United Nations
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MEASURING THE ECONOMIC CONTRIBUTION OF CULTURAL INDUSTRIES

A review and assessment of current methodological approaches

2009 UNESCO FRAMEWORK FOR CULTURAL STATISTICS HANDBOOK NO. 1

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UNESCO

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Abbreviations and acronyms

ACP	African, Caribbean and Pacific countries
BIMSTEC	Bay of Bengal Initiative for Multi-Sectoral, Technical and Economic Cooperation
CI	Cultural industries
CIDI	Cultural Industries Development Index
CPA	The statistical classification of products by activities
CSA	Cultural Satellite Accounts
DCMS	Department of Culture, Media and Sport
ESS	European Statistical System
EU	European Union
Eurostat	Statistical office of the European Union
GDP	Gross domestic product
GVA	Gross value added
IIPA	International Intellectual Property Alliance
ILO	International Labour Organization
I-O	Input-output tables/model
ISCO	International Standard Classification of Occupations
LPS	Local production system
EU LEG-Culture	Leadership group on cultural statistics (Eurostat)
MERCOSUR	Common market of the South
NACE	Statistical Classification of Economic Activities in the European Community
NEPAD	New Partnership for Africa's Development
OECD	Organisation for Economic Co-operation and Development
R&D	Research and development
SADC	Southern African Development Community
SAS	Systems of Satellite Accounts
SEE	South East Europe
SIC	Standard Industrial Classification
SNA	System of National Accounts
UIS	UNESCO Institute for Statistics
UK	United Kingdom
UN	United Nations
UN DG	United Nations Directorate General
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNESCO FCS	UNESCO Framework for Cultural Statistics
VA	Value added
WIPO	World Intellectual Property Organization

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Chapter 1. Development of methodological approaches for measuring the economic contribution of cultural industries: A brief overview

1.1 Introduction

For a long time, cultural industries as an economic phenomenon were not a subject of special research interest. By the end of the 1990s, results of research conducted in developed countries showed that cultural and creative industries generate a high growth rate of Gross Domestic Product (GDP) or Gross Value Added (GVA) and employment; potentially they have the characteristics of a leading sector that can generate growth of the overall economy; some of their sectors (e.g. design) can provide spill over effects for the economy; and they can attract a high-quality workforce, business and investment, and spur creativity and innovation across all sectors of the economy. All of this has prompted a very intense economic, political and academic debate on the contribution of cultural industries in terms of economic development, and led to a reinvestigation of their role in the structural development and changes of the economy. The growing interest in cultural industries and their rapid acceptance as a fairly general model for addressing development problems at the economic and political level, have contributed that cultural industries become a key component in the formulation of economic policy and strategic development planning. In this regard, there is a growing tendency in several countries to include different aspects (production capacity, creative class, cultural amenities, etc.) of cultural industries in measuring national developmental performances.[1]

Cultural industries are increasingly becoming important components of the modern economy and knowledge-based society due to their impact on the enrichment of development. The culture sector generates two types of impacts: non-economic and economic. The non-economic impacts that cultural industries have on social development can be seen in the field of social cohesion and integration of marginalised groups (Council of Europe, 1998; Matarasso, 1997); building of a new value system (Ingelhart, 2000); affirmation of creativity, talents and excellence (Throsby, 2001; UN,2010b); development of cultural diversity, national identity and the identity of different cultural groups (UNESCO,2005b; Herrera,2002; Throsby, 2001); facilitating creativity and innovation (ABS, 2001; Cox, 2005; Potts and Cunningham, 2008; Bakhshi et al., 2008).

In recent decades there has been greater understanding and examination of the economic importance of cultural industries. It has become obvious that they have an impact on GDP or GVA growth rates and employment, and that they can improve a country's foreign trade position and competitiveness, as well as contribute to the regeneration and branding of creative cities, and attract business and investment. Some authors recognize that cultural industries have an important impact on the economy and society by introducing a new concept of economic growth and development, and that they constitute one of the few economic sectors where dynamic future development is expected (Lash and Urry, 1994; Jensen, 1999; Pine and Gilmore, 1999).These trends are sometimes considered to represent a 'culturalisation' of the economy (Ellmeier, 2003), or the 'creativisation' of the 'economy' (Rikalovic and Mikic, 2011). In any case, they highlight the central role that the culture sector plays in building a creative economy (UNDP, 2010; Howkins, 2001; Florida, 2002; Conference Board of Canada, 2008).

[1] For many years the evaluation of creative sector performances was one of the pillars of measuring competitiveness in the United Kingdom (see Huggins and Thompson, 2010 for the UK Competitiveness Index).Over the last few years this practice was adopted in the measurement of regional competitiveness at EU level (see Kozovska and Annoni, 2010). In addition, the development of creative services was widely included as a component in calculating the global index of competitiveness as a factor for showing changes in the field of innovation and business sophistication (see World Economic Forum, 2010).

This report is divided into five chapters. Chapter 1 explores the historical background of measuring the economic contribution of cultural industries, tracing progress in this area from the first study until now, and including the background, rationale and policy context of fostering economic development through the culture sector (in the first instance through cultural and creative industries)

Chapter 2 discusses the economic evaluation of the developmental role of cultural industries. This chapter also examines the approaches, concepts, methodologies, practices and definitions connected with cultural industries and economic development.

Chapter 3 describes, evaluates and analyses international approaches for measuring the economic contribution of cultural industries made by UNESCO, the Organisation for Economic Co-operation and Development (OECD), Eurostat, the European Union (EU) and the World Intellectual Property Organization (WIPO).

Chapter 4 reviews the most relevant research and mapping studies conducted. It provides a comparative overview of the main characteristics of these studies, with examples from Europe, Asia, the Pacific, Africa, Latin America and North America. The review includes studies which measured the economic contribution of art, the culture sector (or sub-sectors within it), and cultural and creative industries.

Chapter 5 provides a short description of the core methodological approaches, their analytical value and usefulness for different stakeholders, and examines their potential for measuring the economic impact or contribution of cultural industries at the international level. It also provides recommendations.

1.2 Historical background of measuring the economic contribution of cultural industries

Until the early 1960s, the measurement of the economic contribution of cultural industries did not generate any special research interest. This was due to several factors:

- the lack of evidence and long-term statistical data on cultural industries (e.g. cultural industries and culture as an economic subject are relatively new phenomena in expert and academic communities);
- poor and underdeveloped measurement approaches for economic analysis that could be applied to the cultural industries domain;
- an unsystematic relationship between cultural industries and the economy;
- difficulties in measuring the economic effects of cultural industries;
- the traditional perception that an economic analysis of cultural industries does not correspond to their spirit or nature, as cultural industries and culture in general were seen as the expression of pure aesthetic and spiritual activity; and
- investment potential analyses were scarce in the cultural sector, which was mostly due to the traditional view that considered the cultural domain as a public good and public financing of cultural activities as a matter for government consumption.

Since the 1980sthis situation has changed, with more and more research and analyses being dedicated to the character of the relationship between cultural industries and the economy, and cultural industries and their economic impacts. The history of economic research of culture is connected with the publication of Baumol and Bowen's paper "On Performing Arts: Anatomy of their Economic Problems" in 1965, and later in 1966, with the book entitled *Performing Arts: The Economic Dilemma*, where the authors analysed the economic position of performing arts in the United States. At the beginning of the 1980's, Hendon and Shanahan published two publications dealing with cultural economics and the economic effects of artistic disciplines, which gave a significant contribution to further thinking about the dynamic connections between art and economy.[2] "In the United States, in particular in the 1980s and 1990s, this economic paradigm has been changed by a radical conservative ideology that rejects the concept of "public good" or policies argued on social welfare grounds" (Everitt, 2009: 319). These two decades were marked by the culmination of interest in the economic contribution of culture and cultural industries and new approaches for understanding the relationship between culture and economic development. In particular, interest was focused on the quantification of the contribution of different cultural domains to development. Prior to this period, by the mid-1970s, economic impact studies of cultural domains were being conducted in the United States to support arguments for further financing of culture, education and science by the state.[3]

Economic impact studies in many cases can be seen as a response to the need for an objective justification for public financing of the arts. This situation has been explained by two arguments connected with American traditions: first, "the long-established interest of state and local governments in promoting economic growth within their borders; and second, the 'show-me-in-dollars and cents' attitude of local business people whose support was crucial to local arts subsidies" (Heilbrun and Gray, 2004:344).

During the 1980s research interest was focused on examining the impact of different cultural domains on the development of local communities in the United States, while during the 1990s research studies of different cultural domains became an instrument of advocacy for various regional issues or solving practical global problems (e.g. intellectual property issues in the world).

New themes and perspectives of research, as well as the political treatment of different cultural domains in the most developed countries, have resulted in the formulation of an innovative development framework in which the creative and symbolic resources concentrated in the different cultural domains are recognized as an economic factor of development. This was the beginning of the period when cultural and symbolic production was understood and recognized as a key element for determining the future course and development of society and the economy throughout the world.

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2 Hendon, Shanahan and Mc Donald, 1980; Hendon and Shanahan, 1983.

3 Economic impact studies were very popular in the United States during the 1970s and 1980s. An analysis by Radich shows that 10 to 15 impact studies were published per year, while methodology and results were critically evaluated 10 years after the impact studies were conducted. Radich and Schwoch (eds)., 1987:19.

The amount of literature and research studies dedicated to cultural industries dilemmas and problems has increased. At the same time, difficulties, unresolved theoretical and practical questions that this kind of research faces were revealed (e.g. different definitions and classification of the culture sector, incomprehensive research results, different methodological approaches and different systems for the quantification of economic contribution). It is important to say that it is difficult to develop a clear and objective economic measure of the economic impacts of cultural industries that is presented in monetary value and in relation with costs. The focus has thus been primarily on fundamental research in the field of cultural industries because of their stochastic nature and multipurpose effects that cannot always be measured. It is also very difficult to do a quantitative evaluation of creative results, which have a qualitative nature and contribute to the development of many economic fields. All of this has an influence on the economic assessment of the contribution of cultural industries, which is carried out in the broad sense using several partial approaches or their combination.

Anglo-Saxon urban studies have promoted cultural industries as a phenomenon of planning theory, and as a component of urban sociology and regional economic development discourse. Their research focus is on the economic development of cities and on cultural industries as a factor that can improve the attractiveness of urban places (i.e.as a way to transform the image and identity of such places), as well as encourage the agglomeration of business activities there (Zukin, 1995; Scott, 1997, 2004; Hall, 2000; Lazzeretti, 2008; Cinti, 2008). This approach has led to a “cultural turn”, increasing the interest in cultural industries, entrepreneurship in culture, and innovation and creativity as developmental factors. However, the impact of cultural industries on urban and regional development manifests itself through different effects. Some authors, such as Bille and Schulze (2006), point out that the development of cultural industries achieves short-term spending impacts by attracting visitors and local consumers who spend money in the local area; others see long-run growth impacts through the creation of a favourable cultural milieu that attracts people, companies, investments, etc. The latter point of view is known as “economies of agglomeration”, where the concentration of cultural and creative services attracts other industries that can use the specialised inputs produced by cultural industries (Heilbrun and Gray, 2004:388).

Recently, new approaches for analysing the development contribution of cultural industries have moved the focus from the production structure to creative human resources employed in cultural industries and the general economy (creative class). This approach is closely connected with the previous ones, developed within the framework of modern urban sociology.[4]The creative class is treated as a new factor of economic growth, and the main message is that the creative class brings economic growth to countries that can attract people and stimulate an environment for technology and tolerance which is known as the 3Ts theory.[5]It argues that investment in creativity, the concentration of the workforce in creative occupational groups, and technological innovations became the primary force of growth in the creative economy.[6] Research on this topic has initiated intensive debates about the validity of the 3T economic growth theory, in academic communities separating them into authors who critically refute this theory and those who confirm

[4] The concept of creative class was elaborated and presented by Florida in two publications, *The Rise of the Creative Class*, 2002 and *The Flight of the Creative Class: The New Global Competition for Talent*, 2005.

[5] 3Ts theory is based on three key growth factors: the creative class (talent), tolerance and high technology.

[6] The basis for the formulation of the 3Ts theory of economic growth was an econometric estimation on the sample of 219 regions in the United States. According to this study, there was shown a high correlation between these parameters and the economic performance of the regions measured by employment growth and average wages.

it. As both groups support their views with a set of empirical results, the creative class issue continues to generate contradictory findings and conclusions.[7]

In the literature of geographic agglomeration, it is evident that the agglomeration of cultural industries is becoming a field of increasing research importance (Hervas-Oliver, et al, 2011). However, many studies focus on indirect measurement rather than on direct measurement of the economic contribution of cultural industries. They try to observe and investigate interactions between the cultural sector and other industries such as inter-industry trade, knowledge transfers and network externalities. This research also verified the contribution of creative industries to regional development and the relationship between creative industries and knowledge-intensive services, which was recognized as indirectly contributing to the creation of knowledge and regional economic growth.[8] Other ones demonstrated the role of supply-chain linkages in transferring ideas and knowledge between creative business and other firms (Bakhshi, et al. 2008) or indicated the structural relationship in labour market between the cultural and non-cultural sectors (Higgs et al., 2008). All of these initiatives give an impetus to the diversity of research topics and disciplines in investigating relationship between culture and economics.

1.3 Cultural industries and economic development: Approaches and concepts

Present debate and research argue that current trends and their mutual action have led to the transformation of an industrial into a post-industrial society where the role of traditional production factors has changed. The new development paradigm, where the main factors of economic and social growth are knowledge, creativity, originality and skills, has not only changed the economic structure, but also the concepts of growth and development.

The 'knowledge-based economy' finds its economic support in creativity and talent, and emphasises cultural industries as a conceptual framework within which growth generators exist. In that sense, the modern understanding of economic growth and development, which rests on the integrated economy, implies balanced sector networking of cultural activities and industrial sectors with a special emphasis on new ideas and their creative application to development.

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[7] Most of the criticism of the 3T theory of economic growth concerns the introduction of the concept of creative class instead of human capital (Glaeser, 2003); the attempt to reduce creativity to the nomenclature of occupations; blanket statements about occupations qualified as being part of the creative class; emphasizing the idea that creativity comes from exercising certain occupations that are qualified as creative (Markusen, 2006, 2008); unclear concepts, definitions and causal linkages between the critical factors of economic growth (Clifton, 2008); and the validity of the thesis that a concentration of the creative class contributes to faster economic growth (Kupke, 2006). On the other hand, the results of a series of empirical studies confirm a positive direct and indirect contribution of the creative class to the economic growth of cities and urbanized regions (Lee and Florida, 2006; Andresen and Lorenzen, 2005; Hansen, 2007; Clifton, 2008; Mellander and Florida, 2007; Glertler et al., 2002), and of rural areas (Wojan and Mc Granahan, 2007).

[8] It is interesting to mention innovative theoretical approaches in this field. For example, Lazzereti et al. (2008, 2009) propose applying the concept of local production system (LPS) units as units of analysis for creative clustering following an approach based on cultural and creative industries and urban economics. The model was tested empirically in Italy and Spain, and the results confirm the idea that creative industries are a suitable proxy for analyzing creativity. Hervas-Oliver et al. (2011) obtained also positive results by testing a creative industries agglomeration model on 250 regions in 24 European countries, which showing that each increase of 1% in the share of creative industries in regional employment is correlated with an increase of 0.6% in GDP per capita; or, in monetary value, an average increase of €1,424 per capita.

The relationship between culture and development has changed. Since the 1970s,a school of thought dominated where the concept of culture was used to describe the value pattern and all non-material elements that exist on the individual or collective level, but which should be treated as the product of a certain cultural system. This period was marked by examining and emphasizing the spiritual component of culture and its influence on the behaviour of individuals and different social groups and, to a lesser extent, on the development of society. The understanding of the relationship between economic development and art and culture was influenced by a Marxist analysis of culture in which culture and ideology of a given society represent a "superstructure" and reflect the economic base of that society. This theoretical approach dominated for almost 20 years for understanding the relationship between culture and development: the development of art is conditioned by the economic development of the society.

With the Birmingham Centre for Contemporary Cultural Studies, a new school of thought known as British cultural studies was created, which was very much influenced by several west European societies at the end of the 1970s and 1980s. Through their work and essays, the founders of these cultural studies, Raymond Williams and Stuart Hall, introduced not only a rethinking and new understanding of culture by moving the focus from spiritual cultural components to cultural materialism, but also introduced a new way for understanding the relationship between society and culture.[9] Furthermore, among the leading theorists of the cultural materialism approach, a different understanding of the relationship between culture and economic development was established: the development of society is conditioned by the development of art and culture, not vice versa. In this regard, development policies and strategies follow the dominant social trends and they are more focused on cultural industries and entrepreneurship in the culture sector.

The first decade of the 21st century was marked by changes in the participation of the culture sector in economic development. The cultural industries have gained importance. They are becoming one of the most dynamic segments of the global economy, and their contribution toward GDP continues to grow. It is estimated that the creative sector represents 7.3% of the world's GDP (Howkins, 2001:126), and average growth rate of international trade was about 8.7% in the period 2000-2005 (UNCTAD, 2008:4). These tendencies, together with changes in the broader economic environment and consumption, the rapid growth of cultural industries in some countries, the creation of an economic disequilibrium and the slow development of certain industries, are affecting current theoretical and practical viewpoints.

In economic-political discourse, discussions about culture and development came to the fore in 1996 with UNESCO's publication of the Report of the World Commission on Culture and Development, *Our Creative Diversity.* It established the culture and development agenda, and identified culture as a development priority. In the years that followed, the new development agenda was supported by several policy papers and reports, such as *From the Margins: A Contribution to the Debate on Culture and Development in Europe* (Council of Europe, 1998), *Culture, Creativity and Markets* (UNESCO, 1998); *Cultural Diversity, Conflicts and Pluralism* (UNESCO, 2000), *International Flows of Selected Goods and Services, 1994-2003* (UNESCO-UIS, 2005); *Urban Development Needs Creativity: How Creative Industries Affect Urban Areas* (World Bank, 2003),and *Creative Industries and Development* (UNCTAD, 2004). In 2005, the UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expression

[9] In his essay 'Culture is ordinary', Williams (1958) shows his resistance to the classical Marxist idea of culture as a superstructure of society, and emphasizes that culture should not be seen only as 'high culture', but must also be interpreted as a system of production as well as understand as "a whole way of life".

was adopted; its provision recognises the contribution of cultural industries to economic and cultural development.

The culmination of this trend is embodied in two references to the importance of cultural approaches to development: in the “Outcome Document of the Millennium Development Goals UN DG Summit” (UN, 2010a), and in the adoption of the specific “*Resolution on Culture and Development”*(UN, 2010b) by the United Nations General Assembly. As an expression of the overall international consensus for the global development agenda, the MDGs recognise the significant potential of culture to help achieve different components of global development goals.

The UN Resolution on Culture and Development (UN, 2010b) invites all member states to ensure a more visible and effective integration and mainstreaming of culture in development policies and strategies at all levels. It encourages them to support the development and consolidation of cultural industries, cultural tourism and culture-related micro-enterprises, and to assist them in developing the necessary infrastructure and skills. Most important, the UN Resolution invites UNESCO to assist member states in developing ways for assessing and optimising the contribution of culture to development, including through data collection, research and study, and the use of appropriate evaluation indicators.

All of the above mentioned initiatives, resolutions, policy papers and publications aim to ensure that cultural industries are increasingly integrated into the policy agenda of both developed and developing countries. The rethinking of the role of the culture sector in economic development has led to changes in several different phases, which were primarily determined by the social context in which certain new theoretical and practical viewpoints were emerging. According to the historical viewpoint, terms to describe the role of the culture sector in development were quickly established and soon replaced with others. In this regard, various alternative terms (culture, the culture sector, art industry, content industry, creative industries, experience industries, and cultural industries) can be found in literature and yet they are concerned with the same content: arriving at a different understanding and interpretation of cultural and symbolic production.

In existing scientific and research literature dealing with the concept of culture, there is certain ambivalence about the approaches used for examining the developmental contribution of the culture sector. Depending on the theoretical standpoint of the authors, they emphasise different processes and relationships when defining concepts and analysis of the culture sector’s contribution. It may be noted that there are different scientific and research schools of thought in this area, for instance: those that consider the role and contribution of culture sector review and analysis to be a sociological phenomenon (Gouldner, 1979;Adorno and Horkheimer, 1989; Bourdieu, 1984; Jensen, 1999; Johnson, 2006); then those who see this as an urban phenomenon (Zukin, 1989, 1995; Landry, Bianchini, 1995; Evans, 2001; Hall, 2000; Landry, 2000; Scott, 2000; Florida, 2002, 2004, 2005; Lazzeretti, 2008; Cintini, 2008);or as an economic phenomenon (Throsby, 1999; Caves, 2002; Potts and Cunningham, 2008; Pratt, 2004; Potts, 2007; Howkins, 2001). The lack of a unique common platform in discussions about the culture sector’s classification, measurement and research outlook, which makes it difficult to link and improve multidisciplinary approaches, has a negative impact on research in this field and impedes the building of a comprehensive scientific framework for measuring the culture sector’s economic contribution to development. Nevertheless, the rapid growth of national research papers and empirical studies (mapping documents) analysing the economic potential of creative and cultural industries leads to: i) misbalance between theory and practice in this field; and ii) frequent dominance of using pragmatic concepts and operative definition in academic literature.

With regard to conceptual issues, it is important to mention that the cultural and creative industries phenomenon is still in the process of being defined and conceptualised. We can understand this process as a revalidation of the traditional concept of culture that takes into account the challenges of producing and disseminating products and services with cultural meaning. At the same time, however, this process can be understood as the creation of a new theoretical and practical framework in which culture is seen in its complex interactions with other aspects and elements of the economy and society. It is not surprising that there is considerable debate over the appropriate definition of cultural and creative industries; distinguishing between different terms and concepts, criteria for demarcation, as well as taking into consideration their similarities and differences. In international research practices, different terms describe the components of the society where culture-based creativity has the status of a production factor in the economy. In this regard, two demarcation lines concerning this issue can be identified: the first is established by academic discourse, and the second is set by policy discourse. The cultural approach connected with the concept of cultural and creative industries is pursued within cultural studies, sociology and political economy, while the industry aspect is pursued within applied economics and practical policy studies (Throsby, 2010:90).

Historically, the term “cultural industry” is connected with the Frankfurt School of sociology, and rooted in the criticism of the economisation of art by Theodor Adorno and Max Horkheimer in their book "Dialectic of Enlightenment" (1933/1944). Originally, it was used to describe the art and cultural goods that can be multiplied industrially. The term has been used in a polemical manner to describe the irreconcilable opposition of culture and economy. It was widely used in the polemic against the perceived limitations of modern life, and it was picked up by French sociologists. Later, the term “cultural industries” was converted to the term ‘creative industries’ by policy makers (Hesmondhalgh, 2002:15; Throsby, 2010:88; Pratt, 2005).

The concept of creative industries originated in Australia at the beginning of 1994 with the report “Creative Nation: Commonwealth Cultural Policy” (DCA, 1994), where it was discussed in the context of art and communication technology. This concept was accepted at the end of the decade. The predominance of the liberal concept of cultural policy in the United Kingdom (UK) during the 1990s contributed to the spread of ideas and scope of creative activities. Moreover, the connection between culture domains and technology has been complex, and the traditional understanding of the culture sector as well as its classification were not flexible and broad enough to cover the multiple relationships between creativity, cultural value, technology and economy.

