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FINANCIAL SYSTEM STABILITY THREATS AFTER 2008 ANTI-CYCLICAL POLICIES

The financial crises is a major issue for the economists because they are phenomena which raise questions regarding their future evolution, the impact on the world economy as a whole and on each state. In a globalized economy the financial crisis cannot be isolated to one country. To avoid the emergence of future one, we need to identify the fundamental factors which trigger them.The paper dwells on a wide range of causes and consequences of the 2008 financial crisis, the pseudo-scientific concepts and the essential systemic shortcomings. The problem is still relevant today. The aim of research is to show the theoretical and objective weakness of used anti cyclical policies. The crisis has affected different countries varying degrees and has caused the unconventional consequences. The real situation that has arisen as a result of this crisis in developed countries requires the awareness of its sense and creates a need for preventive measures. However, it is necessary to define clearly the crisis diagnosis and treatment methods. The paper is an empirical study of Keynesian and monetarist approaches, which were used to overcome 2008 financial crisis. Theauthorspayparticular attention to activities of rating companies, whosespread contributed to shaping the irrational attitudes tothe credit and financial systems, their capacities and role in the economy. Analysis of monetary and fiscal stimulation programs on overcoming the financial crisis allowed the authors for assessing the effectiveness of the Keynesian approaches combatting the causes and consequences of the crisis. This is particularly true for economic outcomes resulting from the monetary injections carried out within the quantitative easing programs. Despite the change in the framework of the supervisory policy and its implementation, the analysis of the processes occurring in the financial system, which are characteristic of the pre-crisisperiod, revealed that instead of changing the supervisory policy, in order to prevent the crisis, it is necessary to implement structural reforms with a view to overcoming the principal shortcomings existing in the credit system.

Key words: credit (loan), financial crisis, business-cycle.

Угрозы устойчивости финансовой системы после антициклической политики 2008 года

В статье рассматривается широкий спектр причин и последствий финансового кризиса 2008 года, псевдонаучные концепции и системные недостатки. Проблема не теряет актуальности и по сей день. Кризис в различной степени затронул разные страны и вызвал неординарные последствия. Реальная ситуация, сложившаяся в результате кризиса в развитых странах требует осмысления и создает необходимость принятия превентивных мер. Однако необходимо провести четкую кризисную диагностику, а также методы лечения. Авторы особое внимание уделяют деятельности рейтинговых компаний, распространение которых способствовалоформированию нерациональных взглядов на кредитно-финансовые системы, их возможности и роль в экономике. Анализ программ денежно-кредитного и финансового стимулирования по преодолению финансового кризиса позволил авторам оценить эффективность кейнсианских подходов к борьбе с причинами и последствиями кризиса. Особенно это касается экономическогоэффекта, полученного в результате денежных вливаний, осуществляемых в рамках программ количественного смягчения денежно-кредитной политики. Несмотря на изменение рамок надзорной политики и ее улучшение, анализ процессовв финансовой системе, характерныхдля предкризисного периода, показал, что вместо изменения надзорной политики для предотвращения кризиса важно проводить структурные реформы с целью искоренения принципиальных не-

достатков, существующих в кредитной системе. Цель исследования – показатьтеоретическую и объективную слабость используемой антициклической политики. Авторы проанализировали эмпирические данные антициклической политики и представили результаты. Также в статье сформулированы проблемы современного финансового пространства в глобальном масштабе. Авторы утверждают, что проблемы в финансовом секторе были более глубоко интегрированы в механизм кредитования, чем это было представлено политиками.

Ключевые слова: кредит, финансовый кризис, бизнес-цикл.

Introduction

A financial crisis is often linked with one or more of the following phenomena: substantial changes in credit volume and asset prices; severe disruptions in financial intermediation and the supply of external financing to various actors in the economy; large scale balance sheet problems; and large scale government support. As such, financial crises are typically multidimensional events and can be hard to characterize using a single indicator. The literature has clarified some of the factors driving crises, but it remains a challenge to definitively identify their deeper causes. Many theories have been developed over the years regarding the underlying causes of crises. While fundamental factors – macroeconomic imbalances, internal or external shocks – are often observed, many questions remain on the exact causes of crises. Financial crises are often preceded by asset and credit booms that eventually turn into busts. Many theories focusing on the sources of crises have recognized the importance of booms in asset and credit markets. However, explaining why asset price bubbles or credit booms are allowed to continue and eventually become unsustainable and turn into busts or crunches has been challenging. This naturally requires answering why neither financial market participants nor policy makers foresee the risks and attempt to slow down the expansion of credit and increase in asset prices.

The 2008 global financial crisis was a particular phenomenon in the history of financial crises. In addition to its global nature, which is due to its magnitude, it has enabled the researchers and scientists interested in this issue to test the existing theories of money and credit and economic cycles in reality. Unlike the exact and natural sciences, as well as medical area, social science research is deprived of the opportunity to perform "test" to find out the truth, as well as to prove new or existing theories. Therefore, the 2008 global financial crisis, despite its heavy consequences and challenges highlighted, is scientifically fertile ground for the assessment of scientific theory and concepts.

