

Central banks as leaders in ensuring financial stability

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Abstract The paper deals with the basic concepts and key problems of creating financial stability, as well as the role of central banks in its provision. The role of central banks in providing financial stability is extremely important and has a double manifestation - is the maintenance of the stability of the national currency and the responsibility for the stability of commercial banks and the banking system. The central element of any financial system is always banks, so the emergence of systemic instability in the banking sector always has a negative impact on financial stability in general and has extremely negative socio-economic implications for the country as a whole. The present study provides a thorough analysis of the essence of financial stability, the main challenges faced by central banks in monitoring financial sector and examines the global experience of central banks of different countries to ensure financial stability and their role in these processes. This paper highlights the common and distinctive features of the activities of the central banks of the most developed and developing countries towards the achievement of financial stability. Our paper focuses on the activities of the National Bank of Ukraine. In particular, its role in ensuring financial stability of the country is described and directions of its consolidation are indicated. The major task of the National Bank of Ukraine on the way to financial stability in the post-crisis period selected, the maximum possible mitigation Ukrainian banks consequences of the global financial crisis; increase of financial stability of banking institutions; strengthening of public confidence in banks and the banking system. As a result of the conducted, the key factors of achievement of the set tasks, as well as the main directions of application of monetary instruments of the National Bank of Ukraine in the activities aimed at increasing the stability of banks and ensuring financial stability, were determined.

1 Introduction

The research of the role of the central bank in providing financial stability was carried out by many as Ukrainian and scientists from other countries of the world (Obstfeld et al. 2009). It should be noted that the specialists of the central banks of Great Britain, the Netherlands, France, the Czech Republic, and Japan work in this area particularly actively at this stage, but their theoretical justifications and applied developments are designed for countries with a developed market economy system and, therefore, do not fully meet the conditions of developing economies in transition economies such as Ukraine, Russia, etc (De Grauwe 2008; Klomp and De Haan 2009; or Fungáčová and Weill 2012).

With regard to this, there is a situation in which most of the theoretical substantiation of foreign scientists and their applied developments are designed for countries with a developed market economy, while researchers from Ukraine and Russia have left out many aspects of the central bank's involvement in ensuring financial stability. Given this, there is a need for further scientific developments on financial stability issues and the role of the central bank in monitoring and providing it. Based on the foregoing, the purpose of the article is to

elucidate the theoretical foundations of financial stability and outline the role of the central bank in its provision. To achieve this goal, the following main tasks were defined: to reveal the essence of the concept of "financial stability", to analyze the experience of the participation of foreign central banks in ensuring financial stability, to outline the role of the National Bank of Ukraine in ensuring financial stability.

2 Leading aspects of financial stability

Financial stability can be interpreted as the ability of the financial system at the same time to satisfactorily fulfill three key functions:

- efficiently and continuously promote the distribution of resources in the economy from savers to investors and the distribution of economic resources in general;
- identify financial risks and evaluate them prospectively with acceptable accuracy, and manage them relatively well;
- continuously absorb financial and real economic unexpected events or shocks.

According to Ogon (2008): "*achieving the balance of needs and offers on the state financial resources in the process of formation and fulfillment of obligations will serve as a guarantee of financial stability of the state*" (Ogon 2008). Bahholdin (2007) believes that the preservation of monetary stability provides the necessary conditions for achieving financial stability, since the immutability of price proportions and the balancing of macroeconomic parameters are important parameters for the stability of the economy (Bakholdyn 2007). The ability of the financial system to maintain parameters within clearly defined limits for a long time is interpreted as financial stability (Mitchener 2007; Varvarenko and Sinelnik 2009).

Central banks, as financial institutions, play an unquestionably extraordinary role in ensuring the financial stability of the country. This value of the actions of the central banks is due to their double influence on the functioning of the financial through - maintaining the stability of the national currency and the responsibility for the financial stability of commercial banks and the stability of the banking system. The role of central banks in ensuring overall financial stability is also to prevent the spread of systemic instability in the banking sector to the entire financial sector and to localize the negative socio-economic implications for the country as a whole (). Thus, the central bank serves as the first pillar of defense against systemic instability in the financial and banking sectors, and monetary policy instruments provide:

- normalization of the situation with liquidity, restoration or maintenance of uninterrupted work of the payment system;
- reduction of negative expectations of participants in the banking services market, restoration of confidence in the banking system;
- prevention (or decrease) of the outflow of deposits from the banking system and funds from non-residents from the financial sector of the country, as well as withdrawal of assets from troubled banks;
- restoration of solvency of banks and their recovery through recapitalization, restructuring of troubled assets, reorganization, liquidation.

