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Testing the Catalysts of the Romanian Creative Economy—A Panel Data Analysis Approach

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Abstract: There have been several decades since the creative and cultural economy (CCE) was praised for its contributions to long-term socio-economic development and also for its sustainable approach concerning the main production factors involved by the creative industries—human intellect and talent—and cultural ones, and now, more than ever, the creative sector could be perceived as vital in facing and recovering from the several crises of recent years. In order to determine the “recipe” of a flourishing local CCE, our research continues analysing seven Romanian cities, by assessing several influential factors considered as catalysts of the CCE, such as: student populations, young populations, and local public expenditure on culture during 2008–2019 for the selected creative cities. In this paper, we will determine the connection between these catalysts of the local CCEs’ development as independent variables, and two economic dimensions, the number of employees and turnover, as the dependent variables. The determination of this correlation started by using the observation method and the method of multiple regression, but further investigation was needed, so the present paper deepens the research by approaching the panel data method. Our results prove an existing correlation between the analysed variables, some of them influencing positively, and others negatively.

Keywords: creative economy; cultural economy; creative cities; catalysts; economic performance; panel data



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1. Introduction

In recent years, the global economy has faced various challenges which created turbulences difficult to recover from; 2020 came with the COVID-19 pandemic and its imposed restrictions affecting the economic activities and the labour market; 2021 combined the effects of the partial restrictions kept in order to prevent the spread of the virus, the measures adopted to recover in the post-pandemic times, and increasing gas prices; and 2022 adds to this succession of crises the war between Russia and Ukraine and something more, the inflation crisis. All of these add up to several threats, starting with the permanent existence of the COVID-19 virus in our lives and continuing with increasing prices and lowered living standards, the uncertainty of the gas supply, the Russian war, and possible food crisis due to the shortage of supply—another effect of the current war. These conditions have to be addressed with fast and sustainable economic recovery, and one of the possible solutions could be the CCE. In this respect, the present paper aims to determine how the CCE could be enhanced in urban areas, and therefore, which are the factors influencing the CCE.

The typical creative activities imply exploiting the human mind and talent and also cultural heritage. The CCE has provided high contributions to economic growth and development as the creative and cultural industries (CCI) are generators of high added value. These industries are appealing for investments and for the labour market, but there

are also certain aspects necessary in order to work and operate in the creative sectors; these aspects will be presented in this paper as influential factors, these being chosen based on the literature regarding the creative cities and the creative class.

Another reason to consider the CCE a key element in facing the current crises and in the recovery process is its high resilience and sustainability due to the intangibility of its main raw materials—ideas, talent, and culture—and so it does not rely on high volumes of traditional raw materials' transformations; as the United Nations noticed, the creative sectors are some of the fastest growing in the world, generating jobs quickly and at lower costs than almost any other sector [1]. Additionally, several studies were dedicated to assessing the impact of the 2008 crisis on the creative economy and proved that the creative sectors were more resilient than others [2–4]. Even more, recent research on the pandemic's effect on the CCE proved the adaptability and resilience of these sectors [5,6]. The resilience of the local CCE during 2020 and 2021 is analysed and discussed later in this paper.

On the other hand, analysing the creative sectors of the urban local economies and assessing the influencing factors provide the means to enhance the attractiveness of the analysed cities; the cities with high-performing economies are known to be attractive to individuals looking to improve their living standards or simply to find a job, but the creative sectors help to create a cultural identity, transforming the city into a creative one, and also enhancing civic pride [1]. High and stable incomes along with the feelings of belonging and pride should be on Romania's governing institutions' list since the country's population is around 19 million persons [7], continuously decreasing since 2007 (when the population was over 21 million persons)—the year when Romania became part of the European Union. Considering the possibility to attract those who emigrated and also to keep those who are still living in the country, the development of creative cities, with better living and working conditions [8], is crucial for the future.

In this paper, we analyse and verify the correlation between the CCI's performances as the number of persons employed, recorded turnover, and several influential factors on a local level of several selected Romanian cities, considered as representative of the concept of a creative city. In our view, the catalysts of the local CCE are represented by the student population, assessed in two dimensions: as a share of the local population and a share of the total number of Romanian students (Bachelor studies); the young population (25–29 years) was assessed as a share of the local population. Lastly, the local public expenditure on culture, recreation, and sports was also assessed in two ways: as a share of the local budget and as an allocation per person (RON/capita). Initially, we were interested only in culture expenditure, but the reporting method of the local institutions included them in a category alongside expenditure on recreation activities, which on the other hand are related to our research as elements of the local amenities, cultural diversity, and social inclusion. We find it relevant to consider the entire public expenditure on recreational activities, even if these include sports as well because engaging in sports or attending sports events represent other kinds of leisure activities, which are essential for crafting the behaviour of a consumer also interested in creative and cultural goods and services; moreover, the chosen cities have a more pregnant cultural identity (this being one of the reasons the analysed cities were chosen), so we assume a large percentage of the public allocations concern culture.

The analysed influential factors represent the object of the current research due to the possibility of finding ways in which the regulations, investments, and policies of the public authorities could enhance the CCE. Highlighting the importance of education, especially tertiary education, should bring into light the crucial need for a highly qualified labour force. Providing a wide range of academic qualifications suitable for a safer professional future, alongside activities with high added value outputs, and also ensuring the work conditions and amenities necessary to keep or attract qualified young professionals in the creative cities, should represent the aims of the local public institutions, these ones having the means to meet the mentioned goals. Therefore, the current paper aims to find the “ingredients” that the public authorities could add or “enhance” in the “recipe” of a successful urban CCE. Analysing Romania from this perspective is new and beneficial, not

only for the Romanian economy but also for other countries similar in culture, history, and geographical localisation. We should consider that Romania turned to a capitalist economy after the fall of communism in 1989 and joined the European Union in 2007, so its economy has been evolving during these more than 30 years, and also the population was strongly impacted by these major changes, embraced easily by some, and with difficulties by others. A capitalist economy of almost 33 years is still new, and the Romanian culture and values still suffer from some of the communist reminiscences, so analysing the CCE of such a country raises various questions regarding the mindset of its population. Considering the recent events related to the Russian war, with Ukraine's and Moldavia's intentions to adhere to the European Union, we could foresee some of the challenges these countries will face which were also encountered by the Romanian economy and definitely by other European economies as well (for example, the free movement of the labour force in the European Union, determined numerous persons to leave Romania and look for better jobs in Western countries, and so their economies were influenced by that new input of labour force). For economic sustainability, a certain balance should be crucial; instead of emigrating to attain economic abundance, it can be created in the country of origin if the domestic economy is developed enough and suitable for the existent labour force's qualifications. Obviously, the creative sectors could represent a way of solving this social and economic dilemma.

In order to find out the "recipe" of a successful CCE in a post-communist and young European country, during 2008–2019, we analysed seven cities essential for the economic, cultural, and academic environment of Romania: Bucharest, Cluj-Napoca, Timisoara, Iași, Brașov, Sibiu, and Oradea. The analysed period does not include the years 2020 and 2021, these years being affected by the COVID-19 pandemic, and thus the restrictions imposed in 2020–2021 make the data unsuitable, so those two years are unrepresentative for our analysis; however, surely the effects of the actual crisis represent a future subject for our research.

