ENTREPRENEURSHIP IN THE FIELD OF ART BUSINESS IN THE EUROPEAN UNION

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ABSTRACT

The research of diversification of the export profile of the creative section entrepreneurship in the field of art business of the EU countries, which is implemented on the basis of methods of multiple cluster analysis (cluster dendograms, K-means) and which is allowed to identify six groups (clusters) of EU countries. The average profile of export of goods of the creative group was very similar with the exception of one cluster. The greatest variability of export parts is observed in those groups of creative goods, the volumes of which are the largest (design, press, visual art), while groups of goods with a small share in the total volume of creative export of the EU (works of art, performing art), respectively and less are differentiated between clusters. It is established that specific nature of the profile of creative export of Ireland is the highest share of audio-visual products and a low share of design. Quite permanent was mix of the clusters "France-UK", "Finland-Latvia-Slovenia", at the same time Greece, Spain, Estonia and Luxembourg have become consolidation basis, remaining in the same cluster, when applying both statistical methods of clustering. Similarly, one cluster includes Italy, Malta, Lithuania, Romania and Portugal.

Keywords: Paradigm of Art Business & Entrepreneurship, Creative Section of Economy, Multiple Cluster Analysis, Family Groups of Goods, Export Share.

JEL Classification: I2, F6.

INTRODUCTION

The creativity of economy has significantly changed the nature, dynamics and structure of the service sphere, in which the share of the art business has increased significantly over the last quarter of the century. Art business has developed rapidly under the influence not only of domestic demands for the creation of cultural products, but also of the dominant processes of internationalization, globalization and cosmopolitanism of the world cultural environment in the society. The consequence of these processes was the system-based diffusion of historical, spiritual, cultural and commercial assets, which led to formation of the art market, as well as expansion of this specific business with the inherent control mechanisms and instruments, which, on the one hand, are based on stimulating the production of creative products, on the other- block the incompetent influence of individual institutions and officials in the creative process. Significant successes in the formation of a modern paradigm of art business has reached the European Union, one of the leading goals of which was creativity.

Modern post-industrial countries are distinguished from others by an extremely high share of the creative sphere, which in addition to the social orientation carries an important entrepreneurial basis. The European Union is no exception, as the share of cultural and creative industries in the economy is 2, 6% generated GDP (Gross Domestic Product) (Arbussa et al.,

2017). However, it is necessary to know that the modern creative economy is developing so fast. It is enough significant, given this, we should consider 2017, when the growth rates of industries of the creative economy were twice as high as service industries and 4 times faster than the industry. It should be noted that in developed countries, the creative economy is seen as an extremely important industry, which is an effective instrument for influencing economic growth, employment and trade.

For example, the money turnover of the creative economy of the European Union is 654 billion euro and annually growth by 12 % faster than total money turnover of all sections. Only tax revenue of the industry in individual countries of this integration group make up 10% of the broad indicator. The creative section has about 5 million people, in 2016 it is accounted about 2,5 % of the total workforce (Foss & Saebi, 2017).

REVIEW OF PREVIOUS STUDIES

Extremely important content elements of the makeup of the creative sphere of the economy are the following:

- The presence of different approaches of modern authors and institutions to sectional positioning. The level of coincidence of content matter of creative entrepreneurship varies between 75-90 % (Drobyazko et al., 2019a; Drobyazko et al., 2019b).

- The subsectional composition of creative spheres has much smaller coincidence that is caused by various author's vision of importance and taxonomy of certain spheres of a creative complex (Massa et al., 2017).

- Technological progress creates appropriate conditions for the diversification of creative activity, which provokes the problem of identifying new subsectors and the possible inconsistency with the classifications that existed before (Hilorme et al., 2019 Tetiana et al., 2019).

Some aspects of the studied problematic are still insufficiently developed, in particular, the identification of value-conscious attributes and motivation of the art business, the institutional and instrumental regulation in the EU at the same time. Ukraine is no exception, despite the considerable creative potential, a large intellectual resource and all the opportunities not only the implementation, but also for the global transfer of creative products produced in the country. Therefore, it can be argued that the chosen topic is extremely relevant for our country, because it acquires not only theoretical, but also practical importance, which is important in the development of a long-term strategy for economic development and implementation of Association Agreement between Ukraine and EU.

