State Anti-Crisis Management of Banking Sector: Looking for Optimization Ways and Contemporary Development Trends

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Abstract
The article examines topical issues related to the formation of an effective monetary policy as an element to ensure stability of the banking sector under the conditions of the economic crisis. During the research, the following basic conclusions were drawn. The nature and content of the state anti-crisis management in the banking sector is considered, taking into account current and future changes in the global development of the world economy. The state anti-crisis management in the banking sector should be primarily focused on the control and minimization of the key risks of sustainable national socio-economic development. This is achieved through the systematic use of the monetary policy instruments. Instruments for banking sector regulation are systematized with due consideration of the monetary policy targeting. The choice of instruments for regulating the banking sector, as a rule, is discretionary, thus, the state, represented by bodies of power, when forming approaches to the implementation of effective monetary and macroprudential policies, aimed at ensuring the stability of the banking sector during the economic crisis, should take into account the investment and innovative character of the real economy sector development, as well as social and legal relations in society. Through the buildup of sustainable socio-economic development, as well as the systematization of the regulatory treatment of the banking sector on the basis of monetary policy optimization, author proposes to further improve the development of financial systems of the state as a whole, and the banking sector in particular on the basis of the
triple helix model (universities-state-business). In relation to the banking sector, adaptation of the triple helix model means reforming the tripartite institutional interaction by replacement of the real sector with the banking sector, and the public sector – with central bank and the macroprudential oversight bodies.

**Keywords:** banking sector, economic crisis, systemic banking crisis, anti-crisis public management, monetary policy, macroprudential regulation, the triple helix model.

**JEL Classification:** E52, G51, H12.

1. **Introduction**

Banking sector is an important element of the current political, legal and economic spheres of civil life, which maximally contributes to the development of socio-political stability and economic growth, though, on the other hand, can provoke signs of a crisis, which, in turn, have a negative impact on society (Dudin et al. 2014a, Adrian et al. 2013). The possibility of financial insolvency and bankruptcy of banks, due to a pronounced publicity of their activities, covering all sectors of the economy and the broad segments of population, causes special public attention to this phenomenon, and also dictates certain specificity of the banking sector regulation (Dudin et al. 2014b). Here we should take into account, that the banking sector plays a strategic role not only in the national financial economy sector, but also in general national socio-economic system (Gref and Yudaeva 2009). With the development and complication of banking products and technologies, as well as the spread of contemporary globalization processes, banking line is increasingly exposed to all kinds of risks associated with the crisis developments in the economy (Freeman 1987, Hoelscher and Quintyn 2003). Currently the global scientific community did not agree upon a single unambiguous interpretation of the term ‘banking crisis’, which would take into account the broad classification of different banking crises.

Thus, Caprio and Klingebiel (1996) consider the banking crisis in the context of the solvency margin and define it as an event, in which the bank losses all or substantial part of its capital. Broader interpretation is given by Dutagupta and Kashin (2008), who define a banking crisis as a combination of ‘erosion’ processes of bank capital, massive withdrawals of deposits, reduction in bank activities and extensive state intervention into the bank operations. According to Levin and Valencia (2008), a systemic banking crisis is characterized by the presence of a significant number of bankruptcies in the corporate and financial sector of the state.

2. **Results**

General review of approaches to the definition of ‘crisis’ in relation to the banking sector in the contemporary economic literature allows us to consider the financial crisis from three perspectives:

- Firstly, as the actual status of the banking sector, which occurs during a non-profit operation, inefficient asset management and accounts payable that leads to an outflow of funds and incomplete satisfaction of creditors’ claims, as well as the inability of banks to implement financial support for their activities;
- Secondly, as a potential state of the banking sector, focused on the forecast, with unpredictable consequences that jeopardizes its further development;
- Thirdly, as an actual or a potential result-oriented management of the banking sector.

