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THEORETICAL PRESUMPTIONS OF THE CREATIVE INDUSTRIES INNOVATION PRODUCTIVITY PERFORMANCE

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Abstract. The development of the concept of creative industries is related to the contribution of culture and creativity to the economy. Creative industries are often associated with innovation. Scientific literature reveals that creative business is more innovative compared to other sectors of the economy. Some authors also note that when assessing the level of innovation, the companies that are closely related to creative industries tend to have higher innovation rates. The concept of creativity is closely related to the major purpose of innovation, *i.e.* problem solving, while synergy between creativity and economy formulates creative industries theory. Based on the literature, problem solution requires creativity, and some solutions can inspire the emergence of innovation. The major purpose of this article is to provide the theoretical presumptions of the creative industries innovation productivity performance. Applying the method of comparative literature analysis, this article presents a conceptual model that allows to evaluate and compare countries economies in terms of the productivity in the creative industries innovation performance.

Keywords: creative industries, creativity, economy, innovation, innovation process, productivity.

Introduction

Creative industries and the creative economy have received increasing attention due to the rapid growth of this sector in recent decades. The analysis of the creative industry focuses on their significant impact on urbanisation (Chala, 2015; Liang & Wang, 2020), technological development (United Nations, 2010; Moore, 2014; White et al., 2014), economic growth (Howkins, 2013; Canadian Heritage: Policy Research Group, 2013; Martinaitytė & Kregždaitė, 2015; Throsby, 2002; Kontrimienė & Melnikas, 2017; Potts, 2011; Scott, 2005), sustainability (Canadian Heritage: Policy Research Group, 2013; Throsby, 2010; Klein et al., 2021) and social environment (Bilan et al., 2019; Throsby, 2002; Potts, 2011).

In recent decades, the growth of creative industries has been driven by a variety of trends, such as flexible working hours, an improved education system and increased real income, promoting the demand for goods and services with a creative and cultural content.

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In particular, the development of creative industries can be greatly impacted by such areas as films, music, the visual arts and lifestyle products.

Scientific literature proposes that creative industries are relevant not only in terms of economic growth and employment, but also for innovation. Although the innovation literature often emphasises the significance of research and development (R&D) activities, the effects of creativity and design on the innovation process are increasingly recognized by policy makers and academics (Cox, 2005; Government of the United Kingdom: Department of Trade and Industry, 2005; Klein et al., 2021). It is important to note that the companies operating in creative industries are increasingly seen not only as consumers of new technologies that drive the demand for innovative solutions, but also as generators of innovative ideas and services (*e.g.* images, designs and symbols) (KEA European Affairs, 2006).

According to the European Commission (EC): Directorate-General for Enterprise (2004), the concept of innovation has changed significantly over the last forty years. In the 1960s, innovation was evaluated as a separate development, driven by individual research. Nowadays, the concept of innovation has expanded; innovation is no longer treated as a particular result of individual actions. Most authors align innovation with a product or process (Brouwer, 1991; Rogers, 1998; Maclaurin, 1953; Goldberg et al., 2006; European Commission: Directorate-General for Enterprise, 2004), while others suggest distinguishing the following types of innovation: business, management (Damanpour, 1991), organizational (Huiban & Bouhsina, 1998) and marketing (Higgins, 1995) innovation. A systematised division of innovations into particular types by their content is provided in the Oslo Manual, prepared by the Organisation for Economic Co-Operation and Development (OECD) in cooperation with European Statistical Office (Eurostat) (2018). The OECD and Eurostat indicate the product, process, organizational and marketing innovation.

Most researchers agree that education and learning can be the key factors in fostering creativity, innovation efficiency and competitiveness. It is a "knowledge triangle" encompassing education, scientific research and innovation. Nevertheless, creativity and innovation are also inseparable from personal qualities based on cultural and interpersonal skills and values (European Statistical Office, 2009). Synergies between creativity and innovation not only stimulate economic growth, but also help attract creative people and boost the potential of corporate competitiveness (Bobircă & Miclăuş, 2013).

