FREE NETWORK POLICY BRIEF SERIES

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April 2021

Creative Industries: Impact on the Development of Ukraine's Economy

This brief is based on research investigating the effects of creative industries on the development of the Ukrainian economy. The results indicate that capital investment in creative industries has a significantly greater effect on economic growth than a simple increase in the consumption of the respective industry's products. Thus, we conclude that, to achieve a more substantial economic effect of spending in creative industries, it is necessary not only to increase the expenditures in these industries and boost consumption of their products but also to support these industries in developing production capacity. The underlying study "Creative Industries: Impact on the Development of Ukraine's Economy" was prepared by the Kyiv School of Economics in order and cooperation with the Ministry of Culture and Information Policy of Ukraine. The first results from the study were presented at the international forum "Creative Ukraine" in 2020.

Background

In 2019, the United Nations (UN) General Assembly declared 2021 as the International Year of Creative Economy for Sustainable Development. This nomination was a recognition of the growing role of creative industries in the economic development of both developed and developing countries. The program of events taking place under the theme of the International Year of the Creative Economy for Sustainable Development includes forums, conferences, and intergovernmental meetings, which intend to draw attention to the problems that hinder the development of creative industries (CI) and the opportunities that these areas create.

The importance of CIs, which lie at the crossroads of art, business, and technology, is constantly growing both at the national level and in terms of international competition between countries. CIs have become a strategic direction for increasing competitiveness, productivity, employment, and sustainable economic growth (UNCTAD 2019) [1]. Exceptional rates of growth in turnover, creation of new jobs, and resilience to the economic crisis make creative industries an attractive area for investment at both the private and governmental levels. (UNCTAD 2004) [2]. On the other hand, the scope of knowledge about the economic role of CIs and their impact on the development of other sectors of the economy is quite limited.

This brief describes the economic effect of spending in CIs. Particularly, using input-output and computable general equilibrium models, we outline CI multiplier effects on the development of other industries and discuss implications for government support of CI.

Creative Industries in Ukraine

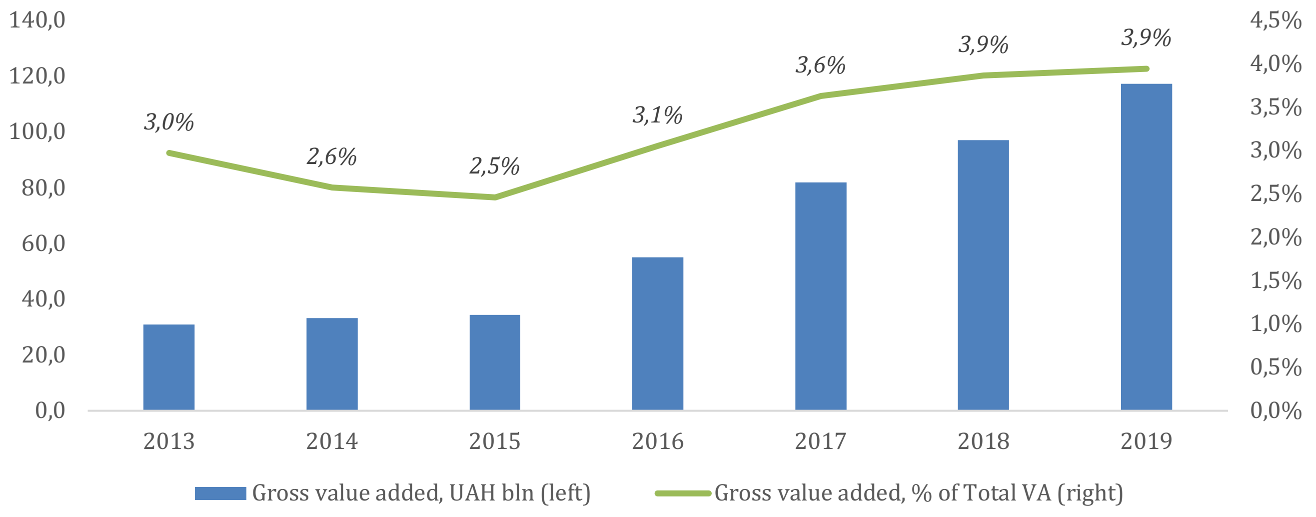
Although the term creative industry is becoming more common, countries have different approaches to the definition. There have been attempts to introduce an international standard, but the goal has not yet been achieved [3].

Ukrainian law define CIs as "types of economic activity aimed at creating added value and jobs through cultural (artistic) and/or creative expression".

Currently, the Cabinet Ministers of Ukraine list 34 basic economic activities belonging to CIs, including visual arts, performing arts, publishing, design, fashion, IT, audiovisual arts, architecture, advertising, libraries, archives and museums, folk arts and crafts.

