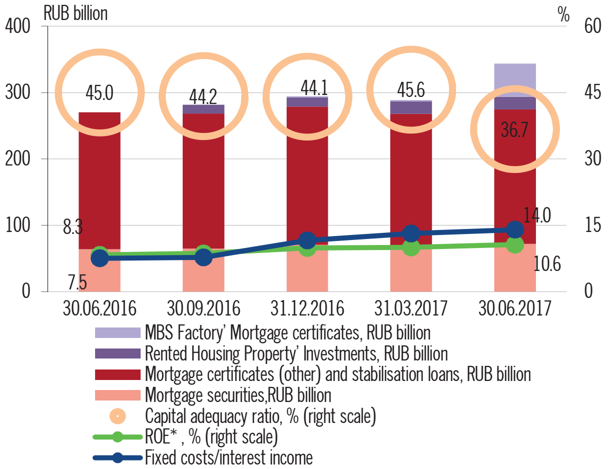
4.1. The Unified Development Institution in the Housing Sector (AHML JSC)

Implementation of the first transactions under the 'MBS Factory' project[1] did not have a significant impact on the financial stability of the AHML Group.[2]

Thanks to the low mortgage risk level, the risks of AHML remain low. In May 2017 the AHML Group acquired a pool of mortgage loans from Sberbank in the amount of 48.5 billion rubles. Due to an increase in financial leverage and in combination with the announcement of dividend payment for 2016 to the shareholder in the amount of 7.1 billion rubles, this transaction decreased the capital adequacy ratio of AHML Group to 36.7%. In spite of the said events, the capital adequacy of AHML Group is maintained at a high level. It should be mentioned that in accordance with the Long-Term Development Programme up to 2020[3], upon achieving the target indicators, the required value of this indicator will be 9%.

Figure 49

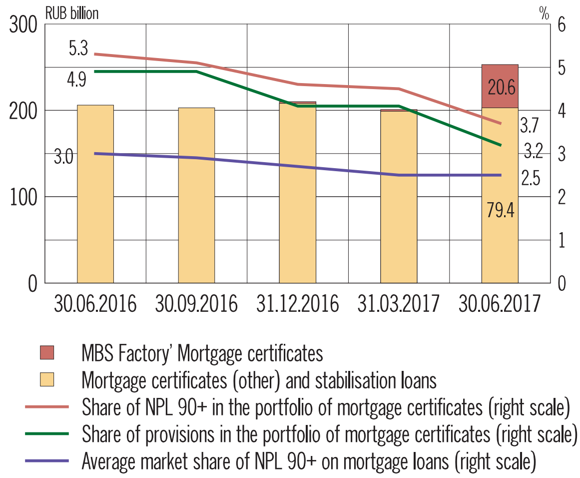
AHML key performance indicators



*Rolling year calculation.
Source: Bank of Russia, based on AHML IFRS reporting.

Figure 50

Dynamics of the quality of the portfolio of mortgage certificates and loans issued by AHML



Source: Bank of Russia, based on AHML IFRS reporting.

Furthermore, implementation of the first transactions under the 'MBS Factory' project resulted in the growth of the portfolio of redeemed mortgage certificates by 20.5% over the first half of 2017 (Figure 49) and, as a result thereof, in the improvement of its quality. In particular, as of 30 June 2017 the share of NPL 90+ in the portfolio of mortgage certificates and stabilisation loans had decreased to 3.7%[4] (Figure 50). Furthermore, the absolute volume of non-performing mortgage certificates and stabilisation loans for the first half of 2017 had decreased insignificantly (from 9.6 billion rubles to 9.3 billion rubles).

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[1] The securitisation of bank mortgage portfolios and their swap into mortgage-backed securities issued and guaranteed by AHML with an option for their further sale or repurchase.

[2] The organisations of the Unified Development Institution in the Housing Sector, as determined in accordance with clause 1 of Article 3 of Federal Law No. 225-FZ, dated 13 July 2015, 'On Facilitating Development and Enhanced Efficiency in the Housing Sector and on Amending Certain Legislative Acts of the Russian Federation,' except for credit institutions.

[3] The Development Strategy of the Unified Development Institution in the Housing Sector for 2016–2020.

