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# THE TENDENCIES OF GLOBAL DEVELOPMENT AND COUNTRIES' INTEGRATION INTO GLOBAL CUSTOMS SPACE

Abstract: Modern tendencies of global economic development are analyzed and existing asymmetries in positioning of countries by the level of economic growth are revealed. The role of trade in international economic relations is explained. Understanding of customs space as an open system is outlined and the peculiarities of selection of various forms of regional economic integration by countries to balance their customs space are emphasized. Common features of customs space for all forms of countries' integration are found. The challenges for EU customs space are defined. The differences in regional economic integration of countries are determined. The authors prove that in case of trade liberalization and customs procedures simplification, each country finds itself in the zone of perspective risks of economic growth maintenance. Main challenges for customs space and economic development of countries are generalized.

Based on the methods of econometric analysis, the histograms of empirical distribution of the countries in the world are developed and they are identified in customs space by involvement in international trade and economic growth. The analysis resulted in establishment of 10 basic functions of the countries' involvement in international trade and 11 functions for economic growth. Unequal distribution of countries by the chosen features is confirmed. Ukrainian positions by the abovementioned parameters are specified and strategic vectors of integration into global customs space are suggested.

**Keywords:** globalization, economic integration, economic development, involvement in international trade, customs space.

**JEL classification:** F02, F15

#### Introduction

Strengthening of the countries' international cooperation in the last decades is objectively stipulated by the expansion of their participation in international labour division as well as exhaustion of natural resources, demographic tendencies, growth of financial capital mobility and expansion of international trade volumes.

The XX century became the period of active growth of all forms of international economic relations. The following trends can be named as the major ones in the period: growth of processing industry, improvement of international transport infrastructure, information revolution, development of transnationalization processes, expansion of new production and management technologies, qualitative shifts in the development of international market of loan capital. These processes promote financial and foreign trade openness of the countries in general and their involvement in the system of international relations. Moreover, "...global economic space becomes the only filed for business games" (Stadnytskyi Yu. I., 2016. [online]. Spaceology: science on spatial aspects of efficiency. Uzhorod University Scientific Bulletin. Issue 1(2). P. 18-22. (Series : Economy). Available from: http://nbuv.gov.ua/UJRN/Nvuuec\_2016\_1(2)\_4). The paces of economic growth of the countries in the last century provided by the data of Maddison Project (New Maddison Project Database. Available from: http://www.ggdc.net/maddison/maddison-project/data.htm) confirm the existence of these processes. At the same time, the countries of Asia and Latin

America are those that managed to essentially increase the volumes of GDP per capita in the last century along with the developed countries. However, each of them chose their own model of integration into global space. International trade is an important sphere of international economic relations and its development has become the ground for economic growth and integration of the countries into the global customs space.

The purpose of the article. The article aims to research the role of the countries' global interaction and their integration into the global customs space and maintenance of economic development.

#### Research results

## 1. Global trends of economic development.

The steady networks of interaction between countries have been formed in the world due to international trade. All the countries in the world are involved in the processes, regardless of the level of economic development. The consequences of trade cooperation are obvious not only for the countries in general, but for the households as well. Herewith, we should admit the existing of misbalances in geographical and commodities structure of international trade accumulated under the impact of globalization processes. Thus, there are the leading countries at international markets, which define the functioning of the latter to a certain extent. For example, the paces of international trade growth differ at various globalization stages, more so that the role of international institutions in these processes cannot be underrated. Due to the development of scientific and technical progress and expansion of integration processes, the ways of delivery of goods have changed as well. Maritime transport has been ranked the first among the goods delivery ways lately: in 2017, about 80% of goods were transported by sea. Despite the emergence of some contradictions in the process of trade among countries and applications to arbitral tribunals on violations of rules, international trade continues to evolve, because the countries always diversify their risks in the sphere of trade. However, international trade has been developing much faster than the GDP has been growing in the last decade. Moreover, 2016 became the period, when the ratio was less than one (Trade recovery expected in 2017 and 2018, amid policy uncertainty. Available from: https://www.wto.org/english/news\_e/pres17\_e/ pr791\_e.htm). In future, it can be the impetus for the countries' return to protectionist policies. In the aftercrisis period, many countries relied on the instruments of financial and credit regulation for revitalization of national economies, conducting of structural reforms and maintenance of economic growth paces. However, the role of trade shouldn't be underrated regardless of low consumer demand in certain periods of time, some incomplete negotiations between countries in the framework of multilateral agreements, poor impact of trade on ecological situation, etc.

