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## **THE IMPACT OF GOVERNMENT REGULATION OF BANKING ON FINANCIAL STABILITY AND SUSTAINABLE DEVELOPMENT**

*The thesis is devoted to the state regulation of banking activities in the context of global turbulence. The influence of banking regulation instruments on macroeconomic stability and the likelihood of a banking crisis is determined. The relationship between banking regulation and the effectiveness of green investments is revealed.*

**Keywords:** *banking regulation, financial stability, banking crisis, green investment, digitalization.*

1. Banking regulations is a complex multidimensional latent construct that could not be measured by a single indicator. Due to the proposed model identification and specification, the number of observed variables should be limited. Therefore, the exogenous constructs of banking regulations are measured by the solvency ratio (%) and Tier 1 ratio (%). According to the provisions of the Basel III final rule, the solvency ratio is based on risk-weighted assets. According to representatives of the Basel Committee, increased banking regulations should minimize the probability of global financial and economic crisis occurrences. The authors of the amendments to the Basel Capital Accord hope that the proposed package of changes, including new provisions of Tier 1 capital, will significantly strengthen the financial condition of banks and protect them from taking on excessive risks.

The mediated constructs presented by financial system stability are measured by the financial development index and the inflation rate. In contrast to relevant and timely research [1], where financial sector deformation reflected by the degradation of financial institutions and markets was used as a mediator, a mediational pathway of financial system stability represented by the financial development of markets and institutions was investigated in this study. Following [2; 3], a stable financial system is capable ensure economic agents with developed financial institutions and financial markets are in terms of their depth, access, and efficiency. Therefore, financial system stability is assimilated into the financial development index. A second observed variable that was additionally incorporated for the multilayered latent construct represented by the financial system stability is the inflation rate. The state of the financial system is provided on the inflation rate since the overriding principle of financial system stability focused on price stability.

This study has raised important questions about the mediation role of financial system stability as a transmitting path between banking regulations and trust in the ECB.

Relying on preliminary empirical findings that banking regulations do have a significant influence on financial system stability, and the latter on trust in the ECB, the mediation effect model was created, studied, and tested. In response to the negative impact of banking regulations on financial system development, a negative mediation effect was established. Thus, a rise in the banking regulations creates the causal chain by virtue of the financial system stability changes leads to the shrinkage of trust in the ECB.

The analysis has shown that despite positive mediation of other phenomena and/or processes distinct from financial development and inflation, given the negative mediation of financial system stability in the linkage between banking regulations and trust in central banking, the total mediation model implies a negative effect. Among considerable research outcomes are that the mediation effect is greater than the unmediation effect. From a practical angle, empirical results indicate that financial system stability is expected to take the lead mediator in the path between government regulatory and supervisory interventions in the banking sphere and trust in the ECB.

2. Following the 2008 financial crisis, BCBS started discussing new regulatory approaches to address systemic risk and reduce the probability of further financial crises. New set of standards released by BCBS in 2010-2011, introduced a separate set of banking regulation tools. Since then, financial regulators in the EU and around the world have been actively working on its implementation. However, although bank regulation tools have become an accepted part of the financial regulation system, there is still a lack of systematic data that would allow them to study their effectiveness. As a result, assessment of effects of bank regulation measures on the probability of a banking crisis has become one of the most difficult challenges currently facing regulators.

The results of the study revealed the influence of banking regulation tools on the likelihood of a banking crisis, which made it possible to draw the following conclusions. Bank regulation tools are important in predicting the probability of a systemic banking crisis in European countries. However, a model containing only indicators that characterize government interventions in banking is able to correctly classify stability times with an accuracy of 95.65%, and a systemic banking crisis – with an accuracy of only 10.87%. Ratio of bank capital to total assets, equity to total assets weighted for risk and Z-score of bank default probability, the results of binary modeling of logistic regression are significant with negative coefficients. This indicates that trend of an increase in these indicators reduces the probability of a systemic banking crisis by providing a buffer to protect the banking system from peak losses that exceed the possible level of credit losses.

In this context, the role of the Basel agreements in stabilizing the entire financial system and increasing bank capital is clearly evident. At the same time, the deterioration in the asset quality of the European banking system as the ratio of non-performing loans to total loans increases the probability of a systemic banking crisis. This fact confirms the hypothesis that aggressive credit policy and inadequate risk assessment, expressed by increasing the share of non-performing loans, not only worsen the profitability of

banking activities, but also negatively affect the financial sustainability of the banking system as a whole.

Further research should, in our view, be directed to an in-depth study of additional instruments of bank regulation, in particular, in the direction of the impact of capital preservation buffers, systemic risk protection, systemic importance buffer and countercyclical buffer, the probability of a systemic banking crisis, including the “lag” of some indicators. Another direction of promising development could be to address the issue of complementary impact of different types of financial policies in order to minimize potential threats in the financial sector of the economy and, reducing the probability of a banking crisis in European countries.

3. Bibliometric analysis of 229 Scopus publications from 1993-2022 on “green investment” and “regulation” allow concluded that:

- government effectiveness and rule of law are considered as drivers of carbon productivity increase, while improvement of control of corruption, voice and accountability, financial development and financial freedom might result to decrease of carbon productivity;

- control of corruption and financial development index are considered as inhibitors of comparative advantage in environmental goods, while political stability has significant positive impact on it;

- regulatory measures (including banking and financial regulation) do not influence significantly on environmental goods trade balance;

- research and development expenditures inhibits government green investment (expenditures on environmental protection) because of substitution effect, while rule of law, financial intermediary development and effective banking regulation help to boost it.

The obtained empirical results can be useful for both scientists and practitioners and government officials to improve the regulatory policy of the state based on environmental friendliness and sustainability.

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