Banking sector of the economy is a complex dynamic system. Accordingly, the anti-crisis management in the banking sector involves a range of activities that allow neutralizing the effect of destabilizing factors and returning to a state of equilibrium, provided that fluctuation band of basic parameters of the banking sector is within its sustainability. The essence of the anti-crisis management in the banking sector is reflected in the combination of management activities that have integrated and systemic nature, and are aimed at preventing or eliminating the adverse effects of the banking business through the use of the bank management recourse, development and implementation by the business community and the state of special strategic programs that promote the maximum increase of banking institutions immunity by relying on their own and borrowed resources, provided on possibly concessional terms. Anti-crisis management, as a primary objective, considers maintaining stability and resilience of the banking sector. According to the research results of Levin and Valencia (2008), Dutagupta and Kashin (2008), Gref and Yudyayeva (2009), the majority of banking crises have a similar nature and following general predictors:
- financial liberalization processes taking place for several years prior to the crisis (the lifting of restrictions on interest rates and banking transactions) or availability of the mass innovation period in the banking sector, as in the case of the crisis of 2008;
- a lending binge that took place after the financial liberalization and was accompanied by the emergence of price ‘bubbles’ in the stock market and real estate market;
- emergence in the most countries before the crisis a fixed exchange rate with regard to one of the reserve currencies;
- capital inflow against the background of fixed rates and in connection with financial liberalization, which was largely handled financing of the credit expansion and price ‘bubbles’.

Hölscher and Kuintin (2003) identify three stages of public crisis management under the conditions of a systemic banking crisis. At each of the stages one can use a specific set of instruments (Figure 1). Moreover, it is obvious that economic entities in market economy cannot function under economic stability and risk-free conditions. Thus, anti-crisis management is a natural necessary condition of the economy, in which the analysis, evaluation, preventive forecasting and warning of possible negative trends is the only possible norm of life. Violation of the orientation terms in the area of possible risks due to any reasons (low qualification, ‘greed for gain’ at any cost, frauds, and so on) inevitably leads to unbalance of the complex mechanism of anti-crisis management and brings to life the most negative consequences for the economic entity.

**Figure 1. Stages of the public anti-crisis management in a systemic banking crisis.**

Among the key financial risks to ensure sustained growth of the banking sector we can distinguish the following ones presented in Figure 2, namely:
the risks of bank assets encumbrance, which arise as a consequence of using own assets of the bank to raise additional debt capital that in turn leads to a reduction in financial maneuverability;

- the risks of arising speculative financial ‘bubbles’, which occur when manipulating demand for one or another financial instruments that in turn leads to a significant overestimation of their fair prices, and further backsliding to the original price, and the previously demanded financial instrument becomes illiquid;

- risks of maintaining low interest rates, which arise as a result of constant policy on growth rates restrained, despite the change in other macroeconomic indicators that stimulates growth of insolvent demand in the future.

Urgency of the situation with bank risks was due to the high level of openness of many national economies, not supported by enough competitiveness and appropriate institutional and financial mechanisms, as well as structural and institutional imbalances of real sector and propensity to consumer model of economic growth that has developed in recent years.

The growing risks in the finance and credit, as well as in banking sector significantly complicate the activities of financial regulators, issue new challenges, requiring immediate decision of the problems in the field of oversight over financial institutions. Leading role in the anti-crisis public management and surveillance in the bank sector belongs to monetary policy.

![Risk universe diagram]

**Figure 2.** Key risks, transforming the growth quality of the banking sector.

### 3. Discussion

A wide range of problems, which can be solved by monetary policy, affects not only the banking activities, but also has an impact on the overall stability conditions in the contemporary market economy. Monetary policy is most closely connected with the general sensitive market policy that creates prerequisites for achieving the
strategic goals of the banking sector under the conditions of crisis development in the economy (McCallum and Bennett 1997).

In this context, monetary policy includes combination of methods and instruments in the sphere of currency circulation and credit relations, which use state for regulation of banking sector. The main objective of monetary policy is to achieve stability of the banking sector and help the national economy to achieve overall production, which is characterized by full employment and price stability (Clarida et al. 1998).

