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Innovativeness of the creative economy as a component of the Ukrainian and the world sustainable development strategy

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Abstract. The article the innovativeness of the creative economy as an important driver of the world economy sustainable development is considered. In accordance with the analysed concepts of creative economy, creative industries, classification of creative industries due to UNCTAD methodology and Ukrainian regulations, the feasibility of considering research and developments as a separate type of services in the creative economy is shown. Understanding of creative goods and services from the standpoint of innovation contributes to increasing the innovation and creative potential of Ukraine and opens wider prospects for achieving sustainable development goals, which as were declared is the only possible way to develop the national economy. Taking into account such perspectives, the paper presents the goals that can be covered by the creative economy, providing that innovation is included as an integral part, the analytic dependence of the share of creative industries added value in the total added value of Ukraine.

1. Introduction

There is an almost unanimous awareness in the world today of the importance of developing a creative economy in the political, economic, social and environmental dimensions, and in many cases different countries face the same challenges and problems. At the same time, their practical experience in responding to these requires its critical reflection through the prism of Ukrainian realities, which is another reason for the importance of considering the creative economy as a strategic driver of sustainable development and the need of active participation in the international dialogue to support and expand the list of creative goods and services.

At the present stage, it is important to focus on the creative economy development from the standpoint of its impact on the innovation and creative potential level of Ukraine and the world, but not only as an sphere that promotes cultural and creative industries, the list of which Cabinet of Ministers of Ukraine is adopted by a resolution [1].

The importance of creative industries for the country's economy can be assessed by their contribution to GDP, the number of job positions and the volume of export potential, which shows the growth rate of the country's economy, employment and currency inflows into the country. With the growth of these indicators around the world and their positive dynamics in Ukraine, obtained primarily from international reports and studies due to the low level of their coverage in national statistical sources, more and more foreign and Ukrainian scientists are directing their research to prospects and



obstacles of development, the role of the creative economy, ways to develop creative entrepreneurship for different segments of the population, etc. However, the importance of developing the creative economy in the context of innovation and impact on all industries without exception through research, development of new or innovative technologies, which should be considered as a type of creative services, as proposed in 2008 in [2], increased attention of various scientists, especially in Ukraine, has been paid only recently. So it is worth noting the works of scientists such as S A Davymuka and L I Fedulova [3], O Klipkova [4], A A Pakulina and A S Evseev [5], T V Posnova [6], etc., which consider innovation and creativity as elements of the creative economy that are performed simultaneously and are not derived from each other.

On the other hand, the development of a creative economy around the world is becoming an integral part of achieving the Sustainable Development Goals approved by the UN Summit in 2015 [7]. In addition, the creative economy and creative industries stand out as separate strategic objectives of states, where Ukraine is no exception.

The aim of the work is to study the strategic impact of innovativeness as an element of the creative economy in the context of achieving and meeting the Sustainable Development Goals in Ukraine and the world.

2. Current state of the creative economy and creative industries development in Ukraine and the world

The topic of creative industries is a relatively recent item in the international economic and development agenda. However, there is a growing awareness that it can have a positive impact on the economy, directly or indirectly, through creating jobs, stimulating innovation and promoting social and sustainable development.

For the first time term "creative industries" was used by the Australian Government in the Creative Nation Report (1994). And the first definition was proposed by the UK Department of Culture, Media and Sport (1998) as industries based on individual creativity, craftsmanship and talent, with the potential to create added value and jobs through generation, production and operation of intellectual property products [8].

According to John Howkins definition, a creative economy is a system for the production, exchange and use of creative products, where a creative product is an economic good, service or experience resulting from creativity whose main economic value is based on creativity. The defining characteristics are twofold: it results from creative activity and its economic value is based on creativity [9].

Over the past 10 years, the global turnover of creative products and services has more than doubled and reached 624 billion US dollars. Along with economic benefits, the creative economy creates intangible values and provides sustainable, human-centered development. Ukraine, which is rich in creative and innovative human potential, as evidenced by the Global Creative Index and the Global Innovation Index, Ukraine's rating on which has risen, has a number of competitive advantages that allow it to successfully produce intellectual and creative products, the most profitable of which - it's innovation. Human potential as a strength of the national economy is also discussed in The Doctrine of Sustainable Development "Ukraine 2030" [10].

So far, there are no systemic documents in Ukrainian legislation that would regulate such a category as the creative economy, which is also emphasized in [11]. However, today the Law of Ukraine on Culture has been amended, which defines that creative industries are types of economic activity aimed at creating added value and jobs through cultural (artistic) and / or creative expression, and their products and services are the result of individual creativity [12].