Thus, the new features of functioning of global economic space emerged in the late XX century, in particular the dependence of the countries of "the first world" on the natural and human resources of the countries of "the third world" increased and the role of TNC as global mediator strengthened. According to World Bank, the USA generates the fourth part of global GDP (24.32%). China is next in rankings (14.8%). The countries remain to be the leaders in global economic space, confirming the unevenness of space by the level of the countries' participation in forming of global GDP. Three blocks dominate in the structure across regions (83.16%): Asian countries are ranked first, North American countries are ranked second and European countries are ranked third (This Chart Contains a Few Hidden Surprises About the World Economy. Available from: https://howmuch.net/articles/the-global-economy-by-GDP). Therefore, it is obvious that polarization of global economy has deepened the asymmetry of global structure of production, demand and consumption (Bilorus, 2016). Informatization of global space has caused its deformation, which can further push the countries with low level of the use of information technologies to the periphery of space. In addition, innovative development also increases the distance between them in space and such spatial asymmetry grows each year. Still there are countries that efficiently use innovative developments to assert their functioning in spatial dimension.

## 2. Regional integration of countries in global customs space.

Taking into account the fact that the countries' integration into the global space is not possible without the development of foreign economic policy, the customs component of global economic space is gaining an increasing importance. Customs space of a country functions as an open system under the influence of global integration processes. Therefore, such an approach requires the

development and implementation of transparent customs policy of a country that would correspond to global standards of harmonization and simplification of customs procedures and provide qualitative customs control, its security, economic independency and integration into the spaces of higher hierarchical order. Global customs space includes the countries with different levels of protection of national markets and adjustment of tariffs, which is confirmed by the structure of customs profiles of these countries (World Tariff Profiles. Available from: https://www.wto.org/english/res\_e/booksp\_e/tariff\_profiles17\_e.pdf). Therefore, unilateral nature of simplification of trade conditions between countries is one of the risks for customs space, which generates non-commensurate advantages for countries.

Economic space is uneven and it can break into separate smaller integration units. The countries choose one of organizational forms of economic integration depending on the level of integration in correspondence with their interests in terms of balancing their customs spaces. The impact on balancing of customs space depends on the level of adjustment of trade regulation instruments at each stage of international economic integration. Elimination of customs barriers in mutual trade is peculiar to all the forms; single customs tariffs in trade with the "third" countries are established for customs union and deep integration forms; free movement of capital and labour is the decisive one for common market and economic union; adjustment of the countries' economic policies is peculiar to economic union. European model of functioning of customs space and protection of national economic interests based on common policy is one of the best, because it contributed to unification of goods movement procedures, customs system harmonization, introduction of common initiatives regarding the "third" countries thus protecting the national interests of each EU Member State. We see the position of Great Britain regarding the membership to be a serious challenge for customs space of European Union. Great Britain's example somewhat undermines the 100% confidence in the efficiency of the EU customs-free space for foreign trade policy of the country, as far as it chose foreign markets beyond the EU despite tariff and non-tariff barriers that exist there. Brexit can further change the volumes of non-tariff measures and customs procedures regarding the goods with the EU origin and waiting time on the border, etc. It will certainly impact the reduction of Great Britain's exports and further – the structure of EU foreign trade.