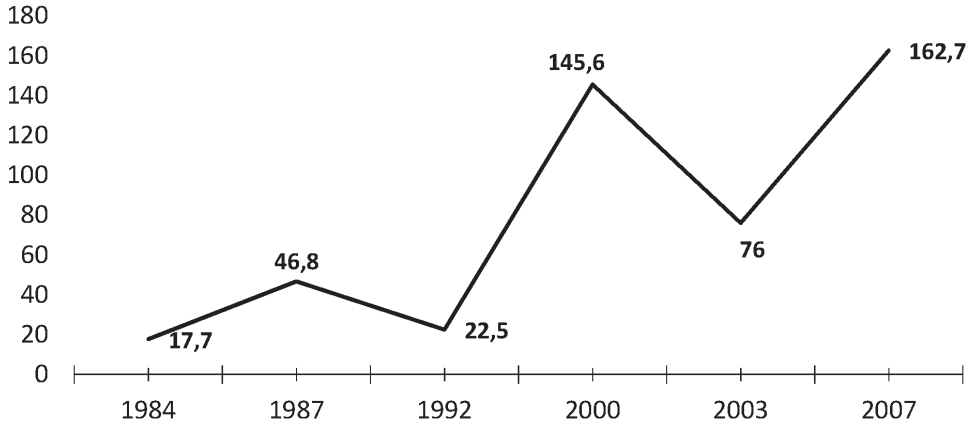
Factors of the 2008 global financial crisis

In the late nineteenth century and early twentieth century, the liberal credit policy prepared a global economy excessively saturatedwith credit.

There was emerged the so-called credit "overproduction", that is a special virtual credit universe, due to which, the imbalance was grown between the real and financial sectors (see Figure 1).

Figure 1

The total value of securities/GDP in the world, %



Source: World Bank 2019.

If in the early stages of the development of credit relations, it was considered to be a "serving" instrument of real economy, the imbalance registered in the 2000s formulated a different approach to the financial system. It was not regarded as an instrument of a real sector, which in turn stimulates economic growth, but as an independent source of economic growth.

A similar trend has been occurring in the structure of corporation income. In 1960–1984, in the USA, only 17.4% of total corporate profits were accounted for by the financial sector. In the early 2000s, this figure rose to above 40%, and by 2002 it reached 44%. It is important to note that the growth rate of profit in the financial sector exceeded the economic growth rate (Khatiwada 2010).

The phenomenon of derivatives has played a special role in strengthening the financial sector as the institution "independent" of the economy. For the financial system, it has almost completely eliminated the ceiling lending limit, the threshold above which the lending rate went beyond the rational framework. In 2009, the exchange trade and turnover of derivatives became the largest consumers of credit.

Table 1

Financial derivatives in the world, $ milion

Market	Open positions In nominal		
	1990	2004	2007
Stock trading	2 290.4	46 592.1	80 575.9
Overseas trade	3450.3	181 132.0	596 004.0
Total	5 740.7	227 724.1	676 579.9

Source: Khidasehli 2014, p. 64.

The reason for the sharp increase in the volume of derivatives was the revitalization ofwaning illiquid assets, and the discounting has become the main method of an approach to different financial contracts.

The rating agencies have made their contribution to the "preparation" and development of the 2008 financial crisis. In 2008, the rating agencies were accused of making an inadequate assessment and misunderstanding of riskiness of derivatives secured by real estate. For example, in 2017, the Mood's rating company substantially downgraded the ratings of 83% of derivatives secured by real estateworth $869 billion, while in 2006 the same securities were rated at the AAA.

The ground for criticising rating companies was alsothe conflict-of-interest issue due to the so-called "issuer pays" model. According to this model, the issuer of the securities pays the rating agency to enable the latter to make aninitial valuation of the securities it issued, as well as the resumption of this valuation afterwards (Council of Foreign Affairs 2015).

Special challenges were encountered with respect to evaluation of derivatives. Besides, during the pre-crisis period, most of the revenues of the rating companies were used tovaluatederivatives. The main threat was the fact that the derivatives can be projected in such a way that allows for obtaining the desired rating. By means of the analogous instrument of "financial alchemy", the financial instruments, in which there were used the securities with low ratings (including the CCC ratings), were able to easily be converted to the securities rated at the AAA.

Against the background of the above circumstance, at the beginning of the new millennium, banks and stock exchanges continued to operate successfully, which stirred the universal admiration and was viewed as exemplary, but this is not all that caused their growing significance. The more important factor was the penetration of credit and the exchange trade in all areas of society and the establishment of a system, which, on the one hand, involves the global movement of value, and on the other hand, the development of a comprehensive credit and exchange-trade culture. In parallel to this, at the end of the first decade of the new century, there were also spread a lot of myths and assumptions about viability and sustainability of transnational banks.

