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Monitoring the Development of the Export and Import Potential of the Regions

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ABSTRACT

Creation of the effective managerial decision on the development of the export and import potential of the region is mainly based on the analytical basis, which is set up in the result of monitoring of this potential, namely the system of indicators. The system of indicators is determined by the official statistics in the relevant country and should take into account the content of the export and import potential. Critical analysis of the relevant scientific works of different scholars on the content of the export and import potential shows that the export and import potential should be considered as a set of real opportunities and the ability to operate in an effective manner within the environment; the structure of the region's potential is composed of resource, organizational, managerial and functional potentials, where the resource potential plays a key role; the form of manifestation of the potential as the result of activity is formation, realization and development; the potential's development level depends on the size and the quality of its crucial elements and components. The authors recommend to calculate the indicator of the amount of the resource potential of the region as the ratio of the available number of elements of the resource potential in the region to the total number of elements of the resource potential in the country concerned. The article proves the logic of the stages on the monitoring of development and realization of the export and import potential of the regions.

INTRODUCTION

The economic growth of a country concerned depends on the development of its regions, especially on the development of the regions which have better results in comparison with the other one. As a result, such regions have a national importance and an investment attractiveness. Each country is inter-

ested in the equal development of its regions, in the equal potential of its regions and such regions take an active part in the economic and trade relations with subjects of international business. Formation, realization and development of the export and import potential of the region are considered to be complex processes that are inherent in many countries, especially countries with transformational economies, where their foreign economic activity and policy have become conditions for economic and political self-determination and a ticket to the world economy.

Management of the export and import potential is mainly dependant on the objective and reliable information on it. The level of the export and import potential shall be registered, identified and analyzed in a timely and regular manner and the problems which arise in the processes should be eliminated and prevented in a timely manner, i.e. to monitor. Monitoring is considered to be one of the key components of the managerial system, nevertheless its theoretical and methodological levels remain insufficiently formed in order to be duly implemented into the practical activities of the regions, i.e. into the managerial system of the mezolevel. Clarification on the content of the notion "export and import potential" and adequate reflection of this notion within the indicator's system should be made. Taking into consideration all the mentioned-above, there is a necessity both in monitoring and formulation of the managerial decision on the potential.

1. LITERATURE REVIEW

All developing county face with the problems on the export and import potential (Yang et al., 2020). Moreover, a vast number of scholars pay their attention to such problems. S. Abbas and A. Waheed (2015) examined attempts to investigate the macroeconomic behaviour of export flow and export potential of Pakistan with its bilateral trading partners employing the augmented gravity model. These scholars offered a model the results of which show that Pakistan's export is positively determined by its supply capacity and partner country's demand potential as well as market size, whereas negatively determined by the geographical distance. A. Abdimomynova (2018) proposals to implement the approach of forming regional innovative export-oriented structure of the economy, that should be based on the «Comparative advantage» analysis of the region and modern regional scientific competence on creating products in demand in the international market (export potential), as well as «Comparative disadvantage» analysis of the region, which are particularly manifested under eliminating the consequences of economic crisis, Structurally perspective sectors allocation («regional growth poles») to increase the export potential and structurally unviable branches. L. An et al. (2017) in their work set out the model to separate the direct and indirect impact of an export tax rebate on the intensive margin of firm-level export sales at the subnational level. The direct impact of the rebate is associated with a reduction of an exporting firm's variable costs, while the indirect impact manifests itself through higher regional wages as a result of increased demand for local labor.

The working assumption D. Christopoulos (2014) is that elite social capital and trust between elite groups reflect on the regional development record. He found out the association between levels of gross domestic product and the propensity of elites to act in concert. P. Deng et al. (2013) in the process of examination of the problems on the development of the potential of a region stressed a structural equation modeling (SEM) approach was employed to test a hypothesized model concerning ports and their regional economy and the results indicated that port supply had a positive effect on port demand. In addition, the findings indicated that value added activity in port had a positive effect on the development of regional economy. K.R. et al. (2019) characterise this resource base at the county level, disaggregating it by material type and spatially constraining it to ensure biodiversity conservation. Scholars set out various scenarios of the industry development and domestic market dynamics. A.C. Jordaan (2015) sings both a static and a dynamic augmented gravity model. Sectors with export potential are identified, whether these are reliable and stable is considered, that made it possible for the largest export potential to include the apparel sectors as well as the basic metals, communication, furniture, glass, iron, leather, motor, paper and printing sectors.