The catalysts analysed in this paper represent elements considered to have the ability to enhance the CCE and, therefore, to determine growth and economic development in the geographical area where the CCIs flourish. We have previously studied the connection between the selected variables, statistically verifying the existence of a correlation between these catalysts and the dimensions of the local CCE—the employment and turnover levels reached in the CCI. By analysing them, we observed a direct connection between the selected variables, so we can attribute the performances of the local CCE to the student population and also to the graduate population living in the analysed cities. Deepening the analysis using the ANOVA approach and studying the correlation between the dimensions of the local CCE and the catalytic factors, we were able to confirm the influences of these factors, some of them to a higher, and others to a lower extent. As a result of the correlations, the student population as a share of the local population and the public expenditure on culture per capita have emerged as exerting the strongest influences on the local CCE. The influential power of the first factor resides in the work supply offered by students and in their demand for cultural and creative goods and services [6]. Turning to the second influential factor, the public expenditure on culture per capita, we remarked that by organizing various kinds of cultural events and activities, a large share of opportunities emerges for: the cultural–creative business environment, the augmentation of cultural consumption, and also for the debut and affirmation of the local artists. Applying Student's and Fisher's *t*-tests, the existence of a statistical correlation between the dimensions of the creative sector and some catalysts was confirmed; these influencing factors are the share of students in the total local population, the share of students in the total number of students in Romania, in some cases, the share of the young population in the total local population (Bucharest, Brașov, Iași), and the public expenditures on culture per capita (Sibiu, Timișoara), as well.

The present paper aims to continue to deepen the analysis of the selected influential factors linked to CCEs' growth. In order to reach our aim and to present our results, the

next section of this paper synthesises a literature review of the most noteworthy approaches regarding the development of the CCE in urban places, on local and regional levels on the one hand, and on the other hand, the crucial factors for economic growth and development in creative locations. The Section 3 comprises the methodological approaches undertaken in order to test the relationship between the local economic performances and the supposed determinants. Section 4 is designed for the empirical results of our research, the fifth for discussions, and the last part comprises the conclusions.

2. Literature Review

2.1. Terminology

Our research interest is represented by the CCE; usually, this concept is referred to only as the creative economy, but cultural industries are included as well, whether they are mentioned separately or not. The cultural economy is part of the creative one, and there is no definition of the creative economy's concept without referring to arts, heritage, or other cultural industries. The concept is presented in this manner in one of the best-known definitions of UNCTAD identifying the creative economy as "the interface between creativity, culture, economics and technology as expressed in the ability to create and circulate intellectual capital, with the potential to generate income, jobs and export earnings while at the same time promoting social inclusion, cultural diversity and human development" [9], all of these being processed through the CCI. This concept is related to exploitation through the production, distribution, and commercialisation of cultural, symbolic, and expressive products and services with a higher intrinsic value [10].

An issue regarding the CCE is the inconsistency of the CCIs' classification. The framework of the economic activities included in these industries slightly differs from country to country, or even from one institution to another, and leaves certain activities outside the classification [1,11,12] as some scholars have highlighted "reference codes used to classify cultural and creative industries into sectors do not always adequately reflect the activities they actually engage in" [13].

Another concept related to the creative economy, even older in academic recognition [14], is the concept of the creative city, described as an urban area favourable for the development of the urban regeneration and development of the creative and cultural industries [15,16], populated by people recognised as a creative class [17] and positively affecting the area in the direction of urban regeneration and economic development [11,18–21]. The creative class, as a concept, was recognised and put in the spotlight by Richard Florida and includes all the persons engaged in creative industries or who conduct activities implying a certain degree of creativity [17]. The contribution of the creative class's members to the economic development of the area where they are living is acknowledged by several academics [16,22–25] due to their lifestyles [26,27] and also due to the generated vitality, fame, and worldwide recognition of the place they inhabit [28]. Another aspect of the creative class to be valued for is their main characteristic, creativity; creativity is valued as an inexhaustible resource with a constantly increasing influence on socio-economic processes and economic development [29,30]. It is recognised as an advantage for those who possess it [31,32], "people who have ideas are more powerful than people who work on a machine tool and, in many cases, more powerful than people who have machine tools" [30], as a guarantee for originality, the ability of new ways of thinking, and adaptability to new situations and crisis [11,30]. Thus, the spotlight falls on intellectual capital and its exploitation targeting economic growth and development and avoiding future poverty [11,27,33].

Although, a creative city is not defined only by the presence of the creative class but also by its amenities and events [34], as Skavronska stated precisely, "a major source of creativity is invisible as it includes everything each person possesses—knowledge, emotions, talent, spontaneity, intuition, memories, imagination, divergent thinking, the ability to produce new and original ideas, problem-solving skills—and cultural assets and civilization foundations of each society, such as cultural heritage, values, traditions" [11].

However, there are also some negative aspects implied by the CCE; the concerned literature highlights the heterogeneity of the economic activities included in the CCI, causing various developments of disparities in these industries [35–38], the small size of most companies operating in the CCI [39,40] and also the precariousness of the business structure [37]—enterprises of this size with problematic structures are more likely to experience hardship in times of crisis, higher medium and marginal costs, and therefore lower competitiveness on the market. On the other hand, the CCI benefits and needs agglomeration and geographical proximity, making possible the networking, project work, inspiration, knowledge exchange, and spillover effects [39].

2.2. Catalysts of the Creative Economy's Development

A way to assess an economic sector implies dimensioning its effects; considering the CCE, its dimensions were analysed in many different forms such as the employment of the creative class [18], but there are limits on the exact quantification of the creative class, so it was often considered suitable to assess the number of the people employed in the CCI whether they conduct creative activities [41] or not [42] and the revenues generated by the CCI [13,37]; other dimensions taken into consideration were the number of firms operating in these industries [43], the added value created [40,44,45], and the spillover effects of innovations [33] and entrepreneurship in other economic sectors [46]. As previously chosen, we pursued to analyse the impact of the CCE as a job creation and revenue generator.

The efficiency of the cultural and creative activities depends on and is enhanced by some particular aspects; several academics considered the public institutions responsible for the CCE's stimulation and development [1,13,33,47–50], while others paid attention to the concentration level of the economic activities [20,39] and also to the phenomenon of clustering [37,51,52]. Besides the proximity of suppliers or partners, Escalona Orcao et al. [53] also assessed the proximity of consumers—the distance to urban markets—human capital, local cultural specialization, and the number of firms. Human capital as a defining characteristic of the creative economy is crucial for the development of this sector or of a city [16,28]; creative abilities, talents, and intellectual acquisitions appear as raw materials used in the CCI, so there is no surprise that the level of education was considered as an influential factor [42,54,55] and the public expenditure on education as determining human capital formation, as Londar et al. noticed “a direct correlation between creative outputs and human capital & research, and between creative outputs and knowledge & technology outputs: the better the situation with the human capital & research and the development of knowledge & technology, the more the creative outputs” [27].

As mentioned before, the talents and intellectual acquisitions of human capital represent resources; therefore, places such as countries, regions, and even rural or urban areas where people possessing these kinds of resources live benefit from a competitive advantage [19,56,57], and what is more, talent is one of the four T's of Richard Florida's model. Due to this reason, a lot of research work is aimed at the development of the CCE on local or regional levels [13,24,32,58–60]. One of the most exhaustive research papers on the influential factors of the creative economy belongs to Li and Liao [40], an analysis of 30 indicators affecting the CCI; they chose to include in their analysis several factors regarding cultural production (performances, books, and exhibitions), local population, disposable income, family cultural expenditure, government expenditure on environmental protection, government expenditure on culture, investments in R&D, the number of cultural and creative industrial parks, employees in the city's CCI, the number of scientists, the number of international students, the number of colleges and universities, the number of patent grants, etc. From all these, the most relevant influential factors of Shanghai's CCI were the “Cultural industry science and technology environment factor, Cultural industry infrastructure environment factor, Cultural consumption environment factor, Cultural industry human resource environment factor, Funding and policy environment factor and Socio-cultural environment factor” [40]. As we notice, many relevant factors rely on cul-

ture. We also took into consideration in our analysis the cultural factor due to the cultural consumption enjoyed and characteristic for the creative class and also for those of superior intellect, with culture behaving “much like any other commodity” [53], and so if there are great levels of production and consumption, there are high levels of revenues and incomes.