In 1980, only 20% of the banking sector assets were accounted for by10 largest banks in the United States, while in 2014, this figure rose to 50%. Banks were integrated into the complex financial conglomerates, which included the entire spectrum of the financial sector. They carried out not only depositing, lendingand mortgage activities, but they also provided broker-dealer, insurance, asset management, etc. (Cetorelli, Traina 2018).

The consolidation process occurring in the banking sector has led to the formation of banking institutions, despite the institutional-legal form of which, their impact on the sector and the economy has become considerable and dangerous. A situation has emerged inwhichthe business and financial problems of banking institution of a similar size were dangerous for the entire financial system. As a result, the financial system, economy and the general public have found themselves in a state of "hostage", and the approach "Too Big to Fail"to this type of financial institutions has been established. This situation allows financial institution for being less cautious and overly liberal

during the formation and implementation of lending policy, since the State can not allow the financial system to fail, which in turn can cause financial problems of this banking institution.

J. M. Keynes approaches to recession

Keynes was deeply convinced of the need for the role ofState in stabilizing the economy. In his assessment, only through state interventions, it was possible to ensure high level of employment in the long term. In particular, Keynes believed that the decline in demand, which in turn was caused by the reduction of purchases by financially restricted consumers, resulted in a decrease in economic growth and a cycle, since due to the reduction of purchases, businessesconducted reduction of wages or personnel.

Keynes believed that the government had the responsibility and obligation to intervene in the economy and prevent the economy shrinking. In this regard, it confers one of the central functions on the Central Bank as an institution, which is required to develop a monetary policy, within which low, by means of low interest rates, it increases the supply of money to business and consumers. Increasing the accessibility of money will allow business for recapitalizing andstarting developing, recruiting more employees, which will bring the unemployment rate down.

He also believed that the impact of State on the economy had to make impact on the economy not only with the monetary tools, but also in the fight against unemployment, it also had to use government investment in the various sectors of the economy, to finance private enterprises.

In general, Keynes's approach consisted in the need to confront the recession and depression through state interventions. From a fiscal point of view, this approach has taken the following form: during depression and recession, government has to reduce taxes and increase spending, especially in non-financial assets. He believed that such fiscal policy would impact on aggregate demand that in turn could lead to economic growth. According to Keynes, the recession and depression are caused by insufficient aggregate demand (AD), and consequently, the State has to bridge this gap through fiscal and monetary interventions in order to prevent a drop in economic growth.

Bail outs

Assistance provided to banks consisted of three parts. At the first stage, assistance of the US State Treasury to 707 financial institutions in 2008–2009 was totalling $205 billion. The amount of assistance of aid fluctuated between $300 thousand $25 million, while the interest rate was 5–7.7%, and the interest rate rose to 9–13.8% over the five years. This loan was secured through the preferred shares or bonds that were, in turn, bore the right to exchange them for common stocks. The second part of the funding started in January 2009, when the US State Treasury allocated $20 billion to the City Bank and the Bank of America each. The third part of the program also

started in January 2009, when the US State Treasury, the Federal Reserve System and the Federal Deposit Insurance Corporation jointly became guarantors of $118 billion in losses, which threatened the City Bank and the Bank of America (Anderson, Gascon 2011).

The largest program of the Federal Reserve System was the so-called TAF (Term Auction Facility), which enabled banks to receive loan from the Federal Reserve System on a weekly basis. The program was launched in December 2007 and ended in April 2010. The most controversial program of the Federal Reserve System was the Maiden Lane (ML I), the purpose of the program was to assist the J.P. Morgan Chase to buy the Bear Stearns and Co. The New York's Federal Reserve Bank allocated for this deal $28.5 billion (Federal Reserve Bank of New York 2012).

Apart from banks, the Federal Reserve System and the US State Treasury have also assisted number of insurance companies. Among them, the most assistance was provided to AIG. Assistance to insurance company started in September 2008 with a loan secured with $85 billion. On 25 November of the same year, the Treasury bought the newly issued preferred shares worth $40 billion. On April 17, 2009, the Treasury created the support of the share capital worth $29.8 billion especially for AIG. On September 30, 2010, the Treasury allocated $69.8 billion to AIG.

For its part, the Federal Reserve System also assisted AIG in autumn 2008 within the limits of ML I–II and ML I–III, where the insurance giant received a $70 billion loan from the Federal Reserve Bank of New York (Karnitschnig et al. 2008).

One of the largest beneficiaries of the US Treasury Assistance Program was the Fannie Mae and Freddie Mac. The support from the Treasury included the purchase of the newly-issued preferred securities. On 30 June, 2010, the Treasury invested $187.5 billion in this company (Frame et al. 2015).

After the crisis, the US Treasury provided significant financial assistance to the automotive industry. The total assistance to the General Motors amounted to $49.5 billion, including $6.5 billion as a loan, $2.1 billion were invested in preferred shares, and the remaining investment was used to buy 61% of share capital. Financial assistance to the Chrysler amounted to $12.5 billion. Overall, the Treasury's financial support for the automotive industry amounted to $81.7 billion (Weisman 2014).