The synergy between creativity and economics is described in terms of creative industries. Depending on the interpretation of the concept of creative industries in individual organizations such as United Nations Conference on Trade and Development (UNCTAD), Switzerland, the European Parliament (EP), United Nations Educational, Scientific and Cultural Organization (UNESCO), France or Department for Digital, Culture, Media and Sport (DCMS), United Kingdom (UK) the creative industries are associated with culture, the arts, heritage or industries and the economy (United Nations, 2010; Department for Digital, Culture, Media and Sport, 2001; Ernst & Young, 2015; European Parliament, 2016). Most authors agree with the statement that innovation is a key factor promoting the growth of the creative industries sector (Peters, 2010; Bobircă & Miclăuş, 2013; Julier, 2009; Kontrimienė & Melnikas, 2017; Florida, 2002; Khessina et al., 2018).

The main purpose of this article is to research the theoretical presumptions of the creative industries innovation performance productivity. The scientific literature analysis, based on the methods of comparative and theoretical analysis, helped to define the concept of creative industries and assess how creative industries relate to innovation.

1. Creativity and creative industries

1.1. From a creative idea to innovation

There exists a close relationship between creativity, innovation and productivity growth, underpinning competitiveness, economic development and social well-being. Creativity and innovation are overlapping concepts. Most authors agree with the statement that creativity can be equated with the emergence of new ideas or a new way of solving problems, while innovation is the successful use of new ideas (Cox, 2005; Khessina et al., 2018; Cropley, 2006; Luecke, 2003; Smith, 2003). The synergy of creativity and innovation starts with creativity, *i.e.* from generating a new and useful idea (Cox, 2005). If a creative idea is attractive, its further development leads to a full-fledged invention or prototype. An idea can be referred to as an innovation when it is commercialized, *i.e.* when a prototype is successfully implemented in the production process and is ready for market entry (Khessina et al., 2018). A more detailed model of the relationship between creativity and innovation, highlighting the key steps of transforming an idea into innovation, is provided by Harvard Business School, United States.

The Harvard innovation process model can be directly linked to the creativity stage model, which was later extended by Cropley (1997) and presented as 7 stages of a creative product development. This model encompasses the stages of preparation, information, incubation, refinement, verification, communication and validation, and is very similar to the stages of the innovation process. The preparation, information, incubation, refinement and verification stages are more related to idea generation, opportunity recognition and idea evaluation, while communication and validation are more related to development and commercialization. The Harvard model is focused on the business aspects of bringing a new idea to market, while the model of creativity stages is primarily concerned with the psychological processes and characteristics that accompany a creative action and reflect its impact on the market.

As a result, two complementary approaches towards an innovation process can be distinguished:

- The approach of business components indicated in the Harvard model (idea generation, opportunity recognition, idea evaluation, development, and commercialization);
- The approach of the parallel psychological components presented in the model of creativity stages (preparation, information, incubation, refinement, verification, communication and validation).
- The former approach is more suitable for describing what is happening in a business system, while the later allows to assess the contribution of individuals and teams to the former. To fully understand an innovation process, both models need to be considered. The similarities between the two models propose that innovation is closely related to problem solving. A problem is a complex or challenging situation that leads to improvement, and problem solving is a way of thinking that promotes improve-

ment. It is worth noting that problem solving is not always innovative: some tested and verified solutions can also be accepted, but innovation always covers problem solving because idea generation and implementation cannot do without the challenges targeted by innovation (Cropley, 2006).

Nevertheless, the model of an innovation process provided by Smith (2003) does not focus on a coherent chain of the innovation process that covers the stages from generating a creative idea to commercialising this idea but considers the actions within an innovation process. According to the author, an innovation process includes the aspects of problem solving and invention activities. The author notes that the concept of an invention is most commonly used when referring to patentable ideas. In the area of inventions, design works occupy an important place. Design is referred to as inventing or creating complex things. Certainly, only designs with a higher level of originality are considered inventions. For instance, although architects create a design, they do not invent buildings, but a design can help architects invent a new method to solve an architectural problem.

Problem solving and inventions lead to idea generation. Idea generation is mental generation of the relevant alternatives or opportunities, most employed at the problem-solving level. It is widely acknowledged that invention and design are important parts of an innovation process, while the potential/ability to generate new ideas is referred to as creativity. Creativity can be interpreted as an aggregate of the existing or acquired skills, habits and attitudes.