[4] In 2009–2010 AHML Group implemented a programme aimed at supporting borrowers with mortgage loans by granting them stabilisation loans. Stabilisation loans were extended for making monthly payments under mortgage loans over the course of one year.

In the first half of the year 2017 the return on equity of AHML Group also increased by 0.7 p.p. to 10.6%. The main factors for the increased return on equity included recovery of previously formed loss provisions on redeemed mortgage certificates in the amount of 0.5 billion rubles and payment of dividends to the owners for 2016 (as described above).

According to the plans of AHML Group two more transactions for a total amount of up to 80 billion rubles may be executed by the end of 2017: (Sberbank, 30 billion rubles, VTB 24 (PJSC), 50 billion rubles[5]). Agreements have been concluded with the largest state-owned banks for the securitisation of their mortgage portfolios for an amount of 300 billion rubles (Sberbank) and 100 billion rubles (VTB 24 (PJSC)).

Due to the possible increase in the volumes of mortgage portfolio redemption from banks, the importance of requirements for mortgage certificates imposed by AHML Group is increasing (at the moment, there are limitations on the payment to income ratio (max 75%), loan to value ratio (max 80%), and other mortgage portfolio characteristics).

The Main Challenge for AHML Group is Integration with Joint-Stock Commercial Bank Russian Capital (PJSC)

A possible decline in the capital adequacy of AHML Group in the mid-term due to the integration of JSCB Russian Capital (PJSC) and the creation of prerequisites for the adjustment of strategic goals should be noted. The risks are associated with the fact that the bank is a provisional administrator for a group of banks[6] and the SU-155 group of companies and is also going through financial recovery itself.

Development of the 'MBS Factory' programme is likely to facilitate an increase in mortgage market capacity and support the downward trend of interest rates (due to the possibility of reflecting these MBSs with a decreased (20%) risk ratio when calculating the capital adequacy of banks and thus saving on expenditures).

[5] 'Sberbank prepares a second mortgage securitisation transaction for 30 billion rubles' // URL: https://realty.interfax.ru/ru/news/articles/85540/.

[6] The Bank incorporated OJSC 'Gubernsky Bank Tarkhany' (2011), OJSC CB Potential (2012), and OJSC CB 'Ellipse Bank' (2014), and since 2015 it has been acting as an investor in the financial rehabilitation of JSC Sotsinvestbank.

4.2. The Development Institution in the Small and Medium Business Sector (SME Corporation JSC)

The reduction of deposit rates has resulted in a decrease in the profitability of SME Corporation JSC (the 'Corporation').

The income of the Corporation is mainly comprised of the interest received on bank deposits and the cash balances on settlement accounts (81.8% of assets[7]). Amid the decline of interest rates, yield on the invested cash funds has decreased from 10.6% to 7.9% (Figure 51), which was one of the causes of the decline of its return on equity to the self-repayment level (0.8% as of 30 June 2017). Furthermore, equity was under pressure from the growth of management expenses (+56.9% for the first half of 2017 compared with the same indicator in the first half of 2016).

The share of guarantees with signs of impairment grew by 1.7 p.p. over the first half of 2017 to 14.7% as of 30 June 2017, while the portfolio of issued guarantees decreased by 0.8% for the same period.

Amid the increase of risk under the guarantee portfolio of the Corporation, the sureties issued under the 6.5% Programme[8], the principals under which are mostly major credit institutions (Sberbank, VTB Bank (PJSC), Rosselkhozbank JSC), have become the main growth driver of contingent liabilities (+57.7% for the period).

Limited possibilities for self-generation of capital. Amid the decline of the operating income and deterioration of the quality of the guarantee portfolio of the Corporation, the receipt of budgetary transfers in 2017 Q2 in the amount of 12.8 billion rubles was a significant source for equity support[9]. In fu-