Quantitative Easing

In terms of the scope, along with the Treasury, the anti-cyclic measures also actively involved theFederal Reserve System. The main instrument that it used at this time was the Quantitative Easing program (QE). Within this program, the Federal Reserve System was buying securities linked to real estate from its member-banks.

The first program (QE1) was launched by the Federal Reserve System on November 26, 2008. The structure of securities purchased at the initial stage was as follows: $600 billion were securities linked to real estate, $100 billion were unsecured securities. From 2008 to 2010, within the QE1, the balance sheet of the Federal Reserve System increased up to $2.1 trillion, while prior to the start of the Quantitative Easing program, its balance sheet did not exceed $800 billion.

In the parallel, the Federal Reserve System pushed down its refinancing rate to zero and started to pay interest on the minimum reserve demanddepositedin the correspondent accounts (McInish et al. 2017).

Since 2010, the second stage of the Federal Reserve System's Quantitative Easing program (QE2) has come into action. The declared goal of the program was to buy the Treasury securities worth $600 billion. The purpose of purchasing securities from the banks was to keep the lending rates low. This would lead to a rise in lending and stimulating the economy. However, the low interest rates did not result in the planned lending growth – during the recession, it was not easy to find the solvent loan seeker.

Consequently, the Federal Reserve System bought the 10-year Treasury Bonds worth $30 billion, on the one hand, in order to keep the interest rates low, and on the other hand, to make the Treasury Bonds non-attractive and to trigger investors to return to securities linked to real estate. Through the QE2, the Federal Reserve System (PSS) also sought to reach moderate inflation, in order to stimulate the economy through the grown demand. The principle is simple, when society knows that the prices are gradually rising in a certain dose, it tries to buy now, in order to avoid paying more. In this regard, the FRS was considering inflation to be a driving force of demand. In June 2011, the FRS completed the QE2 program. At that time, its balance sheet amounted to $2.8 trillion.

On 13 September, 2012, a new phase of the FRS Quantitative Easing program (QE3) was started. At the outset of this program, the FRS declared that it was planning to continue the easy monetary policy until the tangible results in the decrease in the rate of unemployment are obtained. At this stage of Quantitative Easing policy, the main goal of the FRS – to achieve the target rate of inflation, was replaced by the goal to decrease the unemployment rate. The FRS also declared that the zero rate on the refinancing loans will be kept until 2015. With that, the FRS tried to influence on expectations of business actors. Within the QE3, the FRS has announced its desire to buy assets worth $40 billion secured by real estate.

At the same time, the FRS implemented the so-called "Operation Twist", within which the System was selling the short-term treasury bills and was buying the 10 year treasury bills. The increase in demand for the long-term treasury bills from the FRS side has completely naturally resulted in reduction in the interest rate on the same securities.

The greater the demand for securities, the lower the interest rate established by the issuer, and vice versa. Since the interest rate on the Treasury securities is the base one for all long-term treasury bills, this action of the FRS made real estate and securities linked to real estate more profitable. The FRS completed the QE3 program in December 2012. At that time, the balance sheet of the Federal Reserve System amounted to $2.9 trillion.

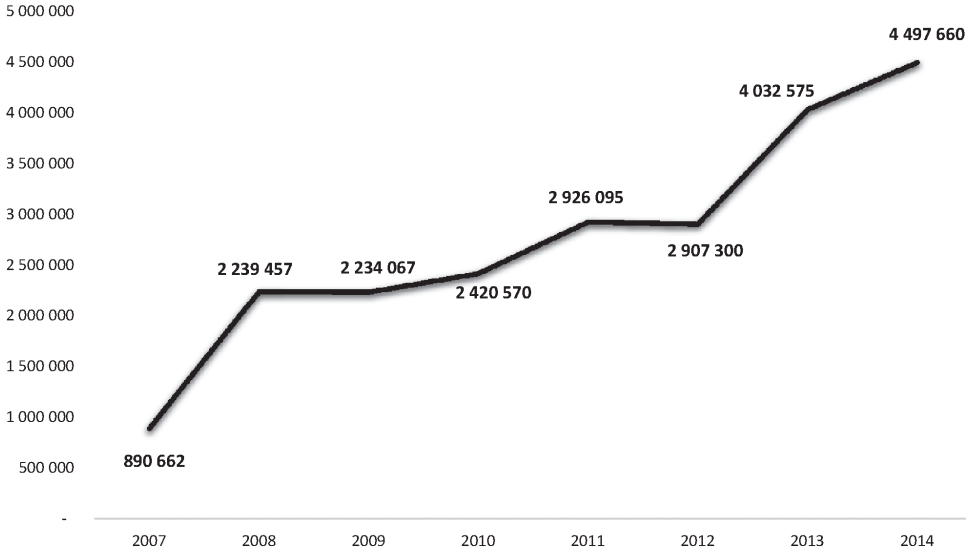
The final stage of the Quantitative Easing program (QE4) started in January 2013. Within the program, the Federal Reserve System was buying from itsmember banks the Treasury bonds worth $85 billion every month. The Federal Open Market Committee stated that by the end of the year, purchases of Treasury Bonds to be

implemented within the Quantitative Easing policy will be gradually reduced, in particular, by $10 billion a month. It is noteworthy that at the end of QE4, the balance sheet of the FRSexceeded $4 trillion.