1.2. Why creativity matter to creative industries?

The UNCTAD (2010) proposed to divide the concepts of creativity into the following groups:

- Artistic creation includes imagination and the ability to generate original ideas and express them in texts, sounds and images;
- Scientific creativity includes curiosity and a desire to experiment and discover new ways to solve problems;
- Economic creativity is a dynamic process leading to the development of innovation in technology, business practices, marketing and inspiring the growth of competitive advantage in the market.

All the groups listed above are related to technological creativity. According to Florida (2002), creativity is a major source of economic growth and a significant source of competitive advantage. According to the author, creativity is not an individual phenomenon – it is a more social process, dependent on the environment. For this reason, creative individuals are concentrated in communities.

Analysing relationship between creativity and creative industries at first sight creativity has nothing mutual with industries. According to common definitions, creativity is the ability to create something new in a household or art. In other words, creativity is an integral part of human identity and the ability to create intellectual property. Industries, meanwhile, describe the opposite sphere, closer to the economy, the production of products from raw materials, usually in factories where people produce a particular product. The question therefore arises as to whether these two seemingly different areas can be combined and how they interact with each other. Neither creativity nor economics is a new concept, but what is new is how connections and their coherence create great value and secure financial capital (Howkins,

2013). Howkins (2013) notes that there are two types of creativity: creativity that inspires product production and promotes individual satisfaction. The second type of creativity is more common in industrial societies, which focus on innovation, science, technology and intellectual property rights.

2. Creativity, creative industries and innovation

2.1. The concept of creative industries

The development of the concept of creative industries is related to the contribution of culture to the economy (Moore, 2014). The term *creative industries* was first used in Australia in 1994, in the report "Creative Nation: Commonwealth Cultural Policy, October 1994" (Government of Australia, 2022). The report emphasizes the importance of culture for national identity and provides a broader concept of culture, including films, radio, libraries and other areas. The report proposes that "the level of creativity largely determines the ability to adapt to new economic changes, promotes exports and tourism. This is an important aspect of economic success" (Government of Australia, 2022).

In Europe, the term *creative industries* was developed in the UK in 1997, when the government established the DCMS that was intended to promote creative industries as the driving force of the economy. Since the first use of the term *creative industries*, this concept has expanded to include not only cultural areas, but also the economy, technology, environment, politics and social environment.

The development of the concept of *creative industries* has, however, started relatively recently, which is why either the concept or the definition of creative industries are not precise and are constantly changing. The definitions of creative industries provided by the DCMS, the UNCTAD and the European Union (the EC, the EP) are most often cited in scientific literature. According to the DCMS (2001), creative industries are the industries characterized by the original creativity, skills and talent of an individual that promote wealth and job creation through the generation and exploitation of intellectual property. The definition of creative industries provided by the UNCTAD (2010) emphasizes the role of intellectual property and proposes that creative industries are, but are not limited to, knowledge-based and arts-oriented activities that generate revenue from trade and intellectual property rights; thus, creative industries constitute a new dynamic sector of the global trade. *Ernst & Young* (2015) aligns the concept of creative industries with the arts, culture and heritage sectors, while some other sources, *e.g.* the EP (2016), Jones et al. (2004) and KEA European Affairs (2006) treat creative industries as an economic industry. According to the DCMS, creative industries denote a natural evolution of cultural industries driven by the structural changes that determined the emergence of new technologies and new products in the entertainment industry. Meanwhile, the definition of creative industries provided by the UNESCO covers more than just the cultural sector, including media and information and communication technologies in the context of the structural changes related to the growth and development of new technologies. When formulating the concept of creative industries, Moore (2014) pointed out that the idea of creative industries is based on an individual creative talent and exploitation of the potential of innovation and intellectual property.