Some authors (McGuigan, 1996; Bianchini, 1987) have emphasised that N. Garnham, with his engagement in the policymaking process and policy research (e.g. report on London’s cultural industries), along with the paper he presented at the major policymaking conference *"Cultural industries and cultural policy in London"* (1983), was the first to raise public awareness of the economic power of the cultural field. He also made several useful analytical distinctions concerning the concept “cultural industries“. Garnham used “cultural industries” as a descriptive term, referring to industries ”in our society which employ the characteristic modes of production and organization of industrial corporations to produce and to disseminate symbols in the form of cultural good and services--usually as commodities”. The main characteristics of those industries are “to use capital-intensive process, technological means of mass production and/or distribution, highly developed divisions of labour and hierarchical modes of managerial organization.“ (Garnham,1987: 55). His reasoning for cultural industries as well as his observations concerning their economic power “fed into the London Industrial Strategy of the Greater London Council and the Greater London Enterprise Board” (McGuigan, 1996:84).

The works of O'Connor (1998) and A. Pratt(1997) who have attempted to define cultural industries by connecting art sociology and economics can also be considered as another early effort of defining cultural industries.[10] Those operative definitions highlighted the sectorial connections in the production process, the importance of the creation of new content as the basis for the creation of value across the sector and economic potential of creative content. These authors demonstrate the link with organizational definition of cultural industries by highlighting sectorial relations in the organizational process of creation, production, dissemination and distribution of creative content.

Considerable attention in this respect, should be paid also to early functional definitions of the cultural industries given by several authors, who define cultural (creative) industries(activities) as a sector which "produce goods and services that are often associated with cultural and artistic value or entertainment" (Caves, 2000:1), "whose primary purpose is the creation and communication of symbolic meaning" (Hesmondhalgh, 2002:11), which beside those two features, "includes some forms of creativity which is embodied in some form of intellectual property" (Throsby, 2001:4). In the last years, a growing number of scholars have shown an interest in creative industries concepts and their academic definition (Cunningham, 2002; Flew, 2002; Flew and Cunningham, 2010; Wyszomirski, 2004; Galloway and Dunlop, 2007).

A huge promotion of the economic importance of the culture sector by policy discourse was initiated in the UK in the late 1990s, when the first descriptive definition of creative industries was adopted by the Creative Industries Task Force in 1998.[11]This was when the change of terminology occurred, and the cultural administration started using the term "creative industries" instead of "cultural industries" (Pratt, 2005). For some researchers, this change of terminology had a cultural policy background. According to Garnham, the change from "cultural" to "creative" industries signifies a return to supply-oriented and artist-centred cultural policy, while policy using the term "cultural industries" signalled a focus on consumption and demand (Garnham, 2005:27). These changes in the definitions of the terms "creative" and "cultural" industries do not only have a pragmatic, but also a symbolic significance. First, there is the transition from cultural to creative industries, which was induced by technological change; a broader understanding of culture and artistic activity; increased importance of creativity, innovation, and skills in economic development; and changes in consumption and demand patterns. Second, there is the repositioning of culture from being elitist and exclusive to being more creative, democratic and inclusive (Galloway and Dunlop, 2007:18). Third, there is the change from seeing the production of culture as a separate industrial activity to seeing it as a sector, which takes into account the relationships, connections and clustering of cultural and creative activities. Fourth, there has been as shift from subsidised arts and centralisation to cultural domains in the generation of wealth, "which has brought debates about the culture sector into larger discussions concerning issues such as trade policy, intellectual property, educational future" (Flew and Cunningham, 2010:1).

Classification of cultural industries is another issue which requires attention. The lack of a strong theoretical definition has led to misunderstanding and confused the situation concerning structural elements of these industries, even though certain progress has been made in

[10] Pratt introduced the new alternative term "cultural industries sector." It was used as a working definition to clarify the context for analysing employment and trade data. The cultural industries sector was defined as a combination of concepts (e.g. ranging from art sociology to local economic development) that are connected with the term sector-concept and whose relationship with the production process can be demonstrated (Pratt, 1997). O'Connor (1987) used the term "cultural production" and focused on creation of content as the basis for the creation of value across the sector.

[11] For a discussion on this topic, see Chapter 4 on Europe.

developing a common analytical framework. In this regard, several authors give considerable contribution in modelling cultural and creative industries. The baseline dimension of this approach is connected with the traditional structure of art, based on criteria picked up from aesthetics theory,[12] a broader perspective adding some criteria from the industrial field such as the level of industrialisation of production process (Hesmondhalgh, 2002), degree of influence of technical progress (Boix et al., 2010), engagement of the creative workforce (Higgset al., 2008; Florida, 2004) or level of cultural and economic value (Throsby, 2008).

All of these approaches try to conceptualise structural features of cultural and creative industries by combining "cultural" and "industry" dimension. Throsby (2008) proposed and discussed the "concentric circle model"' which is based on the idea that cultural industries services and goods have cultural and economic values and different degrees of cultural content exist relatively to their commercial value. In cultural industries relations between the cultural and economic values appear in the form of a concentric circle, where core artistic industries are in the centre while at distance from the centre to periphery, circles emphases degree to which cultural content decreases relatively to its commercial value. The basic model comprises four circles: core creative arts (literature, music, performing arts and visual arts), other core cultural industries (film, museum, galleries, libraries, photography), wider cultural industries (heritage, publishing and printing, sound recording, television and radio, video and computing game) and related industries (advertising, architecture, design, fashion).[13] Hesmondalh's view of cultural industries structure include core industries (directly involved in production of social meaning and using industrial mean of production and content distribution) and peripheral industries (industry involved in the production of texts which use semi-industrial and non-industrial methods for reproduction of those symbol).[14] Boix et al.'s (2010) classify creative industries depending on the degree of influence of technical progress in traditional (publishing, architecture, music, film, performing arts) and non-traditional cultural industries (software and computer services, advertising).

In the United States, the growing interest analysing cultural and creative industries from an employment perspective has led to studies focusing on measures which captured the indirect economic contribution of cultural domains, the dynamics of economic development, the competitiveness of countries (Florida and Tiangli 2004), regions and places (Gertler et al., 2002) and which ranked countries according to their ability to develop, attract and foster creative resources. At the same time, discussions in the European research community were focused on capturing creativity-based employment rather than the concentration of cultural industries. The main argument for this transition was that industrial classification schemes were not appropriate for describing creative activities and measuring their full economic contribution, which is generated in a combination of ways by individuals, by groups working with creative organizations, and by individuals in creative occupations who work in non-creative organizations (Pratt, 2004).[15] A new approach for classifying cultural and creative industries is the "creative trident" model which is used for measuring direct and indirect employment in cultural and creative industries, and aims to bring together those working in creative industries with those

[12] Full and partial aesthetic and communication utility.

[13] Similar classification and its different interpretation can be found in: KEA, 2006; Work Foundation, 2007; DCMS, 2007; etc.

[14] Hesmondalh (2002):12-14. Similar approach can be found also in Markusen et al. (2008) in defining creative economy from cultural occupation side.

[15] Several studies focusing on this employment-based approach have been conducted at the national level (e.g. French Ministry of Culture, 2005; Higgs et al., 2008; Hansen, 2007; Andresen and Lorenzen, 2005; Markusen, 2008) as well as at the EU level (e.g. MKV, 2001; Florida and Tiangli, 2004; Boschma and Fritsch, 2007; Power and Nielsen, 2010; Boix et al., 2010).

working in specialist creative jobs in other firms and organizations. It was developed by the Higgs and Cunningham from Australian Research Council Centre of Excellence for Creative Industries and Innovation.[16] According to this model, creative economy ‘‘refers to the human activities related with the production, distribution, exchange, and consumption of creative goods and services”.[17]

The models discussed here have subsequently been applied and developed in several number of studies with evident dominancy of production chain model named as “Pratt production value chain” (O’Connor, 1998; Reeves, 2002; Power, 2002; CCPR, 2003), somewhere interpreted as DCMS model (UNDP, 2008).[18]

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).A consensus seems to be emerging for a working definition of the “core” creative or cultural industries, while there is still confusion surrounding non-core and supporting activities. Usero and del Brío (2011) in their recent article also discuss and assess the contribution of the 2009 UNESCO FCS to the field of measuring the economic contribution of culture. As they note (p. 194):

> “The first significant contribution is to answer what we shall call the “which” question; that is, to delimit cultural activities by defining what is and what is not included within a cultural domain. The second contribution is to answer what we shall refer to as the “how” question. The Framework specifies how to carry out the previously mentioned activities, i.e., the chain of value from inception of the cultural activity through to its final provision. Lastly, the third contribution defines the “how much” question. Here, current international classification systems are used to describe precisely which activities are included in the cultural domains in order to measure their economic and social impact.”

[16] Higgs and Cunningham, 2007.

[17] In the creative trident model, creative occupations are divided into three modes: “specialist mode” (people employed in creative industries); “support mode” (people employed in the defined creative industries, but not working in defined creative occupations (i.e. carrying out technical, accounting, administrative functions, etc.); and “embedded mode” (people employed in defined creative occupations but who are working outside the defined creative industries). Higgs and Cunningham, 2007.

[18] For details, see Chapter 4.

Chapter 2. Measurement approaches, methodologies and practices

Assessing the economic importance of culture can be done in different ways, contexts and approaches. In this regards, it is necessary to clarify measurement terminology, such as mapping (studies), impact, economic contribution, economic size, etc.

Mapping is a term that emerged from DCMS studies, and it is used for "a whole series of analytic methods for collecting and presenting information on the range and scope of creative industries. In particular, mapping is intended to provide an overview of the industries' economic value, especially in places where relatively little is known about them" (BOP consulting, 2010:11). This mapping exercise can be good to help in data-gathering, but they can be misused if the aim is to measuring economic contribution or impact of cultural industries.[19] On the other hand, the measuring toolkit can be understood as a narrative clarification of the mainstream analytical approach being employed in the analysis of the economic contribution of cultural and creative industries. In the quite same way, should be interpreted term "measuring approach" as a whole series of analytical methods, practices and tools for collecting, calculating, presenting and interpreting information on the economic contribution of cultural industries.

Economic "contribution", "importance" and "impact" are quite the most usable terms for measuring the economic contribution of cultural industries, but there is a lack of clarity in distinguishing contribution from impact. The studies which measure the economic contribution of cultural industries are primarily focused on giving a list of economic impacts (direct or indirect) or contributions, rather than on defining or conceptualising those terms.

The term "economic contribution" is a quantification of the economic dimension of cultural industries and the gross changes in their economic activity. The term "economic importance" is also used for the same purpose. Economic contribution is basically a static, descriptive concept, which can be interpreted according to which particular variable is involved and measured (e.g. employment, GVA, GDP, value of trade, etc.). It is used to statistically demonstrate the economic contribution of cultural industries. The question to be answered when using the term "contribution" is, 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?"

But literature and studies show that this term was not always clearly defined as well as different interpretation of it. Some authors define contribution as "the economic impact in terms of income, expenditure and employment and the holistic benefits which the sector provides with respect to social and economic value" (Jura Consultants, 2008). Watson et al. (2007) define economic impact and contribution within the framework of regional economic analysis as follows: "the economic contribution is the gross changes in economic activity associated with an industry, event or policy in an existing regional economy, while economic impact is the net changes in new economic activity associated with an industry, event or policy in an existing regional economy" (Watson et al., 2007:142). Similar views can be found with Throsby who defines contribution as a most basic approach in measuring economic contribution of cultural industries, while impact is concept with higher level of analytical insight and the measuring economic impact has capacity to depict the ways in which output is produce and distributed in the economy and to capture the direct, indirect and induced effects on other industries (Throsby, 2010:93-94).

[19] See Throsby, 2010:93.

The distinction between the notion of “importance” and “economic impact” was made in certain cases, where it was argued that the “first one is a static concept which can be measured through the qualitative or quantitative description of the characteristic of a particular problem or phenomenon” (Reeves, 2002:21), while the second one measures net financial flows (Madden, 2001:163), the effect of some phenomenon on economic factors, such as the consumer, business, market, economy as a whole, income, and employment (Radich, 1987) the sum of direct, indirect and induced effects of different culture domains (Bille and Schulze, 2006; Heilbrun and Gray, 2004).

Economic impact is more dynamic concept in the sense that it relates to real and potential changes in one variable as a result of changes in another. It can be applied at a micro level, to study the short-run impact of an investment in cultural sector, or at the macro-level, to study the impact of an increase in economic activity in the cultural industries on other industries or whole economy. Both approaches use multipliers to measure the relevant impacts or other economic models.

In this review, the methodological approaches are divided in two lines: the first one dedicated to measure economic contribution of cultural industries (economic size and structural analysis and Cultural Satellite Accounts (CSA)), while second one dedicated to measure impact of cultural industries (multiplier analysis, production function, disequilibrium model). This classification of methodological approach should be understood as operative, because it is quite difficult to make clear and strict distinction between those approaches, especially in line of economic modelling recognised by economic theory. In addition, some of them can include some methodological element which can be used for both purposes (e.g. I-O tables constructed for CSA can use in some cases for multiplier analysis).

As economic analysis goes from the firm/organization level to the industry level, and then from the sector level to the total economy level, it becomes necessary to examine the possibility of cumulating the effects from a lower level of aggregation (e.g. the firm/organization level) to the overall economic efficiency of cultural industries. For the purpose of measuring global effects, it is necessary to use proceedings from a simple regression model to very complicated econometric and mathematical models. In this regard, it is evident that development and research diversity of cultural economics were mostly related to microeconomic analysis rather, than to analysis of economic dimension of cultural industries at the macroeconomic level. Beside multiyear analysis which has been applied at practical (micro and macro) level, this chapter will present some approaches applied in empirical testing and evaluating the different economic dimensions of certain cultural domains such us *Economic model of cultural activities* based on different modalities and specifications of the production function and *Disequilibrium two-sector model* for measuring and estimating the economic contribution of the cultural industries at a different level of reallocation of capital stock and labour inputs. These models do not have wider applications in practice, but they can provide ideas for improving existing approaches and for finding new methods for investigating dynamic role of cultural industries in economic growth and development.

The main reason for measuring the economic contribution and impact of cultural industries is that there should not be only an ex-post evaluation of economics of cultural policy, but also an estimation and ex-ante evaluation of the developmental potential of cultural industries. So, efforts to measuring the economic contribution of cultural industries at the international level should begin with a simple and basic measure, modular in design, which can evolve into a complex model in the future that can be used for the estimation and ex-ante evaluation of the developmental potential of cultural industries and that will make it possible for countries to estimate the developmental potential of their cultural industries at a level and timing that is appropriate for their current capacities and interests.

2.1 Economic size and structural analysis

The purpose of economic size and structural analysis is to determine how much economic activity is associated with cultural industries. These methodological approaches use measures from the SNA for estimating the direct contribution of cultural industries in the generation of basic macroeconomic aggregates (GVA, GDP, gross value of production, employment, fixed capital formation, export and import) by sub-sector or group of stakeholders, and to track the gross changes in the economic activity of cultural industries. Very often, to estimate the contribution of cultural industries, the percentage of different macroeconomic aggregates in the culture sector is calculated and compared with the size of other sectors (e.g. this is the case in Germany, Queensland, Australia and Finland).[20]

Economic size analysis aggregates all components of an economic sector and focuses on economic effects for the long-term (Cultural Policy Center, 2004:44). In other words, economic size analysis provides a more general picture of the role that cultural industries play in the economy and of how cultural industries fit into the greater economic environment. The terminology of regional economic analysis identifies this kind of analysis as contribution analysis (Watson et al., 2007). However, in the measurement of cultural industries, the word "size" can be appropriate as it reflects the primary aim of measuring which is very often to determine the economic size of cultural industries and their share of the economy.

Structural analysis is very often done as part of economic contribution studies, but it can also be conducted separately (e.g. mapping study in Albania). It consists of different analysing techniques for studying the structure of cultural industries, in the first line concerning the distribution of macroeconomic aggregates by sub-sectors, groups of stakeholders (authors, producers, distributors, etc.) or different stages of the value chain. This kind of approach is used for measuring the long-term contribution of cultural industries to the economy. Another application for economic-size and structural analysis is measuring the short-term contribution of cultural industries by investigating their business performances. Short-term measurement is based on the evaluation of structural business measures (turnover, sales revenue, number of enterprises, profit, etc.). Structural analysis is not limited to a description of data; it is rather an interpretation of the specific policy, market and economic contexts. In several reports, different kinds of structural analysis are given specific names, such as value chain analysis, and cluster analysis. Value chain analysis is useful for identifying and showing the relationship between different stages of the value chain in cultural industries. Its analytical and in-depth modality makes it possible to explore and explain the relationship between different value chain players. Cluster analysis is a technique for analysing the competitiveness of cultural industries and factors associated with them. It is often based on Porter's Diamond model,[21] which consists of the analysis of four key factors in competitiveness: i) companies' strategies, structure and rivalry; ii) demand market; iii) related and supporting industries; and iv) factor conditions.

As can be seen in **Table 1**, the measures used to measure the contribution of cultural industries are variables of macroeconomic aggregates that are shown both in absolute terms and in relative terms (participation in the corresponding aggregates or regional indicators), and of disaggregate at the sub-sector level. The aim of these indicators is to measure the dynamic of cultural industries at the economic level and to provide reliable data as the basis for future decision-making in the area of cultural industries

[20] See Chapter 4, Tables 7, 8, and 10.
[21] Porter, 1990; see also: Ministry of Culture Republic of Columbia, 2007.

Table 1. Basic model of the measures for economic size and structural analysis

Indicator	Measure	Description
Gross value added	Gross value added/GDP of cultural industries or sub-sectors	Gross value added/GDP of cultural industries or sub-sectors in absolute terms
	Gross value added/GDP of cultural industries in relative terms	Share of cultural industries gross 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
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 activity	Stock of businesses	Number of businesses by size in cultural industries
	Distribution of businesses by sub-sector	Number of businesses by size in cultural industries sub-sectors
	Business-start ups	Number of new businesses in cultural industries per 10,000 persons
	Business mortality	Number of closed businesses in cultural industries per 10,000 people
	Distribution of start-up businesses by sub-sector	Number of new businesses in cultural industries sub-sectors per 10,000 persons
	Distribution of business mortality	Number of closed businesses in cultural industries sub-sectors per 10,000 persons

2.2 Cultural Satellite Accounts (CSA)

The Satellite Account System (SAS), which is an extension of the System of National Accounts (SNA), is a robust statistical framework for measuring the economic contribution of a specific industry (e.g. the tourism sector, sports sector, non-profit sector, household production, etc.) within the national economy. Satellite accounts were created for measuring the economic importance of a specific industry because this does not correspond to a specific statistically delineated economic activity and so is not very often observable in the traditional SNA. Cultural Satellite Accounts (CSA) are a statistical framework for measuring the economic contribution of culture. The first proposal for a cultural satellite account was made by Lemaire of the French National Institute for Statistics and Economic Studies in 1986(The Ministry of Education, Finland 2009).At present, the CSA system for measuring the economic contribution of culture is used in most MERCOSUR countries, and in some countries in Europe – Finland, Spain and the UK (only I-O tables derivate from CSA).[22]

[22] Experian, 2007.

The CSA system integrates the demand side with supply side of the cultural economy. The main CSA variables are based on an input-output matrix prepared for the System of National Accounts.[23] The CSA system can be developed through different modules or pillars (e.g. target analyses, volume output module, etc.), but usually it includes national accounts key concepts: output, intermediate consumption, value added and employment. It is evident that gross fixed capital formation (investments) very often are not included in these calculations because data at the 3 and 4 digit level of industry classification are not available in many countries (e.g. Finland and Spain).

An important characteristic of the CSA system is its ability to systematise a large number of statistical data (social, demographic, economic, financial and cultural), which makes it possible to use CSA not only for measuring the economic contribution of cultural industries, but also for analysing culture phenomena in the broad sense.[24]At present there is no official manual on cultural satellite accounts at the international level (e.g. UN manual).This is because the methodology for developing a satellite account depends on national circumstances. However, work on the elaboration of a CSA methodological manual was carried out by the inter-governmental organization Convenio Andrés Bello, which resulted in the publication of the first CSA manual for Latin American countries in 2009 (Convenio Andrés Bello, 2009).

Cultural satellite accounts can be based on SNA tables from which input-output tables are derived and modified to highlight culture (e.g. Australia),[25] or input-output tables are specially prepared for cultural activities based on empirical research that maps inter-sectoral relationships (e.g. Colombia). The main problem that could arise with this approach is the standardisation of industries providing services or products that belong wholly or partially to culture and so should be included in CSA I-O tables. This is important because industries where the supply of cultural products or services is minimal could be included or excluded from the analysis, while for industries with products or services partially belonging to culture, only the share belonging to culture can be taken into account. The input-output matrix is prepared as a synchronised table where demand and supply are in balance. For the construction of CSA, information is required on the demand side of culture and on the supply side. The final quality of CSA information will depend on the quality and coverage of available information. Information on the supply of culture can be calculated from different sources, such as business data and non-profit data registers, treasury registers for public institutions and organizations, or surveys using the national statistics system in individual countries. Information concerning the demand side can be obtained from household surveys (for private consumption), government expenditure statistics (government consumption), data on foreign trade and customs statistics (export), etc. For example, in developing the CSA system in Spain, 18 statistical sources on various topics were used.

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[23] Input-output analysis was developed by the economist Wassily Leontief in the 1930s for describing inter-industry relations in an economy. It shows how different industries depend on each other and how they supply each other with input and use each other's output. The main source for I-O tables is the supply-and-use tables which are broken down into three parts: the resources/supply table shows the elements of domestic supply, imports and subsidies by product; the intermediate use table shows intermediate consumption by industry and consumption by product; and the final use table shows the final demand/expenditure of households, government and non-profit institutions; it also shows goods and services that are consumed and not used for producing new goods and services. For further information see OECD (2006); *System of National Accounts 2008* (2009).

[24] For an extended discussion of this topic, see OECD, 2007.

[25] Australia has not developed a coherent CSA system, but uses input-output tables as a model for calculating multiplier coefficients for culture. These I-O tables were derived from the System of National Accounts and modified to highlight culture. See ABS/Australian Bureau for Statistics, 2011.

Several elements need to be defined in the process of CSA development, including the definition of culture, the key activities and their corresponding products. The process of identifying principal, secondary and ancillary cultural activities works well when the culture sector is identified in one of the standard classifications and appears in the central framework. However, the process of identification is in reality complex because not all relevant activities and products appear in the central framework of classification (e.g. amateur arts, crafts, design).[26] The main assumption of CSA I-O tables is production homogeneity, which means that each industry is classified according to which product accounts for the greatest part of its output, but the identification of key sectors depends on local circumstances. Then it is necessary to analyse the key products and key industries accounts in the context of a supply and use table. In practice, the I-O industry/product classification is consistent with the Standard Industrial Classification (SIC) (03 or 04 digits) in the sense that every SIC sub-category, in its totality, relates to only one input-output category (i.e. no overlaps). For example, the SNA I-O tables of France are calculated based on 114 products and 116 industries; in the UK, SNA I-O calculation is based on 123 products and industries (out of which 9 are mapped as creative "functions");[27] in Finland, this calculation is based on 90 products and industries (out of which 60 products and industries are included in I-O tables within the CSA framework); in Australia, SNA I-O tables are based on 106 products and industries; while in Spain SNA I-O tables are based on 75 branches of activities and 118 groups of products, out of which 25 branches and about 55 products are included in CSA I-O tables, etc. The number of industries and products depends on industry development and its diversity in certain countries.

