

The Impact of globalization on the development of creative industries businesses

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Abstract. The creative industry represents the potential for economic growth worldwide. Even though there is no single definition of it, it can be generally said that these are the economic sectors in which the primary production factor are people, their individual creativity, ability, and talent. Creative industries can also be said to be created at the interface of innovation and culture, where they overlap. The article focuses on the analysis of the creative industries development in the Slovak Republic in the context of the development of creative industries in other European Union countries. Based on the gained knowledge, it points out the regional differences in the creative world of European countries. The article also tries to identify the link between globalization influences and the development of the creative industry, using the KOF index. This index represents a quantitative expression of the level of globalization in terms of its economic, political, and sociological development. This enables a comparison of the the selected indicator development of the creative industry with the development of globalization. The research methods used include time series analysis as well as correlation methods. The obtained results suggest that the creative industries is developing independently of globalization trends.

1 Introduction

The creative industries have enormous potential for economic growth. However, the difficulty of examining them is their inconsistent definition. The literature and practice offer several approaches to define this term. Some authors [1] and institutions [2] believe that the creative industry, together with the cultural industry, is a single term for the creative economy. On the other hand, the European Commission [3] uses for designation of the key industries, cultural industry, creative industry and related industries (e.g., PC manufacturing) unified term cultural sector. According to Hautamäki [4], the creative industry is at the interface of innovation and culture, where they overlap. However, some approaches use the concept of the creative industry to designate the production of all areas from music and fine arts to the production of advertising and software. This approach is also used by creativity indexes, which may include indicators such as talent; attractiveness and connectivity; cultural environment, and creative entrepreneurship. [5] According to Florida, the creative industry is an economic sector based on resources such as people, their

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individual creativity, skills, and talent. [6] The creative economy includes products and services that are based on creativity and have economic value. [7]

The creative economy includes scientific, research, artistic, and other activities falling under the protection of intellectual property rights. On the one hand, creative industries are seen as a source of localized innovation. [8] On the other hand, the creative industries can be built by multinational companies at the local level. [9] The creative industry is also seen as a unique area of business that contributes to the sustainable growth of the country's economy. [10] The renewed growth of these sectors represents its enormous potential in the global environment. Their contribution is noticeable, especially in the growth of sales and jobs. In the context of the creative industry, the issue of globalization is at the forefront. Globalization is generally perceived as a spontaneous and uncontrolled process affecting events around the world with an impact on the daily life of individuals. Economic globalization, which represents the interconnectedness of economies around the world, is considered the peak of this process. In addition to economic globalization, political, social, and cultural globalization is also taking place. Economic globalization is manifested by: the emergence of a network of different activities and relations across continents, the mutual reactions of countries to economic changes, the opening of national markets (competition, capital, technology), the emergence of transnational business entities through various tangible and intangible flows. In particular, the spread of ideas, information, ideas, and the migration of people can be seen as manifestations of social globalization. Political globalization is an interconnection of government policies through international treaties and membership of international organizations.

It is also important to highlight the strength of the combination of individual manifestations of globalization. In this context, the development of the creative industry brings a combination of a larger volume of tradable services and a broader market abroad. [11] Enterprises involved in the global value chain are even better placed to overcome the crisis. [12] Although there are both positive and negative views on the perception of globalization [13], the general consensus is that this is a stronger and inevitable phenomenon. Globalization in the creative industry can contribute to multiculturalism leading to greater cultural diversity. [14] The fact that the value perceived by customers in international markets may vary can be both an opportunity and a threat in promoting the creative industry in global markets. [15] Globalization thus represents an opportunity for economic sectors to grow.

The globalization index KOF allows quantification of the level of globalization. It is a composite index that measures globalization for each country in the world in economic, social, and political dimensions. [16] The overall globalization index thus includes sub-indices for: economic globalization through both real economic flows and economic constraints, social globalization mapping personal contacts, information flows and cultural proximity, political globalization mapping countries' political commitment.

2 Globalization index development

The globalization index has been steadily increasing since 1970, and its global value has risen by 54%. [17] An increase in KOF can be observed in all regions under review. The period of its most significant growth can be considered in the years from 1992 to 2000 when it increased by 16%, the average year-on-year growth in this period amounted to 1,91%. KOF growth slowed down in the years 2011-2015 (last five years of the reference period), and the average year-on-year growth reached only 0,35%. This result was also due to the fact that in 2015 it decreased by 0,22%. The KOF recorded a downward trend in the year-on-year trend after 27 years of growth.