Within the framework of four Quantitative Easing programs, the balance sheet of the Federal Reserve System increased from $0.9 trillion to $4.5 trillion (see Figure 2). It is important to note that in US history, the implementation of monetary injections of this scale is unprecedented.

Figure 2

US Federal Reserve total assets, $ million



Source: US Federal Reserve 2019.

Regulatory and supervision reforms

In addition to the ongoing fiscal and monetary measures of anti-cyclic regulation, through which the political authorities sought to avoid economic depression, a number of steps were taken to change the supervisory and regulatory framework. The financial system's governing structures thought that shortcomings in the supervisory policies were a cause of. It is for this purpose that the Basel Committee has developed a new package of reforms of the supervisory framework, which aims to prevent the developments similarto the 2008 financial crisis.

In terms of scale, the banking institutions of USA, Switzerland, UK and European Union have grown so much in relation to the respective economies that they have become bearers of the systemic importance. Consequently, their collapse meant that the entire economy enters the deep economic crisis. Finally, for this reason, the taxpayers had to fund their financial difficulties. This fact has become a source of inspiration for

Basel III, in order to enable banks to perform functions of economic development rather than to facilitate its collapse.

Basel III was aimed to put the banking sector in the framework of the overly liberal lending policy that would protect them from the threats of excessive illiquidity. The Basel Committee found that the existence of the insufficient liquidity buffer was what caused the crisis, because banks were unable to absorb loan losses due to this factor.

The authors of Basel III believed that they created such a regulatory framework, which protects the financial sector from external and internal shocks. Consequently, the new standards included micro-prudential reforms at the level of individual banking entities and macro-prudential reforms in terms of the banking sector. The bank was required to improve and maintain the quality of capital availability, which would protect it from the unexpected shocks developed in the financial market (World Finance on Basel 2018).

Requirements of Pillar 1 and the combined buffer. From the minimum requirements for supervisory capital (the minimum requirements of basic primary capital, primary capital and total supervisory capital – 7%, 8.5% and 10.5% respectively), there has been separated the capital conservation buffer – 2.5%, which was previously integrated into the minimum requirements. As a result, the minimum requirements for renewed capital are 4.5%, 6% and 8% in accordance with the requirements for basic primary capital, primary capital and gross supervisory capital.

Along with the above changes, through basic primary capital, banks are required to protect additional the so-called combined buffer, which includes the buffer of conservation, counter-cyclicality and systematicity. To this end, as the conservation buffer rate, there were determined 2.5% of the total risk positions weighted in accordance with risk, while asthe counter-cyclical buffer rate, there was determined 0%. A counter-cyclical buffer can be established within the range from 0% to 2.5%. This will be revised periodically, on the basis of the financial and macroeconomic environment. For the systemically important commercial banks, there has also been introduced been able to introduce the systematicity buffer.

The introduction of the systematicitybuffer serves several purposes as follows:

- to provide greater financial sector sustainability;
- to reduce the probability of large bank failures and avoid the resulting systemic problems;
- to reduce moral hazard in systemic banks;
- to reduce the potential burden on the taxpayers when providing assistance to troubled banks;
- to reduce the concentration and, as a result, to promote competition.

Requirements of Pillar 2. According to the Basel III framework, commercial banks, within Pillar 2, should maintain the adequate buffers of capital for risks that are not adequately included in Pillar 1.

The requirements for capital within Pillar 2 include the requirement of a capital buffer for the unprotected risk positions, which have until this time been integrated into Pillar 1. This buffer is a macro-prudential buffer that aims to reduce systemic risk

caused by dollarization. The adoption of this buffer once more expresses the National Bank's policy to gradually reduce dollarization ofthe banking system, in order to ensure financial stability and promote the flexibility of the economy during the external shocks.

It is important that the capital buffers imposed within Pillar 2 should be met by commercial banks in the same proportion of supervisory capital elements, as is given in the minimum requirements (basic initial capital – 4.5%, primary capital – 6% and total supervisory capital – 8%). Accordingly, 56% of capital requested within Pillar 2 should be protected by the elements of basic primary capital, while 75% of it, should be protected by elements of primary capital. With a view to bringing into line with these requirements, the commercial banks will be provided with a relevant timeframe.

As a result of the changes made regarding capital adequacy, in case of the violation of the amount of a new total capital established for the commercial bank, it will be deemed that capital combined buggers are the first ones that are violated. According to changes made in the provisions of "Capital Adequacy Requirements", in case of violation of these buffers, the commercial bank is prohibited to distribute capital, including dividends.

