THE EFFECTS OF FINANCIAL CRISIS ON THE REGULATORY AND PRUDENTIAL SUPERVISORY FRAMEWORK OF THE CREDIT INSTITUTIONS AT THE EUROPEAN LEVEL

Ph. D Gheorghe Chitan
Academy of Economic Studies
Faculty of Finance
Bucharest, Romania

Abstract: The present paper illustrates and analyzes the modifications at the level of regulatory and prudential supervisory framework generated by the financial crisis aiming to ensure the solidity of the banking system, and supporting the necessity for a macroprudential approach. The first part presents the need to modify the regulatory and prudential supervisory framework. The second part of the paper approaches macroprudential supervision versus microprudential supervision whose combination is required to ensure financial stability evidencing the dimensions of systemic risk manifestation. In the third part is presented the surveillance architecture, some indicators whose values may constitutes inputs for econometric application build up for systemic risk identification and management, and also indicators for systemic risk supervision, and, in the end, some conclusions.

JEL classification: G01

Key words: macroprudential/microprudential supervision, supervision tools, financial crisis, systemic risk, financial stability

1. INTRODUCTION

Given the importance of the financial system within the economic system, and of the credit institutions within the latest, their adequate regulation and supervision is needed to ensure financial stability and to avoid negative consequences, economic and social triggered by manifestation of financial crisis.

The financial crisis, also known as subprime crisis, triggered in 2007 in USA and rapidly expanded in many countries, specially due to financial globalization was a consequence of total commitment in the free market economy, lack of a regulatory framework, the nonregulatory philosophy turning the idea of freedom in a of caricature them, greed triumphing against prudence (Stiglitz, 2010).

The expression of financial crisis surprised through its dimension and its intensity being favored, among other, by the cross-border activity of the financial institutions, by volatility of capital flows, by innovative financial products, by the high degree of interdependence and interconnectivity between financial institutions and between markets and also by procyclicality of the banking activities, the regulatory bodies failing to keep up with the rapid development of such macroeconomic factors.

Thus, in order to reduce systemic risk, the financial crisis has highlighted the need to go beyond a purely micro-based approach to financial regulation and supervision (Galati, Moessner, 2011), namely macroprudential approach.

2. MACROPRUDENTIAL SUPERVISION VS MICROPRUDENTIAL SUPERVISION

As documented carefully by Clement (2010), the word "macroprudenţial" was first used by the Cooke Committee in 1979 as a link between macroeconomic problems and prudential regulatory framework, becoming a topical word during the current crisis.

The concept of macroprudential always expressed concern about the financial system stability and its link with macro-economy, orientation of regulation and supervision to it.

The regulatory and supervisory framework was the subject of numerous reviews that have highlighted the lack of significant macroprudential approach in Europe and its implications on the financial system, concluding it necessity to implement (Crockett, 2000, Borio, 2003, Borio, Shim, 2007).

The terms "microprudential" and "macroprudential" denote elements that coexist in regulatory and supervisory frameworks, but in order to highlight the differences between them is necessary to present the main characteristics. Thereby, the objective of a macroprudential approach is to limit systemic or system-wide financial risk while the microprudential approach is to limit risks of individual institutions. The macroprudential approach analyzes the financial system as a whole and its interactions with the real economy and it considers factors that drivers of risk depend on the collective behaviour of financial institutions (Borio, 2003, 2010).

In order to assure financial stability, I consider the macro and microprudential supervision complete each other, being required a balanced combination between these for not generate negative externalities by measures taken.

The main characteristics and differences between the micro and macroprudential approach are summarized in the following table:

Table no.1

	Macroprudenţial	Microprudenţial
Proximate objective	Limit financial system-wide distress	Limit distress of individual institutions
Ultimate objective	Avoid macroeconomic costs linked to financial instability	Consumer (investor/depositor) protection
Characterisation of Risk	"Endogenous" (dependent on collective behavior)	"Exogenous" (independent of individual agents' behavior)
Correlations and common exposures across institutions	Important the financial system as a whole (including the interactions between the financial and real sectors)	Irrelevant, individual institutions
Calibration of prudential controls	In terms of system-wide risk; top-down	In terms of risks of individual institutions; bottom-up
Instruments used	Primarily prudential and non-prudential tools calibrated to target the sources of systemic risk.	Uniform minimum capital standards
The horizon analysis	An economic cycle	Un year, common practice

Sourse: Crockett (2000), Galati, Moessner (2011), Borio (2003), Progress Report to G20 (2011)

ISSN 1223-365X

Taking into account the connections between financial system and real economy, my opinion is that the manifestation of systemic risk with respect to time has two dimensions:

- the horizontal dimension, namely the evolution of systemic risk in the financial system over time;
- the vertical dimension, namely systemic risk sharing between entities within the financial system at a given point in time.