Monetary policy represents the institutionalized regulatory mechanism with its own specific objectives, channels, instruments, and the role in the state economic regulation. The choice of optimal monetary policy in accordance with the specific economic conditions remains the main problem for any country. The strategic objectives of the policy are defined by this choice, as well as the preference is given to one or another action of central bank, the scope of the monetary policy possibilities and its relationship with the fiscal and regulatory policy are determined (Semenyuta and Kudinova 2005).

To achieve this goal, the regulator can use different types of target variables (Table 1). Features of the national banking system largely affect the choice of the ways and economic methods of the country’s central bank regulation, as well as on preference of those or other monetary instruments over these economic methods. Thus, for example, reserve requirements as an instrument of monetary policy of the state are used in many countries because they allow:

- adjusting the active operations size and dynamics of credit institutions;
- affecting the structure and volume of attracted resources, as well as their cost;
- acting upon the profitability of individual operations of credit institutions, the level of profitability and regulating liquidity of credit institutions;
- controlling the amount and rate of change in the money stock;
- creating security for their use in settlement of obligations to depositors and creditors in case of bankruptcy of credit institutions.

Table 1. Objectives and instruments of monetary policy

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Target variables</th>
</tr>
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<tbody>
<tr>
<td>Operational (tactical)</td>
<td>Reserve requirements and aggregates; Interest rates (interbank, interest on promissory notes) and discount policy; Open market operations.</td>
</tr>
<tr>
<td>Intermediate objectives</td>
<td>Monetary aggregates (M1, M2, M3); Long-term and short-term interest rates.</td>
</tr>
<tr>
<td>Final (strategic)</td>
<td>High employment; Price stability; Financial markets stability.</td>
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The value of reserved funds depends on two key parameters: the level of legal reserve requirements and the composition of the reserve base set by regulatory documents (Enhancing Financial Stability and Resilience, 2010). Thus, the choice of the monetary policy type and those or other instruments for its implementation is determined by the central bank of one or another state in each specific case based on the current state of the market performance and the phase of economic cycle. In any case, the central bank faces a difficult task to combine optimally the use of various instruments to solve current problems in order to achieve the ultimate strategic goals (Limetal 2008).

The contradictions that arise in the implementation of the state monetary policy during the emergence of the crisis developments should be solved with the help of legal and administrative control measures, adopted by the state (Macroprudential Instruments and Frameworks 2010). It is necessary to supervise the emergence of such contradictions and to take proper actions in order to overcome them. These measures should be based on the effective positive intervention of the state, on the establishment and functioning of the protection mechanism of rights and legitimate interests of all participants of economic relations, and on the actual use of market competition. An important way to improve the bank control of monetary market is the introduction and development of macro-prudential oversight and regulation (Hirtle et al., 2009).

Table 2 presents the macroprudential oversight and regulation measures implemented in the banking practice of different countries as of 2013.
As is obvious from Table 2, structural macroprudential measures of bank oversight are grouped in four areas, corresponding to the main risks, associated with the growth and development of the banking business.

### Table 2. Instruments of macroprudential oversight

<table>
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<tr>
<th>Problem</th>
<th>Instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macroeconomic risk and the risk of ‘financial’ bubbles</td>
<td>(1) reserve requirements; (2) limits on lending; (3) taxes on consumer credit (a tax on the loan principal).</td>
</tr>
<tr>
<td>Credit and market risks</td>
<td>(1) loan-to-value ratio (LTV ratio); (2) debt-to-income ratio (DTI ratio); (3) countercyclical / dynamic provisioning, creation of reserves for possible bad debts; (4) change the risk-benefit ratios on various types of loans; (5) restrictions on ‘short sale’; (6) restrictions on CDS transactions.</td>
</tr>
<tr>
<td>Currency and capital flow risks</td>
<td>(1) taxes on capital transactions; (2) restrictions on net foreign exchange positions of the banks; (3) restrictions on investments in assets denominated in foreign currency; (4) restrictions on borrowings in foreign currency; (5) restrictions on investments in national assets by non-residents; (6) special requirements for licensing; (7) administrative measures.</td>
</tr>
<tr>
<td>Aggregate risk</td>
<td>Measures for the implementation of Basel reforms; Common rules to improve the financial institutions in the EU; Separation of systemically important non-bank financial institutions in the USA.</td>
</tr>
</tbody>
</table>

‘Group of Thirty’ separated two key approaches to the application of macroprudential oversight and regulation:
- variable approach;
- fixed approach.

