

# Measuring the economic contribution of cultural industries: A case study of Serbia



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#### List of abbreviations

ANZSIC Australian and New Zealand Industrial Classification

FCS 2009 UNESCO Framework for Cultural Statistics

GDP Gross Domestic Product

GVA Gross Value Added

ILO International Labour Organization

ISCO-08 2008 International Standard Classification of Occupations

ISIC Rev.4 International Standard Industrial Classification Revision 4

LFS Labour Force Survey

NACE Rev.2 Classification of Economic Activities in the European Community, Revision 2

NAEMA Nomenclature d'Activités des États Membres d'AFRISTAT

NAICS North American Industry Classification System

NSO National Statistical Office

OECD Organisation for Economic Co-operation and Development

SBS Structural Business Statistics

SIC Standard Industrial Classification

SNA System of National Accounts

UIS UNESCO Institute for Statistics

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#### Introduction

In 2012, the UNESCO Institute of Statistics (UIS) published its first handbook from the 2009 UNESCO Framework for Cultural Studies (FCS) Handbook Series, entitled "Measuring the Economic Contribution of Cultural Industries". The FCS Handbook No. 1 compares and contrasts the core approaches in measuring the economic contribution of cultural industries, highlighting their advantages and limitations. The handbook emphasizes the need "to develop guidelines for measuring the economic contribution of cultural industries that could serve as a tool to help Member States to understand methodological techniques and develop consistent and relevant studies with a high level of international comparability" (UNESCO-UIS, 2012). To that end, the FCS Handbook No. 1 proposes a methodology entitled "Basic model for measuring the economic contribution of cultural industries" (UNESCO-UIS, 2012, p. 89).

This report presents the results of the Serbia case study that tested the methodology for measuring the economic contribution of cultural industries proposed by UNESCO and described in the FCS Handbook No. 1. It demonstrates that it is feasible to produce basic measures of the economic contribution of cultural industries at a national level. The report also identifies possible statistical limitations of this type of exercise and provides guidelines for measuring the economic contribution of cultural industries. This report complements the 2009 UNESCO FCS Handbook No.1.

This report consists of three chapters.

Chapter 1 discusses the concepts and terminology used when measuring the economic contribution of cultural industries. It explains how the 2009 UNESCO FCS methodology is used to define cultural industries and the UNESCO methodology for measuring their economic contribution (turnover, gross value added, employment, and business activities). Special methodological issues discussed in this chapter include the measurement of informal activities and employment, marketable and non-marketable activities in cultural industries and the identification and classification of the craft sector.

Chapter 2 presents the results of the case study that tested the proposed UNESCO-UIS methodology using data from Serbia for the period from 2008 to 2012.

Finally, Chapter 3 highlights the key issues to consider when measuring the economic contribution of cultural industries. It also includes an overview of how basic measures of economic contribution of cultural industries can be implemented at the national level, together with information about its statistical limitations. It concludes with recommendations for data improvement at national levels that will improve the capacity of countries to measure the economic contribution of cultural industries.

For a thorough policy review, please refer to the FCS Handbook No. 1 (UNESCO-UIS, 2012), which provides background information and a global literature review of policies related to the economic measurement of the culture sector.

#### 1. Key concepts, terminology and methodological issues

#### 1.1 Concepts and terminology

There is no generally accepted academic definition of cultural industries; indeed there is a variety of different meanings and scopes. The definitions include creatorship as a field as wide as possible, taking into account historical circumstances and economic-political perspectives and criteria. As such, it is not surprising that there is considerable debate over the appropriate academic definition of cultural and creative industries and about the different terms, concepts and criteria for demarcation, among other things. In this respect, two demarcation lines concerning this issue can be identified: the first is established by academic discourse, and the second by policy discourse. The cultural approach connected with the concept of cultural and creative industries is pursued within cultural studies, sociology and political economy, whilst the industry aspect is pursued within applied economics and practical policy studies (Throsby, 2010:90). The UNESCO Handbook on Measuring the Economic Contribution of Cultural Industries (UNESCO-UIS, 2012) (UNESCO FCS Handbook No. 1) concludes with a model and a classification system for cultural industries at the national level.

The definition of cultural industries is a primary task of each measurement exercise. In this case study, the term "cultural industries" is used in accordance with UNESCO's view as a set of activities "that produce and distribute cultural goods or services", which at the time they are considered as a specific attribute, use or purpose, "embody or convey cultural expressions irrespective of the commercial value they may have" (UNESCO-UIS, 2009). Pragmatic implementation of this definition covers any business activity wherein materialization of artistic and cultural creativity occurs in products whose aesthetic and/or symbolic character may not be central. This definition also accounts for a constitutive element (culture and art-related activities), as well as those production structures wherein creative skills (e.g. design, architecture, advertising etc.) are used in the production of economic goods, with the aesthetic dimension being secondary, but also fully compliant with their usability feature. Such a concept is based on several components: the fact that cultural expression is in the essence of these activities, that a symbolic message, artistic, aesthetic or spiritual values are created or conveyed through, and that those cultural goods and services may be subject to copyrights (UNESCO-UIS, 2009).

The UNESCO concept of cultural domains recognizes both the economic and social value of cultural expression and creativity. These cultural domains are defined as a "common set of economic and social activities that are traditionally recognized to be cultural" (UNESCO-UIS, 2009). The economic activities are built upon the core cultural industries and are much more closely related to cultural policy field demarcations. However, the heterogeneity of cultural industries and the extensive composition of sub-sectors often create the need for measuring their multiple effects on the economy, especially those from partial cultural industries. These cultural domains are very familiar to the sector and branches of industry. Nevertheless, they are not created according to the similarity of production processes and produced cultural goods and services, but according to the culture cycle, which captures all of the different phases of the creation, production and dissemination of culture. In this instance, several activities that are different in the production process, or that do not produce similar goods can be part of the same cultural domains. The cultural cycle includes five stages: creation - originating and authoring of ideas and content; production - the reproduction of cultural content; dissemination dissemination of the cultural products to consumers and exhibitors; exhibition/transmission - the place of consumption and access to consume; consumption - process of consuming or participating in cultural activities (UNESCO-UIS, 2009).

In addition, the 2009 UNESCO FCS offers a broader picture of the potential effects of culture on the economy by introducing activities, known as related domains, and equipment and supporting materials for both cultural and related domains. This shows how cultural products and services are created and transmitted, as well as the effects of cultural industries in the three ways they contribute to the economy. The first way is generated through activities that are not considered as cultural, but contain cultural elements; the second, through activities that produce equipment and supporting materials for cultural domains and the third, through activities that produce equipment and supporting material for related domains.

RELATED DOMAINS CULTURAL DOMAINS E. AUDIO-VISUAL G. TOURISM D. BOOKS and A. CULTURAL and NATURAL B. PERFORMANCE RECREATION and CRAFTS and
INTERACTIVE
MEDIA CREATIVE HERITAGE SERVICES Charter travel and CELEBRATION Sports Fine Arts and tourist Museums (also Newspaper and Physical fitness Fashion Design Photography services **Cultural industries** Film and Video and well being Crafts Other printed - Amusement and Theme Performing Arts TV and Radio Hospitality and also Internet live Festivals, Fairs Library (also Parks Gambling Internet Book Fairs Video Games **INTANGIBLE CULTURAL HERITAGE** INTANGIBLE CULTURAL (oral traditions and expressions, rituals, languages, social practices) HERITAGE EDUCATION and TRAINING **EDUCATION and TRAINING** ARCHIVING and PRESERVING **ARCHIVING and PRESERVING** FOUIPMENT and SUPPORTING

Table 1. UNESCO cultural industries sector framework: FCS domains

Several terms are used when discussing measurement of the economic contribution of cultural industries. These common terms are defined in the section below.

The economic contribution is a descriptive concept, used for quantification of the economic dimension of cultural industries and the gross changes in their economic activity. "It is used to statistically demonstrate the economic contribution of cultural industries if economic output is being considered, and if the gross domestic product (GDP) of a country in a given year is X, how much of X is "contributed" by the cultural industries?" (UNESCO-UIS, 2012:18)

GDP is the most significant macroeconomic aggregate within the System of National Accounts, which represents the result of production activities of all residential institutional units. Usually, institutional units are enterprises and non-profit organizations. Production cover by GDP includes material production and services and it is the indicator of national economic activities that is calculated at the overall economic level.

Gross value added (GVA) is defined as a measure of the value of goods and services produced in industry. As the taxes on products and services and subsidies can be calculated only at the level of whole economy, GVA is mostly a measure used for measuring and analysing the sub-

sectorial structure of an industry or gross output of entities at different levels of the economy (sectorial, regional, local, etc.).

Economic size analysis is a methodological approach that shows how much economic activity is associated with cultural industries. It uses measures from "the System of National Accounts (SNA) for estimating the direct contribution of cultural industries in the generation of basic macroeconomic aggregates (gross value added, employment, fixed capital formation, etc.) and to track the gross changes in the economic activity of cultural industries" (UNESCO-UIS, 2012: 20). It provides a more general picture of the role that cultural industries play in the economy. The word "size" in this analysis reflects the primary aim of measuring, which is usually to determine the economic size of cultural industries and their share in the performance of the economy.

Structural analysis of cultural industries "consists of different analysing techniques for studying the structure of cultural industries, primarily those concerning the distribution of macroeconomic aggregates by sub-sectors, groups of stakeholders (authors, producers, distributors, etc.) or different stages of the value chain" (UNESCO-UIS, 2012: 20). It can complement structural analysis. Structural analysis is an interpretation of the specific policy, market and economic contexts. "If the structural analysis has a specific purpose, it can be carried out in two ways: by identifying and showing the relationship between different stages of the value chain in cultural industries or different value chain players (value chain analysis) or analysing the competitiveness of cultural industries and factors associated with them (cluster analysis)" (UNESCO-UIS, 2012: 20).

An employed person is someone who has a job in a productive activity within the production boundary of System of National Accounts (enterprises, governmental and non-profit organizations, cooperatives). The statistical definition includes persons aged 15 or over who performed any kind of work for a wage or profit for at least one hour during the reference week or persons who were not working, but have jobs from which they were temporary absent (ILO, 1982). Employment can also be measured by administrative sources, and in that case an employed person is someone who has an official job (by employment contract) in a productive activity within the production boundary of System of National Accounts.

Employment is the number of employed people who entered into a labour relationship with an employer, as well as self-employed people in the instance of a private entrepreneur. In the case of the Labour Force Survey, employment also covers informally employed persons, such as working household members and unpaid family workers or supporting household members.<sup>1</sup> (ILO, 1982)

Enterprises are institutional units with an aim to produce goods and services for the market. In statistical terms, this indicator includes the total number of enterprises that were active during one year. Enterprises can be organized as a private sole property enterprises, limited companies, joint stock companies, etc.

More precisely, ILO defines employment as a "persons in employment comprise all persons above a specified age who during a specified brief period, either one week or one day, were in the following categories: paid employment and self-employment". (ILO, 1982a).

An entrepreneur is a physical person who operates in some economic activities (sole proprietorship). A special category of entrepreneurs is self-employed persons who are defined as persons who are the sole or joint owners of the unincorporated enterprises in which they work.

A non-profit organization is an institutional unit founded by corporations, households or state institutions. The term non-profit organization demonstrates that members managing these organizations have no financial benefits from their operation i.e. they cannot participate in the distribution of profit, since the entire operating surplus is re-invested in the organization's operation. Non-profit organizations in cultural industries are most commonly organized in non-market production, so that their business operation expenses are covered by donations, whilst sales of services in the market is rather less frequent. They can be divided into those controlled by the state (public cultural institutions, public cultural companies) and those rendering services to households (cultural associations, clubs, amateur societies, professional associations in cultural industries etc.).<sup>2</sup>

Labour productivity is the gross value added per person employed and it is a basic indicator of measuring productivity. It is calculated as gross value added in an industry divided by the number of persons employed in that industry.

#### 1.2 Identification and classification of cultural industries

There are different approaches for identifying and classifying cultural industries. The two main approaches are: the functional classification and the statistical classification of cultural industries. At the international level, the standard for identification and classification of cultural industries is the International Standard Industrial Classification of All Economic Activities (ISIC). It is the basic element of international system for classification of economic activities, which enables the comparison of economic statistics produced by different institutions. This system usually provides countries with a different level of differentiation of economic activities. In many countries, the degree of differentiation is at 4-digit level. At the regional level, ISIC can be transformed into different regionally oriented statistical classifications such as Statistical Classification of Economic Activities in the European Community (NACE), North American Industry Classification System (NAICS), Australian and New Zealand Standard Industrial Classification (ANZSIC), Classification of Activities of AFRISTAT Member States [Nomenclature d'Activités des États Membres d'AFRISTAT (NAEMA)], together with classifications at the national level.

Many cultural industries are found in two sectors: Information and communication; and Arts, entertainment and recreation. In these two sectors almost all activities, services and goods produced by cultural industries are represented, whether they were produced by industrial or artisanal process. For example, there is a huge tendency in national industrial statistical systems to adopt innovative industrial groupings in accordance with the ISIC Revision 4 (United Nations, 2008). This has resulted in the reclassification of manufacturing industries to give greater visibility to the new information sector that includes sub-sectors such as the publishing industry, the motion picture and sound recording industry, broadcasting and telecommunication industries and information and data services.

<sup>&</sup>lt;sup>2</sup> For discussion about non-profit organizations, see SNA (2008): 455-456.

ISIC provides a standard way of grouping of economic activities, which is not necessarily aligned with the data requirements to measure cultural economy, which may cross the boundaries of the existing ISIC categories. A compilation of cultural industries in statistical sense required a reclassification of activities from traditional industrial sectors to the cultural industries model. This means that it is necessary to create alternative aggregation to measure the economic contribution of cultural industries and to provide a standard way of presenting these data. The cultural industries model presented in this Handbook differs from the standard industrial classification grouping because the integration of economic activities in cultural industries domains is based on the cultural cycle, unlike ISIC, which uses criteria of similarities in producing and providing goods and services.

For overall economic size analysis, working with groups of activities (3-digit level or with 2-digit level) is acceptable, but for an in-depth sub-sectorial analysis of cultural industries, it is necessary to work with classes (4-digit level). Enterprises and organizations are classified by main activities that contribute the most to the value added. The traditional (and usual) method is that the principal activity is the one accounting for 50% or more of the income or value added of enterprises and organizations<sup>3</sup>. In the statistical system, the main activity appears as a main criterion for registration of an entity. In practice, an entity can make a mistake when classifying its activities; or it can perform many activities that are not only in the cultural industries. Moreover, an entity can be registered for other activities and perform some in the cultural industries. The main problem in measuring economic contribution is identification of the value added or income of the main activity. Usually, there is no mechanism for controlling the main activity or for tracking automatic changes of main activities following changes in generation of income from certain activities. Some enterprises can generate the value added from other activities much more than from main activities; in financial reports, it is not obvious which activities generated more value added. This problem appears if an entity is registered for cultural industries as a main activity, but it performs also non-cultural activities as secondary. In this case, generated income and value added from other activities will be described as income of cultural industries. In some cases, this can create the wrong picture about economic volume created in cultural industries. The same situation can appear if an entity undertook several activities in cultural industries (cinema, film production, library, advertising)<sup>4</sup> or if there is no specific Standard Industrial Classification (SIC) code for some activities (for example, amateur arts, design, crafts, or separate codes for retail sale of music and retail sale of video recordings in specialized stores).<sup>5</sup> For example, some entities can be included in more than one class of ISIC. This is a typical situation in the creative industries market where vertical, horizontal or mixed of integration of businesses are present. In this case, it will not be possible to desegregate income from different cultural industries and to ascribe it to relevant domains in measuring their economic contribution. Those shortcomings can result in a reduced analytical value of subsectorial economic analysis, but in general, this will only slightly impair the general picture about economic characteristics of the whole sector.

For more information see: United Nations (2008). *International Standard Industrial Classification of All Economic Activites (ISIC) Rev. 4.* Series M No. 4/Rev.4: New York: UN, p. 13.

For example, some producers can produce several cultural services or goods: in some countries the film industry is constituated about 70% of its output while the remaining 30% could include other products such as commercial videos.

For economic analysis of cultural indutries, "retail sale of music and video recording" activities should be divided between two cultural domains: retail sales of music is normally part of the performances and celebration domain, whilevideo recording is included in the audiovisual and interactive media domain.

**Table 2** presents the baseline framework for core cultural industries in accordance with UNESCO FCS (2009), which is used in this case study.

Table 2. Baseline framework of core cultural industries

ISIC rev 4.	NACE Rev. 2	NACE Rev. 1	Description		
Cultural and Natural Heritage					
9000	9000	9231	Creative arts and entertainment activities		
9012	9102	9251	Museum activities		
9013	9103	9252	Botanical and zoo garden		
4774	4779	525	Retail sale of second-hand goods		
Performanc	e and Celebrati	on			
9000	9000	9231	Creative arts and entertainment activities		
3220	3220	363	Manufacturing musical instruments		
5920	5920	2231	Sound recording and music publishing		
4762	4763	5248	Retail sale of music and video recordings		
Visual Arts					
9000	9000	9231	Creative arts and entertainment activities		
7220	7220	1	Research and experimental development		
7420	7420	7481	Photograph activities		
3212	3212	3622	Manufacture of jewellery		
5819	5819	2215	Other publishing activities		
Books and					
5811	5811	2211	Book publishing		
5813	5813, 5814	2212, 2213	Publishing of newspapers, journals		
5819	5819	2215	Other publishing activities		
6391	6391	924	News agencies		
6399	6311	723	Other information activities		
9101	9101	9253	Library and archives activities		
4716	4761.2	5247	Retail sale of books, newspapers		
Audiovisua	l and Interactive	e Media			
9000	9000	9231	Creative arts and entertainment activities		
5820	5820	7220	Softer publishing		
5911	5911	9211	Motion picture, video and television production		
5912	5912	9211	Motion picture, video and television post- production		
5913	5913	9212	motion picture, video and television distribution		
5920	5920	2231	Sound recording and music publishing		
5914	5914	9213	Motion picture projection		
6010	6010	9220	Radio broadcasting		
6020	6020	6420	Television programming		
6312	6312	7240	Web portals		
6391	6391	9240	News agencies		
7722	7722	7140	Renting of video tapes and disks		
4762	4763	5248	Retail sale of music and video recordings		
4791	4791	5261	Retail sale via mail order		
Design and	Design and Creative Services				
7410	7410	/	Specialized design activities		
7310	7310, 7320	7440	Advertising		
7110	7110 <sup>°</sup>	7420	Architectural and engineering activities		
85	Education		Only cultural and art education		

In general, the industrial classification is often a limiting factor of precise measurement of the economic contribution of cultural industries. The limitation is caused by differences between cultural activities in practice and the industrial classification, as well as a limit between functional understanding of cultural industries and statistical classification.

The statistical classification of industry keeps pace with the industrial change. It provides detailed coverage of the traditional sectors, such us manufacturing. Several activities are well described in ISIC, including design, post-production activities, multimedia, visual arts, live entertainment activities, while some activities are not included. In some countries, this limitation was addressed by using more detailed level of activities; in Germany, for example, special statistical codes or sub-codes were created for the activities of composers. In Italy, similar steps were taken for visual arts or design (ESSnet-Culture, 2011: 65). Another challenge is that many cultural industries can be identified only at the highest level of disaggregation (4-digit level) and this creates difficulties due to the fact that national statistics are often available for industry sectors at the lowest level of aggregation (usually, 2-digit level).

The main difficulty with the modelling of cultural industries is to link statistical and functional classifications in each domain. This can be done at the theoretical level, but in practice it is sometimes difficult to implement this kind of approach, especially in the emerging cultural industries market where the value chain in cultural industries is very small and simple or where there is no specialization of cultural industries. There are also challenges in large markets where there are vertically or horizontally integrated companies. In the Framework for Cultural Statistics (UNESCO-UIS, 2009: 22) it states that "the review of cultural statistics around the world shows that there is a consensus about the idea that culture is the result of group identifiable constituent activities". However, there is a lack of agreement about how to group those activities into domains and which functions should be included in the analysis of cultural industries.

The measurement matrix presented in **Table 3** gives a general framework for linking statistical and functional classifications in each domain in accordance with the UNESCO FCS (UNESCO-UIS, 2009). This framework starts with domains in which activities are grouped according to functions. Each activity is assigned an appropriate SIC code. This matrix should be used with the baseline measure of economic contribution of cultural industries and, depending on available data, expanded with information on public financing, export or other information relevant for policymaking.