To each dimension corresponds a source of risk. In the time dimension, the source is the procyclicality of the financial sector, namely those mechanisms that operate between financial system and the real economy or within the financial sector and which support economical cycles. Thus, in the ascedent phase of the economic cycle availability of credit is greater, increase the value of assets, leverage, market liquidity and maturity mismatches. In the descedent phase, the situation previously accumulated can lead to systemic risk. Thus appears the need for analysis of economic cycles to identify the tools necessary to ensure financial stability. In the vertical dimension the source is similar exposures within the financial system (from assets, liabilities, dependence on common services) and the interconnections between institutions. Greater attention should be given to banks that are systemically important.

Taking into account mainly the financial system exposure to the evolution of the economic cycle and the contagion effect should be implement macroprudential supervision.

Macroprudential regulation and supervision requires monitoring system-wide risks in both dimensions.

3. REACTION OF THE EUROPEAN UNION (EU) AUTHORITIES FOR MODIFICATION OF THE REGULATORY AND PRUDENTIAL SUPERVISORY FRAMEWORK

The financial crisis illustrated the following weaknesses of the financial system: inadequate regulatory framework, disregard of the systemic risk and fragmentation of the supervisory architecture (Dardac, Georgescu, 2009), imposing though as a necessity the reexamination of the regulatory and prudential supervisory framework in order to reestablish the stability of the financial market.

Under the conditions of the European financial markets highly integrated and interconnected, with institutions performing cross-borders activities, and also the growing tendency for existence of a single European financial market, I consider as a necessity the adoption of immediate measures for strengthen the regulatory and prudential framework at European level.

In this regard the measures of the European authorities are aiming for set up of a single European regulatory framework focusing on development of regulations targeting the factors within the systemic risk and also for creation of an adequate supervisory structure, registering their actions mainly on two directions:

- change of the supervisory architecture;
- modification of prudential regulations.

3.1 European institutional supervisory framework

The reform of the institutional supervisory framework was motivated in particular by the existing deficiencies on cooperation and coordination at the EU level and also by the need to address the financial supervision from macroprudential and microprudential perspective.

Based on Larosière report, EU decided (EU Council decision no. 16452/2010) modification of the supervisory architectural framework through the establishment of new institutions with attributions at the macroprudential and microprudential level. As a result the European System of Financial Supervisory (ESFS) is structured on two levels:

I. The level responsible with macroprudential supervision, represented by the European Sistemic Risk Board (ESRB), charged with prevention and reduction of systemic risk at the EU level, aiming in this respect on the one hand identification , gathering and analysis of macroeconomic data and also macro and microprudential data, and on the other hand identification, evaluation and ranking risks. For the risks identified both the macro and micro level ESRB issues warnings and recommends measures for their prevention/reduction. Romania is represented within ESRB by the governor of National Bank of Romania (NBR) as voting member, by the prime vice-governor of NBR (coordinator of banking supervisory activity) and also by the presidents of other supervisory authorities as nonvoting members

II. The level responsible with microprudential supervision composed of European Supervisory Authorities (ESA) represented by national authorities for financial supervision and the three European authorities for supervision of the financial market: the European Banking Authority (EBA), the European Securities and Markets Authority (ESMA) and the European Insurance and Occupational Pensions Authority (EIOPA). EBA issues proposals of legal acts and guidelines regarding the applicable regulations, coordinates their uniform application, mediates divergences and allows for a better cooperation between the national supervisory authorities, performs stress tests for credit institutions, strengthen the microprudential supervision.

European Commission proposed strengthening the supervisory system by introducing a requirement for preparation of an annual supervisory program for each supervised institution. Besides, I think that is necessary to develop a surveillance strategy, both at national and European level, which to be framed within an EU coordinated framework.

As regards Romania, prudential supervision is sectoral organized, each market with its own surveillance institution, NBR having microprudential supervisory responsibilities for the banking sector. Given the powers NBR (e.g. monetary policy, regulation and supervision of credit institutions) and the fact that approximately 84.4% of net assets of the financial system in Romania (NBR, 2011), were held, at the end of 2010, by credit institutions we can say that NBR has explicit responsibilities in the field of macroprudential surveillance.