METHODOLOGY

It is used in the work both general- scientific and special methods of explaining the essence of regulation of art business in the creative economy in the EU. The methodological basis was: historical-logical method, method of analysis and synthesis, method of quantitative and qualitative comparison, dialectical method of cluster analysis (in determining the general groups of development of art entrepreneurship in the EU and export of creative goods and services).

Information and statistical bases of the work were accounts, reports and analytical materials of United Nations Organizations, Organization for Economic Cooperation and Development, European Commission, Statistical Office of the European Communities, United

Nations Educational, Scientific and Cultural Organization, United Nations Conference on Trade and Development, European Cluster Observatory, European Innovation Scoreboard, as well as the works of leading scientists and people on the ground on the regulation of the art market.

RESULTS AND DISCUSSIONS

In the context of the growing global saturation of the market with goods and services, certainly increased the need for the development and production of creative products, which can have both material, spiritual and virtual form. They are produced by talented figures, artists, designers, architects, etc., for the purpose of subsequent sale, resulting in the formation of the corresponding image of the author, and, as a consequence, price of the products increases. Large number of buyers and sellers of these specific goods and services have formed a national market of art products, which under the influence of a significant increase in international demand and offer is gradually turning into global one with the important sectional components. Unlike many traditional markets, this one is exceptionally creative.

Modern art business is a system of sequential commercial actions aimed at the production, distribution and commercialization of artistic images, which, thanks to creative activity of the artist, can acquire material or non-material qualities, that have, on the one hand, an elemental influence on consumers, and on the other- form a global market of art products with the sectional, age, territorial, social and elite, in some cases, subject differentiation, the demand for which has a leading tendency to growth.

It is obvious that the study of the aggregate measurement of creative trade export of the EU does not provide the understanding of the specific nature of country paradigms of export specialization. Two methodological methods of multiple agglomerative-hierarchical cluster analysis based on the STATISTICA software package were applied in order to study the homogeneity of country structures of export of creative goods to the EU.

The technology of cluster analysis was that at first, based on United Nations Conference on Trade and Development statistical data on the export structure of creative goods of 28 EU member nations in 2017, were identified 7 main product groups, namely: *"works of art", "audiovisual products", "design", "new media", "performing arts", " press", " objects of fine arts"*. It was found that the initial data for cluster analysis should be presented in a table in which the columns show the data on the share of the above-mentioned family groups of goods in the total export of creative goods of the country, and the rows show the EU member nations, which are the investigated structural paradigms of creative export at the second stage. Therefore, each line represents a list of the shares of product groups in the structure of creative export for each individual EU member nation. According to STATISTICA software package, was carried out preliminary assessment of potential clusters of EU countries, by the criterion of similarity of country structures of export of creative goods with the use of a cluster dendogram using the Ward's method (Ward's method).

The use of another method of multiple cluster analysis of K-means (K-means method) allowed to identify in more detail the statistical patterns of each of the identified clusters, mix of which, at the same time, is slightly different from the above.

According to this method, six cluster groups of countries were also identified, first of which includes Belgium, Estonia, Greece, Luxembourg and Spain; the second–only Ireland; the third- Finland, Latvia and Slovenia; the fourth- Austria, Bulgaria, Croatia, Czech Republic,

Germany, Netherlands, Poland, Slovakia, Sweden; the fifth-France and the United Kingdom; the sixth- Cyprus, Denmark, Hungary, Italy, Lithuania, Malta, Portugal and Romania.

It is necessary to know that already at this stage, when six clusters of countries were formed on the basis of two different methods of multiple cluster analysis (dendograms and K-means) it is possible to draw fairly clear conclusions about the significant difference in the structures of creative export from other clusters and the fundamental similarity within several clusters. Thus, Ireland has a unique structure of creative tradable export in both the former and the latter case. The content of the *"France-UK"* and the *"Finland-Latvia-Slovenia"* cluster also remained permanent. Greece, Spain, Estonia and Luxembourg became the consolidating basis, remaining in the same cluster when applying both statistical clustering methods at the same time. Similarly, Italy, Malta, Lithuania, Romania and Portugal belong to one cluster, although Cyprus, Denmark and Hungary also join the latter.

The value judgment of the quality of the statistical cluster paradigm obtained by us is carried out using analysis of variance (Table 1).