**Table 3. Measurement matrix** 

<b>Cultural Domain</b>	Creation	Production	Dissemination/ Transmission	Exhibition/ Reception
Cultural and Natural Heritage	9000 - Creative arts and entertainment activities	9102 - Museum activities 9103 - Botanical and zoo garden	4774 - Retail sale of second-hand goods	Reception
Performance and Celebration	9000 - Creative arts and entertainment activities	3220 - Manufacturing musical instruments 5920 - Sound recording and music publishing	4762 - Retail sale of music and video recordings	
Visual Arts and Crafts	9000 - Creative arts and entertainment activities 7220 - Research and experimental development	7420 - Photograph activities 5819 - Other publishing activities 3211 - Manufacturing of jewellery		
Books and Press		5811 - Book publishing 5813 - Publishing of newspapers, journals 5819 - Other publishing activities 6391 - News agencies	9101 - Library and archives activities	4761 - Retail sale of books, newspapers 6399 - Other information activities
Audiovisual and Interactive Media	9000 - Creative arts and entertainment activities	5820 - Software publishing 5911 - Motion picture, video and television production 5912 - Motion picture, video and television post-production 5920 - Sound recording and music publishing 6391 - News agencies	5913 - Motion picture, video and television distribution 6010 - Radio broadcasting 6020 - Television programming and broadcasting	5914 - Motion picture projection 6312 - Web portals 7722 - Renting video tapes and disks 4762 - Retail sale of music and video recordings 4791 - Retail sale via mail order
Design and Creative Services	7410 - Specialized design activities 7110 - Architectural and engineering activities	7310 - Advertising		

The most difficult issue in terms of practical implementation of this matrix is the compilation of economic information about creation and the allocation of the activities to different cultural industry domains. In several cases, these creation activities are primarily connected with authors and the primary market of artistic creativity. In many countries, organization of economic activities does not include these activities, since they are either organized by physical persons (authors), are below the census for registration, or are not allocated appropriate SIC code (for example writing cultural articles for newspapers, creation of drama works, creation of scripts etc.). For a lot of those activities, which cover the process of creation, there is only one ISIC code in the industrial classification - 9000 Artistic creation - from which it is not possible to extract different creation activities and to group them into the appropriate cultural industry domain without using some working criteria. For categories that are not recognized by ISIC or do not have a separate ISIC code, a survey model for exploring economic size and investigating other particularities is needed. The survey methodology is applied not only to gather in-depth information about some cultural activities, but also to calculate allocation factors and to obtain information about micro-enterprises that are too small to meet national statistical census criteria or major actors in cultural industries who are not subject to full financial reporting (for example, self-employed people, small organizations). The allocation factor is used to determine the proportion of cultural activities from non-cultural activities in an industrial classification group (for example, the proportion of specialized retail music product in the overall specialized retail network) or to divide value added and employment between the multiple cultural domains to which the activity belongs. As the allocation factors have a serious limitation, there are no clear solutions for them. For activities which are mainly connected with cultural industries, the allocation factor can be assumed to have equal weight in each domain or it can be calculated as a simple arithmetic calculation of average value added for each relevant domain. It can be also assumed based on investigation of a sample (group of enterprises that mostly comprise a certain branch). A certain level of homogeny between the sample and overall class can be assumed, but "the validity of the results will vary depending on the appropriateness of the construction of the algorithm used to construct the allocation factor" (OECD, 2007:17). The ESSnet Culture Group also recognized difficulties in the methodology for allocating cultural content to activities which are partially cultural. Its solution was to propose three cultural ranks: totally, mainly and partly cultural. The concept is based on the fact that different activities may include a greater or lesser proportion of theoretical cultural content, without quantifying cultural content level.6

By using the UNESCO FCS in modelling cultural industries, the problem of allocation factors in core cultural industries is not a serious problem. The activities which should be allocated to some degree to different domains are totally cultural, so the mistake that can appear in the proportion allocated to each domain to which they belong cannot affect the picture about economic performances of cultural industries or to change them a lot. Activities that required allocation of certain proportions to cultural industries domains are: Retail sale of second-hand goods (4779), Other publishing activities (5819), Creative, arts and entertainment activities (90), News agencies (63910), Sound recording and music publishing activities (59200), Retail sale of music and video recordings in specialized stores (47630), Art and cultural education (8530, 85220), and Research and experimental development in social sciences and humanities (72.20).

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<sup>&</sup>lt;sup>6</sup> For extended discussion, see ESS Net-Culture (2011).

Possible solutions for assumption of allocation factor value include:

- 1) Allocation of GVA and employment in equal proportion to each of the cultural industries domain to which it belongs;
- 2) Allocation of GVA and employment in total to the cultural industry domains that generate the highest GVA;
- 3) Allocation of GVA and employment proportionally based on the level of GVA of the cultural industry domain;
- 4) Allocation of GVA and employment using the value of technical coefficients from "I-O matrix" (if available) or coefficients from "Use and Supply Table" related to cost structure.
- 5) Allocation of GVA and employment based on the outcomes of structural investigation of cultural industry domains (business level, enterprises, primary activities, consultation with business leader focus group).

#### 1.3 Basic measures of economic contribution of cultural industries

The measurement of the economic contribution of cultural industries can be carried out using different methods, depending on the researchers' interests and available budget and the aim of an evidence-based study. At present, the statistics for cultural industries have not been harmonized in a systematic manner, and there is no unique statistical methodology, which often limits the possibility of an in-depth analysis of the economic dimension of cultural industries. Under these circumstances, methodologies for measuring the economic contribution of cultural industries can only be understood and interpreted in their specific contexts. Measuring economic contribution can improve understanding of supply, demand and other factors that influence the development of cultural industries, and ensure the efficiency and reliability of public policies related to cultural industries. In the future, this baseline system may offer robust statistics for a significant number of countries around the world.

The measures presented in Table 2 (UNESCO-UIS, 2009) can be seen as a baseline measurement framework for cultural industries. The measurement framework is based on several principles:

- Measurements are designed to be a continuous statistical process and to ensure continuity of updated data;
- ii) In many countries, those measures can be calculated using the existing data from Business Registers and do not require primary data collection;
- iii) Data can be comparable over time and with other countries;
- iv) Proposed baseline measures can be extracted at the local and regional levels; and
- v) The methodology for measuring economic contribution of cultural industries is aligned and consistent with the framework for national statistical data.

Usually those measures are available for 90% of total cultural industry domains. It is not possible to expect a high analytical level in countries that do not have basic statistics for cultural industries and where the measurement and estimation exercise can only be based on survey results. It is evident that when each measure is critically reviewed, certain limitations will appear. However, measuring the economic contribution of cultural industries should start at a broad level of economic measures and data, and with a certain level of flexibility.

Basic analysis of economic contribution will be based on three components:

<u>First component: GVA.</u> Monitoring of gross value added in cultural industries provides an overall picture of the economic power and economic importance of cultural industries for economic growth. A higher value of Gross Value Added and higher growth rate over the years demonstrate to the greater importance of this sector in generating GVA for the national economy. Analysis of the sub-sector composition of GVA indicates the level of supply and demand for cultural industries per domain, the climate for doing business in cultural industries, the economic potential of different domains. The domains can act as "accelerators" of the cultural industry growth. A comparison of GVA sub-sectoral measurements over time can be used as a tool for analysing structural shifts in cultural industries.

First component alternative: <u>Turnover</u>. For similar purposes, but with less analytical value than GVA, turnover can provide an indication of economic value and level of activity in cultural industries. It can be used when GVA cannot be calculated. Turnover indicators are not discussed in this handbook.

<u>Second component: Employment</u>. Monitoring of employment and its dynamics provides a picture of the potential of cultural industries for job creation. Analysis of sub-sector composition of employment indicates the level of supply and demand for the labour workforce, the employment potential of different domains, and the domains that can act as accelerators of the cultural industry employment growth.

Third component: Business activity. Monitoring of business activities in cultural industries can give us analytical insights into the cultural diversity of cultural industries as well as into the nature of entrepreneurship and the role of small- and medium sized enterprises. In general, measuring business activity gives a broader picture of business demography and demonstrates the level of competition, entrepreneurial spirit, and in some cases barriers or benefits from the cultural industry business environment. Furthermore, a variation of this measure can be used as a tool for analysing structural shifts, the level of supply of cultural product and services by different domains, and gaps in the value chain in different cultural industry domains. The number of start-ups and mortality can give an indication about turbulence in enterprise life cycle or subsector maturity, together with information on the business structure, contraction of market power or their diversification. It can serve the purpose of analysing similarities and differences between enterprises in cultural industries and in the rest of economy.

Basic Measures for measuring the economic contribution of cultural industries are given in **Table 4**. Those measures were also used for the exercise of measuring the economic contribution of cultural industries in Serbia.

Table 4. Basic measures for measuring the economic contribution of cultural industries

Indicator	Measure	Description		
Gross value	Gross value added/GDP of cultural industries or sub-sectors	Gross value added/GDP of cultural industries or sub-sectors in absolute terms		
added	Gross value added/GDP of cultural industries in relative terms	Share of cultural industries value added/GDP in GVA/GDP of total economy (%)		
	Distribution of gross value added/GDP by sub-sectors	Share of cultural industries sub-sectors in total gross value added/GDP of cultural industries in absolute and relative terms		
Turnover	Turnover of cultural industries or subsectors	Turnover of cultural industries or subsectors in absolute terms		
(alternative)	Turnover of cultural industries in relative terms	Share of cultural industries turnover in turnover of total economy (%)		
	Turnover by sub-sectors	Share of cultural industries sub-sectors in total turnover of cultural industries in absolute and relative terms		
Employment	Contribution of cultural industries employment to total employment	Share of cultural industries employees in total employment (%)		
	Distribution of employment in cultural industries sub-sectors	Share of cultural industries sub-sectors' employment in total employment in cultural industries in absolute and relative terms		
	Volume and share of self-employment	Number of self-employment jobs/share of self-employment in total self-employment jobs in economy		
	Labour productivity in cultural industries	GVA in cultural industries per employee		
Business	Stock of business	Number of businesses by size in cultural industries		
activity	Distribution of businesses by subsector	Number of businesses by size in cultural industry sub-sectors		
	Business start-ups	Number of new businesses in cultural industries		
	Business mortality	Number of closed businesses in cultural industries		
	Distribution of start-ups by sub-sector	Number of new businesses in cultural industry sub-sectors		
	Distribution of business mortality	Number of closed businesses in cultural industry sub-sectors		

#### 1.3.1 Measurement of Gross Value Added

GVA is one of the main macroeconomic aggregates that are calculated in accordance with the System of National Accounts (SNA). In national statistics, calculation of this macroeconomic aggregate is usually based on the System of National Accounts 1993 (SNA 1993) or the System of National Accounts (SNA 2008). The System of National Accounts is an internationally accepted standard for macroeconomic accounts based on the broader concept of production that includes material production and services as well as non-material services. The main indicators of economic activities (with a very similar analytical value) are GVA and GDP. These measures represent economic activities at the national level and show economic activities of resident institutional units in a given year. A key difference between those two indicators is that GVA includes subsidies and excludes direct taxes. As the taxes on products and services and subsidies can be calculated only for the whole economy, GVA is often used for measuring and analysing the sub-sectorial structure of an industry or gross output of entities at different levels of the economy (national, regional, local, etc.). The value added can be calculated in Gross and Net amounts. GVA is the value of output minus the value of intermediate consumption, whilst value added is the GVA minus consumption of fixed capital. Since the value added represents a new or added value created by an industry, it should also be calculated in net terms. However, in practice, it is often too difficult to do so; hence, in the existing statistical or evidence-based studies, GVA is used.

There are three methods of calculating GVA: the production, expenditure and income approaches. Each approach should produce the same or similar values, but which approach will provide the most reliable results depends on the quality of data.

The production approach is the method of calculating GVA as the difference between output (production value) and intermediate consumption. The consumption of goods and services in the production process represents intermediate consumption.

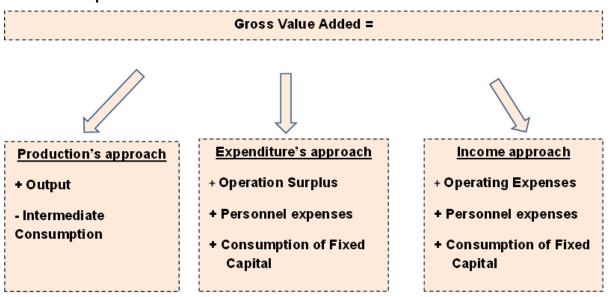
The expenditure approach is the method of calculating GVA as the sum of several aggregates: final consumption, gross fixed capital formation, changes in inventories, the acquisition, minus disposal of valuables and the net value of exports.

The income approach is the method of calculating GVA as the sum of compensation of employees, gross operating surplus, and mixed income. This is the most common approach for calculating GVA based on data from the Business Registry.

The GVA calculation can be based on input-output tables or industry estimates. In countries where there is not a lot of investment in the improvement of national statistics, GVA is estimated by a method of extrapolation using single indicators applied to a fixed base year. This means that the complex calculation of GVA is only used for the year that is selected to be the base year; in other years, GVA is calculated using an indicator for extrapolation. This means that estimation of GVA is based on an assumption that the relationship between outputs, intermediate consumption and value added is fixed and that the correlation between the indicator and value added dynamics is direct. This approach is appropriate for several activities in which production is not influenced by dynamic technological progress, the mix of inputs is the same for all activities and production will remain stable over time. As a correction for several assumptions that followed this method, extrapolation should be applied to a new fixed base year every two or three years, which will minimize errors in assumption of GVA. The turnover volume, prices, number of employees, etc. can be used as indicators for extrapolation. A direct

calculation of GVA is based on data from the financial report. For calculation, it is appropriate to use the income approach. However, sometimes data for calculation of GVA will not be directly available. In that case, it is possible to calculate approximate GVA as a proxy measure for GVA. This exercise can be done by calculating GVA using the expenditure approach. In the expenditure approach, a proxy can be used to approximate GVA based on data on employment and profit rates. Data on employment can be used for the assumption of the sum of compensation for employees (employees x average gross salary) plus profit (turnover x profit rate) as a proxy measure for operating surplus. Other methods can use turnover or total expenses (as a proxy of income) and the sum of compensation for employees (employees x average gross salary) if the cultural industry domain can be categorized as a non-marketable.

**Table 5. Composition of Gross Value Added** 



Output consists of services and goods that are produced during a certain activity. Production can be defined as creating benefits in both a tangible and intangible form (Miljković, 2001). It is realized through the investment of capital and work thus creating or adding a value to existing goods and services.

Intermediate Consumption consists of goods and services produced in other enterprises and used by institutional units in the production process. It can also consist of materials and intermediates transformed during the production process into new goods and services or finished products and services. Intermediate consumption is calculated as operating expenses minus depreciation expenses. Operating expenses can be extracted from financial statement reports and they can be calculated as total expenses minus financial expenses and extraordinary expenses.

Operating Surplus is the difference between business income and business expenses. The difference between operating surplus and mixed income depends on the type of enterprise. Mixed income is used when operating surplus cannot be distinguished from wage income, which is common in the assumption of GVA created by entrepreneurs. Based on data from financial statement reports, operating surplus is calculated as operating income minus operating expenses.

Personal expenses are the total remuneration and other employment compensation payable by enterprises. Employment compensation consists of salaries, social contributions and taxes. Personal expenses include expenses of an enterprise for employees in a gross amount. In financial statement reports, the value of this component can be obtained as the sum of wages, salaries, fees and taxes and social contributions.

Consumption of Fixed Capital is the reduction of the current value of fixed assets during the accounting period. This reduction of the current value of assets equally refers to both tangible and intangible assets.

Operating expenses is the cost of running a business. It can be extracted from financial statement reports and they can be calculated as total expenses minus financial expenses and extraordinary expenses.

Concerning the value, GVA can be calculated using current prices, basic prices and constant prices. The calculation of GVA using current prices represents the production value, which includes price instability or current inflation. The basic price is the amount receivable by a producer from the purchaser. GVA in the constant price is the price in one year that was used for the valorisation of GVA in the other years. Time series are usually constructed using constant prices. GVA can be calculated not only directly, by using constant prices, but also by using GVA deflators – values that can be used to measure GVA over time in terms of a base period. This approach enables the identification of changes in GVA resulting from changes in prices or volume of output. Calculation of GVA using current prices is known as a nominal GVA, while the GVA at the base year's prices is known as real GVA.

There are several limitations in the calculation of GVA, including:

That data for GVA calculation originates from registered activities, which means that this approach cannot capture the informal economy (the so-called "shadow economy").

Those cultural industries are a heterogeneous sector, and existing industries are already included in other categories. Often, some cultural industry fields are not supported by adequate analytical categories in existing industry classification, meaning that the GVA cannot be calculated at the domain level (for example, civil organizations in cultural industries). In this case, it is necessary to calculate GVA for each entity, which deals with certain cultural industries and then to add up all GVA values at the domain level. This is often impossible to achieve because it is a very expensive and long process and it cannot be acceptable as a systematic solution in measuring the economic contribution of cultural industries each year. Nevertheless, it can be employed in ad-hoc cultural industry exercises. For this mixed category of activities, it is necessary to calculate GVA for a reference year (base year) by extracting data from financial reports or by using data from total creative industries enterprises or activities, but in the future years calculating GVA can be based on using certain indicators for extrapolation. This will be possible to do for several activities in which production is not influenced by dynamic technological progress and "the mix of inputs is the same for all activities and it will remain stable over time. In this situation estimation of GVA can be based on an assumption that relation between outputs, intermediate consumption and value added is fixed and correlation between the indicator and value added dynamics is direct". This method can be accurate if the structure of cultural industries is not based on technological progress and will not be affected by

<sup>&</sup>lt;sup>7</sup> For an extensive discussion, see Statistical Office of the Republic of Serbia (2008).

changes in the production process and distribution, which is often the situation in crafts and other handmade cultural industries. For labour-intensive activities of cultural industries (for example, museums, cultural heritage, crafts, handmade cultural industries, libraries, archives, etc.) the rate of employment is often used for extrapolation. In the case of technologically oriented cultural industries, indicators which reflect the dynamics of contemporary technical progress, such as the capital coefficient, can be used for extrapolation; other adequate indicators by which it is possible to measure technological progress in cultural industries can also be used. The use of indicators for extrapolation and as alternative method for approximation of GVA value in cultural industries should be done with caution. Before selecting an indicator for extrapolation, it is recommended to test the correlation between the indicator and GVA in previous years. If a strong positive correlation exists, this indicator can be used and it will produce an appropriate GVA value. In the long term, this approach cannot be used as a standard method for measuring the economic contribution of cultural industries. The indicators should be revised every three to four years for labour-intensive cultural industry domains, and every two years for technologically oriented cultural industries, depending on the dynamics of technological progress within cultural industries. The main reason for revising indicators is the fact that starting from the base year, the indicator becomes less realistic for describing the current economic situation in cultural industries.

#### 1.3.2 Measurement of employment

One of the key measurement components of the economic contribution of cultural industries is employment. This measurement provides an insight into the structure of employment by sector and into the utilization of human resources in cultural industries. When employment is measured over time, it is possible to evaluate structural changes in employment in cultural industries. Indirectly derived measures, such as the employment rate, are widely used as an indicator of performance of the national economy. For many cultural industries, employment is quite different from the overall pattern of national economy employment. These kinds of jobs are often performed under service or copyright contracts, they can be performed from distant places, labour contracts are more flexible, several jobs with shorter working hours can be performed and these are often part time jobs. Frequently, many of these particularities are not captured by official employment statistics.

Labour data are usually available from Structural Business Statistics (SBS), Labour Force Surveys (LFS) or Population censuses. In accordance with the ILO definition, an employed person is someone who works for one hour during the reference period.

There is usually a difference between employment data from Structural Business Statistics and LFS. Data from SBS or other administrative sources are collected from reports by institutions or other organizations and only cover formal employment. In LFS, data are collected from members of households selected from a sample. LFS includes statements of persons about their employment status (with or without an employment contract) while SBS and other administrative sources record only persons with legal (official) employment contracts. The data on the number of employed from SBS and other administrative sources are typically collected on a regular basis (monthly, quarterly, annually). From the methodological point of view, LFS in European countries covers data on formal and informal employment; they include informal spheres of employment such as unincorporated organizations, unpaid family worker or supporting household members, in addition to employed persons in the institutional sphere.

