#### **Main Results of Dissertation Research**

# "FOREIGN TRADE EFFECTS OF FREE TRADE AREA BETWEEN UKRAINE AND THE EUROPEAN UNION"

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The scientific novelty of the obtained results in dissertation research is the systematization and deepening of theoretical and methodological approaches to the classification and determination of foreign trade effects of the development of the free trade area between the EU and Ukraine. The main provisions of scientific novelty are as follows:

## Primary research results:

- Trends in bilateral complementarity of trade relations during 2013-2020 under development of the free trade area between Ukraine and the EU are investigated. The EU and Ukraine have been found to be "natural trading partners", as evidenced by the high level of trade complementarity. The trade complementarity index for Ukraine and the EU tends to gradually increase, which is a positive result of the creation of the deep and comprehensive free trade. VAR-analysis was used to find the main factors affecting the change of the index.
- The volume of the non-traded part of Ukraine's export potential on the EU market, as well as the non-traded part of the export potential of EU countries on the Ukrainian market was estimated. It was found out that the expansion and deepening of trade relations between countries is a mutually beneficial process. Since exports of Ukrainian goods to Russia have decreased in recent years due to the exit of Ukrainian enterprises from production networks with companies of Russia and other EAEU countries, increasing Ukraine's exports to the EU market of such goods is of particular importance. But high security and economic risks due to the confrontation with the Russian Federation significantly limit the entry of Ukrainian enterprises into European production networks with a high level of added value. They also distort the effects of deep and comprehensive free trade area with the EU.

#### Enhancement of:

- Theoretical substantiation of gravity model application for quantitative estimation of geographical structure of trade between Ukraine wand the EU. This method confirms that the economic size of trading partner countries positively affects the volume of mutual trade in goods, while the distance negatively affects the intensity of trade relations, i.e. European neighbors trade more actively with Ukraine. The main trade partners of Ukraine in the EU are Germany, Poland, Italy and Hungary countries that are geographically close to the border of Ukraine. During the analyzed period, trade in goods with Luxembourg, Cyprus and Latvia increased significantly.
- Analysis of Ukraine's foreign trade relations with EU countries using statistical indices of trade creation and deviation (in 2013-2019). It is proved that the effect of trade creation is achieved for such major product groups as "Electrical machinery and equipment" (product group 85) and "Land vehicles other than rail" (product group 87). The trade diversion effect is observed for such product groups as "Pharmaceutical products" (product group 30) and "Boilers, machines, apparatus and mechanical devices" (product group 84).
- Substantiation and assessment of possible economic benefits for the national economy from the creation of a deep and comprehensive free trade area between Ukraine and the EU using the index of

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revealed comparative advantages for the relevant period. It is concluded that Ukraine has comparative advantages in 54 product groups out of 99. The most significant growth was for the indices in 7 product groups: 87, 41, 42, 90, 64, 53, 23. However, the identified comparative advantages are mainly characteristic of low value-added commodity groups, and the growth of the index for goods with a high level of value added is quite slow.

- Analysis of the index of regional orientation of Ukraine to the EU market for the period 2013-2020. It is concluded that Ukraine has a greater focus on trade in the EU market for 51 product groups out of 99. The indices for 28 product groups had a significant increase, which confirms the growing role of demand in the EU single market for the relevant product groups compared to Ukrainian exports to other world markets. The regional reorientation of Ukraine's trade in a significant number of product groups to the EU market is becoming an important factor of changes in the geographical and commodity structure of Ukraine's foreign trade.

## Further development:

- Investigation of principles and approaches to determining the impact of trade liberalization with EU countries on the process of differentiation of Ukraine's exports using CR-4 and CR-10 export concentration indices. It is determined that the CR-4 index of concentration of total exports in Ukraine for the corresponding period tended to increase, which indicates an increase in the concentration of exports as a whole. At the same time, during this period the CR 4 index for exports to EU countries mainly decreased, which indicates a weakening of the concentration and differentiation of the commodity structure of exports in this direction. The trend of changing the CR 10 export concentration index is similar and tends to decrease as for EU countries and to increase as for other countries. Thus, the differentiation of the commodity structure of Ukraine's exports to the European Union becomes an important factor of differentiation of the commodity structure of total exports from Ukraine and partially hinders the process of its concentration as a whole.
- Analysis of a significant increase in the role of trade relations with the EU for the economic development of Ukraine in the context of its disintegration with Russia. Ukraine's foreign trade openness index with the countries of the world decreased, while the trade openness index with EU countries increased. This confirms the importance of trade relations with the European Union for the development of the Ukrainian national economy. Moreover, trade relations with the European Union have partially offset Ukraine's declining openness to trade with other countries.
- Analysis of the dynamics of intra-industry and inter-industry trade of Ukraine with the EU. The index of intra-industry trade is significant for 34 out of 99 commodity groups. Its growth in the relevant period occurred for 25 groups. The highest growth was observed for the commodity groups 69, 57, 96, 02. At the same time, there was a decrease in the index and reorientation from intra-industry to inter-industry trade in commodity groups 61, 25, 89, 27, 36, 94, 44, 92, 88. This confirms the hypothesis of a predominantly intersectoral nature of mutual trade, and describes the initial stage of actual production integration between the partners.
- Assessment of the balance of sectoral trade between Ukraine and the EU based on the net trade index. During the period under review, Ukraine's export of goods to the EU exceeded imports for 32 out of 99 commodity groups. The index tended to increase for 25 of them, thus, export capacity tended to expand (in particular, for commodity groups 92, 94, 66, 70, 02, 57). At the same time, the index fell for 19 product groups (mostly for product groups 79, 31, 36, 88). Thus, considering positions of the relevant product groups, the balance of trade between Ukraine and the EU has improved, although it continues to be negative.