The emergence of the concept of creative industries is inseparable from the growing production and consumption of symbolic goods (Markusen et al., 2008; Strielkowski, 2018). According to the researchers, creative industries produce "symbolic goods" (an idea, experience, image, *etc.*) the initial value of which depends on their symbolic value. The value of these goods and services is determined by the end consumer (a viewer, an audience, a reader, a consumer). The value of symbolic goods depends on the consumer's perception in addition to on the creation of the original content, wherefore the value may not always be converted into a financial return. Hartley (2005) notes that this definition of creative industries is useful because it substantiates the non-profit nature of creative output and the relationship between the meaning of a product and its symbolic form, thus highlighting the growing importance of symbolic goods in some industries, in particular, footwear, cars and mobile phones.

The definitions of creative industries may also vary from country to country due to the provisions of national laws regulating intellectual property rights. Proponents of creative ideas argue that creative industries are based on a creative talent, innovation and intellectual property that create economic value by improving communication and socialization (Moore, 2014; Kontrimienė & Melnikas, 2017). It is important to note that after satisfaction of basic consumption demands, developed societies turn to the cultural sector.

The analysis of the concepts provided by different authors allows to develop the definition of creative industries: creative industries are the industries that create goods and services with a symbolic value through individual creativity and intellectual property and influence the social and economic value creation.

Creative industries can encompass both commercial and non-profit activities conducted by private or public organizations (*e.g.* museums, libraries) that are often engaged in cultural activities. According to the UNCTAD (2010) and Bilan et al. (2019), characteristics providing creative goods and services can be distinguished:

- Production of a good or a service is based on the contribution of human creativity and knowledge;
- A good or a service is a means of conveying a symbolic message to consumers, *i.e.* it possesses not only utilitarian, but also a communicative purpose;
- A good or a service is produced by employing intellectual property;
- Production and consumption of a good or a service intended for local audiences is related to a national cultural identity, but competes with the international market; a good or a service is often protected by short-term intellectual property rights (copyright and related rights), possesses a high level of risk and an unpredictable value;
- A good or a service has a threefold nature: economic (creation of wealth and jobs), cultural (creation of values, meaning and identity) and social (creation of a large and attractive means of communication);
- The sector of such goods and services does not have a standardized system of settlement for works; it is characterised by a high concentration of micro-enterprises, the self-employed and independent start-ups;
- The market of such goods and services is considered volatile given fashion, trends and consumption uncertainty.

Literature is abundant not only in various concepts of creative industries, but also in the models that allow to identify the areas attributable to creative industries. The DCMS model is most common in literature analyses. The model stemmed in the 1980s from the UK's drive to reorient its traditional economy towards a creativity and innovation-based economy in the global competitive environment. Creative industries are described as the industries requiring creativity, experience and talent, capable of creating wealth and jobs through intellectual property. Essentially all the 13 industries included in the DCMS' qualification could be classified as cultural as defined above, but the UK government prefers the term *creative industries* to prevent connotation of the word *cultural* with regard to high culture. The relevant industries include advertising, architecture, art and antiques, crafts, design, films and videos, music, performing arts, publishing, software, television and radio, and video and computer games.

2.2. Factors influencing the development of creative industries

To assess the impact of creative industries on the economy, social environment and environmental protection, it is important to understand what factors affect the development of creative industries. Literature provides rather different approaches to the factors affecting the development of creative industries. Some authors prioritize the factors related to personal psychological characteristics (talent, skills, urgency, pride), while others focus on the factors related to macroeconomics, infrastructure and government policy. The authors most commonly agree on the impact of the following factors: talent, infrastructure, governmental policies, skills, technology, R&D and innovation. Table 1 below provides the structured information on the factors affecting the development of creative industries (based on the works of different authors).

Florida (2002), one of the pioneers in the creative industry research, denoted the factors affecting creative industries by employing the 3T acronym which represents technologies, talent and tolerance. According to the author, these factors convey a symbiosis of creativity and economic development, and their combination has a significant impact on creativity and creative industries, which leads to economic changes.