Recently the Cabinet of Ministers of Ukraine has adopted the Resolution "On approval of types of economic activities that belong to creative industries" [1]. The document contains a list of activities related to creative industries and includes the following: visual art: painting, graphics, culture, photography; performing arts: live music, theatre, dance, opera, circus, puppet theatre; literature, publishing, and print media; audio art; audiovisual art: cinema, television, video, animation, animation

related; design; fashion; new media, information and communication technologies: programming, video games, digital technologies in the arts (3D printing; virtual, augmented, modified reality); architecture and urban planning; advertising, marketing, public relations and other creative services; libraries, archives and museums. The Glossary of Creative Industries has also been developed.

The development of the creative economy as a strategic task of our country is discussed in various documents approved at the national level. According to The Doctrine of Sustainable Development, the main components of Ukraine's sustainable development policy are: a social contract; good governance; networking the national economy; stimulating economic activity; the development of a creative economy; the effective implementation of human and social capital; the diversification of financial security; creating stable investment security [10].

The Ministry of Economic Development, Trade and Agriculture of Ukraine, taking into account the purpose and strategic goals, given the need to concentrate efforts in conditions of limited resources, in the Export Strategy of Ukraine identified promising sectors of the economy to develop sectoral and cross-sectoral export strategies and further promote these industries (goods, works, services) in foreign markets. These are sectors that can promote innovation, modernization and high added value, with the potential to develop small and medium-sized enterprises, as well as with high demand in world markets. Other factors are taken into account in the selection, in particular, such as the possibility of creating new jobs, attracting investment, the presence of comparative advantages and the potential to involve the country in global value chains. Potential sectors in Ukraine in accordance with the Strategy are: information and communications technology; creative services; tourism; machinery; aircraft repair and maintenance; aerospace and aviation parts and components; food and beverages industry [13].

3. Innovativeness as a component of the creative economy

It should be noted that among the nationally approved list of industries related to creative [1], there is no such activity as "research and development" (not only in the field of culture, but in general), in contrast to the UNCTAD classification of creative goods and services (figure 1) although an overall vision of moving Ukraine into "Knowledge- and innovation-based exports for sustainable development and success in global markets" proclaimed by the Export strategy of Ukraine [13].

Creative Goods (7 groups, 25 subgroups)		
Art crafts	Design	Audiovisuals
Carpets Celebration Other art crafts Paperware Wickerware Yarn	Architecture	Film
	Fashion	CDs, DVDs, tapes
	Glassware	Visual arts
	Interior	Antiques
	Jewellery	Painting
	Toys	Photography
		Sculpture
New media	Performing arts	Publishing
Recorded media	Musical instruments	Books
Video games	Printed music	Newspaper
		Other printed matter
Creative Services (8 items)		
Advertising, market research and public opinion polling		Computer services
Research and Development		Information services
Architectural, engineering and other technical services		Franchises and similar rights
Audiovisual and related services		Other royalties and license fees

Figure 1. UNCTAD classification of creative goods and services

In our opinion, research and development should be approved at the legislative level as a type of creative services, because it is the latest developments (novations that then become innovations) that

create added value through intellectual work. In addition, according to the model of interaction between culture and economy, proposed by J Potts and S Cunningham [2], it is more correct to consider creative industries as an integral part of the national and international innovation system (figure 2). Culture changes economic processes and is considered a public good in a dynamic sense. Under such conditions, culture and creative industries become the object of national innovation policy with all the corresponding consequences.

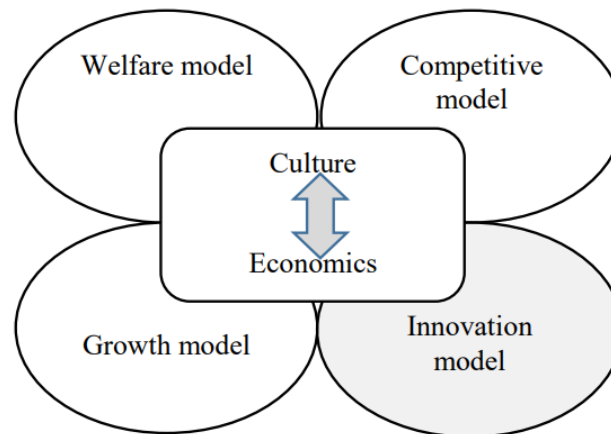


Figure 2. Models of interaction between culture and economy. Built on the basis of [2]

Considering innovation as part of the creative economy will open its broader perspectives in the context of the Sustainable Development Goals, as it will create new opportunities and open new labor markets, which according to preliminary estimates as of 2030 is 12 trillion US dollars. There are several reasons for this. First of all, on September 30, 2019, the Presidential Decree "On Sustainable Development Goals of Ukraine until 2030" is identified sustainable development as the only possible way to develop the domestic economy and social institutions, which will increase the standard and quality of life, constitutional rights and freedoms human [14]. In addition, this approach opens up additional opportunities in light of Ukraine's transition to a "new economy."