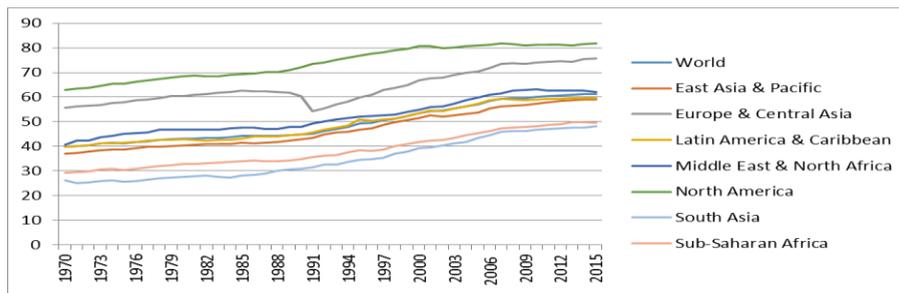


Fig. 1. Development of KOF in the world (Processed according to KOF Swiss Economic Institute)

From the point of view of the division of the world into individual regions, the regions of North America, Europe & Central Asia are above the global average of KOF. Despite the highest levels of KOF index in these two regions, their growth records values below average. While the global average represents an increase in the KOF index by 21,476 points, Europe & Central Asia achieved overall growth of only 19,906 points and North America by only 18,801 points. Although North America seems to have a significant lead over the globalization index, its low year-on-year growth (by only 0,44 points over the last ten years of the referential period) reduces this lead. Europe & Central Asia region ranks second place in the KOF ranking, but its average year-on-year growth is only slightly higher than in North America. The slowdown of the globalization growth in this region was caused by its decline in 1986-1991, which, however, counterbalanced the period 1992-1997 when it grew more sharply. This growth is probably related to the inclusion of post-socialist countries in the research sample. In the last ten years of the period under review, KOF achieved a growth of 3,77 points. As a result, the leaders' globalization measured by KOF Europe & Central Asia, North America are progressing more slowly than countries with an initially lower degree of globalization. Thus, the degree of globalization within individual regions can be expected to equalize. In terms of the globalization index, East Asia & Pacific can be considered the region with the fastest-growing globalization (average year-on-year growth 0,479 points) and North America with the slowest growing globalization index.

In Slovakia, the KOF index has been monitored only since 1993, and its value has increased from 54,85 to 80,74 points during this period. However, this growth was achieved, in particular, by 2007, after which time the process of globalization has tended to decline slightly. This is also confirmed by the fact that over the past ten years, KOF in Slovakia has increased by only 1,45 points. Thus, with its globalization index, Slovakia is slightly above the value of Europe & Central Asia, but developments in recent years indicate a slowdown in its development.

3 Development of the creative industry in Slovakia in context with other European countries

The creative industry presents growth potential worldwide. According to a 2015 EY study, the big considerable turnover of cultural and creative industries is concentrated in the European region (32%). [18] According to Eurostat [19] for the European leaders of the creative industry can be considered the United Kingdom, Germany, with a turnover of over 80 000 mil. € Significant position also belongs to France and Italy.

In a more detailed examination of the European creative industry in terms of turnover levels, the United Kingdom retains its primacy, whose turnover continuously rises. In other leaders, we can rather observe a decline in turnover. Growth in turnover can still be seen in Sweden, Portugal, Romania, and Cyprus. To assess the growth potential, we also calculated

the labor productivity of employees of an individual country's creative industry. Overall, we can say that between the years 2010 and 2015, the productivity of creative industry employees grew in only about half of the countries analyzed. The other half of the countries report a decline in this indicator. The highest productivity in 2015 was achieved by employees in Belgium and Norway - approximately € 200 000 per employee. Employee productivity in France and Sweden was around € 170 000 and € 155 000 in Denmark. Interestingly, with productivity above € 140 000 per employee, Austria and Cyprus outperformed Italy and Germany by € 20 000 per employee. Other countries did not exceed € 83 000 per employee.