National technological capacity can be assessed in terms of the number of patents, R&D expenditure, employment and productivity in the research and development sector (Florida, 2002; Prasetyo & Dzaki, 2020). The largest part of the market in the creative industries consists of small companies possessing fewer resources compared to large companies; nevertheless, they are considered as more flexible and more prone to innovative solutions. Companies in creative industries sector is more likely to connect to clusters in order to contact customers, to recruit skilled workforcwe or to acquire novel ideas in order to develop new products and services (Protogerou et al., 2017). A proper access to technologies provided to such companies inspires creativity which following contributes to economic growth (White et al., 2014). Jesús Rodríguez-Gulías et al. (2020) noticed that geographical region, firms age and size influence creative industries innovation performance – firms age effect have negative impact to patens activity percent, suggesting that young firms is more likely to use innovation slipover effect.

Table 1. Factors affecting the development of creative industries (source: created by authors)

Factor group	Factors	Authors
Macroeconomic indicators	Wealth (gross domestic product *per capita*)	European Commission (2010)
	Disposable household income	European Commission (2010)
	Financing	Howkins (2013), Bilan et al. (2019), Asian Development Bank (2014)
Innovation/ technology	Innovation	United Nations (2010), Moore (2014), White et al. (2014), European Commission (2010)
	Patents	Florida (2002)
	Research and development	Florida (2002), Organisation for Economic Co-Operation and Development, European Statistical Office (2018), European Commission (2010), Müller et al. (2009), Bakhshi et al. (2008)
	Employment in the research and development sector	Florida (2002)
Human capital	Vision	Howkins (2013)
	Education	White et al. (2014), Tubadji (2012), Bilan et al. (2019)
	Individual creativity	White et al. (2014)
	Skills	European Commission (2010); White et al. (2014)
	Attention	Howkins (2013)
	Urgency	Howkins (2013)
	Pride	Howkins (2013)
	Talent	Florida (2002), White et al. (2014), European Commission (2010)
	Tolerance	Florida (2002)
	Leadership	White et al. (2014), Howkins (2013)
Infrastructure	Cluster/network	White et al. (2014), Tao et al. (2019)
	Culture	White et al. (2014)
	Infrastructure	White et al. (2014), Bilan et al. (2019), Peters (2010), Pratt (2000)
Goverment policy	Goverment policy	Bilan et al. (2019), White et al. (2014)
	Institutional structures	Bilan et al. (2019)

An overview of the factors influencing the development of creative industries allows them to be grouped into the following groups – macroeconomic indicators, innovation/technology, human capital, infrastructure and goverment policy. The analysis of the literature and the grouping of indicators into appropriate groups will allow to form a conceptual research model and purposefully identify indicators that will lead to assess the impact of groups of factors on the development of creative industries.

3. Creative industries innovation performance

The analysies of factors affecting the development of creative industries showed that innovation is relevant factor for creative industires growth, but this relationship could be opposite – creative industries can support innovation performance too. Creative industries have a significant impact on innovation processes and knowledge-based growth in various areas of the economy and promote the horizontal and vertical growth of the value chain, *i.e.* regarding both suppliers and customers (Martinaitytė & Kregždaitė, 2015; van Laar et al., 2020).

According to Bakhshi et al. (2008), creative business is more innovative compared to other sectors of the economy. The authors also note that in terms of the level of innovation, companies that are closely related to creative industries tend to have higher innovation rates. The 5th UK Innovation Survey[1] found that creative industries have higher levels of the product, process and other innovation compared to other sectors of the economy (European Commission, 2010).

On one hand, creative industries can develop and implement innovations as a part of their business activities, thus directly contributing to the development of economic innovation. Such innovations cover new products and services offered to customers (product innovations) as well as new technologies, procedures and processes that increase production efficiency or quality (process innovations). A completely new marketing method proposed by an advertising company is an example of the product innovation.

On the other hand, creative industries promote innovation in other industries through the producer-consumer interaction (Miles & Green, 2008; Landoni et al., 2020). This interaction can be twofold, depending on the direction of a supply chain: "upstream", *i.e.* creativity generated in creative industries is used for customer-level innovation, or "downstream", *i.e.* the demand for innovation is generated by suppliers in creative industries (*e.g.* technology producers) (Miles & Green, 2008). The consumer demand drives innovation which later becomes a global standard (Beise, 2004). Creative industries are often at the forefront of new technologies, especially in the area of information and communications technology. The demand for new applications can be the key driver for technology providers to implement innovation. For instance, digital audio-visual signal technologies and compression techniques that allow efficient storage and fast transmission of data without losing quality have determined the emergence of new, low-cost means of distribution. Such developments accelerate the diffusion of technological innovations on the supply side. In general, innovative companies account for a significant share of the demand in the innovative products' supply chain (Müller et al., 2009).