If we take as a basis the national report "Sustainable Development Goals: Ukraine", prepared by the Ministry of Economic Development and Trade of Ukraine [15], which provides a vision of Ukraine's Sustainable Development Goals in the form of 86 national development goals and 172 indicators for their monitoring, we can analyze those goals that are achieved through the development of the creative economy, taking into account the typology of the creative industries legally enshrined today. However, if we take into account the prospects for the creative economy development from the standpoint of developing innovative approaches, new or innovative technologies, the range of goals covered by the development of the creative economy is extremely expanding, as shown in a figure 3.

As we consider, an effective tool for the development of innovation and creative potential of Ukraine is the expansion of participants in the creative economy innovation ecosystem. And among the main such participants, identified for instance in [3], which should include creators, startups, creative companies, distribution companies, industrial enterprises, universities, research institutions, government, business, public and private finance. From where we stand, it is necessary reconsider the role of universities as one of the main drivers of development in the field of creative economy.

We deeply support the idea mentioned in [16] that an understanding creativity and its contribution to the economy and culture of the 21st century requires changes in teaching methods. Such changes are already taking place during the transition from STEM subjects (Science, Technology, Engineering, Mathematics) to STEAM (STEArtsM). The indicated transition is a new educational paradigm that can lead to creativity and creative thinking as the main stimulus for innovations. If we recall the revolutionary changes brought about by science and technology in the previous century, we can

confidently say that art and design will lead to no less result today, which determines the inclusion of new and innovative technologies primarily in all sustainable development goals.

