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Review of doctoral thesis
entitled

Problems of Aquatic products export from Shandong Province to Belt and Road Initiative countries, written by

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The review consists of an introduction, a general part, a detailed part and a final conclusion. The first part contains an opinion on the choice of the subject of the dissertation, defining the purpose of the research, theses and research questions, the methods used, added value. The detailed part refers to the implementation of the adopted assumptions and goals of the research, the structure of the dissertation, the literature and other sources used, and the fulfillment of technical and scientific requirements, etc.

General part

Choice of the subject

The subject of the dissertation and conducted in it research was "Problems of exporting fishing industry products from Shandong Province to the countries of the Belt and Road Initiative (OBOR - One Belt One Road). The topic is topical not only because of the OBOR

initiative itself, submitted by the PRC government in 2013, or the scale of the project (150 participating countries), but above all because of the clear change in the PRC's position in the global economy that has taken place in recent decades. It is also important that the OBOR initiative is not a finished, closed project, it is an initiative that is in the process of being implemented. Particular emphasis should also be placed on the "internal" effects of the OBOR initiative, which refers to the Chinese province of Shandong and to one sector of the economy, which is the fishing industry.

Description of the goal of research

The dissertation emphasizes that studies analyzing the importance of OBOR both for the countries covered by the initiative and for the PRC economy in general, do not focus on its importance for individual sectors of the Chinese economy, as well as individual provinces. The reviewed dissertation is an attempt to draw attention to this fact, which is facilitated by the choice of one sector of the economy (fishing industry) and one province (Shandong) - which show the influence of OBOR. The main point here is that there are no detailed studies showing the impact of OBOR on the development of individual provinces of the PRC, nor the development of exchange between them. This statement is a paradox resulting from the fascination with the development of the economy of the PRC as a whole, the impact of the changes observed here on other economies through which OBOR runs, with no reference to the relationship between individual provinces of the PRC or the policy applied in these provinces that allows the use of OBOR for their development.

Theses and research questions

The dissertation sets several goals, one of which is the assessment of the economic policy conducted in Shandong province, pointing to their shortcomings and weaknesses, which is the starting point for formulating guidelines on how the problems identified in this area can be solved by introducing some adjustments to the adopted policy. . Of course, not all weaknesses of the applied policy refer here to decisions made as part of the adopted economic policy, which means that the trade and technical potential of the OBOR initiative countries is not disregarded, but it is indicated that this potential can be influenced. loops and research questions.

In the dissertation, two sets of hypotheses were formulated, which set the detailed direction of the conducted research and analysis. The first set of hypotheses relates to export potential. The second set of hypotheses is related to the analysis of factors determining the limited effectiveness of economic policy measures. Both sets contain, symmetrically, five theorems.

H1₁: GNP per capita in importing countries is positively correlated with Shandong fishing industry exports;

H1₂: GNP per capita in exporting countries is positively correlated with Shandong fishing industry exports;

H1₃: the overall level of population in importing countries is positively correlated with the exports of Shandong province's fishing industry;

H1₄: the overall level of population in exporting countries is positively correlated with exports of the fishing industry of Shandong province;

H1₅: Distance shows a negative correlation with the fishing industry exports of Shandong Province.

and

H2₁: the share of customs duties in national taxes is positively correlated with the inefficiency of trade policy;

H2₂: a country's WTO membership is negatively correlated with inefficiency of trade policy;

H2₃: the level of currency freedom is positively correlated with the inefficiency of trade policy; **H2₄**: the LSCI index (links to the global maritime transport network) is negatively correlated with the inefficiency of trade policy;

H2₅: the level of financial freedom is negatively correlated with the ineffectiveness of trade policy.