The gross value added (GVA) of CIs in Ukraine is growing rapidly. In 2013, the GVA of creative industries amounted to UAH 31 billion (3% of total value added), and in 2019 it amounted to UAH 117.2 billion (3.9% of total value added) (Figure 1). The number of companies and employees in the field of CI is also growing rapidly. In 2019, there were 205.5 thousand business entities and more than 350 thousand employees.

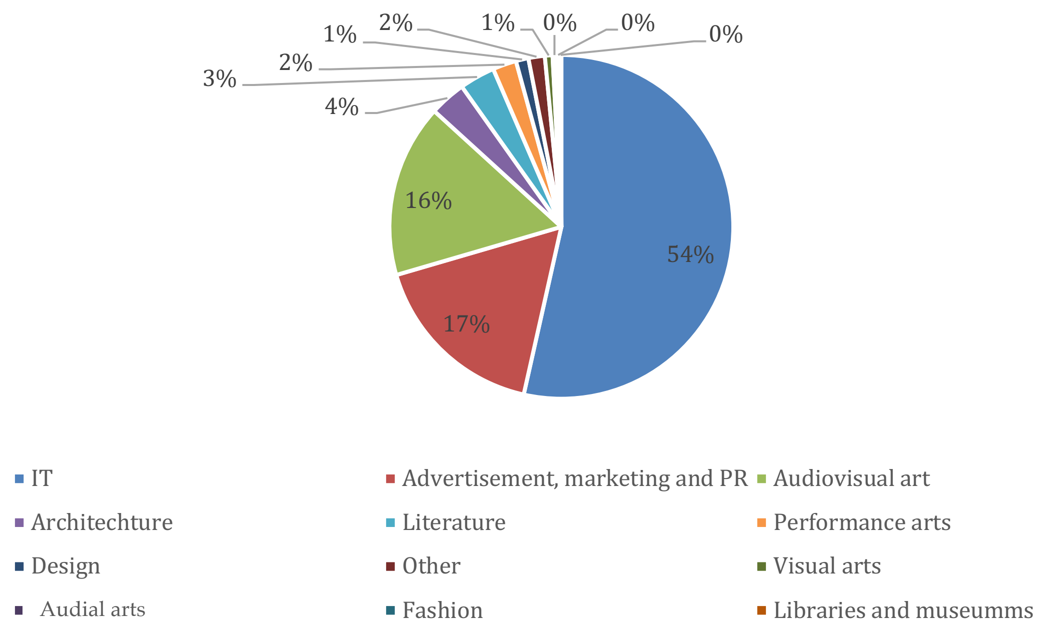
Figure 1. *Gross value added of CI in Ukraine*



Source: State Statistics Service of Ukraine

Most GVA of CIs is generated by information technology (IT) activities. In 2019, the IT sector generated UAH 63.7 billion of GVA or 54.3% of the national CI GVA (Figure 2). In second place, there is Advertising, ¢Marketing and PR – UAH 20.2 billion of GVA or 17% of national GVA. In third place with a small gap there is Audiovisual Art – UAH 19.4 billion of GVA or 17% of national GVA.

Figure 2. *Structure of Gross Value Added CI in Ukraine, 2019.*



Source: State Statistics Service of Ukraine

Methodology and Data

To assess the economic effect of creative industries, we employ a computable general equilibrium (CGE) approach. CGE estimates a general equilibrium model of an economy using real-life economic data. It models interactions of individual markets - such as manufactured goods, services, and factors of production - encompassing the entire economic system. In doing so, the model takes into account reactions of economic agents - economic sectors, households, government, external sectors - and assumes that markets are perfectly competitive. The resulting set of simultaneous equations then employs real data from the economy in question to estimate the equilibrium in these markets by balancing supply and demand in all markets via the appropriate choice of prices.

In this way, the CGE model is a good reflection of a studied economy. In particular, in application to our research question, it allows us to distinguish the economic impact of additional consumption and capital investments in creative industries, and therefore to form reasonably precise recommendations for policy measures. This feature makes the CGE approach much more relevant than the alternative methods, such as the input-output approach.

Limitations of the CGE approach include increased analytical difficulty and computational demands, calibration and the use of estimated parameters, etc.

Data utilized by the CGE model are given by the Social Accounting Matrix (SAM). The SAM structure is related to the input-output table. Each row and column reflects the income and expenses of a particular economic agent. The main principle of SAM is balance, i.e., income from the sale of goods and services equals expenditures.