Time intervals for labour statistics can differ, but such statistics are generally easily available at the two digits level of the industry class. Additional detailed information can be collected from SBS or directly from financial statement reports of entities, but the main weakness of this data is that it covers only official employment.

Normally, national statistical offices collect employment data, which correspond to the concept of economic activities and the industrial classification system. The existing data system only allows the identification of data on employment by principal activities. LFS as a source of data on employment can be a standard source for extracting cultural industry employment information due to the fact that they are done on regular basis, they contain many concepts are consistent with ILO concepts and they cover informal employment. In addition, a lot of analytical information can be obtained from LFS and in many countries; this information can be available only at a low level of aggregation (2 digits level). On the other hand, LFS samples size may not enable the measurement of the cultural labour force because data are not reliable. However, by comparing and contrasting these two data sources on employment, some relevant information about employment in cultural industries can be obtained. This is the approach taken by the UIS Survey of Cultural Employment in order to collect data.<sup>8</sup>

The existing data collection system cannot provide data on informal employment in sub-sectors of cultural industries. Furthermore, seasonal fluctuations in employment can occur in some cultural industries. A fluctuation can be visible in statistics depending on the survey period and timing of on- and off-season periods. A particular problem in employment statistics also lies in contribution of family workers in performing some cultural industry activities, which are typical employment forms for small crafts, home manufacturing or arts and crafts entrepreneurs. Volunteers and persons who provide unpaid services to other entities (especially non-profit cultural organizations, community festivals, etc.) also will not be registered as employed. Sector-specific registers can be used for these purposes such as artists' registers, craftsmen association, etc.

#### 1.3.3 Measurement of business activities

Information on business activities represents the element of structural business statistics in each country. Business activities are usually analysed by the size class of enterprises, the number of enterprises in each sub-sector, the number and distribution of start-ups and the number and distribution of mortality of business activities. The data are published according to the organizational form of registered entities. Usually, the Business Register, or another institution responsible for registration of business activities, is responsible for collecting these data. Business entities can have different organizational forms: companies (limited joint companies, joint stock companies, partnerships, etc.); entrepreneurs (sole proprietors and partnership proprietors), cooperatives, business associations, civil organizations, citizens associations, foundations, etc. The organizational form provides information about the structure and current status of cultural industries, but is frequently difficult to obtain it in a disaggregated form. A detailed insight into organizational forms at higher levels of analytics (4 digits) is not possible to obtain for all forms of organizations, except for companies, entrepreneurs, and public institutions. Civil organizations, cooperatives, citizens associations, foundations and

<sup>9</sup> For more explanation, see Hussmans (2007).

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For more information on UIS work on cultural employment, see http://www.uis.unesco.org/culture/Pages/cultural-employment.aspx

others often conduct various activities and are not classified according to the predominant business activity in the Business Register Agency, since they are legal entities that do not perform economic activities as their primary ones. In South-Eastern Europe, there are a lot of organizations that declare themselves as NGOs, but they actively operate in cultural industries. This is the case with festivals and other events of the visual arts, which are usually established by a civil organization, foundation or another not for profit institution; their cultural industry orientation cannot be seen from their registration data. Entities from those categories relevant to cultural industries can be found in the following industrial classification codes (NACE rev. 2), but they are mixed with other organizations outside of cultural industries:

9411 – Activities of business and employers and membership organizations.

9412 – Activities of professional membership organizations,

9499 – Activities of other membership organizations n.e.c.

A specific identification procedure (research of their missions, realized programs, usual operation etc.) is required for entities performing these activities, followed by the calculation of GVA and employment rate for each entity identified as relevant for cultural industries. This should be followed by the adding together of all GVAs at the domain level. However, the mere realization that such organizational forms exist to a large extent in cultural institutions certainly speaks to an insufficiently structured sector and its non-professionalization, and highlights that these are emerging markets in cultural industries. It is rather common that in unarranged markets of cultural industries, work is performed firstly at home. Then, when a critical mass of clients is formed and when the market develops, non-profit organizations or cooperatives are established and they can obtain grants from the State and other financial sources after which a decision on transformation into a company is finally made. Thus, for instance, a large part of the market of arts and in particular of visual arts comprises civil associations or other forms of nongovernmental organizations. Some music activities are not professionalized and are mainly performed by amateurs, who sometimes organize music festivals as a hobby, after which they grow into projects and ultimately are transformed into commercial business models. Due to this, this indicator can suffer from operational limitations, since comparisons can be different for different countries due to a different methodology to classify organizational forms. Moreover, it may be possible that the business register may not cover the whole cultural sector or that cultural industry entities cannot be identified at a high level of disaggregation or automatically by their industrial codes.

For statistical purposes, the size class is usually defined using the average number of employees during the financial year, the level of net turnover and/or the balance sheet total (value of properties). In accordance with those criteria, the size class of an enterprise in Europe is classified as follows:<sup>10</sup>

 Micro-enterprises with fewer than 10 persons employed, less than EUR 2 million total turnover and value of properties of less than EUR 2 million;

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Commission Recommendation of 6 May 2003 concerning the definition of micro, small and mediumsized enterprises (Recommendation 2003/361/EC). There is no international standard releted to the classification of business size. In North America, where countries use NAICS, size standard is based on NAICS general guidelines and rules and depends on the type of activities and branches.

- Small enterprises with 10 to 49 persons employed, less than EUR 10 million total turnover and value of properties of less than EUR 10 million;
- Medium-sized enterprises with 50 to 249 persons employed, less than EUR 50 million total turnover and average value of properties of less than EUR 43 million;
- Large enterprises with 250 or more persons employed, more than EUR 50 million total turnovers and value of properties of more than EUR 43 million; and
- Entrepreneurs (sole traders) are classified as small enterprises, independent of the number of employees.

#### 1.4 Specific issues in measuring the economic contribution of cultural industries

#### 1.4.1 Informal economic activities and employment in cultural industries

In many countries, cultural industries also operate in the shadow or informal economy". In those countries, cultural production often takes place in the informal economy, where statistical data are rare or inaccurate (e.g. Nigerian video economy, crafts in Africa, etc.). 11 This term describes the market production of cultural industries that are missed out in official estimates of GDP/GVA.

ILO defines the "informal economy" as "all economic activities by workers and economic units that are – in law or in practice – not covered or insufficiently covered by formal arrangements" (ILO, 2002). However, there are many definitions of informal economy depending on which aspect will be emphasized in each definition. For example, the fiscal definition stresses the tax issues in an informal economy (hiding sales by cultural industries); the legal definition highlights regulation issues in an informal economy (activities against existing laws); the employment definition emphasizes employment conditions in an informal economy (activities without employment contracts); and the statistical definition emphasizes the proportion of the economy which lack statistical data for measuring.

There are three main lines of definition informal economy (Becker, 2004:10):

- 1. The dualist: the informal economy is a separate marginal economy not directly linked to the formal economy, providing income or a safety net for the poor (ILO, 1972)
- 2. The structuralists: the informal economy is subordinated to the formal economy.
- 3. The legalists: informal work arrangement as a response to overregulation by government.

In the last ten years, discussion about the informal economy and its measurement was initiated by ILO, the World Bank and other international organizations. It has been emphasized that an informal economy can be created by the operation of informal enterprises who undertake economic activities outside of the formal economic flow (transaction in cash, without accounting system in place, rarely comply with trade and other regulations, etc.). They can frequently be found as unregistered family enterprises or micro-enterprises. The second way an informal economy can be created is by the hiring informal employees. In this way, the term informal economy covers the self-employed who have family businesses, and employees and employers in informal enterprises (Becker, 2004:13).

<sup>&</sup>lt;sup>11</sup> For more information, see McComb (2012) and Lobato (2010).

Methods for estimating the informal economy can be divided into 2 categories: direct (surveys, Tax Auditing) and indirect (Labour Analysis, Household Survey) methods. Surveys have often been used as a means for collecting information about the informal economy such as its size, characteristics and sub-sectorial structure. The most common criticism of surveys is that the success of this method is based on the respondents' willingness to give accurate answers or to cooperate in collecting data about the informal economy. Data on labour statistics can be a valuable source for information about informal employment. In many countries, Labour Force Surveys capture informal employment in different economic activities and based on this indicator, it is possible to estimate approximate GVA as a proxy measure for GVA (see Section 3.1). Some standardized approaches and estimation techniques already exist, such as those one presented in the Organisation for Economic Cooperation and Development (OECD) Handbook for Measurement of the Non-observed Economy (2002) or the ILO publication Measuring Informality: A Statistical Manual (2013). Nevertheless, but they are not entirely suitable for cultural industries.

In countries where a cultural industry informal economy exists, measurement tools and a policy-based indicator framework are needed, together with the systematic implementation of policy measures devoted to the registration of cultural industry enterprises and organizations. However, in many of the least developed countries, cultural industries are part of the informal economy, so it is quite difficult to get a real picture of their economic size. Wherever the informal sector is dominant in cultural industries, it will be essential to collect statistics through surveys or to assume it by using indirectly data from Labour Force Surveys.

#### 1.4.2 Market vs. non-market activities in cultural industries

The specific calculation of GVA is for non-marketable activities. The basic definition of nonmarketable production is that goods and services are not produced for the market. The amount of products and services offered by these activities are not determined by the relationship between supply and demand. They are delivered free of charge or at prices lower than economic ones. In practice, the non-marketable production of services rendered by the State and non-profit organizations is defined as production for other institutional units without sales incomes or with small sales incomes compared to production expenses. It is common for such sales to cover less than 50% of production costs. In the case of such organizations often present in cultural industries (especially in developing countries), the production value is input and is assumed to be equal to total production costs (ESA95, SNA, 1993). It is not easy to make a distinction between market and non-market producers during the process of measuring the economic contribution of cultural industries. For this purpose, it is necessary to check financial statement reports of enterprises and organizations to identify if market sales comprise more than 50% of their income. Usually, there are industry reports in which this information can be found for a lot of public institutions, as the analysis of structure of their income is part of public sector monitoring in many countries. In other cases, an evaluation can be carried out in an adhoc manner depending on the existing data:

For the entities that make a significant contribution to total domain income, but for which market income is less than 50% of the total income, calculation of GVA can be based on the method for the non-market sector (this can often be the case of single public broadcasting enterprises and public performance organizations);

The market position can be evaluated based on the structure of revenues for the first 50 entities in the domain or for those that participate in the total income of the domain with more than 70%.

If more than two thirds of entities have a market income of less than 50%, the whole domain can be treated as a non-market branch for the purpose of calculating GVA (see Serbian example).

Non-market services are usually provided by governments, private non-for profit institutions, NGOs, foundations and civil organizations. If the empirical observation and investigation of legal entities that operates in some cultural industries show dominance of those legal forms mentioned above, this is a sign that this domain can be recognized as non-marketable.

#### 1.4.3 Classification and identification of the crafts sector

In the past, crafts used to be a secondary source of earnings. The emergence of industrial production caused many of them to be substituted by industrial products and become the category of handicrafts, thus becoming a cultural phenomenon. The total turnover from crafts accounts for USD 2.3 billion worldwide, whilst the average annual market growth rate is about 25% (USAID, 2011) and the largest exporters are developing countries. This activity was mainly auxiliary when there was no other work. However, the development of tourism and growth of purchasing habits has led to this sector becoming the backbone of development of cultural industries in the majority of developing countries.

Crafts are the main sector without appropriate and systematic SIC codes. Furthermore, a lot of handicraft products are not identified separately in the main system of economic statistics. It is a very diverse sector and many economic activities that belong to the crafts sector are included in different sectors in the SIC classification. In addition to its symbolic focus on the field of cultural industries, the existing UNESCO FCS has to be practical in the sense of producing measurable and comparable international data. These two SIC codes do not encompass all art crafts activities.

In many countries, especially the developing ones, the crafts sector does not cover only art crafts, but also traditional crafts and handicrafts. Crafts are often classified by types of materials or by domains in which art crafts are essential (UNESCO, 1999). Originality, as well as artistic and creative components is the main characteristics of the crafts sector included in cultural industries. However, in many cases in the system of industrial classification it is difficult to make a distinction between handmade and original crafts and those produced by industrial means.

A framework for the crafts sector is presented in **Table 6**. This framework can be used for identifying the crafts sector in countries where it makes up a large part of cultural industries. In many cases, measuring the economic contribution of this sector requires the use of surveys and the collection of empirical/primary data. This is because it is often an informal economic sector; it is often organized as home production process, and it is difficult to identify. In addition, while the sector is divided into commercial and hobby manufacturing, it is composed of many small businesses which are not registered in the business register; and are often not under any obligation to submit a financial statement report for this kind of business. Usually, this kind of activities are performed by a person as their occupation; activities can be organized and performed as associations, cooperatives and collaborative platforms and registered as a mixed registration under the "activities of other membership organizations" code. 12

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<sup>&</sup>lt;sup>12</sup> International Standard Industrial Classification of All Economic Activites (ISIC), REV. 4. Statistical Papers, Series M, No. 4/Rev. 4. New York: United Nations, 2008.

Due to these shortcomings, it is necessary to create a systematic approach to measure the economic contribution of the crafts sector, such as mapping crafts within the existing economic sectors and creating a database on the crafts sector using data from associations and other directories, undertaking a survey to collect data on the economic performance of this sector, modelling GVA and employment statistics and analysing the economic contribution of the crafts sector. The approach for measuring the economic contribution of the crafts sector cannot be implemented without collecting primary data by means of surveys or observation, especially in developing countries.

Table 6. Framework for identification and classification of the crafts sector

Craft sector	NACE rev. 2	Description	ISIC 4	Label ISIC
Coppersmithing, pottery	23.41	Manufacture of ceramic and artistic products for household	2393	Manufacture of other porcelain and ceramic
copporation in g, powerly	23.49	Manufacture of other ceramic products	2000	products
Weaving, manufacture of	13.93	Manufacture of carpets and rugs	1393	Manufacture of carpets and rugs
tapestries and artistic weaving	13.92	Manufacture of textiles, except apparel	1392	Manufacture of made-up textile articles, except apparel
	13.20	Manufacture of fabrics	1312	Weaving of textiles
Manufacture of national costumes	14.13	Manufacture of other apparel	1410	Manufacture of wearing apparel, except fur apparel
Leather processing	15.11	Tanning and dressing of leather, dressing and dying of fur	1511	Tanning and dressing of leather; dressing and dyeing of fur
Hand engraving in leather	15.12	Manufacture of luggage, handbags and other products	1512	Manufacture of luggage, handbags and the like, saddlery and harness
Manufacture of clogs	15.20	Manufacture of footwear	1520	Manufacture of footwear
Carpentry, marquetry, engraving	16.29	Manufacture of products of wood , cork, straw and plaiting materials	1629	Manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials
Manufacture of matting	13.93	Manufacture of carpets and floor coverings	1393	Manufacture of carpets and rugs
Wool souvenirs	13.10	Weaving and spinning of textile fibres	1311	Preparation and spinning of textile fibres
Rope souvenirs	13.94	Manufacture of cordage, rope and netting	1394	Manufacture of cordage, rope, twine and netting
Stonecutting craft and products made of stone	23.70	Cutting, shaping and finishing of stone	2396	Cutting, shaping and finishing of stone
Basketware – wickerwork crafts and manufacture of products of straw, reed, plaiting etc.	16.29	Manufacture of other products of wood , cork, straw and plaiting materials	1629	Manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials
Waxing and gingerbread making crafts	32.99	Manufacture of other products	3290	Other manufacturing n.e.c.

Craft sector	NACE rev. 2	Description	ISIC 4	Label ISIC
Glass painting and products of unique glass, stained glass	23.13	Manufacture of hollow glass  Manufacture and processing of other glassware and technical glassware	2310	Manufacture of glass and glass products
Manufacture of artistic engravings	25.61	Treatment and coating of metals	2592	Treatment and coating of metals; machining
	25.99	Manufacture of other fabricated metal products	2599	Manufacture of other fabricated metal products n.e.c.
Artistic manufacture of items made of wrought iron	25.50	Forging, pressing, stamping and roll-forming of metal	2591	Forging, pressing, stamping and roll- forming of metal; powder metallurgy
	25.72	Manufacture of padlocks and locks	2593	Manufacture of cutlery, hand tools and general hardware
Textile painting	13.30	Finishing of textiles	1313	Finishing of textiles
	13.30	Finishing of textiles	1313	Finishing of textiles
Artistic embroidery	13.99	Manufacture of other textiles	1399	Manufacture of other textiles n.e.c.
Restoration of old books, artistic bookbinding	18.14	Bookbinding and similar services	1812	Service activities related to printing
Manufacture of souvenirs	32.99	Manufacture of other items	3290	Other manufacturing n.e.c.
Manufacture of items made of scrap leather	15.12	Manufacture of handbags (only part)	1512	Manufacture of luggage, handbags and the like, saddlery and harness
and textile	13.94	Manufacture of cordage, rope, twine etc.	1394	Manufacture of cordage, rope, twine and netting
Artistic jewellery and items	32.12	Manufacture of jewellery	3211	Manufacture of jewellery and related articles
Artistic embroidery, crocheting and items thereof	14.39	Manufacture of knitted and crocheted apparel	1430	Manufacture of knitted and crocheted apparel
Paper items, preparation of paper, textile, leather	17.22 17.29	Manufacture of eiderdowns for personal use  Manufacture of other paper and cardboard products	1709	Manufacture of other articles of paper and paperboard
Manufacture of artistic models	16.29	Manufacture of other products of wood , cork, straw and plaiting materials	1629	Manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials
	17.29	Manufacture of other paper and cardboard products	1709	Manufacture of other articles of paper and paperboard
	32.99	Manufacture of other items	3290	Other manufacturing n.e.c.
Manufacture of games and toys	32.40	Manufacture of games and toys	3240	Manufacture of games and toys
Contemporary crafts	74.10	Specialized design activities	7410	Specialized design activities

# 2. Measuring the economic contribution of cultural industries in Serbia

This section applies the UIS model presented in Table 2 to Serbia. This section provides interesting results for determining the weight of cultural industries in Serbia and also identifies the further work that needs to be done to get more accurate data. Two analytical methods are used, namely economic size analysis and structural analysis.

# 2.1 Methodological framework of quantifying economic contribution of cultural industries in Serbia

Baseline measures of the economic contribution of cultural industries cover the industries as presented in Table 2. Data for Serbia are extracted from the Business Register and financial statement reports submitted by entities registered in cultural industries in the period 2009–2012. Data from financial statement reports are available for entities registered in the following legal forms: enterprises, cooperatives, foundations, public enterprises and entrepreneurs (with income exceeding EUR 20,000). The data used for public institutions was the data from the regular statistical surveys, complex annual reports for users of budget resources (KGI 02) completed according to annual financial statements, and other available accounting records collected by the Statistical Office of the Republic of Serbia.

Civil organizations were the main challenge in calculating the economic contribution of cultural industries. They are classified in the group of activities based on memberships and have a diverse scope of work. It is very difficult to extract only civil organizations that operate in the field of cultural industries, due to mixed registrations in class 9499 – activities of other membership organizations. The economic indicators for civil organizations are extracted by researching each civil organization and its work. During the research process, the history of each organization, information about programmes and projects, web sites, and other sources were used. In this category, about 105 organizations have been found that can be recognized as relevant for economic analysis of cultural industries, but in the final calculation only 40 organizations have been taken in account. Investigation of their income and salary expenses showed that all of those organizations accounted for less than 0.01% of GVA of total cultural industries, thus they were not included in final calculation of GVA presented in section 2 and the Annex.

The GVA for cultural industries is calculated based on the records obtained from balance sheets of legal entities for the period 2009–2012, which are updated by partial records from financial reports statements for several enterprises. The analysis of companies has demonstrated that not all entities operating in creative industries perform certain business activities. In addition, certain known to perform their activities in cultural industries are registered for another business activity. This is most common in radio and television activities, where the enterprises can be registered in the Cable communications area (code 611, NACE rev. 2). The domain of radio and TV activities includes the public broadcasting company Radio Television of Serbia, as well as television companies PINK and Fox, which are registered for performing telecommunications services and cable distribution.

It should be noted that it is somewhat different from the GVA calculation performed by the Statistical Office of the Republic of Serbia both in terms of the calculation method and in terms of the data used for the calculation; however, the data obtained as a final result are comparable to the data of the Statistical Office.