For fulfillment of the objective of these authorities, namely to ensure financial stability, in my opinion structures for macroprudential supervision in charge of detecting the emergence of potentially systemic dangers are necessary to be set up at the national and even regional level.

Also, to identify micro and macroprudential risks and for their mitigation, exchange of information should be not only among ESFS members but also with other authorities with similar duties outside the EU.

I consider that European supervisory authorities should have the power to impose sanctions on institutions that do not cooperate or their cooperation is insufficient.

EFSS set up, should be accompanied, inter alia, by the development of unique regulations package in order to guarantee both, the consistent harmonization and

uniform application of regulation and contributing consequently to a more efficient functioning of the EU internal market.

3.2 Modifications of prudential regulations

Following a short-term policy focused on maximization of shareholders results (returns on equity - ROE) and ignoring risks, the banking system, at the beginning of financial crisis, was characterized by insufficient liquidity reserves, excessive debts, erosion of the quality and capital level, a high degree of interdependence and interconnectivity of markets and financial instiutions.

To address these weaknesses was necessary to reconsider the regulatory framework, in order to claim for the adoption and implementation of a macroprudential approach. This approach requires the set up of signaling indicators and systemic risk surveillance tools.

To signal the build-up of risks in the financial system and the economy at large and to capture the systemic risk manifestation a set of indicators may be used out of which:

- for horizontal dimension: aggregate indicators of imbalances (e.g., of bank liquidity and maturity mismatch, currency risk, leverage, credit and sectoral or leverage in the household and corporate sectors); indicators of market conditions which express both the appétit for risk (e.g., spreads, risk premia) and market liquidity;

- for vertical dimension - indicators of concentration of risk within the system (e.g., bank size and concentration, exposures and interconnectedness among financial institutions, sectors, markets and countries, the degree to which they provide specialised services for which there are few substitutes). These indicators may be use also within the identification process for global systemically important financial institutions (G-SIFIs);

- for both dimensions stress testing covering scenarios with potential adverse modification of the macroeconomic framework and contagion elements can be used to macro, national, and international level;

For concluding information and correct decisions is necessarily to take account of the broader economic context and qualitative information gathered from market participants.

For achievement of the objective, is necessary a close collaboration between institutions and market actors, both national and international, in order to determine indicators/data and collect the information required to identify systemic risks.

For surveillance instruments to be characterized as macroprudential they need o have a systemic orientation in terms of objective, calibration and governance (Progress Report to G20, 2011).

As reaction to the financial crisis, European Commission proposed (Commission proposal, July 20, 2011) that Basel III agreement (BIS, 2011) to be transposed at the European level. The new proposals include both macroprudential measures directed to counter the procyclicality and contagion phenomenon and microprudential aiming for individual strengthen of the institution.

Out of macroprudential tools to address threats to financial stability arising from excessive credit expansion and asset price booms, I mention:

- the countercyclical capital buffer, designed to be accumulated during periods when excess aggregate credit growth is judged to be associated with a build-up of system-wide risk and can be used when risks materialize. The buffer applies to

Common Equity Tier 1 (CET 1) and fully loss absorbing capital and ranges from 0 to 2.5% of risk-weighted assets. In my opinion countercyclical capital reserves should be set up for each category of assets based on continuously evaluation of asset related risks;

- the capital conservation buffers (2.5% CET 1 equity), able to be withdraw during the stress period to support lending activity;

These are to be jointly implemented during 2016-2018 period. For managing the sovereign debts, EBA proposed that a temporary capital reserve to be establish by the end of June 2012 amounting 9% CET1 equity.

- the leverage ratio, defined as CET 1 equity divided by a measure of non risk weighted assets, is aimed to prevent the accumulation of excessive debt within economic boom periods in order to bring institution' assets closer to their capital. By official start, the mechanism will be under testing until 2017;

- the liquidity buffers, taken in order to maintain a sufficient liquidity to cope with stress situations, for a period of one month (liquidity coverage ratio) or stable funding sources on an ongoing basis, for a period of at least one year (net stable funding ratio);

- setting up additional capital for the trading operations carried on over-to-counter (OTC) these financial instruments exposing the credit institutions to unpredictable risks;

- setting up provisions for expected losses aiming to cover future losses in case of risk materialization. By adopting International Financial Reporting Standards (IFRS), Romania has already implemented this requirement, establishing accounting provisions with parallel use of regulated methodology for determining the provisions which allow the adjustments of equity to capital determination requirements with positive difference resulted from applying the two methodologies. However, in order to obtain profit, this methodology allows banks not to recognize its risks.

