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EVALUATING AND MANAGING SYSTEMIC RISK IN THE EUROPEAN UNION

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Abstract:
The financial crisis has exposed the weaknesses in national and international economies, the disruption of the financial systems all over the world. The aim of this paper is to point out the importance of systemic risk management in the European Union (EU). Structured on two parts, the study presents the evaluation methods of the systemic risk in the mentioned area and the main proposals for the financial stability reconstruction. To conclude, deep reforms are needed: an adequate financial regulation and supervision, the evaluation of the performance over time, new rules for improving capital and liquidity and a better communication between institutions in order to prevent and neutralize possible distress.

1. Introduction

In the last few years, the financial system has become more complex; the connections between its components are the results of financial innovation and deregulation. An intense activity, an important amount of transactions and the speed of change reveal the consequences of the overexposure to risks. The loss of confidence, an increased uncertainty, the state of concern arising over the financial system produce serious effects in the real economy. According to European Central Bank (2010), the systemic risk is defined in terms of financial stability- the capacity of reducing and eliminating shocks, imbalances and disruption in order to allocate money to profitable investment opportunities. Direct and indirect linkages between financial institutions have conducted

to rapid transmission of shocks. More than that, the failure of one institution generated negative effects in the financial system. Another definition place the systemic risk as the risk of ”widespread failures of financial institutions or freezing up of capital markets that can substantially reduce the supply of such intermediated capital to the real economy” [1, 4].

The current financial crisis shows that systemic episodes can arise both from solvency and liquidity concerns. The systemic events appear as a result of three forces: an increase in real estate prices, the fall of interest rates, an accelerated efficiency and availability of the refinancing opportunities. One of the main sources of instability is provided by the risk management policy.

The reconstruction of a solid financial system demands a correct evaluation of the systemic risk and implies finding healthy solutions for countering the negative effects.

2. The evaluation methods of the systemic risk in European Union

The large dimension of the systemic risk makes it imperative to find a method of evaluation. Even though there have been many attempts to choose just one measure to monitor the risk at European level, none of them proved to be reliable. So, there are at least three approaches that can be used to detect systemic risk.

First approach is taking into consideration a range of measures that can be used to discern when events become systemic, named financial soundness indicators (FSIs). These indicators are used to monitor the soundness of the financial system and to assess systemic risk. FSIs aggregate micro-prudential indicators are used by supervisors to assess soundness of a financial institution. This way they can detect risk to the financial system as a whole that might be missed by micro-prudential indicators.

TAB.1.**Macroprudential Indicators of Financial System Soundness**

Aggregated micro prudential indicators	Macroeconomic indicators
I. Capital adequacy	Economic growth
II. Asset quality	Balance of payments
II.1. Lending institution	Inflation
Borrowing entity	Interest and exchange rate
Management soundness	Lending and asset price booms
Earning and profitability	Contagion effects

Liquidity	Other factors
Sensitivity to market risk	
Market-based indicators	

Source: *Evans, O., Leone, A., Gill, M., Hilbers, P. – Macro-prudential Indicators of Financial System Soundness, IMF Occasional Papers, Washington DC, 2000, p. 9*

The second approach refers to the inter linkages between financial institutions, both domestically and internationally. To indentify the linkages between financial firms there can be used four directions [5, 2]:

- *the network approach*, which tracks the transmission of financial stress across the banking system via linkages in the interbank market;
- *the co-risk model*, which uses market data on credit default swaps to assess how the default risk of an institution is affected by the default risk of another institution;
- *the distress dependence matrix*, which allows analysts to study a group of financial institutions and to assess the probability of distress for a pair of institutions, taking into account a set of other institutions;
- *the default intensity model,* which captures the likelihood of default of a large fraction of financial institutions through linkages.

The final approach takes into consideration data from individual financial institutions in order to identify what entities are most likely to experience pressures. A recent study conducted by IMF shows that while information from individual financial institutions can help guard against systemic risk, not all such information is useful. Also, data collection problems, both in terms of the number of institutions covered and in terms of the timeliness of the data, are likely to be important. The number of systemically important institutions is far smaller than the total number of institutions, and data availability is less likely to be a problem in the case of large institutions.