For statistical purposes, the Statistical Office of the Republic of Serbia uses the production method to calculate GVA, which means that GVA of the sector, domains and the overall national economy is calculated as a sum of gross value added using basic prices (prices from 2002, defined as amounts obtained by producers from customers for produced goods and services, including taxes and subsidies received). The obtained amount increases at the overall economy level as a result of the tax on products, and is reduced by subsidies for products, in order to obtain the value of gross domestic product (Statistical Office of the Republic of Serbia, 2008). In order to finally obtain values in constant prices (prices from 2002 are relevant for the Serbian statistical purpose), gross value added based on basic prices is multiplied by industry production indexes, whilst their multiplication represents the gross value added in constant prices in 2002. When calculating GVA, the extrapolation method is applied by means of a fixed base year (2002) index, whilst industrial production indexes are used as extrapolation indexes for industrial sectors. Such a method is based on the assumption that the output, intermediate consumption and gross value added ratios are constant, and that the changes in indexes is directly co-related to the changes in the gross value added. 13 The calculation of GVA at constant prices with a fixed based year was applied until 2010. Since 2013, an additional method for calculation of GVA using constant prices has been used. GVA is now calculated at prices from the previous year. In this method, the previous year is considered as the base year and indicators are changed every year. Data source chaining means that data are chain linked to the reference year (reference year for Serbia is 2005).<sup>14</sup>

The extrapolation of the gross value added for the majority of services (including services in cultural industries) was carried out using input indicators, i.e. the level of change of the number of employees per year. From an analytical point of view, GVA and GDP identified by the Statistical Office of the Republic of Serbia have been extrapolated at the sector and domain level of classification of business activities. Audits of the GVA and GDP calculations based on current prices have been carried out several times; therefore these calculations have been harmonized and corrected. On the other hand, insufficient analysis of calculations (sectors and areas) limits the insight into the sectoral structure of GVA, including its generation in cultural industries, which is essentially the purpose of this analysis.

Therefore, the calculation for this report has been carried out according to the previous method and it includes the gross value added of areas, sectors, groups and sub-groups of the national economy obtained as a sum of employee compensations, operating surplus and consumption of fixed capital (depreciation). In the instance of non-market oriented production (State-owned creative industries and non-profit organizations, such as public institutions), the production value is input and it is assumed that it is equal to production costs. Non-market production herein includes the production by State-owned cultural industries (public cultural institutions and public companies) and by non-profit organizations, without sales revenues or with such sales revenues that are rather small compared with production costs. It also includes preservation of cultural heritage, museums, library, archives (sales revenues totalling approximately 9% of business revenues), performing arts, artistic and entertainment activities (sales revenues totalling about 8% to 20% of business revenues). Investigation about the

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<sup>&</sup>lt;sup>13</sup> For more explanation, see Statistical Office of the Republic of Serbia (2008).

<sup>&</sup>lt;sup>14</sup> For more explanation, see Statistical Office of the Republic of Serbia (2013).

market or non-market categorization was based on their financial statements or existing research reports.<sup>15</sup>

The gross value added of non-market services in cultural industries was obtained as a sum of operating expenses, employee compensations and consumption of fixed capital (depreciation). Concurrently to non-market production there is also market production in certain business activities, such as the case of screening cinematography and radio and television services. Screening cinematography was considered as market production given the dominant participation of private screening companies, as well as market prices applied in this domain even when the State is the producer of those services. GVA of radio and television activities has been calculated using the method for market activities, except for those of the public broadcasting company Radio Television of Serbia (which accounts for approximately 40% of generation in all structural business indicators for the domain) for which non-market production has been calculated. The resulting amount was then added to the total gross value added of the domain.

Professional artists or creative professionals are registered only in the registers of artistic associations. In 2013, there were 30 artistic associations in the registry of artists or other creative or cultural workers. Most artists and cultural workers are not registered as entrepreneurs, despite the fact that many of them act as entrepreneurs (for example, by selling paintings, sculptures, etc.). The reason for that is that the status of "independent artists" offers them a possibility to have the State cover social contributions at a minimal base (about EUR 2,500 per year). They would lose this kind of benefit if they were to register themselves as entrepreneurs. It is not possible to calculate the income and value added from independent artists or from entrepreneurs with an income below EUR 20,000. The GVA data presented in the tables below represent the economic performance of registered entrepreneurs in the business registry.

Statistics on the labour market in Serbia are produced based on the Semi-annual survey of employees and their salaries and wages performed by the Statistical Office of the Republic of Serbia and on the 2008-based Labour Force Survey. For the purpose of this analysis, alternative good data have been taken from financial statement reports. These data were used for calculating the employment level in cultural industries, together with data from the Semi-annual survey of employees and their salaries and wages for public sector workers and entrepreneurs due to their relevancy for employment in those fields. The results of that survey are compared with data from the Labour Force Survey to investigate levels of informal employment. Concerning methodology, the Labour Force Survey surveys randomly selected household members from 6,500 Serbian households, while the Semi-annual survey of employees and their salaries and wages is based on administrative sources from enterprises, organizations, institutions and other relevant bodies. In Labour Force Surveys, the unit of observation is the randomly selected household member and the main variable is the unit's

For public institutions, the report on Local cultural policy reports (2011) from Centre from research in cultural development, Belgrade was used. This report covers surveying investigation about financial position of public cultural institutions in Serbia. In some parts, this report is incomplete, but it is useful for determination of business to market or non-market production. Reports of Belgrade Secretary for culture regarding Belgrade about cultural institution outcomes and their financial position as well as statistics on budgetary users from Statistical Office of the Republic of Serbia were also used.

Operating surplus in the instance of non-market producers equals to 0. On methodological explanations of the gross value added calculations according to the revenue method, see Miljkovic (2001): 71-87.

employment status. In Semi-annual surveys of employees' wages and salaries, organizations' legal entities are the units of observation and the officially registered number of employed persons is the main variable. This latter survey does not cover employees in the Ministry of Defence and Ministry of Interior. In addition, data on entrepreneurs and their employees are collected by the Republic Health Insurance Fund. The definitions of employment differ in the two surveys, but these differences do not hamper comparability due to the selective use of the data and to the comparison and contrast with data from financial statement reports.

Both data sets show the number of employed persons at the end of the year. This is calculated using data on semi-annual averages in the case of the Labour Force Survey and using 12 month averages in the case of the Semi-annual survey. For employment statistics from the latter survey (as those taken from financial statement reports), the term *employed* covers "persons who entered into a labour relation with an employer (enterprise, institution, organization), as well as self-employed in case of a private entrepreneur - persons working under employment contracts or contracts on performing temporary but occasional jobs are not considered to be employed".<sup>17</sup> In the Labour Force Survey, an employed person is "a person who works for at least an hour for remuneration, as well as a person with a job who, in the week in question, was absent from work". It covers self-employed, employees and unpaid family workers. That survey does not investigate the formality of employment. Rather it focuses solely on real activity in the week in question. The existing employment statistics for this survey follow occupations at a high level of aggregation (1-digit level); it does not enable an analysis of groups of creative jobs.

In Serbia, business activities are classified by the enterprise size class. For statistical purposes, the size classes are defined by the average number of employees during a financial year, the level of net turnover, and/or the balance sheet total (value of properties). In accordance with those criteria, size classes of enterprises are classified as follow:<sup>19</sup>

- Micro enterprises with less than 10 persons employed, less than EUR 2.5 million of total turnover, and less than EUR 1 million value of properties.
- Small enterprises with 10 to 49 persons employed, less than EUR 2.5 million of total turnover, and less than EUR 1 million value of properties.
- Medium sized enterprises with 50 to 249 persons employed, EUR 2.5 to EUR 10 million of total turnover, and an average value of properties between EUR 1 million and EUR 5 million.
- Large enterprises with 250 or more persons employed, more than EUR 10 million of total turnover, and more than EUR 5 million value of properties.
- Entrepreneurs are classified as small enterprises, regardless of the number of employees.

Allocation factors for domains of cultural industries such as other publishing activities (5819), creative arts and entertainment activities (900), news agencies (6391), sound recording and music publishing (5920), retail sale of music and video recordings (4763), and research and

<sup>&</sup>lt;sup>17</sup> For more information, see Statistical Office of the Republic of Serbia (2013).

<sup>&</sup>lt;sup>18</sup> See Statistical Office of the Republic of Serbia (2012).

<sup>&</sup>lt;sup>19</sup> In accordance with Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises (2003/361/EC)

experimental development in humanities (72.2) are calculated based on the examined structure of businesses in each of the above-mentioned domains.

For news agencies (6391) the model of allocation of an equal proportion to each cultural industry domain it belongs to was used. The allocation factor is 0.5, due to the fact that both audio-visual industries and newspapers use an equal proportion of news agency services.

For retail sale of music and video recordings (4763) the allocation was carried out based on the list of the first 50 publishers of audio and visual records, using ISAN/V-ISAN data from the National Library of Serbia, which is responsible for registering music and video records. I According to the above-mentioned data, in the period of 2009–2012, video records accounted for about 70% of the total registered records whilst 30% was music. Therefore, the allocation factor for part of retail sale of music and video recordings (4763) allocated to the domain Performances and Celebration was 30%, with the remaining 70% being allocated to Audiovisual and Interactive Media.

For sound recording and music publishing (5920), the allocation was entirely to the Performances and Celebration domains of cultural industries due to the absence of specialisation in music production for film industries and the fact that film music production does not exist in the Serbian cultural industry market. All of the enterprises and recordings are connected with commercial music records.

For Creative Arts and Entertainment activities (900) the allocation was made based on the examination the kind of activities they produce as well as economic performances of different organizations registered for these activities, together with their income and number of employees. In this regard, it was discovered that almost 70% of these activities are Performing arts, 25% Visual arts and Crafts, and the remaining 5% is a combination of domain Cultural and Natural Heritage and domain Audiovisual and Interactive Media. Allocation factors represented by those values are 0.7 for Performances and Celebration, 0.25 for Visual arts and crafts, and 0.025 for both Audiovisual and Interactive Media and Cultural and Natural Heritage.

For other publishing activities (5819), the allocation factor was calculated based on empirical investigation of the first 25 enterprises (with a contribution of 80% sales income) and their main category of clients. In this regard, it was discovered that those activities are mainly focused on providing services to the visual art field than to Book and Publishing. It is assumed that 70% of total income came from printing posters, cards and advertising material, while only 30% came from Book and Press activities.

Retail sale of second hand goods (4779) is a very diverse activity, but by examining the main organizations and their activities it was found that, in the case of entities registered in this domain, many operated as antiques shops and second hand stores or places. The allocation factor for this domain was 1.

Data on research and experimental development (72) are available at the 2-digit level and cover research and experimental development in natural science (72.1) and research and experimental development in humanities (72.2). Assumption of allocation coefficient was made based on the number of research institutions, the participation of their income in the total income of the research institution, and the number of employees. Outcome of this analysis was that allocation factor was at 0.33 for all macroeconomic indicators connected to activity 72.2.

For Education (85) data were insufficient for precise assumption of allocation factors. Therefore, estimation is based on the participation of pupils and students in art and cultural fields of education compared with the total number of pupils and students in educational fields. Restrictive criteria were used, producing an allocation factor of 0.1.

For assumption of GVA and employment in related domains and of equipment and supporting materials in cultural domains, basic information for the construction of initial Supply and Demand Tables in Serbia was used. They were produced in 2013 by the Statistical Office of the Republic of Serbia (2013a) in the process of investigation of the structure of income and expenditures of economic subjects by activity. The coefficients of cost structure were calculated at the 2-digit level and they were used to estimate the total value of GVA in the abovementioned fields. The following coefficients were used for estimation:<sup>20</sup>

Related domains 49: Transport and storage - 14.79%; 55: Accommodation and foods - 7.21%; 79: administrative and support services - 22.59%; 93: Art, entertainment and recreational services - 13%;

Equipment and supporting material 18: Printing services - 32.7; 68%; 26: Computer, optical products - 18.12%; 20: Chemicals and chemical products - 3.25%; 46-47: Wholesale and retail trade - 12.08%; 61: Telecommunication -12.55%; 62-63: IT and other information services - 7.17%; 95: Other services - 3.77%; 33: Other manufacturing products - 4.86%.

Equipment and supporting materials of related domains: 14-15: Textile, clothing and leather products - 1.4%; 28: Manufacture of machinery and equipment - 1.45%; 30-32: Transport equipment - 12%; 42: Construction – 13 %.

#### 2.2. Economic size analysis of cultural industries in Serbia

#### 2.2.1 Business size

The number of legal entities in creative industries in Serbia was estimated to be 10,423 in 2012, including about 4,850 enterprises (about 5.2% of total number of enterprises), 5,046 entrepreneurs (about 2.5% of total number of entrepreneurs), <sup>21</sup> and 527 public institutions. Independent entrepreneurship initiatives had a rather small scope in Serbian cultural industries. According to the records from 2012, entrepreneurs in the cultural industries that submitted financial reports amounted to merely 4.8% of the total number of entrepreneurs (those obliged

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Coefficients were extracted for different sizes of enterprises in the branch as follows: Value of coefficients represents the sum of the coefficient value (cost structure ratio) in the branch: publishing, audiovisual and broadcasting services (58-60); education services (80); arts, entertainment and recreation services (90-93); Scientific research and development (72); advertising and research (73-75). Coefficients were applied to GVA of related domains, equipment and supporting material and equipment and supporting materials of related domains. Above-mentioned GVA (in constant prices, 2002) is extracted from meta-data of the Statistical Office of The Republic of Serbia (2013).

Data on entrepreneurs cover two categories of entrepreneurs: the first for those that earn less than 20,000 Euros of total income and which are not obliged to keep bookkeeping records or preparei financial reports. The second covers those that earn more than 20,000 Euros per year and are obliged to keep bookkeeping records and produce financial reports. Of the total number of entrepreneurs that submit financial reports (19,650), cultural industry entrepreneurs (with submission of financial reports) accounts for about 4.8% (1,053). Of the total number of entrepreneurs that do not submit financial reports (196,805), cultural industry entrepreneurs (without submission of financial reports) account for about 2.2% (4,400).

to submit financial reports), although over the last four years the number of newly established entrepreneurs has increased by an average annual rate of 3.5%.

Comparing the number of cultural industry enterprises to average values of this indicator at the level of the entire economy, cultural industries demonstrated a higher level of stability, with a small number of fluctuations in the number of enterprises during the period from 2009 to 2012. In cultural industries, corporate businesses are dominant and they accounted for 55% of all enterprises in 2009 and 51% in 2012. A faster yearly decline of corporate enterprises in cultural industries (2.2%) was noted compared to the overall corporate landscape in Serbia, which decreased by about 0.9% annually over the last four years.

Structure of cultural industries is composed of small enterprises (49%) and entrepreneurs (48%), which belong to the small sized enterprise category. The analysis shows that cultural industries are characterized by large number of micro-organizations with fewer than three employed persons. Compared with the average value of this indicator at the level of the entire economy, cultural industries demonstrate a higher level of sectorial and market fragmentation. In total, small enterprises represented 97% of the total number of cultural industry enterprises, with medium-sized enterprises and large enterprises comprising 1.7% and 0.4% respectively (see *Table 7*). This indicates that cultural industry enterprises do not have the economic capacity and power to transform them and grow. The same issue existed in the national economy. The main reason for this is the non-export orientation of domestic firms, including cultural industries. There is small national market and a lot of domestic firms have a strategy of being market survivors, rather than broadening business activities.

Table 7. Distribution of cultural industries and all industries by enterprise size, 2008 and 2012

Year	Culti indus		National economy		
	2008	2012	2008	2012	
Small enterprises (%)	97.6	97.9	94	95.9	
Medium enterprises (%)	1.9	1.7	8.9	3.8	
Large enterprises (%)	0.4	0.4	3.7	3.1	

<sup>\*</sup> Entrepreneurs are excluded.

The distribution of business by cultural industry domains indicates cultural diversity and a certain level of supply of cultural products and services. There are three characteristic structures of cultural industry domains in terms of business size. The first type is emerging domains, such as Design and Creative services. This domain is characterized by a large number of small and micro enterprises and a high level of fluctuation in the number of enterprises. It includes about 47.7% of total small enterprises in cultural industries. This modern sector of Serbian cultural industries is characterized by market instability, absence of specialization, large competition and frequent incorporation of new companies, together with a process of sector consolidation. See **Table 8** for more information.

The second type consists of traditional cultural industries – Performances and Celebration. This group is characterized by the dominance of large enterprises, which comprise approximately 70% of the total number of cultural industry large entities. This is the result of

high involvement of State enterprises in this domain, with large infrastructural capacity as well as level of employment.

The last type is domains in transformation, such as Audiovisual and Interactive Media and Book and Press. The structural changes in the sector appear as a result of transformation and privatisation of State companies or through a process of vertical/horizontal integration of companies, which has appeared in the least 10 years. Such domains are characterized by dominance of medium-sized enterprises (about 65% compared to total number of medium-sized enterprises in cultural industries) and very dynamic transformation of relationships within the sector (collaborative platforms, project cooperation etc.). Some of the reasons can be found in impediments of drumming up business, which is the case with radio and television activities, for which a broadcasting permit and payment of the fees for this right are required. Another example is Book and Press, which requires a high capital investment. This often leads to collaboration between enterprises of different sizes, as well as horizontal and vertical integration of activities.

By cross-checking the data on the total number of registered entrepreneurs obtained from the Statistical Office of the Republic of Serbia and from the Business Registers Agency, we have come to the conclusion that only 19.3% of cultural industry entrepreneurs generate incomes higher than EUR 20,000, which is the requirement for bookkeeping. This information was also used to determine which entrepreneurs would be included in the GVA calculation. However, based on this, it is not possible to find out in which domains this category of entrepreneurs is mostly present. Records on the dynamics of entrepreneurs below and above the census criterion demonstrate the potential of certain areas to be transformed into institutional activities and their area of specialization.

Moreover, it is also clear that there are no registered entrepreneurs in certain domains, which demonstrates a high level of impediments in terms of entering the business, in addition to non-profitability of operating and instability of the market. Such is the case with cultural and natural heritage, library and performance and celebration domains (see Table A1 in the Annex).

Concerning start-ups and mortality of enterprises in cultural industries, domains which are seen as "in transformation" show a high level of mortality of enterprises. The Book and Press domain accounts for about 40% of closed enterprises every year in all cultural industries, with the Design and Creative Services also seeing a high number of closures (see **Table 9**).

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As of 2013 it has been increased to EUR 60.000, but since this analysis pertains to the period by 2012, the relevant criterion is the one valid until said period.

Table 8. Stock and distribution of businesses by cultural industry domains, 2009-2012\*

Year	Size	Cultural and Natural Heritage	Performance and Celebration	Visual Arts and Crafts	Books and Press	Audiovisu al and Interactiv e Media	Design and Creative Services	Entrepreneurs*	Total Cultural industries	%
	Micro	18	4	0	145	27	340	4210	4,744	44.42
	Small	160	190	363	1,310	1,005	2,764		5,792	54.24
2009	Medium	4	23	2	34	16	26		105	0.98
	Large	0	23	1	10	0	4		38	0.36
	Total	182	240	366	1,499	1,048	3,134	4210	10,679	100.00
		20	6	90	154	39	382	4300		45.95
	Micro							4300	4,991	
	Small	168	246	370	1,287	1,056	2,576		5,703	52.51
2010	Medium	4	41	1	28	13	24		111	1.02
	Large	0	40	1	10	1	4		56	0.52
	Total	192	333	462	1,479	1,109	2,986	4300	10,861	100.00
	Micro	22	19	91	130	29	356	4260	4,907	47.85
	Small	169	242	363	1,221	1,090	2,094		5,179	50.5
2011	Medium	4	41	1	34	11	24		115	1.12
	Large	0	40	0	8	2	4		54	0.53
	Total	195	342	455	1,392	1,132	2,478	4260	10,254	100.00
	Micro	24	2	80	144	28	368	4400	5,046	48.41
	Small	169	244	362	1,180	1,162	2091		5,208	49.96
2012	Medium	4	41	1	30	11	28		115	1.1
2012		0	40	0	9	2	4		55	0.53
	Large							4.400		
	Total	197	327	443	1,363	1,203	2,491	4,400	10,424	100.00

Entrepreneurs below the census for submission financial reports, registered in sectors: Information and Communication and Creative Art and Entertainment Activities
For more information, see Table A1 in the Annex.