There are regions in the world, where integration processes haven't brought about the desired effect. For example, average Integration Index rate in 2016 was 0.470 in African countries, which is an extremely low rate if to consider that the index scale includes coefficients from 0 (low integration level) to 1 (high level) (Africa Regional Integration Index – Report 2016. Available from: http://repository.uneca.org/bitstream/handle/10855/23200/b11561531.pdf?sequ ence=1) (productive (average rate is 0.384) and financial (0.381) integration are the weakest due to poor development of financial sector in the countries of this region). Many countries continue to face the problems of non-implementation of many trade agreements in practice, preserving high level of non-tariff protection of economies, changing policies regarding the imposing of customs tariffs, simultaneous participation in several blocks and unstable state policy.

The segments of global space are being formed, which are not restricted by visible coordinates, but rather express the integrity of relations and interconnections between their participants. We deem BRICS to be an example of such spatial cooperation (Brazil, Russia, India, China, and South Africa) (Ivashchuk, 2014). The resources factor rather than territorial one is the major motivation for the countries' consolidation.

# 3. Evaluation of customs space's impact on involvement in international trade and economic growth.

The processes of the countries' global integration have brought into the fore the social issues in addition to economic ones. However, the co-existence of countries with various levels of economic development inevitably leads to their loss of national interests, deformation of economic and customs spaces, deepening of instability and expansion of misbalances. Maintaining the balanced development both at global and national levels for consolidation of endeavors to provide the future remains an unsolved problem (Global Sustainable Development Report. [online]. Available from: https://sustainabledevelopment.un.org/globalsdreport).

In case of trade liberalization and customs procedures simplification, each country finds itself in the zone of perspective risk, because, for example, uncontrolled inflows of environmentally hazardous substances to the customs territory of a country is the challenge for its customs space. One cannot consider a

space to be safe if the duties are minimized there, but sanitary or veterinary control is not ensured. The space cannot be efficient, if an official, who is holding the customs control under the customs procedures, is not able to distinguish an SITES object. Illegal movement of wastes is also a risk – social, ecological and economic one. Growing illegal trade in ozone-depleting substances with violation of Montreal Protocol and false labeling is a challenge for both national and global customs spaces. Therefore, we affirm that customs space should have the institutional and functional structure that complexly maintains the compliance with the principles of sustainable development.

We suggest considering the instruments of evaluation of customs space features' impact on its balance in two dimensions: integration and country's involvement in international trade (impact on the Enabling Trade Index) and economic growth in the country (GDP per capita). Based on the methods of econometric analysis, the histograms of empirical distribution of the countries in the world are developed (Figure 1). They confirm the unequal distribution of countries in customs space by these parameters (Figure 2).

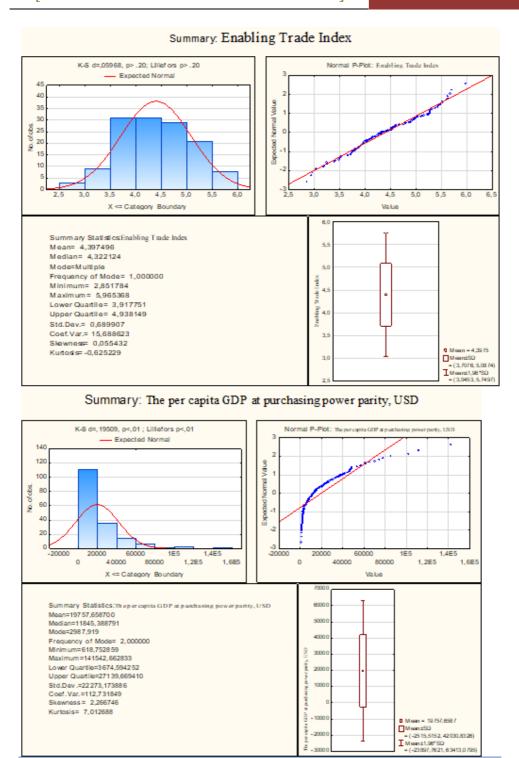


Figure 1: The countries in global customs space by involvement in international trade and GDP per capita

Source: developed based on the data of World Bank and the World Economic Forum.