Some of the hypotheses put forward are confirmed in the literature, e.g. relating to the trade policy applied in the countries of Central and Eastern Europe during the transformation period, or the trade policy applied in other Asian or Latin American countries. This applies in particular to the level of adopted customs or non-customs barriers, or financial freedom and transport links. However, this is not a widely known problem, which is partly due to the rather general approach to the topic of "opening up" the economy and the assumption that similar solutions (recommended by the IMF, WB, OECD, etc.) were applied everywhere and to the same extent. All the more, the importance of the research carried out and the conclusions drawn from it should be emphasized.

Research methods applied

The study is based on stochastic boundary analysis, which allows for the description of relationships in a given industry by comparing the input/output analysis of the activities of units, taking into account two data components: random and inefficiency, which can be supplemented with the benchmarking method. The dissertation focuses on the subject of technical and cost-effectiveness, which is directly related to the concepts of frontier production and frontier cost. The applied boundary gravity model, as explained in the dissertation (p. 12), avoids the weaknesses of the traditional gravity model. An additional justification for the use of the stochastic frontier analysis model is that the PRC market in terms of the number of inhabitants is a large market, although strongly diversified in many respects (population density, income level, education level, employment structure, etc.).

Value added of the conducted research

The deepening of the analysis of the impact of the broadly understood "opening" of the economy (membership in the WTO/WTO, the level of tariffs, the share of tariffs in budget revenues, financial freedoms, etc.) on the development of one province and one branch of production, which in plays an important role in this province. This is about Shandong Province and the fishing industry. In addition, the level of GNP per capita, WTO membership, LSCI index, financial freedoms, inefficiency of trade policy, etc. are taken into account.

Detailed part

Structure of the dissertation

The dissertation consists of an introduction, five substantive chapters and conclusions, recommendations and guidelines, which in the discussed field requires additional research and analysis. In addition, the work presents a bibliography, a list of tables and graphs, and a list of illustrations. The first chapter discusses the theoretical framework of the OBOR initiative, as well as the history of the initiative, the scope of the concept, the role of Shandong Province in OBOR, the implementation of the concept in Shandong Province, the political and economic solutions adopted, and the effects and discussion of the relationship between Shandong Province and its cities and the countries covered by OBOR.

The second chapter focuses on the production of the fishing industry in Shandong. This includes the production of this type in the PRC and the export of fishery products, as well as the structure of these exports. This information provides the background for the presentation of the problem of fishing exports from Shandong Province, which includes an overview and characteristics of exports. This also applies to markets that have free trade agreements with the PRC. Other groups are markets where fishing trade may be considered a more difficult task, others have very limited opportunities to increase trade (catch exports). The conducted analysis clearly indicates where export expansion may take place, and on which markets it will be a more difficult task. (p. 92). The entire analysis of potential sales markets begins on p. 78 and is more detailed than one might think from the quoted conclusions.

The third chapter focuses on the province's export potential for catch products to OBOR countries. This section discusses the competitiveness and comparative advantages of the analyzed province and the industry selected for the study. Further, the following are discussed in turn: OBOR countries as potential sales markets, institutional conditions created for export, standardization indicators and the issue of reliability, market segmentation (cluster analysis) and segmentation effects on the analyzed market segment. Here, particular attention is paid to very specific proposals concerning individual groups of countries, towards which similar solutions can be applied in the adopted strategic policy or separate ones due to the specificity

of their economies or trade policy. (p. 91). Cluster map showing segmentation of catch export markets. Differences between individual clusters result from the level of economic development, population density, climate for fishing trade. This also applies to markets that have free trade agreements with the PRC. Other groups are markets where fishing trade may be considered a more difficult task, others have very limited opportunities to increase trade (catch exports). The conducted analysis clearly indicates where export expansion may take place, and on which markets it will be a more difficult task. (p. 92). The entire analysis of potential sales markets begins on p. 78 and is more detailed than one might think from the quoted conclusions.