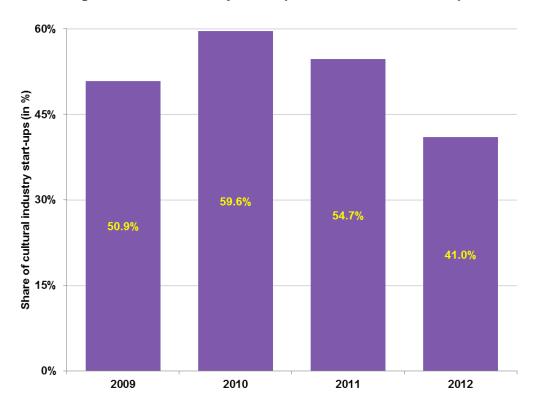
Table 9. Distribution of business mortality by cultural industry domains, 2010-2012 (number of enterprises)

Domain	2010	2011	2012
Cultural and Natural Heritage	5	7	9
Performance and Celebration	9	27	21
Visual Arts and Crafts	27	23	27
Books and Press	104	129	94
Audiovisual and Interactive Media	54	73	53
Design and Creative Services	58	189	156
Total creative industries	239	447	359

<sup>\*</sup> For more information, see Table A2 in the Annex.

Concerning the dynamics of start-ups, evidence shows that almost half of all start-ups in the last 4 years in the cultural industry sector, contributing an average 51.3% of total new enterprises each year (see *Figure 1*). In terms of distribution of new enterprises by domain, the leading domain is Design and Creative Services, with 48.8% of total newly established enterprises, at the opposite end of the scale, the Cultural and Natural Heritage domain had about 2.1%. New enterprises in cultural industries accounted 32% of the average yearly growth rate, while the same indicator for overall economy was 24% per year (see *Table 10*).

Figure 1. Percentage of cultural industry start-ups out of the total start-ups, 2009-2012



<sup>\*\*</sup>Excluded business mortality of entrepreneurs

In 2010-2012, new entrepreneurs in cultural industries made up 3.1% of the total new entrepreneurs in Serbia and they accounted for a decline of an average of 19.6% per year. The same indicator for the whole economy was an average decline of 12.5% per year. The leading domain for new entrepreneurs in cultural industries is Design and Creative Services with 38.0% of all newly set up entrepreneurs, while the Visual Arts and Crafts and Books and Press domains get only 8.6% and 11.7% respectively (see Table 10).

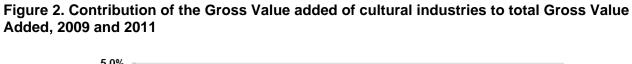
Table 10. Distribution of entrepreneurs' start-ups by cultural industry domains, 2010-2012 (number of entrepreneurs)

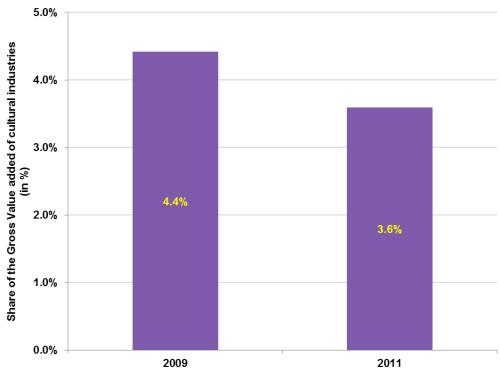
Domain	2010	2011	2012	2010-2012 total (share in cultural industries %)
Cultural and Natural Heritage	8	6	7	21 (12.9%)
Performance and Celebration	6	13	1	20 (12.3%)
Visual Arts and Crafts	8	2	4	14 (8.6%)
Books and Press	9	5	5	19 (11.7%)
Audiovisual and Interactive Media	13	8	6	27 (16.6%)
Design and Creative Services	21	22	19	62 (38.0%)
Total creative industries	65	56	42	163 (100%)
TOTAL NATIONAL ECONOMY	1,860	1,898	1,425	

<sup>\*</sup> For more information, see Table A4 in the Annex.

## 2.2.2 GVA

The GVA of cultural industries comprised about 4% of the total national economy. It decreased at current prices over a three-year period. In 2009, the contribution of cultural industries to Serbia's GVA was 4.4%, while in 2011, it was 3.6%. This decrease in current prices of about 1% (see *Figure 2*) was associated with the impact of the economic crises that strongly influenced Serbia since the end of 2008.





<sup>\*</sup> For more information, see Table A5 in the Annex.

In terms of distribution of GVA across the domains, the largest GVA is created by the Books and Press and the Design and Creative Services domains (on average, 31.9% and 28.8% of the total Cultural industries GVA, respectively) (see **Table 11**).

The smallest value of GVA is created by the Cultural and Natural Heritage and the Performance and Celebration domains (respectively 0.3% and 0.8% of total GVA in cultural industries). The share of different domains of cultural industries between 2009 and 2011 remain relatively static, except a very small positive change in the Design and Creative Services domain as well as a negative change in the Book and Press domain. Within National Accounts System, the GVA deflators are developed at the domain level and they do not cover deflation of GVA in cultural industry sub-sectors. The previous pilot research of cultural industries (Mikić, 2011; Mikić, 2013) assesses the contribution to GVA of cultural industries at constant prices. The projections show that the GVA of cultural industries (at 2002 constant prices) comprised 3.0% of the total GVA of the national economy in 2009 and 2.5% in 2011. This pilot research also shows that the GVA created by related domains and supporting activities of cultural domains produced about 7.0% of

total GVA in 2009 (at constant prices, 2002).<sup>23</sup> In 2013, the first investigation of income and expenditure structures of economic subjects by activity was produced in Serbia. The results of this survey provided the data about production process inputs and outputs and basic information for construction of initial Supply and Demand tables for Serbia. Those initial coefficients were used as allocation factors for the calculation of GVA in related domains and in Equipment and Supporting Materials of cultural domains classified in accordance with the UNESCO FCS 2009.<sup>24</sup> Estimations based on those results gave lower projection for GVA in 2011: related domains, equipment, and supporting materials account for about 3.1% of total GVA (at constant prices, 2002).<sup>25</sup>

In 2009, the public sector contributed approximately EUR 326 million of GVA, which represents about 33.3% of the total GVA created in cultural. For comparison, in 2011 this ratio in generation of GVA amounted to 28.2% (public sector) as opposed to 71.7% (private sector). In the employment domain that ratio was 39% to 61%, which demonstrates the fact that the growth of cultural industries results in structural changes within the sector leading to economic.

As to the change in the share of GVA of certain domain of cultural industries, negative tendencies have been recorded in Book and Press (decrease in participation of GVA in total GVA of cultural industries by 4 percentage points). Radio and television activities recorded share increase in total GVA of cultural industries (by 1 percentage points) as well as Design and Creative Services (increase of GVA share for 2 percentage points). Those both domains recorded about 2% of increase of their shares in structure of cultural industries (see **Table 12**).

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For more information, see Mikić (2012 and 2013). Estimation based on focus group and research into cost structures of cultural industry domains. The research was carried out in 2010, 2011 and part of 2012. This process included consultations, focus groups and discussions with cultural industry representatives. In addition, some cost structure coefficients were extracted from programme reports of cultural institutions (for example, museums, archives, heritage centres, etc.). The secondary impact of cultural industries covers domains including UNESCO UIS-related domains and equipment and supporting materials, plus the following domains: 35 - Electricity; 68 - Real estate services; 69-71 legal and management services; 73-75 - other professional services; 77-82 - Other administrative and support services. Those activities accounted for about 3.7% of total GVA in 2009 (at constant prices, 2002). It is quite difficult to comment on trends related to the broader impact of cultural industries by comparing those two results due to methodological differences. Differences between the results of the Statistical Office of the Republic of Serbia and the pilot research can be a result of different research methodologies; different years of investigation (2009 and 2011); extended versions of classification of activities; and different values of coefficients related to the cost structure as well as their analytical projection (statistical projection of cost structure at the 2-digit level and pilot research at the 4-digit level). For more information, see Statistical Office of The Republic of Serbia (2013a).

The coefficient of the cost structure is calculated at the 2-digit level and it can be used for estimating total GVA and employment of related domains and equipment and supporting materials of cultural domains. For more information, see Statistical Office of the Republic of Serbia (2013a).

<sup>25</sup> See section "Methodological framework for measuring the economic contribution of cultural industries".

Table 11. Distribution of GVA cultural industries domains, 2009 and 2011 (in millions RSD and Euros, current prices)

Domein	200	9	2011		
Domain	GVA (RSD)	GVA (€)	GVA (RSD)	GVA (€)	
Cultural and Natural Heritage	326.75	3.48	296.32	2.91	
Performance and Celebration	868.08	9.24	867.00	8.50	
Visual Arts and Crafts	5,034.50	53.59	5,157.03	50.58	
Books and Press	35,431.52	377.13	30,508.25	299.25	
Audiovisual and Interactive Media	23,870.77	254.08	24,364.13	238.98	
Design and Creative Services	29,098.02	309.72	30,358.29	297.78	
Education	11,941.14	127.10	12,512.50	122.73	
TOTAL CULTURAL INDUSTRIES	106,570.78	1,134.34	99,867.80	979.58	
Total national economy	2,333,391.10	24,836.52	2,779,522.70	27,263.59	
GVA contribution of CI (%)	4.41	4.41	3.59	3.59	

<sup>\*</sup> Entrepreneurs excluded from calculation. For detailed structure of GVA, see Table A5 in the Annex.

Table 12. Distribution of GVA share of cultural industry domains, 2009-2012 (%)

Domain	GVA of cultural industries domains in total GVA of cultural industries (%)			
	2009	2011		
Cultural and Natural Heritage	0.31	0.28		
Performance and Celebration	0.81	0.83		
Visual Arts and Crafts	4.72	4.96		
Books and Press	33.25	29.32		
Audiovisual and Interactive Media	22.40	23.41		
Design and Creative Services	27.30	29.17		
Education	11.20	12.02		
TOTAL CULTURAL INDUSTRIES	100	100		

<sup>\*</sup> Entrepreneurs excluded from calculation.

## 2.2.3 Cultural employment

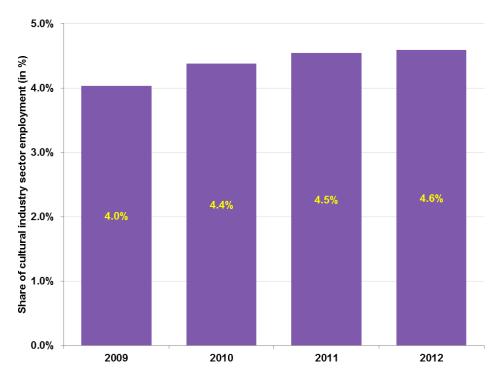
A total of 79,189 persons are employed in core cultural industry domains in 2012, which accounts for 4.6% of the total number of employees in Serbia (see *Figure 3*). However, the real view of employment in the creative sector cannot be perceived merely based on conventional methods of employment monitoring used to produce statistics. As mentioned above, for many cultural industries, employment is quite different from the national pattern of employment. These kinds of jobs are often performed under service or copyright contracts, they can be performed from distant places, labour contracts are more flexible, several jobs with shorter working hours can be performed and these are often part-time jobs. Employment in creative industries is

flexible and often project-oriented (creators are hired for individual projects), hence they are statistically invisible in records on employment. Since this is a sector where operations are mainly based on project cycles, the need for hiring permanent persons is rather small and the sector is mostly focused on the hiring of creative freelancers.<sup>26</sup>

By comparing employment data from administrative sources and the Labour Force Survey, a broader picture of employment in cultural industries can be obtained. By including informal employment figures registered by administrative sources, the core cultural industries accounted for 4.8% of the total number of employees in Serbia in 2012. Data on employment in cultural industries from the Labour Force Survey are quite inaccurate due to the methodology used, which only offers disaggregated data at the 2-digit level.

Larger differences between official employment statistics and those generated by the Labour Force Survey are only obvious in 2010, when the difference was about 4,200 employees. The lowest difference was seen in 2012, when it was about 3,000 employees. The Labour Force Survey places average informal employment in cultural industries at about 1.9 % in the period 2010-2012.<sup>27</sup>

Figure 3. Contribution of cultural industry sector employment to total employment, 2009-2012



<sup>\*</sup> Calculation based on data from administrative sources.

This can be also seen from the expenses side, such as difference between authors/freelance fees paid by cultural industry enterprises, and the average economy level. A total of 17% of paid fees according to copyright contracts, which is substantially higher than the average for the entire economy (4%), demonstrates this point.

According to LSW informal employment accounts about 1.6% in Audiovisual and Interactive Multimedia, about 4.0% in Cultural, art and entertainment activites, 1.9% Design and Creative Services, 0.1% in Education.

Some early pilot research show that each enterprise in cultural industries employed between 70 and 120 freelancers per year, which is about 570,500 freelancer contracts per year (Mikić, 2011; Mikić, 2013).

In terms of distribution of employment by domain, the domains that employ the most persons are Design and Creative Services and Audiovisual and Interactive Media (23.2% and 20.5% of the total number of employed persons in cultural industries in 2012). The smallest number of employed persons can be found in the Performance and Celebration domain, with only 4.6% of employed persons in cultural industries, and the Cultural and Natural Heritage domain, with 5.5%. These figures remain relatively static between 2009 and 2012. The public sector accounts for approximately 19,500 employees, which represents about 24.6% of the total number of persons employed in cultural industries. More than 50% of personnel in all public cultural industries were employed in education domain (see Table A6 in the Annex).

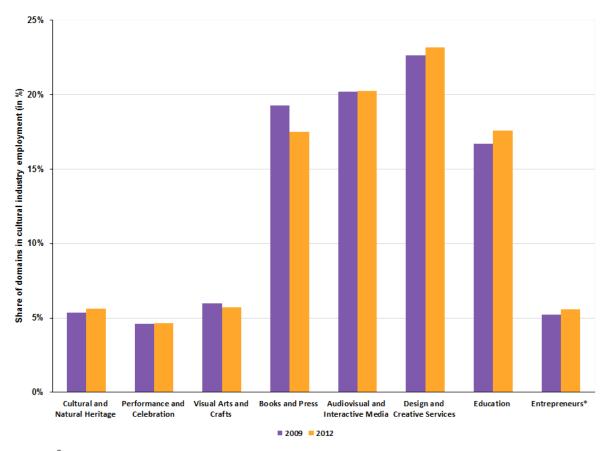


Figure 4. Distribution of employment in cultural industry domains, 2009 and 2012\*

Regarding the distribution of cultural employment in different domains, negative trends have been recorded in the Book and Press (by 1.8%). Between 2009 and 2012, the number of persons employed in Radio and Television Activities fell by 6.8%. This fall was mainly caused by the transformation of Radio Television of Serbia into a public broadcasting service, since this company employs approximately 40% of the total number of employed persons in the domain, together with the transformation or liquidation of a number of local and regional radio and television stations. On the other hand, the reduction in the number of employed persons in the

<sup>\*</sup> For more information, see Table A6 in the Annex.

publishing industry has, to a great extent, resulted from the restructuring of large publishing companies (Kultura, Prosveta) as well as from privatization of a number of companies in this field. In architectural services, the decrease of employment rates has been caused by a crisis in the building industry since 2009 (see Table A6 in the Annex).

If records on employment are placed in a comparative context, the conclusion that can be drawn is that certain domains in the creative sector have contributed to the generation of employment. On the other hand, the results of their propulsive nature at a macroeconomic level were less visible owing to the limited share of cultural industries in the overall employment. It is interesting to mention that the scope of employment in cultural industries in Serbia is at the same level as European countries of rather similar demographic structure, but that have a more developed structure of cultural industries (Denmark; 3.0% share, 82,400 employed persons; Finland: 3.0% share, 79,300 employed persons; Austria: 2.4% share, 88,600 employed persons; Hungary: 2.1% share, 79,000 employed persons; Portugal: 1.4% share, 69,800 employed persons)<sup>28</sup>, which confirms the project-oriented employment of creators in cultural industries, even in economically stronger areas of this sector.

Interestingly enough, the concentration of employment is proportional to the market share of leading companies in several domains; for example, the first 4 media companies (Pink, RTS, B92 and FOX) employ 55.6% of employed persons in the domain; in the film industry, the top five film companies<sup>29</sup> account for about 25.8% of employed persons in that domain, whilst the first 6 largest screening companies<sup>30</sup> employ about 75% of persons employed in the domain.

Substantially more modest ranges of employment concentration in leading companies are found in the music industry, where the first 2 companies (Grand produkcija and City records) account for about 30.7% of employed persons in the domain, and in the publishing industry, where the top 6 publishing companies (Zavod za udžbenike, Službeni glasnik, Laguna, Evro Giunti, Kreativni centar and Mladinska knjiga) employ about 10% of employed persons in the domain. In creative-professional activities, as well as in the visual art domain, the distribution of employment is highly diversified. The largest companies individually absorb between 0.3 and 0.7% of person employed in those domains.

EUROSTAT (2007) Cultural Statistic, EUROSTAT, <a href="http://epp.eurostat.ec.europa.eu/cache/ITY\_OFFPUB/KS-77-07-296/EN/KS-77-07-296-EN.PDF">http://epp.eurostat.ec.europa.eu/cache/ITY\_OFFPUB/KS-77-07-296/EN/KS-77-07-296-EN.PDF</a> (accessed in May 2013).

Emotion production, Vision film, Work in Progress, Contrast studios, Kosutnjak film, Avala film and DTV Production.

<sup>&</sup>lt;sup>30</sup> Zvezda film, Dom Sindikata, Mirius tuck ster Cinemas, Coloseum, Art Vista.

Table 13. UIS basic model for measuring the economic contribution of cultural industries: Serbia case study

Indicator	Measure	Indicator	2009	2010	2011	2012
	Gross value added of cultural industries	Gross value added of cultural industries in absolute terms (in millions EUR, current prices)	1,134.34	/	979.58	1
		Gross value added of cultural in current prices)	industries sub-secto	rs in absolu	te terms (in l	millions EUR,
		Cultural and Natural Heritage	3.48	/	2.91	/
		Performance and Celebration	9.24	/	8.50	/
	Gross value added of cultural industries	Visual Arts and Crafts	53.59	/	50.58	1
	sub-sectors	Books and Press	377.13	/	299.25	/
		Audiovisual and Interactive Media	254.08	/	238.98	/
		Design and Creative Services	309.72	/	297.78	/
Gross value		Education	127.10	1	122.73	1
added	Gross value added of cultural industries in relative terms (%)	Share of cultural industries value added in GVA total economy (%)	4.41	/	3.59	/
		Share of cultural industries sub- relative terms (% GVA of creat industries)				
	Distribution of gross value added by sub- sectors (in %)	Cultural and Natural Heritage	0.31	/	0.28	/
		Performance and Celebration	0.81	/	0.83	/
		Visual Arts and Crafts	4.72	/	4.96	1
		Books and Press	33.25	/	29.32	/
		Audiovisual and Interactive Media	22.40	/	23.41	/
		Design and Creative Services	27.30	/	29.17	/
		Education	11.20	/	12.02	1
	Contribution of cultural industries employment to total employment	Share of cultural industries employees in total employment (%)	4.03	4.38	4.54	4.59
		Share of cultural industries sub			nployment in	cultural
		industries in absolute terms (no Cultural and Natural Heritage	4,302	4,289	4,329	4,458
		Performance and Celebration	3,705	3,722	3,656	3,665
Employment	Distribution of	Visual Arts and Crafts	6,403	6,248	6,174	6,063
	employment in cultural industries	Books and Press	15,547	14,563	14,817	13,867
	sub-sectors	Audiovisual and Interactive Media	16,294	16,464	16,325	16,017
		Design and Creative Services	18,252	17,052	17,304	18,359
		Education	13,480	13,618	13,839	13,920
		Entrepreneurs*	4,210	4,300	4,426	4,400