Given that creative industries are a major source of intellectual property, they can be particularly attractive as a source of external knowledge for innovative companies. They can

[1] The survey (European Commission, 2010) covers the 2005–2007 period; the sample covers 14 870 companies. Traditionally, not all standard industrial classification codes defining creative industries were included in the sample system. The research covered the following areas: advertising, architecture, arts and antiques, designer fashion, the major share of publishing (excluding the activities of news agencies) and the major share of videos, films and photography, software, computer games and electronic publishing. Radio and television, as well as all artistic, literary creation and art object exploitation firms that are a part of the music, video and performing arts sector were not included.

offer a diverse set of creative products and services that can be integrated into an innovation process in other companies. These innovation-supporting or innovation-accompanying products can range from innovative ideas to R&D and product design. In addition, specific software can be developed to meet the needs of new products or processes. It can also be a new marketing strategy, or the services related to the search for more efficient production methods tailored to specific needs of an innovative company. Consultations make it possible to introduce new training methods that allow to exploit the potential of the creative workforce (Müller et al., 2009).

Creative industries can also support innovation in a wider economy without any direct interaction. The main mechanism for this is labour mobility, especially when people find new jobs outside creative industries and use the accumulated ideas, knowledge and creative potential in other industries. Skills are perhaps the most important contributor to industrial innovation (Leiponen, 2005), while skilled and talented people are the key element in providing companies with the potential to absorb external knowledge. As it can be seen, the human factor and the workforce are the major elements in the interaction between innovation and creative industries (Müller et al., 2009).

It is important to note that the market of creative industries is currently undergoing significant changes which create preconditions for the development of innovation. The abovementioned changes include:

- Platforms of new technologies – new information technologies and the relevant digital content are changing the methods through which products are developed, delivered and sold. This tendency is especially noticeable in the video game market but can also be observed in all creative industries;
- Consumers – both individuals and companies are becoming increasingly meticulous about their choices. Consumers more openly share their opinions with producers, which facilitates the development of creative projects;
- Institutional changes, such as new regulatory requirements and the industrial, market and workforce globalisation. Many companies buy workforce abroad or even outsource their operations;
- New products, developed for new markets – for instance, the entertainment market is penetrating the education market by offering new types of video games; production companies are becoming service providers. These changes are driving innovation in creative industries, especially when competitors are seeking a competitive advantage and enter new markets through innovation (Miles & Green, 2008).

Synergies between creative industries and business companies allow for the diffusion of dynamic capacities and new technologies. Creative industries typically use a large, heterogeneous network of the relationships that help ensure an easy access to new knowledge and faster knowledge uptake. Knowledge and technology transfer is also driven by a strong functional or regional (business-to-business) network structure (Potts & Cunningham, 2010). Jones (2001) argues that collaboration in the area of innovation is common in creative industries where new creative products are often developed in well-known networks and on a temporary, project basis.

Consequently, creative industries are widely accepted a part of innovation-intensive and fast-growing information services (Müller et al., 2009), a major source of new ideas and their

commercialization (Cox, 2005; Khessina et al., 2018; Cropley, 2006; Luecke, 2003; Smith, 2003; Černevičiūtė & Strazdas, 2018) or an area where R&D is the key activity, while production is the secondary one (Müller et al., 2009).

4. The conceptual framework of the creative industries innovation productivity performance

Creative industries innovation performance analysies has two objectives: firsly, to evaluate the creativity of economies, defined as the ability to generate innovation and new ideas[2]. Second objective is to measure creative industries innovation productivity performace, defined as the efficiency by which inputs (for exemple skills, R&D, education) are transformed into outputs (new products or process, patterns) (Figure 1).