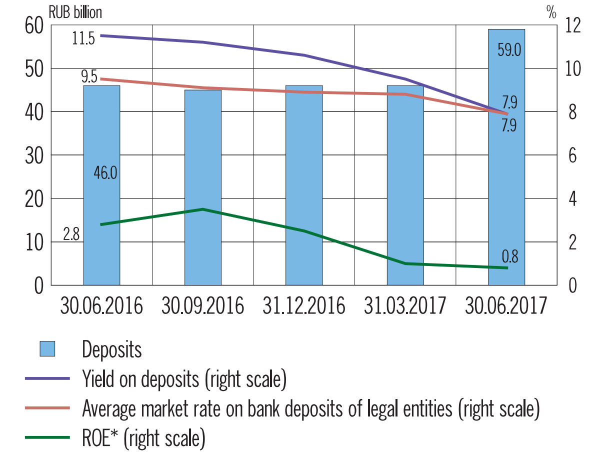
[7] *Not including investments in the affiliated bank SME Bank JSC.*

[8] *The 6.5% Programme provides loans to SMEs for business development at a reduced fixed rate of 9.6% for medium businesses and 10.6% for small businesses. The reduced cost of loans is supported by loans granted by the Bank of Russia to its authorised banks under the Corporation's guarantee at 6.5% per annum.*

[9] *In accordance with Federal Law 415-FZ, dated 19 December 2016, 'On the Federal Budget for 2017 and for the Planned Period of 2018 and 2019.'*

Figure 51

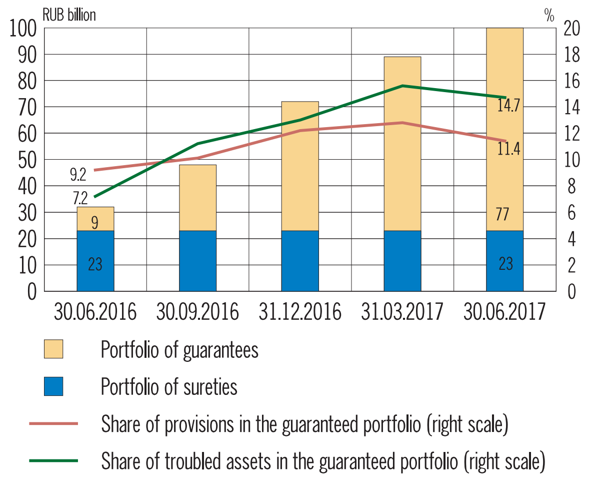
Dynamics of the revenue of SME Corporation



*Rolling year calculation.
Source: Bank of Russia, based on SME Corporation RAS reporting.

Figure 52

Dynamics of the sureties and guarantees



Source: Bank of Russia, based on SME Corporation RAS reporting.

ture the subsidised nature of the Corporation's activity will likely be preserved.

In this light, the initiative of the Ministry of Economic Development of Russia to establish required ratios for the activity of the Corporation at a legislative level becomes particularly relevant[10].

Should this law be adopted, the Corporation will have to calculate and comply with the capital adequacy ratio, equity to liabilities ratio, maximum risk per counterparty or group of related counterparties, and total risk per insider of the Corporation. Numerical values and the procedure for calculating these ratios will be established by the Government of the Russian Federation, and compliance with them will be checked by an audit company, the procedure and terms of such audit to be established by the Government of the Russian Federation by agreement with the Bank of Russia.

Furthermore, the said innovations create the prerequisites for the accounting of guarantees and sureties issued by the Corporation as security of quality category I, according to the Bank of Russia Regulation No. 590P[11], which will create additional incentives for the extension of credit support of SMEs by banks.

4.3. State Corporation 'Bank for Development and Foreign Economic Affairs (Vnesheconombank)'

Taking into account the systemic importance of the activity of the State Corporation 'Bank for Development and Foreign Economic Affairs (Vnesheconombank)' ('VEB Group'), the Bank of Russia analysed the financial condition of the development institution (based on the reporting data under IFRS) and the Development Strategy up to 2021[12] within the framework of ensuring financial stability.