Considering Romania and its urban areas as creative cities, Pintilii et al. [61] were also interested in evaluating several Romanian cities as potential European capitals of culture. Our approach fills the gap in the analysis of the relationship between the CCE’s dimensions and its catalysts using the panel data method in Romania; this method is also used by Che Arshad and Irijanto [6] in investigating how CCI impacts the economies of Malaysia, Indonesia, Singapore, Thailand, Vietnam, and Brunei Darussalam but during the COVID-19 pandemic; this approach appealed to other academics as well, concerned by the CCE’s research; for example, Innocenti and Lazzaretti [25] used this method in analysing the link between the CCE and other economic sectors.

3. Methodology

The theoretical approach of the present paper was covered by using the ISI Web of Knowledge resources and highlighting various important contributions related to the subject concerning this work. The empirical part consisted of collecting data regarding the economic performances of the local CCE (number of persons employed and turnover recorded by the creative sectors) from a specialised site providing financial data concerning private businesses established in Romania; therefore, our workings address the situation of the private creative sectors, without including public institutions—this could be one of the limits of this paper. Anyway, we consider private initiatives crucial for local economies’ well-being. Private capital attracted and invested in the economy creates new jobs and generates revenues for individuals, companies, stakeholders, and local budgets. For the panel data model, the data regarding the economic dimensions were collected for each city and for the whole country for the years 2008–2019 by selecting all the 79 codes concerning the activities included in the CCI from the national classification of the economic activities of Romania as nominal values for the number of employees and nominal values/1000, expressed in thousands of RON (Romania’s national currency) for the recorded turnover. On the other hand, the demographic data were collected from the National Institute of Statistics’ database using nominal values, whereas the data used to present the CCE’s resilience had the same source (number of employees and revenues generated in the private businesses operating in the CCI). In order to present a more reliable and clearer situation, we chose to compare the urban CCE as shares in the local economies; once again, the collected data considered only the private sectors.

The fundamental question of this paper is: what exactly enhances the development of the CCE, and it could be a matter of local and national authorities and regulations? The reasons to consider urban economies and the listed catalysts were presented in the previous sections, and in the following sections, we assess the impact of the independent variables on the CCI’s turnover and the number of employees as dependent variables. Therefore, in other words, we propose two hypotheses, as Figure 1 presents:

H_1, H_3, H_5, H_7, H_9 represent the number of persons employed in CCIs in urban economies who are impacted by the influence of the student population (share of students in the local population and share of students in the total number of Romania’s students (Bachelor courses)), the young population (the share of young population (25–29 years) in the local population), the share of the local expenditure on cultural, recreational, and religious activities in the total local expenditures, and the per capita local public expenditure on cultural, recreational and religious activities (RON/capita);

$H_2, H_4, H_6, H_8, H_{10}$: the turnover recorded by CCIs in urban economies is impacted by the influence of the same independent variables mentioned in the first hypothesis.

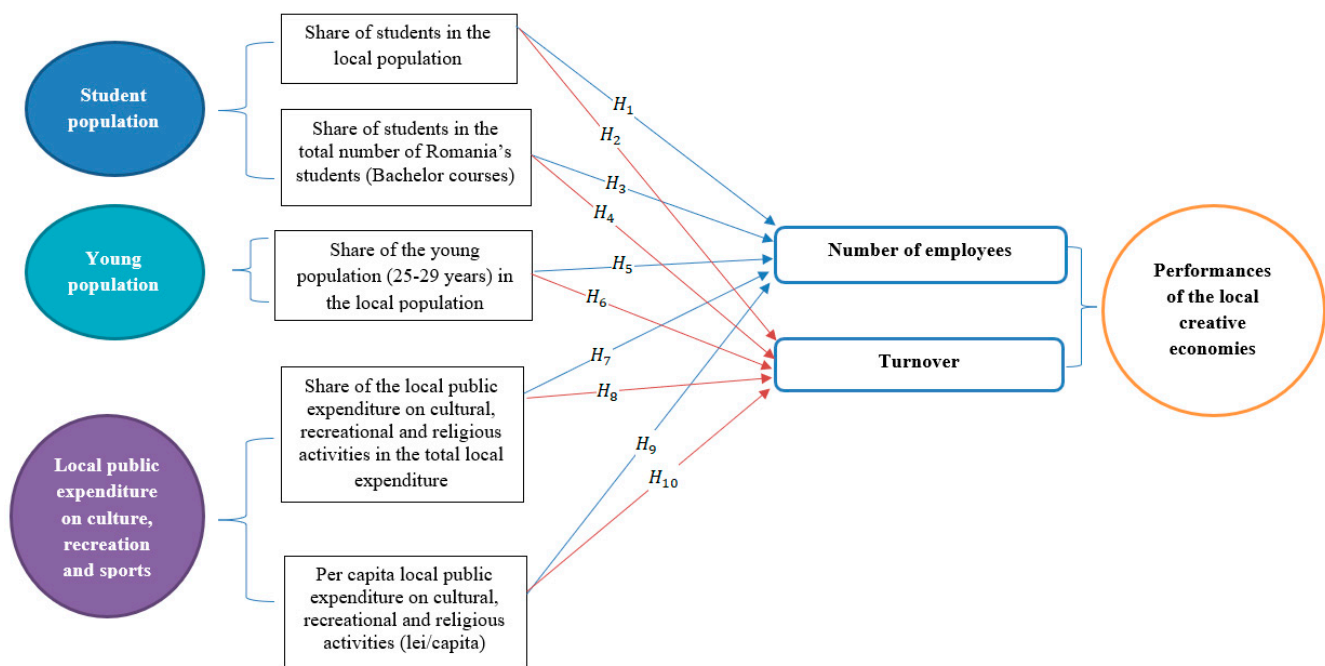


Figure 1. Catalysts of the local creative and cultural economy. Source: own representation.

The influence of the selected catalysts over the dependent variables was tested using the panel data method, in order to deepen our previous research; we consider this method more suitable for our research as the panel data method does not only assess the influencing potential of each factor but also their aggregate and interrelated influence.

Statistical analysis was performed on the specific statistical packages, SPSS24 (Armonk, NY, USA: IBM) and STATA64 (College Station, TX, USA: Stata Corp). A significance level of 0.05 was considered in all the analyses unless otherwise mentioned. The variables were structured in panel data over a timeframe of twelve years. Panel data are used because the same aspects are observed under different periods of time [62]. In this case, the timeframe is between 2008 and 2019, and the investigated aspects are the number of employees and turnover in relation to the share of students in the local population, the share of students in the total number of Romania's students (Bachelor course), the share of the young population (25–29 years old) in the local population, the share of the local public expenditure on cultural, recreational, and religious activities in local expenditures, and the per capita local public expenditure on cultural, recreational, and religious activities in the selected creative cities.

