

Review of the Doctoral Dissertation

Value Chains and Competitiveness in Europe: A Comparative Study of the Czech Republic and Switzerland

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The doctoral dissertation of Sarbani Bublu Thakur-Weigold, MSc on the topic *“Value Chains and Competitiveness in Europe: A Comparative Study of the Czech Republic and Switzerland”* is a very interesting and readable scientific work. The subject of the doctoral dissertation is very topical with respect to the fact that global value chains (GVCs) significantly contribute to global economic growth, international trade and the creation of new work positions in the individual countries around the world. Processing this topic on the example of two European countries, the Czech Republic and Switzerland, fully corresponds with the study programme International Economic Relations and the study field European Studies.

The formulation of the initial research assignment and the objectives of the doctoral dissertation is clear and original. Although many scientific studies and articles about GVCs have already been published, the author of this dissertation creates a new approach that analyses the GVC issue through five scientific areas and, thus, she moves the current level of knowledge in the given area. **The objective of the doctoral dissertation** is *“to bridge the gaps in globalization studies by summarizing the body of GVC knowledge across Economics, Geography, Sociology, International Business, and Operations Management (p. 9)”*. In order *“to discover possibilities for value creation and enable policy development (p. 9)”*, the author of the doctoral dissertation compares two European countries, namely the Czech Republic and Switzerland, which are both small open economies deeply embedded in GVCs. The objective of the dissertation is supported by two research questions, which are: *“How to compete as a place and as a firm?” (p. 9)* and *“What types of strategy can change the shape of the Smile Curve for the better? (p. 10)”*. Thus, the research assignment clearly contributed to the achievement of fruitful results for setting policy recommendations.

In terms of the methodological approach and research methods, instead of the previous GVCs methodology of the Gereffi school (p. 73) that explores GVCs through a four-dimensional framework, but without a logical connection with business decisions, the methodology of the author’s own research is based on a mix of macro-economic indicators with the national firm (micro)-level GVCs data, with both parts focused namely on the MedTech industry. Thus, the empirical part of the doctoral dissertation (i.e. Chapter 2) includes three parts. Firstly, two monitored countries, i.e. the Czech Republic and Switzerland are compared through

the GVC adequate macro-economic data, and also differences between the MedTech enterprises in the Czech Republic and Switzerland are explored, and then the main causes of differences among MedTech enterprises in both countries are identified. Secondly, a case study about the integration of the Swiss MedTech industry into a global GVC is introduced and a growth strategy based on a global order fulfilment system is developed. This case study is the result of the author's own participation in a two-year research project with an industrial partner of the ETH Zurich, i.e. a Swiss Contract Manufacturer, i.e. a multinational holding company which operates globally. Thus, besides traditional logical methods, such as statistical description, analyses and comparison of data, etc. the author of the doctoral dissertation, as a member of the research team, co-creates a new competitive approach. Lastly, the author identifies the areas that should be revised to avoid risk and, *vice versa*, to manage the opportunities which small firms face when operating within GVCs. On the whole, the multi-discipline approach that was used in this dissertation enables to think about GVCs in a more complex way. This methodology gives a new dimension to the GVCs research.

The doctoral dissertation has a logical structure. Besides the Introduction, the content of the doctoral thesis is divided into three main chapters. **Chapter 1** focuses on the theoretical determination of GVCs through a structured literature review of five research domains, as follows: macroeconomics, sociology, economic geography, international business and supply chain management. The author explores GVCs in all five domains through six conceptual questions concerning: 1) the global division of labour in GVCs and the determinants that have impact on the GVC location, 2) the institutional and territorial context of GVCs, 3) the effects of GVCs on social and developmental outcomes, 4) the incentives for participation in GVCs, 5) the mechanism of value creation and capture in GVCs and 6) the role of the managerial agency and business strategy in GVCs. The main conclusions of the literature review for each above-mentioned domain are summarised in tables that are located at the end of every subchapter. On the whole, the theoretical part of the doctoral dissertation was done very thoroughly on more than fifty pages of the thesis. **Chapter 2** is the empirical part of the doctoral thesis and deals with GVCs in the Czech Republic and Switzerland in the MedTech industry. The author gives a real picture about the position of the MedTech industry in the economies of both monitored countries through selected macroeconomic data, such as the exports of MedTech products and the Revealed Comparative Advantage (RCA) in MedTech products, and also introduces the ten biggest MedTech companies in both countries. Besides this analysis on the macro-level, the author of the thesis introduces a new competitive approach that is based on a global order fulfilment system, namely the Global Virtual Manufacturing Network (GVMN) Order Fulfilment strategy. She also points out the limitations of the exploratory study and shows the possibilities for further research. At the end, a case study of a Swiss firm is presented to illustrate how a small supplier of a low-cost commodity achieves above-average rents. Both parts of the doctoral dissertation, i.e. the theoretical and empirical part, are logically structured into several sub-chapters and their contents are in balance. **Chapter 3** carefully summarises the main conclusions of all parts of the doctoral dissertation and presents policy recommendations. The recommendations are systematically grouped into six subtopics, namely: alignment of interests, information base, system mapping, reducing logistics friction, systems benchmarking and ongoing business education for public servants (p. 133). On the whole, the doctoral dissertation has 166 pages, including Bibliography and two Appendixes. The theoretical as well as empirical part of the doctoral dissertation include a wide range of literature. **The work with resources** is very good and includes a high number of books, studies and scientific articles that were published in scientific journals.

Based on the author's own original methodology concept, the author brings new knowledge from her research. The theoretical contribution of her research lies in the development of design science studies in operations management. Namely, she participated in the creation of a new strategy in which a Global Virtual

Manufacturing Network (GVMN) operates as an integrated Order Fulfilment system. This system enables to avoid the cost arbitrage of externalisation. In addition, the author's research showed that the smile curve is not a universal phenomenon, but that it flattens out in certain configurations and business cases. The growth strategy based on a global order fulfilment system also has practical advantages. Above all, the new strategy does not require extensive capital investments, only utilises the existing capabilities and differences in GVMN to increase network competitiveness. Thus, the global order fulfilment system enables to create more self-reliant governance structures.

On the whole, Ms. Sarbani Bublu Thakur-Weigold gave a comprehensive view on the GVCs issue through different theoretical disciplines and contributed to the creation of an innovative organisation system in the increase of the competitiveness of a globally operated firm. I very much appreciate her work in an international team and participation in the project with a Swiss firm. Getting theoretical knowledge and practical experiences contributed to the formulation of well-founded policy recommendations. The author fulfilled the original objective of the doctoral dissertation and systematically answered all research questions. In addition, she was inspired by the previous comments of her opponents and also formal mistakes were removed from the content. Thus, the level of processing as well as the scope of this doctoral dissertation fully correspond with the requirements that are generally placed on this type of research work.

With regard to all above-mentioned facts, the submitted doctoral dissertation by Sarbani Bublu Thakur-Weigold, MSc fulfils the main requirements placed on doctoral dissertations. I recommend it fully for defence in front of the relevant commission.

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