First of all, financial experts of Great Britain and Scandinavia have stated the necessity of participation of central banks in ensuring financial stability of countries. They stressed the introduction of continuous monitoring of systemic risks in the financial system and regular reporting to the public through the publication of financial stability reports.

For example, the Bank of England began to regularly monitor the risks that threatened the country's financial stability since 1996 and regularly bring its results to the public in specialized reports on financial stability. Later this was started by the central banks of Sweden and Finland. Since 1998, the Law "On the Bank of England" provides that its purpose is to promote protection and enhance the stability of the financial system of Great Britain. To achieve financial stability, the Bank of England closely cooperates with the Treasury and the Financial Services Authority (Albertazzi and Gambacorta 2009).

The law "About Bank of Finland" defines that the main objective of the Bank of Finland is to maintain price stability. The Central Bank should support the implementation of other goals of economic policy, without creating threats to the achievement of the main goal. In addition, its tasks include participation in the maintenance of the reliability and efficiency of the payment system and the overall financial system and participate in their development. Unlike other States, in Sweden, financial stability is not specified the sole priority of the Central Bank. For the Bank of Sweden, the law establishes two objectives: to maintain price stability and to contribute to the effective functioning of the payment system. However, in practice the Central Bank of Sweden comes from the fact that the payment system is the core of the financial system. For this reason,

it conducts regular analysis of risks and threats to the stability of the entire financial system to prevent systemic failure in making payments in the economy.

In turn, the European Central Bank treats the notion of financial stability as a condition in which the financial system of the country can effectively withstand economic and political constraints and on a permanent basis to cope with financial imbalances. The ECB defines three main factors of financial stability:

- 1) the financial system should be able to efficiently and freely transfer financial resources from savers to investors;
- 2) financial risks should be reasonably weighted and valued, and well managed;
- 3) the financial system should be in such a condition that it can smoothly offset financial and economic upheavals.

In our opinion, the latter condition is the most important. Because failure to overcome financial and economic shocks can increase them and promote rapid spread throughout the financial system, which can lead to a general financial crisis and violate the mechanism of financial intermediation as a whole.

Deutsche Bundesbank uses a similar broad approach to this notion: financial stability is a stable state in which the financial system effectively performs its key functions, such as resource allocation and risk diversification, and is able to do so even in the event of shocks, stress situations and periods of profound structural changes. Such a broad definition of the main elements includes financial intermediaries, financial markets and financial infrastructures. It contains an extended action program in relation to financial stability. As a result, the threat to financial stability may not only be due to shocks, but also through an unorganized settlement of the imbalance created in the past as a result of excessive optimistic expectations regarding future profits.

Instead, the U.S. Federal Reserve defines financial stability because of its opposite - financial instability, which is determined by three criteria:

- 1) prices for key financial assets that are substantially deviating from the fundamental values and (or)
- 2) malfunctions in the functioning of the securities markets and access to credit within the country and, possibly, at the international level;
- 3) aggregate costs that are significantly deviating from the potential value.

Instead, experts from the Bank of Norway believe that the starting point for ensuring financial stability is the lack of crises in the financial system, that is, it is determined by the general stability of the financial sector to the shocks that may arise in the activities of individual financial institutions or in the functioning of financial markets in general.

In addition, the Bank of Poland practically equals and identifies the notion of financial stability and the stability of the financial system. At the same time, under the stability of the financial system, his specialists understand the situation of continuous and effective implementation of the financial system of all its functions. Including, in the conditions of significant unpredictable shocks.

In its conceptual study of financial stability, the International Monetary Fund offers its own version of the notion of financial stability that it does not attempt to provide a conceptual definition of it, while highlighting the main tasks to be addressed in the way of ensuring financial stability: "The main task of this publication is that, to provide clarification on the concepts and definitions, sources of data and methods used in macroprudential analysis. Such an analysis is an assessment and control of the strengths and vulnerabilities of financial systems in order to increase financial stability, in particular, to reduce the likelihood of a collapse of the financial system" (IMF 2007).