Panel models deal with fixed and/or random effects in data. The main difference between the two models is in the role of the dummy variables. In a fixed effect model, a parameter estimate of a dummy variable is part of the intercept, while in a random effect model, it is an error component. The mathematical equations of the one-way fixed and random effects models are,

$$\text{Fixed effect model: } y_{it} = (\alpha + u_i) + X'_{it}\beta + v_{it}$$

$$\text{Random effect model: } y_{it} = \alpha + X'_{it}\beta + (u_i + v_{it}),$$

where u_i is a fixed or random effect specific to an individual or time frame that is not included in the regression.

The choice between a fixed or random effect model is taken based on the Hausman specification test [63], with a null hypothesis that the preferred model has random effects.

4. Results

4.1. The Resilience of the Creative Economy in the Selected Cities

Table 1 presents the share of the persons employed by CCIs in the total number of employees in the local economies of the seven selected cities, which shows the importance of the CCE in each analysed city, and it evolved during the years. We can definitely notice that the CCEs of Cluj-Napoca and Iași increased substantially and employed many more persons. During these years, the number of employees—in absolute values, which can be accessed via the link provided as Supplementary Materials—from each city faced various oscillations, and the percentage of the local total number of employees is affected both by the local CCE and the local economies' evolution in general.

Table 1. Share of the creative class in general number of employees (%).

	Romania	Bucharest	Cluj-Napoca	Timișoara	Sibiu	Brașov	Iași	Oradea
2008	9.58	10.07	13.78	12.56	12.71	10.14	9.61	15.14
2009	9.08	9.62	13.56	9.81	12.02	9.67	8.80	16.20
2010	9.11	9.40	14.05	10.86	10.28	9.62	9.05	15.82
2011	9.21	9.62	16.37	10.77	10.69	10.17	9.75	15.67
2012	9.01	9.31	15.11	11.28	10.54	9.78	10.28	15.81
2013	9.13	9.35	15.38	10.71	10.64	9.86	11.55	16.35
2014	9.22	9.46	15.91	9.46	10.38	9.71	12.40	17.05
2015	9.31	10.00	16.68	9.94	10.34	9.78	12.93	16.39
2016	9.24	9.71	17.64	9.65	10.42	9.43	13.13	16.57
2017	9.47	10.75	19.56	9.17	10.24	9.74	13.77	15.54
2018	9.48	11.13	20.70	9.37	10.06	9.88	14.64	13.71
2019	9.47	11.51	21.90	9.87	11.85	9.87	16.01	12.27
2020	9.49	11.77	22.97	9.46	12.87	9.98	18.06	11.60
2021	9.69	12.44	25.25	9.85	12.78	9.85	18.45	12.04

Source: own representation using information from [64].

Anyway, addressing the local CCE's resilience in terms of the number of employees, the years 2020 and 2012 present negative evolutions for the local economies of all the selected cities; when we analyse more specifically the CCE, we notice that the number of employees continuously decreased during these years in Bucharest, Timișoara, Sibiu, and Brașov, mirroring the national trend. The other cities instead performed better; the city of Iași continued to increase the number of persons in these sectors even after the pandemic started; Cluj-Napoca and Oradea, on the other hand, present a negative oscillation in the number of employees for the year 2020, but the next one came with an improvement of the situation.

Considering that all these are proved by the nominal values and the fact that the share of those employed by CCIs increased during 2020–2021 or kept a similar value to those before the pandemic, we can deduce that even if the local CCEs were affected by the lockdown, and so the number of employees was lower, when comparing it to the local employment, certainly the CCEs performed better, presenting lower rates of dismissal and keeping their employees on track with work. Definitely, the pandemic represented a challenge for the adaptiveness of both individuals and businesses, but the rates prove that in the Romanian creative sectors was found a way to address this challenge.

Analysing the turnover of the CCEs, we notice oscillations in the numbers due to the economic crises of 2008–2009 and also due to the COVID-19 pandemic; apart from these, generally, the recorded turnovers increased nationally and locally. The lockdown did not affect the CCE as the previous crises did, and in terms of turnover, the figures even present a better situation than the number of employees proved. The year 2020 hit the creative economies of Bucharest, Timișoara, Sibiu, and the overall Romanian CCE; however, the following year came with an improvement. The other cities managed to keep their figures increasing even during these tough times, proving again that the creative sectors had found ways to maintain their presence in the market.

If we pay attention to the share of revenues earned by the creative sectors in total local revenues, we notice a generally positive trend; Cluj-Napoca, Braşov, and Iaşi had doubled their shares during the analysed period, these results correlating with the number of persons employed. The city of Timişoara was the only one whose CCE lost importance in the local economy during the years, but we should not forget that these ratios depend also on the evolution of other sectors in the local economy (Table 2).

Table 2. Share of the creative turnover in general local turnover (%).

	Romania	Bucharest	Cluj-Napoca	Timişoara	Sibiu	Braşov	Iaşi	Oradea
2008	5.52	7.40	6.25	8.26	6.02	4.31	6.50	6.79
2009	5.51	7.55	6.66	5.89	5.58	4.33	6.37	7.36
2010	5.32	7.09	6.71	4.60	5.29	4.24	6.87	7.78
2011	5.10	6.48	7.39	4.75	5.45	5.14	7.13	8.09
2012	5.12	6.42	7.95	4.83	5.26	5.44	7.41	8.25
2013	5.13	6.35	8.42	5.10	5.03	5.72	7.97	8.66
2014	5.31	6.57	9.47	4.75	4.86	5.83	8.99	9.58
2015	5.43	6.78	10.50	4.96	4.43	6.12	9.52	8.96
2016	5.55	6.91	11.90	5.66	4.69	6.28	9.94	9.44
2017	5.53	7.07	12.50	5.20	4.72	6.61	10.56	8.78
2018	5.59	7.27	13.35	5.76	4.71	7.33	11.42	7.75
2019	5.78	7.39	14.55	7.78	5.63	7.86	12.24	8.56
2020	5.91	7.74	16.31	6.33	5.40	8.27	13.47	8.28
2021	5.87	7.54	16.40	5.76	6.05	8.64	13.58	8.08

Source: own representation using information from [64].

The continuous development of the creative sectors is perceived also in the relative figures in Cluj-Napoca, Braşov, and Iaşi, proving their rising importance in generating the local economies' turnover. For the city of Oradea, even if its economy enjoyed increasing turnovers earned by the CCI, the ratio shows that other local sectors proved a higher development. Another continuous negative evolution after the pandemic's debut concerns Timişoara, but both in nominal and percentage values; concerning the other analysed cities, and also the national perspective, the values regarding 2020 present the negative impact of the lockdown, but 2021 came with a revival of both local economies and local CCEs, the latter recording higher values than those recorded in 2019.

The fluctuations during 2022–2021, even if negative, were not significant, so the creative sectors proved resilience in facing the challenges brought by the lockdown.

4.2. The Influential Factors' Relevance in the Selected Creative Cities of Romania

The descriptive statistics of the variables are presented in Table 3. The average number of employees is 26,288, with a minimum of 5972 encountered in Sibiu in 2010 and a maximum of 129,824 in Bucharest in 2019. The turnover ranges between 558 in Sibiu in 2009 and 44,944 in Bucharest in 2019, with an average of 5741 and an average deviation from the mean of 10,421. The average share of students in the local population is 10.61%, while the average share of them in the total population is 10.13%. The average share of the young population in the local population is 8.19%. The average share of the local public expenditure on cultural, recreational, and religious activities in the total local expenditure is 8.67%, and the per capita local public average expenditure on cultural, recreational, and religious activities in the selected creative cities is 221.95 RON.