		Share of cultural industries sul industries in absolute terms (% industries employment)					
		Cultural and Natural Heritage	5.34	5.45	5.46	5.63	
		Performance and Celebration	4.60	4.73	4.61	4.63	
	Distribution of employment in	Visual Arts and Crafts	5.97	5.95	5.82	5.69	
	cultural industries sub-sectors	Books and Press	19.29	18.51	18.68	17.51	
	Sub-Sectors	Audiovisual and Interactive Media	20.22	20.92	20.58	20.23	
		Design and Creative Services	22.65	21.67	21.82	23.18	
		Education	16.72	17.31	17.45	17.58	
		Entrepreneurs*	5.22	5.46	5.58	5.56	
	Volume and share of self-employment	Volume of self-employment (number of self-employment person in creative industries)	5,049	5,197	5,638	5,450	
		Share of self-employment (% of self-employment in total self-employment jobs in economy) in total self-employment jobs in economy)	0.88	1.18	1.40	1.41	
	Labour productivity in cultural industries	GVA in cultural industries per employee (in EUR, current prices)	1,407,422.11	/	12,351.44	/	
		Entrepreneurs	4,744	4,991	4,907	5,046	
		Small	5,792	5,703	5,179	5,208	
	Stock of business	Medium         105         111		115	115		
		Large	38	56	54	55	
		Total	10,679	10,861	10,254	10,424	
	Distribution of businesses by subsectors	Number of businesses by size in cultural industries sub-sectors					
		Entrepreneurs	18	20	22	24	
Business		Small	160	168	169	169	
activity	Cultural and Natural Heritage	Medium	4	4	4	4	
		Large	0	0	0	0	
		Total	182	192	195	197	
		Entrepreneurs	4	6	19	2	
		Small	190	246	242	244	
	Performance and Celebration	Medium	23	41	41	41	
		Large	23	40	40	40	
		Total	240	333	342	327	
		Entrepreneurs	0	90	91	80	
	Viewel Arte and	Small	363	370	363	362	
	Visual Arts and Crafts	Medium	2	1	1	1	
		Large	1	1	0	0	
		Total	366	462	455	443	

		Entropropouro	145	1 454	130	144		
		Entrepreneurs		154				
		Small	1,310	1,287	1,221	1,180		
В	Books and Press	Medium	34	28	34	30		
		Large	10	10	8	9		
		Total	1,499	1,479	1,392	1,363		
		Entrepreneurs	27	39	29	28		
		Small	1,005	1,056	1,090	1,162		
	Audiovisual and nteractive Media	Medium	16	13	11	11		
"	meradave media	Large	0	1	2	2		
		Total	1,048	1,109	1,132	1,203		
		Entrepreneurs	340	382	356	368		
		Small	2,764	2,576	2,094	2,091		
	Design and Creative Services	Medium	26	24	24	28		
3	bervices	Large	4	4	4	4		
		Total	3,134	2,986	2,478	2,491		
E	Entrepreneurs*	Total	4,210	4,300	4,260	4,400		
_	Business start-ups	Number of new businesses in cultural industries	492	510	466	384		
В	Business mortality	Number of closed businesses in cultural industries	Na.	239	447	359		
		Number of new businesses in cultural industries sub-sectors						
		Cultural and Natural Heritage	7	14	10	8		
		Performance and Celebration	29	42	26	23		
	Distribution of start- ups by sub-sector	Visual Arts and Crafts	27	36	23	21		
		Books and Press	85	75	62	48		
		Audiovisual and Interactive Media	77	105	106	126		
		Design and Creative Services	268	238	240	158		
		Number of closed businesses	in cultural industries	sub-sectors				
		Cultural and Natural Heritage	1	5	7	9		
D	Distribution of	Performance and Celebration	1	9	27	21		
b	ousiness mortality	Visual Arts and Crafts	/	27	23	27		
b	y sub-sector	Books and Press	/	104	129	94		
		Audiovisual and Interactive Media	1	54	73	53		
		Design and Creative Services	1	58	189	156		

## 2.3 Structural analysis of cultural industries in Serbia

In the previous section, a general picture of the role of cultural industries in Serbia was given using economic size analysis. Its primary aim was to show the size of cultural industries and their share in the economy. The primary focus of the structural analysis of cultural industries in Serbia is to analyse distribution of macroeconomic aggregates by sub-sectors, to analyse the cultural industry value chain in Serbia, and the development of different cultural industry functions.

Large investments in the creative sector, incentives for sustainable entrepreneurship in the cultural sector, and a high level of professionalism have become imperatives of survival in the creative economy. However, not all societies are equally ready to meet these new requirements. The development of the creative sector is mainly determined by the level of economic development of a given country (which also applies to Serbia). Historically, in Serbia, the development of cultural industries was modest until the late 1990s. In addition, socialism and centralism in government resulted in the role of the cultural sector being perceived in the spirit of enlightenment and later of democratization of culture. A twist in terms of perception of cultural industries occurred in the mid-1990s when this sector was strengthened by private initiatives as an activity of public interest. First, publishing companies were founded, as well as book stores and film companies, whilst over the same period first radio and television stations emerged. Liberalization of culture from administrative constraints contributed partly to the independence of private initiatives and their operation according to economic principles; hence a new stage of economic strengthening began early in 2000. The process of transition towards a market economy was to strengthen the development of the private sector in this area.

From the perspective of the structural employment structure, the economic crisis influences the potential for the creation of new jobs in cultural industries. Average growth in employment rates in cultural industries was 1.7% and it was generated mainly by entrepreneurs. Compared to the average decreasing rate of employment in total economy, the cultural industries show resistance to the impact of the economic crisis and a certain level of vitality. The average difference between those two rates of employment in the period under analysis was 6.3% (see **Table 14**).

The highest decrease was recorded in the Book and Press domain (about 4.3% average decrease rate), while the lowest decrease was recorded in the Audiovisual an Interactive Media domain, about 0.6% in average. High growth rates of entrepreneurs in the Book and Press Performance and Celebration domain were caused by the small numbers of employees in those fields, meaning that the new employment (small in absolute terms) caused a dynamic growth rate. The growth of entrepreneurs' employment in the Book and Press domain was followed by the decrease of employment in the corporate sphere of this domain. Certain sectors of the Book and Press labour workforce from the corporate sphere continue to perform activities as a sole property entrepreneur or as a spin-off entrepreneur. In the corporate sphere, only public cultural industries domains recorded rises in employment, while the domains that are dominantly controlled by private sector recorded a decrease in employment.

Table 14. Growth rate of employment by cultural industries domains, 2009-2012 (%)

Domain		orises and gal entitie		Entrepreneurs			Total		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
Cultural and Natural Heritage	-0.34	0.91	3.13	25.00	10.00	-54.55	12.16	5.91	-24.14
Performance and Celebration	0.47	-193.00	0.47	0.00	200.00	-88.89	0.47	98.07	-43.98
Visual Arts and Crafts	-2.89	-1.47	-1.68	3.33	-1.08	-20.11	-1.23	-2.01	-11.73
Books and Press	-6.50	-0.61	-5.74	6.60	150.88	-23.28	-3.20	74.83	-17.38
Audiovisual and Interactive Media	0.97	-0.77	-1.90	57.14	-36.36	14.29	29.54	-18.96	5.24
Design and Creative Services	-6.86	1.30	614.00	5.78	-4.33	4.29	-3.97	-0.53	8.28
Education	1.03	1.62	0.58	0.00	0.00	0.00	1.03	1.62	0.58
Entrepreneurs*	0.00	0.00	0.00	2.14	2.93	-0.59	1.07	1.47	-0.29
TOTAL CULTURAL INDUSTRIES	-2.72	0.24	0.09	2.93	8.48	3.33	-1.26	4.48	1.76
Total national economy	-5.11	-0.89	-0.14	-22.77	-8.62	-4.23	-16.50	-5.19	-2.26

<sup>\*</sup> Entrepreneurs below the income threshold for submission of financial reports, registered in the following domains: Information and Communication and Creative Art and Entertainment Activities

Table 15. Average growth rate of employment by cultural industries domains, 2009-2012 (%)

Domain	Enterprises and other legal entities	Entrepreneurs	Total
Cultural and Natural Heritage	1.23	-6.52	-2.02
Performance and Celebration	-0.33	37.04	18.19
Visual Arts and Crafts	-2.01	-5.95	-4.99
Books and Press	-4.28	44.74	18.08
Audiovisual and Interactive Media	-0.57	11.69	5.28
Design and Creative Services	0.30	1.91	1.26
Education	1.08	0.00	1.08
Entrepreneurs*	0.00	1.49	0.75
TOTAL CULTURAL INDUSTRIES	-0.80	4.91	1.66
TOTAL NATIONAL ECONOMY	-2.05	-11.87	-7.98

<sup>\*</sup> Entrepreneurs below the income threshold for submission of financial reports (EUR 20,000), registered in the following domains: Information and Communication and Creative Art and Entertainment Activities

Within certain domains of cultural industries, leading activities generate the largest influence on employment dynamics. For example, in the Audiovisual and Interactive Media domain, the largest annual employment growth rate is exhibited by software publishing, wherein employment has almost doubled. The largest annual employment growth rate in the Performance and Celebration domain is recorded in Sound recording and music publishing with a growth rate of 5.0%. In Visual Arts and Crafts, creative arts and entertainment have an average annual employment rate of 11.3%, whilst in the Audiovisual and Interactive Media domain, the propulsive element for employment was visible in the field of motion production, where the employment growth rate was 4.6% average per year. Lastly, in the Design and Creative Services domain, architectural activities had an average annual growth rate of 3.4%.

In pilot research conducted in 2011 (<u>Mikić, 2011</u>; <u>Mikić, 2013</u>), it was calculated that five jobs in the related domain Equipment and Supporting Materials were created for every two jobs in cultural industries.

The entrepreneurial profile of creative persons is such that they usually decide to engage in micro-entrepreneurship: almost 95% of companies employ less than 10 persons, and for independent entrepreneurs, about it is 2 persons on average. Also, the number of employed persons per company in the field of architecture, news agencies, book and artefact trade, and newspaper publishing is on average 20 persons. The labour market in creative industries is characterized by significant dualities: temporary employment accounts for about 15% of the employment rate in creative industries compared to 11% in the economy as a whole. It is a sector employing a relatively young workforce (25-44 year olds) and its total share in the overall employment of the sector is about 67% compared to the average in economy as a whole, which is 48%. Highly educated persons dominantly employed within the sector (46-55% of the total workforce) compared with the average in the overall economy where they account for 23%. A total of 85% of employed persons in creative industries work in the private sector, with the remaining 15% in the public sector. Unqualified workforce and low qualified workforce in creative industries account for about 0.01% of the total employment rate for this sector compared with the average in the economy, which is 20.6%.

The average annual employment growth rate for entrepreneurs in the period 2009–2012 was 4.9%, which was 7% higher than the growth rate for entrepreneurs for the economy as a whole (-11.87%). The Book and Press and Performances and Celebration domains were key generators of entrepreneur employment with average annual employment growth rates of 440.7% and 37%, respectively.

However, entrepreneurship is still a marginal part of employment in the creative sector, given that about 75,500 persons are employed in the corporative and institutional sectors of cultural industries. On the other hand, the overemphasized social dimension of cultural policy implemented over the last several years significantly restricts and demotivates entrepreneurial initiatives since it puts independent artists and entrepreneurs in the creative sector into an unequal position. Whilst the first group's socio-economic status is protected by the State (expenses pertaining to social insurance, pension, policy of residing and improvement of working environment and studios), there are no stimulating mechanisms for the second group (neither of a financial or non-financial nature) to assist entrepreneurs to strengthen material, human and financial capacities during the start-up of their activity. Owing to this situation, an overwhelming majority of creators are not interested in assuming business risks, or to engage in business ventures in such an informal market. The main impediments to conducting activities in the creative sector are almost identical to those present in the entire economy: high costs of legal regulation, low level of quality of institutions, poor ownership rights and inefficient protection of intellectual property, and substantial instability of the macroeconomic environment.

The analysis of GVA and employment in cultural industries demonstrates that their current structure is relatively satisfactory, in particular from the point of view of concentration of activities. As regards their functions, in 2012, activities relating to content creation and production account for 55.1% of the GVA of cultural industries and for about 70.5% of the employment rate thereof, whilst dissemination and exhibition amount to 44.9% of the GVA of creative industries and 29.5% of the total employment rate of creative industries (see *Table 16* and *Table 17*).

Furthermore, the public sector accounts for 25% of GVA in production and creation and 20% of the total employment in those two functions, whilst these percentages for the private sector are 65% and 80%, respectively.

Table 16. Distribution of GVA by cultural industry functions, 2009 and 2012 (in million euros, current prices)\*

Domain	Crea	ation	Produc	Production		nination	Exhibition	
Domain	2009	2012	2009	2012	2009	2012	2009	2012
Cultural and Natural Heritage	0.35	0.28	2.97	2.11	0.16	0.52	0	0
Performance and Celebration	4.921	3.97	3.07	274	1.25	1.79	0	0
Visual Arts and Crafts	47.08	47.28	6.51	3.30	0	0	0	0
<b>Books and Press</b>	0	0	118.59	112.75	258.59	186.25	0	0
Audiovisual and Interactive Media	1.41	1.14	41.33	23.38	211.43	214.46	0	0
Design and Creative Services	84.61	98.93	225.11	198.07	0	0.52	0	0
Total	138.371	151.6	397.58	342.35	471.43	403.02	0	0

<sup>\*</sup> Excluded transversal cultural industries domains and entrepreneurs

Table 17. Distribution of employment by cultural industry functions, 2009 and 2012 (number of persons) \*

Domain	Crea	tion	Produc	tion	Dissem	ination	Exhil	oition
Domain	2009	2012	2009	2012	2009	2012	2009	2012
Cultural and Natural Heritage	240	240	3,895	4,047	166	171	0	0
Performance and Celebration	3,368	3,284	3,824	3,994	64	76	0	0
Visual Arts and Crafts	4,403	3,995	750	507	0	0	0	0
Books and Press	0	0	9,347	7,733	2,786	2,842	3,413	3,292
Audiovisual and Interactive Media	2,409	2,407	1,054	977	11,902	11,169	904	1,519
Design and Creative Services	13,780	14,131	4,214	4,228	0	0	0	0
Total	24,200	24,057	23,084	21,486	14,918	14,258	4,317	4,811

<sup>\*</sup> Excluded transversal cultural industries domains and entrepreneurs

What has posed an impediment to the development of cultural industries in Serbia for several years now is a lack of capacity to grow, fragmentation of the sector, a lack of knowledge and skills for business development (many companies that are successful in the beginning have no capacity to reach the next stage of the life cycle), a lack of intersectoral cooperation between creative industries and traditional sectors (which results in the rather poor competitiveness of the entire economy and narrowing of the market for placement of creative contents), neglect of non-technological innovations coming from creative industries and their use in traditional economy sectors, a dissatisfactory level of placement of products of creative industries and hindered access to finances, and high labour-related taxes (creative persons mainly tend to work in an informal manner).

# 3. Conclusions: Main findings and implications

### 3.1 Lessons learned from the Serbia case study

Several lessons can be learnt from this case study.

The approach to measuring economic contribution depends on the structure of the sector itself. The first step within the measuring process is to examine the structure of the sector and its typical organizational forms. Further development of the measurement method and which specific approach to apply depends on their character, organizational form etc.

The measurement procedure should cover as much of the sector as possible. Coverage of 80% of relevant organizational forms is to be considered sufficient for drawing conclusions.

The collection of data requires a combination of several sources, both administrative and other. During the course of this procedure it is necessary to have the concepts mutually harmonized between different data sources. The crossing checking of data obtained from different sources can also contribute to identifying the existing statistical gaps.

Even though they do not include a large list of indicators, the existing economic contribution measures are quite sufficient for gaining an insight into the main properties of the sector and modelling public policy measures.

The existing measures should be supplemented by additional sources from qualitative sources – surveys, interviews and focus groups. They enable a better understanding of the data obtained on economic performance.

The first methodology and measurements used should serve as a "zero measurement exercise" and efforts should be made to perform the measurement process continuously and improve the methodology in order to obtain as high quality results as possible.

It is not possible to include some areas in the analysis, including the crafts sector, civil initiatives or festivals, due to the lack of data. In this area, there is a need to develop standard methodological tools and handbooks for mapping resources and capacities of those domains of cultural industries as well as for measuring their economic contribution. These sectors have an emerging role in developing countries and many areas of cultural industries are developed around them. The standardization of the surveying method and data collection will ensure consistency contribute to the development of evidence-based cultural policy. The Creative Arts and Entertainment Activities domains are in a similar position, since there are a variety of organizational forms in the field of cultural industries, including performing, multimedia, visual, literary and other. This sector also requires alternative methods of research, data collection and measurement of the economic contribution.

Without prior collection of primary data, it is difficult to include these activities in the measuring of economic contribution. This is mainly due to significant diversity across the domains and differences in their organizational forms. These sectors require primary research, the collection of primary data, and construction of baseline measures on economic contribution after extensive data gathering.

Detailed secondary data (household surveys, business surveys, etc.) are very important for compiling baseline measurements on the economic contribution of cultural industries.

# 3.2 Statistical limitations and data improvement

A large number of studies emphasize that most difficulties in measuring the economic contribution of cultural industries are caused by the lack of data quality and the inaccuracy of the existing data, not only for developing countries but worldwide. In some countries there is a lack of primary data for cultural industries; in others there is a lack of data at the sub-sectorial level (for example, crafts, new media, and different kinds of design). Due to the huge diversity of cultural industries, it is necessary to develop specific methodologies for primary data collection and analysis of the sub-sectors of the cultural industries that are not easily identified through ISIC codes. These models may help countries to improve statistics in the field of cultural industries. So far, the biggest challenge seems to lie in the development of quality instruments for the collection of data on cultural industries, which can produce a satisfactory analytical value without being exceedingly expensive. The majority of developing countries, including Serbia, do not have sufficient resources to invest in quality instruments for the collection of statistics on cultural industries. This goes hand in hand with the general unawareness of the potential of cultural industries in terms of development, leading to a lack of strategic access to monitoring of this sector. On the other hand, although providing sufficient analytical information for monitoring cultural industries is important, the majority of countries cannot afford satellite cultural accounts owing to financial constraints, or, if they can, there is no continuity in the collection of these data.

Numerous mapping studies conducted, except those in certain countries, including Germany and the United Kingdom, have not served the purpose of removing shortcomings in the methodology used. Rather, they were performed in an ad-hoc manner as a mean of popularization and advocating for a better position of this sector. They are followed by a discontinuity in, or a diverse number of, methodologies, meaning that the data cannot be compared and the dynamics of development of the creative sector cannot be realized. The development of statistics in culture is linked to a better positioning of this sector on the development agenda. Just as about ten years ago data on information economy was scarce, nowadays industrial classifications and the entire statistics have been adjusted for this sector as a result of better monitoring; therefore, changes need to be made to cultural industry statistics in light of the increasing role of cultural industries in the economy. They mainly need to move towards further development of industrial classifications and more analytical coverage of subsectors of cultural industries. Moreover, it is necessary to enable a detailed insight into registered legal entities operating in the field of creative industries prior to the establishment of statistical means so that they can be classified according to their activities in cases where they do not belong to standard classifications. Databases of registered entities and research with regard to their primary activity can certainly contribute to the development of better statistics.

Numerous statistics can be developed alternatively, through combining existing statistical sources in order to provide a better insight into the development of this sector. In order to do this properly, it is necessary to empower persons dealing with measuring the economic contribution, either individually or through standardized training modules.

Finally, a significant limitation in statistics is mirrored in the different forms of organization of cultural industries, which can vary depending on the country, as well as on the ownership of these organizational forms. Frequently, different databases are kept rather than information on the organizational forms or ownership (public, private, civil). This substantially hinders the development of quality statistics or makes the collection difficult. Hybrid forms of cultural institutions, such as cultural houses and cultural centres, can also pose restrictions in terms of data collection, particularly if they are a dominant domain of cultural industries. Vertical and horizontal integration of companies can also influence monitoring of the sub-sectorial economic contribution of cultural industries. In countries in which such companies are dominant, a review

of the economic contribution is either hindered, unclear, or the development of alternative methods of measurement is required. In such instances, the measurement of economic contribution must be performed in stages, starting with those sectors and activities with the most clearly defined structure, and working up to those requiring the biggest amount of time and work on statistical compliance. The fact that cultural activities start up as hobbies or additional jobs and then turn into businesses in an overwhelming majority of developing countries highlights the changes taking place in this sector from the social and economic perspectives, as well as the complex nature of this sector, which often requires different methods of processing and interpretation of results.

# 3.3 Considerations when applying basic measures of economic contribution of cultural industries at the national level

Measuring the economic contribution of cultural industries can only give a dynamic perspective of the development of cultural industries if data collection over time is sustainable. Establishment of a basic methodology in addition to the verification of structures of registered entities and their relevance to activities in cultural industries require the largest amounts of time and work. The different steps to be followed to undertake such work are presented below:

### Step 1: Establish data inventory and the structure of culture sector

Preliminary research of the structure and character of the cultural cycle in cultural industries, as well as of the form of organization and particularities thereof, in addition to identification and classification of cultural industries are the first step in the process of measuring their economic contribution. As a result of this step, the databases should be developed on businesses in cultural industries, which will be useful for the long-term measurement of the economic contribution of this sector, and will contain information which is not visible from the existing statistical data and other synthetic reports. Such "zero data bases" or directories are necessary for the crafts, design, and festivals sectors, but it is also necessary to check the structure of companies in other activities (for example, radio and television and cable communications).