M. Seifullaeva and V. Kapicin (2001) when examining the export potential of a region put in the foundation the resource basis and the state of economy that provide a region concerned with scientific,

technical, manufacturing, social and cultural development which help to achieve sustainable growth rates regarding the export production and a high standard of living taking into account current and proiected market conditions, V.P. Mykhailovsky (2006) states that the export potential of the territory is considered to be the main potential resource in facilitating the effectiveness of the international trade in the region that should be described with the help of the system of quantitative and qualitative indicators that characterize the region from the point of its position within the world product markers and the possibility of obtaining the maximum currency earnings in the long-term perspective. The scholar considers that the international economic potential should be determined by the viability of produced in the region goods and services at the international market and by the opportunities of application of technological, labor, integral, natural and other resources of the territory in the structure of the international cooperative links. The degree of realization of the international economic potential of the region is characterized by the state of its export complex. It should be emphasized that the author replaces one concept with another: the export potential with the internal economic potential. In the opinion of T.O. Baban (2012) the international economic potential is a broader concept which is not only limited by the export opportunities, but also includes opportunities for cooperation with foreign partners, fulfilment of the foreign exchange, banking, insurance and other operations related to the international business. The scholar emphasizes that manufacturing still precedes exports, not the other way around. Thus, many scholars truly believe that the export potential is the ability to produce competitive products, without mentioning the possibility of selling the product for the application of the export potential.

E.A. Jackson and M. Jabbie (2020) stress that the balance of benefits is mainly tilted to developed countries, reinforced by the fact that developing countries have been importing more and exporting less to these countries - a reflection of the under-developed state of their industrial sector, which is evident in their export of mainly unrefined or primary products, with little or no value addition taking place. This gives attestation to the presence of an insignificant import substitution-oriented manufacturing activity in such countries, which have rendered them heavily reliant on imports for their survival - by extension making them highly susceptible to external risks and shocks. The procedures of import substitution play a crucial role in the process of the development of the export and import potential. Detailed analysis of the role of the procedures of import substitution may be found in the scientific work of R.A. Aregbeshola (2017) who argues that the import substitution industrialisation (ISI) policy helps to catalyse the industrialisation process of these five countries, with the effects being more convergent in the short run. B.A. Kheyfets & V.Y. Chernova (2019) offer to solve the problems on the basis of a system for assessing the efficiency and monitoring the results of import substitution policy as a component of structural policy aimed at the modernization of the Russian industries and manufacture of competitive products. The obtained method can be used to substantiate decisions related to the development of import substitution projects.

Thorough analysis of the mentioned-above scientific works shows that in the suggested theories and concepts the attention is only limited to the export component of the potential, when the import component has not been examined by the scholars at all. It should be emphasized that in general terms the theory of the potential in the economy is far from the ideal one. In the scientific works of L.M. Malyarets & I.P. Otenko (2007, 2019) the theory of the protentional has been examined. It has also been stressed that the potential should be classified on the basis of the following features: the level of management (global, national, sectoral, regional, macro, mezzo, and microlevels); types of management (strategic, tactical, operational, situational); structure of elements (labor, personnel, human, resource, technical, technological, financial, information); types of activity (production, economic, innovation-investment, marketing, export-import, logistics); functions (managerial, organizational); forms of manifestation (formation, application, development). To clarify the substantive essence of the export and import potential of the region, its conceptual basis should be analysed in the modern economic conditions, namely: interpretation of the potential as a set of real opportunities and ability to live effectively in the environment; understanding the structure of the potential of the region (resource, organizational, managerial, functional, where resource is the main one); taking into account the form of manifestation of potential as the result of the activity (formation, realization, development); determination the level of potential, which depends on the size and quality of its elements and components. It is proved that the potential of the region, particularly, export one, is influenced by the quality of its institutional environment (Kostiukevych et al., 2020) and infrastructure development (Tenhunen, 2019), which, in turn, affects the further changes in resources structure, including labor, and overall economic growth (Oliinyk et al., 2021; Wulandari et al., 2020). To the functional potential of the region may be referred technical and technological potentials (Du et al., 2020). The functional potential is aimed at the following types of activity: production, economic, investment, innovation, marketing, export, import and logistics. Directing the potential to the types of activity of economic entities forms its competencies. The elemental composition of the resource potential of the region is composed of labor, natural, monetary and informational resources that may be found within its territory.