Table 3. Descriptive statistics.

Variable	Minimum	Maximum	Mean	Std. Deviation
Number Of Employees	5972.00	129,824.00	26,288.1548	36,896.10306
Turnover	558.00	44,944.00	5741.5952	10,421.72134
Share Of Students In Local Population	5.53	20.45	10.6150	4.42183
Share Of Students In Total Student Population	2.36	43.56	10.1396	9.79482
Share Of The Young Population	5.71	9.73	8.1986	0.93452
Share Of The Local Public Expenditure	2.90	21.94	8.6718	4.19963
Per Capita Local Public Expenditure	75.00	888.00	221.9524	142.89055

The first hypothesis tests a model of the number of persons employed in regard to the students' share in the local population and in the total number of students in Romania, the young population, the local public and per capita public expenditure in cultural, recreational, and religious activities. The choice of the appropriate regression model of a fixed or random effect was tested by the Hausman specification test (Table 4). The null hypothesis of a preferred random effect model is rejected (p -value = 0.00).

Table 4. Hausman specification test for the first hypothesis.

	- Coefficients -			
	(b) fe	(B) re	(b-B) Difference	sqrt(diag(V _b - V _B)) S.E.
Share of students in local population	303.0995	-1449.117	1752.216	.
Share of students in total population	841.5239	3562.965	-2721.441	138.3043
Share of the young population	-2381.688	-537.8025	-1844.605	.
Share of the local public expenditure	-524.474	293.7484	-818.2224	.
Per capita local public expenditure	8.025631	-4.574697	12.60033	.

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

$$\chi^2(5) = (b-B)'[(V_b-V_B)^{-1}](b-B) = 243.21$$

Prob > χ^2 = 0.0000

(V_b-V_B) is not positive definite

The fixed effect regression model statistics are summarized in Table 5. The model is significant (p -value = 0.00). The number of employees is positively affected by the share of students in the local population, the share of students in the total student population, and the per capita local public expenditure. An increase of 1% in the share of students in the local population leads to an increase of 303 in the number of employees, an increase of 1% in the share of students in the total student population will increase the number of employees with 841, and an increase of 1% in the per capita local public expenditure will lead to an increase of eight employees. The share of the young population and the share of the local public expenditure are negatively correlated to the number of employees. An increase of 1% in the share of the young population impacts the number of employees with a decrease of 2.38, and an increase of 1% in the share of the local public expenditure impacts with a decrease of 5.24.

Table 5. Fixed effect regression model of the number of employees.

Number of Employees	Coef	Std. Err.	t	$p > t $	[95% Conf Interval]
Share of students in local population	303.09	144.26	2.1	0.039	15.50331, 590.6956
Share of students in total student population	841.52	196.51	4.28	0	449.7754, 1233.272
Share of the young population	−2.38	555	−4.29	0	−3488.08, >−1275.295
Share of the local public expenditure	−5.24	250	−2.1	0.039	−1022.173, >−26.7749
Per capita local public expenditure	8.03	5.84	1.37	0.017	−3.62813, 19.67939
Cons	36,800	5130	7.18	0	26,606.15, 47,056.36

F test that all $u_i = 0$: $F(6, 72) = 86.85$
 Prob > F = 0.000

The second hypothesis is about the impact of the same factors on turnover. Hausman specification test results are summarized in Table 6. The appropriate model is a fixed-effect one.

Table 6. Hausman specification test for the second hypothesis.

	- Coefficients -			sqrt(diag($V_b - V_B$)) S.E.
	(b) fe	(B) re	(b-B) Difference	
Share of students in local population	190.2537	−467.0277	657.2814	34.99897
Share of students in total population	−140.3344	981.4866	−1121.821	127.1944
Share of the young population	−2151.716	−1027.949	−1123.767	
Share of the local public expenditure	−578.5555	−12.11001	−566.4455	
Per capita local public expenditure	8.680324	0.5188786	8.161446	

b = consistent under H_0 and H_a ; obtained from xtreg
 B = inconsistent under H_a , efficient under H_0 ; obtained from xtreg

Test: H_0 : difference in coefficients not systematic
 $\chi^2(5) = (b-B)'[(V_b - V_B)^{-1}](b-B)$
 = 106.80
 Prob > χ^2 = 0.0000
 ($V_b - V_B$) is not positive definite

The fixed effect model parameters are summarized in Table 7. Except for the share of students in the local population, all variables are significant and have a 0.05 level of significance. For the share of students in local population, a 0.1 significance level is considered. The share of students in the local population and the per capita local public expenditure positively affect the turnover; for both, an increase of 1% will increase the turnover by 190.25 and 8.68, respectively. The remaining variables negatively impact the change in turnover. A 1% increase in the share of students in the total population decreases the turnover by 140.334, while in the share of the young population, it decreases the turnover by 2151.71. An increase of one percent in the share of the local public expenditure decreases the turnover by 578.55.

Table 7. Fixed effect regression model of turnover.

Turnover	Coef	Std. Err.	t	$p > t $	[95% Conf Interval]
Share of students in local population	190.2537	101.5767	1.87	0.065	−12.232579, 392.7431
Share of students in total population	−140.334	138.3625	−1.01	0.031	−416.155, >135.4862
Share of the young population	−2.15	391	−5.51	0	−2930.7, >−14,372.732
Share of the local public expenditure	−5.79	176	−3.29	0.002	−928.9733, >−228.1377
Per capita local public expenditure	8.68	4.12	2.11	0.038	0.4751954, 16.88545
cons	25,900	3610	7.17	0	18,677.23, 33,075.73

F test that all $u_i = 0$: $F(6, 72) = 18.34$
 Prob > F = 0.000

5. Discussion

The results lead us to a clearer understanding of how the CCE is spurred on in the analysed locations; all the independent variables selected in our study proved a certain influence over the dependent variables, some of them a positive influence, and others, a negative one, as the following table presents (Table 8).

Table 8. The influence of the analysed factors over the economic dimensions of the urban creative and cultural economies.

	Influence Factors	Number of >Employees	Recorded Turnover
Student >population	Share of students in the local population	Positive	Positive
	Share of students in the total number of Romania's students (Bachelor courses)	Positive	Negative
Young >population	Share of the young population (25–29 years) in the local population	Negative	Negative
Local public expenditure on culture, recreation and sports	Share of the local public expenditure on cultural, recreational and religious >activities in the total local >expenditure	Negative	Negative
	Per capita local public expenditure on cultural, recreational and religious >activities (RON/capita)	Positive	Positive

The number of persons employed in the creative sectors is enhanced by three factors:

- the share of students in the local population;
- the share of students in the total number of students in Romania;
- the per capita local public expenditure on culture, recreational, and religious activities.

Therefore, the more students a city attracts, the more persons are employed in creative sectors; this aspect is important both as part of the local population and as to how many students studying in Romania choose one of the analysed cities. This means that the population composition should include a large number of students, as this determines positive effects on the number of employees. This aspect could be motivated by the students' demand for creative products and services, this type of population being more concerned with exploring and spending their free time with friends and other people of their age, without having the pressure of a family or the difficulties in balancing professional and family lives. Therefore, students have more time and interest in these types of outputs,

and so the CCIs have to employ and produce more. The limit of this interpretation is the consideration of the student population without considering its income sources. On the other hand, the high presence of students in a city could represent a source of the labour force for the creative sectors: a curious, inspired, passionate, and cheap labour supply, due to their lack of experience and also due to their main interest on studying; usually, the jobs held during studenthood are just an extra source of income or a launching ramp into the career they are preparing for.