2.3 Multiplier analysis

Economic impact studies and multiplier analysis were methodological approaches predominantly used during the 1970s and 1980s in the United States and the UK. The basic framework for Input-Output (I-O) models originated from Quesnay's paper "*Tableau Economique"* published in 1758. The basic I-O model idea was developed later, adapted and transformed first by Walras, and then by Leontief.[28] The approach is a systematic analysis of the economic interrelationships between cultural industries (producing sector) and the other sectors of the economy (consuming sectors). The methodological base for conducting multiplier analysis is the construction of input-output (I-O) tables.

Input-Output tables illustrate the relationship between different industry activities, in other words, inter-industry transactions. Each relation level between sectors is represented by technical coefficients. Technical coefficients represent the value of the direct delivery of some product for intermediate consumption of a concrete industry. Furthermore, there is a relation between the producing sector and final consumers (household, government, export). Each relation level between consumers and the producing sector is presented by inversion coefficients. By using the I-O table at a high level of aggregation and surveys, different multiplier coefficients can be calculated (employment multiplier, gross value added multiplier, output multiplier, tax revenue multiplier, etc.). Input-output analysis enables to track "how many times a dollar is "re-spent" directly or indirectly within other sectors of the economy (local communities/regions), and the economic impact generated by each round of spending" (American for the Arts, 2010). The initial assumption behind multiplier analysis is that an initial incremental amount of spending can lead to increased consumption. In the I-O model dedicated to cultural industries, it is usually possible

[26] For an extensive discussion on problems and limitations on satellite accounts, see System of National Accounts 2008, 2009.
[27] Experian, 2007:8.
[28] See more: Lahr et al. 2008:5.

to measure three components of the multiplier effect: direct impact, indirect impact and induced impact. The direct economic impact is employment and income (GVA or VA) generated in local communities, regions or at the national level by the cultural industries themselves. This represents the change in purchases due to a change in the activities of cultural industries. The indirect impact comprises all the upstream goods and services that need to be produced to support direct inputs. This represents the change in the purchases of suppliers of cultural industries. The induced impact is the change in consumer spending that is generated by changes in labour income within regions or local communities as a result of the common impact (direct and indirect) of cultural industries.

Table 2. Basic model of multiplier coefficients for cultural industries (CI)

Coefficient	Measure	Description
Output multiplier	Ratio of change in output/production of all industries caused by €1 increase of CI output/production	The relationship between the initial increase in output/production required from CI and the total increase in output by all industries (in monetary unit)
Employment multiplier	Number of full-time equivalent (FTE)persons employed in overall economy due to CI output (per €1 million)	The number of extra persons employed (full-time equivalent) for an initial expenditure of output from CI(in number of persons)
Gross value added multiplier	Ratio of change in gross value added of all industries caused by €1 increase of CI gross value added	The relationship between the initial increase in output gross value from CI and the total increase in gross value added by all industries(in monetary unit)
Tax revenue multiplier	Ratio of change in tax revenue of all industries caused by €1 increase of CI spending	The relationship between CI consumption and new tax revenues

Apart from this practical approach for measuring the economic impact of cultural industries, there are also four distinct levels of economic contribution (primary, secondary, tertiary and quaternary) which Chartrand (1984) calls "impacts". These make it possible to isolate the different levels of contribution of the creative industries to the general economy. The primary impact is their direct and quantifiable contribution to the economy. This is the direct number of jobs, value-added, capital stock (physical and human capital) generated by sectors. The secondary impact is the indirect and quantifiable contribution of cultural industries to the economy. This includes their multiplier effects on other sectors that are in inter-industrial relationships with cultural industries and in inter-consumption linkages. It also includes the contribution of cultural industries to design and marketing. The tertiary and quaternary impacts refer the direct and non-quantifiable contributions to the economy. These impacts involve the contribution of cultural industries to invention and innovation, improving the quality of life, the motivation of people, etc. (assessments of the first three kinds of impacts were done in studies on Singapore and Thailand).[29]

Economic impact studies in the cultural sector are very often conducted for thematic areas or cover one cultural domain (e.g. cultural heritage, performing arts, etc.), different territory levels (e.g. local communities, regions or city) or single events (e.g. festival, art manifestation, project, etc.). There are different views about the analytical and economic purpose of impact studies in culture. Madden (2001:167) considers “that multipliers are designed only to measure the impact

[29] Heng et al., 2003; KIAsia, 2009.

on GDP, increase in demand, increases caused by exogenous increases in wealth (e.g. money from outside the economic system)", while Throsby considers impact studies "as a tool constructed to discern the short-term effects of specific projects and essentially to measure the effects of direct expenditures" (Cultural Policy Center, 2004:44).

Different levels of industry aggregation and data resources, however, have cast doubt on this approach, and it has come under extensive criticism. Most of the discussion has been focused on the quantification of technical coefficients, and on distinguishing those parts of the economy that produce for cultural industries from those that do not. For example, Seaman (2003) points out several weaknesses concerning technical aspects of economic impact studies, such as: direct base errors, errors in calculating induced effects, errors connected with assumptions about the capacity of local areas, policy interpretation errors, etc. The second dilemma that arises is knowing when multiplier analysis should be conducted at the regional, local or city level. The localisation of production at different territory levels requires different techniques for measuring the involvement of cultural industries in the regional economy (Listokin et al., 2010).

With multiplier analysis, when an input-output model is not available, then it may be necessary to construct one by means of local surveying (Heilbrun and Gray, 2004: 347). For example, in Queensland's creative industries mapping study, the I-O table was created by data gathered from an extensive survey of over 350 businesses across Queensland's six creative industries segments. Survey participants were asked to provide information on their number of "creative" employees (as distinct from other employees), their products and production levels, markets and production inputs, and spatial information relating to the inputs and outputs of industries (SGS, 2005). This methodology is source of extensive criticism on impact studies using multiplier analysis: since these estimations are based on survey results, they may have some inaccuracies, and suffer from different and incompatible definitions for different surveying units, etc. (Reeves, 2002:96; Everitt, 2009:318). There were some cases where one community borrowed the value of multiplier for an input-output study carried out for another community in order to calculate the total spending of its own cultural industries, which directly led to error in calculating induced effects.

This kind of methodological approach also has certain strengths. For example, it can provide information on trends in the culture sector, financial effects of demand and supply, and structural changes, and intermediate consumption may be identified. However, all of this information depends on the quality of statistical input data. If the quality of data is poor, estimations of final and intermediate consumption and production in the culture sector will be based on assumption, and most likely distort the multiplier effects of cultural industries.

2.4 Economic model of cultural activities

Economic model of cultural activities uses the traditional and modified Cobb-Douglas production function as a model for explaining more clearly the quantitative relationships between production results and production factors in certain cultural industries domains, and indirectly for addressing possible relationships between culture and other economic domains from a development perspective. Due to the assumption that the output elasticity of labour and capital are constants over time and determined by available technology, the Cobb-Douglas production function has very often been adopted and modified, like the Tinbergen production function, which contains

the novelty of a factor representing the increase of productivity due to technology depending exponentially on time.[30]

The Cobb-Douglas production function[31]has subsequently been used in many settings, ranging from individual firms to global economic questions. In the past, the production function was a method with the capacity for huge empirical application in economics, which made it possible to measure the long-term effects of production factors and their contribution to the generation of total output of a sector or the economy. The limiting factor of the Cobb-Douglas production function application is that it can measure only quantitative changes in capital and labour inputs, but with certain changes this limitation can be overcome.

The application of the production function as a methodological approach for measuring the economic contribution of the entire cultural sector or all cultural domains is very rare. Past efforts using the production function for this purpose were based on individual or specific cultural activities, and were not applied at macro-economic level, to study the relationship between production factors and outputs in cultural industries. The reason for that is the structure of the culture sector, where domains associated with productivity lags and Baumol's cost disease were dominant in the past.[32]

Gapinski (1980, 1984) evaluated the transcendental production function for performing arts institutions, and in later work also used a production function to explore the economic underpinnings of the Royal Shakespeare Company. Bishop and Brand (2003) examined the technical efficiency of museums of South West England by using the stochastic frontier production function. They measured the impact of public funding and voluntary activities, besides labour and capital inputs, on the technical efficiency of the museums. Boyle (2006) applied the production function in order to understand the production process of certain Australian symphony orchestras and the relationship between inputs and outputs in the process. Throsby (2006) applied the production function for artistic output in which he tried to consolidate the quantity and quality of output as a joint product from the input of labour and capital provided by individual artists. The production function model has been used on a sample of practicing professional visual artists and craftspeople in Australia. Several articles have been published on different research undertaken in this area, and considerable empirical efforts have gone into estimating the cost and demand functions, which imply corresponding production functions of cultural (sub)sector(s) (Taalas, 2003; Boyle, 2006).

In the analytical sense, the production function can be used for planning, monitoring and evaluating cultural and economic policy in the field of cultural industries. It can support and facilitate the decision-making process at the macro-economic level (especially in the field of allocation of financial resources in cultural industries), and can be used for measuring some contributions of cultural industries to the economy. In spite of its limitations, the Cobb-Douglas production function may be a good way to estimate the growth of the economic contribution of cultural industries in developing countries, where the influence of technology on the production process is small. It is possible to transform and adapt data so that the economic contribution of cultural industries can be measured using the production function. For example, the problem of

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[30] ($Y = AK^{\alpha}L^{\beta}e^{\lambda T}$), where is Y: output, L: labour input, K: capital input, β: output elasticity depending on labour input, α: output elasticity depending on capital input, e: technical progress function, λ: quality changes caused by technological innovations, A: coefficient of proportionality which depending on input units.

[31] $Y = AK^{\alpha}L^{\beta}$, where is Y: total output (production), L: labour input, K: capital input, β: output elasticity depending on labour input, α: output elasticity depending on capital input, A: total factor productivity.

[32] For an extensive disscusion on this topic, see Baumol and Bowen, 1965:495-502.

measuring the output of some cultural domains such as museums, performing arts and crafts, can be solved by taking the number of visitors, size of attendances or frequency of performances as a proxy for output. The non-marketable economic contribution of cultural industries can also be estimated. In addition, it is possible to use expenses (i.e. running expenses or housing expenses) as a proxy indicator for capital inputs. The real value of inputs and outputs can be calculated by implicit price deflators (capital-price index or overall price index). The most important advantage of the production function, however, is that each input can be divided into different components and each component's contribution can be quantified and estimated (e.g. labour can be divided into creative and non-creative; technical progress as a residual can be disaggregated in different components).

2.5 Disequilibrium economic model

Disequilibrium economic models are theoretical-analytical models for testing, measuring and quantifying the effects of allocation decisions at the macro-economic level; with certain modifications, they can also be applied at the regional or local level. These models are mathematical and statistical constructions for the formalisation of economic situations that do not reflect the equilibrium state, and as such are used for the assessment of rational decisions under conditions of disequilibrium. For example, they can be used for predicting the possible loss in society and the economy due to an inadequate allocation of investment and labour resources.

In designing a disequilibrium model for the inter-sector reallocation of investment and labour inputs, the following assumptions were taken as a starting point: i) a part of economic growth can be attributed to the reallocation of resources from less productive sectors to more efficient sectors; ii) the economy is in a disequilibrium state; and iii) the economy consists of two sectors: the creative and non-creative sector. The analytical framework for assessing the effects of reallocating investments is based on a modified disequilibrium model of inter-sector reallocation of resources (Rikalović, 2009). The traditional and creative disequilibrium economic model was developed and adopted for measuring, estimating and predicting the economic contribution of the creative sector and cultural industries. This was tested on data for the Finnish and Serbian creative sector and cultural industries.[33] This dual-economy model of growth suggests a relevant two-sector decomposition of the economy into creative and traditional sectors.[34] In theory and practice, the cases of disequilibrium may be different, which leads to the assumption that the disequilibrium is the result of different levels of efficiency of certain sectors of the national economy. It is further assumed that a part of economic growth can be attributed to the effects of reallocation of resources from less productive to more efficient sectors of the economy.[35]

[33] Rikalović and Mikić, 2010; Mikić, 2011; Rikalović and Mikić, 2011; Mikić, 2012.

[34] The traditional sector consists of all other branches (e.g. agriculture, financial, services, trade, tourism, etc.) that are not covered by the working definition of the creative sector. An industry-based classification of the creative sector and cultural industries was used in the research. Two definitions of the creative sector were used for testing. The narrower definition includes only cultural industries (NACE branch-22), while the broader definition combines computer and other services, education, recreation and culture.

[35] Detailed economic and mathematical elaboration of the model construction as well as regression equations was explained in: Rikalović, 2009; Rikalović and Mikić, 2010; Mikić, 2011; Rikalović and Mikić, 2011.

An assessment of the impact of reallocating resources in Finland as an increase of the share of investment in the creative sector (i.e. through greater allocations from the traditional sector), and additional growth in GVA by 1 percentage point, would possibly generate GVA of about €1.06 billion on average per year (valued at 2000 prices).[36]By contrast, results for the reallocation of labour inputs are quite modest: holding sectoral labour inputs and capital stock constant, and supposing that labour inputs representing 1% of the total labour force, are transferred from the non-creative to the creative sector, could contribute to an increase of about 0.1% of GVA on average per year for the period 1975-2007.[37]

The basic disequilibrium model can be used for measuring economic contribution and for predicting the possible contribution of the creative sector or cultural industries at different levels of reallocation of capital stock and labour inputs as well as to produce „what if" scenarios concerning the effects of changes in different macroeconomic theories. It can be adapted to measure input reallocation within sub-sectors of cultural industries. In general, the disequilibrium model provides a more realistic description of the situation of the economy. It can also be modified for comparison among countries, or different groups of countries. It can show that shifting resources toward the creative sector can be an important source of economic growth. At the same time, this model has several limitations: the first one concerns the availability of data, especially for fixed capital formation in constant prices. The second limitation is that this model is much better adapted to the situation in developed countries than in developing countries. This is due to the need for long-term statistical data and how the creative sector and cultural industries are structured. In order to make good and reliable predictions, it is necessary to possess long-term data; countries whose creative sector is a small part of the total economy may show a lack of statistical significance when testing the effects of reallocating investment and labour inputs from the non-creative to the creative sector. In practice, however, this can be a very important source of economic growth.

[36] Data was testied for the period 1975-2007 and cumulatively for the entire 33-year period, the effects of reallocation of investment resources from the non-creative sector to the creative sector would reach the amount of EUR 34.9 billion (valued in constant 2000 prices), which represents approximately 24.55% of the GVA of Finland's economy in 2007 Decomposition of the sources of growth and explanation of estimation of investment reallocation effects are presented in Mikić (2011).

[37] Decomposition of the sources of growth and explanation of estimation of employment reallocation effects are presented in Rikalović and Mikić (2011). For Serbia, see Mikić, 2012.

Chapter 3. International approaches for measuring the economic contribution of cultural industries

3.1 EU perspective

The question on how to define, classify and measure the economic contribution of cultural industries cannot be answered independently of specific objectives of policy perspective. Conceptualisation of cultural and creative industries and measuring their economic contribution is a relatively new topic on the EU agenda. This process started with recognising cultural and creative industries as a catalyst of economic and social development of EU. Several ways in defining cultural and creative industries arose through communications, opinions and declaration of European Commission, European Parliament and their Committees and Divisions. Different EU bodies were taking different views on the definition and structure of the cultural and creative industries, although never defining what they explicitly meant with those terms.

In the first Resolution of the European Parliament on this topic entitled *European Parliament Resolution on Cultural Industries* (2002/2017) cultural industries was considered as a field of multidimensional forms of cultural expressions ranging from cultural heritage to audiovisual industries. Two years later, *Opinion of European Economic and Social Committee on Europe`s Creative Industries* (2004) adopted a prescriptive definition of creative industries by identifying provisional list of activities labelled as creative industries. These include the performing arts, such as theatre, music, dance and others, the plastic arts, covering both painting and sculpture etc., cultural craftsmanship, book publishing, music publishing, the audiovisual media and the cinema, the communication media, cultural and above all architectural heritage, the conservation and restoration of our cultural heritage and cultural works and even tourism aiming at raising awareness of a specific cultural asset, whether urban or rural, not to forget museums, libraries and other centers of culture.

The next stage of policy positioning and conceptualisation of cultural and creative industries arose in 2008. It was published in the *Report on cultural industries in Europe* by European Parliament (2008), after which it was adopted *Resolution on Culture in a globalising world* (2008a) where the new prescriptive in defining of cultural and creative industries was given, with a list of their characteristics and contribution to economic and social development and intercultural dialogue of the EU. The Commission also invited the EU to harness the potential of culture as a catalyst for creativity and innovation within the framework of the Lisbon Strategy for Growth and Jobs.

In 2010, European Commission published the Green Paper *Unlocking potential of cultural and creative industries* (2010) with the aim to: i) highlight the importance of the cultural and creative sector for EU competitiveness in the global environment; ii) initiate a discussion on the strategic approach for strong and attractive cultural assets at EU, national, regional and local levels; and iii) identify the policy response for enhancing cultural and creative industries for development gains. After that, European Parliament adopted the new *Resolution on unlocking the potential of cultural and creative industries* (2011) recognised the cultural and creative industries as a sources of economic and social innovation in many other sectors of the economy, and identifying the need to produce better definition of cultural and creative industries at EU level as well as call Member States to recognise and target practical problems of cultural and creative industries (education, training, entrepreneurship, distribution of works in digital age, etc.) in their policies and strategies. The last Opinion of the European Economic and Social Committee on the proposal for establishing the Creative Europe Programme (2012) emphasises the

contribution of cultural and creative industries in relation to the new industrial development and in close connection with other services and production processes. In accordance with this new policy perspective, the creative industries were perceived as a catalyst for innovation in industry and the services sector as well as prominent role in the Europe 2020 strategy and contribution to a new type of growth in the EU. As shown above, cultural and creative industries at the EU level have a different treatment. First, they were always seen in duality: as a catalyst of cultural and economic growth and development with different weights of those two aspects. Secondly, cultural and creative industries were mainly considered as sources of economic growth, while finally they are now, sources of cultural growth (e.g. as a promoter of innovation, knowledge transfers, inter-sector networks, etc.).

However, efforts to measure the social and economic dimensions of cultural industries have a longer tradition, and were connected with the process of improving cultural statistics. The first step towards the implementation of cultural statistics initiatives started in 1997, when the Leadership Group on Cultural Statistics was set up (LEG-Culture) by the EU Statistical Programme Committee. LEG's work was given the status of a 3-year pilot project and it was divided into 4 thematic groups and task forces. The main aim of LEG-Culture was to build up at the EU level a system of coherent and comparable information that could contribute to a better understanding of the link between culture and socio-economic development.

The final report of LEG-Culture was presented in 2000 with main conclusions and recommendations on cultural statistics, as well as several questions concerning the regional survey template on cultural participation and comparable data for 5 countries. The methodological work of LEG-Culture was continued through the Eurostat European Group on Cultural Statistics with a mandate of 4 years (2001-2004). The group was responsible for developing common methodologies for producing statistical data on three themes that are important for national and European policy: employment, public and private spending on culture, and cultural practices.

At the same time, different bodies at EU level (e.g. the European Council and the European Commission), through different explicit and implicit initiatives, demonstrated their will to develop reliable and quality cultural statistics, in particular to measure the economic impact of the cultural sector and its potential within the framework of the Lisbon Strategy for Growth and Jobs and later within Europe 2020. Explicitly, the new framework of Community objectives in the field of cultural and creative industries was adopted in 2007 by the Council Communication known as the European Agenda on Culture in a Globalising World (COM (2007)242 Final). Future actions in the field of cultural statistics were specified in the Work Plan for Culture 2008-2010, which also led to the creation of the Eurostat Working Group on Cultural Statistics. This Eurostat Working Group on Cultural Statistics in the framework of European Statistical System project (ESS) was set up in 2009 with the main aim to work on methodological issues for the future generation of cultural statistics in the EU.[38] This Working Group is composed of four task forces in four thematic areas:

i) Task Force on EU framework and definitions, responsible for creating the methodological basis for defining and establishing an information system on culture, based on LEG–Culture work and the UNESCO FCS 2009;

[38] The creation of ESSnet-Culture is part of a long-term projection cultural statistics that started with EU LEG Culture in 1997 (1997-2000), and was later continued with the "Eurostat European group on cultural statistics" (2000-2004).

ii) Task Force on financing and expenditure, mainly responsible for defining a basis for cultural finance, with priority given to public financing;

iii) Task Force on cultural industries, mainly responsible for preparing a proposal for producing a core data set concerning cultural/creative industries, including cultural employment; and

iv) Task Force on cultural practices and social aspects of culture, responsible for analysing the connections between cultural participation and other aspects of social life.

The Task Force for Cultural Industries of ESSnet-Culture worked to harmonise the vocabulary and definition of cultural industries. As the concept of cultural industries is defined in different ways around Europe, it has made the proposal to create a general harmonised framework for the purpose of measuring employment and the economic characteristics of the culture sector, but that would allow countries or users to define the culture sector according to their local or political needs (ESSnet-Culture, 2011:32). For the ESSnet-Culture group, the concept "cultural industries" covers cultural economic enterprises and organizations, both market and non-market. This definition is very close to the ESSnet-Culture group's definition of the culture sector, which covers all types of cultural industries involved in cultural economic activities according to the Statistical Classification of Economic Activities in the European Community (NACE)/Statistical Classification of Products by Activities (CPA) 2008 classification (ESSnet-Culture, 2011:63). This can be understood to mean that cultural industries and the culture sector are the same concept for the ESSnet Culture Group, but seen from different perspectives: the first one focuses on the descriptive aspect of cultural industries, while the second one focuses on the statistical aspect, with particular emphasis on the sectoral relationship between different cultural domains. The ESSnet-Culture framework classifies the cultural and creative industries into 10 cultural domains (heritage, archives, libraries, books and press, visual arts, performing arts, audiovisual and multimedia, architecture, advertising, art and crafts) based on the economic functions of creation, production and publishing, dissemination and trade, preservation, education, management and regulation (ESSnet Culture, 2011:62).

In the final report produced by ESSnet-Culture (2011), the main conclusions and recommendations for the above mentioned fields are given, out of which several of them directly for measuring the economic contribution of cultural and creative industries. Those recommendations and proposals are listed below:[39]

i) A common field of cultural industries should be defined by applying the 50% criteria (only organizations and enterprises of the cultural sector that generate at least 50% of their income by selling cultural products and services) or by including all the enterprises and organizations of the cultural sector;

ii) The vocabulary relating to employment and the economic characteristics of the cultural sector needs to be precisely defined, and then harmonised by developing a general harmonised framework for employment and the economic characteristics of the cultural sector, which will allow users of statistics to define or to delineate the cultural sector according to their local context or political needs.