As a result, the availability of input-output table data is a crucial factor for our analysis. The State Statistics Service of Ukraine publishes an input-output table for 42 industries, which is not sufficient to distinguish creative industries from other sectors of the economy. To compensate for these deficiencies, we use the following sources:

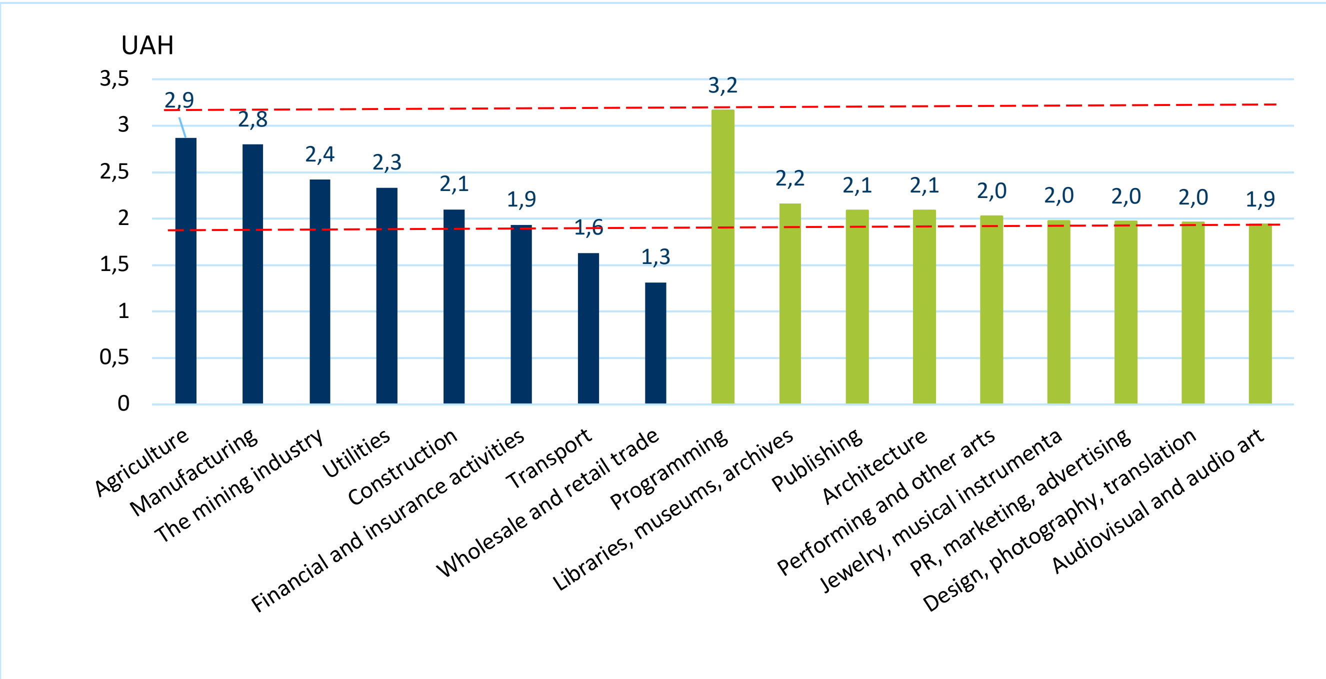
- input-output table for Ukraine for 2018.
- input-output table for Poland for 2015 (latest available) to approximate the intermediate consumption of creative industries, not available from Ukrainian input-output tables.
- annual report on state budget expenditures of Ukraine for 2018.
- balance of payments of Ukraine for 2018.
- structural business statistics of Ukrainian enterprises in part of gross value added and sales volume for 2018.

Results

The results of the CGE model suggest a strong effect of investment in CIs. The sizes of the multipliers across the most creative industries are similar. The exception is the programming industry, for which for a one hryvnia investment leads to a total GDP growth of 3.2 hryvnias. This value is the highest among all sectors of the economy, not only among the CIs. For the rest of the CIs, the multiplier ranges from 1.9-2.2, which is comparable to the multipliers of the construction and finance and insurance sector (Figure 3). Accordingly, the increase in GDP for one hryvnia of investment by industry is

- UAH 2.2 for libraries, museums, archives.
- UAH 2.1 for publishing.
- UAH 2.1 for architecture.
- UAH 2.0 for performing and other arts.
- UAH 2.0 for production of jewelry, costume jewelry, musical instruments.
- UAH 2.0 for public relations, marketing, advertising.
- UAH 2.0 for design, photography, translation.
- UAH 1.9 for audiovisual and audio art.

Figure 3. GDP change per one hryvnia of capital expenditures*



* Estimated assuming 5% increase in capital

Source: Our calculations are based on data from State Statistics Service of Ukraine and Poland, as described in the data section.

While the above results are obtained by estimating GDP response to a 5% increase in capital, the results are quite similar for different sizes of investments.

Conclusion

Our estimations show that investment in creative industries has a considerable impact on GDP. Investment in the IT sector has the highest multiplier, even compared to “non-creative” sectors of the economy. Other CIs’ multipliers can be compared to the construction and finance and insurance sector. Therefore, the results suggest that creative industries offer a highly valuable investment opportunity.

We also find that increase in capital investment in a creative industry has a stronger positive impact on GDP than an increase in the consumption of the respective industry's products. An immediate policy implication of this finding is that, to achieve a more significant economic effect of government spending in creative industries, it is necessary not only to increase the expenditures on these industries or boost consumption of their products but also to support them in expanding production capacity.

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