To reduce its risks and develop its activity, VEB Group will need budgetary support

The main findings based on the results of analysis of the financial condition of VEB Group for the period from 30 June 2016 to 30 June 2017 (the 'analysed period'):

- During the analysed period the amount of loss provisions accrued amounted to 401.8 billion rubles, while the loan portfolio decreased by 16.8%.
- The equity growth of VEB Group (by 19.5% to 617.5 billion rubles) is mainly associated with the provision of a subsidy from the federal bud-

[10] *Draft Federal Law No. 203028-7 'On Amending the Federal Law "On the Development of Small and Medium Business in the Russian Federation"' (the wording adopted by the State Duma of the Federal Assembly of the Russian Federation in the 1st reading on 27 September 2017).*

[11] *Bank of Russia Regulation No. 590P , dated 28 March 2017, 'On the Procedure for the Creation of Loan, Overdue Loan, and Equated Indebtedness Loss Provisions by Credit Institutions.'*

[12] *The Development Strategy up to 2021 and the VEB Business Model.*

get in the amount of 196.2 billion rubles[13] to compensate for the costs of performance under external borrowings in the capital market.

- Loans from the Bank of Russia and from the Government of the Russian Federation account for about 20% in the structure of borrowings.
- There has been an outflow of funds raised from credit institutions and customer funds[14] due to negative publicity: 179.9 and 150.2 billion rubles, respectively.

The loan portfolio of VEB Group is focused on sectors with an increased risk level

VEB Group, as a development institution, provides credit support to the most capital-intensive economy sectors. The credit portfolio of the Group (including leasing), less loss provisions on outstanding loans and equivalent debts, amounted to 2,053 billion rubles (or 60.8% of assets) as of 30 June 2017. Most of this amount is provided by project and commercial financing in the field of mechanical engineering, construction and real estate, agriculture, and the financial sector (Figures 54, 55). As was mentioned above (Section 2.1 hereof), the share of 'bad' loans in the cumulative corporate portfolio of banks remains above the average market level in most of the said segments (11.7%): construction, 23.6%; real estate, 18.2%; agriculture, 13%.

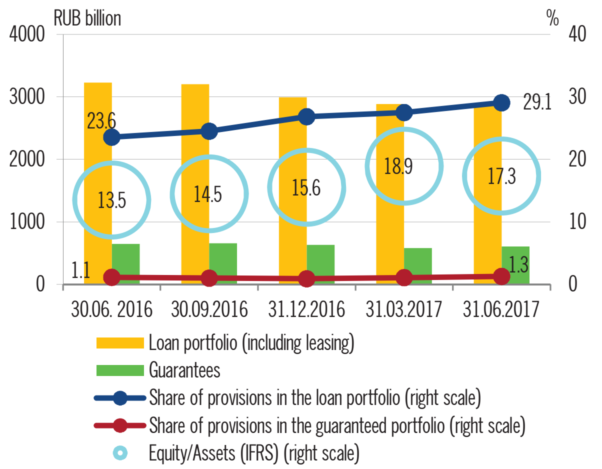
When implementing the New Development Strategy, VEB Group may face the following challenges:

1. Availability of financing in the domestic market. VEB securities will have to compete for the funds of institutional investors with OFZs, investment securities of AHML, and liquid securities of major issuers, which creates prerequisites for increasing spreads in the securities market.

2. Focus on new investment areas: infrastructure, industry, conversion of the defence and military complex for civil production, the high-tech sec-

Figure 53

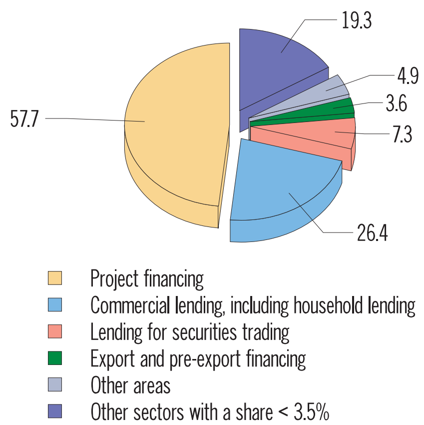
Key characteristics of the loan portfolio and contingent liabilities of VEB Group



Source: Bank of Russia, based on VEB Group IFRS reporting.

Figure 54

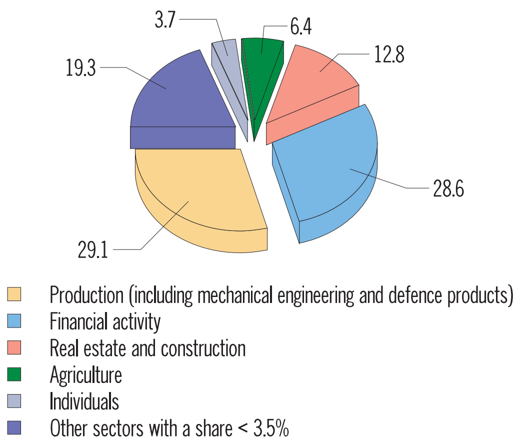
Portfolio structure by areas of lending as of 30 June 2017 (%)



Source: Bank of Russia, based on VEB Group IFRS reporting.