When analyzing the creative industry in Slovakia, we encounter the problem of insufficient statistical data. In the Eurostat statistics between 2010 and 2015, data for Slovakia are recorded only for the first and last reference year. In 2015, there were 11 690 creative industry enterprises in Slovakia, which achieved a turnover of 1 476, 288 million € and employed approximately 24 549 employees. Although Slovakia experienced a decrease in creative industry average turnover by approximately € 10 800 between 2010 and 2015, due to the overall growth in the number of enterprises in this sector, the total turnover growth was EUR 135,988 million €. The decrease in the number of employees by approximately 871 persons between these periods caused an increase in labor productivity of € 7 410 per employee. Although Slovakia did not achieve the average values of the European countries in 2015, its development can be assessed as neutral.

4 Methodology

Creative industry can be described as a phenomenon of the economic development of countries. However, opening markets across the world forces us to look at this young sector, also in terms of globalization. Globalization brings opportunities for growth but also the fall of the economies of individual countries or their economic sectors.

We divided our research into three stages. In the first one, we examined the creative industry in the Slovak Republic and individual European countries, in the second the development of the globalization index and in the third stage the relation of the development of this indicator to the creative industry. The research aimed to verify the relationship between the level of globalization and selected indicators of the creative industry in the countries belonging to the research sample. The criterion for fulfilling the main objective was to verify the hypothesis: There is a positive link between the development of globalization and the creative industry.

The development of the creative industry was examined based on data from Eurostat for the area of Culture [19, 20] for the years 2010-2015. Based on the analysis of the companies included in this database and determination of creative industry mentioned in the previous parts of this article, we will consider this database for the creative industry companies database. We analyzed the available data of the database, which in total, represented data for 27 European countries. To identify the development trends of the creative industry, we chose three indicators: the turnover of enterprises in €, the number of employees, and the productivity of employees in € per employee. The frequency of the collected data has varied from year to year due to countries' discipline in the provision of data, as well as in line with the increase in the number of Eurostat respondents.

We examined the development of globalization using the KOF indicator in the years 1970 - 2015. Data about this indicator were obtained from the ETH Zurich - KOF database of the Swiss Economic Institute. [17] (The latest available data on the Globalization Index are for the year 2015.) To get an overview of the globalization index, we focused on its global value and trends in its evolution within the division of the world into seven regions. We used data from 2010 to 2015, which we were able to identify for all stages of our

research, to investigate the development of globalization and the creative industry. Due to the incompleteness of the data in the Eurostat database, 37 % up to 85 % of European countries database have been examined in individual years.

In addition to basic theoretical and logical methods, we used basic methods of descriptive statistics (linear graph, table) and methods of correlation analysis. We examined the dependence of companies turnover, number of employees, the productivity of employees, and KOF in 2010-2015. The productivity of employees was determined as the ratio of turnover to the number of employees.

5 The results - relationship between creative industry and globalization

To find out the relationship between the development of the creative industry and globalization, we examined the relationship between the globalization index KOF (found in the EHF database) and the turnover of the creative industry businesses (from the EUROSTAT database). We also examined the possible correlation between KOF and the number of employees in creative business enterprises (calculated from Eurostat data). Taking into account the available data for both factors, we surveyed a sample of 32 European countries for the period 2010-2015. This data was subject to correlation analysis. However, the turnover figures for the creative industry were not available for all countries in the period under review, thus affecting the reliability of the findings. We rephrased the scientific hypothesis into two alternative statistical hypotheses:

H1: Is there a statistically significant correlation between the globalization index and the turnover of creative industry businesses?

H2: Is there a statistically significant correlation between the globalization index and the number of employees in creative industry businesses?

In all monitored years, we found a positive correlation between the amount of turnover and the degree of globalization. While in 2010, 2011, 2013, and 2014 we identified only a low dependence of these two parameters, in 2012, there was a moderate correlation. This would suggest that a higher turnover of the creative industry in countries with a higher degree of globalization was achieved in the period under review. However, the reliability of these findings is low due to the high mean error.

Table 1. Correlation between the amount of turnover and KOF in European countries

	Year 2010	Year 2011	Year 2012	Year 2013	Year 2014	Year 2015
Correlation Coefficient	0,4378	0,4171	0,5423	0,4084	0,3121	0,4478
Mean Error	0,2160	0,2612	0,1887	0,2405	0,2503	0,1667

When examining the relationship between creative industry turnover and globalization index in individual countries, a very high positive correlation was confirmed in only two countries, one of which is Slovakia. However, a high to very high negative correlation was also identified in three countries.