We believe that Mr. Nier systematized the activities of central banks in the field of financial stability. According to this author, financial stability can be carried out as follows: 1) realization of monetary policy; 2) ensuring systemic liquidity; 3) performance of the function of the lender of last resort and rescuing bankrupt banks; 4) supervision of payment systems (IMF Working Paper 2009).

It can be noted that in countries where the Central Bank is prudential regulator should be provided:

- important role of the Central Bank in the management of prudential and market regulators;
- formalization of the role of the Central Bank regarding the approval of changes in key prudential policies, especially capital and liquidity;
- supervisory function in relation to the largest and systemically important companies, payment systems

At the same time, Kawai and Morgan (2012) point to a number of scientific papers on financial regulation issues, which highlight weaknesses in existing approaches to regulation and supervision, including in relation to the macroprudential component. Because of the propensity to analyze individual institutions (the traditional "micro-prudential" approach), overseas supervisors around the world failed to identify in time the interconnections and relationships between financial companies, sectors and markets because of the lack of a macroprudential approach. Regulators were focused only on their part of the big puzzle, not noticing the

macroproblem (Kawai and Morgan 2012). Financial instability complicates the conduct of monetary policy (see Figure 1 below).

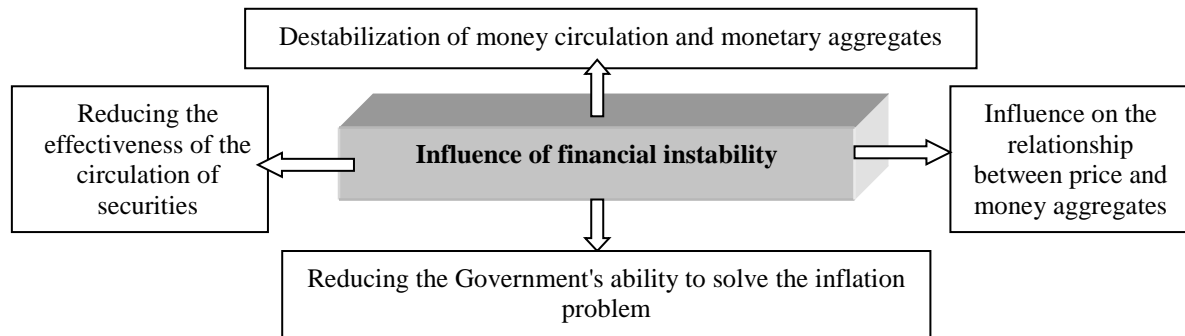


Fig. 1. Influence of financial instability on monetary policy
Source: Own results

- destabilizes money demand;
- reduces the efficiency of securities;
- affects the relationship between price and money aggregates - variables that help the central bank to control and explain price behavior (for example, monetary aggregates, that is, macroeconomic indicators of money supply, interest rates, exchange rates, etc.);

In the end, the government's ability to solve the problem of inflation decreases.

3 Role of central banks in ensuring financial stability

The internal organization of the function of financial stability of central banks depends on many factors. In some cases, this was the result of the reaction of central banks to the main financial crisis, in others as a consequence of the loss of one main responsibility and attempts to find areas where a new important contribution could be made, and in some situations it was motivated by the insurmountable desire of central banks to focus, an innovative work aimed at mitigating the risks in the banking system (Kondrat 2015). In general, there are three main approaches to the organizational structure of the function of financial stability of central banks can be identified:

- Establishing a financial stability department / unit / branch in which all operations related to financial stability are carried out;
- Establishment of cross-departmental committees for coordinating and managing all types of activities related to the financial stability of different subdivisions, branches;
- Putting on existing organizational mechanisms that have been proven to be effective in solving all kinds of financial instability issues.

Creation of financial stability divisions/units has become the most common approach (Weber 2005). The most striking example is, again, the Bank of England, which has units in monetary policy and departments whose activities are related to solving financial stability problems. Their intention is to provide a general vision of the central bank regarding developments that could affect financial stability and to coordinate further actions with the help of specialized departments.

The Deutsche Bundesbank also uses a multidisciplinary approach to financial stability. Today, representatives of banking and financial supervision, international affairs, market activities closely cooperate with each other and compare their methods, data and experience in order to maximally assess the overall situation with regard to Germany's financial stability.