# Step 2: Data collection using administrative data as well as business surveys and assessment of data quality

The second step pertains to the collection of data. The largest analytical importance here can be attributed to records from Structural Business Statistics, financial statement reports or existing statistical resources (Labour Force Survey, employment survey). Certain data can also be gathered by means of surveys and guestionnaires, in which case it is necessary to harmonize the manner of data collection with concepts from the official statistics. This is required to enable data comparison and to provide a comparable image of economic performances of cultural industries of the entire economy, together with a view of their differences and similarities. Differences pertaining the concepts may often limit analytical possibilities of interpretation of results and the possibility of gaining a wider picture of the economic contribution of cultural industries concretely in its social and economic contexts. During this stage it is necessary to gather data for a number of years in order to acquire enough data quality for the purpose of analysis during the "zero measurement exercise". Data on cultural industries is not always available and it is necessary to rely on different sources. During the course of this process it is necessary to make sure not to lose credibility of the research by combining different sources. Additional sources of data should always be consulted for the purpose of obtaining a clearer picture of the development of different domains of cultural industries, but it is important to be careful when data from such sources.

## Step 3: Undertake the calculations and determine allocation factors

The third step encompasses the measurement process itself. During this stage it is necessary to resolve any doubt about the measurement of contribution of cultural industries, as explained in Chapter 2. First of all it is necessary to examine and research the market and non-market characteristics of certain activities in order to know which calculation method is to be implemented for the calculation of GVA, while estimates are mainly to be carried out based on the majority of entities in cultural industries. Since the objective of the measurement of the economic contribution of cultural industries is to demonstrate the dynamics and characteristics of their economic development, the focus during the first research should be on core domains of creative industries. Whilst developing and expanding the data base, it is necessary to consider other domains directly and indirectly associated with cultural industries. Since the purpose of measuring of the economic contribution is mainly to improve cultural policy, the aforementioned approach is completely justified.

# Step 4: Develop alternative methods for specific sectors not properly represented in industrial classification

The fourth step includes the measurement of the economic contribution of certain sectors requiring specific measurement. These include the craft and design sectors, non-governmental organizations and civil initiatives and all those organizational forms included in their activities. During the course of this stage it is possible to develop certain specific surveys for measurement of the economic contribution of a certain domain. However, when it comes to first measurements, availability and relevance of data should be kept in mind. Many conclusions and findings arising from this stage may serve the purpose of developing specific methodologies from which sectorial studies to measure the economic contributions of cultural industries can be derived.

# Step 5: Undertake data analysis and interpretation

The fifth step includes analysis and interpretation of data. This stage depends on the analytical skills of the research team, as well as on the data gathered and knowledge of the national context and of the development process of cultural industries. Interpretation of results will most certainly depend on the objective of measuring of economic contribution of cultural industries itself. It is quite usual for the first measurements of the economic contribution of cultural industries to be of a somewhat more modest analytical approach, but of a larger methodological scope. Subsequent research will be more comprehensive.

## Step 6: Take into consideration the data limitations, ensure sustainability of the process

Finally, it is necessary to mention that challenges in terms of measurement of cultural industries primarily depend on the structure of cultural industries in each country. In those countries where this sector is well developed and institutionalized, the measurement process is easier, faster and has fewer methodological issues. On the other hand, in those countries in which this sector is only just developing, there will certainly be more challenges when first measuring of economic contribution of this sector. In any case, what should be borne in mind is that the methodology should always be harmonized with the previous one in order to enable continuity of data collection. In addition, it should be taken into account (something that often is not) that the measurement is not the goal, but a means to enable a better insight into the status of this sector. In this regard, the quality of interpretation as well as the relevance of statistical data must always be taken into account.

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# **ANNEXES: Statistical tables**

Table A1. Distribution of business in cultural industries by size, 2009-2012 (in number of business)

NACE				2009					2010					2011					2012		
Rev.2 code	NACE Rev.2 label	Entrepre neurs	Small	Medium	Large	Total	Entrepr eneurs	Small	Medium	Large	Total	Entrepr eneurs	Small	Medium	Large	Total	Entrepr eneurs	Small	Medium	Large	Total
900	Creative arts and entertainment activities	0	5	0	0	5	0	6	0	0	6	0	6	0	0	6	0	6	0	0	6
9102	Museum activities	0	105	4	0	109	0	102	4	0	106	0	102	4	0	106	0	102	4	0	106
9103	Botanical and zoo garden	0	5	0	0	5	0	6	0	0	6	0	7	0	0	7	0	8	0	0	8
4779	Retail sale of second hand goods	18	45	0	0	63	20	54	0	0	74	22	54	0	0	76	24	53	0	0	77
Total Cultu Heritage	iral and Natural	18	160	4	0	182	20	168	4	0	192	22	169	4	0	195	24	169	4	0	197
900	Creative arts and entertainment activities	0	110	23	23	156	0	166	41	40	247	0	168	41	40	249	0	168	41	40	249
3220	Manufacturing musical instruments	0	6	0	0	6	1	6	0	0	7	2	4	0	0	6	1	4	0	0	5
5920	Sound recording and music publishing	0	65	0	0	65	0	65	0	0	65	0	60	0	0	60	0	60	0	0	60
4763	Retail sale of music and video recordings	4	9	0	0	13	5	9	0	0	14	17	10	0	0	28	1	12	0	0	13
Total Perfo		4	190	23	23	240	6	246	41	40	333	19	242	41	40	342	2	244	41	40	327
900	Creative arts and entertainment activities	12	27	1	0	39	14	31	0	0	45	13	32	0	0	45	13	31	0	0	45
7220	Research and experimental development	0	137	0	0	137	0	137	0	0	137	0	137	0	0	137	0	137	0	0	137
7420	Photograph activities	60	44	0	0	104	65	43	0	0	108	67	43	0	0	110	59	40	0	0	99
3212	Manufacture of jeweler	0	75	0	0	75	0	80	0	0	80	0	80	0	0	80	0	85	0	0	85
5819	Other publishing activities	11	81	1	1	94	11	79	1	1	92	11	71	1	0	83	8	69	1	0	77
	and Crafts	0	363	2	1	366	90	370	1	1	462	91	363	1	0	455	80	362	1	0	443
5811	Book publishing Publishing of	22	606	12	2	642	22	596	10	2	630	19	567	12	1	599	21	539	10	1	571
5813, 5814	newspapers, journals	5	348	11	7	371	8	350	7	6	371	0	325	10	5	340	8	322	9	6	345
5819	Other publishing activities	9	35	1	0	44	11	34	0	0	46	0	31	0	0	31	8	29	0	0	38
6391	News agencies	0	7	1	0	8	0	8	1	0	9	0	6	1	0	7	0	7	1	0	7
6311	Other information activities	12	100	3	0	115	14	101	3	1	119	15	107	3	1	126	14	100	2	1	117
9101	Library and archives activities	0	59	5	0	64	0	59	5	0	64	0	59	5	0	64	0	59	5	0	64
4761	Retail sale of books, newspapers	97	155	2	1	255	99	139	2	1	241	96	126	3	1	226	93	124	3	1	221
Total Book	s and Press	145	1,310	34	10	1,499	154	1,287	28	10	1,479	130	1,221	34	8	1,392	144	1,180	30	9	1,363
900	Creative arts and entertainment	12	5	0	0	17	14	6	0	0	20		6	0	0	6	0	6	0	0	6

	activities				I					I			1 1		I			1 1		I	
582	Software publishing	0	4	0	0	4	0	4	0	0	4	0	10	0	0	10	0	15	0	0	15
5911	Motion picture, video and television production	0	286	4	0	290	6	310	4	0	320	9	328	3	0	340	9	333	3	0	345
5912	Motion picture, video and television post- production	0	0	0	0	0	0	0	0	0	0		2	0	0	2	0	4	0	0	4
5913	motion picture, video and television distribution	1	48	1	0	50	2	47	0	0	49	2	43	1	0	46	2	41	2	0	45
5920	Sound recording and music publishing	1	0	0	0	1	1	0	0	0	1	1	0	0	0	1	1	0	0	0	1
5914	Motion picture projection	1	27	1	0	29	2	26	1	0	29	1	23	1	0	25	2	22	1	0	25
6010	Radio broadcasting	0	18	0	0	18	0	20	0	0	20	0	34	0	0	34	0	50	0	0	50
6020	Television programming	5	497	6	0	508	6	492	4	1	503	6	442	3	1	452	4	412	3	1	420
6312	Web portals	0	1	0	0	1	0	3	0	0	3	1	19	0	0	20	0	30	0	0	30
6391	News agencies	0	7	1	0	8	0	8	1	0	9	0	6	1	0	7	0	7	1	0	7
7722	Renting of video tapes and disks	2	24	0	0	26	2	24	0	0	26	1	24	0	0	25	1	24	0	0	25
4763	retail sale of music and video recordings	0	21	0	0	21	0	21	0	0	21	0	24	0	0	25	0	28	0	0	28
4791	Retail sale via mail order	5	67	3	0	75	5	95	3	0	103	9	129	2	1	141	10	190	1	1	202
Total Audi Media	ovisual and Interactive	27	1,005	16	0	1,048	39	1,056	13	1	1,109	29	1,090	11	2	1,132	28	1,162	11	2	1,203
7410	Specialized design activities	0	NA	NA	NA	0	0	8	0	0	8	4	18	0	0	22	6	25	0	0	31
731,732	Advertising	130	970	22	4	1,126	145	1,008	20	4	1,177	115	1,048	20	4	1,187	112	1.04	24	4	1.18
7110	Architectural and engineering activities	210	1,794	4	0	2,008	237	1,560	4	0	1,801	237	1,027	4	0	1,268	250	1.026	4	0	1.28
Total Designation	gn and Creative	340	2,764	26	4	3,134	382	2,576	24	4	2,986	356	2,093	24	4	2,477	368	2.091	28	4	2.491
Entreprene	eurs*	4,210					4,300					4,260					4,400				
TOTAL CU	ILTURAL INDUSTRIES	4,744	5,792	105	38	10,67 9	4,991	5,703	111	56	10,86 1	4,907	5,179	115	54	10,25 4	5,046	5,208	115	55	10,42 3

<sup>\*</sup> Entrepreneurs below the census level (20,000 Euros per year). Calculations are based on data Business Registry, Statistical Office of the Republic of Serbia and the Chamber of Commerce of Serbia.

Table A2. Distribution of business mortality by cultural industries domains, 2010-2012 (number of enterprises, organization and entrepreneurs)

NACE Rev.2 code	NACE Rev.2 label	2010	2011	2012
9000	Creative arts and entertainment activities	0	0	0
9102	Museum activities	-2	0	0
9103	Botanical and zoo garden	0	0	0
4779	Retail sale of second hand goods	-3	-7	-9
Cultural and N	latural Heritage	-5	-7	-9
9000	Creative arts and entertainment activities	-30	-10	-10
3220	Manufacturing musical instruments	-1	-2	0
5920	Sound recording and music publishing	-17	-15	-10
4763	Retail sale of music and video	-3	0	-1
Douformones	recordings	9	-27	04
	and Celebration			-21
9000	Creative arts and entertainment activities	-17	-11	-10
7220	Research and experimental development	0	0	0
7420	Photograph activities	-7	-4	-7
3212	Manufacture of jeweler	-3	0 -8	-5 -
5819	Other publishing activities			-5
Visual Arts an		-27	-23	-27
5811	Book publishing	-34	-47	-44
5813, 5814	Publishing of newspapers, journals	-31	-49	-27
5819	Other publishing activities	-3	-7	-5
6391	News agencies	0	-4	0
6311	Other information activities	-6	-7	-13
9101	Library and archives activities	0	0	0
4761	Retail sale of books, newspapers	-30	-15	-5
Books and Pro		-104	-129	-94
9000	Creative arts and entertainment activities	0	0	-1
582	Software publishing	-3	2	0
5911	Motion picture, video and television production	-6	-8	-17
5912	Motion picture, video and television post-production	0	1	1
5913	motion picture, video and television distribution	-6	-4	-4
5920	Sound recording and music publishing	0	0	0
5914	Motion picture projection	-1	-6	-1
6010	Radio broadcasting	-2	-12	-3
6020	Television programming	-39	-63	-40
6312	Web portals	-2	-1	0
6391	News agencies	0	-4	0
7722	Renting of video tapes and disks	-3	-3	-2
4763	retail sale of music and video recordings	-3	-1	-1
4791	Retail sale via mail order	3	-1	8
	nd Interactive Media	-54	-73	-53
7410	Specialized design activities	NA	-2	-1
731,732	Advertising	-76	-82	-104
7110	Architectural and engineering activities	16	-109	-51
	eative Services	-58	-189	-156
TOTAL CULTU	JRAL INDUSTRIES	-239	-447	-359

Calculations are based on data from Business Registry and the Chamber of Commerce of Serbia.

<sup>\*</sup> Excluded number of business mortality of entrepreneurs below the census for submission financial reports, registered in sectors: Information and Communication and Creative Art and Entertainment Activities.

Table A3. Distribution of start-ups by cultural industries domains, 2009-2012 (number of enterprises)

NACE		20	009	20	)10	20	11	20	012
Rev.2 code	NACE Rev.2 label	Total	Start-ups	Total	Start-ups	Total	Start-ups	Total	Start-ups
9000	Creative arts and entertainment activities	5	1	6	1	6	1	6	0
9102	Museum activities	108	0	106	0	106	0	106	0
9103	Botanical and zoo garden	5	1	6	1	7	1	8	1
4779	Retailed sale of second hand goods	45	5	54	12	54	8	53	7
Cultural	and Natural Heritage	163	7	172	14	174	173	173	8
9000	Creative arts and entertainment activities	196	13	247	21	249	12	249	9
3220	Manufacturing musical instruments	7	0	6	0	4	0	4	0
5920	Sound recording and music publishing	65	15	65	17	60	10	60	10
4763	Retailed sale of music and video recordings	9	1	9	4	11	4	12	4
Performa	ance and Celebration	277	29	327	42	324	323	324	23
9000	Creative arts and entertainment activities	27	13	31	21	32	12	32	9
7220	Research and experimental development	137	0	137	0	137	0	137	0
7420	Photograph activities	44	5	43	6	40	4	40	4
3212	Manufacture of jeweler	75	5	80	5	85	5	85	5
5819	Other publishing activities	83	4	81	4	69	2	69	3
Visual Ar	rts and Crafts	366	27	372	36	369	363	363	21
5811	Book publishing	620	34	608	22	580	19	550	14
5813, 5814	Publishing of newspapers, journals	366	31	363	28	340	26	337	24
5819	Other publishing activities	35	1	35	1	31	1	30	1
6391	News agencies	15	4	17	2	7	0	7	1
6311	Other information activities	103	6	105	8	111	13	103	5
9101	Library and archives activities	64	0	64	0	64	0	64	0
4761	Retail sale of books, newspapers	158	9	142	14	130	3	128	3
Books ar		1,361	85	1,334	75	1,269	1,262	1,226	48
9000	Creative arts and entertainment activities	5	1	6	1	6	1	6	0
582	Software publishing	4	2	4	3	10	4	15	5
5911	Motion picture, video and television production	290	31	314	30	331	25	336	22
5912	Motion picture, video and television post-production	0	0	0	0	2	1	4	1
5913	motion picture, video and television distribution	49	2	47	4	44	1	43	3

5920	Sound recording and music publishing	NA	NA	NA	NA	NA	NA	NA	NA
5914	Motion picture projection	28	0	27	0	24	3	23	0
6010	Radio broadcasting	18	2	20	0	34	2	50	13
6020	Television programming	503	15	497	33	446	12	416	10
6312	Web portals	1	1	3	0	19	15	30	11
6391	News agencies	15	4	17	2	7	0	7	1
7722	Renting of video tapes and disks	24	5	24	3	24	3	24	2
4763	retail sale of music and video recordings	21	2	21	4	25	4	28	6
4791	Retail sale via mail order	70	12	98	25	132	35	192	52
Audiovis	ual and Interactive Media	1,028	77	1,078	105	1,110	1,103	1,103	106
7410	Specialized design activities	NA	NA	8	6	18	8	25	8
731,732	Advertising	996	132	1.032	112	1,072	122	1.068	100
7110	Architectural and engineering activities	1.798	136	1.564	120	1,031	110	1.03	50
Design a	nd Creative Services	2,794	268	2,604	238	2,121	2,121	2,121	158
TOTAL C	CULTURAL INDUSTRIES RISES	5,935	492	5,887	510	5,346	466	5,377	384
TOTAL E	NTERPRISES NATIONAL ECONOMY	94,573	967	95,002	855	93,096	852	92,157	937

Calculations are based on data from Business Registry, the Statistical Office of The Republic of Serbia and the Chamber of Commerce of Serbia.

Table A4. Distribution of start-ups by cultural industries domains, 2009-2012 (number of entrepreneurs)

NACE Rev.2 code	NACE Rev.2 label	2010	2011	2012
900	Creative arts and entertainment activities	5	0	0
9102	Museum activities	0	0	0
9103	Botanical and zoo garden	0	0	0
4779	Retail sale of second hand goods	3	6	7
Cultural and Natu	ral Heritage	8	6	7
9000	Creative arts and entertainment activities	5	0	0
3220	Manufacturing musical instruments	0	0	0
5920	Sound recording and music publishing	0	0	0
4763	Retail sale of music and video recordings	1	13	1
Performance and		6	13	1
900	Creative arts and entertainment activities	5	1	1
7220	Research and experimental development	0	0	0
7420	Photograph activities	3	1	3
5819	Other publishing activities	0	0	0
Visual Arts and C	rafts	8	2	4
5811	Book publishing	2	0	1
5813, 5814	Publishing of newspapers, journals	0	0	0
5819	Other publishing activities	0	0	0
6391	News agencies	0	0	0
6311	Other information activities	0	1	1
9101	Library and archives activities	0	0	0
4761	Retail sale of books, newspapers	7	4	3
<b>Books and Press</b>		9	5	5
900	Creative arts and entertainment activities	5	0	0
582	Software publishing	0	0	0
5911	Motion picture, video and television production	2	2	1
5912	Motion picture, video and television post-production	0	0	0
5913	motion picture, video and television distribution	0	0	0
5920	Sound recording and music publishing	0	0	0
5914	Motion picture projection	0	0	1
6010	Radio broadcasting	1	0	0
6020	Television programming	0	0	0
6312	Web portals	1	1	0
6391	News agencies	0	0	0
7722	Renting of video tapes and disks	0	0	0
4763	retail sale of music and video recordings	1	0	0
4791	Retail sale via mail order	3	5	4
Audiovisual and I	nteractive Media	13	8	6
7410	Specialized design activities	0	4	0
731,732	Advertising	11	6	4
7110	Architectural and engineering activities	10	12	15
Design and Creati	ve Services	21	22	19
TOTAL CULTURA		65	56	42
TOTAL NATIONAL		1,860	1,898	1,425

Calculations are based on data from Business Registry.