[39] For more information, see ESS Net-Culture, 2011.

iii) As different definitions of cultural and creative industries are used in political discourse, it is important to develop a clear, evidence-based cultural industries framework which will use a standardised pan-European definition of cultural industries.

iv) The classification of cultural industries should be in line with Eurostat's Structural Business Statistics (SBS), and subsequently the following sub-sectors can be classified as cultural industry markets: publishing industry, film/video industry, sound recording industry, broadcasting industry (without public activities), news agencies, architectural market, advertising market, design, photographic and translation activities, retail sale of books, newspapers and music and video recording.

v) A total of 28 indicators that all cultural stakeholders can use and that can meet the main policy needs for cultural statistics should be produced. Two main types of indicators are included in the ESSnet-Culture proposal: key indicators and spill-over indicators. While key indicators describe the economics of culture or its direct impact on the economy, the purpose of the second set of indicators is to describe the culture sector's indirect influence on other economic sectors. The ESSnet-Culture Group points out that while most of the 28 indicators were created on the basis of already existing statistical data resources of Eurostat, some proposed indicators may not yet be available by Member States, and so it is necessary to do further work on developing cultural industries statistics.

vi) A Task Force should be put into place with the mission to identify the necessary requirements for developing satellite accounts on culture in Europe and a definition of standards.

3.2 OECD perspective

Several activities of the Organisation for Economic Co-operation and Development (OECD) highlight the importance of culture for political agendas. For instance, the publication *Culture and Local Development* (OECD, 2005) examines the potential of developing the culture sector through cultural tourism, cultural districts and cultural neighbourhoods. The publication describes the importance of culture on the local economy and discusses methodological issues related to their identification at the policy level. The report points to the increasing role of culture on the agendas of local governments, and its role as a catalyst for other activities to further the development of territorial clusters. In 2009, *Impact of Culture on Tourism* (OECD, 2009) was published, which examines the growing relationship between tourism and culture, and their impact on the attractiveness and competitiveness of destinations and local places. OECD's activities on measuring the economic importance of culture have been developed within the framework of improving social and demographic statistics. OECD data concerning culture are treated as quality of life indicators, and are focused on measuring household and government expenditures on culture and recreation. This can be considered to be a cultural industries demand perspective.

In 2006, OECD initiated a new project for the measurement of culture and art-related activities. It published a background report entitled *International Measurement of the Economic and Social Importance of Culture,* and organized a workshop on this topic at OECD headquarters in Paris on 4-5 December 2006. The objective of these efforts was to strengthen international cooperation and to generate new ideas for measuring the economic and social contribution of culture, and to address existing problems and needs in this field; for example, the need to create

data for various purposes, including descriptive analysis, planning and monitoring (OECD, 2007). As OECD is the key agency for enhancing SNA (System of National Accounts) around the world, its approach for measuring the economic contribution of culture is based on developing satellite accounting for the calculation of culture's economic and social significance. The OECD has thus proposed the development of a Cultural Satellite Account Framework with several layers and modules *(see **Table 3**).*

OECD's proposed Cultural Satellite Account Framework represents a coherent framework for gathering and analysing statistical information on the economy of culture, but its practical application involves very extensive work. Differences in the composition and classification of culture for the purpose of preparing CSA are evident, and the basic methodological weakness in measuring the economic contribution of culture still exists. Nonetheless, some countries have developed a basic CSA model limited to the macro-information module (Spain, Finland and Colombia). During the implementation of the CSA project, discussions on economic and social measurement began and important questions were raised. However, since the project was terminated in 2007 there remains only a proposal for different measuring methodologies, but without their practical implications. As the project *International Measurement of the Economic and Social Importance of Culture* was ad hoc, after its termination there have been no future OECD initiatives in this field.

3.3 WIPO perspective

Intellectual property right are essential for cultural and creative industries, and very often basic principle of their functioning. This international organization concerning culture, cultural trade and intellectual property rights have been active in advocating a efficient regulation of intellectual property protection as well as improvement different aspects in this field. Developmental Agendas of WIPO from 2004 to 2012 show different proposal for actions (capacity building, normative regulation, technology transfer, policy regulation, etc.) as well as interests in valuing economic dimension of intellectual property assets. One of those issues is conceptualising and measuring the economic contribution of creative industries recognised from the perspective of copyrights value. As a response to the growing interest and needs of the WIPO Member states to address the economic and cultural development contribution of intellectual property practices in creative industries, in 2005, the department for creative industries was set up.

As WIPO recognised the need for a tool to assist interested countries to conduct surveys in this field, it prepared the *Guide on Surveying the Economic Contribution of the Copyright-Based Industries* in 2003 (WIPO, 2003). The purpose of the guide is to develop a practical instrument for measuring the economic contribution of a nation's creative and information sector, and to establish a basis for comparison between countries (WIPO, 2003:7).

The WIPO framework for measuring the economic contribution of the information and creative sector is based on several elements:

1. The copyright model is based on stages of the copyright chain. It covers content creation (expression of original ideas, formatting and processing of work), production of original work, distribution, marketing and promotion of work and consumption and use of this work.

Table 3. OECD proposal for a Cultural Satellite Account Framework

LAYER I	MACRO-INFORMATION MODULE: MONEY FLOWS	
	SUPPLY	**DEMAND**
	Size of the culture sector(economic impact)	Value in consumer demand for culture goods/services
	Value of government spending on culture	Value of culture-tourism
	Value of international trade in culture goods/services	
	Value of private sector support	
LAYER II	**QUANTITY/VOLUME OUTPUT MODULE**	
	SUPPLY	**DEMAND**
	Number of culture organizations and businesses	Number of consumers
	Infrastructure changes (amalgamations/births/deaths)	Attendance and participation rates
	Volume output produced	
	Size of culture employment force	
	Size of volunteerism	
LAYER III	**CHARACTERISATION MODULE**	
	SUPPLY	**DEMAND**
	Volume output by product type (content, language, etc.)	Consumer spending by demographic variable
	Employment by occupation	Participation rates by demographic variable
	Employment by type (full-time/part-time/self-employed)	
	Output by commercial category, language	
LAYER IV	**TARGETED ANALYSIS: ANALYTIC MODULE**	
	SUPPLY	**DEMAND**
	Economic impact analysis	Stock of potential customers
	Labour market analysis	Consumer personal income, savings, expenditures
	Financial analysis	
	Social impact analysis	
	Government spending analysis	
	Provincial profiles	
	Sector analysis	
	Ownership(foreign-control market share)	
	Identity(market share of domestic content)	
	Concentration(market share of large companies)	
	Production or cost function(inputs)	
	Investment	
LAYER V	**DOCUMENTATION MODULE**	
	Technical papers (concepts, methodologies, etc.)	
	Policy issues	
	Data needs	
	Data gaps	
	Contacts	
	Survey questionnaires	
	Strategic plans	

Source: OECD, 2007:24.

2. The concept of copyright and related rights is the main criterion for the classification of sector. By this criterion and in accordance with the copyright chain, the sector is divided into four categories: core copyright industries, interdependent copyright industries, partial copyright industries and non-dedicated support industries:[40]

- Core copyright industries are industries that are fully dependent on copyright material. They include nine sub-categories: press and literature, music, theatrical production and operas, motion pictures and video, radio and television, photography, software and database, visual and graphic arts, advertising services and collective copyright management societies.

- Interdependent copyright industries are industries that are engaged in the production, manufacture and sale of equipment. This category is divided into two sub-categories: core interdependent copyright industries, which include manufacture, wholesale and retail of television sets, radios, CD players, cassettes, electronic game equipment, computers and equipment, music instruments; the second group – partially interdependent copyright industries – cover manufacture, sale and retail of photographic and cinematographic instruments, photocopiers, blank recording material and paper.

- Partial copyright industries are "industries where a portion of their activities is related to copyrighted work and other protected subject matter, and may involve creation, production, manufacturing, performance, broadcasting, communication and exhibition or distribution and sales." These industries include apparel, textiles and footwear, jewellery and coins, other crafts, furniture, household goods, china and glass, wall coverings and carpets, toys and games, architecture, engineering, surveying, interior design and museums.

- Non-dedicated support industries are "industries where a portion of their activities is related to facilitating broadcasting, communication, distribution or sales of copyrighted work and other protected subject matter, and whose activities are not included in core copyright industries." These industries generally refer to business services and delivery modes, and they include: general wholesale and retailing, general transportation and telephony and the Internet.

3) There are three main indicators for measuring the economic contribution of copyright industries: i) size of copyright industries as a percentage of GDP; ii) employment; and iii) foreign trade (share of imports and exports).

i. *Size of copyright industries* is a measure that can be used in two ways: with a production approach, where VA is viewed as the difference between output and intermediate consumption; and an income approach, where VA is calculated as a sum of compensation for employees, gross operation surplus/mixed income and taxes minus subsidies on production. The Guide lists several limitations in applying the value added approach and provides possible solutions. For example, if the relevant data for calculating VA are not directly available, it is recommended to explore official sources for the necessary categories and relevant data and then calculate disaggregate data on copyright industries. In other cases, VA can be calculated on the basis of financial statement reports. The third approach is to

[40] For more information, see WIPO, 2003: 29-35.

calculate VA for missing categories with the help of statistics of employment, earnings and different supporting surveys (e.g. for estimation of salary costs, depreciation expenses, etc.).

ii. *Employment* is a measure based on employment data in 59 categories recognised as copyright industries. This indicator can be calculated by disaggregate categories of national labour statistics data based on the International Standard Industrial Classification. If there is no report on employment, the employment data "can be estimated by applying the ratio between the value added of the narrower category and the broader category" (WIPO, 2003:55).

iii. *Foreign trade* is a less explained measure in the WIPO Guide. In measuring the economic contribution of copyright industries, trade was presented as depending on available data of each country. Due to the existing system of trade data, which is focused on physical products, there is no possibility to estimate trade in services or copyright licenses. The limitation in categories used in trade statistics did not permit the compilation of data for the full range of copyright industries, so under-valuation very often exists in the motion picture sub-sector, for example, and in the broadcasting sub-sector.

4) It is very difficult to estimate the proportion of copyright-based value added for industries that are not fully copyright industries (partial, independent, non-dedicated industries). In that case, it is necessary to estimate the copyright component of the industries in question. Copyright factors are used for the calculation of all economic measures connected with copyright industries that are not fully based on copyright matters - partial, independent and non-dedicated supporting services. One of the proposals for the calculation of the copyright factor is to use international comparison, where estimation will be based on the copyright factor of a country with a similar industry structure, production practices, etc. However, in reality, countries employ different approaches in calculating the copyright factor. For example, in the Singapore Survey, the copyright factor was estimated on the IP (Intellectual Property) intensity scorecard. In Hungary, core and interdependent copyright industries are included 100%, while partial copyright industries and non-dedicated support industries are included only at the level of their copyright component. The Hungarian copyright factor for the partial copyright industries is estimated by using a surveying method, while the copyright factor for non-dedicated support industries is estimated by using a method applied in the U.S. study. In the Latvia Survey, the average copyright factor based on the Singapore and U.S. studies was used to estimate the potential percentage of the partial copyright industry in Latvia.[41]

In practice, the WIPO approach has several limitations: the first limitation is copyright factors, which are very often based on country estimates. For example, in the case of Latvia, there is no clear similarity between that country and Singapore and the United States with regard to partial and non-dedicated copyright support services. The second limitation is connected with the organization of statistics, which can differ between countries due to the different management of data and accounting policies and practice. There is also a limitation concerning the calculation of value added for copyright industries as a whole, since all activities in the non-formal economy and cultural production that is not marketable will not be captured by this approach. It seems that the WIPO approach is much more appropriate for the situation of developed countries

[41] WIPO, 2004a:74-89.

where copyright is effectively protected. However, in countries where there is a high level of piracy, the relevance and objectivity of measuring copyright industries can be questioned.

3.4 UNESCO perspective

The time where the cultural policy is interpreted and practised have been transformed. The series of UNESCO report provides illustration how this transformation goes to connection between culture and economic by giving important contribution to better understanding role of cultural industries in new cultural policy and economic reality. UNESCO is trying to bring culture from the periphery of development to the central place. There have been numerous UNESCO initiatives that have strived to strengthen the role of the culture sector in development such as the UNESCO symposium held in India in 2005, known as the Jodhpur Initiatives, which put emphasis on the importance of local cultural activities as a means of poverty alleviation, especially in various Asian countries; the Paro Initiative (BIMSTEC, 2006), and the Nairobi Plan of Action on cultural industries in Africa (African Union, 2005).

There is a need for governments to take steps to integrate the concept of cultural industries in development strategies and to ensure that, it has been necessary to recognising the economic potential of the cultural industries.[42]The work of UNESCO in this field has two pillars: policy and methodology. Policy aspect of UNESCO work ensure that the cultural industries are recognised as a part of an expanded and broader interpretation of culture as a way of life and as a central in promoting and maintaining cultural diversity, in ensuring democratic access to culture and constitutive part of cultural and economic development (UNESCO, 2005a). Based on the Convention on the Protection and Promotion of the Diversity of Cultural Expressions, the 2009 UNESCO Framework for Cultural Statistics(FCS) defines “cultural industries” 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; UNESCO, 2005a).This definition also reflects a context where cultural heritage is considered to be a part of cultural industries (which is often the case in UNESCO Member States).. There are two reasons for this approach: the first one is that cultural heritage produces cultural services, and the second one is the application of the production cycle model, which recognises cultural heritage (museums, libraries, documentation centres) as being part of the production or exhibition/dissemination stage of the cultural cycle of different cultural domains.[43]

Methodological aspects of UNESCO’s work have been connected with the topic of international harmonisation of statistics on culture and supported by different programme activities at the regional level. In 1992, in cooperation with UNESCO, the Meeting of Experts on Cultural Industries was organized in Africa. In the same year, the *Dakar Plan of Action for the Promotion of Cultural Industries: Factors of development in Africa* (UNESCO, 1992) was adopted. In 2003, the plan for culture and development launched by the New Partnership for Africa’s Development (NEPAD) was adopted (UNESCO, 2003). In the Asia-Pacific region, in cooperation with UNESCO, the Jodhpur Initiatives programme was launched with the purpose of strengthening the cultural industries sector as a strategy for poverty reduction and community regeneration (UNESCO, 2007). Within the framework of these initiatives, UNESCO has supported the project

[42] Throsby, 2010:197.

[43] For example, when analysing the cultural cycle in visual arts, it is necessary to include museums as part of the exhibition/dissemination stage (e.g. this approach can be found in Austria, Serbia and Switzerland); libraries would be included as part of dissemination activities in publishing and book industries, while intangible cultural heritage (as well as tangible cultural heritage), which is often at the origin of art and handcrafts, would be included in the creation/production stage in crafts or design.

Statistics on Cultural Industries: Framework for the Elaboration of National Capacity Building designed to meet the demand for data on cultural industries and the creative economy in the countries of the Asia-Pacific region. In addition, UNESCO has supported several expert meetings in these regions focused on the development of statistics on cultural industries and on their overall economic contribution (e.g. Asia Cultural Co-operation Forum).

In cooperation with the Spanish Agency of International Cooperation for Development, UNESCO has also developed the pilot project *The UNESCO Culture for Development Indicator Suite,* which aims to establish a set of indicators highlighting how culture contributes to development at the national level. Through 10-15 quantitative indicators covering the economic, social, governance, communication, heritage, education and gender equity dimensions UNESCO seeks to measure the contribution of culture to development processes. In the analytical sense, seven dimensions (policy areas) are connected with development and culture (economy, education, heritage, communication, governance, social issues and gender equality). Each dimension is represented by at least one indicator. The pilot project was tested at the country level during the first phase in Bosnia and Herzegovina, Colombia, Costa Rica, Ghana, Uruguay and Viet Nam. At the economic level, the value added of cultural activities will be measured: contribution of cultural activities to GDP, employment in culture, and household expenditure on cultural goods and services.

UNESCO has always recognised the critical role of statistics for formulating evidence-based policy and the importance of analysing data in the policymaking process. As a result, the UNESCO Institute for Statistics (UIS) was created in 1999, with its main role being to provide statistical information to Member States and international organizations in order to inform decision-making and facilitate democratic debate in UNESCO's areas of competence (education, science, culture, and communication). The UIS carries out its role through four main programme lines of action: i) guardianship of cross-national data focused on improvement of data quality, development of standards and their application within countries, and the construction and dissemination of policy relevant indicators; ii) development of appropriate methodologies and standards through providing guidance to Member States based on international standards and best practices; iii) capacity building in the collection and use of statistics (e.g. regional workshops on cultural trade, cultural employment and cultural classification); and iv) the monitoring and analysis of cross-national data by developing innovative approaches to statistical analysis and disseminating the practice of evidence-based policymaking by helping users to better interpret and utilise statistics.[44] At the different levels, several initiatives have made important contributions to improving the statistical base for measuring the economic contribution of cultural domains.

Over the last few years, the main contribution of the UIS concerning the economic contribution of cultural industries was the development of the 2009 UNESCO Framework for Cultural Statistics (UNESCO-UIS, 2009). It was also an important contribution for arriving at a better understanding of the culture and their structure. The FCS was inspired by a broad definition of culture based on the cultural cycle model. In accordance with this model, the culture sector covers the following domains: cultural and natural heritage, performance and celebration, visual arts and crafts, book and press, audio-visual and interactive media, design and creative services, and transversal domains, such as intangible cultural heritage, education and training, archiving and preservation. The list of cultural domains also includes related domains (tourism, sports and recreation), as well as equipment and supporting materials for cultural domains. As was pointed out in the 2009 UNESCO FCS, the issue of the creative-cultural debate was addressed by allowing the inclusion

[44] For more details see UNESCO-UIS, 2009.

of some specific creative industries (design and advertising) as a separate culture domain (UNESCO-UIS, 2009:19). However, by FCS, the confusion over classification was reduced, and all components of modern and technologically-oriented activities of culture were defined as cultural or partially cultural domains, together with the traditional fields of art.

The new statistical framework takes into account the new policy context caused by technological change, globalisation, new perceptions of culture, increase in international trade of cultural products, complex inter-interdependences between private and public spheres in culture, multi-sector linkages, etc. It presents several new methodological approaches and concepts for defining culture for statistical purposes, such as the following:[45]

- the creation of the cultural domain (a set of economic and social activities that traditionally have been regarded as cultural);
- the grouping of cultural domains into core cultural domains (cultural and natural heritage, performance and celebration, visual arts and crafts, book and press, audio-visual and interactive media, design and creative services), related domains (tourism, and sport and recreation) and transversal domains (education and training, archiving and preserving, and equipment and supporting materials).
- a classification of cultural domains that is based on different approaches (industry-based concept, employment-based concept and product-based concept), and on various existing pragmatic classifications (International Standard Industrial Classification, Central Product Classification and International Standard Classification of Occupations); and
- the cultural cycle concept, which captures the different phases of creation, production and dissemination of culture.

In the field of measuring the economic contribution of cultural industries, the UIS' main efforts are concentrated on defining and capturing the flows of global cultural trade, cinema statistics, cultural employment, and on-going work with experts and Member States to implement the revised UNESCO Framework for Cultural Statistics that will provide guidance to Member States on how to measure the economic contribution of cultural industries to social and economic development. The UIS produced two reports concerning international flows of cultural goods (UNESCO-UIS, 2000, 2005). The reports, which analyse cross-border trade, present data from about 120 countries on selected products: books, CDs, videogames and sculptures. In 2007, the UIS launched a revised international survey on Feature Film Statistics. The survey aims to gather information on selected economic characteristics of the film industry and to study the diversity of cultural expressions. As of 2010, the survey has become biennial. The UIS' international data collection on feature films includes a combination of indicators on the development of the film industry, such as cinema statistics, statistics on production and distribution, box office statistics, and statistics on digitalisation, the language in which films are shot, and comparative data on feature film production, distribution and cinemas.

As of 2011, the UIS is developing a global survey on cultural employment statistics for which the development will take several years. The results will shed light on the contribution of culture to economic and social development, as well as the conditions of those engaged in cultural activities. The UIS is developing a questionnaire using the methodology of the 2009 UNESCO Framework for Cultural Statistics.

[45] For more details see UNESCO-UIS, 2009.

Chapter 4. Relevant national approaches and issues in measuring the economic contribution of cultural industries to economic development

This chapter presents an exhaustive review of the most relevant research and mapping studies conducted globally. The chapter is structured by region starting with an introduction of the policy context, the concepts used and finally the methodology applied for measuring the economic contribution of cultural industries in the country studied.

4.1 Europe

Policy context

In Europe, national approaches to measuring the economic contribution of different cultural domains (e.g. cultural and creative industries) have a relatively short tradition. While there has been a slightly longer UK experience in measuring the economic and social impact of cultural domains at the systematic level, an analysis at the economic level has been only sporadically the subject of research by academics interested in management, business or economic aspects of different cultural domains. This situation changed by the end of the 1980s, when many European countries were influenced by market neo-liberalism, and public policies focused on the necessity of market forces in the economy. The main driving force was the promotion of "free trade", entrepreneurialism, unrestricted investment flows, flexible labour markets, the decreasing role and ownership of the state in the social service system (e.g. culture, education and social security) and budget austerity (e.g. deficit spending, reducing government expenditure, and privatisation of public companies). The general attitude towards a stronger market economy in Europe started to shift in the late 1980s and the UK became the leader of this process and a role model for European action (Hermann, 2005).

The UK model

UK academic and political discourse started to recognise that cultural and art activities, besides being a spiritual element of social behaviour and identity building, constituted an economic sector of equal importance with any other sector of society. As a pioneer in measuring the economic contribution of different cultural domains, the UK has gained considerable experience and expert potential in this field, and its approach, measurement toolkit and concepts have had an influence on other European countries. However, academics and researchers also recognised the difficulties in measuring the economic contribution of cultural industries and the problems posed by unclear concepts and terms, limited comparability, and very often changing and conflicting methodologies, which has led to a wide-ranging and constructive debate. This is the reason why the UK experience in developing an approach for measuring the economic contribution of cultural industries and other aspects of this issue have been chosen for a detailed discussion.

Under the influence of American research practice, economic analyses of the culture sector across the UK were disseminated in European academic circles. In the UK, initial research in this field was related to socio-demographic urban regeneration projects popular in the early 1980s. In search of new sources of economic growth and ways to restructure British economic models, the largest cities (e.g. Manchester, Glasgow and Liverpool) sought the development of new strategies of cultural and economic development, in which capital projects were to play an important role. Unlike American practice, which focused on the study of economic performance as an instrument of advocacy, the UK practice was more sophisticated, and in the spirit of

policymaking and development plans based on facts (evidence-based policy). The evidence-based policy principle was explicitly recognised in 1999 with the publication of the "White Paper: Modernising Government", even though this principle had been implemented in policy making 10 years earlier. This document emphasised the role and importance of relevant information and analysis in the decision-making process, which was a means to give priority to research in formulating public policies (Taylor, 2006).