By the level of involvement in international trade, Ukraine ranks at the level of Zambia, Senegal, Gambia, Ghana, Cambodia, India, etc with the 3.97 rate (e.g. the Index for Singapore is 5.97, the Netherlands – 5.70%, Hong Kong – 5.66%). Ukraine lags significantly behind the developed countries in the world by the GDP per capita rate and remains to be at the level of Philippines, Angola, Cuba, Bhutan, etc.

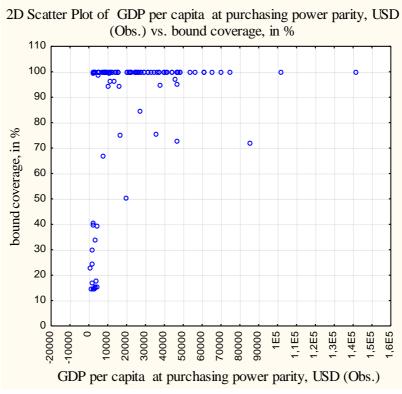


Figure 2: Positions of the countries in global space by the level of bound tariff and GDP per capita rate

Source: developed based on the data of World Bank and the World Economic Forum.

Let's calculate the impact of customs space features on the countries' involvement in international trade and economic growth. The initial sample consisted of 174 countries, 104 of them were chosen for analysis. The following features of customs space were selected:  $x_1$  — Logistics Performance Index;

 $x_2$  — time of imports and border crossing (hours);  $x_3$  — time of exports and border crossing (hours);  $x_4$  — efficiency of customs clearance process;  $x_5$  — level of terroristic activity;  $x_6$  — Corruption Perception Index;  $x_7$  — development of transport infrastructure;  $x_8$  — Global Competitiveness Index;  $x_9$  — Index of Economic Freedom;  $x_{10}$  — bounded coverage, %;  $x_{11}$  — arithmetic average, bounded tariff, %;  $x_{12}$  — arithmetic average, most favoured nation treatment, %;  $x_{13}$  — customs-free, bounded tariff, %;  $x_{14}$  — customs-free, most favoured nation treatment, %;  $x_{15}$  — number of individual tariff rates, bounded tariff;  $x_{16}$  — number of individual tariff rates, most favoured nation treatment;  $x_{17}$  — number of tariff rates of the most favoured nation treatment. We chose the countries' involvement in international trade and economic growth as the outcome indicators.

Using the Multivariate Adaptive Regression Splines (Mar Splines) in STA-TISTICA we revealed the basic functions and strength of factors' impact and found the factors that provide the balanced customs space. The used method is the non-parametric technique based on the use of data without assumptions, which allows finding the functional dependencies between the predictor and dependent variables. It consists of two passes – "forward" and "backward". Based on calculation results, we outline the multiple regression equation:

Enabling Trade Index =  $4.32-0.01*\max(0; 56.0-x_6) -0.38*\max(0; 4.22-x_8)$  $-0.0033*\max(0; x_3 - 75.0) -0.04*\max(0; x_{12}-11.0) + 1.79*\max(0; x_{10}-99.9)$  $+ 0.004 *\max(0; 99.9-x_{10}) + 0.003*\max(0; x_{14}-15.0) -0.00008*\max(0; 8643.0-x_{17}) + 0.66*\max(0; x_{1}-2.98) + 0.01*\max(0; x_{9}-55.6); (1.1)$ 

The per capita GDP at purchasing power parity, USD = 9016.23+  $17427.28*\max(0; x_8-3.79) + 670.0*\max(0; x_5-2.45) + 3720.77*\max(0; 2.45-x_5) + 25.7*\max(0; 335.0-x_{15}) - 14885.0*\max(0; 3.6-x_1) + 2218.9*\max(0; 11.0-x_{12}) + 760.81*\max(0; x_{14}-50.7) + 47981.1*\max(0; x_8-4.74) - 1443.41*\max(0; x_6-71.0) - 13344.58*\max(0; x_7-4.50362889649018e+000) - 476.8*\max(0; x_{14}-15.0). (1.2)$ 

The analysis resulted in establishment of 10 basic functions of the countries' involvement in international trade and 11 functions for economic growth. The basic functions for countries' involvement in international trade are the efficiency of logistics, time of border crossing in exports, corruption level, Global Competitiveness Index, Index of Economic Freedom, % of bounded coverage of tariffs, arithmetic average rate of the most favoured nation treatment, % of the customs-free most favoured nation treatment, number of tariff rates of the most favoured nation treatment.