Table 1
RESULTS OF VARIANCE ANALYSIS OF THE CLUSTER PARADIGM BY THE K-MEANS METHOD

Tradable groups	Inter-cluster variance properties	df	Properties variance within clusters	df	F-criterion	Level of statistical significance (ρ)
Works of art	139,771	5	387,056	22	1,5889	0,204662
Audiovisual products	1606,286	5	660,668	22	10,6978	0,000026
Design	6406,637	5	1117,796	22	25,2186	0,000000
New media	747,259	5	319,467	22	10,2920	0,000035
Performing art	3,244	5	6,193	22	2,3044	0,079319
Press	2009,291	5	472,534	22	18,7095	0,000000
Fine arts	2575,032	5	89,552	22	126,5207	0,000000
Source: it is complied by the author using the STATISTICA software package according to the data of United Nations Development Programme; United Nations Conference on Trade and Development, Creative Economy: A Feasible Development Option, Geneva : United Nations, 2017.						

As follows from Table 1 most of the properties (tradable groups) have positively influenced the statistical clustering procedure of export paradigms of countries. Only in two tradable groups (cluster analysis properties) *"Works of art"* and *"Performing art"* the indicator of inter cluster variance of properties exceeds the variance of properties within the cluster, and the level of statistical significance exceeds the threshold level of 0.05.

The results of estimation of quality of statistical paradigm are quite expected as properties with the smallest numerical values, as a rule, least of all rely on distribution of objects on cluster groups, that is on *"quality"* of statistical procedure of identification of clusters at the same time. Nevertheless, it is not advisable to exclude them from parameters (properties) of the analytical cluster paradigm, since this would violate the economic content and logic of the analysis proposed by the author.

RECOMMENDATIONS

The central element of the support system for the development of the art sector in the EU is a framework program *"Creative Europe"* (2014-2020), the regulatory instrument of which on an additional basis combines the subprograms *"Media", "Culture"* and a number of intersectional activities. Modern priorities of creativity in the EU were the development of international cooperation, networks and new business paradigms in the cultural and creative sphere, the expansion access of users to media operators, digital adaptation, promoting the production of European audiovisual product, ensuring the complex of necessary professional skills and internationalization of creative career in the art sector. It was established that the leading means of implementing the priorities of *"Creative Europe"* program were support for co-production and screening of European films abroad, diversification of European audiovisual products, support for cultural dialogue and creative networks, promotion of international mobility of artists, provision of multilingual translation of literary works.

CONCLUSIONS

The expenses of recreational and cultural products occupy a significant share of a consumption budget in EU countries with a high level of gross domestic product per caput. However, the volatility of demand for art products is explained by the high malleability, since the majority of such products and services do not belong to the category of basic necessities. The driving force behind the growth of spending on recreational and cultural products in Europe was the attendance of music concerts, museums, cinemas, book and street music festivals at the same time. Another important key trend in the development of the modern European art market in recent years has been the gradual transition from physical to digital format of consumption of news and music, as well as the reduction of public spending on media services, due to the massive transition of the majority of consumers to online news services, audio and video products, digital applications, online games and social media. Consequently, the growing technification of the art business has significantly affected the availability of goods and services in the region within the borders, the comparability, sectional saturation and high quality of export.

The proposed method of assessing the nature of creativity of the European Union, based on a number of consistent approaches to identifying the structure, dynamics and trends of the economic development of the art sector has revealed a number of specific essential properties. In particular, the study of the tradable structure of export products of the creative sector shows the dominant positions in the tradable export of EU art products had design (56 % of volumes), fine arts (16,2 %), and press (10,6 %). The cluster dendogram, constructed by Ward's method, allowed to separate six structural paradigms of creative export (clusters) of EU countries on the basis of the sectional similarity. The validation of the above-mentioned econometric paradigm by the method of multiple cluster analysis of K-means (K-means method) allowed to confirm the permanent leadership in the groups *"France-Great Britain", 'Finland-Latvia-Slovenia"*, as well as the variance analysis of cluster paradigms with the appropriate positioning of the sectors *"Works of art"* and *"Performing art"*.

Given the difficult poly-structural nature of identification creative and commercial effects of the art business, quick changing moods, preferences and *"audience awards"* consumers

determined the desirability of developing synthetic indicators, that would be based on the statistical comparability of cultural processes.

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