Figure 55

Loan portfolio structure by sectors as of 30 June 2017 (%)



Source: Bank of Russia, based on VEB Group IFRS reporting.

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[13] *This comprises RUB 117.2 billion in contribution to the authorised capital and RUB 79 billion in income from the writeoff of a part of expenditures under government loans raised.*

[14] *The balances of the current accounts of private and public corporations as well as household funds placed in deposits (for the banks resolved by VEB Group).*

tor and export, as well as implementation of the 'factory' programme of project financing. High-risk areas of activity call for increased requirements for the risk management system of the Group, particularly for the level of expert project review and for the availability of integrated risk management (analysis of risks of the group on a consolidated basis).

3. Stabilisation of the financial condition of subsidiaries and their sale. In the absence of demand in the market for the purchase of credit institutions resolved by VEB, the burden on the equity of VEB Group is likely to be preserved in the mid-term prospect.

Taking into account the potential risks described above and the systemic importance of VEB Group for the stability of the Russian financial system, the Bank of Russia will continue monitoring the development institution.

ANNEXES

Annex 1. International Practice with Regard to Reducing Dollarization Measures

For emerging markets and in general for countries with non-reserve currencies, the limitation of foreign currency risks for the financial system and the economy, including risks associated with cross-border capital flows, remains a topical issue.

Direct investments traditionally remain the least risky, as the probability of their quick outflow in a difficult situation is low, and the inflow of foreign capital to the securities market is also considered to be relatively less risky. The biggest risks for financial stability and the economy are associated with the excessive inflow of foreign capital to the debt market.

In the conditions of an economic upturn, the country becomes attractive for foreign capital inflow; borrowers have greater incentives for raising foreign currency loans, but they underestimate the corresponding risks. In the foreign practice macroprudential measures have been used for a long time to minimise the incentives for foreign currency predominance in balances and to mitigate related systemic risks. The measures differ depending on the sector in which the foreign currency inflow is observed.

Corresponding regulatory measures with regard to the banking sector have been taken, in particular in South Korea, Croatia, and Peru.

In 2010 the Republic of Korea faced excessive volatility of the free floating won. For the purpose of suppressing volatility, measures were taken to limit operations with foreign currency forwards and swaps for Korean banks and divisions of foreign banks to 50% and 250% of their equity, respectively. The requirements for the management of liquidity in foreign currency were also toughened for South Korean banks and divisions of foreign banks.

In 2011 a foreign exchange stability levy was introduced in Korea, which was meant to reduce short-term borrowings by banks and to create an instrument for insuring against the risks associated with such loans. Foreign currency loans of banks for less than 1 year were subject to a 0.2% levy; for 1 to 3 years, 0.1%; for 3 to 5 years, 0.05%; and above 5 years, 0.02%. The collected funds were used to replenish the Exchange Equalisation Fund, which was to be spent on the provision of FX liquidity to troubled financial institutions. In 2015 this levy was also applied to borrowings of non-bank financial institutions if their outstanding debt as of the end of the month exceeded $10,000,000, and a levy for foreign currency loans of banks maturing within less than 1 year was established at 0.1%.

According to the assessments of the IMF in the Financial Sector Assessment Program (FSAP)[1], the measures described above turned out to be effective. The share of short-term foreign currency operations decreased from 50% in 2008 to 20% in 2013. This was primarily caused by an increase in the repayment term of foreign currency liabilities in the divisions of foreign banks. The leverage ratio on foreign currency liabilities of divisions of foreign banks decreased from 260% at the moment the said measures were introduced to 90% in late 2013.

