



## Facultatea de Științe Economice și Gestiunea Afacerilor

Str. Teodor Mihali nr. 58-60 Cluj-Napoca, RO-400591 Tel.: 0264-41.86.52-5 Fax: 0264-41.25.70 econ@econ.ubbcluj.ro www.econ.ubbcluj.ro

## **HABILITATION THESIS**

## How to Prevent the Fall of the Titans? Mechanisms for Reducing Systemic Risk of Banks

Simona NISTOR

## **SUMMARY**

This habilitation thesis summarizes my research activity in the field of Financial Stability and comprises my main publications on this subject. The first part of the thesis is dedicated to the presentation of my scientific contributions to the literature on systemic risk and intervention mechanisms. The second part of the thesis highlights my contributions to the literature on determinants of systemic risk and of market perception about the riskiness of systemically important banks. Finally, the third part of the thesis presents my plans with respect to research activities.

The first part, "Intervention Mechanisms Impacting Systemic Risk", provides an overview on the intervention mechanisms and policies used by governments, supervisors and central banks to control systemic risk. Chapter 1 "Effects of Policy Interventions on Systemic Risk across Banks", which is published as a working paper, co-written with S. Ongena, on SSRN network (2017), investigates the impact of policy interventions on systemic risk across banks by analyzing a comprehensive sample of European banks and bank-specific bailout events between 2008 and 2014. The findings show that guarantees have a limited effect in reducing the systemic risk contribution made by small, lowly-capitalized or liquid banks in the long run and of liquid banks in the short run. Recapitalizations immediately decrease the banks' systemic importance, but the effect seems short-lived. Liquidity injections can provide immediate beneficial effects for risky or lowly-profitable banks, but in the long run increase their contribution to systemic risk.

Chapter 2 "Effects of Macroprudential Policies on Systemic Risk", which is a forthcoming paper, co-written with A.M. Andrieş and F. Melnic, in Czech Journal of Economics and Finance (2018), assesses the effectiveness of a large set of general and housing macro-prudential policies in controlling banks' systemic importance and risk-taking incentives. The sample includes 95 large international banks from 21 European and North American countries spanning from 2008 to 2014. Empirical findings indicate that tightening the general capital requirements, sector specific capital buffers, along with housing countercyclical capital requirements and Debt-Service-to-Income lending criteria significantly reduce banks' contribution to systemic risk and their individual risk-taking. A similar effect has been obtained for loosening real estate loans loss provisioning. Furthermore, the nexus between macroprudential policies and banks' risk is shaped through several channels like bank size, the share of foreign bank assets, banking sector competition, and the independence of supervisory authority.

Chapter 3 "Systemic Risk and Central Bank Transparency" analyses the impact of central bank transparency on systemic risk in emerging banking markets. It is a forthcoming paper, co-written with A.M. Andrieş and N. Sprincean, in Research in International Business and Finance (2018). Results indicate a positive and significant relationship between central bank transparency and financial institutions' contribution to systemic risk. On the other side, increased central bank transparency significantly reduces the idiosyncratic risk of banks. The relationship is influenced by the restrictiveness of regulatory framework. A more transparent central bank is beneficial for the banking sector from a micro-prudential perspective. However,

it may create incentives for financial institutions to engage in risky activities which through herd behavior may increase individual contribution to the risk of the banking system.

The second part, "Systemic Risk Determinants and Market Perception on Systemically Important Banks", continues to treat the role of public interventions through banking regulations, but also highlights the determinants of systemic risk and of the market perception regarding a broad range of systemically important banks. Chapter 4 "Systemic Risk, Corporate Governance and Regulation of Banks" investigates the impact of governance and regulation on systemic risk across a sample of banks from Emerging CEE countries during 2005-2012. Overall, the empirical results show that tight internal risk management mechanisms and shareholder-friendly supervisory boards are associated with greater contributions of banks to systemic risk. Additionally, external governance, such as regulatory and supervisory environment in banks' host and home countries, significantly affects the impact of corporate governance on systemic risk. This sub-section has been published as a paper, co-written with A.M. Andries, in Economics Letters, 144, 59-63, 2016.

Chapter 5 "Systemic Risk and Foreign Currency Positions of Banks", which is a forthcoming paper, co-written with A.M. Andrieş, in Eastern European Economics (2018), focuses on assessing the impact of foreign currency (FX) denominated assets and liabilities on systemic risk using a unique hand-collected dataset of bank-level FX positions for the period 2005-2012. The sample consists of banks from Central and Eastern Europe with a large share of FX exposures in their balance sheets. Empirical findings indicate that systemic risk is dependent on the currency choice of financial institutions. While FX positions denominated in EUR and USD do not pose systemic risk concerns, FX positions denominated in other currencies like CHF significantly enhance banks' systemic importance. The negative influence of CHF positions might be reduced through prudent corporate governance mechanisms, tight restrictions on banking activity and more restrictive limits on foreign currency lending in the home countries of bank holding companies.

Chapter 6 "On Becoming an O-SII ('Other Systemically Important Institution')", which has been published as a working paper, co-written with A.M. Andrieş, S. Ongena and N. Sprincean, on SSRN network (2017), examines how financial markets react to the disclosure of the O-SIIs list by the European Banking Authority. Based on an event study of bank stock prices, the results document that the immediate reaction of the stock market is negative. However, within a few days investors change their perception, both in the case of Euro zone and non-Euro zone banks. CDS spreads react similarly, increasing in a first stage and later decreasing. Abnormal returns are more negative for banks with more interest income or that are foreign held. This is also the case in countries with more banking activity restrictions, independence of supervisory authority and greater fiscal capacity.

The third part of the thesis, "Research Perspectives", presents future directions on research activities. The research agenda will focus on analyzing the impact of intervention schemes on banks' individual risk-taking, their market power, as well as their creditworthiness and health. This would be analyzed also in the context of cross-border banking activities.