2. DATA AND METHODOLOGY

It is recommended to define the export and import potential of the region as the ability to carry out export and import operations that take place within the territory of the region; ability to ensure a positive balance of export and import operations, namely to conduct effective export and import activities to form and reproduce the competitive position of the whole country in foreign and domestic markets. It is necessary to distinguish the processes that occur with the potential: the formation, implementation and development of potential, and, accordingly, their results, as well as to distinguish the state of potential, which is a static slice of the process. The results of the processes that occur with the potential depend on the influence of the external and internal environmental factors (Ponomarenko et al., 2017). Monitoring as a functional component of the management of the export and import potential of the region is composed of systematic monitoring, observation, estimation, control and forecasting of states of this potential by instrumental, scientific, methodical and organizational means. To identify the particular place of the monitoring within the managerial system of the export and import potential of the region, the following components have been analysed: objects, main types, main functions, results of the management, as it is shown in Figure 1.

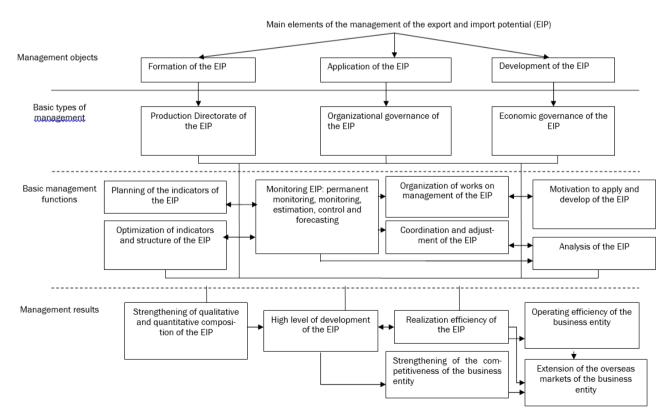


Figure 1. Management scheme of the export and import potential

Source: own

Differentiation of the management functions makes it possible to set out separate tasks and types of the administrative activity and to stipulate the rational rules and procedures for their execution. Various concepts on the management of economic entities prescribe the separation of different functions. However, the analysis of the works of the world-renowned scientists – specialists in management, makes it possible to specify the following management functions of the export and import potential: planning, forecasting, organization, management, monitoring, control, evaluation, analysis, motivation, regulation and adjustment. General management functions reflect the content of the main stages of the activity management process at all hierarchical levels. This substantiates the feasibility of such management functions as management of integration processes, monitoring and control of the functioning processes and components of the potential, regulation and adjustment of the functioning processes of the potential, estimation and analysis of the potential, organization of works on the management of functioning, planning and forecasting of the functioning of the potential, motivation for the activation of the functioning of the export and import potential.

Monitoring the state of development of the export and import potential of regions is carried out in accordance with the system of indicators. Most scholars support such approach. At the same time, the system of indicators may be composed of different elements. Thus, under the official statistics in Ukraine (State Statistic Service of Ukraine), it is recommended to carry out monitoring of the state of development of the export and import potential of regions in accordance with the following system of indicators: the volume of the resource potential (x_1) ; dynamics of production of cereal and leguminous crops in weight after cleaning and drying, thsd. centner (x_2) ; dynamics of industrial crops production volume, thsd. centner (x_3) ; planted area under annual and biennial agricultural crops, thsd.ha (x_4) ; labor productivity in agricultural enterprises (x_5) ; productivity of the workforce in enterprises that operate in crop production (x_6) ; productivity of the workforce in enterprises that operate in animal production (x_7) ; consumer price indices by region, percent (x_8) ; labour force by region (working age), thousands person (x_9) ; number of the employees at enterprises by their size by region, total, thsd. persons (x_{10}) ; ILO unemployment, thousands person (x_{11}); migration increase (decrease), persons (x_{12}); number of R&D personnel by region, persons (x_{13}) ; the total amount of subscribers of multichannel paid TV (x_{14}) ; the total amount of the internet users (x_{15}) ; freight road transport by region (x_{16}) ; environmental protection expenditures by region (at current prices, thsd. UAH) (x_{17}); capital investments by regions, mln.UAH (x_{18}) . It is proposed to monitor the degree of realization of the export and import potential of Ukrainian regions according to the following system of indicators: net profit (loss) of large and medium enterprises by regions in % to the total (y_1) ; per capita gross regional product, UAH (y_2) ; regional volume of the foreign trade in services, net, thous USA (y_3); regional volume of the foreign trade in products, net, thous USA (y_4).