Table 2. Correlation between the amount of turnover and KOF in specific countries

Country	Correlation Coefficient	Mean Error	Country	Correlation Coefficient	Mean Error
Croatia	-1,0000	0,0000	Slovakia	1,0000	0,0000
Finland	1,0000	0,0000	United Kingdom	-0,7339	0,2063
Poland	-0,9350	0,0563			

The hypothesis that there is a significant correlation between the turnover of the creative industry and the globalization index has not been confirmed. Such interdependence of these parameters depends on the individual conditions of each country. There are even countries where the development of these factors is reversed.

When examining the relationship between the development of the number of employees and KOF, we found a positive correlation between these variables. However, taking into account the height of the correlation coefficient value, we can sum up that its value is very low. (Again, a high medium error was confirmed.)

Table 3. Correlation between the number of employees and KOF in European countries

	Year 2010	Year 2011	Year 2012	Year 2013	Year 2014	Year 2015
Correlation Coefficient	0,2194	0,2074	0,263	0,284	0,1609	0,1853
Mean error	0,2640	0,3026	0,2488	0,2654	0,2702	0,2014

When examining the relationship between the number of employees in the creative industry and KOF across countries, we identified the dependence of the number of employees and KOF with a reliable degree of tightness of dependence in nine countries.

Table 4. Correlation between the number of employees and KOF in European countries

Country	Correlation Coefficient	Mean Error	Country	Correlation Coefficient	Mean Error
Croatia	-1,000	0,0000	Poland	0,9293	0,0682
Finland	1,000	0,0000	Slovakia	-1,0000	0,0000
France	1,000	0,0000	Slovenia	-0,9665	0,0295
Greece	-0,8750	0,1172	Sweden	0,7165	0,1987
Norway	0,9893	0,0087			

A high to the very high negative correlation of the number of employees in the creative industry and KOF can be observed in Croatia, Greece, Slovakia, and Slovenia. It means that the declining number of employees in the creative industry is linked to the increasing globalization of these countries. The opposite situation occurs in countries with a high to a very high positive correlation between the number of employees in the creative industry and KOF, which are, according to our survey, Finland, France, Norway, Poland, and Sweden. The hypothesis that there is a significant correlation between the number of creative industry employees and the degree of globalization has not been confirmed. A country-specific survey suggests that the growth in the number of employees in the creative industry depends on the individual circumstances of each country.

6 Discussion

The worldwide growth of the creative industry, as well as the growth of globalization, are not interrelated factors in the European area. We find some explanation in the finding of imperfections in statistical surveys, which are also undergoing development. On the one hand, they improve the methodology of collecting and processing statistical data, and new countries are gradually included in the research samples.

An individual examination of these parameters confirms the fact that the growth of globalization will be typical for countries with a lower initial index of globalization. Based on this observation, it can be assumed that in the long term, the value of the globalization

index may be balanced among the majority of regions. A similar trend can also be seen for the creative industries, where countries with low turnover in these sectors are growing. However, no confirmation of the correlation between the growth of the creative industries and the globalization index suggests that the creative economy is developing independently of globalization trends. In terms of the opportunities that globalization brings on the input and output side of the creative industries' production processes, this may be a harmonious balance across individual countries. For example, the mutual transfer of employees among countries does not ultimately change the number of employees within an individual country.

In terms of the development of the creative industry, Slovakia can be assessed as stagnant. The growth in the number of enterprises in the creative industries and the labor productivity of their employees can be viewed positively. However, due to the overall decline in employees in these industries, their average turnover decreased. In terms of the relationship between the creative industry and KOF, a very high positive correlation between turnover and KOF and a very high negative correlation between the number of employees and KOF were confirmed. The obtained data suggest that in case of globalization growth, the sales of creative industries will grow and their workforce will decrease (this phenomenon may be for example due to the transfer of knowledge and technologies). In the end, such development would lead to a growth in the performance of creative industries in Slovakia.

7 Conclusion

Although the development of data for the creative industry suggests future growth opportunities for the industry, in countries where the industry is more developed, and its market is saturated, the growth will become increasingly difficult to achieve. This prognosis may not be reversed even by the increasing globalization, which positively correlates only with the creative industries of a small number of countries. However, the growth of globalization can be considered a positive factor for the Slovak creative industry. The importance of the creative industry should not only be seen in terms of the growth of the sector itself, but also in the broader context of its impact on the regions in which such businesses operate.

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