Creative industries innovation productivity performance is measured by ratio beween output and input (Prasetyo & Dzaki, 2020). In this analysies creative industires input is macroeconomic indicators (European Commission, 2010; Asian Development Bank, 2014; Leiponen, 2005; Cunningham & Higgs, 2009; Florida, 2002), human capital (Leiponen, 2005; Müller et al., 2009; Cunningham & Higgs, 2009; Florida, 2002), infrastructure (Protogerou et al., 2017; Leiponen, 2005; Müller et al., 2009; Lee & Drever, 2013; Cunningham & Higgs, 2009) and government (Bilan et al., 2019; Asian Development Bank, 2014). Therefore, output covers factors related to innovation performance (paters, new products or process) (Bakhshi et al., 2008; European Commission, 2010; World Intellectual Property Organization, 2021; Lee & Drever, 2013).

According to the literature systematization and analysis, concerning the concepts of creative industries and innovations and the relationship between them, a conceptual economic model of the creative industries innovations performance was developed (Figure 2). The model presents the groups of factors influencing the development of creative industries systematized during the analysis of the literature – mocroeconomic indicators (wealth, household incomes, financing) human resources (education, vision talent, skills, attention), infrastructure (cluster, culture) and government (institutional structures, government policy).

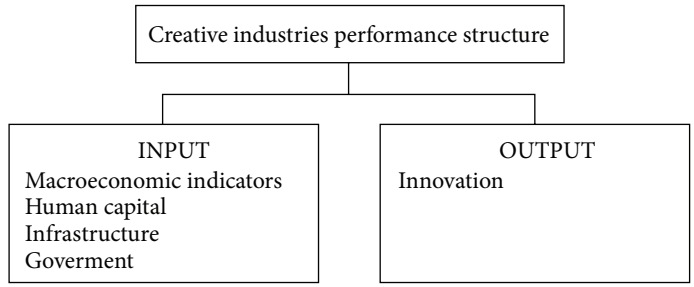

Figure 1. Creative industries performance structure (source: created by the authors)

[2] This article focuses on theoretical analysis. An empirical study will be presented in our next article.

As it was mentioned before models of creative industries differ among depending on geographical acceptability and structure. The conceptual model was developed based on the UNCTAD, because it offers standar definition with classification system. In this model creative industries comprise heritage, art, media and functional products (Dharmani et al., 2021).

In the conceptual research model, creative industries performance are estimated as input, while innovation – as output, *i.e.* the model assesses the creative industries innovation productivity performance (Asian Development Bank, 2014). In this model productivity is ratio between output and input according to aggregate values of the factors influencing creative industries performance. Creative industries can affect the product, process, organizational or marketing innovations that inspire improvements in the quality or quantity of goods and help to expand commercial markets through the synergies between innovation and creative industries.

The output is conditioned by the performance of innovation. Innovation activities cover employee training, R&D, intellectual property, design and marketing activities. Scientific literature tends to emphasize the role of scientific and technical R&D as the key component of innovation activities and the key driver of the product and process innovation (Müller et al., 2009; KEA European Affairs, 2006).

Design and other creative works are considered innovation activities, except for minor design changes that do not meet the requirements for innovation, for instance, making an existing product in a new colour (Organisation for Economic Co-Operation and Development, European Statistical Office, 2018). Marketing innovation includes preliminary market research, market tests, advertising, pricing mechanisms and product innovation methods. Nevertheless, the benefits of the business process innovation can be sold, if the business process innovation, for instance, benefits the environment or improves product quality. Intellectual property activities related to new ideas and inventions intended for developing or improving new products are also classified as innovative activities. For example, this may

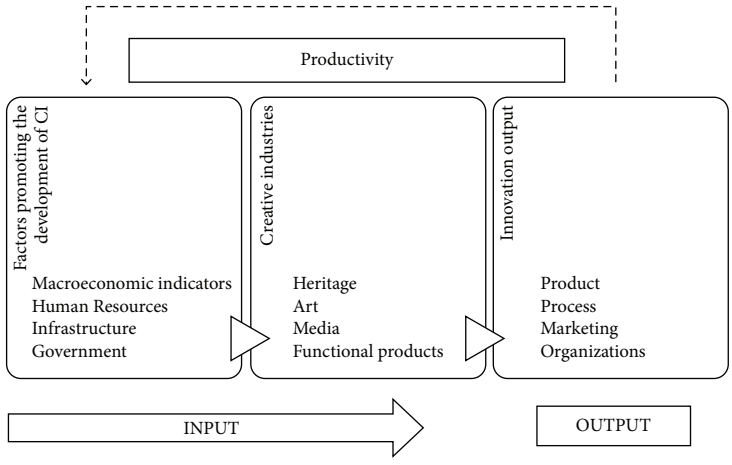

Figure 2. A conceptual model of the relationship between creative industries and innovation (source: created by the authors)