One of the main decisive components of the export and import potential of the region is considered to be its resource component. There are many controversial recommendations for calculating the level of the resource potential. In this case it is recommended to calculate the indicator of the amount of the resource potential as the ratio of the available number of elements of the resource potential in the region to the total number of elements of resource potential in the country. According to the official statistics, there are 33 main elements of the resource potential of Ukraine, namely hard coal of ordinary, hard coal of ordinary, coking coal of calorific value of more than 23.865 MJ/kg (5700 kcal/kg) on wet basis free from ash, ssteam hard coal of calorific value of more than 23.865 MJ/kg (5700 kcal/kg) on wet basis free from ash, hard coal other, brown coal (lignite), crude oil, including oil obtained from bituminous minerals, natural gas condensate, supplied from natural gas field, natural gas, liquified or gaseous, natural gas, associated gas from oil fields, iron ores and concentrates. non-agglomerated (excluding roasted iron pyrites), iron ores and concentrates. agglomerated (excluding roasted iron pyrites), manganese ores and concentrates, including ferruginous manganese ores and concentrates with a manganese content of 20 % or more, calculated on the dry weight, ilmenite concentrate, rutile concentrate, zirconium

ores and concentrates, granite, crude or roughly trimmed, gypsum and anhydrite, limestone flux, limestone and other calcareous stone used for the manufacture of lime or cement (excluding crushed limestone aggregate and calcareous dimension stone), chalk, ilica sands (quartz sands or industrial sands). sands such as clayey sands; kaolinic sands; feldspathic sands (excluding silica sands, metal bearing sands), limestone, dolomite and other calcareous stone, broken or crushed, other broken or crushed stone, of a kind commonly used for concrete aggregates, for road metalling or for railway or other ballast (excluding pebbles, gravel, shingle, flint, limestone, dolomite and other calcareous stone), kaolin, not calcined, fireclay, other chemical and fertiliser minerals, peat (in the conventional humidity), peat (in the conventional humidity) non-agglomerated fuel, peat (in the conventional humidity) non-agglomerated for agriculture and other purposes, salt (including denatured salt but excluding salt suitable for human consumption) and pure sodium chloride, whether or not in aqueous solution or containing added anticaking or free-flowing agents, other minerals (State Statistic Service of Ukraine). Figure 2 shows the value of the development indicator of the resource potential in Ukrainian regions in 2020; demonstrates different levels of the resource potential in 2020 in the regions. Figure 2 illustrates the following key regions: Vinnytsya (1), Volyn (2), Dnipropetrovsk (3), Donetsk (4), Zhytomyr (5), Zakarpattya (6), Zaporizhzhva (7), Ivano-Frankivsk (8), Kviv (9), Kirovohrad (10), Luhansk (11), Lviv (12), Mvkolaviv (13), Odesa (14), Poltava (15), Rivne (16), Sumy (17), Ternopil (18), Kharkiv (19), Kherson (20), Khmelnytskiy (21), Cherkasy (22), Chernivtsi (23), Chernihiv (24).