Over the last two decades, several studies have been published that can be seen as representing different phases in the development of a framework for measuring the economic contribution of cultural industries. In the UK literature "The Economic Importance of the Arts in Great Britain", published by the Policy Study Institute in 1988, is recognised as the first study dedicated to the measurement of the economic contribution of culture (Reeves, 2002:7). By using multiplier analysis, it was demonstrated that the culture sector had an impact on spending in other sectors and on increasing wealth and job creation. The second study, "Employment in the Arts and Cultural Industries: An analysis of the 1991 Census", was conducted in 1995 (O'Brien and Feist, 1995). This research presented an employment-based approach for analysing the economic contribution of the culture sector, and examined the distribution of employment in the culture sector and in other sectors, as well as by territorial level. One year later, the Policy Study Institute published a study entitled "Culture as Commodity? Economics of the Arts and Built Heritage in the UK", dedicated to measuring the economic contribution of the arts and heritage (Casey et al.1996). The findings of this research confirmed that the culture sector generated employment, and that it was a part of the socio-economic structure and influenced the character of employment. The end of this first phase of research on the economics of culture was marked by the publication of Pratt's paper "The Cultural Industries Sector: its definition and character from secondary sources on employment and trade, Britain 1984−91" (Pratt, 1997), when was introduced a new methodological framework for economic analysis of the culture sector.[46]

The methodological framework of these studies was very soon adopted across British cities as a technique for quantifying the economic contribution of the cultural sector. Results from this research were used to support cultural and economic planning and for popularising the art sector as a significant factor of economic development and urban renewal. In political discussion, some authors point out that these studies had a wider analytical purpose in the UK, particularly in terms of recognising inter-sector linkages and clarifying the strategic interventions that can facilitate the growth of the artistic sector. While this can be considered as their secondary role, their primary role was to confirm the positive effects of the cultural sector on urban regeneration.

The first research phase, which was ended in the late 1990s and measured the economic contribution of the culture sector, was aimed at generating and systematising the economic data, with considerable attention devoted to developing tools for assessing the indirect contribution of the culture sector to the expansion of other economic sectors. From the point of view of methodological and analytical instruments, this phase has been characterised by two dominant approaches: i) analysis of the statistical and economic character of the culture sector, combined with multiyear coefficients; and ii) input-output tables in combination with a descriptive analysis. However, none of the studies so far have provided strong explanations and precise definitions of

[46] In this work, Pratt introduced a new methodological framework for economic analysis of the culture sector known as a "production chain model". The production chain concept presented in this paper was meant to facilitate understanding of the development process for creative products by presenting it in various stages: from the original creative idea to the distribution and consumption of the product itself.

the two main issues: economic impact and the various alternative notions, such as cultural sector, artistic activities, arts, cultural heritage sector, cultural industries, cultural production and cultural industries.[47]

The critical review of these studies was carried out relatively slowly, but proved to be fruitful. The second phase of economic contribution research started after the Creative Industries Mapping Document was published in 1998. In 1997 the Creative Industry Task Force was formed in the UK in order to investigate the role of the creative sector in economic growth. The result of its work were two creative industries mapping documents (in 1998 and 2001), followed by a series of economic and statistical studies produced under the direction of the Statistical Office of the UK.

In this period, the first descriptive definition of creative industries from policy perspective was introduced. Cultural production was considered to be creative with a symbolic production, and defined with the term “creative industries”. They were defined "as those industries which derive from individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property" (DCMS, 1998).

The pragmatic classification of creative industries included 13 activities: advertising, architectural services, art and antiques market, crafts, design, design fashion, film, interactive leisure software, music, television and radio, performing arts, publishing and software. Both the DCMS’s definition and list of creative industries provoked a considerable debate.[48] “It was argued, for example, that almost all new products have elements of creativity and intellectual property embedded within them. Separating a handful of industries from other industries and labelling them as “creative” is, according to this critical view, rather arbitrary. More specific criticisms of the list have also been made, especially concerning the inclusion of computer and software activities because of their low creative component” (BOP Consulting, 2010:17). The UK definition has been widely accepted by European countries, extended by the ESS Net Culture Group (ESS Net Culture, 2011), UNCTAD (2004, 2008 and 2010) and KEA (2006) and by the UK government in 2006 (BOP Consulting, 2010).

By the end of the 1990s, mapping studies with a regional dimension were added. The appointment of the Regional Issues Working Group by the Creative Industries Task Force emphasised the need for further research on creative industries, but with a regional perspective. In particular, the aim was to examine the potential of creative industries for promoting regional development, and to identify a new development model for the British regional economy. During the same period, a number of key sub-sectoral studies were conducted at regional and local levels (Reeves, 2002:11). There were also several umbrella initiatives concerning creative industries: improvement of the statistical base for mapping creative industries (e.g. Creative Industries Statistic Group), exploring opportunities for the promotion of regional creative industries and for increasing the benefit to regional economies, stimulating employment and entrepreneurship in creative industries.

[47] See Reeves, 2002.

[48] Discussion concerning the DCMS definition and classification were intensive in academic discourse. About this topic refer to Chapter 3.

The work carried out for the cultural industries mapping documents revealed a series of methodological problems: numerous heterogeneous and incomparable activities had to be consolidated into a single sector; it was necessary to prove that creative industries contributed significantly to the development of the national economy; there was a chronic lack of reliable statistics; a clear distinction had to be made between existing concepts (art, cultural industries, cultural sector); and, finally, methodological shortcomings had to be overcome.

In this regard, the challenges on the UK mapping methodology should be pointed out. The first one is the scope of the mapping studies, and the definition and classification of creative industries, which was conceived to facilitate the measurement of the economic contribution of creative industries to the British economy. However, the incomparability of data and findings from different studies and the limited opportunities for trend analysis led to discussions regarding the conceptualisation of creative industries and the development of a unique methodological and theoretical research apparatus for this field. In this respect, the academic community was split, with different sides taking different positions and making different statements. On one side there were the researchers who felt that the generic sector definitions could meet the diverse goals and interests of researchers, politicians and academia. On the other side, the proponents of a unified sector definition argued that the continuous monitoring of economic size and the viability and meaningfulness of research results required a uniquely defined object of study.[49] These issues were never clarified in detail. In 2010, "Mapping the Creative Industries: a Toolkit" (BOP consulting, 2010) was published. At the same time, several different methodological approaches were being used, such as the DCMS model, employment-based model (e.g. creative trident model), and I-O analysis for measuring linkages between creative industries and other sectors.

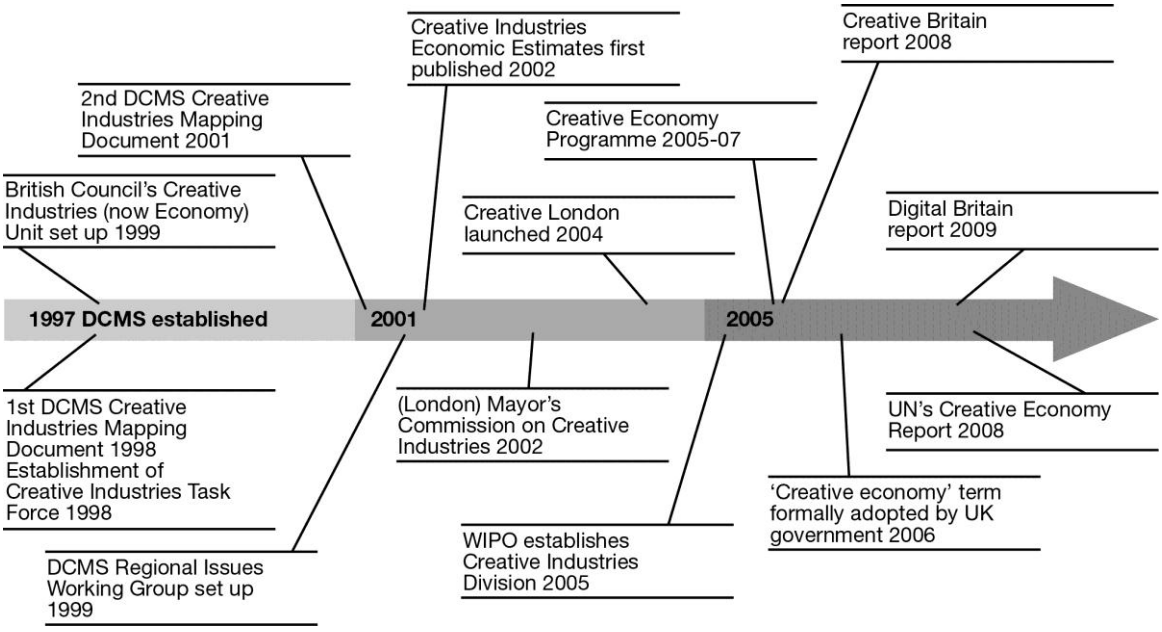
The early mapping studies (especially those conducted at the regional level) deal with the calculation of multiplier coefficients as a measure of the economic importance of creative industries to the regional economy. Various multipliers have been used in the arts and creative industries in Britain, such as those used by Myerscough (1988), calculated as an employment multiplier in Merseyside, Glasgow and Ipswich – 2.8, 2.7 and 1.8 respectively (Reeves, 2002:48). Later research on measuring the economic importance of culture has emphasised on its contribution to employment, gross value added, export, number of enterprises, etc. and sub-sector structural analysis.

The transition to a new perspective on measuring the economic importance of creative industries began in 2007, when the growing importance of creative industries was recognised, and the context for analysing their economic contribution was broadened. In the same period, the new official term "creative economy" was adopted by the UK government, which broadened the term “creative industries”. The main reason for this change was the growing influence of creative industries on the economy and their linkages with other sectors.[50]

The employment-based classification of the creative economy, as well as an examination of its linkages with other sectors, influenced UK public policy space. Several studies, such as "*Staying Ahead: the economic performance of the UK creative industries" (2007), "*Creative Britain: New Talents for the New Economy" (2008), "The Creative Economy: Beyond the Creative Industries" (2008), and “How linked are the UK’s creative industries to the wider economy?: An input-output analysis" (2007). Those studies confirmed a new research interest focused on innovation, the spill-over effects of creative industries, role of creative class in economic development and economic contribution of their concentration at different cities.

[49] For more, see Reeves, 2002:23.
[50] BOP Consulting, 2009:18

Figure 1. Key elements in the evolution of the creative approaches and policies in the UK



Source: BOP consulting, 2010:19.

Other European countries

In other European countries, academic and political communities also showed some interest in recognising the importance of cultural domains at the economic level. The transformation of state systems with a strong social dimension and a re-examination of the role of public expenditure in cultural domains began in the early 1980s (in South-East European countries during the 1990s), first at the discussion level, and then at the practical level. Stronger linkages between culture and the economy resulted as several cultural domains made the transition from a subsidy model to one that generates employment and added value, and as culture was seen more and more as an important element of development. To demonstrate that cultural domains generated economic growth and employment, the definition of cultural sector was expanded to include all forms of cultural and art expression that could be mass produced. Outside the UK, early studies (e.g. in Sweden and the Netherlands)[51] that analysed cultural domains from an economic perspective focused mainly on the most traditional parts of culture (heritage, publishing, film industries), on social aspects, or on copyright, financing, and market issues. The latter studies went beyond traditional art and cultural content to include partially cultural domains (advertising, architecture, computer services) in mapping (e.g. Denmark), and they tried to provide a general picture of the economic contribution of cultural industries. In terms of periodicity, most of them were ad-hoc research projects, but some examined the long-term comparability of economic measures or were of a longitudinal nature (e.g. UK, Spain and Finland).

In general, these studies have limited applicability for trend analysis, and differences in methodological approach and sampling affect their quality and make comparison between European countries difficult. The second reason why comparison between country studies was difficult concerned specific national policy areas. Each study had specific policy questions that

[51] The early studies were dedicated to measuring copyright-based industries. The first studies were conducted in Sweden in 1982 and in the Netherlands in 1985 (WIPO, 2003:10).

were to be addressed by the cultural industries research (e.g. cultural diversity, economic impact, financing and economic problems, trade issues and, locally based economic development), which led to major arguments and narratives focusing on the main policy issues rather than on the economic analysis. In many cases, it was clear that measuring the economic contribution of cultural industries was only a tool for policy advocacy. A list of the more exhaustive studies and research dealing with the measurement of the economic contribution of cultural industries at the national level that were published in the last ten years is given in **Table 4**.

A series of studies have been able to show that cultural industries are indeed capable of generating economic growth and employment. This was the initial and primary purpose of these studies. Their wider policy-oriented purpose has been to increase awareness among different national ministries of the importance of investing in cultural domains and of increasing interest in comprehensive and continuous research on culture, development and economy as a useful tool for policy decision-making. In South-East Europe, these studies have had an influence (in some cases) on the promotion and introduction of evidence-based policy principles in cultural policy. Each of these studies and research projects, presenting different measuring approaches, statistics and benchmarking tools, have been very useful in lobbying for a better position of culture on the political agenda. They are a very effective means for helping to stimulate reform in cultural and creative industries policies, identify the main problems in the development of different cultural and creative industries domains, and increase public awareness of the developmental dimension of cultural and creative industries. Also, the policy recommendations provided in many of these studies have provoked academic and political discussion. As these studies were nationally oriented, they were primarily focused on measuring the domestic performances of cultural industries, but some of them have been included in the international comparison of trade performances as well (e.g. Finland and the UK).

Some countries, such as Belgium, conducted this research only at the regional level due to that country's specific administrative system. The first and second studies on the economic contribution of cultural industries were published in 2006 and 2011 respectively by Flanders DC and the Antwerp Management School. It soon became evident, however, that it is nearly impossible to conduct a thorough and valid impact analysis due to the lack of available data. This led to a discussion on the need to develop a plan or strategy for optimising statistics for creative Industries. As a follow-up research project on the economic impact assessment of cultural industries, the Flanders DC Knowledge Center at the Antwerp Management School is currently developing a methodology to update and repeat the economic impact exercise bi-annually. At the same time, a series of recommendations were made to optimise the NACE-nomenclature in order to better align it with the economic activities of creative industries. Besides Flanders' intention to measure the economic contribution of the culture sector, the region is aiming to raise awareness of these issues and to provide further guidance and support for facilitating future work on this topic.[52]

Comparison at the European level and between countries has in most cases not been an important goal. The lack of comparability has been noted even in the national context (e.g. Germany, Austria and the UK), where research was conducted at the different government levels (national, local or regional). There are various reasons for the incomparability of these studies, but some factors are particularly important in this respect: different concepts of cultural industries; different application of the value chain model; different levels of statistical data and available information resources; and different methods for measuring the proportion of culture-related activities in an industry.

[52] Consultation with Dr Annick Schramme,University of Antwerp, 15 September 2011.

Table 4. Research and mapping studies at the national level in some European countries

Country	Publication	Commission/performed by	Year(s)
Albania	Mapping creative industries in Albania	Performed by the Institute for Contemporary Studies for the British Council, Albania	2007
Austria	The first Austrian report on creative industries, 2003	Austrian Institute for SMS and IKM	2003
	The second Austrian report on creative Industries, 2006	Austrian Institute for SMS	2006
	The third Austrian report on creative industries, 2009	Austrian Federal Economic Chamber	2009
	The fourth Austrian report on creative industries, 2010	Austrian Federal Economic Chamber	2010
Belgium/ Flanders	The Creative Economy: challenges and opportunities for the DC-regions	Verick Lauven Gnet Management School: DC Knowledge	2006
	The creative industries in Flanders: year 2010	DC Knowledge	2010
Bulgaria	WIPO study on copyright-based industries in Bulgaria (based on year 2005)	WIPO and expert team (Center for Intellectual Property, University of National and World Economy, Sofia and University of Plovdiv	2007
Croatia	Copyright-based industries in Croatia, 2008	WIPO and Croatian Patent Office	2008
Denmark	Denmark's Creative Potential – Culture and Business Policy Report 2000	Ministry of Trade and Industry Ministry of Culture	2000
	Denmark in the culture and experience economy, 5 new steps, 2003	Danish Government	2003
	The Danish Recorded Music Industries Annual Mapping, 2005	Copenhagen Business School	2005
	The Danish Film Industry Annual Mapping, 2005	Copenhagen Business School	2005
	The Danish Design Industries Annual Mapping, 2005	Copenhagen Business School	2005
	The Danish Computer Game Annual Mapping, 2005	Copenhagen Business School	2005
	The Danish Fashion Industries Annual Mapping, 2005	Copenhagen Business School	2005
Estonia	Mapping and analysing of Estonian creative industries, 2005	Estonian Institute of Economic Research	2005
	Survey and mapping of creative industries in Estonia, 2009	EAS Enterprise Estonia	2009
	Creative industries in Estonia, Latvia and Lithuania, 2010 and 2011	British Council	2010 & 2011
Finland	Staying Power of Finnish Cultural Exports, 2005	Ministry of Education, Finland	2005
	Cultural Satellite Accounts in Finland, 2009	Ministry of Education, Finland	2009
	Economic contribution of copyright-based industries in Finland, 2005-2008	Finnish Copyright Society & Finnish Copyright Institute	2010
France	L'emploi culturel dans l'Union européenne en 2002: Données de cadrage et indicateurs	Ministère de la culture et communication, France	2005
	Les industries culturelles en Ile-de-France	Institut d'Aménagement et d'Urbanisme de la Région d'Ile-de-France	2006
Germany	Cultural and creative industries in Germany, 2007	German Commission for UNESCO	2007
	Cultural and creative industries in Germany, 2009	Federal Ministry of Economics and Technology	2010
	Music industries in Germany, 2011	Musikinformationsentrum	2011
Hungary	Copyright-based industries in Hungary, 2005	WIPO	2005
	Copyright-based industries in Hungary, 2010	Hungarian Intellectual Property Office	2010
Italy	White paper on creativity: Towards an Italian model of development, 2009	UniversitàBocconi	2009

Country	Publication	Commission/performed by	Year(s)
Latvia	Copyright-based industries in Latvia	WIPO	2000
	The economic contributions of copyright-based industries in Latvia, 2005	Ministry of Culture, Latvia	2005
	Creative industries development potentials and challenges for Latvia, 2005	BICEPS	2005
	Creative industries in Latvia, 2007	BICEPS, KM,VKKF	2007
	Creative industries research, actualization of statistics, 2008	BICEPS	2008
	Creative industries in Estonia, Latvia and Lithuania, 2010 and 2011	British Council	2010 & 2011
Lithuania	Creative industries in Estonia, Latvia and Lithuania, 2010 and 2011	British Council	2010 & 2011
TFYR Macedonia	Creative Industries Mapping in the Republic of Macedonia	Ministry of Culture of the Republic of Macedonia British Council Macedonia	2009
Norway	White Paper 22 "Culture and industry"	Royal Norwegian Ministry for Cultural and Church Affairs	2007
Poland	Analiza potrzeb i rozwoju przemysłów kreatywnych	ECORYS	2009
	The economic importance of the cultural sector - an introduction to the analysis of the problem	IBS	2010
Serbia	Creative industries in Serbia: basic trends and recommendations	British Council	2006
	Expert report on economic analysis of creative sector in Serbia	SFBC-Group for creative economy	2011
Slovenia	Cultural and creative industries – Slovenian style	Ministry of Culture of the Republic of Slovenia	2011
Spain	The economic value of culture, 2000-2005	Ministry of Culture	2007
	Satellite Account on Culture in Spain, 2000-2008 results	Ministry of Culture	2010
Malta	Report on Malta's Creative Economy & Draft National Strategy for the cultural and creative industries	Creative Economy Working Group	2012
Sweden	A Growth Model for the Experience Economy	FUNK	2006
Switzerland	Creative industries in Switzerland (the first report)	Zurich University of Arts	2003
	Creative industries in Switzerland (the second report)	Zurich University of Arts	2008
UK	Creative industries mapping document 1998	DCMS	1999
	Creative industries mapping document 2001	DCMS	2001
	Creative Industries Economic Estimates, Statistical Bulletin, 2004, 2005, 2006, 2007, 2009, 2010	DCMS	2004-2010
	Staying Ahead: the economic performance of the UK creative industries	NESTA	2007
	How linked are the UK's creative industries to the wider economy?: An input-output analysis	NESTA	2007
	Creative Britain: New Talents for the New Economy, 2008	DCMS, BERR and DIUS	2008
	Private investment in culture, 2007-2008	Art & Business	2009
	The Creative Economy: Beyond the creative industries	NESTA	2011

Cultural industries definition and classification

The scope of the studies on the economic contribution of cultural industries has changed over time. In the case of "creative industries", a term which is used very often as a synonym for "cultural industries", it is quite difficult to quantify creativity. A large number of European countries, however, have agreed on the classification of cultural industries. In most cases, the UK classification model has been adapted to fit local needs, with smaller or larger modifications. Furthermore, some cultural domains are presented as a part of the culture sector and at the same time as a part of other sectors (e.g. tourism or cultural tourism, or sports and recreation).

The definitions of cultural industries used in the studies discussed here often follow cultural policy field demarcations. There are also different terms for the same classification of activities, as is the case with Finland and Switzerland. In those countries, a similar list of activities has a different title – in Switzerland, "creative industries", while in Finland "cultural industries".[53] The classification of cultural and creative industries tends to be pragmatic and focused on assessing the economic size of the components of culture that can be more easily quantified. Very often, however, there is a situation where different calculations for measuring the economic contribution of cultural industries have been done using a similar methodology, but the results are not entirely comparable because the industries examined are not the same. On the one hand, cultural industries very often include the publishing industries (book publishing, newspapers, magazines, book stores, newspaper outlets), the film industries (film, video production, distribution, cinemas, video stores), broadcasting industries (radio and television, including broadcasting networks), music and performing arts (concert agencies, festivals, technical stage services, music publishing houses, music stores), design industries (industrial, product, fashion, textile and similar design), and architectural activities. On the other hand, advertising industries and game and software production are included in creative industries concepts. These classifications are very often based on a combination of different levels of industrialisation of cultural production and profitability criteria, where the sub-sectors with industry-based production and profit-oriented objectives are denoted as cultural industries.

There is a specific understanding of cultural industries in South-East Europe (SEE). After the collapse of communist regimes in that region, there was much discussion of the commercialisation of culture through private enterprise, and the development of market-oriented business in culture, which has a negative perception in the public sphere. In many of these countries, integration into the EU has weakened these mainstream attitudes, but they still exist in some discourses and some regions (e.g. Western Balkans). Nevertheless, cultural industries are now largely understood to be a sub-sector in which profit-oriented cultural activities are dominant and cultural production is

[53] Finland has adopted an official definition of cultural industries, which is very rare among European countries. According to the final report of the Ministry of Education's cultural industry committee (1999), cultural industry can be defined in four ways: production based on content, covering both the traditional and new fields of art and culture; a creative act expressed in various forms of art; the distribution, presentation or performance of these forms of art, as well as their reception; and cultural entrepreneurship: cultural contents are traded and the value and distinctiveness of traded cultural products are based on their content (Ministry of Education, Finland, 2009:8).

industry-based, and which belong, from a policy viewpoint, much more to the economic sector than to culture.

In SEE countries, the UK model was introduced during 2005-2006 by the British Council regional project UK SEE Creative Industries Stand. This project was dedicated to the promotion of the concept of creative industries in Bulgaria, Romania, Serbia, Montenegro, Bosnia and Herzegovina, Kosovo and Croatia. The project also aimed to share the UK experience and knowledge in this field as a policy model. Several mapping studies were conducted, such as the first national creative industries mapping study in Serbia (Jovicic and Mikić 2006), city studies "Mapping Cultural Industries in Plovdiv" (Tchalakov, 2006), and "Creative Lasi" (British Council, 2006). At the same time, networking meetings and mapping methodology workshops were held to build the capacity of local experts for measuring the economic contribution of creative industries.