3. The main directions for limiting systemic risk in the European Union

European Union states are characterized by diversity of the architecture and structure of financial systems. These circumstances make more difficult finding solution against systemic risk, because each country has different approaches regarding oversight and regulation of its own financial system.

The crisis highlighted the new needs of European Union on supervision of financial services. The European Parliament, the most important legislative institution of EU sets three principles regarding European financial system:

- a closer regulation and supervision of alternative investment funds (hedge and equity funds);
- supplementary capital requirements for European banks and a new approach about the bonuses that these financial institutions pay out;
- the supervision of the financial sector – at micro and macro level [3,1].

One of the proposed directives has the main objective to ensure that all alternative investment funds will be over sighted and regulated without exemptions. Every fund will have an European passport and the possibility of developing financial activities in EU. Non-EU funds will be authorized by Member States. Also, the managers of such funds should inform the national supervisors of the leverage limit. Excessive compensation of this managers encouraged excessive risk taking. The G20 Pittsburgh Summit set principles regarding financial system stability, including a compensation based on a long-term value creation. Financial activities based on derivates become extremely important today because of their potential risk in triggering systemic problems. The European financial institutions must work with derivates in certain limits of risk-taking. Derivates should retrieve their most important role: reducing a specific risk and correcting an anomaly from a financial market.

In order to ensure the stability of banking system, a vital component of the system, the European Parliament sets *Capital Requirements Directives III* [4,1]. Through this directive, the European Commission wants to revise EU rules on capital requirements: impose higher capital requirements for re-securitizations, limiting securitization exposures and restrictiveness about risk-taking. Regarding executives bonuses, the directive set maximum cash bonuses of 30%, at least 40% differed for at least three to five years, at least 50% will be remunerated in shares and the discretionary pension benefits should also be in shares.

These new directions for European financial institutions should reduce the systemic risk and make them more powerful facing the crisis. We consider that expanding stress-tests on a large base of financial institutions may discover weakness in system. Also, the role

of central banks should be extended over the procedures of commercial banks regarding customer creditworthiness. Even the negative effect of re-securitizations may be reduced is the basement is solid with clients who can return their credits.

Monitoring and assessing the potential risks and threats during the crisis were weak and incapable to diminish the negative effects manifested in European financial system. This is the reason for creating the European Systemic Risk Board, a new authority with responsibilities in detecting irregularities manifested in the countries' financial systems.

European Systemic Risk Board will have to issue warnings regarding all the potential risks and make recommendations to a country or group of countries for the good functioning of the whole financial system. A potential warning may be made public, depending of effects that can appear in case of publicity.

The new authority will include all central banks governors from the 27 Member States, as well as the countries which haven't adopted the euro yet. Assuring a global supervision implies the presence of other authorities like European Supervisory Authorities and national supervisors.

The existing European supervisory committees will be replaced by a European Banking Authority (EBA), European Insurance and Occupational Pensions Authority (EIOPA) and a European Securities and Markets Authority (ESMA). They will be a part of a network of financial supervisors and will aim a closer supervision of European financial system components. The future of supervision in European Union includes cooperation between these three institutions, ESRB and the national supervisory authorities.

The main advantage of European Systemic Risk Board should be the multinational power in regulating and supervising different institutions from all the financial system. Theoretical issues may look encouraging, but the differences between financial system architecture may be a problem in implementing directions of action in European countries. There are many arguments regarding the existence of such institution. An appropriate regulation and setting clear responsibilities for each supervisor in every country and for each segment of financial system is a necessary measure which can guarantee the success.

4. Conclusion

The recent financial crisis highlighted once again the importance of risk management policies. The systemic events appear as a result of individual actions of financial

institutions even though they are highly interconnected. Taking into consideration the fact that financial stability is defined as the absence of the systemic risk, it is very important to identify the possible sources of it. Policy makers tried to apply different measuring methods and concluded that there are at least three approaches: financial soundness indicators, the linkages between financial institutions and the individual evaluation of firms. Designing an appropriate framework for the systemic risk must be followed by efficient proposals and action in order to improve financial stability. Risk management should focus on regulation and the quality of supervision. New directives have the role to ensure an optimal level of capital, liquidity and solvency. Macro-financial surveillance and macro-prudential supervision are vital and that makes credible the need for a multinational power - European Systemic Risk Board - an institution capable to assure a global supervision.

Aknowledgements

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