A characteristic feature of the European post-crisis recovery program was that it addressed the challenges faced by the EU as global. The financial crisis has demonstrated how interdependent countries of the world are: the speed at which problems in one region affect the financial markets and the real-world production world is alarming. In this context, the European Economic Recovery Plan has become an integral part of the international program of economic cooperation aimed at restoring growth, avoiding negative externalities and supporting developing countries. In general, the main tasks of the central bank in the field of ensuring financial stability are:

1. Creation of general economic conditions for efficient functioning of banks.

2. Smoothing current fluctuations in liquidity of the banking sector.
3. Maintain the sustainability of the financial situation of private banks and the banking sector as a whole.
4. Assessment of the vulnerability of the banking sector to external and internal shocks.
5. Creation of mechanisms for protecting the interests of creditors and depositors of banks and deposit guarantee system.
6. Ensuring the smooth functioning of the national payment system.
7. Cooperation with international organizations on financial stability issues.
8. Development of financial stability reports.

The last item is one of the main tasks of the central bank. Because the reports of the central bank on financial stability inform the society about the main risks that exist in the functioning of the financial system. Such public information has a positive impact on the state and dynamics of economic expectations in society. Informing the public and, above all, active participants in the financial market about the risks inherent in the financial system, also motivates market participants for more prudent and deliberate behavior, which in turn reduces the level of systemic risks in the financial system as a whole.

For the central bank, the development and publication of financial reports is useful and necessary. On the one hand, due to the publication of such reports, the regulator directly reduces the level of risks that threaten the financial stability of the country, and on the other - the central bank increases the transparency of its activities and thus directly contacts the society, which improves the quality of its communications with all members of the financial system. The benefits of publishing financial stability reports include:

- Improving the understanding of the economic environment: the central bank, through the publication of its research, can expand and clarify the analysis and vision of the economic processes that the market participants themselves are dealing with. That is, by publishing a report analyzing the main financial indicators, the bank will act as an expert, whose opinion may refute or confirm the judgments of individual market participants;
- Warning banks and other financial market participants about the effects of their joint actions: in a competitive environment, the central bank has a significant advantage in the ability to anticipate the potential threats that may be borne by the joint actions of market participants who, at the time of decision-making, only analyze their benefits from the decisions taken and do not always consider the state of the financial market and the consequences that their actions will have on the market as a whole;
- Possibility of stimulating actions by legislative and executive bodies to make decisions that will prevent or mitigate systemic risks;
- Formation of public support of measures in the field of ensuring financial stability: the effectiveness and quality of the introduction of central bank policy to ensure financial stability directly depends on the perception and understanding of the community goals of the central bank. The systematic informing the population about the state and prospects of financial market development and possible risks will improve communication with the society, restore confidence in the market regulators and correct its behavior in the event of crises;
- Improving the country's reputation in international financial markets: prepare and publish reports on financial stability is an indicator that the country, in particular the bodies macroprudential supervision, not afraid to disclose the state of Affairs in private financial markets and not only see the risks that threaten their stability, but also have mechanisms to manage these risks.

At the same time, in spite of a number of positive and beneficial consequences of financial stability reports, their disadvantages should not be diminished. During periods of financial instability, the publication of reports can provoke panic in society. For example, excessive attention to the growth of credit risk may provoke a reduction in lending, which, in turn, can accelerate the solvency crisis even among reliable borrowers. Therefore, it is important that the reports contain not only an analysis of potential risks, but also a real, clear, clear strategy and recommendations of the central bank to reduce them.

Thus, the National Bank of Ukraine, which only begins practice of publishing such reports, you should pay special attention to their quality content and presentation. In particular, a qualitative report on financial stability is not only a large number of analyzed indicators and use analysis tools, but the transparency of the sources of data that underlie their calculation, clarity and structuredness of the information presented and, most importantly, the report should reflect the position of the Central Bank regarding future changes in the financial system of the country and its strategy to overcome the identified risks.

Now the responsibility of Central banks for financial stability and their powers to carry out these responsibilities is more diverse and less well understood than their obligations relating to price stability. Identifying and giving priority in the consideration of issues of monetary policy and financial stability can be problematic. It is recognized that full responsibility for the maintenance of financial stability Central banks to

carry not. Ensuring financial stability is a complex issue and requires addressing many challenges, concerted efforts by a wide range of public bodies, including Central banks, Finance ministries, organs of supervision and regulation.