The economic dimension of culture and creative industries were recognised very slowly by SEE government agencies and ministries, while international organizations such as UNDP, British Council, WIPO, and others were more active in raising public awareness and supporting policy actions in this field (e.g. UNDP Creative Business Project in Macedonia; UNDP Serbia-Business Idea Catalog in the Creative Industries). All of the SEE countries have the same problems in gathering cultural industries data due to a very low level of basic statistics on culture. This is the reason why the production chain model and the classification of cultural and creative industries in this region cover a small number of activities at a low level of aggregation, and very often are focused on core cultural industries (e.g. publishing, film industry, music industry, radio and television). For example, in the first mapping study in Serbia conducted in 2006, creative industries practically covered all cultural industries sub-sectors (publishing, printing, music industry, film industry and radio and television). In the study conducted in 2011, the creative industries concept was broadened to include architecture, and game and computer services, advertising, and research in social science (Mikić, 2011a). In some SEE countries, two different concepts and perspectives for measuring the economic contribution of cultural industries exist: the UK model adapted to national circumstances and the WIPO copyright model (e.g. Bulgaria, Croatia and Romania). In Croatia, the first data on the economic contribution of creative industries were presented in the report "The economic contribution of copyright-based industries of Croatia" (WIPO, 2007a), and then more data were provided in another book, "Culture of oblivion" (Švob-Đokić et al., 2008). During a very short time, two concepts with a different scope were introduced: "copyright-based industries", which are classified in accordance with the WIPO methodology, and "creative industries" which, in a very broad sense, are considered to cover publishing and printing industries, computer and related services, research and development, other business activities and recreation, culture and sport activities.[54]

[54] There is very little comparability between these two concepts because they cover creative and cultural industries at different analytical levels and are based on two different models (copyright-based industries are classified according to the copyright chain, while creative industries cover only the production and creation value chain at the NACE-2 digit level). At the same time, due to the very low analytical level of cultural statistics, both studies deal with basic and general data.

A specific approach in the classification of cultural industries exists in Nordic countries where the main component for grouping cultural activities is experience. A range of national studies exist, each using a different sector definition and methodologies (Fleming, 2007). For example, studies on cultural industries in Finland and Norway have been based on a mix of concepts that include culture sector and copyright-based activities, while in Denmark there are two different concepts: the experience economy and cultural industries. With the first concept (experience economy), culture and entertainment are broadly seen as an origin of experience. It covers visual art, architecture, entertainment, publishing, printed and audiovisual media, design, education and content production, advertising, the sport industries, fashion and tourism industry.[55] The second term (cultural industries) is used to describe the connection between culture and business, with special attention being paid to culture as a business, cultural entrepreneurship and private companies.[56] The Danish definition of cultural industries is very close to the German and Swiss approach, focused on market-oriented private companies.

In recent years, a new trend in classifying cultural and creative industries has emerged based on an assessment of the broader economic contribution that cultural industries make to the general economy. This approach is known as the employment-based classification. Activities which are part of creative occupations for the production of cultural and non-cultural goods and services are considered to be a part of the creative economy. The studies focus on the localisation of employment of the creative class, its clusterisation and territorial distribution, with special emphasis on measuring the distribution of the creative class in non-creative sectors.

[55] See Denmark Government, 2003.
[56] See Ministry of Trade and Industry, 2000.

Table 5. Classification framework for cultural industries in selected European countries

Countries	Denmark	Finland	TFYR Macedonia	Norway	Poland	Slovenia	Spain	Switzerland
Concept	Cultural industries/ experience economy[1]	Culture sector	Creative industries	Cultural industries	Culture sector and creative industries	Creative industries	Culture sector	Creative industries
Architecture	×	×	×	×	×	×	×	×
Film and video	×	×	×	×	×	×	×	×
Archives		×	×		×	×	×	×
Libraries		×	×		×	×	×	×
Museums		×	×		×	×	×	×
Heritage sites and places		×	×		×	×	×	
Broadcasting (radio and TV)	×	×	×	×	×	×	×	×
Performing arts (theatre, dance, festivals)	×	×	×	×	×	×	×	×
Design (product, fashion, graphic)	×	×	×	×	×	×		×
Visual arts and art market	×	×	×	×	×	×	×	×
Publishing (book, press, journals)	×	×	×	×	×	×	×	×
Music industry	×	×	×	×	×	×	×	×
Software, computer games, multimedia	×		×	×			×	×
Advertising	×	×	×		×		×	×
Education and training, consulting		×	Only foreign language schools				×	Only music schools, included in music industry
Cultural-educational activities			×					
Recreation, entertainment and other cultural activities	×[2]	×				Only other cultural activities		
Botanical gardens and zoos	×	×				Included in other cultural activities	×	
Discos, night clubs								Included in music industry
Wine and food industry								
Audio industry (manufacturing of radios and TV, retail trade of radio and TV equipment)		×			×		×	×
Sport industries	×[2]	×					×	
Interdisciplinary activities							×	
Tourism	×[2]		×					
Toys/amusement					×		×	
Public administration							×	
Other auxiliary activities		×					×	×

Country	Austria	France	Estonia	Germany	Italy	Latvia	Lithuania	Serbia	UK
Concept	Creative industries	Cultural industries	Creative industries	Cultural and creative industries	Cultural and creative industries	Creative industries	Creative industries	Creative industries/ creative sector[1]	Creative industries
Architecture	×		×	×	×	×	×	×	×
Film and video	×	×	×	×	×	×	×	×	×
Archives	×		×		×	×	×	×[3]	
Libraries	×		×		×	×	×	×[3]	
Museums	×		×	×	×	×	×	×[3]	
Heritage sites and places	×		×		×	×	×	×[3]	
Broadcasting (radio and TV)	×	×	×	×	×	×	×	×	×
Performing arts (theatre, dance, festivals)	×		×	×	×	×	×	×	×
Design (product, fashion, graphic)	×		×	×	×	×	×	×	×
Visual arts, and art market	Included in Vienna mapping studies, 2004		Visual and applied arts	×		Visual arts	Visual and applied arts, heritage	×[3]	×
Publishing (book, press, journals)	×	×	×	×	×	×	×	×	×
Music industry	Included in performing arts	×	×	×	×	×	×	×	×
Software, computer games, multimedia	×		Entertain-ment IT		×	Entertain-ment IT	Entertain-ment IT	×	×
Advertising	×		×	×	×	×	×	×	×
Education and training, consulting	×						×	×[3]	
Cultural-educational activities						×			
Recreation, entertainment and other cultural activities						×		×[3]	
botanical gardens and zoos							×		
Discos, night clubs					×				
Wine and food industry					×				
Audio industry (manufacturing of radios and TV, retail trade of radio and TV equipment)	Included in Vienna mapping studies, 2004								
Other auxiliary activities	×								
Research and development								×[3]	

Notes: 1 Use of more than one classification of cultural industries.
2 Refers to the experience economy.
3 Refers to the creative sector.

Typology and classification are based on national research and mapping studies, see the References.

Cultural industries models

At the end of the 1990s, the concept of the value chain model applied in UK mapping studies (known as DCMS model) had been reproduced by other European countries as a new element in empirical studies on measuring the economic contribution of cultural and creative industries. It was a methodological tool proposed in some studies before the UK model was implemented.[57] The value chain model encompasses the creation, production, manufacturing (reproduction) and distribution of cultural content. The value chain model was used both as a model for grouping cultural industries segments and as a type of economic analysis.[58]

The value chain approach is sometimes difficult to apply because the national statistics definition of cultural domains includes certain activities at a different level of aggregation (at the 3, 4 or 5 digit level). Also, the value chain model in some countries covers different activities through value chain segments (e.g. zoo and botanical garden, wine and food industries), or stages of the value chain, depending on the historical tradition and tradition of cultural sector classification (approaches that include or exclude supporting activities, such as art agents, and other auxiliary activities).

For example, "in the Finnish model, the implementation of the value chain approach depends on the "culturality" of the goods. For goods that are primarily cultural, everything is taken into account when measuring their importance in the value chain; for those, whose primary use is something other than cultural, however, only the service part is included, and not the production or distribution of these goods" (Ministry of Education, Finland, 2009:10). Consequently, the cultural industries value chain can differ widely in terms of complexity.

In Switzerland, Austria and Germany, instead of the value chain model a three-sector model was implemented. The "three-sector model" is based on private, civil and public property and management rights in the sub-sectors of cultural industries. The model was presented and elaborated in the Switzerland mapping study (Weckerle et al., 2008). It is focused on the individual entrepreneur, and divides the culture sector into three sub-sectors: public sector, private sector (called "cultural industries"), and intermediate sector (non-profit organizations). In accordance with this model, measuring the economic contribution of the culture sector is centred on the private sector or market-oriented businesses, and all sub-sectors and market segments are related to "culture in a broad sense" (e.g. Germany and Switzerland).In Austria, where the public sector has an enormous presence (Holzl, 2007), the three-sector model has been modified and adapted to a content-oriented definition of creative industries. This definition includes various sub-categories and domains, and is based on the LIKUS*kreativ*©-scheme.[59] According to this scheme, there are six main categories (cultural heritage, performing arts, audio and audiovisual, visual arts, book and press, and interdisciplinary) and about 20 sub-categories that include elements from the private, intermediate and public sectors.

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[57] For example, the value chain model was visible in a statistics plan drawn up by Statistics Finland in 1972, which proposed a compilation of cultural statistics with production, distribution and consumption perspective. See The Ministry of Culture, Finland, 2009:16.

[58] See Chapter 2.

[59] Austrian Institute for SMS and IKM, 2006:5.

The employment-based approach (definition and classification), which is based on measuring direct and indirect employment in creative occupations in all industries, has growing popularity in the last five years or so. There are two approaches for measuring the contribution of employment in cultural industries to economic development. The first one was developed within the framework of the 3Ts theory of economic development, and focused on measuring the impact of cultural amenities and the concentration of the creative class on economic growth. The localisation of the creative class and its correlation with the general measure of prosperity (employment rate, population growth, average level of salaries, etc.) was explored and tested by different econometric techniques. In many cases these studies confirm that places with a high concentration of the creative class tend to benefit from positive economic development. However, while these studies do identify the places where cultural industries are clustered, they do not specifically deal with the quantification of the creative class's contribution to economic development.[60]The second approach is the "creative trident" model which is used for measuring direct and indirect employment in cultural and creative industries, Creative trident model was applied in UK and France.[61] The model incorporates data on three modes of creative occupations ("specialist mode", "support mode" and "embedded mode"), including data on their growth rate and average earning levels. The French Ministry of Culture has been very active in harmonising and standardising methodologies for employment statistics in France, and also at the EU level. This work has produced two reports: "Cultural Employment in the EU in 2002: Framework Data and Indicators" (French Ministry of Culture, 2005), and "Creative Industries in Ile-de-France: A New Look at the Metropolis", which was produced in 2010 by the Institute for Urban Planning and Development. In the latter study, the creative trident model was applied for measuring creative employment and exploring the region's capacity for agglomeration creative activities, as well as for measuring their current concentration in the Paris metropolitan area.

Cultural industries measurement framework

Three main measures have been recognised as being the most important for measuring the economic contribution of cultural and creative industries to economic development – gross value added, employment, and the dynamics of business in cultural industries (number of enterprises).[62]These economic measures are used in a quantitative as well as qualitative manner.

The primary resources for preparing a sub-sector analysis of cultural industries are data from national accounts (SNA) at different levels of aggregation and very often at current prices. However, this can cause an unrealistic estimation of cultural industries and sub-sector dynamics. The survey methodology for collecting in-depth information on cultural industries has been adopted in many studies in combination with general data from SNA. Several other approaches have also been used, such as: data collection covering more variables known to be correlated with the economic dimension of cultural industries; cognitive research methods, such as focus groups and qualitative interviews for a better

[60] Such studes are Hansen, 2007; Andresen and Lorenzen, 2005; MKV, 2001; Florida and Tiangli, 2004; Boschma and Fritsch, 2007; Power and Nielsen, 2010; Boix et al., 2010.

[61] In the UK, creative trident model the selection of occupations that produce creative goods and services was done at 26 four-digit SOC and the following domains are classified as creative industries: advertising and marketing, architecture, visual arts and design, film, television, radio and photography, music and performing arts, publishing, software, computer games and electronic publishing. Higgs, Cunningham and Bakhshi, 2008.

[62] For a detailed list of economic measures, see Table 7.

understanding of the issues; and evaluation of attitudes towards different development issues involving cultural industries, etc.

For categories that are not recognised by the International Standard Industrial Classification (ISIC) (e.g. design, crafts, interactive media) or do not have a separate ISIC identity, a survey model for exploring economic size and investigating other particularities has been used. For example, the British Design Industry Valuation Survey and Design Industry Survey were used in the UK for investigating the economic contribution of design industries (British Design Innovation, 2007). The survey methodology is applied not only to gather in-depth information about some cultural and creative 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 (e.g. 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 (e.g. the proportion of specialised retail music product in the overall specialised retail network). **Table 6** presents the wide range of allocation factors that were used in certain studies, as well as their connection with SIC codes.

Table 6. Allocation factors

	SIC code	Austria*	Finland*	Germany*	UK	
					SIC code**	Allocation factor
Architecture	74.20	/	/	25%	74.10	4.5%
Art and antique market	52.48 52.50 74.84 92.31	/ 33.3% 12.5% 25%	/	5% 5% / /		
Design	74.87 74.84 52.50 52.84	/ 12.5% 33.3% 20%	74.87 75% 74.83 20%	2.5% / / /	74.10	89.6% Clothing manufacture 0.5% + 5.8% (other)
Video, film	22.32 74.81 32.30 24.65 52.45	/ / 50% 33.3% 40%	/	25% 25% / / /	59.12 74.20 18.20/2	18.4% 25% 25%
Music and performing arts	55.40 22.31 92.31 92.34 92.72	33.3% / 25% / 50%	/	/ / 25% 50% 25%	18.20 78.10/1	25% 0.07%
Publishing	22.15 22.11 92.31 71.40 74.84	/ 50% 25% 50% 12.5%	No clear basis for allocation	25% / / / /	58.19	50%
Software	24.65 52.48	33.3% 20%	/	/ /	18.20/3 59.12	25% 81.6%

Notes:* SIC 2003 codes; ** SIC 2007 codes. Review was based on the list of research and mapping studies, see the References.

However, allocation factors have serious limitations. The methodology used for constructing allocation factors is very often imprecise (or it does not exist), and there is no clear methodology for determining their value in most studies. One source of information can be data from a sample. "Usually the researcher assumes a certain level of homogeny between the sample and overall class. 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). Allocation factors were also a discussion theme in the field of cultural employment at the EU level. Within the framework of the Eurostat project "Implementation of EU methodology for statistics on cultural employment" the first estimation of cultural employment in Europe was produced and efforts were invested in defining a method for the collection of data and indicators on cultural employment (Eurostat, 2004).As part of the project, efforts were made to estimate allocation factors for cultural employment where it was not possible to obtain precise data (e.g. for architects the estimate was 39% of the NACE 74/ISCO 214), to determine the patterns of allocation factor value and to estimate cultural coefficient matrices at the EU-15. The ESSnet Culture Group also recognized difficulties in methodology for allocating cultural content to activities which are "partially" cultural. Its solution was to propose 3 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, but without quantification of cultural content level.[63]

In most studies, economic size and structural analysis accounted for the main methodological approaches. Economic size analysis is dedicated to estimating the direct contribution of cultural industries in generating basic macroeconomic aggregates (GVA, GDP, employment, trade, export and import). This analysis is very often combined with structural analysis. Depending on the scope of the research study and availability of information, these techniques can vary and be complementary. In cases where the scope of the study includes highlighting the competitiveness of activities as well as providing in-depth information concerning markets, cluster analysis is applied.[64] On the other hand, structural analysis is very often combined with value chain analysis when the focus of the study is on explaining the structure and function of the different stages of the value chain in cultural industries *(see **Table 7**).*

[63] For extension discussion, see ESS Net-Culture, 2011.

[64] A detailed description and explanation of economic size analysis and structural analysis were presented in Chapter 2.

Table 7. Cultural industries measurement framework in some European countries

	Measuring model	Main economic measures	Measuring approach
Austria	Three-sector model (private sector+ intermediate sector/non-profit + public sector)/LIKUS*kreativ*©-scheme	- employment - number of enterprises, non-profit organizations, public sector - GVA in creative industries - revenues - revenue per employee - density of creative industries enterprises - structure of creative industries by employment and enterprises - R&D and innovation by creative industries - employees with university degrees (by sector)	Economic-size and structural analysis
Albania	Production chain model (core activities)	- activity distribution - employment and characteristics of employment - organization structure - turnover - industry consumers - financial resources	Economic-size and structural analysis
Estonia	Production chain model	- employment - number of enterprises - GVA in creative industries - sales revenues - total income - revenue per employee - revenue per company	Economic-size and structural analysis
Lithuania	Production chain model	- number of enterprises - net sales - employment	Economic-size and structural analysis
Italy	Creativity value chain model	- value added - employment - structure of employment	Economic-size and structural analysis
Germany	Three-sector model: public, private and intermediate sector (includes only private market-oriented industries)	- turnover; share of self-employment in overall labour force - number of enterprises - structure of cultural and creative industries by market segments - employment- sub-sector analysis	Economic-size and structural analysis
Spain	Production chain model	- gross value added/gross domestic product - structural analysis by sub-sector, GVA and GDP formation	Economic-size and structural analysis; cultural satellite accounts

Finland	Value chain model	- export/import value - value added - public investment - public consumption - private consumption	Economic-size and structural analysis; cultural satellite accounts
Denmark	Value chain model	- turnover - added value - exports - employment and distribution of employment - creative industries sub-market and sector analysis	Economic-size and structural analysis
UK	Production chain model (for industry-based approach)"Cultural Trident" model(for employment-based approach)	- gross value added - employment and structure of employment - value added - productivity - number of enterprises - creative industries sub-market analysis - distribution of creative employment in creative and non-creative sector	Economic-size and structural analysis; I-O matrix
Switzerland	Three-sector model (private sector+ intermediate sector/non-profit + public sector)	- turnover /turnover per employee - employment (level, growth and structure) - number of enterprises and their size - creative industries sub-market analysis - value added - profit margins - value of export	Economic-size and structural analysis; cluster analysis
France	Value chain model; "Cultural Trident" model(for employment-based approach)	- employment and distribution of employment; distribution of occupations - turnover - number of enterprises, distribution by size and value chain	Economic size and structural analysis; value chain analysis by sub-sector
Poland	Production chain model	- value added per employee - value added - employment per domestic/foreign creative industries enterprises - employment and structure of employment	Economic-size and structural analysis; cluster analysis
Serbia	Production chain model	- employment - total gross value added and sub-sector - number of enterprises and their distribution by sub-sector - gross capital formation in total and by sub-sectors - sub-market analysis - profitability; turnover; productivity	Economic-size and structural analysis; cluster analysis
TFYR Macedonia	Production chain model	No economic measures	Structural analysis

This review is based on the list of national research and mapping studies, see the References.

Another method for measuring the economic contribution of cultural industries is using cultural satellite accounts (CSA). However, this approach is rarely applied in European countries. It was developed in Finland and Spain, while in the UK only I-O models are used for measuring the level of linkages of creative industries with other sectors of the UK economy. In Finland, the CSA was developed in 2005, when the Ministry of Education appointed a committee to investigate possibilities for measuring the effects of culture on the economy. During 2005-2006, a calculation model for measuring the economic contribution of culture was created. Then, in 2007, this effort was continued with the culture satellite account survey, a pilot project aimed at creating a computational framework for cultural satellite accounts (Ministry of Education, Finland, 2009). The Finnish CSA concept did not take into account voluntary work, original works of art, general cultural administration in municipalities, outsourcing, sales from department stores and kiosks, demand of culture by companies, crafts, games, religious organizations and military bands, open source activities, education, folk high schools and colleges, design, sport. The other characteristic is that the Finnish CSA input-output matrix is based on 60 products and 60 industries out of 90 products and industries included in the SNA I-O table for the Finnish economy. The starting point for compiling CSA is the concept of cultural commodity (the value chain of this commodity differs according to the "culturality" of goods and services at different stages), while the measurement is based on employment, value added, international trade (value of export and import), and private and government consumption of culture .

The pioneering works in Spain addressing the cultural and creative industries was carried out by the research group at the Autonomous University of Madrid by the end of 90's.[65] These works reflect an effort to quantify the importance of cultural and leisure industries when cultural economics was taking its first steps in Spain. Measurement framework of those studies focused on gross value added, contribution of the cultural sector to GDP, employment, number of firms, net sales, etc. as well as on the distinction between the private and public sector in the measuring economic contribution of cultural and leisure industries. Based on the anthropological understanding of culture those studies encompasses not only "elitist" culture, but also leisure activities such as sports, bullfighting, amusement parks, fairs as well as certain shows, lotteries, gaming and toys. At the policy level cultural industries were formally introduced in Spain in 2005, in the government's Integral Plan for the Reduction and Elimination of Activities that Violate Intellectual Property Rights. The main objective of this plan was to explore the economic impact of cultural and intellectual property-related activities on the Spanish economy. Within this framework, the Ministry of Culture started statistical research on cultural industries. The first study in the new policy framework was "The Economic Value of Culture in Spain: 2000-2005" (Ministry of Culture Spain, 2007), which provided estimations of the economic value and contribution of culture. It was the basis for the development of culture satellite accounts in Spain, the results of which were published in 2010. The Spanish CSA model is based on a combination of cultural activities and activities related to intellectual property. While cultural activities are the central pillar of this model, it also includes cultural-related activities that are not strictly cultural, but essential for understanding the creative sector as a whole (Ministry of Culture Spain, 2009) and this approach can be seen as a connection with the tradition based on the first research studies on this topic, which deal with more anthropological definition of culture. Each of these activities is subject to study by the production chain model which distinguishes the following phases: creation, production, manufacture, dissemination and distribution, promotion and regulation activities, education activities and auxiliary activities. Other activities include activities that are related to intellectual property and closely connected with the cultural sphere, such as

[65] García Gracia et al., 2000, 2001a, 2001b, 2003; García Gracia and Zofío, 2003; García Gracia et al., 2007.

information technology sectors and advertising. In some cases, the classification of these activities is very close to the WIPO model.[66] The other characteristic is that the Spanish CSA input-output matrix is based on about 55 products and 25 branches of activities out of 118 products and 75 branches of activities included in the SNA I-O table for the Spanish economy.

In the UK, the new model I-O matrix for the creative sector was set up in 2007 based on a combination of input-output data with information on employment by occupation. The primary aim of this kind of inter-industry analysis was to use information from the input-output accounts to investigate the linkages between the creative sector and the wider economy in the UK. This kind of analysis is very rare in European countries due to the extensive process of data gathering, very often from primary sources.