Moreover, the higher the allocation for cultural, recreational, and religious activities, the higher the employment in the local CCE; even if the dimensions we study concern private companies, it seems that local budget allocation enhances their activities, proving that the institutional demand in organising celebrations and other festivities relies on the private creative supply; these events also create a market for diverse creative products and services.

The other analysed independent variables have a negative impact on the number of employees; continuing with public expenditure, when analysing the share of expenditure on cultural, recreational, and religious activities in the local public expenditure, there was no positive correlation with the number of employees; what is more, it was a negative impact. This means that the local public allocation is still important, as seen in the correlation with the per capita expenditure, but when the allocation is enhanced compared to other public expenditures, the number of employees decreases; this fact proves the importance of other public expenditures at local levels in supporting the local employment or demand for creative outputs.

The young population aged between 25–29 years impacts negatively the number of employees, showing that employment in the creative sectors of the analysed cities has a different age structure. Considering the positive influence of the student population, it seems that creative employment relies on this population for its work supply and output demand; although we cannot prove the positive impact of the older population, we assume that this could also benefit the CCI, but further research should be undertaken. Even if we could presume the population aged between 25–29 years should benefit from higher incomes than the student population, the reasons for consuming creative goods would make the difference in impacting the demand, the former being concerned rather with building a career and a family, so not having so much available time for leisure or other activities involving creative goods.

Paying attention to the catalysts of the recorded turnover, we notice that in this case, only two of the studied factors positively impact this dimension, and these are:

- the share of the student population in the local population;
- the per capita expenditure on cultural, recreational, and religious activities.

The other three independent variables definitely have an influence over the recorded turnover, but a negative one.

The positive impact on the turnover of the two independent variables should be explained in the same way, as they benefit the number of persons employed in creative sectors, considering that these two variables positively impact both dependent variables. The student population in the local community is crucial for enhancing revenues, but how many of Romania's students are attracted to the analysed cities does not determine the revenue increases, but the opposite. This aspect is strange, considering it enhances the number of employees, but this contradiction proves that creative sectors rely on employing students. When it comes to turnover, being a highly attractive university centre of the country does not enhance earnings but proves that the low income levels of students matter; they present an important category of creative clients, but for a local CCE to be spurred on, the higher earnings come from those clients benefitting from higher income levels.

The negative influence of the other two independent variables, the share of the young population in the local population and the share of local public expenditure on cultural, recreational, and religious activities in the local public expenditure, impact the turnover due to the same reasons presented for the number of employees.

Anyway, the two hypotheses are validated. All five determining factors chosen for this analysis exert a certain influence, some of them enhancing creative dimensions and others having the opposite effects on them. Enhancing the two studied dimensions of creative economies on local levels proves the benefits coming from public stimulation and support in attracting students and higher allocations for per capita expenditure. The increase in the number of students in a city and the local budget for cultural, recreational, and religious activities should come with an increase in the local population's income level—in other words, employing more experienced and specialised professionals—and the budgets for other public needs; this fact proves a possible positive correlation between the CCE and the development of other sectors on the local level, but this represents a future research project.

6. Conclusions

The CCE gained recognition for its contributions to income generation, job creation, tolerance and social inclusion enhancement, and also for the high added value created in the CCI. Additionally, as presented in this paper, the CCE's resilience was proved in the last two economic crises—the 2008 crisis and the more recent crisis caused by the COVID-19 pandemic—in several different countries and regions. Enhancing the CCE represents the trigger for sustainable economic development in urban areas, and the CCE's sustainability is proved on all three pillars:

- economic: job creation and income generation specific to high added value creation;
- social: job creation, self-expressiveness, and social inclusion, as the CCE promotes and blooms in places with cultural diversity and tolerance;
- environmental: the CCE's raw materials are represented by intellect, talent, and culture—resources untouchable by scarcity; definitely, CCIs also use material resources, but these components fulfil rather a support purpose for the output of the above-mentioned inputs.

If these creative sectors are so sustainable, the need to find out the factors developing them is obviously crucial. As our research focuses on Romania, the investigation concerns seven important Romanian cities, and our presumptions were that the creative economy's dimensions (number of employees, turnover) are influenced by five factors representing the student population, the young population, and the expenditure on cultural, recreational, and religious activities on the local levels. We tried to assess these previously using the ANOVA method, but a deeper analysis was required, so the current paper served for meeting this goal.

The first approach proved a positive and strong correlation between the variables in each analysed city, but the panel data approach—a more suitable method for deepening the analysis, proved the factors' influence over the variables, in some cases, a positive influence, and in others, a negative one.

Our findings show that the share of the student population in the local population and the per capita expenditure on cultural, recreational, and religious activities have a positive impact on both economic dimensions we chose to analyse. Anyway, the share of students in the total of Romania's students (Bachelor courses) determines an increase but only in the number of employees.

The other analysed factors, the share of the young population in the local population and the share of the local public expenditure on cultural, recreational, and religious activities, exert a negative influence on the analysed economic dimension. These findings show a strong reliance of the creative sectors on students' demands for creative goods but also on their labour supply, as long as the local economy does not rely on the student population.

Additionally, local public expenditure positively influences CCIs in terms of per capita allocation but negatively as a share of the public budget, proving that it is decisive how much money is allocated for this type of public expenditure, as long this allocation does not harm or cut other public allocations. This last fact makes us think that the support of other public expenditures is beneficial for the local CCE, but this is just a presumption for now.

The population aged between 25–29 years, the young population as we considered it in our study, negatively impacts CCIs, proving that the younger population could be essential for labour supply, and the older, more professional, and higher income-earning population is essential for creative goods demand.

In conclusion, in order to develop the creative sector on a local level, it is essential to attract students but also to keep in the city the professional and expert labour force, which has the potential and the interest for creative consumption. Additionally, the local public expenditure per capita favours the creative sectors; these public allocations represent direct ways for authorities to impact the CCE, but considering the other confirmed catalysts, we can notice that there are other ways in which the local or national authorities could support the development of CCIs. Some of our recommendations consist of:

- enhancing the academic offers with courses taught in English, so that Romanian universities would become more accessible for foreign students; Romania is chosen as a destination for studying for its low university fees. This recommendation could determine an inflow of foreign students and even a higher rate of enrolment of the Romanian students who are interested to study in English, and as it was proved in the previous pages, the more students in a city, the better performing the CCE;
- the public authorities together with the universities should offer benefits for those who are interested in pursuing an academic qualification related to the CCE; these benefits could be represented as discounts on income tax in the first years of working in the CCI;
- additionally, there could be discounts offered on the university fees for those who are pursuing a second academic qualification, this time in a CCE domain;
- considering the student population as a whole, there could be lower income taxes offered for those young people who are both working and enrolled in an academic programme, without regard to the studies' fields; this regulation would present itself as a social benefit, helping those who are in need to earn an income during their studenthood, but the effects would be strongly economic due higher disposable income and also due to the higher interest to enrol in tertiary education.

The recommendations are strongly oriented towards increasing the number of persons enrolled in tertiary education due to the high impact on the creative sectors but also because of the need of ensuring a highly qualified labour force which is able to produce high added value outputs, and so to enhance national economic development; in a country where public authorities are concerned with creating the best tax and infrastructure conditions for possible investors, it is mandatory to switch the focus on the quality of the labour force supply; improving the labour supply would improve the investments attracted to the country. When attracting investors, it is important also to consider what kind of labour they would employ; it is not enough to look for investors or for those investors to open new businesses which employ an under-skilled labour force because the income and the added values generated would not pay for the public efforts.