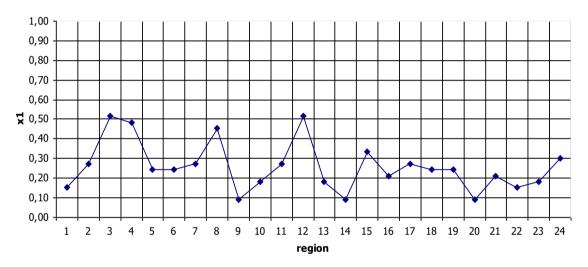


Figure 2. The level of development of the resource potential of Ukrainian regions in 2020.

Source: own research.

The highest level of development of the resource potential in Ukraine has Dnipropetrovsk, Lviv, Donetsk, the lowest – Kherson, Odesa, Kyiv. At the same time, the resource potential is not equal to the export and import potential.

3. APPLICATION OF THE MODEL

In order to determine the types of development of the export and import potential of the regions in Ukraine the cluster analysis has been applied, namely the Ward's method, since this method provides with the natural classification of the objects in conjuction (Ponomarenkon & Malyarets (2009)). Figure 3 shows the dendrogram, which provides with the opportunity to set out the types of development of the export and import potential of the regions.

Figure 3 illustrates five clusters of Ukrainian regions according to the development of their export and import potential. In order to determine the level of development of the export and import potential of the

regions of each cluster, firstly, the average indicators are figured (Table 1), then the integral taxonomic indicator of the development is figured is figured out Pluti V (Ponomarenko & Malyarets, 2009).

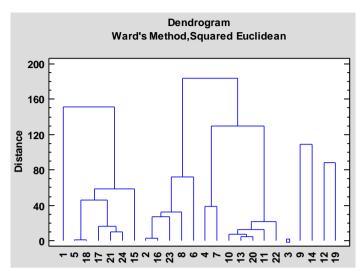


Figure 3. The clusters of Ukrainian regions according to the development of their export and import potential in 2020.

Source: own

Table 1. The average values of the development indicators of the export and import potential in clusters of the regions of Ukraine

Cluster	x_1	x_2	x_3	x_4	x_5	x_6	x_7
1	0.251	36143.2	9084.04	993.4	1087.14	1169.74	886.843
2	0.250167	12768.0	5062.41	633.0	776.875	779.158	681.033
3	0.515	24482.3	12011.4	1323.8	831.4	728.6	1306.3
4	0.091	18903.2	5659.45	1055.45	537.7	494.6	635.85
5	0.3785	24336.1	8993.6	869.05	1123.2	1228.1	775.3
Cluster	x_8	x_9	<i>x</i> ₁₀	<i>x</i> ₁₁	<i>x</i> ₁₂	<i>x</i> ₁₃	<i>x</i> ₁₄
1	100.514	524.657	137.757	61.8714	-89.2857	493.0	50.8857
2	100.075	506.017	128.442	61.7917	-499.833	750.917	22.0833
3	100.2	1426.5	653.5	130.4	254.0	7679.0	143.3
4	100.3	902.65	303.0	66.05	9608.0	1841.0	71.8
5	100.05	1156.0	362.2	85.9	23.5	7776.5	29.1
Cluster	<i>x</i> ₁₅	<i>x</i> ₁₆	<i>x</i> ₁₇	<i>x</i> ₁₈	1		
1	101.014	706297.	526507.	11585.7	0.487		
2	118.883	939633.	1.1183E6	8949.33	0.402		
3	264.5	1.84967E6	1.4246E7	58601.4	0.729		
4	628.9	1.57887E6	1.16563E6	27098.8	0.467		
5	210.1	2.3264E6	1.40667E6	21945.0	0.615		

Source: own research.

The first cluster is composed of the following regions: Vinnytsya (1), Zhytomyr (5), Ternopil (18), Sumy (17), Khmelnytskiy (21), Chernihiv (24), Poltava (15). The second cluster is made up of Volyn (2), Rivne (16), Chernivtsi (23), Ivano-Frankivsk (8), Zakarpattya (6), Donetsk (4), Zaporizhzhya (7), Kirovohrad (10), Mykolayiv (13), Kherson (20), Luhansk (11), Cherkasy (22). The third cluster consists of the sole region – Dnipropetrovsk (3), the fourth cluster – Kyiv (9), Odesa (14), the fifth cluster – Lviv (12), Kharkiv (19). The third cluster of regions has the highest level of development of the export and import

potential, the fifth cluster follows the third cluster, then goes the first, the fourth and the latest on the basis of the particular level goes the second cluster (Figure 4).