At the same time, the requested total amount of capital specified within Pillar 2 can be temporarily reduced for a maximum period of one year, by the unexpected downward fluctuation in the exchange rate, in the amount of capital request caused by the mechanical growth of assets weighted in accordance with risk. The amount of capital that will reduce the demand within Pillar 2, will be counted by the methodology developed by bank and agreed with the National Bank. The Commercial Bank is required to ensure the calculation of capital in accordance with this methodology.

Requirements of Pillar 3. Along with Pillar 1 and Pillar 2, the Basel III framework includes the requirements relating to market discipline through Pillar 3, according to which thecommercial banks have already published the 3rd quarterly reports. This will promote the transparency of the banking sector and, consequently, the improvement of market discipline.

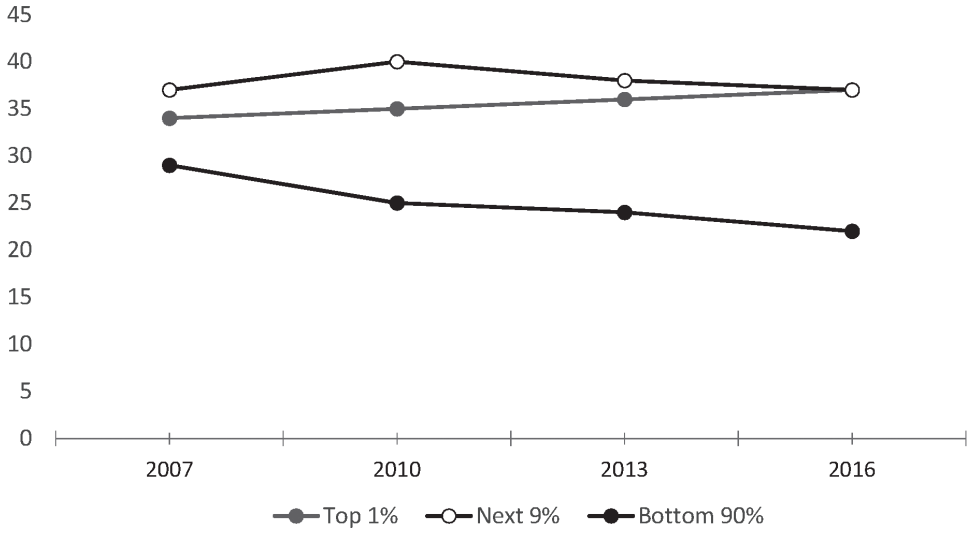
Unconventional monetary policy results

From November 2008 to November 2014, the FRS's balance sheet, within the QE program, increased by $3.6 trillion, while in the same period the nominal GDP increased by $ 2.9 trillion. Besides theabsolute indicators, the fact that the real economy is strongly dependent on the QE program support is also a negative indicator. As a result, prices for financial assets went up without fundamental market factors. The latter has affected the capital movement not only between the US economy sectors, but also from the developing countries to the US, and vice versa regarding the movement of financial movement (Roach 2018).

In addition to the weak impact on economic growth, the QE program has had the mixed impact on the distribution of incomes and wealth in the United States. Particularly, in parallel with the program implementation, the inequality of the distribution of incomes and wealth has been rising infavour of the rich social strata (see Figure 3).

Figure 3

Recent trends in the distribution of income and wealth in US



Source: Federal Resreve Bank of Cleveland 2017.

In parallel to the quantitative easing program, the Federal Reserve System was massively buying Treasury Bonds, and as a result, from 2008 to 2017, domestic government debt was doubled and GDP achieved 76%. Unambiguously, after the completion of the quantitative easing program, the above factor will have a negative impact on the economy.

Basel III and bubbles. In addition to the quantitative easing program, the financial world has developed a new regulatory framework in the form of Basel III, which was expected to prevent the future financial crises, but since 2016, there has still been observed the accumulation of factors similar to those that had caused the 2008 crisis in the financial sector.

Similarly to 2005, when in the United States, the average median index value was above the rate of inflation by 35%, by the end of 2018, this indicator reached 32%. The Case-shiller National Index reached its peak in December 2016. For example the value of houses in Denver and Dallas exceeded the peak of 40% that existed before the crisis (Olick 2017).

Affordability of real estate was significantly limited. In 2010, 11% of rental facilities were affordable for low-income families, while in 2016 the same parameter decreased to 4% (Tracy 2017).

In March 2017, William Poole warned the public of the recurrence of the financial crisis. According to him, 35% of Fannie Mae's loans require mortgage insurance. That approximately commensurate with a similar figure of 2006 (Poole 2017).

The main problem for the financial system sustainability is student loans to finance their study – $ 1.5 trillion. It is hard to imagine how to service these loans taking into

consideration the rate of youth unemployment. According to Sheila Bair, the former head of the Federal Deposit Insurance Corporation, 20% of these loans are already doomed to default, and by 2023, the default indicator may reach 40% (Bair 2018).