In 2004–2006 an unremunerated marginal reserve requirement on banking FX loans (24% in 2014, with a gradual increase to 55% in 2006) was introduced in Croatia to suppress short-term foreign currency inflow in order to support macroeconomic stability and to limit excessive lending growth. According to the FSAP 2008[2] these measures facilitated a slowdown in foreign currency lending and an increase of the capital level in the banking sector, because of the increased reserve requirements it would be more favourable for the parent foreign banks to inject capital than to extend loans in foreign currency. However, as a result, the effectiveness of the measures turned out to be insufficient,

[1] *International Monetary Fund. Republic of Korea. Financial System Stability Assessment // IMF Country Report. No. 14/126. May 2014.*

[2] *International Monetary Fund. Republic of Croatia: Financial System Stability Assessment – Update // IMF Country Report. No. 08/160. May 2008.*

as the subsidiary banks started referring their customers to the parent non-resident bank. Customer verification and operations related to the execution of documents were performed by the subsidiary resident bank, while the final contract and loan extension formally took place in the parent organisation outside Croatia.

In Peru, as part of the reduction of dollarization of FX liabilities of banks, increased provisioning requirements were established: they amounted to 42.2% (vs. 19.3% for liabilities in the national currency). Furthermore, the provisioning ratio for short-term foreign currency liabilities amounts to 60%. In the opinion of the IMF (report on Article IV, May 2017), this measure, along with other measures (primarily, the transition to the inflation targeting mode in 2002), made it possible to reduce the dollarization level. The IMF also recommended that the regulators in Peru increase loss provisioning for FX loans issued to non-hedged borrowers.

The experience of Indonesia is one of the best-known cases of limitation of the FX debt burden in the corporate sector. In 2014 this country took measures to improve risk management quality when companies make external FX borrowings, which were designed to facilitate the mitigation of foreign currency risks for the companies and the limitation of short-term foreign capital inflow. In particular, non-financial organisations that make external borrowings must meet three requirements:

1. The hedging ratio for the change of the FX exchange rate against the rupiah: the part of foreign currency liabilities maturing within less than three months and within three to six months which is not covered with foreign currency assets must be hedged by 25% (initially by 20%). Hedging transactions shall be executed with banks from Indonesia. The Bank of Indonesia determines the threshold level of the negative difference between foreign currency assets and liabilities upon reaching which the requirement to comply with the hedging ratio starts to apply. The exception for the hedging ratio requirement is made for companies whose reporting currency is the US dollar, provided that during the previous year the ratio of export revenue to total commercial revenue in such companies was no less than 50%.

2. Liquidity ratio: the minimum level of the short-term FX liquidity ratio (the ratio of assets and liabilities denominated in foreign currency maturing within less than 3 months) is set at the level of 50%, and starting 1 January 2016, at 70%.

3. Credit rating: a rating assigned by the competent agency to the borrower and/or to the debt security at a minimum level of BB- (or equivalent rating). This requirement does not apply to external loans for the purposes of refinancing, external loans raised for infrastructural projects, or commercial and export loans.

The analytical note on Indonesia published by the IMF in 2016[3] stated that the growth of foreign corporate debt continued and amounted to 20% of GDP in 2015, and foreign sources accounted for 60% of all borrowings of corporations. The implemented measures facilitated the overall improvement of risk management quality. However, the IMF points out that the risks of losses associated with the decline of the Indonesian rupiah exchange rate remain and recommends that the authorities continue monitoring of the situation.

Annex 2. Summary of Current Macroprudential Policy Measures in Foreign Countries

1. Countercyclical Capital Buffer (CCyB) Requirements

Starting from 28 June 2017 the Bank of England increased the CCyB from 0% to 0.5% of RWA. The increase of CCyB to 0.5% should provide banks with an additional 5.7 billion pounds sterling in common equity Tier 1 capital. The main reason for increasing the CCyB lies in the increased risks of consumer lending (growth rates exceed 10%) and in the considerable size of the debt burden of households (debt servicing costs remain at a low level due to low interest rates). Besides this, the Bank of England pointed out external global risks associated with BREXIT and risks of asset revaluation. Starting from November 2018 the Bank of England plans to increase the CCyB to 1% of RWA. In July 2017 the National Bank of Slovenia decided to increase the CCyB from 0.5% to 1.25% of RWA as of 1 August 2018.

