

Review on dissertation

Author: Emmanuel Ebo Arthur, MBA (*University of Pardubice, Faculty of Economics and Administration*)

Title: Influence of Selected Determinants of the Knowledge Production Function on Innovation Performance in Region

Supervisor: prof. Ing. Jan Stejskal, Ph.D.

In recent years, the issue of innovation performance has come to the forefront of interest among economists and policy makers, who see innovation as a key engine of economic growth. At the same time, innovation is a decisive factor increasing the competitiveness of national, regional and local economies. The relationship between innovation and knowledge production is an up-to-date research topic. It is knowledge that stimulates the creation and spread of innovations.

The author based his dissertation on these ideas. His literary review demonstrates a very good orientation in the researched topic. The theoretical framework is created on the basis of a large number of sources, including traditional ones, but dominated by publications from recent years, which include the latest findings on relevant theories and concepts.

From the point of view of the defined aims, it is necessary to highlight the way in which the second chapter "Production function to knowledge production" is processed. According to the statement of the author, the Independent variables section "critically examines the specific explanatory variables of the study". The review conducted is focused on the later determination of hypotheses. Some explanatory commentary would be particularly appropriate for sections 2.3.5 and 2.3.8.

How significant is their role in fulfilling the primary aim?

Aims and hypotheses

The starting point for setting the aims was the identification of research gaps. The author defined one primary (general) aim, which he divided into three main objectives. The first and second objectives are defined clearly and comprehensibly. This is also reflected in the hypotheses set, the number of which is four for objective 1 and six for objective 2.

In the case of the third objective, it is not clear why the term civil liberties is considered a synonym for the term business environment. ***This should be explained during the defence.*** Five hypotheses are set for objective 3. Hypotheses H3c and H3d appear to be irrelevant. The differences in the values of the Civil liberties index (CLI) are very small between European countries. At the same time, there are countries in the global economy that belong to the innovative leaders and their CLI is less than 1 (typically China in some fields).

All three objectives correspond to the topic of the work, are relatively ambitious and create the prerequisites for potentially interesting and valuable results. Although I have comments on the formulation of some hypotheses, I consider most of them relevant and their confirmation a significant contribution to research in the field.

Data and methods

The research is based on data from the Community Innovation Survey 2018, supplemented by other secondary data from sources that the author considers relevant for achieving the set objectives. This is described in detail and credibly, especially in sections 4.1.5 - 4.1.7. Subsequently, attention is paid to the explanation of the dependent and independent variables.

Several research methods are used in data processing, which are again specifically chosen for individual objectives. Their description and explanation demonstrate the author's very good orientation and also his experience with their application.

Dissertation results

The objectives were fulfilled. Most of the hypotheses were confirmed, with the exception of H3c and H3d, for which it was possible to assume this. All results are presented clearly and properly. Strong attention is paid to their interpretation. The discussion is also of good quality in the context of existing studies that dealt with partial aspects of the research issue. Some conclusions and limits of the research open questions that I present in the next part of the review.

Comments and questions for explanation at defence

It is not good to state "Author's own" as the source of tables in cases where the author did not create their content, but only elaborated them based on other sources (tables in chapter 2).

Switzerland is not a member state of the EU (p. 67).

There is a small error on p. 107, the correct one should be: This supports hypothesis H2e (not H3e).

What is the real meaning of rejecting H3c and H3d? What does it say? The answer should be given in the context of the above comment and demonstrated on the secondary data that entered the calculation.

The title of the dissertation states "in Region". Although regional innovation performance is written in several places, national data is used in the calculations. Is the assumption that a developed country = developed regions used? How would it be possible to view Italy, for example, from this perspective?

Conclusion

The candidate has demonstrated his creative abilities in the relevant research area. His results contributed to filling the research gap in the field of regional and public economics. I recommend the dissertation for defence and the awarding of the Ph.D. degree.

Brno, August 19, 2025

.....

doc. Ing. Vladimír Žitek, Ph.D.
Department of Regional Economics
Faculty of Economics and Administration
Masaryk University