The first approach involves the use of prudential norms, whose parameters vary over time. The second approach is based on the use of permanent and mandatory standards. ‘Group of Thirty’ believes that for an effective macroprudential policy one must adhere to both approaches, using a wide range of instruments (Figure 3).

In the context of a balanced macroeconomic environment, implementation of macroprudential oversight and regulation tasks will contribute to achieving the objectives of monetary policy, though macroeconomic imbalances between macroprudential and monetary policy may lead to conflict of objectives. The regulator faces the choice between supporting the real economy or the financial system. Depending on the characteristics of the financial system and its impact on the real economy segment and the specific of the aggregate shock, currently selection of the regulator is of discretionary nature.

Note that in today’s ‘knowledge economy’ support of investment and innovative growth of the real economy sector has strategic importance for the banking sector (Walliser 2008). And this should be taken into account in monetary policy, for example, when dealing with the refinancing issues of the second-tier state bank, which aims at loan services of innovative projects. Surely, for the national banking systems the stability of the monetary unit is a priority, though this problem can be solved in different ways. The stability formula in the medium-term strategy focuses on the choice of the ways that give economic growth investment and innovative nature (Mintzberg et al. 2002, Kaplan and Norton 2006).

### 4. Conclusion

Preservation of the socio-political sector’s stability is important for each state, since the existence of the state is largely determined by its stability. Fair to assume that the international community has the right to consider the crisis not only as an economic category of emerging problems but also as an economic factor affecting the socio-legal stability of each state. When developing approaches to implement monetary and macro-prudential policy, aimed at ensuring the stability of the banking sector during the economic crisis, the state, represented by the
bodies of power, must take into account, in our view, not only an economic nature of social relations, but also social and legal aspects.

![Figure 3. Classification of macroprudential policy instruments depending on the regulation objects](image)

**Source:** Enhancing Financial Stability and Resilience (2010).

Monetary strategy in the economic crisis must act to raise the level of credibility in the national banking system and its elements, to promote long-term sustainability of the banking sector. Formation of an effective monetary strategy also requires to take into account the specifics of the relationship of macroeconomic and monetary parameters, inherent in the economy at a given stage of development, as well as to remember that the economy development is organically linked to a certain level of inflation, and to maintain balance between the real sector growth dynamics and an increase in the living standard and well-being of society.

Based on the foregoing, the most important and promising direction is to create the appropriate scientific basis for development and implementation of effective monetary policy and macroprudential regulation; to support and implement timely innovative tools into anti-crisis management of the banking sector; to encourage the academic communities, carrying out the research with due account for the specifics of a particular national economy (this is especially true for developing countries and countries with economies in transition); to create an effective coordination and communication system of the central bank with persons concerned; to improve financial education of a wider audience; to support popular scientific and specialized publications; to form a balanced and responsible approach of officials with regard to public statements concerning the monetary issues, etc.

In other words, it is reasonable to say that the efficient state monetary policy, as an element providing sustainability under the conditions of the economic crisis, should be based on the so-called ‘triple helix model’ (Etzkowitz and Loe 2000), adjusted to the banking sector specifics. Consequently in the chain ‘academic sector (universities and research institutes) - real sector (business and industry) – public sector (state and bodies of power)’ the real sector will be replaced by banking sector (commercial and investment banks), while the public sector will be presented by the central bank and the bodies of macroprudential oversight.
Note that at present the issue on using the concept of ‘triple helix’ in relation to the monetary policy and the banking sector is poorly studied and, therefore, is of great scientific interest for further research in this direction.

References