

SUPERVISOR'S REVIEW REPORT ON PH.D. STUDENT'S ACTIVITIES

Applicant: Ing. Richard Gardiner
Fakulta ekonomicko-správní
Univerzita Pardubice

Title of dissertation thesis: Modelling Sustainable Development in a Region

Study programme: Economic Policy and Administration

Supervisor: prof. Ing. Petr Hájek, Ph.D.
Centrum pro vědu a výzkum
Fakulta ekonomicko-správní, Univerzita Pardubice

Review of applicant activities

Ing. Richard Gardiner has started his doctoral studies in 2015 in the study programme Economic Policy and Administration. In June 2019, he successfully passed the state exam. During his full-time study, participated in educational activities, demonstrating effective communication in discussions in the courses of Environmental Economics and Management and Modelling of Socio-Economic Processes. He also showed enthusiasm for academic career. He gradually improved his academic skills by presenting his research progress at international conferences and by preparing complete research papers submitted to highly regarded journals.

Objectives of the dissertation thesis, research methodology and results

The dissertation thesis by Ing. Richard Gardiner deals with modelling sustainable development in a region. The objective of the thesis is to propose and verify an economy-society-environment nexus model to examine interactions among SDGs and sustainable development indicators at national and regional EU levels. Although the objective of the thesis seems to be too broad, the applicant defines several specific problems to be addressed in four specific objectives.

The applicant divided the thesis into 8 sections. Sections 1 and 2 provide sufficient theoretical background on modelling sustainable development. Section 3 presents the aim and objectives, and Section 4 outlines the main steps of the research methodology. The econometric methods are sufficiently justified, and the applicant structured the remaining sections in terms of three proposed models. All the data used are publicly available and the obtained results are well documented and, therefore, the results can be easily reproduced.

Summary

The applicant has demonstrated the ability to conduct research on a complex problem. I can state that the applicant has worked actively and independently in his endeavour to overcome the problems stated. The objective of the dissertation thesis is challenging, and the proposed

model represents a promising approach for detecting complex interactions among sustainable development goals and indicators. The results obtained provide empirical support to the proposed approach. In my opinion, the dissertation thesis does fulfil requirements expected for a thesis in the field of Economic Policy and Administration.

Publication activity of the applicant

The list of author's publications is presented in the final section of the dissertation thesis. The partial results of the dissertation thesis were first presented in the conference papers (indexed in Web of Science), and the complete models were published in two leading journal papers (both ranked in the first quartile of their respective research fields). The applicant published five conference papers and two journal papers in collaboration with his supervisor. One journal paper is under review now. For the defence of the dissertation thesis, I consider the list of the publications sufficient. The published papers also attracted a considerable attention of research community, with more than twenty citations in Web of Science.

Recommendation

Based on the above, and I **do recommend** Richard Gardiner for defence of the dissertation in the study programme Economic Policy and Administration.

In Pardubice, September 30, 2021

prof. Ing. Petr Hájek, Ph.D.