The fourth chapter presents the results of the potential measurement and stochastic boundary analysis, which includes the presentation of the concept, the theoretical model, the sources used, the empirical effects of the method used (tests and estimates), the results of estimating the export potential and the impact of solutions limiting the effectiveness of the policy applied in this area. This chapter bears the main burden of proof for most of the hypotheses put forward. (p. 102) The last part of the chapter contains conclusions and recommendations. The formulated conclusions refer to the following statements: (1) data on the exchange of agricultural products indicate that fishery products exported by Shandong province to countries linked by the OBOR initiative have gained importance after the PRC's accession to the WTO. The stochastic frontier analysis model shows that participation in multilateral trade regimes is a solution favoring the promotion of fishing products. In the case of a positive income correlation between the Shandong province and the countries joined by the OBOR initiative, an increase in exports is observed, which bodes well for future contacts and the success of the strategy that may stimulate exports. The paper emphasizes the importance of such markets as: Russia, Thailand, Malaysia, Turkey, Poland, Ukraine, Egypt, Saudi Arabia, UAE, The fifth chapter is frontier data analysis (DEA) inputs. Here you can get acquainted with the review of the literature on the discussed topic, the principles of using DEA, methods of estimating technological progress. This part contains both a theoretical component, acquaints the reader with the results of research preceding the dissertation, as well as suggestions for courses of action that may improve the results achieved. An important topic is the impact of technological progress on the improvement of export performance. The last part contains conclusions, recommendations and guidelines for further research on this topic.

Implementation of the assumed research goals

In the conducted analysis, it was possible to confirm the two sets of theses put forward. The conclusions highlight that Shandong province conducts intensive trade with Russia, the United Arab Emirates, Turkey, Poland and the Philippines. As one of the conclusions formulated, it is stated that there is a lot of room for improving the export of fishing products to the markets of most countries that are united by the OBOR initiative. The condition, however, is the formulation of appropriate trading strategies that can be applied to individual markets. It is emphasized that this applies in particular to geographically similar markets, such as ASEAN countries.

Use of literature and other sources

The bibliography is divided into different types of sources, which include books (28), articles (50), Internet sources (25), other sources (4). 107 items in total, mostly in English, although online sources may be Chinese-language sources.

The bibliography should be considered representative of the topic discussed. There are sources relating to model and analytical solutions used to construct theoretical models, as well as sources discussing the main problems in international economic relations and those that directly relate to the issues discussed in the dissertation. In general, the bibliography (sources) quoted and used in the thesis should be assessed positively.

Technical requirements

The work meets the technical requirements formulated for this type of work. This applies to references, numbering and titles of tables, charts or other illustrations. It also includes requirements for their compactness as well as the sources used in their preparation.

Substantive requirements

The dissertation meets the substantive requirements for this type of work. In this particular case, the author demonstrates the ability to formulate the topic of research, the purpose of research and analysis, and to conduct them in accordance with academic principles, thus

bringing new elements to science. This means that not only is the topic up-to-date, but the dissertation itself introduces new threads of analysis in comparison with previously conducted research on similar topics.

Implementation of the adopted research assumptions

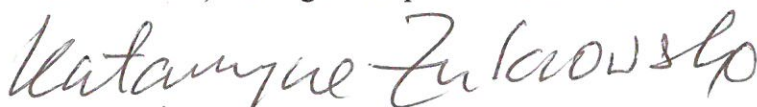
The research goals adopted in the introduction of the dissertation were consistently achieved, which was served by the effectively outlined structure of the dissertation, which consistently led step by step to proving the research hypotheses formulated in the introduction, which were cited earlier in this review.

Dissertation language

The dissertation is written in English. Positively surprising is the linguistic correctness and diligence with which the study was prepared in the last editorial phase.

Final conclusion

The doctoral dissertation entitled "Problems of aquatic products export from Shandong Province to Belt and Road Initiative countries", prepared by Jiayu Ru, meets the requirements of the applicable regulations on Higher Education (Journal of Laws 2023.742). I am recommending admission of the doctoral student to further procedures (which includes doctoral exams) leading to the public defense of the dissertation.



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