Monetary interventions and their results

Equilibrium between demand and supply without monetary interventions is ensured by a free pricing system. The price for credit products in the free unregulated market is established based on the "time advantage". It is a question now of exchanging today's product (money) for productthe acceptable in the future. Under the free market conditions, it is better "an egg to-day" than "a hen tomorrow". This "advantage" is what establishes the interest rate and its level depends on how big or small this "advantage" is for market participants.

The "time advantage" also determines the volume of investments and savings. If the time "time advantage" is reduced, people consume less products, and they save and invest more. At the same time, for the same reason, the interest rate on loans is falling, because as have mentioned before, the time-related "advantage" has been reduced. It is economic growth that the consequence of this "advantage".

Now let us consider what happens when the reason for the reduction in the interest rates is not a low-time advantage and large savings, but mitigation of the Central Bank's monetary policy. What happens when the reduction in the interest rate is caused by unnatural and artificial circumstances? The answer is simple. The unnatural, artificial reduction of the interest rates leads to some problems. When the interest rates on loans go down, business, naturally, increases investments. Particularly noteworthy is the fact that part of investments goes to financing the projects that have become viable and profitable as a result of the reduction in the interest rates. The response of business is the same as in the case of the naturally reduced interest rates due to the increase in savings.

Business exploits cheap credit resources and increases the demand for capital goods through their investment. There are the growing rental value, salary, etc. Such business behaviour is not explained by the real savings, but it is the result of the artificially cheapened money. However, business takes it as a natural market signal and acts in accordance with this given.

The problem begins when the employer and the renter begin to spend the increased incomes. Since the reason for the reduction in the interest rates is not the reduction in the "time advantage", people do not want to reduce their spending and save more, as it happens in case of the reduction in the "time advantage". This means that instead of savings, which could create an additional demand for capital goods in the form of investments, they direct their spending to the consumer market, which is reflected in the capital goods industry. It will turn out that business has made excessive investments in the sector of capital goods, and less investments – inthe sector of consumer products. The artificially reduced interest rates misled business and tricked them into thinking think the total amount of savings was above the existing ones.

An inflationary bubble leads us to the distortion in the system of pricing and production. When the excessive demand generated for capital goods is based on monetary interventions and credit expansion instead of real savings, the economic decline is the market's response to a "foreign body" invaded in its system in the form of monetary interventions. The market in this form is trying to bring the economy back into the equilibrium state based on natural factors. Depression is a painful but necessary process in order to free the economy from ineffectiveness, which in turn was due to artificial factors. An unreasonably increased price for capital goods should be returned to its natural, equilibrium level (Chikhladze, Khidasheli 2015).

How long can the economic growth caused by non-natural factors due to the credit expansion go on? The duration of the economic growth achieved due to artificially cheapened credit resources is in direct connection with the duration of the artificial interest rates. If the lowering of the interest rate of interest is made on a one-time basis, the artificial economic growth would be very short-term, but in fact the reduction in the interest rate lower the market level is not of a one-time and short-term nature. However, despite the continuous nature of monetary interventions, proceeding from its artificial nature, its permanent existence is impossible. After a certain time, the visible inflation, low liquidity and other similar factors prevent the continuation of the process in a permanent state. Therefore, sooner or later, this process of credit expansion is interrupted, and the market starts to recover. Macroeconomic indicators tend to market equilibrium.

Substantial problems and the need for structural reforms

According to the modern world's financial legislation, bank deposit is no longer the property of the depositor, it already belongs to the bank and the depositor receives an asset in exchange which is called a deposit account (the current or savings account). This deposit is reflected in the bank's balance sheet as a liability,on the basis of which the Bank has a legal right to give loans in compliance with the minimum reserve requirement. In most cases the minimum reserve requirement ratio is 1/10, which means that the banking system has a right to "produce" and provide the $1000 loan on the basis of the existing $100 deposit.

The shortcomings of theoretical foundations of the fractional reserve system are not confined to the above-mentioned economic and financial shortcomings. The system has significant legal-type shortcomings that condition also its internal contradictions and crisis nature, which is periodically manifested in financial life of humankind.

In a free-market economy, where there is no fractional reserve banking practice, the source of credit resources is savings, temporarily free money funds, which, through the banks as the mediators, flow from the savings holders to business operators in the form of loans. The existence of savings is, on the one hand, are the means for obtaining credit resources for business, and on the other hand, the indicator of the existence of the additional demand, which should provide support for the economic growth, as well as the application of the additional issue. Everything changes in the conditions of a fractional reserve system, when the source of loan is not the real savings but monetary multiplier.

The monetary multiplier has the ability to create a loan with a larger volume than real savings. This leads to increased credit supply and the existence of the artificial, low interest rate on credit resources. Sometimes,this is also stimulated by the Central Bank's monetary policy. As a result, business is getting more access to lending, but since it is not due to the existence of the appropriate volume of savings, there is a slack, between the increase in output and the additional consumer demand secured by savings, as a result: 1) this slack is filled with consumer loan, which in turn cannot continue indefinitely; 2) sales are down andthe crisis begins.