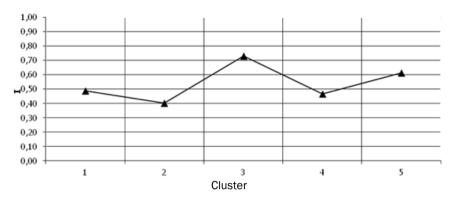


Figure 4. The general level of development of the export and import potential of Ukrainian regions in each cluster in 2020.

Source: own research.

To sum up, the highest export and import potential in Ukraine have Dnipropetrovsk, Lviv, Kharkiv regions. Vinnytsya, Zhytomyr, Ternopil, Sumy, Khmelnytskiy, Chernihiv, Poltava follow them. Figure 5 demonstrates the dendrogram that provides us with the possibility to specify realization types of the export and import potential of Ukrainian regions.

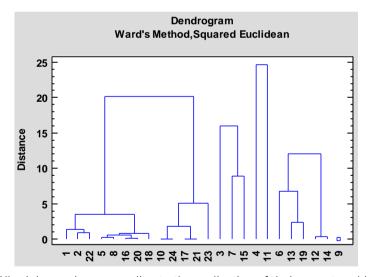


Figure 5. The clusters of Ukrainian regions according to the realization of their export and import potential in 2020.

Source: own research

Figure 5 demonstrates five clusters of Ukrainian regions according to the level of realization of their export and import potential. The composition of regions in the cluster differs from the composition of clusters that have been obtained according to the level of development of their export and import potential.

Table 2 illustrates the average indicator's values of realization of the export and import potential in clusters of Ukrainian regions and their levels.

Table 2. The average indicator's values of realization of the export and import potential in clusters of Ukrainian Regions

Cluster	y_1	<i>y</i> ₂	<i>y</i> ₃	<i>y</i> ₄	II
1	69.2077	68278.8	28873.8	71434.4	0.531
2	72.7333	116046.	11578.0	1.91887E6	0.645
3	51.3	34089.0	-5593.24	1.04454E6	0.347
4	74.22	78373.4	293176.	-216968.	0.679
5	73.4	123216.	62575.5	-1.40804E6	0.503

Source: own research.

The first cluster is composed of Vinnytsya (1), Volyn (2), Cherkasy (22), Zhytomyr (5), Ivano-Frankivsk (8), Rivne (16), Kherson (20), Ternopil (18), Kirovohrad (10), Chernihiv (24), Sumy (17), Khmelnytskiy (21), Chernivtsi (23) regions; the second cluster is made up of Dnipropetrovsk (3), Zaporizhzhya (7), Poltava (15) regions; the third cluster consists only of two regions: Donetsk (4) and Luhansk (11); the fourth cluster – Zakarpattya (6), Mykolayiv (13), Kharkiv (19), Lviv (12), Odesa (14); the fifth cluster – Kyiv (9). The fourth cluster of regions has the highest level of realization of the export and import potential, the second cluster follows the fourth cluster, then goes the first one, the fifth one, when the third cluster occupies the last place (Figure 6). Thus, the export and import potential is mostly realized in Zakarpattya (6), Mykolayiv (13), Kharkiv (19), Lviv (12), Odesa (14) regions and then in Dnipropetrovsk (3), Zaporizhzhya (7), Poltava (15) regions.

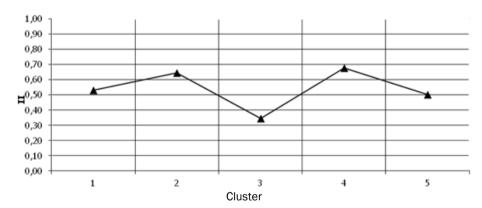


Figure 6. The general level of realization of the export and import potential of Ukrainian regions in each cluster in 2020