According to Table 1, the results of supervision may show either shocks (for example, shock that promotes a boom or crisis) or mechanisms for spreading financial instability (showing a boom approximation). Since shocks are accidental, attention should be paid to the vulnerability of the national economy and its constituents. This raises the question of measuring the level of vulnerability of the national economy, in which the level of vulnerability of the national economy is subject to shocks and crisis phenomena.

As an example, the European Central Bank holds a 7-point vulnerability assessment of the economy. First, identification of vulnerabilities and imbalances, and second, the modeling of scenarios where the imbalances are potential risks. Thirdly, identifying triggers (shocks) for the scenarios in the fourth assessment of the probability of occurrence of scenarios. Fifth, the estimation of losses for the financial system, Sixthly, the evaluation of system reliability under such shocks, in the seventh, the classification (ranking) risks.

Table 1. Phases of the evolution of crisis phenomena in the national economy

| Phase of the crisis | The volume of distribution in the economy | Examples of phase signs | Appropriate timescales of the crisis phases in Ukraine |
|---|---|--|--|
| Primary (favorable) shock | diversiform | Deregulation, monetary and fiscal easing, changes in market sentiment. | 2004-2005 |
| Distribution - increasing vulnerability | Comprehensive Phase acts as the main subject of macroprudential supervision | Sign ups in financial markets, the accumulation of debt, booming asset prices, innovations in financial markets, the underestimation of risk, concentration risk and low capital adequacy for banks, unstable macro policies. | 2006-2007 |
| Secondary (unfavorable) shock | diversiform | Monetary, fiscal or regulatory stiffness, asymmetric trade shock. | 2008 |
| The spread of shock is a crisis | Comprehensive | Failure of institutions or markets leading to the crisis of other members of the economy due to direct links or uncertainties in the presence of asymmetric information, or because of the general crisis that arose due to the general shock. | 2008-2009 |
| Regulator response | Comprehensive The main subject of crisis management | Deposit insurance, additional liquidity emission, general mitigation of monetary restrictions. | 2009-2011 |
| Economic Impact | Comprehensive The volume depends on the severity of the crisis and the responses of the regulator | Credit restraint and general uncertainty lead to a drop in GDP, including investment | 2011-... |

Source: Own results

The principle of modernizing the financial system of Ukraine should be the observance of a well-balanced balance between stimulating and regulatory measures. On the one hand, the outbreak of depression requires the heating of investment markets on the basis of mitigating monetary policy, the revitalization of entrepreneurial activity.

On the other hand, the low efficiency of the channels of the transmission monetary mechanism in Ukraine makes it difficult to solve this problem, as the gap between real and financial sectors increases liquidity in circulation leads to speculative overheating of certain segments of the financial market. Fighting the periodic "infusion" of such "soap bubbles" requires the strengthening of the anti-cyclical nature of state regulation (Kovalenko 2011). The list of monetary policy instruments and measures that can be used by the central bank to ensure financial stability is quite broad, so we will list only the main ones:

- traditional central bank instruments (interest rate, reserve requirements, open market operations, etc.), including instruments for regulating current liquidity of banks;
- setting standards for the safe functioning of banks;

- non-standard refinancing of banks, and in some cases, non-bank financial institutions that are experiencing liquidity problems;
- administrative measures, including the imposition of restrictions on conducting current operations and capital operations in order to prevent the outflow of funds from non-residents;
- introduction of a moratorium on withdrawal of deposits; measures to recapitalize and reorganize the banks, including increasing the authorized capital at the expense of the owners or the state, mergers and acquisitions of troubled banks and financial rehabilitation and liquidation of insolvent banks;
- measures aimed at protecting the interests of depositors, restoring confidence in the banking system by creditors and depositors, reducing negative expectations of market participants, stopping outflows of deposits, etc.

Using the tools and measures listed above, central banks of different countries have the opportunity to create better macroeconomic conditions for the effective functioning of the financial sector, weaken price volatility in financial markets, monitor risks, and provide financial stability for banks and the banking system. Such actions of the central bank ensure the smooth functioning of financial infrastructure, as well as promote better protection of interests of creditors and depositors of banks, reduce the negative consequences of systemic instability in the financial sector as a whole.