involve activities related to the enforcement of intellectual property rights, a license to use an invention or an innovation, or a license for an invention or innovation. Employee training can be considered an innovative activity when employees are introduced to new products or processes. Some examples of training as an innovation activity are training employees to use innovations, such as new software in a logistics system, and training related to implementation of innovations, such as training employees or customers to exploit the innovative features of a product. Employee training required to create innovation, for instance, training in R&D or design, is a part of R&D activities or a part of the engineering, design and other creative work, respectively.

This constructed conseptual model allows to evaluate innovation performance productivity in the creative industries. Scientific literature analysis and systematization allows to highlight major factors influencing creative industries performance and to distinguish them to input and output variables. With this conseptual model scientific problem – how to evaluate and compare countries economies in terms of the productivity in the creative industries innovation performance could be solved.

Conclusions

An increase in the value generated by creative industries cause great interest in this sector in scientific literature. Different interpretations of the concept of creative industries could be found in the scientific literature, however most of them focus on the same relevant aspects: individual creativity, intellectual property, a symbolic and an economic value creation. Given the major aspects mentioned above, the following definition of creative industries can be provided: creative industries are those industries that through individual creativity and intellectual property create goods or services with a symbolic value and promote the social and economic value creation.

Summarising the opinions of different authors, the factors that affect the development of creative industries can be divided into several groups: macroeconomic indicators, innovation/technology, human capital, infrastructure and government policy. Technological progress includes innovation and technology. The macroeconomic indicator factor covers gross domestic product *per capita*, household disposable income and financing. The group of government policy comprises institutional structures and governmental policies. The broadest factor group, often recognised as most influential, represents human capital which cover individual creativity, vision, talent, tolerance, attention, urgency and leadership. Finally, the group of infrastructure factors covers infrastructure, culture and a cluster/network. The interaction of these groups determines the development of creative industries.

The literature analysis revealed that innovation is inseparable from the concept of creativity which, in its turn, is one of the key aspects in creative industries. Creativity can be observed in the very first stages of an innovation process as a problem-solving tool. Thus, creative industries are widely seen as a part of innovation-intensive and fast-growing information services, a major source of new ideas and their commercialization or an area where R&D is the key activity, while production is the secondary one.

This article presents the conceptual model which allows to evaluate and compare countries economies in terms of the productivity in the creative industries innovation performance, which was developed based on literature analysis; the model covers the major determinants of the growth in creative industries and innovation. The model allows to assess the productivity level of the synergy between creative industries and innovation on the product, service, organizational or marketing innovation. This conceptual model reveals the challenges and perspectives for the innovation outcomes driven by the growth in creative industries; thus, the insights provided in this article may be employed in future research. It is important to note that future research should consider a potential dual direction of the relationship between creative industries and innovation, *i.e.* it may run from creative industries to innovation, and *vice versa*; also, it is important to have in mind that not all areas of creative industries generate innovative solutions. The literature analysis revealed that the relationship can run in the opposite direction, *i.e.* innovation can affect the development of creative industries. The model presented in this article considers only the unidirectional relationship. In addition, although the number of the factors related to innovation activities can be much larger, this model covers only the activities that the authors believe are most relevant to creative industries. To provide a more accurate assessment of the impact of creative industries on an innovation process, it is worth distinguishing those areas of creative industries that are most related to this process, *i.e.* that contribute to the largest number of innovative products, processes or help gain a larger market share because not all areas of creative industries, for instance, advertisement, architecture, art and antiques, crafts, design, fashion, films and videos, music, performing arts, publishing, software, television and radio, and video and computer games, provide innovative products or services.

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