## **Report on Doctoral Thesis**

Doctoral student:	Etsub Tekola Jemberu
Title of Doctoral Thesis:	Forfeited Benefits or Mitigated Losses? The Economic Impact of Not Having a Stock Market: A Synthetic Control Approach
Reviewer:	prof. Ing. Aleksandr Ključnikov, Ph.D.
Place of Doctoral Examination:	Faculty of Management and Economics, Tomas Bata University in Zlín, the Czech Republic

## Evaluation of the actuality of the topic of the Doctoral Thesis

The thesis addresses the economic impact of not having a stock market, which is a critical issue for many developing countries. Given that approximately one-sixth of countries globally lack a formal stock exchange, understanding the implications of this absence is crucial for policymakers and economists. While numerous studies have explored the positive associations between stock markets and economic growth, few have focused on the economic consequences for countries without such markets. The topic is relevant not only to academia but also to a broader socio-economic audience, including international financial institutions, development agencies, and governments. As a result, the Doctoral Thesis topic can be considered both timely and relevant.

#### Evaluation of the fulfillment of the objectives set out in the dissertation thesis.

The dissertation's primary objective is to estimate the unrealized economic benefits of not having a stock market, accompanied by three partial objectives. The thesis accomplishes this primary objective using the innovative Synthetic Control Method (SCM) to create counterfactual scenarios for countries without stock markets. This unique approach allows for a detailed comparison between actual economic performance and hypothetical scenarios where these countries had stock markets. By focusing on key macroeconomic indicators such as economic output, investment, and employment, the research provides comprehensive insights into the potential benefits and costs of stock market absence. The selection of the countries for the research is reasonable and well justified.

However, the results for several countries and variables are quite confusing, raising the question of whether the countries' weights are set correctly. While the author correctly applies the Synthetic Control Method, the problem may be related to selecting the countries for the donor pool and/or the specifics of the countries without a stock exchange. Another doubt is related to the weight of the factual impact of a stock exchange as a single factor, without addressing other economically related issues such as the independence and stability of the legal system, law enforcement, ensuring property rights, security, etc.

In summary, the work has been carried out with diligence and a clear understanding of academic rigor. The objectives set out in the dissertation thesis have been successfully achieved, albeit with some limitations.

# *Evaluation of the procedure of research objectives solvation, results of Doctoral Thesis, and the contribution of the student*

The Doctoral Thesis adheres to a traditional research paper structure, including all essential components. The use of the Synthetic Control Method (SCM) is appropriate for estimating the hypothetical economic performances of countries without stock markets. The thesis outlines the SCM process in detail, including data collection, selection of control and treated groups, and robustness checks. The selection of countries without stock markets and the donor pool countries is well-justified based on their economic and financial characteristics. However, there were some concerns regarding the appropriateness of weights and the donor pool selection, which could potentially affect the results.

The findings reveal that the impact of the stock market varies across countries and macroeconomic indicators. While some countries showed significant output gains without a stock market, others did not benefit or incurred costs in terms of investment. For example, Ethiopia benefited from not having a stock market, whereas other countries experienced the opposite effect.

The student introduced a novel approach to evaluating the economic impacts of stock market absence, making a valuable methodological contribution to future research in economic and financial studies. The author demonstrates the ability to conduct independent research and successfully accomplish all predetermined objectives.

Despite minor shortcomings, the overall evaluation is decidedly positive, marking a successful accomplishment of the thesis objectives.

## Evaluation of the contribution to the development of the field of study and the practice

The doctoral thesis makes significant contributions to both the academic field and practical policymaking. Methodologically, it introduces and validates the use of the Synthetic Control Method (SCM) in a novel context, providing a valuable tool for future research. Empirically, it offers insightful findings on the economic impacts of stock market absence, revealing that these impacts vary across different countries and macroeconomic indicators. Practically, the thesis provides well-supported evidence and a robust framework for policymakers, thereby enhancing the potential for informed and effective economic policies.

#### Evaluation of formal and language issues of the Doctoral Thesis

The Doctoral Thesis meets all prescribed formal criteria for scientific work. The language employed is suitably academic.

#### *Evaluation of the publications of the doctoral candidate*

The doctoral candidate presented a list of 2 articles published in peer-reviewed international scientific journals listed in the Web of Science (SSCI, ESCI) and Scopus databases (Journal of Competitiveness) and 1 paper in the unindexed journal accompanied by 3 local conference papers. Most of the presented publications are related to the field of research. Therefore, the number and the quality of publications fulfill the conditions for proceeding to the defense.

## Questions for the student for further discussion

- 1. How can you explain the significant difference in the estimated results for Ethiopia?
- 2. Based on your research results, do you still believe that the impact of a stock exchange can be evaluated as an isolated factor, without considering other economically related issues? Or is the introduction of a stock exchange a consequence of other factors?
- 3. Two of the seven countries in the donor pool (Cyprus and Romania) are EU member states with robust legal systems, while the other five countries (Bhutan, Botswana, Malawi, Nepal, Zambia) are substantially less developed. Have you attempted to recalculate the model using countries with similar characteristics, particularly in terms of legal environment?

#### Definite statement of the reviewer of the fulfillment of the Doctoral Thesis evaluation

Based on a comprehensive assessment of the topic, the degree of achievement of goals, results, and benefits of work for the practice and the development of the scientific field, I recommend the Dissertation thesis for the defense. In case of a successful defense, I propose to grant the doctoral candidate the academic title of "Doctor" (abbreviated as "Ph.D.").

In Ostrava, 29.05.2024

prof. Ing. Aleksandr Ključnikov, Ph.D. European Centre for Business Research Panevropská univerzita, a.s.