In the SEE countries, the perception of the creative industries' economic contribution is limited by the application of the specific (material) concept in calculating basic macroeconomic aggregates. This approach was dominant in a large number of countries that belonged to the communist economic bloc (Albania, Serbia, Croatia, the former Yugoslav Republic of Macedonia, Rumania, Bulgaria, Bosnia and Herzegovina, Slovakia, Poland, etc.). Different economic categories were used depending on whether certain activities belonged to the social activities sector (such as architecture and engineering, film, radio and television, computer activities, etc.) or whether they fulfilled a vaguely defined concept of material production, and as such should be considered as contributing to the gross domestic (material) product and included in national income calculations. By the end of the 1990s, this situation was changed in several countries, when official statistics were transformed in accordance with SNA principles. Due to the material concept of calculation of GDP, many activities that belong to cultural industries were not considered to be a part of the national economy. Since 2000, several countries (e.g. Serbia, Croatia and Bosnia and Herzegovina) have implemented two ways of calculating macroeconomic aggregates present in the national statistical system: the first theoretically relies on the concept of material production, and the second, which is the internationally accepted SNA.[67] The replacement of the old centralised system in SEE countries was followed by a programme of structural reforms and new policies. In some countries, the need to improve the statistical system in order to be able to measure overall economic performance led to the establishment of evidence-based policies and the replacement of the old statistical system and indicators with new and modern ones. In Western Balkan countries, the process of statistical reform was not the priority during the transition period. A large number of countries in the region (Serbia, Croatia, the former Yugoslav Republic of Macedonia, Bosnia and Herzegovina, and Montenegro) have very poor cultural statistical data, or data that are incompatible with modern approaches for measuring the economic contribution of cultural industries. These national circumstances have had an effect on the definition of cultural industries, which tends to be very broad in these countries, like in Croatia, where cultural industries include recreation, entertainment and sports activities, various business services, and research and development in general. This approach is different from what is usually practiced in many other European countries, which take into account only a proportion or culture-related part of these activities when measuring the economic contribution of cultural industries. On the other hand, measuring the economic contribution of different sub-sectors of cultural industries to macroeconomic

[66] The following activities are considered as activities related to intellectual property: advertising, software publishing, software consultancy and supply, reproduction of computer media, manufacture of computers and other information processing equipment, retail of electronic goods, manufacture of games and toys, etc. See Ministry of Culture, Spain, 2009:71.

[67] Because these two methods of calculation were used, the economic activity in some SEE countries is measured with data regarding gross material product and gross domestic product.

aggregates is impossible due to limitations in the disaggregation of economic measures at the analytical industry levels (3, 4 or 5 digits).

The review of studies across Europe shows their different quality, validity and reliability. Over time, each new study has brought a new way for measuring and analysing the economic contribution of cultural and creative industries. This has led to three methodological problem areas concerning the concept, classification and data limitation of cultural industries. The conceptual problem arises from the use of different concepts which are based on classification criteria as well as on the production value chain criteria. Generally, the "cultural industries" concept is more important in countries with significant state funding for culture and a well-developed public sector, where cultural policy recognises that the culture sector has a dual character, capable of producing both economic and cultural goods. The "creative industry" concept is dominant in countries with a more liberal cultural policy, where the use of the creativity criterion has expanded the traditional cultural sphere.[68] The classification limitation is caused by the use of different national industry classifications, which place cultural industries sub-segments at a higher or lower level, especially those that are digital and multimedia in nature. Employment classification suffers from the same problems, where there is a diversity of detailed labour force survey data (sometimes disaggregating to NACE-4 or 3 digit level, or to NACE-2 digit level). In some countries, the old occupation classification has emerged, while in others employment statistics are at a very low level, which does not allow disaggregation at occupation analytical levels (e.g. in many SEE countries there are no employment data based on the ISCO classification).

Data limitation is still the main problem in most European countries, where research studies were often the first attempt for collecting systematic data on cultural and creative industries. As statistics for cultural industries and statistical methodologies have not yet been harmonised in a systematic manner, economic measures of cultural industries can, for the moment, only be understood and interpreted in their specific local, regional or national contexts. Nonetheless, the measures examined in these studies can be an effective means for analysing the driving forces in certain areas of cultural industries and their contribution to economic growth in national contexts, but they cannot be accepted as consistent measures for gaining a global picture of the development of cultural industries.

4.2 North America

A long tradition and several studies in sociology have left their mark on contemporary economic research of cultural industries in North America. In this regard, impact studies have had the greatest effect. They were primarily developed within the American social school. These studies have emerged along with the dominance of positivist approaches in social sciences by which the empirical verification principle in explaining social phenomena was set.

The first academic research on cultural economics conducted by Baumol and Bowen (1965) drew increased attention of the American academic community to the financial condition of art in the United States, a concern that was reflected in the public sector by the establishment of the New York State Council on the Arts in 1961 and the National Endowment of the Arts in 1965 (Heilbrun and Gray, 2004:6). A lot of analyses of economic issues in culture have appeared in the form of administrative and service studies. Among the first studies, there is a study of the economic situation of the performing arts in the United States funded by the Rockefeller Brothers

[68] See Weckerle et al., 2003; Fesel and Soendermann, 2007; Galloway and Dunlop, 2007; Hesmondhalgh and Pratt, 2008.

Fund in 1965, which served as a panel report aimed at raising public awareness on issues of cultural policy in the United States.[69] During the 1970s the research team led by William Hendon established the Association of Cultural Economists and began publishing the Journal of Cultural Economics, which contributed to the popularisation of future economic topics in the field of culture and profiled cultural economics as a scientific discipline.

A new stage in the development of economic research studies in the cultural field was reached in the mid-1970s with the critical debate about the role of public funding of the arts and culture in the United States. The dominant research interest of economic studies in culture had begun with an examination of the economic impact of cultural activities on the development of local communities.

Radich (1987) pointed out that several works played a key role in the acceptance and popularisation of economic impact studies as a methodological apparatus for assessing the economic effects of the culture sector. The first of these is a model for measuring economic impacts of cultural and art activities adopted in 1977 by David Cwi and Catherine Lyall and applied in a Baltimore economic impact study.[70] Cwi and Lyall promoted the new method of measuring economic impact of the arts at academic conferences by presenting findings from the Baltimore study, and the model became a standardised methodological framework which was employed in measuring the economic impact of culture in six cities: Columbus, Minneapolis, St. Louis, Salt Lake City, San Antonio, and Springfield (Radich, 1987:11-13).

In 1983 the local authorities in New York and New Jersey conducted the study "The Arts as an Industry: Their Economic Importance to the New York/New Jersey Metropolitan Region", in which extended economic impact assessment methods and comparative data on the economic performance and market of the arts industry were presented.[71] The increase of private and public funds allocated for service-oriented research led to the massive growth of quantification and empirical evidence about the positive economic impact of the culture and art sector, disenfranchising the theoretical interest for critical review of the existing practices. This discrepancy is best illustrated by the fact that since 1977, 10-15 studies were conducted per year, while the first critical elaboration of relevant issues was carried out 10 years after the publication of these studies (Radich, 1987).

The economic impact studies of culture and the arts included two main perspectives: economic and public policy analysis. The economic impact approach was focused on measuring the proportion of economic well-being that can be attributed to the culture and art sector. The economic impact was analysed from the consumption perspective, in which the general approach is to measure the size of flows of spending referred to as a direct impact, indirect impact and induced impact. The direct impact is the direct spending of cultural and art organizations (purchased goods and services, wage and salary payment, etc.) and it is measured by the level of total business costs of these organizations. Indirect and induced impacts are indirect spending in local communities which results from art and cultural activities. It represents the second and third rounds of local spending. In studies where the calculations were based on input-output tables, the total economic impact was calculated directly; where this was not possible, estimates were made on multipliers from input-output studies of other localities (Heilbrun and Gray, 2004:345). The assumption is that any change in financing of the culture and art sector has a reflection on consumption and wage and salary payment. Investment in the

[69] The Rockefeller Panel Report, 1965.
[70] NEA, 1977.
[71] The Port Authority NY and NJ, 1983.

culture and art sector determines the dynamics of its consumption, but the increase in aggregate consumption at the local level is often greater than growth in investments. Multiplier analysis was used in explaining the determinants of the culture and art sector on the volume of aggregate demand in the short term. Two modalities of multiplier analysis were used: the basic model by which the consumption of the culture and art sector in the development of local economies was analysed, and an upgraded model was run for further analysis of the consumption impact on the economy of neighbouring local communities, increase in tax revenues, etc.

A major discussion concerning economic impact studies was initiated in 2004 by the researchers gathered around the Centre for Cultural Policy at the University of Chicago. The conference debate "Long-term Effects: Rating the future analysis of economic effects of the arts" was organized and examined different matters concerning the validity and reliability of these studies and their methodological approach. In spite of the shortcomings and weaknesses of the economic impact studies, the conclusion was that on the global research scene the studies have made a significant contribution to the development of new perspectives for analysing the relationship between the culture and art sector and the economy.

Cultural industries definition, classification and models

There are three nation-wide reports in the United States that deal with measuring the economic contribution of cultural industries. Two of them were commissioned by the organization Americans for the Arts and the third was commissioned by the International Intellectual Property Alliance (IIPA). Americans for the Arts conducted three economic impact studies of the non-profit art sector (Arts & Economic Prosperity) in 1992 (Vol. 1), 2000 (Vol. 2) 2005 (Vol. 3) and 2012 (Vol. 4). In those studies, the definition of the arts covers art councils and different art and cultural organizations that have a non-profit orientation and selected programmes, as long as they have their own budgets. This definition excludes individual artists and the for-profit arts and entertainment sector. Within the framework of the Americans for the Arts studies, the definition of creative industries is based on art-centric criteria. It uses a conservative approach for defining creative industries by focusing on businesses involved in the production or distribution of art products (for-profit and not-for-profit). This definition implies that creative industries cover art councils, government agencies, museums, art or science centres, art galleries and art schools (non-commercial), symphony orchestras, theatres, opera companies, performing arts centre productions, ballet productions, dance studios, schools and halls, theatre building, ownership and operation. This concept excludes all industries that are creative, but not focused on the arts (e.g. computer programming and scientific research).It should be noted that with these criteria the concepts of “culture and arts sector” and “creative industries” are very questionable. It seems that they are based on a cultural and historical tradition of understanding the culture and artistic sector inthe United States. For example in the Art & Economic Prosperity study, the non-profit organizations in film and video are recognized as being a part of the art and culture sector, but not a part of creative industries. It can be concluded that these studies focus mainly on the not-for-profit sector in culture and the arts, without applying a clear demarcation criterion.

Table 8. Research and mapping studies in North America

Country	Publication	Performed/commissioned by	Date
United States	Economic Prosperity III: The Economic Impact of Non-profit Arts and Culture Organizations and Their Audiences 2007	Americans for the Arts	2009
	Creative Industries: Business & Employment in the Arts	Americans for the Arts	2008, 2010, 2011
	The economic contribution of copyright-based industries in the U.S.	WIPO	2004b
	Copyright Industries in the U.S. Economy: The 1999 Report	IIPA (Siwek, S.)	1999
	Copyright Industries in the U.S. Economy: The 2000 Report	IIPA (Siwek, S.)	2000
	Copyright Industries in the U.S. Economy: The 2002 Report	IIPA (Siwek, S.)	2002
	Copyright Industries in the U.S. Economy: The 2004 Report	IIPA (Siwek, S.)	2004
	Copyright Industries in the U.S. Economy: The 2006 Report	IIPA (Siwek, S.)	2006
	Copyright Industries in the U.S. Economy: The 2007 Report	IIPA (Siwek, S.)	2007
Canada	The economic contribution of copyright industries to the Canadian economy	WIPO (	2004c
	Cultural HR study 2010:Labour Market information report for Canada's culture sector	Cultural Human Resources Council	2010
	Valuing Culture: Measuring and Understanding Canada's Creative Economy	The Conference Board of Canada	2008
	Economic contribution of cultural sector to Canada's Provinces	Statistics Canada	2007
	Economic contribution of cultural sector in Canada	Statistics Canada	2004a

Table 9. Classification framework for cultural industries in Canada

Canada		
Concept	Cultural sector, core cultural domains *ancillary cultural domains; ** transversal domains	Copyright-based industries * Non-core copyrights industries.
Architecture	**×***	Included in partially copyright industries
Film and video	**×**	**×**
Archives	**×**	
Libraries	**×**	
Museums	**×**	
Heritage sites and places	**×**	
Natural heritage		
Broadcasting (radio and TV)	**×**	**×**
Performing arts (theater, dance, festivals, celebration)	**×**	**×**
Design	**×***	Excluding fashion design
Original visual art, art reproduction, photography, crafts	**×**	**×**
Publishing (book, press, journals, collected information)	**×/×*** (only collected information)	**×**
Music industry	**×**	Included in performing arts
Video games, multimedia , interactive media (partial)	**×**	**×**
Advertising	**×***	**×**
Education and training	**×****	
Governance, funding and professional Support	**×****	
Copyright collective management societies		**×**
Interdependent copyrights industries		**×***

Sources: Statistics Canada, 2004b, 2011; WIPO, 2004c.

Compared to the definition of creative industries, the concept of the U.S. copyright-based industries is defined in a much clearer way. Until 2006, it included four industries: core copyright industries, partially copyright industries, distribution and copyright-related industries. Then, since 2006, it has followed the international standards and recommendations proposed by the World Intellectual Property Organization (WIPO) in 2003 regarding the development of economic and statistical standards to measure the impact of domestic copyright industries on domestic economies (Siwek, 2006).

The Canadian cultural concept is based on the *C*lassification Guide for the Canadian Framework for Culture Statistics 2011(Statistics Canada, 2011), which is harmonised with the UNESCO FCS 2009. The Canadian FCS classifies cultural activities in accordance with the stages of the creative chain model (creation, production, manufacturing, and distribution and support activities). The creative chain consists of an initial creative idea, which is usually combined with other inputs to produce a cultural good or service, that then goes through a series of interlinked stages to reach the user. Cultural goods and services in the creative chain are classified on a hierarchical model that distinguishes between core and ancillary goods and services, depending on the primary purpose of the final product. Core cultural goods and services are those where the entire creative chain is cultural in scope (their primary purpose is the transmission of an aesthetic or intellectual concept), while the purpose of ancillary products and services is to provide an artistic creative service, or an intermediary input, for a final product that is not

cultural. Transversal domains, such as education and training and governance, funding and professional support (public administration in culture) are also included in the culture sector.

Canadian studies that measure economic contribution of cultural industries are based on the 2004 Canadian Framework for cultural statistics (Statistics Canada, 2004b) which identifies cultural activities in accordance with the level of "culturality" of goods and services. The core cultural goods and services are those where the entire cultural chain is in culture (their primary purpose is transmission of an aesthetic or intellectual concept), while non-core goods and services are those that do not have as primary purpose the transmission of an aesthetic or intellectual concept.

Cultural industries measurement framework

In both Canada and the United States, the approaches for measuring the economic contribution of cultural industries are focused on multiplier analysis and economic size analysis. In Canadian research studies, the definition of the economic contribution of culture combines direct, indirect, and induced economic impacts. Direct impacts include the value added to the economy by firms directly producing cultural goods and services. Indirect impacts include the added value that the "direct impact firms" generate economically through their demand for intermediate inputs or other support services, while induced impacts are derived when employees of industries (both direct and indirect) spend their earnings and industry owners spend their profits (Conference Board of Canada, 2008). In the Montreal study (Board of Trade of Metropolitan Montreal, 2009), an additional multiplier was calculated that was dedicated to measuring the indirect spin-off of the culture sector on employment (how many indirect jobs are generated per 100 direct jobs created in the culture sector).

The Americans for the Arts studies (Creative Industries: Business & Employment in the Arts 2008, 2010, 2011) on creative industries do not deal with measuring the economic contribution of cultural industries in any specific way. They present systematic data on business statistics (number of organizations and employees) by the U.S. state and the U.S. Congressional District. Also, the Arts & Economic Prosperity reports use very questionable methodologies.[72] The basis for calculating multipliers was I-O tables constructed for 156 study regions (116 cities and counties, 35 multicounty regions and 5 states). Data were collected from 6080 non-profit arts and cultural organizations and 94,489 attendees, while impacts were measured as total expenditure, full-time equivalent jobs, resident household income, local government revenue, state government revenue and federal income tax revenue.[73]

[72] Extended disccusion on this topic is presented in Everit, 2009.
[73] For more, see Americans for the Arts, 2009.

Table 10. Cultural industries measurement framework in North America

	Concept	Measuring model	Main economic measures	Measuring approach
United States	Non-profit arts and creative industries*	Not-for profit criterion/ *unclear for profit criterion	- economic impact analysis: total expenditure, full-time equivalent jobs, resident household income, local government revenue, state government revenue, federal income tax revenue - growth of non-profit industries measured by number of organizations and attendees - structure of workforce in not-for profit arts and cultural industries sector	Multiplier analysis based on regional **I-**O tables
	Copyright-based industries	Copyright value	- value added by sub-sector of copyright-based industries - employment by sub-sector of copyright-based industries - foreign trade by sub-sector of copyright-based industries - compensation per employee (from 2006 report) - contribution of the copyright-based industries to the real annual growth of the total economy(from 2006 report)	Economic size and structural analysis
Canada	Copyright-based industries (used sometimes as a synonym for cultural industries)	Copyright value (core and non-core copyright industries)	- value added by sub-sector of copyright-based industries - employment by sub-sector of copyright-industries - Foreign trade (foreign revenue and export) by sub-sector of copyright-based industries	Economic size and structural analysis
	Culture sector (used as a synonym for cultural industries)	The creative chain model(criterion for differentiation of core cultural goods and services from non-core cultural goods and services)	- employment (number of employees in cultural sector; employment growth rate) - GVA (value and growth rate); nominal GDP - salaries and remuneration (culture sector and suppliers of culture sector) - net revenues of individual companies (Montreal study) - gross earnings before taxes (Montreal study) - government revenues generated by taxation of culture sector (corporate taxes, income taxes and indirect taxes) - private funding for the arts sector (Montreal study) - value of international trade of cultural goods - government spending in the culture sector by level of government - employment multiplication factor (Montreal study)	Input-output table and multipliers approach; economic size and structural analysis

Review is based on the list of research and mapping studies, see the References.

4.3 Latin America

In Latin America, the countries of MERCOSUR began to work on measuring the economic contribution of cultural industries at the end of the 1990s. Within the framework of the Convenio Andrés Bello (CAB), the "Economy and Culture" project was developed. As part of this project, studies were carried out in Chile, Colombia, Ecuador, Peru and Venezuela, and efforts were made to implement an economic information system in culture (Ministry of Culture, Republic of Colombia, 2007). Regional cooperation was also strengthened to standardise measuring methodologies, which should facilitate comparability between countries. In 2006, a Cultural Satellite Account Workshop was organized by the Convenio Andrés Bello in Caracas. Workshop discussions were focused on the identification of cultural activities to be included in mapping and other methodological approaches, and on the creation of cultural satellite accounts. The aim was to develop a CSA system that could function as a standardised economic information system, which would be necessary in order to:[74]

- prepare the instruments used in supporting the decision-making process and evaluation of cultural policies;
- create a reliable and comparable information system for an economic evaluation of cultural activities;
- achieve economic measures allowing comparison at the international and cross-country level; and
- provide information for structural analysis of cultural industries, etc.

In 2008, the Methodology for Cultural Satellite Accounts in Latin America was adopted (Convenio Andrés Bello, 2008).Before the adoption of this unique CSA methodology, the Colombian Ministry of Culture and the National Statistics Bureau (DANE) created a pilot CSA project within the national accounts system (Olarte-Lopez, 2006). The results of the first phase of this economic measurement exercise were presented in 2007 (the CSA time series covered 2000-2007). Currently, Chile, Uruguay and Argentina are working on establishing cultural satellite accounts. The first results of Argentina's measuring project were published in 2009 (INDEC, 2009).

Cultural industries concepts and classification

The concept of CSA in Latin America is based on the "cultural field", which is defined "as a group of activities and products whose *raison d'être* is to create, express, interpret, conserve and transmit symbolic contents" (Convenio Andrés Bello, 2008:33). In the pragmatic sense, the cultural field is a broad and dynamic concept which includes not only activities that produce goods and services with symbolic meaning and value, but also transversal domains such as artistic training, because these can play a role in the generation of symbolic content. This definition of the cultural field was established in accordance with UNESCO and Eurostat standards, as well as with several national definitions. It encompasses a broad scope of cultural activities, ranging from strictly artistic and cultural activities to those that can be considered as entertainment (e.g. film,

[74] Convenio Andrés Bello, 2008; Olarte-Lopez, 2006; Ministry of Culture, Republic of Colombia, 2007.

radio and television). In the Latin American CSA, the cultural domains are divided into 12 sectors and several sub-sectors, as follows: i) artistic creation (literary, drama, music, etc.); ii) performing arts (theatre, dance, live music, etc.); iii) visual arts (photography, sculpture, graphic arts, industrial arts, etc.); iv) books and publishing (books, periodicals, other publications, etc.); v) audio-visual (film and video, radio and television, video games, etc.); vi) music (music publishing and music recording); vii) design (architectural, industrial, graphic, textile, fashion, accessories and jewellery, etc.); viii) games and toys; ix) tangible heritage (museums, libraries, heritage institutes, etc.); x) natural heritage (botanical gardens and zoos, natural reserves, etc.); xi) intangible heritage (festivals and fairs, local languages, cuisine and local culinary traditions, etc.); and xii)artistic training.

Cultural industries measurement framework

The basis of the Andrés Bello CSA is the I-O matrix constructed with 29 products and 29 branches of activities. The starting point in the compilation of this CSA system is the symbolic value and "culturality" of goods and services, and not the value chain model as in some countries (e.g. Finland). The Andrés Bello CSA methodological guidelines recommend that countries, which are measuring the economic contribution of the cultural field through CSA, use both monetary and non-monetary indicators. While the components of the CSA are quite extensive, it is difficult to determine their practical feasibility. In the case of Colombia, the pilot CSA includes basic macroeconomic aggregates, such as the share of cultural industries in the GDP value (at current and real prices); share of cultural industries in GDP value of in the total economy; growth rate of GDP value of cultural industries; production, intermediate consumption and gross value added of cultural industries; distribution of those indicators by sub-sectors; and distribution of demand and supply indicators by cultural industries sub-sectors (value of production, export, import, final and intermediate consumption).

4.4 Asia-Pacific region

Policy context

The development of a conceptual regional model for promoting the creative sector and measuring its economic potential began in 2005. That year, the Senior Expert Meeting "Asia-Pacific Creative Communities: Promoting the Cultural Industries for Local Economic Development – a Strategy for the 21st Century" was held, which outlined a contextual, strategic framework to support cultural industries in the Asia-Pacific region. The proposed actions and programmes are referred to as the Jodhpur Initiatives for Promoting Cultural Industries in the Asia-Pacific Region. A working definition of cultural industries based on a combination UK and UNESCO perspectives was established within the Jodhpur Initiatives. This definition considers cultural industries to be industries that produce tangible or intangible artistic and creative outputs, and that have a potential for wealth creation and income generation through the exploitation of cultural assets and the production of knowledge-based goods and services (UNESCO, 2005b). A consensus was reached among 28 countries of the Asia-Pacific region concerning this new definition, and they recognised that cultural industries could be a source of capital assets for economic, social and cultural development in the region as well. As the implementation of an evidence-based policy, strategy and action plans was considered to be a priority, the Jodhpur Initiatives emphasized the need for data collection and analysis and assessment of the direct and indirect economic and social benefits of

cultural industries. These initiatives, which were regional in scope and launched by inter-agency cooperation (UNESCO, UNIDO, World Bank), proposed an Inter-agency Technical Assistance Programme to act in the following 5 areas:[75]

- coordination (support for a regional, integrated policy development coordination mechanism to promote cultural industries);
- best practice (compilation of a compendium of best practices in the cultural industries sector);
- networking (support for the development of institutionalised training and research);
- creativity index (establishment of an Asian Cities Creativity Index to track and measure the effectiveness of policy initiatives in support of cultural industries); and
- data (regional data collection).

