



**SILESIA
UNIVERSITY**
SCHOOL OF BUSINESS
ADMINISTRATION IN KARVINA

REVIEW OF DOCTORAL DISSERTATION

Name and Surname of a Student: Michael Amponsah Odei

Title: Examination of factors contributing to SMEs Innovation Outcomes in the Visegrad Countries

Name and Surname of a Reviewer: Michal Tvrdoň (Silesian University in Opava, School of Business Administration in Karviná, Department of Economics and Public Administration, tvrdon@opf.slu.cz)

I. Topicality of a theme

In my opinion, the theme of the dissertation is clearly topical and provides the author enough space for his own approach. The application to the Visegrad Group countries seems to me to be appropriate in the context of their similar development in the last 30 years. The issue of innovation is one of the topics that have been solved for a long time and will certainly be the subject of interest of researchers in the future as well. Focusing thesis on small and medium-sized enterprises seems beneficial to me, especially due to their importance in the economy.

II. Aim of the thesis and its fulfilment

The aim of the dissertation thesis, is „*to examine the factors that can drive small businesses innovation performance*“. From my point of view, the aim of the dissertation thesis is clear and well formulated. Furthermore, three research questions were formulated that support and develop this goal in the sense of determining internal and external factors, or barriers to innovation. In my opinion, the goal was accomplished in its technical essence mainly (performed econometric modelling with comments), but from a purely substantive point of view, the aim of the thesis was fulfilled partially. In this context a more precise definition of the research design in the sense of establishing successive steps will be beneficial.

III. Organization of the thesis and research methodology and treatment

The range of the doctoral dissertation proposal is 92 pages without lists of references and attachments – from this point of view it is below a standard range of the doctoral thesis. Moreover, 8 pages within this range consists of tables or figures without explanatory text only (see pages 44 - 45 and 80 – 85).

Structure of the dissertation thesis seems to be logical and it consists of 1. Introduction, 2. Literature review, 3. Research problem, questions, objectives and scope of the study, 4. Methodology, 5. Results and Discussion and 6. Conclusion.

First chapter called “Introduction” the first chapter is dedicated to the basic definition of the topic. Right at the beginning, the author refers to his own work in a case of a serious statement - here it would be more appropriate to cite prominent authors who deals with this topic. The author mentioned that previous studies on innovation activities mainly deal with large enterprises and only a small part of the research is devoted to small and medium-sized enterprises. This is a completely correct motivation for carrying out one's own research, which, however, is only carried out at the level of econometric modelling of potential links, and although the author states that he will also deal with the business environment in these countries, this part of a research was not included in the thesis (see comments below).

Chapter two focused on the theoretical background, and reviews of recent literature on factors driving small businesses innovations. From my point of view this part is insufficient. This part consists of some general growth theories. Subsequently, the author deals with theories of innovation, types of innovation or factors influencing innovation in small and medium-sized enterprises, while this part is rather a list of individual factors without the expected critical approach. I can't get rid of the impression that the author only collected the most necessary definitions and findings that cover the researched topic. At first glance it is obvious that a deeper analysis of these factors was not carried out, especially on the basis of previous studies and their critical comparison.

The most underestimated part of the thesis is the description of small and medium-sized enterprises in the Visegrad Group countries, which is in the form of two paragraphs. In my opinion, the dissertation lacks a quality description of small and medium-sized enterprises' environment in the Visegrad countries - there is only a mention of the ranking position within innovators. Here I would expect a part that will be devoted to the setting of the innovation policies of the V-4 countries with an emphasis on SMEs and their characteristics, as well as the financing of innovations in these countries. Moreover, all these characteristics should be mentioned in comparison with large companies. The underestimation of this part is evidenced, among other things, by figure 1, which shows a completely irrelevant map of the V-4 countries.

Chapter four deals with research design, methods and data. Author decided to employ probit regression model using Business Environment and Enterprise Surveys. In this section, I lack a discussion of possible methods that could be used in the analysis, including their limitations or advantages. Unfortunately, this key part of the paper is really unclear for me. Within the defence of the dissertation, it will be necessary to clarify the data used in the research. One example – Table 7 should provide a brief and general overview of how firms in the sample are distributed in the Visegrad group. One would therefore expect that the table would contain the division of companies according to the NACE classification, but I did not find anything like that in the table. There is written on the page 52: *“the results show that about 35% of SMEs in these countries are found in the manufacturing sector and about 40% were found in the service sector. About 25% of SMEs were found in the retail sector”*. However, this is not clear from

the table. From my point of view this table contains different data and in truth I am unable to understand them. This should be explained within the defence including the countries differences.

The empirical part of the work also includes a qualitative survey among experts on this topic. Author analysed 15 responses. I am of the opinion that a survey could have been conducted here among a wide spectrum of respondents - not only academics, but also entrepreneurs (managers), representatives of public administration, banks, interest groups (chamber of commerce), etc. It would then have more informative value.

IV. Formal aspects of the dissertation

The student should pay more attention to formal aspects of the thesis – especially mentioned comments in association with the tables on the whole page or without a corresponding comment in the text. Structure of the thesis mentioned in introduction is not compatible with the content

V. Publication activity

Publication activity of the student is average – the student published scientific results mainly in scientific journal listed in ESCI edition, one is in SSCI edition (with IF). Student should continue publishing in the scientific journals listed in SSCI edition.

VI. Overall evaluation

Despite the above critical comments, **I recommend this dissertation for the defense**, and if the student satisfactorily clarifies the problematic aspects of the dissertation mentioned in this opponent review and answers the questions mentioned below and in the text of this review, I would recommend to award student with academic title PhD.

VII. Questions

I would like to ask the following questions regarding the thesis (some are mentioned within the text of a review):

- 1) What other methods could be used to evaluate the factors?
- 2) If the author had focused on large enterprises, can we expect different research results?

In Karviná 23. 6. 2023



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Michal Tvrdoň