In addition to the 2008 financial crisis, one such case was reported in Greece in 2015, when against the background the crisis associated with Greece's sovereign debt, therewas restricted the right to withdraw money from the ATMs, in particular there was adopted the upper limit of withdrawal. That means that restrictions were placed on the rights of private owners to freely manage their current accounts. There is no substantial connection between sovereign debt and the amounts deposited by private owners in the current accounts, and therefore, it is only natural that the sovereign debt crisis cannot be a substantial reason for this restriction. The main reason for this measure of capital control was the absence of sufficient money in banks to convert into cash the amounts deposited in the current accounts. The commercial banks had no resource to withdraw money from the current accounts, and the sovereign debt crisis in the country reduced public confidence in the financial system, and the weakening of confidence posed a threat of money withdrawal from the current accounts and disclosed a real picture demonstrating that the banks are unable to manage their current accounts.

Theoretical and legal foundations of a fractional reserve system were created after the fact. Banking practices have violated the general principles of classical Roman law over the centuries. The low level of public education in the financial categories, the permanent desire of the State to increase the treasury revenues, a canonical ban on usury and so on are prerequisites triggering an abusive banking practice.

One of the main beneficiaries of a fractional reserve system was the State, which wanted to dispose more funds than is possible. Accordingly, there has been formed the traditional symbiosis between the politicians, intellectuals and bankers. Their goals and motives were totally compatible and harmonious. Consequently, all three interested parties were looking for ways to create the theoretical and legal basis for these practices.

Sh.B. Clough clearly described the origins of this problem in his work "Economic Development of Western Civilization" he published in 1959. When the goldsmiths have realized that the only part of the deposits they owned was needed to meet the current demands of the depositors, they started to issue the so-called "Promises to pay", which were used as means of payment. The basis for banknote converting into cash was the depositor's amount held by the goldsmith, although the number of banknotes held by the above mentioned goldsmiths exceeded by far the amounts deposited. We had the loan obligations created at the expense of a simple piece of paper. Consequently, it is absolutely clear what a vital interest existed for preparing theoretical and legislative basis for this such a very profitable injustice. Despite the fundamental differences we have discussed, the "interested" theorists managed and aligned to the demand deposit agreement with the loan agreement. After this "presumption", they

have removed the insuperable hindrance that makes these various types of agreements naturally different from each other (Clough 1959).

When concluding the demand agreement, the depositors aim to keep their money safe and in an environmentconvenient for making transactions. Accordingly, the banker in this case provides services for the protection and securing the payment orders of the client, for which he/she must naturally be paid. During the fixed-term deposit agreement, the depositor transfers for the temporary use (for a certain period) his/her purchasing power to the banker, for which he/she naturally earns the interest.

It is "surprising" that the part of lawyers that cannot "see" this fundamental difference between the demand deposit and loan, and they consider them to be the equal agreements. Why for the medieval lawyer was unclear what was definitely true for the classical Roman law and old Roman lawmakers, which was reflected in their legal acts and practices – The Digest, Book 47, Chapter 2, No 67: "He who receives the deposit and uses with the intention of profiting by it, even though, having changed his mind is a thief".

The most precise instrument for understanding the essential difference between the demand deposit agreement and loan is the determination of their cause and purpose, where these agreements clearly reflect the essential differences existing between them. The purpose of the demand deposit agreement is to secure safe possession and management of monetary funds, while the purpose of the fixed-termdeposit agreement is to obtain dividend and to "hire" the temporarily free monetary funds for a certain period.

Conclusions

There are fundamental types of shortcomings in the credit system, including in the form of a fractional reserve system that causes the systemic crisis development. The crisis is the system's response to the shortcoming existing in its structure that needs to be corrected and reformed. Measures to combat for the elimination of its results do not affect not only the causes of the problem but the results themselves.

Monetary interventions implemented for the stability of the economy distort the impact of market forces on the economy, causing the postponement of the crisis consequences and not their neutralization.

If the structural reforms do not correct the fundamental problems existing in the credit system, the crisis will be a periodic, accompanying phenomenon of the financial system. "Survival" of the existing system with monetary interventions is unimaginable, because the declared, but unattainable goal of these interventions is to alleviate the consequences of the recession and depression, but not to eliminate their causes.

The evolution of reforming the regulatory and supervisory framework demonstrates that each such reform represents the reaction after the event to an outcome that fails to perform the preventive function because of fundamental problems existing in the system.

The fractional reserve banking, with multiplication effect, can create more credit than gross amount of savings is available. Therefore, the credit mechanism can make excessive pressure on economic and cause financial crisis. To eliminate the issue,

there should be restore a Classic Roman law approach to deposits. Therefore, for sustainable financial environment, loan and deposits should be distinguished clearly and only loans and term deposits could be used for creating credits.

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