[3] *International Monetary Fund (2016): 'Indonesia. Selected Issues,' March 2016.*

2. Systemic Risk Buffer

Starting from 1 July 2017 the National Bank of Hungary has introduced a systemic risk buffer in the amount of 0% to 2% for each group of banks, depending on the contribution of the credit institution to systemic risk, which depends on the risks associated with commercial real estate.

Based on data as of 31 March 2017, for now there are two banks for which the systemic risk buffer has applied since 1 July 2017: CIB Bank Zrt (+2.0%) and Raiffeisen Bank Zrt. (+1.5%).

In July 2017 the Danish financial supervisory authority published a notice that starting from 2019 the systemic risk buffer will gradually apply to 6 banks in the amount of 1% to 3% (DLR Kredit and Sydbank, 1%; Jyske Bank and Nordea Kredit Realkreditaktieselskab, 1.5%; Nykredit Realkredit, 2%; Danske Bank, 3%).

In July 2017 the Central Bank of Cyprus decided to establish a systemic risk buffer for 6 national systemically important banks in the amount of 0.5% to 2% starting from 1 January 2019 (Eurobank Cyprus Ltd и Alpha Bank Cyprus Ltd, 0.5%; Cooperative Central Bank Ltd и Hellenic Bank Public Company Ltd, 1%; RCB Bank Ltd, 1.5%; Bank of Cyprus Public Company Ltd, 2%).

Starting from 1 January 2018 the National Bank of Slovakia plans to establish a systemic risk buffer in the amount of 1% for systemically important banks. The buffer will apply to three banks: Všeobecná úverová banka, a.s.; Slovenská sporiteľňa, a.s.; Tatra banka, a.s. The list of systemically important banks is updated on an annual basis; the next decision will be made in May 2018.

Starting from 1 January 2018 the National Bank of Slovenia is introducing a systemic risk buffer for 5 banks in the amount of 0.5% to 1% (Tatra banka, a.s., 0.5%; Ceskoslovenska obchodna banka, a.s., Postova banka, a.s., Slovenska sporitel'na, a.s. and Vseobecna uverova banka, a.s., 1%).

Table 8

Ratio of troubled loans and domestic claims to equity within Component I

Ratio of troubled loans and domestic claims to equity within Component I	Buffer size, %
0.00–29.99%	+0.0
30.00–59.99%	+1.0
60.00–89.99%	+1.5
Above 90.00%	+2.0

The Ministry of Finance of Poland notified the European Systemic Risk Board (ESRB) of the introduction of a systemic risk buffer of 3% for all national credit institutions starting from 1 January 2018. The buffer size will be revised every two years. The decision is stipulated by the uncertainty of economic growth in the developed European countries, the situation with BREXIT, changes in US policy, and the close interrelation between the economy of Poland and many other European countries, which may increase external shocks.

3. Implementation of loan to value ratio (LTV) and debt-to-income ratio (DTI) caps

Starting from 19 May 2017 the Hong Kong Monetary Authority introduced new prudential measures for mortgage lending, according to which:

The minimum risk ratio for new mortgage loans is increased from 15% to 25% for banks using an IRB approach to the assessment of credit risk.

The LTV ratio shall be decreased by 10 p.p. for borrowers with one or more existing mortgage loans. Therefore, the maximum LTV for some loans of borrowers will amount to 50%. The Hong Kong Mortgage Corporation will continue insurance of a mortgage with an LTV of 50%–80% (in some cases, up to 90%).

The maximum debt servicing ratio (DSR) is decreased by 10 p.p. for the borrowers who receive their primary income outside Hong Kong (depending on whether there are other mortgage loans, DSR may be 30%–50%).

Starting from 20 July 2017 the Financial Supervisory Authority of Iceland introduced a cap for LTV of mortgage loans. In accordance with the new requirements the maximum LTV amounts to 85%, and for a first mortgage, 90%.

In August 2017 the Financial Services Commission of the Republic of Korea published information on its plans to toughen requirements for LTV and DTI to 40% for buyers of residential real estate in certain districts (regardless of the type of real estate or the amount and term of the mortgage loan) in order to limit speculative demand. For persons purchasing real estate for the first time, for persons with annual income below 60 million won ($53,400), and for purchases of real estate with a value below 600 million won ($534,200), both ratios will be 50%.

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