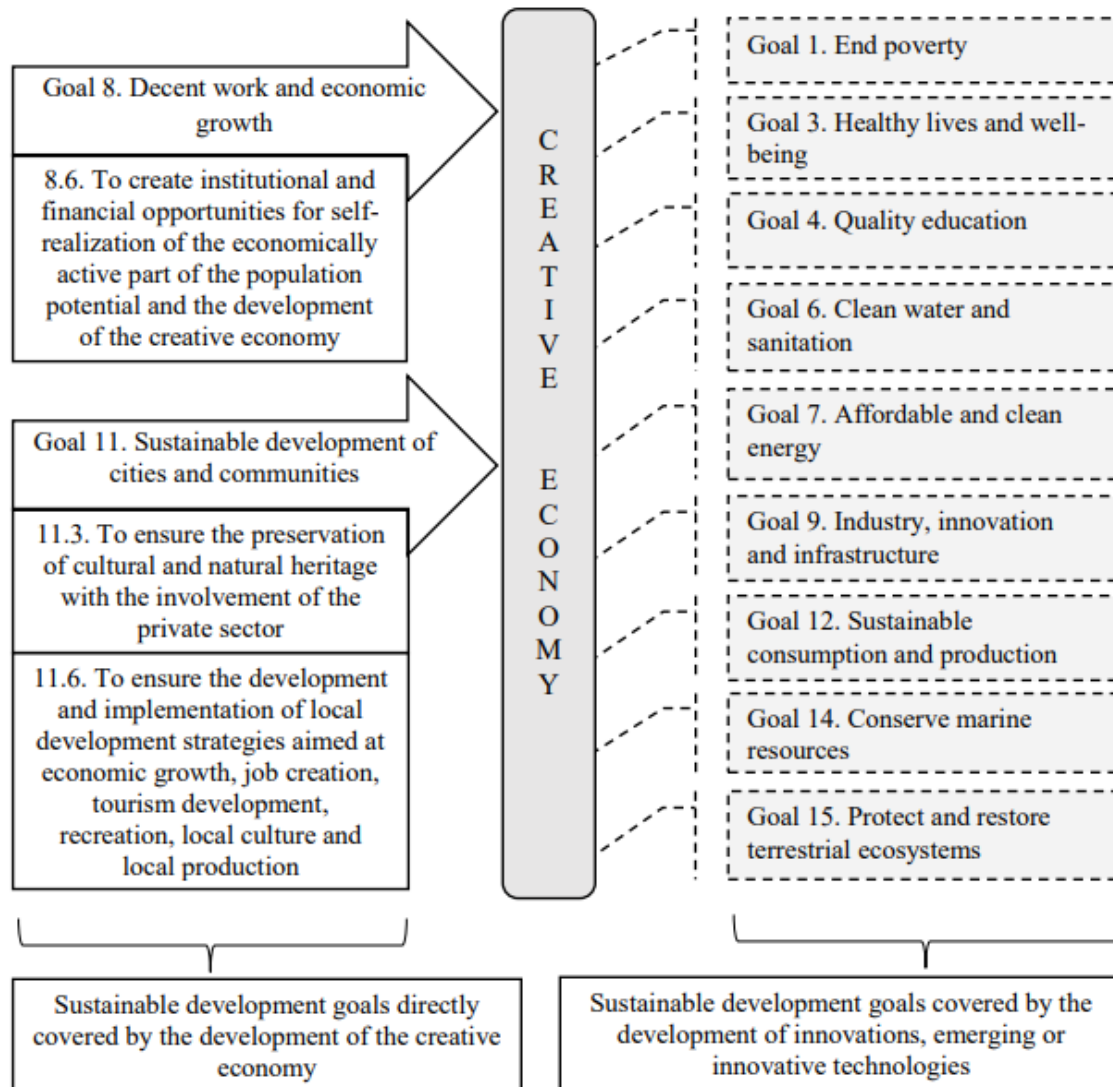


Figure 3. Sustainable Development Goals, which are covered by the creative industries according to the current list and can be covered by including research and development in the list of creative services

4. Model of the Ukrainian creative economy development

We understand the creative economy as a type of economy that has the form of a set of socio-economic relations that arise in the production, distribution, exchange and consumption of goods based on human talents, non-standard, non-traditional ideas, strategies, measures that will provide effective solution of socio-economic problems on the basis of new knowledge and fundamentally qualitatively new solutions.

As already mentioned above, the state of development of the creative economy in the world can be assessed by indicators of their contribution to the country's GDP, the number of employees in the field, the dynamics of economic entities that choose creative types of goods and services, etc.

A figure 4 shows the share of creative industries in the amount of added value, the number of businesses and employees in Ukraine, the results of which can determine the analytic dependence to study the current situation and forecast development prospects.

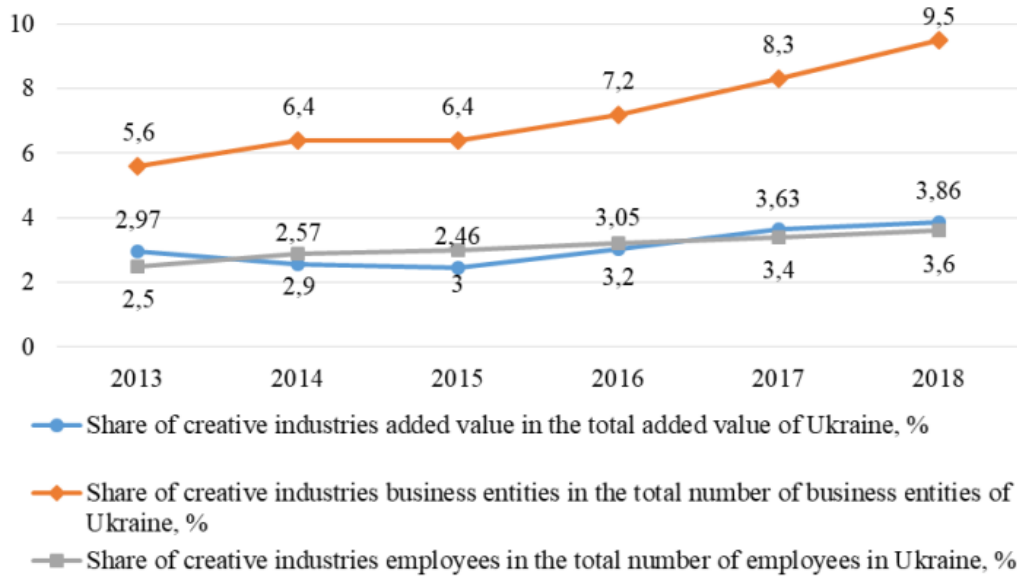


Figure 4. Share of creative industries in the amount of value added, number of economic entities and employees in Ukraine. Built on the basis of [17]

In general, according to the figure 4 we can note the positive dynamics of each of these indicators and a significant increase in the interest of economic entities in the field of creative industries.