Source: own research

To this end, for the country the particular significance plays those regions, where the export and import potential has both a high level of development and a high level of realization. Such type of region's potential has a national significance and investment attractiveness. In Ukraine Kharkiv, Dnipropetrovsk, Lviv, Poltava, Odesa and Zaporizhzhya regions have a national significance. Vinnytsya, Zhytomyr, Ternopil, Sumy, Khmelnytskiy, Chernihiv, Poltava regions follow them. In these regions there is a close relationship between the development of the export and import potential and its realization. The close relationship between the development of the export and import potential and the level of its realization indicates the effectiveness of management of this potential in the region and this is the main reason why they are attractive for foreign investors. Applying the mathematical method of canonical analysis, the model of the relationship between the development of the export and import potential and its realization of the six regions of Ukraine has the following form:

$$\begin{split} r_{U_1V_1} &= 0,999, \quad p-value = 0,000; \\ \left\{ \begin{matrix} U_1 &= 0,4x_1 + 0,458x_2 - 0,356x_3 + 0,336x_4 - 1,027x_5 + 0,592x_6 + 0,447x_7 + 0,175x_8 - 1,511x_9 + 0,4645x_1 - 0,468x_1 + 0,028x_1 + 0,409x_1 - 0,317x_1 - 0,015x_1 - 0,133x_1 - 1,193x_1 + 0,1262x_1 - 0,548y_1 + 1,257y_2 - 0,113y_3 - 0,487y_4, \end{matrix} \right. \end{split}$$

The canonical correlation coefficient is almost one, which proves the existence of a functional mechanism for the relationship between the components of potential development and its realization. The close relationship between the components of the development of potential is provided by the rating of the influence of the following factors: number of the employees at enterprises by their size by region, total, thsd. persons (x_{10}) , labour force by region (working age), thousands person (x_{9}) ; capital investments by regions, mln.UAH (x_{18}) , environmental protection expenditures by region (at current prices, thsd. UAH) (x_{17}) , labor productivity in agricultural enterprises (x_{5}) and realization - per capita gross regional product, UAH (y_{2}) , net profit (loss) of large and medium enterprises by regions in % to the total (y_{1}) , regional volumes of the foreign trade in goods, balance, thous. USD (y_{4}) . Thus, indicated above development factors of the export and import potential provide results of its realization and such type of the potential facilitates the economic growth of the country and its national wealth.

4. FURTHER CONSIDERATIONS AND DISCUSSION

Of course, each region in the country has its own differences, so to ensure the effective development of each region it is necessary to determine the export and import potential and develop programs for the effective use of its potential. These programs should be based on the results of monitoring the export and import potential of the region, which is carried out in accordance with the appropriate system of indicators. The composition of the system of indicators may vary, subject to the system of statistics that is in force in a corresponding country.

CONCLUSIONS

In the process of determining the particular level of realization and development of the export and import potential of the region the level of the resource potential of the region plays a vital role. It is highly recommended to calculate the indicator of the amount of the resource potential of the region as the ratio of the available number of structural elements of the resource potential of the region to the total number of elements of the resource potential of the country.

It is proposed to carry out the process of monitoring of the development and realization of the export and import potential of the country's regions in the following sequence: 1) set up a system of indicators of the export and import potential of the regions; 2) clustering of the regions according to the system of development indicators; 3) specify clusters of development of the export and import potential of the regions in the country, their current level; 4) clustering of the regions in accordance with the system of indicators of realization of the export and import potential; 5) specify the clusters of realization of the export and import potential and their level; 6) identify the regions with the effective management of the export and import potential; 7) define the types of the export and import potential of the regions in the country;

8) systematize the monitoring results in order to develop the managerial decision on the equal development of the country's regions.