Other systemic risk indicators applied in Romania too include:

- the liquidity ratio, aim to reduce the maturity mismatch, calculated as the ratio between effective liquidity and the liquidity required and must be higher than one;

- indicators aiming to limit the credit expansion and growing price of the assets: loan-to-value ratio, calculate as the ratio of the loan amount and volume of necessary financing and must be subunit; debt to income ratio calculate as the ratio between debt and client income, etc.. Against capital flows their applicability has been ineffective.

To identify risk exposure and determining resistance of the banking system to extreme shock stress tests are being used.

Other measures designated to limit the system risk within the financial system are aiming to prevent and to enhance the capacity to absorb losses, such as: higher capital requirements for inter-financial sector exposures, for complex securitization and off-balance sheet exposures and capital incentives; additional requirements address to G-SIFIs (additional capital requirements, contingent capital and bail-in debt, additional liquidity requirements, additional supervision, cross-border cooperation agreements for efficiency of objectives), exposures limits, systemic oversight of OTC derivatives, etc.

The European Commission proposals include modification of microprudential nature such as: a higher level and a better quality of capital, adequate capital for market risk and counterparty credit risk; enhance risk management and disclosure, etc.

Also, supervisors may apply sanctions when identifing risks, for example to reduce credit when it's growing into a bubble.

I consider that monitoring of indicators should be made at the level of the entire national and European financial system, since a surplus recorded to an individual or national level constitutes an imbalance to other institution or nation. This remark is also valid in context of globalization of the financial market.

I consider that reorientation of the regulatory framework towards the macroprudential approach will lead to the development of a more prudential banking activity, a better management of risks, more stabile credit institutions, reducing the probability for appearance and manifestation of financial crisis, including their negative effects. For efficiency of the regulations is required their uniform application on the entire banking system.

5. Conclusions

Under the conditions of the European financial markets highly integrated and interconnected, in order to ensure the financial stability a global regulatory and supervisory prudential framework is required for the entire financial system, not only for each Member State. Also for approaching all the systemic risks and avoid the potential political conflicts international cooperation is required.

Modification of the regulatory and prudential supervisory framework will lead to strengthening the resilience of the EU banking sector, ensuring that banks continue to finance the economic activity and growth. For achievement of the objective, cooperation and application of adequate governance at the macroprudential level is required.

For ensuring the financial stability, future research are required on the interaction of the prudential regulatory and supervisory measures of the credit institutions, with macroeconomic policies (e.g. monetary policy, fiscal policy, etc.), and the influence they have on risk-taking behavior or to the economic cycle.

ACKNOWLEDGMENTS

This work was supported by the Academy of Economic Studies, Bucharest - IOSUD.

References

1. Stiglitz, J. — Freefall, Editura Publica, 2010
2. Borio, C. — Towards a macroprudential framework for financial supervision and regulation, BIS Working Papers, 2003
3. Clement, P. — The term “macroprudential”: origins and evolution, BIS Quarterly Review, 2010
4. Borio, C. — Implementing the macroprudential approach to financial regulation and supervision, Banque de France Financial Stability Review No. 13, 2010
5. Borio, C., Shim, I. — What can (macro-) prudential policy do to support monetary policy? BIS Working Papers, 2007
6. Gabriele, G., Moessner, R. — Macroprudential policy – a literature review, BIS Working Papers, 2011
7. Borio, C. — Implementing a macroprudential framework: Blending boldness and realism, BIS Working Papers, 2010
8. Crockett, A. — Marrying the Micro- and Macro-prudential Dimensions of Financial Stability, Eleventh International Conference of Banking Supervisors, 20-21 septembrie 2000, Basel

9. Dardac, N., Georgescu, E. The Future of the Banking Supervision in Europe", Theoretical and Applied Economics, no. 8/2009
10. * * * Progress Report to G20, Macroprudential Policy Tools and Frameworks, BIS Working Papers, 2011, http://www.bis.org/
11. * * * Decision of the Council of the European Union, Brussels, 17.11.2010, 16452/10, www.consilium.europa.eu
12. * * * Commission Proposal for a Regulation of the European Parliament and of the Council on prudential requirements for credit institutions and investement firms, http://ec.europa.eu/
13. * * * National Bank of Romania, Financial Stability Report, 2011, http://www.bnr.ro/PublicationDocuments.aspx?icid=3922
14. * * * Basel III: A global regulatory framework for more resilient banks and banking systems - revised June 2011, BIS, www.bis.org