THE BUCHAREST UNIVERSITY OF ECONOMIC STUDIES
Council for Doctoral Studies

PhD THESIS

Presented publicly by author:
CARMEN EMILIA PASCAL

Title of the thesis:

THE IMPACT OF THE FINANCIAL SECTOR ON THE MACROECONOMIC STABILITY

Academic advisor: PhD Professor DANIEL ŞTEFAN ARMEANU

Presentation Board:

Prof.univ.dr.Gherghina Ştefan Cristian	- University of Economic Studies, Bucharest
Prof.univ.dr. Onofrei Mihaela	- Alexandru Ioan Cuza University, Iaşi
Prof.univ.dr. Ciumaş Cristina	- Babeș-Bolyai University, Cluj-Napoca
Prof.univ.dr. Nițescu Dan Costin	- University of Economic Studies, Bucharest
Prof.univ.dr.Armeanu Daniel Ştefan	- University of Economic Studies, Bucharest

Bucharest, 2024

THE BUCHAREST UNIVERSITY OF ECONOMIC STUDIES
Council for Doctoral Studies

Finance Doctoral School

THE IMPACT OF THE FINANCIAL SECTOR ON THE MACROECONOMIC STABILITY

Carmen Emilia Pascal

Academic advisor: Prof.PhD Daniel Ştefan Armeanu

Bucharest, 2024

PhD THESIS SUMMARY
THE IMPACT OF THE FINANCIAL SECTOR ON MACROECONOMIC STABILITY

CARMEN EMILIA PASCAL

PhD supervisor: Prof.univ.dr. DANIEL ŞTEFAN ARMEANU

TABLE OF CONTENTS

Keywords:

macroeconomic stability, convergence criteria, Eurozone, price stability, budget deficit, public debt, exchange rate, interest rates, market efficiency, AMH, Hurst, volatility, crisis, financial stability, spillover index, contagion, financial conditions indicator

Financial and economic stability forms the essential foundation for the efficient functioning of markets in supporting sustainable growth. These two types of stability support each other and are crucial for a robust and resilient economy. Without financial stability, economies become vulnerable to major crises, and without macroeconomic stability, the financial system risks becoming fragile and inefficient.

The doctoral thesis begins with a review of Romania's current situation concerning nominal convergence criteria, comparing economic growth levels and GDP per capita with EU member states. It also examines the global economic context and the effects of recent crises on convergence and economic growth. The research uses VAR/VEC models for impulse-response analysis and variance decomposition, innovating by creating a nominal convergence index to study its impact on GDP growth, while avoiding the limitations of the Cholesky method.

A detailed analysis of structural similarities and business cycle synchronization with Eurozone countries, as well as with the Eurozone as a whole, is conducted using the Krugman indicator, the Hodrick-Prescott filter, and a concordance indicator. The second chapter focuses on clustering EU countries based on macroeconomic indicators to assess economic divergences caused by recent crises, contributing to the literature with an extensive and detailed analysis in an economically crisis-impacted context.

The analysis continues with a study of the volatility in stock, bond, monetary, and forex markets using GARCH models and volatility matrices to identify events that generated high volatility. The weak-form efficiency of the stock market is tested using a rolling window to observe transitions between stages of efficiency and inefficiency. The Hurst exponent is estimated to confirm investor herd behavior during crises. Additionally, a spillover index based on Diebold and Yilmaz's methodology is constructed to study the impact of social and geopolitical shocks on volatility and their propagation across markets. These analysis is make significant contributions to the literature.

The final chapter examines contagion in Romanian financial markets using the spillover index applied for the four studied financial markets, highlighting the originality of this study. Specific Romanian market events, such as minimum wage increases, protests, downgrades, and upgrades of the country rating, are tested to identify their impact on market instability. Dynamic correlations between markets are also used based on a BEKK(1,1) model to confirm contagion. To complete the analysis, a financial conditions index is developed according to the NBR methodology, and its impact on economic growth, along with that of the spillover index, is tested through VAR analyses (variance decomposition and Granger causality).

Financial markets are highly interconnected, increasing the risk of shock transmission and volatility. Regulatory authorities and policymakers need to be aware of these interdependencies, monitor them closely, and manage risks effectively to ensure long-term financial and economic stability.