There are already the first attempts of scientists to formalize various dependencies that allow analyzing and predicting the development of the creative economy. Thus, in [11] the economic assessment of creative industries is presented through indicators of the level of creative intensity, contribution to GDP (percentage of GDP in coefficient terms), level (coefficient) of current material support of this type of activity and innovation index, but so far without analytical approbation.

Given that the determining indicator of the creative industries impact on the development of the country's economy is their share in total GDP, according to the figure 4 we construct the corresponding analytic dependence using the least squares method (figure 5).

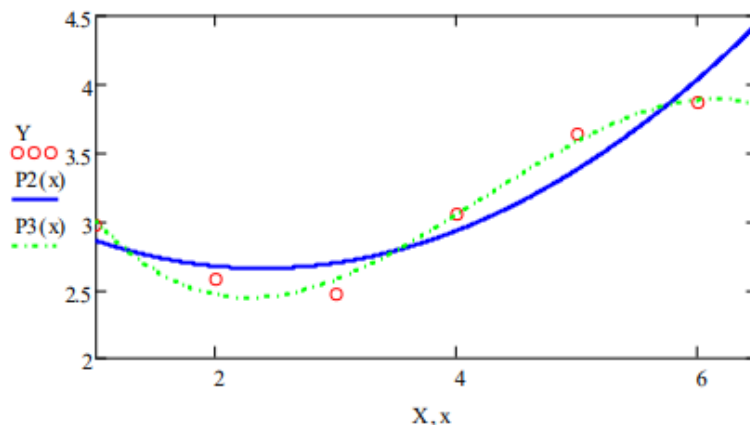


Figure 5. Dotplot Y and approximate curves of quadrate polynomial $P2(x)$ and cube polynomial $P3(x)$ dependence of the share of creative industries added value in the total added value of Ukraine

The calculations were performed using the MathCad program, quadrate polynomial (in the figure 5 dependence of the species $P2(x)$) and cube polynomial (in the figure 5 dependence of the species $P3(x)$) was considered. Note that the approximation of the quadrate polynomial opens the best prospects for its use to further forecast, taking into account the nature (growth and decline) of the function in subsequent periods.

Analytic dependence of the share of creative industries added value in the total added value of Ukraine $P2(x)$, where x is the time for which the change of share is studied, has the form:

$$P2(x) = 3.25 - 0.51x + 0.11x^2.$$

Note that the study of the coefficients and prospects for the obtained dependence application for long-term planning will be conducted in further studies.

In order to increase the pace of the creative economy development at the state level, we share ideas from [18], it is necessary to address the issue of support for creative industries, which consists in the simultaneous development of the following areas: policy-making and protection, improvement of professional networks and unions; strengthening organizational conditions, in particular through the introduction of special education and lifelong learning; expansion of the functions of incubators and accelerators; clusters, hubs and coworking creation; internationalization and globalization. And as mentioned earlier, the role of universities needs to be reconsidered, including at the legislative level.

5. Conclusions

Thus, the innovative and creative potential is a powerful driver of economic growth and promote the development of all sectors of the economy. Ukraine should reflect the creative orientation of the economy and culture in its economic and political documents, as the development of the creative economy is an integral mechanism for achieving Sustainable Development Goals, as it can contribute to achieving almost all goals by knowledge, ideas and talents.

The basis of Ukraine's innovative competitiveness should be creative human capital, as well as knowledge and research results. Their effective implementation in Ukraine and the opportunity to enter world markets will contribute to the successful socio-economic development of the country.

In general, the role of creative industries in the economy will grow, and the industries that make up this sector will be constantly transformed, which objectively creates the need to constantly review the content and tools of public policy and to clarify the interaction between government and business.

Given the rapid "intellectualization" of modern economic processes and, consequently, the growth of protection of intellectual property rights, Ukraine urgently needs to strengthen the system of protection of such rights in general and develop a special system of advising economic agents on intellectual property rights, including those who work in the creative sphere.

It should be noted that today Ukraine needs to develop a system for collecting and analyzing statistical data that characterize the development of culture and creative industries, because without such data it is difficult to make informed political and economic decisions.

In addition, not the least role in building the innovation and creative potential of the country for all sectors of the economy should be given to higher education institutions as catalysts for the development of innovative approaches, new or innovative technologies.

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