The limits of the current paper concern the data used, which do not include the economic performances of public institutions, so we assessed only the private CCEs of the selected cities. Another limitation would be the multitude of possible influential factors, but as mentioned before, we decided to assess those factors which could be regulated and supported by public authorities. Further research should focus on the development of CCEs after the pandemic of COVID-19 and during the inflation crisis.

Supplementary Materials: The following supporting information can be downloaded at: <https://www.mdpi.com/article/10.3390/su142114658/s1>, Table S1: Resilience_Romanian_Creative_Economy.

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References

- Newbigin, J. The creative economy—where did it come from and where is it going. In *A Research Agenda for Creative Industries*; Cunningham, S., Flew, T., Eds.; Elgar Research Agendas: Cheltenham, UK, 2019; pp. 21, 23, 24. [[CrossRef](#)]
- Fanea-Ivanovici, M. The creative industries: Before and after the crisis. In *Romanian Economic Journal*; Department of International Business and Economics from the Academy of Economic Studies Bucharest: Bucharest, Romania, 2014; Volume 17, pp. 97–114.
- Seman, M.; Carroll, M.C. The creative economies of Texas metropolitan regions: A comparative analysis before, during, and after the recession. *Growth Change* **2017**, *48*, 831–852. [[CrossRef](#)]
- Santos, C.; Teixeira, A.A. Spatial analysis of new firm formation in creative industries before and during the world economic crisis. *Ann. Reg. Sci.* **2021**, *67*, 404. [[CrossRef](#)]
- Hill, I.; Manning, L.; Frost, R. Rural arts entrepreneurs' placemaking—how 'entrepreneurial placemaking' explains rural creative hub evolution during COVID-19 lockdown. *Local Econ. J. Local Econ. Policy Unit* **2021**, *36*, 627–649. [[CrossRef](#)]
- Arshad, N.C.; Irijanto, T.T. The creative industries effects on economic performance in the time of pandemic. *Int. J. Ethic-Syst.* **2022**. *ahead-of-print*. [[CrossRef](#)]
- National Institute of Statistics. The Resident Population of Romania. Available online: <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table> (accessed on 22 July 2022).
- Marco-Serrano, F.; Rausell-Koster, P.; Abeledo-Sanchis, R. Economic development and the creative industries: A tale of causality. *Creat. Ind. J.* **2014**, *7*, 81–91. [[CrossRef](#)]
- Newbigin, J. *The Creative Economy: An Introductory Guide*; British Council's Creative and Cultural Economy Series: London, UK, 2010; p. 24.
- Von Schorlemer, S.; Stoll, P.T. *The UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions—Explanatory Notes*; Springer: Berlin, Germany, 2012; p. 154. [[CrossRef](#)]
- Skavronska, I.V. Creative Industries in Ukraine: Analysis and Prospects of the Development. *Econ. Sociol.* **2017**, *10*, 87–88. [[CrossRef](#)]
- Micak, P.; Kocmanova, A. The Influence of Selected Microeconomic Factors on the Willingness of the Company Operating in Creative Industries to Collaborate. In Proceedings of the 12th International Multi-Conference on Complexity, Informatics and Cybernetics (IMCIC 2021), Orlando, FL, USA, 9–12 March 2021; p. 103.
- Barandiaran-Irastorza, X.; Peña-Fernández, S.; Unceta-Satrústegui, A. The Archipelago of Cultural and Creative Industries: A Case Study of the Basque Country. *Economies* **2020**, *8*, 21. [[CrossRef](#)]
- Landry, C.; Bianchini, F. *The Creative City*; Demos in Association with Comedia: London, UK, 1995; ISBN 1898309167.
- Pratt, A.C. Creative cities: The cultural industries and the creative class. *Geogr. Ann. Ser. B Hum. Geogr.* **2008**, *90*, 107–117. [[CrossRef](#)]
- Caragliu, A.; Del Bo, C.; Nijkamp, P. Smart cities in Europe. *J. Urban Technol.* **2011**, *18*, 65–82. [[CrossRef](#)]
- Florida, R. *The Rise of the Creative Class*; Basic Books: New York, NY, USA, 2002.
- Florida, R. *Cities and the Creative Class*; Routledge: New York, NY, USA, 2004. [[CrossRef](#)]
- Südekum, J. Human Capital Externalities and Growth of High- and Low-Skilled Jobs. *Jahrb. Fur Natl. Und Stat.* **2010**, *230*, 92–114. [[CrossRef](#)]
- Boal, I.; Herrero, L.C. Where are the artists? Analysing economies of agglomeration in Castile and León, Spain. *Pap. Reg. Sci.* **2018**, *97*, 995–1016. [[CrossRef](#)]
- Tajtaková, M.; Olejárová, M. Creative Cities and Knowledge Management Approach to Culture-Based Urban Regeneration in Slovakia: A Model. *Commun. Sci. Lett. Univ. Zilina* **2021**, *23*, G25–G37. [[CrossRef](#)]
- Lorenzen, M.; Andersen, K.V. Different creative cities: Exploring Danish data to adapt the creative class argument to small welfare economies. *Creat. Ind. J.* **2012**, *4*, 123–136. [[CrossRef](#)]
- PiergiovanniMartin, R.; Carree, M.A.; Santarelli, E. Creative industries, new business formation, and regional economic growth. *Small Bus. Econ.* **2011**, *39*, 539–560. [[CrossRef](#)]
- Batabyal, A.A.; Nijkamp, P. A Two-Sector Model of Creative Capital Driven Regional Economic Growth. *J. Quant. Econ.* **2018**, *16*, 831–840. [[CrossRef](#)]
- Innocenti, N.; Lazeretti, L. Do the creative industries support growth and innovation in the wider economy? Industry relatedness and employment growth in Italy. *Ind. Innov.* **2019**, *26*, 1152–1173. [[CrossRef](#)]