REFERENCES

- Abbas, S., Waheed, A. (2015), «Pakistan's potential export flow: The gravity model approach», *The Journal of Developing Areas*, Vol. 49, *Issue* 4, pp. 367-378.
- Abdimomynova A. (2018), "Development Factors of Export Potential of the Region: Capabilities in Minerals and Infrastructure Sector", Academy of Strategic Management Journal, Vol., 17, Issue 3, pp. 49-56.
- An, L., Hu, C., Tan, Y. (2017), «Regional effects of export tax rebate on exporting firms: Evidence from China», *Review of International Economics*, Vol. 25, No. 4, pp. 774-798.
- Aregbeshola, R.A. (2017), «Import Substitution Industrialization and Economic Growth: Evidence from the Group of BRICS Countries», *Future Business Journal*, Vol. 3, pp. 138-158.
- Baban, T. O. (2012) "Application of the category "potential" in modern economic research", *Bulletin of Kharkiv National Technical University of Agriculture: Economic Sciences*, Vol. 127, pp. 17–25 (in Ukrainian).
- Christopoulos, D. (2014), «Elite social capital and the regional economy», *European Urban and Regional Studies*, Vol. 21, No. 3, pp. 272-285.
- Deng, P., Lu, S., Xiao, H. (2013), «Evaluation of the relevance measure between ports and regional economy using structural equation modelling», *Transport Policy*, Vol. 27, pp. 123-133.
- Du, J., Peng, S., Song, W., Peng, J. (2020), "Relationship between Enterprise Technological Diversification and Technology Innovation Performance: Moderating Role of Internal Resources and External Environment Dynamics", *Transformations in Business & Economics*, Vol. 19, No 2 (50), pp. 52-73.
- Fingerman, K.R., Nabuurs, G.J., Iriarte, L., Fritsche, U.R., Staritsky, I., Visser, L., Mai-Moulin, T., Junginger, M. (2019), «Opportunities and Risks for Sustainable Biomass Export from the South-Eastern United States to Europe», *Biofuels Bioprod. Biorefin*, Vol. 13, Issue 2, pp. 281–292.
- Jackson, E. A., Jabbie, M. (2020), *Import Substitution Industrialization [ISI]: An approach to Global Economic Sustainability*, MPRA, University Library of Munich, (Germany).
- Jordaan, A.C. (2015), "Determining South Africa's export potential to Australia: A panel data approach", South African Journal of Economic and Management Sciences, Vol. 18, No. 3), pp. 354-365.
- Kheyfets, B. A., Chernova, V. Yu. (2019), «System for Assessing the Efficiency and Monitoring the Results of Import Substitution Policy», *Economics of the Region*, Vol. 15, No. 4, pp.1266-1278 (in Russian).
- Kostiukevych, R., Mishchuk, H., Zhidebekkyzy, A., Nakonieczny, J., Akimov, O. (2020), "The impact of European integration processes on the investment potential and institutional maturity of rural communities", *Economics and Sociology*, Vol. 13, No. 3, pp. 46-63. doi:10.14254/2071-789X.2020/13-3/3.
- Malyarets L., Otenko I. (2019), «Modeling of export-import potential», *Modern management review*, Vol. 24, Issue 26, pp. 51-61.
- Malyarets L., Otenko I., Ivashenko G. (2007), *Analysis and assessment of the strategic potential of the enterprise*, KHEU, Kharkiv (in Ukraine).
- Mykhailovsky V.P. (2006), «Formation of a new paradigm for the development of foreign economic activity in the region», *Russian Economic Journal*, Vol. 4, pp. 37-49 (in Russian).

- Oliinyk, O., Bilan, Y., Mishchuk, H. (2021), "Knowledge Management and Economic Growth: The Assessment of Links and Determinants of Regulation", *Central European Management Journal*, Vol. 29, No. 3, pp. 20-39. https://doi.org/10.7206/cemj.2658-0845.52
- Ponomarenko V., Kolodiziev O., Chmutova I. (2017), «Benchmarking of Bank Performance Using the Life Cycle Concept and the DEA Approach», *Banks and Bank Systems*, Vol. 12, Issue 3, pp. 74 86.
- Ponomarenko, V. C., Malyarets, L. M. (2009), *Analysis of data in researches of socio-economic systems*, INZHEK, Kharkiv (in Ukraine).
- Seifullaeva M., Kapicin V. (2001), «Export potential of Russian regions in the context of globalization of the world economy», *Marketing*, Vol. 1, pp. 3 13 (in Russian).
- State Statistic Service of Ukraine. http://www.ukrstat.gov.ua/
- Yang, L., Yan, Q., Balezentis, T., Li, M. (2020), "Licensing Strategy and Tariff Policy in an International Trade Model with Foreign Stackelberg Leadership", *Transformations in Business & Economics*, Vol. 19, No 1 (49), pp. 284-305.