There is no doubt that the regulatory resource of central banks is one of the key factors in the post-crisis stabilization of financial markets. Soft monetary policy (the policy of "quantitative easing") which is being implemented today by the leading central banks of the world, envisages stimulating economic development and revitalizing the circulation of assets with the help of appropriate money supply instruments. Central banks responded to the crisis by providing financing in foreign and national currencies. At the same time, in choosing the objectives of soft monetary policy central banks prefer low interest rates and the purchase of government securities (Goodhart 2011).

The vector of actions of the National Bank of Ukraine in the post-crisis period of 2008 was aimed at supporting the liquidity of the banking system of Ukraine. The anti-crisis reorientation of monetary and exchange rate policy was reflected in the revitalization of refinancing mechanisms, changes in the reserve policy, and the deterrence of outflow of funds outside the banking system with the varied use of interventional instruments (Dyba et al. 2014). The key task of the National Bank of Ukraine in the post-crisis period should be considered as the maximum possible mitigation of the impact of the global financial crisis on Ukrainian banks, increasing their resilience, and increasing trust in them. It should take into account the following factors:

- Objective and, probably, long-term nature of global crisis processes;
- Complex nature of the internal factors of inflation;
- Problems of the banking system;
- Devaluation of the Ukrainian currency, which is associated with a deterioration of the fundamental indicators and the situation on the world's monetary and financial markets.

The key directions of the monetary instruments of the National Bank of Ukraine on increasing the resilience of the banking sector are:

- increased oversight of the quality of banks' capital, liquidity and risk management;
- increase of transparency of activities of banks;
- improved responsiveness of banks on the activities of the organs of regulation and supervision.

At the same time, the National Bank of Ukraine tries to take into account that the main actions of the central banks of the countries of the world in the post-crisis period are aimed at the transition from anti-inflationary to stimulating policies by:

- stimulating economic growth and expanding access to credit resources;
- the desire not to allow deflation;
- Stabilization of the domestic market (through the interest rate);
- stabilization of the balance of payments;
- increase of efficiency of the state economic policy.

In order to increase the role of the NBU in ensuring financial stability, it is necessary to:

- 1) legislative consolidation of the responsibility of the National Bank for financial stability. However, as we have noted, central banks can not bear full responsibility for maintaining financial stability.

Therefore, the legislation must establish joint responsibility for ensuring the financial stability of the government and central bank;

- 2) definition of a set of indicators of financial stability, mechanisms for their calculation and analysis;
- 3) the development of organizational and methodological approaches to the assessment of the stability of the financial system;
- 4) monitoring of the main indicators of financial stability;
- 5) creation of a special department within the NBU that would analyze financial stability and monitor systemic risks;
- 6) development and communication to the public of a periodic report on financial stability.

4 Conclusions

Overall, we note that the current rapid development of financial and economic relations, manifested by the emergence of new entrants in the financial market and accompanied by the development and implementation of innovations in the financial sector, requires scholars and practitioners to direct further joint efforts towards the development of new effective strategies for ensuring financial stability. Because the central bank is the first line of defense in the event of systemic instability in the financial and banking sectors and monetary policy instruments, it provides: normalization of the situation with liquidity, maintaining the uninterrupted functioning of the payment system; reducing negative expectations of market participants and restoring confidence in the banking system; prevention of outflow of deposits, as well as withdrawal of assets from troubled banks; restoration of banks' solvency and their recovery through recapitalization, restructuring of troubled assets, reorganization or liquidation. It is also extremely necessary to develop the latest approaches of the central bank to ensure financial stability, which will increase the manageability and predictability of economic development in general.

Today, a list of monetary policy instruments and measures that may be used by the central bank to ensure financial stability is wide enough. By applying these instruments, central banks create new macroeconomic conditions for the most effective functioning of financial markets and mitigate jumps in prices for financial assets, monitor risks, which contribute to the financial stability of the banking sector and the smooth operation of financial infrastructure. The complex of these measures is positively reflected in protecting the interests of creditors and depositors, as well as reducing the negative effects of systemic instability in the financial sector. We believe that the regulatory resource of central banks, expressed by the monetary policy of "quantitative easing", which is being implemented today by the leading central banks of the world and involves stimulating economic development and revitalizing the circulation of assets with the help of appropriate money supply instruments, is one of the determinants of post-crisis stabilization of financial markets.

Therefore, the main task of the National Bank of Ukraine on ensuring financial stability in the post-crisis period is to maximize the mitigation of the impact of the global financial crisis on Ukrainian banks, increase their resilience, as well as increase confidence in the banking system as a whole.

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