The analysis found the following basic functions for economic growth: level of terroristic activity, corruption level, development of transport infrastructure, Global Competitiveness Index, arithmetic average rate of the most favoured nation treatment, % of the customs-free most favoured nation treatment, number of individual tariff rates of the most favoured nation treatment.

Ukraine positions itself in this sample as the country with open economy. However, it lags significantly behind the positions of economically developed countries of the world by some parameters. Nowadays it remains to be the country with low level of environmental efficiency by the Environmental Performance Index, which complexly evaluates high-priority directions of ensuring the environmental security of the country and preserving the environment. According to the Index in 2018, our country was ranked 109 among 180 countries in the world with the 52.87 rate (EPI Report 2018. Available from: https://epi.envirocenter.yale.edu /2018-epi-report/introduction). The assessment of the impact of Ukraine's involvement in international trade on the environmental compatibility of its customs space did not reveal such dependence. There are two reasons to explain this: other latent factors of impact and structure of Environmental Performance Index (it does not include such threats of customs space as movement of wastes, nuclear and radiation safety, management of wastes from other sources of origin, etc). We see the priority vectors of efficient integration of Ukrainian customs space into the global space to be the following: taking the specifics and structure of foreign economic activity in terms of its participants, geography, types of transportation and volumes, directions and structure of freight flows into account in the risk profiles; elaboration of institutional platform of customs space that would consolidate all state authorities, establishments and organizations involved in ensuring the space security and its balanced development; development of international cooperation

and use of transit capacity of customs space of Ukraine; improvement of specialists' professional level; introduction of innovative technologies into the activity of customs space institutions and consideration of innovative challenges for national customs spaces.

### **Conclusions**

Modern trends of global economic development show its polarization and growth of asymmetries. Therefore, the importance of customs space in the global system of economic coordinates is defined by these features of global economic development. This correspondingly requires the ensuring of balance between the level of national security and activity in global space. Customs space is not static, it undergoes constant transformations and evolves into the open system. That is why it requires the development of customs policy based on the parameters of international legal and regulatory environment oriented at liberalization as well as ensuring of qualitative customs control. The countries have come to the understanding of the need of new consolidating process, since the repeat of endeavors consolidation after the Second World War in the same format has failed. In several decades of successful functioning of global institutions like World Bank, International Monetary Fund and World Trade Organization, the countries have conducted the range of reforms promoting their openness to bi- and multilateral cooperation.

The research contributed to formulating of main problems of the countries' economic integration that hamper the balancing of customs space: strengthening of crisis phenomena and increasing global instability preventing the objective prognosis of the development of international economy and trade; lobbying of interests by economically developed countries in the process of global integration; appearance of new leaders in international trade, centers of force and partnerships that can transform into the regional territorial groupings in the future; worsening of national security, including the economic one; lack of consistent structural reforms in the developing countries; excessive trade interdependence of countries or lack of economic interest between them; contradictions between the measures of national interests protection policy and the policy of organization or consolidation; etc.

The results of analysis confirm the unbalanced nature of both global customs space and of each country, and therefore – its risk nature, since the improvement of integration into the global space and simultaneous maintenance of economic growth require the countries to use various mechanisms and leverages. Ukraine needs to develop the space on institutional-organizational platform of customs space risk management, innovative platform, platform of foreign economic integration and international cooperation platform to complexly decrease its risk nature, successfully integrate itself into the global space and focus its customs space on implementation of sustainable development principles.

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