Table A5. Distribution of GVA by cultural industries domains, 2009-2011 (in millions, current prices)

NACE Rev.2	NAOE Barro lakal	200	09	20	11
code	NACE Rev.2 label	GVA	GVA €	GVA	GVA €
900	Creative arts and entertainment activities	33.02	0.35	28.94	0.28
9102	Museum activities, zoo garden	278.94	2.97	214.76	2.11
4779	Retail sale of second hand goods	14.78	0.16	52.62	0.52
Cultural and Na	atural Heritage	326.75	3.48	296.32	2.91
9000	Creative arts and entertainment activities	462.31	4.92	405.13	3.97
3220	Manufacturing musical instruments	15.44	0.16	6.70	0.07
5920	Sound recording and music publishing	272.61	2.90	272.61	2.67
4763	Retail sale of music and video recordings	117.72	1.25	182.56	1.79
Performance a	nd Celebration	868.08	9.24	867.00	8.50
900	Creative arts and entertainment activities	620.44	6.60	620.44	6.09
7220	Research and experimental development	3.80	0.04	4.20	0.04
7420	Photograph activities	98.09	1.04	106.14	1.04
5819	Other publishing activities	513.38	5.46	230.54	2.26
Visual Arts and	Crafts	1455.74	15.49	961.32	9.43
5811	Book publishing	4167.27	44.36	4.167.27	40.88
5813, 5814	Publishing of newspapers, journals	6416.28	68.29	6.416.28	62.94
5819	Other publishing activities	220.02	2.34	513.00	5.04
6391	News agencies	338.21	3.60	398.24	3.91
6311	Other information activities	1463.60	15.58	1.488.89	14.60
9101	Library and archives activities	21475.95	228.59	16.534.35	162.18
4761	Retail sale of books, newspapers	1350.19	14.37	989.84	9.71
<b>Books and Pre</b>	SS	35431.52	377.13	30508.25	299.25
900	Creative arts and entertainment activities	132.09	1.41	115.75	1.14
582	Software publishing	1358.53	14.46	7.50	0.07
5911	Motion picture, video and television production	1549.98	16.50	1669.81	16.38
5912	Motion picture, video and television post- production	0.00	0.00	24.66	0.24
5913	motion picture, video and television distribution	422.54	4.50	405.91	3.98
5914	Motion picture projection	169.52	1.80	328.54	3.22
5920	Sound recording and music publishing	636.09	6.77	636.09	6.24
6010	Radio broadcasting	119.75	1.27	176.98	1.74
6020	Television programing	18287.79	194.65	19073.41	187.09
6311	Web portals	59.09	0.63	398.24	3.91
6391	News agencies	338.21	3.60	45.62	0.45
7722	Renting of video tapes and disks	32.63	0.35	45.62	0.45
4763	retail sale of music and video recordings	50.45	0.54	78.24	0.77
4791	Retail sale via mail order	714.12	7.60	1357.75	13.32
	d Interactive Media	23870.77	254.08	24364.13	238.98
7410	Specialized design activities	1.49	0.02	40.32	0.40
731,732	Advertising	7947.88	84.60	10.045.86	98.54
7110	Architectural and engineering activities	21148.65	225.11	20.272.10	198.84
Design and Cre	eative Services	29098.02	309.72	30358.29	297.78
Education		11941.14	127.10	12.512.50	122.73
	RAL INDUSTRIES	102992.01	102771.99	99.867.80	979.58
TOTAL NATION	NAL ECONOMY	2333391.10	24836.52	2.779.522.70	27.263.59
Contribution of	f CI in total economy (%)	4.4	4.4	3.6	3.6
Contribution of	f CI in total economy (%)	2.9	2.9	2.5	2.5

Calculations are based on data from Business Registry, Statistical Office of the Republic of Serbia and the Chamber of Commerce of Serbia.

<sup>\*</sup> Previous calculation: Mikić, (2013); Mikić (2011)

Table A6. Employment distribution in cultural industries, 2009-2012 (by organizational forms and total, in number of person)

NACE			Entrepr	eneurs		Enter	prises and o	other legal er	ntities		To	otal	
Rev.2 code	NACE Rev.2 label	2009	2010	2011	2012	2009	2010	2011	2012	2009	2010	2011	2012
900	Creative arts and entertainment activities	0	0	0	0	241	240	240	240	241	240	240	240
9102	Museum, heritage activities	0	0	0	0	3,551	3,582	3,561	3,689	3,551	3,582	3,561	3,689
9103	Botanical and zoo garden	0	0	0	0	344	345	356	358	344	345	356	358
4779	Retail sale of second hand goods	8	10	11	5	158	112	161	166	166	122	172	171
Cultural	and Natural Heritage	8	10	11	5	4,294	4,279	4,318	4,453	4,302	4,289	4,329	4,458
9000	Creative arts and entertainment activities	0	0	0	0	3,368	3,359	3,284	3,284	3,368	3,359	3,284	3,284
3220	Manufacturing musical instruments	1	1	1	0	14	14	9	7	15	15	10	7
5920	Sound recording and music publishing	0	0	0	0	48	60	60	60	48	60	60	60
4763	Retail sale of music and video recordings	2	2	8	1	62	62	71	75	64	64	79	76
Performa	nce and Celebration	3	3	9	1	3,492	3,495	3,424	3,426	3,495	3,498	3,433	3,427
900	Creative arts and entertainment activities	3	4	6	5	962	960	960	961	965	964	966	966
7220	Research and experimental development	0	0	0	0	3,094	3,040	3,030	3,029	3,094	3,040	3,030	3,029
7420	Photograph activities	165	170	165	132	180	159	146	119	345	329	311	251
5819	Other publishing activities	12	12	13	10	393	337	293	246	405	349	306	256
Visual Ar	ts and Crafts	180	186	184	147	4,629	4,495	4,429	4,355	4,809	4,681	4,613	4,502
5811 5813,	Book publishing Publishing of	50 12	54 16	417 8	285 7	3,445 5,240	3,109 4,772	3,161 4,717	2,533 4,436	3,495 5,252	3,163 4,788	3,578 4,725	2,818 4,443
5814 5819	newspapers, journals Other publishing	10	12	10	10	169	144	126	105	179	156	136	115
	activities	_			-								-
6391	News agencies Other information	0	0	0	0	422	397	356	357	422	397	356	357
6311	activities	20	23	21	21	692	709	682	708	712	732	703	729
9101	Library and archives activities	0	0	0	0	2,786	2,785	2,833	2,842	2,786	2,785	2,833	2,842
4761	Retail sale of books, newspapers	120	121	111	112	2,581	2,421	2,375	2,451	2,701	2,542	2,486	2,563
Books ar		212	226	567	435	15,335	14,337	14,250	13,432	15,547	14,563	14,817	13,867
900	Creative arts and entertainment activities	3	4	4	4	2,406	2,400	2,401	2,403	2,409	2,404	2,405	2,407
582	Software publishing	0	0	0	0	5	5	14	27	5	5	14	27

5911	Motion picture, video and television production	2	2	3	3	645	642	616	575	647	644	619	578
5912	Motion picture, video and television post-production	0	0	0	0	0	0	11	10	0	0	11	10
5913	motion picture, video and television distribution	0	5	4	5	214	197	192	169	214	202	196	174
5914	Motion picture projection	5	7	0	0	204	180	142	158	209	187	142	158
5920	Sound recording and music publishing	5	7	6	5	218	224	224	238	5	7	6	5
6010	Radio broadcasting	0	0	0	0	206	206	260	286	206	206	260	286
6020	Television programing	1	1	2	2	11,481	11,457	11,180	10,608	11,482	11,458	11,182	10,610
6311	Web portals	0	0	0	0	40	40	76	99	40	40	76	99
6391	News agencies	0	0	0	0	422	397	356	357	422	397	356	357
7722	Renting of video tapes and disks	5	7	2	2	43	43	43	43	48	50	45	45
4763	retail sale of music and video recordings	0	0	0	0	144	144	165	176	144	144	165	176
4791	Retail sale via mail order	0	0	0	3	463	720	848	1,083	463	720	848	1086
Audiovis	ual and Interactive Media	21	33	21	24	16,491	16,655	16,528	16,231	16,512	16,688	16,549	16,255
7410	Specialized design activities	0	0	0	5	8	8	28	29	8	8	28	34
731,732	Advertising	115	121	102	85	4,357	4,093	4,048	4,143	4,472	4,214	4,150	4,228
7110	Architectural and engineering activities	300	318	318	348	13,472	12,512	12,808	13,749	13,772	12,830	13,126	14,097
Design a	nd Creative Services	415	439	420	438	17,837	16,613	16,884	17,921	18,252	17,052	17,304	18,359
Educatio	n**	0	0	0	0	13,480	13,618	13,839	13,920	13,480	13,618	13,839	13,920
Entrepre	neurs*	4,210	4,300	4,426	4,400					4,210	4,300	4,426	4,400
TOTAL C	ULTURAL INDUSTRIES	5,049	5,197	5,638	5,450	75,548	73,492	73,671	73,739	80,597	78,689	79,309	79,189
TOTAL N	IATIONAL ECONOMY	571,000	441,000	403,000	385,934	1,428,000	1,355,000	1,343,000	1,341,114	1,999,000	1,796,000	1,746,000	1,727,048

Calculations are based on data from Business Registry, Statistical Office of the Republic of Serbia and the Chamber of Commerce of Serbia.

<sup>\*</sup> Entrepreneurs below 20.000 Euros of income per year

<sup>\*\*</sup>Only cultural and art education

Table A7. Growth rate of employment by cultural industries domains, 2010-2012 (%)

NACE Rev.2	NACE Rev.2 label		Entrepreneur	'S	Enterp	rises and oth entities	ner legal		Total	
code		2010	2011	2012	2010	2011	2012	2010	2011	2012
900	Creative arts and entertainment activities	0.0	0.0	0.0	-0.2	0.1	0.1	-0.2	0.1	0.1
9102	Museum, heritage activities	0.0	0.0	0.0	0.9	-0.6	3.6	0.9	-0.6	3.6
9103	Botanical and zoo garden	0.0	0.0	0.0	0.3	3.2	0.6	0.3	3.2	0.6
4779	Retail sale of second hand goods	25.0	25.0	10.0	-29.1	43.8	3.1	-16.6	56.3	8.1
Cultural and Natu	iral Heritage	25.0	10.0	-54.5	-0.3	0.9	3.1	12.2	5.9	-24.1
9000	Creative arts and entertainment activities	0.0	0.0	0.0	-0.2	-2.2	0.0	-0.2	-2.2	0.0
3220	Manufacturing musical instruments	0.0	0.0	0.0	0.0	-35.7	-22.2	0.0	-35.7	-22.2
5920	Sound recording and music publishing	0.0	0.0	0.0	10.0	0.0	5.0	10.0	0.0	5.0
4763	Retail sale of music and video recordings	0.0	300.0	-87.5	0.0	14.1	6.8	0.0	164.1	-36.9
Performance and	Celebration	0.0	200.0	-88.9	0.5	-1.9	0.5	0.5	98.1	44.0
900	Creative arts and entertainment activities	33.3	50.0	-16.7	-0.2	0.1	0.1	16.4	25.1	-8.3
7220	Research and experimental development	0.0	0.0	0.0	-1.7	-0.3	0.0	-1.7	-0.3	0.0
7420	Photograph activities	3.0	-2.9	-20.0	-11.7	-8.2	-18.5	-10.2	-9.6	-28.5
5819	Other publishing activities	0.0	8.3	-23.1	-14.4	-12.9	-16.2	-14.4	-8.7	-27.8
Visual Arts and C	rafts	3.3	-1.1	-20.1	-2.9	-1.5	-1.7	-1.2	-2.0	-11.7
5811	Book publishing	8.0	672.2	-31.7	-9.8	1.7	-19.9	-5.8	337.8	-35.7
5813, 5814	Publishing of newspapers, journals	33.3	-50.0	-12.5	-8.9	-1.2	-6.0	7.7	-26.2	-12.2
5819	Other publishing activities	20.0	-16.7	0.0	-14.4	-12.9	-16.2	-4.4	-21.2	-16.2
6391	News agencies	0.0	0.0	0.0	-5.9	-10.3	0.3	-5.9	-10.3	0.3
6311	Other information activities	15.0	-8.7	0.0	2.5	-3.8	3.8	10.0	-8.2	3.8
9101	Library and archives activities	0.0	0.0	0.0	0.0	1.7	0.3	0.0	1.7	0.3
4761	Retail sale of books, newspapers	0.8	-8.3	0.9	-6.2	-1.9	3.2	-5.8	-6.0	3.7
<b>Books and Press</b>		6.6	150.9	-23.3	-6.5	-0.6	-5.7	-3.2	74.8	-17.4
900	Creative arts and entertainment activities	33.3	0.0	0.0	-0.2	0.1	0.1	16.4	0.1	0.1
582	Software publishing	0.0	0.0	0.0	0.0	180.0	92.9	0.0	180.0	92.9
5911	Motion picture, video and television production	0.0	50.0	0.0	-0.5	-4.1	-6.7	-0.5	21.0	-6.7
35912	Motion picture, video and television post-production	0.0	0.0	0.0	0.0	0.0	-9.1	0.0	0.0	92.9
5913	motion picture, video and television distribution	0.0	-20.0	25.0	-7.9	-2.5	-12.0	-7.9	-12.5	-6.7
5914	Motion picture projection	40.0	-100.0	0.0	-11.8	-21.1	11.3	8.2	-71.1	-9.1
5920	Sound recording and music publishing	40.0	-14.3	-16.7	0.0	0.0	0.0	20.0	-7.1	0.5
6010	Radio broadcasting	0.0	0.0	0.0	0.0	26.2	10.0	0.0	26.2	11.3
6020	Television programing	0.0	100.0	0.0	-0.2	-2.4	-5.1	-0.2	47.6	-8.3
6311	Web portals	0.0	0.0	0.0	0.0	90.0	30.3	0.0	90.0	10.0
6391	News agencies	0.0	0.0	0.0	-5.9	-10.3	0.3	-5.9	-10.3	-5.1
7722	Renting of video tapes and disks	40.0	-71.4	0.0	0.0	0.0	0.0	20.0	-35.7	39.3
4763	retail sale of music and video recordings	0.0	0.0	0.0	0.0	14.1	6.8	0.0	14.1	0.3
4791	Retail sale via mail order	0.0	0.0	0.0	55.5	17.8	27.7	55.5	17.8	6.8
Audiovisual and I	57.1 0.0	-36.4 0.0	14.3	1.0	-0.8	-1.9	29.5	-19.0	5.2	
7410				0.0	0.0	250.0	3.6	0.0	250.0	3.6
731,732				-16.7	-6.1	-1.1	2.3	-3.5	-9.0	-6.0
7110	3 3 3 3 3			9.4	-7.1	2.4	7.3	-4.1	2.4	12.1
Design and Creat	ive Services	5.8	-4.3	4.3	-6.9	1.6	6.1	-4.0	-0.5	8.3
Education		0.0	0.0	0.0	1.0	1.6	0.6	1.0	1.6	0.6
Entrepreneurs*		2.1	2.9	-0.6				1.1	1.5	-0.3
TOTAL CULTURA	AL INDUSTRIES	2.9	8.5	-3.3	-2.7	0.2	0.1	-1.3	4.5	-1.6

Calculations are based on data from Business Registry, Statistical Office of the Republic of Serbia and the Chamber of Commerce of Serbia.

# **Glossary**

A non-profit organization is an institutional unit founded by either corporations, households or state institutions. The term non-profit organization demonstrates that members managing these organizations have no financial benefits from their operation i.e. they cannot participate in the distribution of profit, since the entire operating surplus is re-invested in the operation of organizations. Non-profit organizations in cultural industries are most commonly organized in non-market production, so that their business operation expenses are covered by donations, whilst sales of services in the market is rather less frequent. They can be divided into those controlled by the State (public cultural institutions, public cultural companies) and those rendering services to households (cultural associations, clubs, amateur societies, professional associations in cultural industries etc.).

An employed person is someone who has a job in a productive activity within the production boundary of System of National Accounts (enterprises, government and non-profit organizations, cooperatives). The statistical definition includes persons of the age of 15 and more who performed any kind of work for a wage or profit for at least one hour during the reference week or persons who were not working, but have jobs from which they were temporary absent (ILO, 1982). Employment can also be measured by administrative sources and in that case an employed person is someone who has an official job (by employment contract) in a productive activity within the production boundary of System of National Accounts.

An entrepreneur is a physical person who operates in some economic activities (sole proprietorship). A special category of entrepreneurs are self-employed persons who are defined as persons who are the sole or joint owners of the unincorporated enterprises in which they work.

Business mortality shows the number of closed businesses. The mortality rate of businesses represents the number of closed businesses relative to the stock of active business. Usually, a business is considered a "closed business", if it is not reactivated within two years. The measure of start-ups can give us an indication of turbulence in the enterprise life-cycle. In addition, by comparing the data with the average of the whole economy it can be used as a tool for analysing differences between enterprises in cultural industries and in the rest of economy. Entrepreneurs are automatically registered as a "closesd business" if they do not operate for one year.

Business start-ups show the number of newly-established enterprises or entrepreneurs. The birth rate is an indicator, which represents the number of newly-established enterprises or entrepreneurs relative to the stock of active businesses. The new businesses do not include reconstruction or transforming of enterprises or those that have changed their activity. The measure of start-ups can give us an indication of turbulence in the enterprise life-cycle or subsector maturity. In addition, by comparing the data with the average of whole economy it can be used as a tool for analysing the differences between enterprises in cultural industries and in the rest of economy.

Economic size analysis is a methodological approach that shows how much economic activity is associated with cultural industries. It use measures from "the System of National Account for estimating the direct contribution of cultural industries in the generation of basic macroeconomic

aggregates (gross value added, employment, fixed capital formation, etc.) and to track the gross changes in the economic activity of cultural industries" (UNESCO-UIS, 2012: 20). It provides a more general picture of the role that cultural industries play in the economy. The word "size" associated to this analysis reflects the primary aim of measuring, which is often to determine the economic size of cultural industries and their share in the economy performance.

Employment is the number of employed people who entered into a labour relation with an employer, as well as the employer himself in the instance of a private entrepreneur. In the case of Labour Force Survey, employment also covers informally employed persons such as working household members and unpaid family worker or supporting household members.<sup>31</sup>

Enterprises are institutional units with an aim to produce goods and services for the market. In statistical terms, this indicator includes the total number of enterprises that were active during one year. Enterprises can be organized as a sole proprietorship private enterprises, limited companies, joint stock companies, etc.

Gross Domestic Product is most significant macroeconomic aggregate within the System of National Accounts, which represents the result of production activities of all residential institutional units. Usually, institutional units are enterprises and non-profit organizations. Production cover by GDP includes material production and services and it is the indicator of national economic activities that is calculated on the overall economic level.

Gross Value Added is defined as a measure of the value of goods and services produced in industry. As the taxes on products and services and subsidies can be calculated only at the level of whole economy, GVA is much often a measure used for measuring and analysing subsectoral structure of an industry or gross output of entities at the different levels of economy (sectoral, regional, local, etc.).

Labour productivity is the gross value added per person employed and it represents a basic indicator for measuring the labour productivity. It is calculated as gross value added in an industry divided by the number of persons employed in that industry.

Stock of businesses represents the number of business by size. A high number of microenterprises can indicate an unstructured nature and that the cultural industries as a sector are too diverse and fragmented. This measure is an indication of business structure in cultural industries, concentration of market power or their diversification and can be used for analysing similarities and differences between enterprises in cultural industries and in the rest of economy. Distribution of business activities by sub-sectors can be used for analysing structural shifts as well as a level of supply of cultural products and services by different domains. Furthermore, it can identify gaps in the value chain in different domains of cultural industries.

Structural analysis of cultural industries "consists of different analysing techniques for studying the structure of cultural industries, primarily those concerning the distribution of macroeconomic aggregates by sub-sectors, groups of stakeholders (authors, producers, distributors, etc.) or different stages of the value chain" (UNESCO, 2012: 20). It can be complemented with

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More precisly, ILO define employment as a "persons in employment comprise all persons above a specified age who during a specified brief period, either one week or one day, were in the following categories: paid employment and self employment". (ILO, 1982a)

structural analysis. Structural analysis is an interpretation of the specific policy, market and economic contexts. "If the structural analysis has a specific purpose, it can be carried out in two ways: by identifying and showing the relationship between different stages of the value chain in cultural industries or different value chain players (value chain analysis) or analysing the competitiveness of cultural industries and factors associated with them (cluster analysis)" (UNESCO-UIS, 2012: 20).

The economic contribution is a descriptive concept, which was used for quantification of the economic dimension of cultural industries and the gross changes in their economic activity. It is used to statistically demonstrate the economic contribution of cultural industries. If economic output is being considered, and if the GDP of a country in a given year is X how much of X is "contributed" by the cultural industries?" (UNESCO-UIS, 2012:18).

Total number of businesses represents the number of enterprises or entrepreneurs active in the observed year. This measure indicates the level of institutionalisation of cultural industries business.

In 2012, the UNESCO Institute for Statistics published the first handbook in the Framework for Cultural Statistics series, entitled "Measuring the Economic Contribution of Cultural Industries: A Review and Assessment of Current Methodological Approaches". The report provided an extensive review of existing methodologies and made recommendations for a model approach.

This case study of cultural industries in Serbia applies Handbook No. 1 by presenting the results of using the UIS-recommended methodology for measuring the economic contribution of cultural industries at a national level. The report details the data used, describes the results obtained and analyses the results. In addition, the benefits and limitations of the current approach are discussed.

This handbook offers a practical guide for practitioners interested in assessing the economic contribution of their cultural industries.



Cultural Organization

The UNESCO Institute for Statistics (UIS) is the statistical office of the United Nations Educational, Scientific and Cultural Organization (UNESCO) and is the UN depository for internationally comparable statistics in the fields of education, science and technology, culture and communication.