26. Lorenzen, M.; Andersen, K.V. Centrality and Creativity: Does Richard Florida's creative class offer new insights into urban hierarchy? *Econ. Geogr.* **2009**, *85*, 4. [CrossRef]
27. Londar, S.; Lytvynchuk, A.; Versal, N.; Posnova, T.; Tereshchenko, H. Investment in Human Capital Within the Creative Economy Formation: Case of the Eastern and Central Europe Countries. *Comp. Econ. Res. Central East. Eur.* **2020**, *23*, 129–148. [CrossRef]
28. Suciu, M.C.; Florea, C.A. An Empirical Study on the Migration Among Young Skilled and Creative People. *Amfiteatru Econ.* **2017**, *19*, 733.
29. United Nations. Creative Economy. Report 2008. Available online: http://unctad.org/en/docs/ditc20082cer_en.pdf (accessed on 15 June 2022).
30. Doniy, N.Y. Economic and social aspect of creativity. *Sci. Bull. POLISSIA* **2017**, *1*, 123–126. [CrossRef]
31. De Jesus, D.S.V.; Kamlot, D.; Dubeux, V.J.C. A Critique of the Creative Economy, Creative City and Creative Class From the Global South. *Int. J. Bus. Adm.* **2020**, *11*, 3. [CrossRef]
32. Zhao, K.; O'Mahony, M.; Qamar, A. Bridging the gap in creative economy and ICT research: A regional analysis in Europe. *Appl. Econ.* **2020**, *52*, 3153–3166. [CrossRef]
33. Elazny, R.; Pietrucha, J. Measuring innovation and institution: The creative economy index. *Equilibrium. Q. J. Econ. Econ. Policy* **2017**, *12*, 43–62. [CrossRef]
34. Borgoni, R.; Michelangeli, A.; Pontarollo, N. The value of culture to urban housing markets. *Reg. Stud.* **2018**, *52*, 1672–1683. [CrossRef]
35. Cojanu, V.; Pîslaru, D.N.; Botezatu, E. Industriile Creative: Potențial de Creștere în România și în Context European (Creative Industries: Growth Potential in Romania and in the European Context), European Institute of Romania, 2016. Available online: http://ier.gov.ro/wp-content/uploads/publicatii/St-3_Industria-creative_final_curat.pdf (accessed on 20 July 2022).
36. Voicu, S.; Dragomir, A. Vitalitatea culturală a Orașelor din România (The Cultural Vitality of Romanian Cities), National Institute for Cultural Research and Training, 2016. Available online: <https://www.culturadata.ro/wp-content/uploads/2017/12/Caietele-Culturadata-Vol1-2017-Vitalitatea-culturala-Ro.pdf> (accessed on 30 June 2022).
37. Rybarova, D. Creative industry as a key creative component of the Slovak economy. *SHS Web Conf.* **2020**, *74*, 2, 5, 13, 14. [CrossRef]
38. Croitoru, A. Diaspora Start-Up Programs and Creative Industries: Evidence from Romania. *Transylv. Rev. Adm. Sci.* **2021**, *63*, 5–29. [CrossRef]
39. Coll-Martínez, E.; Moreno-Monroy, A.-I.; Arauzo-Carod, J.-M. Agglomeration of creative industries: An intra-metropolitan analysis for Barcelona. *Pap. Reg. Sci.* **2019**, *98*, 416. [CrossRef]
40. Li, J.; Liao, J. Research on influencing factors of the development of cultural and creative industries based on grey factor analysis. *Comput. Sci. Inf. Syst.* **2021**, *18*, 1253–1269. [CrossRef]
41. Cerisola, S.; Panzera, E. Cultural and Creative Cities and Regional Economic Efficiency: Context Conditions as Catalyzers of Cultural Vibrancy and Creative Economy. *Sustainability* **2021**, *13*, 7150. [CrossRef]
42. Martinaitytė, E.; Kregždaitė, R. The factors of creative industries development in nowadays stage. *Econ. Sociol.* **2015**, *8*, 56, 59, 61, 69. [CrossRef]
43. Croitoru, C.; Cojanu, V.; Mucică, D.; Becuț, A. Cartea albă Pentru Activarea Potențialului Economic al Sectoarelor Culturale și Creative din România (White Paper for Unlocking the Economic Potential of the Cultural and Creative Sectors in Romania), National Institute for Cultural Research and Training, 2016, p. 7. Available online: <https://www.culturadata.ro/cartea-alba-pentru-activarea-potențialului-economic-al-sectoarelor-culturale-si-creative-din-romania-2016/> (accessed on 16 July 2022).
44. Cojanu, V.; Croitoru, C.; Becuț, A. Sectoarele Culturale și Creative în România. Importanța Economică și Contextul Competitiv (The Cultural and Creative Sectors in Romania. The Economic Importance and the Competitive Context), National Institute for Cultural Research and Training, 2015, p. 62. Available online: https://www.culturadata.ro/wp-content/uploads/2018/07/2015_Sectoarele-Culturale-si-Creative.pdf (accessed on 30 May 2022).
45. Stasiulis, N. The Idea of the Creative Society and the Development of Creative Industries. *Econ. Sociol.* **2017**, *10*, 217–226. [CrossRef]
46. Li, F. The digital transformation of business models in the creative industries: A holistic framework and emerging trends. *Technovation* **2020**, *92–93*, 102012. [CrossRef]
47. Lee, H.-K. Making creative industries policy in the real world: Differing configurations of the culture-market-state nexus in the UK and South Korea. *Int. J. Cult. Policy* **2020**, *26*, 544–560. [CrossRef]
48. Wu, Y.-C.; Lin, S.-W. Integrated approach for exploring critical elements that affect sustainable development of cultural and creative industries. *J. Bus. Econ. Manag.* **2021**, *22*, 604. [CrossRef]
49. Liu, Z. The Impact of Government Policy on Macro Dynamic Innovation of the Creative Industries: Studies of the UK's and China's Animation Sectors. *J. Open Innov. Technol. Mark. Complex.* **2021**, *7*, 168. [CrossRef]
50. Zheng, J. Structuring Artistic Creativity For The Production Of A 'Creative City': Urban Sculpture Planning in Shanghai. *Int. J. Urban Reg. Res.* **2021**, *45*, 795–813. [CrossRef]
51. Jurene, S.; Jureniene, V. Creative Cities and Clusters. *Transform. Bus. Econ.* **2017**, *16*, 224–225.
52. Mackiewicz, M.; Namyślak, B. Development conditions for creative clusters in Poland in view of institutional environment factors. *Growth Change* **2021**, *52*, 1295–1311. [CrossRef]
53. Escalona Orcao, A.I.; Sáez Pérez, L.A.; Sánchez-Valverde García, B. Patterns and drivers of cultural economy in Spain's extra-metropolitan small towns. *J. Reg. Res.* **2017**, *38*, 40.

54. Department for Culture, Media and Sport. Creative Industries: Focus on Employments, 2016, p. 17. Available online: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/534305/Focus_on_Employment_revised_040716.pdf (accessed on 17 July 2022).
55. Rodrigues, M.; Franco, M. Composite Index to Measure Cities' Creative Performance: An Empirical Study in the Portuguese Context. *Sustainability* **2019**, *11*, 774. [[CrossRef](#)]
56. Glaeser, E. *Triumph of the City*; Penguin: New York, NY, USA, 2011; p. 193.
57. Bakıcı, T.; Almirall, E.; Wareham, J. A Smart City Initiative: The Case of Barcelona. *J. Knowl. Econ.* **2013**, *4*, 135–148. [[CrossRef](#)]
58. Boschma, R.A.; Fritsch, M. Creative class and regional growth: Empirical evidence from several European countries. *Econ. Geogr.* **2009**, *85*, 391–423. [[CrossRef](#)]
59. Kerimoglu, E.; Karahasan, B.C. Location patterns of creative capital and regional disparities in Spain. *Reg. Sect. Econ. Stud.* **2014**, *14*, 113–132.
60. De Figueiredo, J.L.; De Jesus, D.S.V.; Robaina, D.T.; Couri, C.L. The development potential index of creative economy for Brazilian federal state capitals. *Creat. Ind. J.* **2019**, *12*, 185–203. [[CrossRef](#)]
61. Pintilii, R.D.; Marin, M.; Gruia, A.K.; Grecu, A.; Teriş, B. Could be creative economy an argument for gaining European capital of culture status?—Comparative Analysis between Romanian Cities Candidate. *Int. Sci. Conf. GeoBal-Canica* **2020**, *33*, 289–296. [[CrossRef](#)]
62. Kennedy, P. *A Guide to Econometrics*, 6th ed.; Blackwell Publishing: Malden, MA, USA, 2008.
63. Hausman, J.A. Specification Tests in Econometrics. *Econometrica* **1978**, *46*, 1251–1271. [[CrossRef](#)]
64. Borg Design. Available online: <http://www.borgdesign.ro/> (accessed on 8 August 2022).