Expert meetings were held in Bhutan and China, Special Administrative Region of Hong Kong, and there were regional meetings of a technical working group on cultural industry statistics dedicated to the development of a framework of cultural statistics and a creativity index for the Asia-Pacific region. Certain countries of the region also included technologically driven activities in cultural industries (Singapore and China, Special Administrative Region of Hong Kong). It should be noted, however, that while the Jodhpur framework for cultural industries is focused on industries that produce artistic outputs subject to IP protection, it excludes scientific and technological innovation (patents), electronic equipment, telecommunication, technical support services, non-artistic software and databases (UNESCO, 2007).

The second initiative focused on the promotion of cultural industries at the sub-regional level, in particular in South Asian countries. It was launched through the Bay of Bengal Initiative for Multi-Sectoral, Technical and Economic Cooperation (BIMSTEC) during the Ministerial Meeting on culture as a result of an expansion of BIMSTEC cooperation areas (trade and investment, technology, transport and communication, energy, tourism, and fisheries). The first BIMSTEC Ministerial Meeting on Culture was held in 2006. During this meeting, the seven member countries (Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka and Thailand) established the future direction in the field of cultural industries. The BIMSTEC group emphasised the promotion of cultural industries as a strategy for poverty reduction and community revitalization. The proposed concept was cluster development of cultural industries by which BIMSTEC countries would create the critical mass needed to become the world economic leader in several sub-sectors.[76] This concept would be centred on developing the potential of cultural industries for poverty reduction, community revitalization and skills formation; mapping of the cultural industries sector (including data collection and analysis of the sector); and the creation of an enabling environment for the sustainable development of cultural industries. The vision and strategy presented in the BIMSTEC concept paper were adopted as the Paro Initiatives, which serve as a roadmap for socio-economic progress driven by cultural industries in the BIMSTEC region. The Paro Initiatives call for the establishment of a BIMSTEC Cultural Industries Observatory and a BIMSTEC Cultural Industries Commission (BIMSTEC, 2006).

[75] UNESCO, 2005b and 2007.
[76] BIMSTEC, 2006:15.

Besides these initiatives in the Asia-Pacific region for the harmonisation of cultural industries models, classification and measurement tools, there has also been growing policy interest in cultural industries at the national level, in particular in the following areas: copyright protection (e.g. Australia, Singapore, Japan and the Philippines); innovation and IT technology (e.g. Korea, Japan and the Philippines); promotion of creativity and competitiveness of creative capabilities (e.g. China, Special Administrative Region of Hong Kong); or scope of the creative economy (e.g. Australia, Singapore). Different policy perspectives, together with different national contexts and official statistics systems, have an influence on how cultural industries are defined and classified, and how their economic contribution is measured.

Cultural industries concepts and classification

In many countries of the Asia-Pacific region, the strong influence of the UK concept and model can be observed. The main reasons for this UK influence are the programme activities carried out by the British Council for promoting the creative industries concept, and the use of the DCMS methodological approach for assisting other countries in recognising the importance of their culture sector (e.g. the creative industries mapping project in Indonesia). In this region, the usual term is creative industries or copyright industries (rather than cultural industries), but it very often covers a range of different activities. Therefore, the definition used to describe these industries can be very close to the UK concept in some countries (e.g. Australia, New Zealand), while in some others (e.g. Thailand) it can be very different *(see **Table 11**).* In countries such as Thailand and Indonesia, where creative industries are seen as a source of innovation, the cultural industries classification very often includes research and development. Countries that wish to emphasise the economic dimension of cultural industries and that have the intention of reaching a leadership position in that field at the regional level, have a tendency to make the cultural industries definition even broader (e.g. China, Special Administrative Region of Hong Kong and Thailand). There are also countries that apply several different models for analysing cultural industries, such as Japan where the policy focus is on copyright industries (Japan Copyright Institute) and content industries (Ministry of Economy, Trade and Industry, Japan), or Australia (copyright industries, creative industries and creative economy).

Cultural industries model

The UK value chain model for analysing cultural industries is dominant in the Asia-Pacific region. In certain countries of the region the production chain model is focused on creative processes and does not cover production, manufacturing and distribution (Australia), while in other countries it has been modified to include the sub-sector value chain (Thailand). In Australia, the mapping methodology is oriented towards industry-based analysis of cultural industries, and it identifies five broad stages of the value chain: pre-creation (including libraries and museums, which are essential resources for creative people); creation (primary creative activities); realisation (replication and distribution of creative product); consumption (e.g. television and stereo equipment); and post-sale (repair, maintenance, support, second-hand sales). In measuring the economic contribution of cultural industries, only activities at the pre-creation and creation stage are included.

Table 11. Research and mapping studies at the national level in some countries of the Asia-Pacific region

Country	Publication	Responsible	Date
Australia	The Economic Contribution of Australia's Copyrights Industries	Allen Consulting Group for the Australian Copyright Council	2001
	Making the Intangible Tangible: The Economic Contribution of Australia's Copyright Industries	PWC for the Australian Copyright Council	2008
	Creative Industries Cluster Study	Department of Communications Information Technology and the Arts & NOIE	2002.
	Creative Industries Economic Analysis	Enterprise Connect and CIIC	2009
	Australia's Creative Economy: Mapping Methodology	CCI	2007
	The measurement of creative digital content	Pattinson Consulting for Department of Communications Information Technology and the Arts	2003
China,-Hong Kong SAR	Baseline Study on Hong-Kong's Creative Industries	Centre for Cultural Policy Research	2003
	A study on the Creativity Index	Centre for Cultural Policy Research	2005
China	Report on Development of China's Cultural Industry	SSAP	2008, 2010
India	The media and entertainment industries: Unravelling potential	PWC	2006
	The media and entertainment industries: Sustaining growth	PWC	2008a
Indonesia	Indonesia creative industry study	Ministry of Trade	2007, 2009
Japan	Copyright White Paper Vol. 1	Japan Copyright Institute	2001
	Copyright White Paper Vol. 2	Japan Copyright Institute	2005
	Copyright White Paper Vol. 3	Japan Copyright Institute	2009
New Zealand	Creative industries in New Zealand: economic contribution	NZ Institute of Economic Research	2002
	The creative sector in New Zealand - mapping and economic role	NZ Institute of Economic Research	2009
	Employment in the cultural sector	Ministry of Culture and Heritage, NZ	2009
Philippines	The Economic Contribution of Copyright-Based Industries in the Philippines	WIPO	2007b
Singapore	Economic contribution of Singapore's creative industries	Ministry of Trade and Industry	2003
	The Economic Contribution of Copyright-Based Industries in Singapore	WIPO	2004a
	The Economic Contribution of Singapore's Copyright Activities	P Academy, Singapore	2005
Thailand	The economic contribution of Thailand's creative industries	KIAsia & Fiscal Policy Institute	2009

Table 12. Classification framework for cultural industries in the Asia-Pacific region

Countries	Australia	China, Hong Kong SAR	India	Indonesia	New Zealand	Singapore	Thailand
Concept	Creative industries	Creative industries	Media and entertainment industries	Creative industries	Creative industries /creative sector* cultural industries**	Creative industries / distribution industries*	Creative industries
Architecture	×	×		×	**×/×***	×	
Film and video	×	×	×	×	**×/×*/×****	Included in performing arts	×
Archives							
Libraries					**×****	**×***	
Museums					**×****	× Including in performing arts /×*	
Heritage sites and places						Included in performing arts	
Broadcasting (radio and TV)	×	×	×	×	**×/×*/×****	×	×
Performing arts (theatre, dance, festivals)	×	×		×	**×/×*/×****	×	
Design (product, fashion, graphics)	×	×		×	×	×	Only jewellery and related activities
Visual arts, crafts and art market	Only creative arts included	×		×	**×/×*/×****	**×/×***	
Publishing (books, press, journals)	×	Including printing and binding		×	**×/×*** Including printing and binding/ **×****	**×/×***	×
Music industry	×	×	×	×	**×/×*/×****	**×/×***	
Software, computer games, multimedia	×	×		×	**×/×***	×	
Advertising	×	×	×	×	**×/×***	×	Only partially included in broadcasting and publishing

Cyber cafes, Internet access providers		×				×*	
Satellite services, network operators						×*	
Photography retail						×*	
Drugs and medicine							×
Wooden furniture and fixtures							×
Animation, Video effects (VFX),gaming, casinos			×				
Community and government activities (religious, cultural education)					×**		
Research and development				×			×
Jewellery and related activities		×			×*		

Another method for analysing the economic contribution of cultural industries is the employment-based classification known as the "creative trident" model,[77] which has been used to measure the scope of the creative economy in Australia.

There is also the creative cluster model, which combines existing approaches, such as the cultural industries approach, the creative industries approach and the copyright approach (e.g. Singapore study).Moreover, this model consists of "upstream" and "downstream" activities. "Upstream" activities include traditional arts that have a commercial value in themselves, while "downstream" activities derive their commercial value form their application in other economic activities (MTI, 2001). At the end of the creative cluster model are distribution industries that support the dissemination of creative products.

Cultural industries measurement framework

All studies for the Asia-Pacific region have a tendency to present information on cultural industries at the broad segment level and compare them with traditional industry sectors, at the national and international level. A higher level of measurement tools for quantifying the economic contribution of cultural industries is evident in countries where mapping and research practices have a longer tradition (e.g. Australia).A very popular methodological approach is economic size and structural analysis, with a focus on cluster analysis (e.g. Australia, China, Special Administrative Region of Hong Kong and Singapore) or value chain analysis (e.g. New Zealand, Singapore). In many Asia-Pacific studies, structural analysis is used most of all for studying the structure of cultural industries, in particular with regard to the distribution of macroeconomic aggregates by sub-sectors, and very rarely for studying these industries by group of stakeholders (e.g. Thailand, India). Primary resources for preparing a sub-sector analysis are basic data from official statistics, in combination with supplementary data (empirical model or econometric estimations).

Multiplier analysis is employed in the Thailand; China, Special Administrative Region of Hong Kong; and Singapore studies. In the Singapore study, three kinds of impacts were measured using multiplier analysis: the primary economic impact of creative industries, the secondary economic impact and the tertiary economic impact. The primary economic impact of creative industries is reflected in their direct contribution to GDP and employment; the secondary economic impact refers to spin-offs resulting from expenditure on creative industries (primarily measured by multipliers). Tertiary economic impact was measured by the level of creative capabilities (with proxy indicators, such as public expenditure on media, arts and culture, copyright industries exports, etc.) and their international benchmarking through the indexes method. Technical coefficients from the I-O matrix were used for measuring creative utilisation (level of inputs from local creative industries), as well as for analysing the development of different stages in the value chain.

[77] Higgs and Cunningham, 2007.

Table 13. Cultural industries measurement framework in the Asia-Pacific region

	Concept	Measuring model	Main economic measures	Methodological approach
Australia	Creative industries	Production chain model (for industry-based approach); "cultural trident" model (for employment-based approach)	- value of gross product, share in total GDP - real GDP annual growth rate of creative industries - employment, sub-sector share employment, growth rate - income distribution and wages by employment - labour productivity by sub-sectors, average productivity growth - international trade (export, import) - distribution of creative occupations - creative trident statistics - number of businesses, entry and exit rates, scale of business - turnover - concentration of creative businesses and manpower	Economic size and structural analysis
China, Hong Kong SAR	Creative industries	Production value chain model	- VA by sub-sectors - employment by sub-sectors - international trade (export and import measures) - VA multiplier and employment multiplier	Economic size and structural analysis; satellite account creative sector sub-model
Indonesia	Creative industries	Production chain model	- GDP/VA - employment	Economic size and structural analysis
New Zealand	Creative industries	Production chain model	- revenue, intermediate consumption and value added by sub-sectors - employment - number of enterprises - international trade measures - household expenditure on culture	Economic size and structural analysis
Thailand	Creative industries	Sub-sectoral value chain model	- manufacturing by sub-sectors - sales and export, imports by sub-sectors - direct economic contribution (VA, employment, sales) - secondary impact (VA and output multiplier) - tertiary impact (creative utilisation measure by technical coefficients from I-O matrix)	I-O tables and multiplier analysis; structural analysis
Singapore	Creative industries	Creative cluster model	- primary impact (contribution to GDP and employment) - secondary impact (output and VA multiplier, productivity) - tertiary impact (measuring creative capabilities through proxy indicators)	Multiplier analysis; economic size analysis; indexes method

4.5 Africa

Policy context

Many countries in Africa have recognised the potential of cultural industries, which are understood to be a factor of poverty alleviation and building the cultural identity of African communities. Already in the 1990s several sessions and meetings were organized to highlight the link between culture and development. For instance, the Dakar Plan of Action in 1992 was prepared in the spirit of the World Decade for Cultural Development. It reviewed different sectors for cultural industries that were important for Africa (e.g. audio-visual and mass media, publishing industries, handcrafts, architecture, fashion, gastronomy, copyright and piracy), and proposed initiatives in this area.

The inter-ministerial conference on the *"Role and Place of Culture in the Regional Integration Agenda"* of the Southern African Development Community (SADC), held in Mozambique in 2000, did much to raise awareness of the importance of cultural industries and their promotion. At the conference, SADC member countries agreed to take several steps to promote cultural industries as a way to alleviate poverty, generate employment and contribute to economic growth (Sithole, 2000). In 2003, the Dakar action plan for the promotion of cultural industries in the African, Caribbean and Pacific (ACP)countries was adopted, which emphasises the need to conduct national and regional studies in ACP states to evaluate the contribution of cultural industries to economic development. Within the framework of the action plan of the New Partnership for Africa's Development (NEPAD), a UNESCO workshop on culture and development was held in 2004 in order to draw more attention to the cultural aspect of NEPAD. In 2005, the Nairobi plan of action for cultural industries was adopted with the main aim to strengthen the cooperation and activities of cultural industries (African Union, 2005).

In Africa, cultural industries are seen as an interface between traditional knowledge, arts and the creative economy. They are fragmented and organized as household units, working in informal groups in many countries. In the poorest countries, most of cultural production takes place in the informal economy, and this is very often the only source of income (UNDP, 2008). In other countries (e.g. South Africa), cultural industries are highly diverse, and characterised by small firms and concentrated in urban areas.

Few studies have been conducted on measuring the economic contribution of African cultural industries. Most of these studies have been carried out at the regional level, such as a series of working papers commissioned by the International Labour Organization (ILO) on *Promoting the Culture Sector through Job Creation and Small Enterprise Development in SADC Countries,* published in 2003 and covering the following areas: crafts and visual arts (ILO, 2003c), ethno-tourism industry (ILO, 2003b), music industry (ILO, 2003a), performing arts and dance (ILO, 2003d), and the film and television industries (ILO, 2003e). The sectoral approach is evident in these studies, as is their orientation towards the regional or city level. Measurement of the economic contribution of cultural industries is based on the cognitive research method, such as focus groups and qualitative interviews for a better understanding of the problems, weakness and strengths of cultural industries, and on statistical data collection. The concept of cultural industries in this instance covers film, crafts, music, performing art and visual art sectors, as well as cross-cutting domains such as design, heritage and cultural tourism.

Several other extensive studies dedicated to the field of cultural industries in Africa should be noted: the Gauteng Creative Mapping Project (British Council, 2008), and the Cultural Industries Growth Strategy reports on the South African film and television industry, craft industry, music industry and publishing industry (DACST, 1998), as well as the report *Economy of Culture in Mali* (2008). All of these studies used economic size and structural analysis at different analytical levels, while the cultural industries model was based on the value chain concept.

As the Gauteng Creative Mapping study was commissioned by British Council, the methodological approach is very close to the DCMS model, but adaptable to South African circumstances. In this study, the direct and indirect economic contributions of cultural industries were measured for the first time in South Africa. The total direct contribution was measured for 11,320 firms and organizations using value added, output and employment indicators. The indirect contribution was calculated by estimated output and value added multipliers (with UK and Singapore multipliers used for benchmarking, while the employment multiplier was based on the creative trident model, which assesses the importance of creative employment in the broader economy (British Council, 2008:48-49). Short-term measurement of the economic contribution of cultural industries was based on the evaluation of several business indicators (export and import activities, wages, government and private sector financing).

The South African film and television industry report, as well as the crafts, music and publishing industry reports are based on value chain structural analysis. They focus on each aspect of the value chain and on the links between these aspects in order to highlight the strengths of cultural industries and to identify where problems are located. In this regard, measuring the economic contribution was not the primary aim of these studies; economic measurement tools were used for finding an appropriate strategic approach for developing cultural industries. The main indicators used for measuring the economic contribution of cultural industries in South Africa were the value of production, profitability, employment and the number of firms and organizations operating in different cultural fields. In some of these studies, there is also an analysis of the structure of cultural industries clusters at certain stages of the value chain, and of the size and profile of the South African culture sector. However, these methodological approaches are often not clearly demarcated and very frequently they overlap.

The study *The Economy of Culture in Mali* (Jeretic et al., 2008) aims to highlight the potential of culture, to ensure the conditions necessary for a better integration of culture into economic development, and to encourage visibility of the economic and social contribution of each cultural domain in Mali. This study strictly defines culture as a "process that is based on events and expressions of intellectual, spiritual and/or aesthetic value".[78] The main reason for this approach is that the creative industries concept as applied elsewhere is not relevant in the Malian context. First of all, it is quite difficult to set apart creative and cultural industries in Mali because for the most part these activities are carried out in other economic sectors (printing, advertising, audiovisual industries, trade items, mixed cultural and other tourism-related activities). Furthermore, creators themselves earn their livelihoods by working in other areas or have second jobs; this mix of activities, however, is not uniquely found in the culture sector. It is the result of general economic insecurity in Mali and it is present in most of the country's business sectors. As in most African countries, the economy of Mali is based on informal sectors, which

[78] In operative terms, the cultural sector in Mali covers music, film and audiovisual works, publishing and books, libraries, radio, dissemination events and festivals, crafts, live shows and theatre, visual arts, fashion and design with cultural content, heritage and cultural tourism and training as a part of professionalization and human resources development in the cultural sector. See: Jeretic et al., 2008.

account for about 57% of the total economic product of the country. It is estimated that the proportion of the informal economy in the culture sector in Mali is much higher, accounting for 85% of the total economic value generated by this sector (Jeretic et al., 2008). The estimation of the extent of informal activities in the culture sector is based on surveys conducted in each region, involving four to five stakeholders from the informal economy. In particular, surveys were conducted to get a better picture of the informal sale of cultural products, such as music, films, crafts, etc., and to determine the level of piracy. An objective of this study was to separate informal activities into two distinct groups based on an estimation of: i) the level of sales of certain economic goods that are not officially recognised; and ii) the level of illegal activities, especially the piracy of musical and audiovisual works. The extent of the economic contribution of these two kinds of informal activities was calculated sector by sector, by estimating the added value of operators in each sector based on the total number of operators, the number of jobs and consumer spending. The matrix of the culture economy in Mali consists of 10 cultural domains, each represented by a number of formal and informal operators, turnover, value added and total employment. The total direct economic contribution was measured for 12,239 operators operating in the formal and informal parts of the culture sector. It was estimated that the participation of the culture sector in the generation of total value added in Mali represents 2.38%, and in total employment, 5.85%.

There are not many studies that deal with measuring the economic contribution of cultural industries in Africa, so it is quite difficult to provide detailed conclusions about the measurement methodologies used. “Cultural industries” is a common term throughout African communities, and it usually covers the music industry, crafts, film and television, and the publishing industry. An understanding of cultural industries in a broader sense includes cross-cutting sectors, such as cultural tourism, design and fashion, heritage, gastronomy. Mapping studies are very rare in Africa; only South Africa has carried out several studies, but without methodological improvements. One of the factors contributing to this situation is the lack of reliable data. The lack of key data poses a major problem in African countries, and several studies have had to rely on primary data gathered by the surveying method. Facts presented in studies for African countries are very often estimations based on expert consultation and labour force survey estimations (e.g. South Africa film and television and craft industry employment). In many countries there is no single source for collecting data, and “where data exists for industries, it is often limited to businesses or individuals who are members of organization collecting the data" (British Council, 2008:32).

Chapter 5. Conclusions and recommendations

5.1 Assessment of methodological approaches for measuring the economic contribution of cultural industries

There is a lack of a unique and common platform for discussing the classification of cultural industries, the measurement of their economic impact, and the potential of linking and upgrading multidisciplinary approaches. This lack not only has a negative impact on research in this field, but also makes it difficult to build a comprehensive scientific and practical framework for measuring the economic contribution of cultural industries to development. Two different types of core methodological approaches currently in use have been examined in this study: those ones dedicated to measure economic contribution of cultural industries and those dedicated to measure economic impact of cultural industries. As the intention of the UIS is contribute to the harmonization of constitutive elements of a methodology for measuring economic contribution of cultural industries, a short description of the core methodological approaches for measuring the economic contribution of cultural industries, with a list of their strengths and weaknesses, is presented in **Table 14**.

The first methodological approach presented in this table is economic size and structural analysis. In the end, the review of the studies found that the most popular methodological approach for measuring the economic contribution of cultural industries is economic-size and structural analysis. This is a very good method for measuring this contribution internationally and comparing it with other sectors. Of course, this method will only be possible after terms and concepts concerning the measuring subject have been standardised. It is a simple approach that uses very understandable variables of macroeconomic aggregates, which are shown both in absolute terms and in relative terms. In combination with quantitative data collected through questionnaires and focus groups, this approach makes it possible to examine networking and capacities between sectors, as well as analyse structural features in depth. Also, this approach can capture the long-term (GDP, employment) and short-term direct economic contribution of cultural industries (turnover, sales revenues, etc.). Moreover, economic size and structural analysis is an appropriate method for measuring the economic contribution of cultural industries in both developing and developed countries, and it can help them in planning, monitoring and evaluating cultural and economic policy in this field. Of course, this can be done with relevant structural analysis. In addition, this methodological approach requires relatively little time and cost to implement, which is a very important advantage especially for developing countries which have limited financial resources. In cases where it is not possible to calculate value added, several other measures can be used for estimating the economic contribution of cultural industries, such as turnover. Otherwise, value added can be calculated with data from business registers or with estimations based on survey results (an approach employed in some African countries, Serbia). There is also the possibility to estimate the economic contribution of cultural industries that is not marketable by using expenses as a proxy indicator for market value. The real value of outputs (e.g. turnover, value added) can be calculated by implicit price deflators (e.g. cultural price index), which can enable comparability in real terms.

The main operational weaknesses of economic-size and structural analysis may be due to different levels of economic activity aggregation in business registers for some activities (e.g. design), inadequate digit level in ISIC classification in some countries for some activities (e.g. crafts, multimedia) or inadequate cultural employment statistics (non-existing Occupation Classification statistics or existing only at a high level of aggregation). Another weakness is that the analysis cannot identify the location of areas where the creative businesses tend to cluster and to provide any special recommendation for policy intervention in this field.[79]

This review of the studies that have been done on measuring the economic contribution of cultural industries also showed that some countries are developing cultural satellite accounts (CSA) as a methodological approach. One of the weaknesses of this methodology is that the I-O tables, which are the basis for constructing CSAs, very often do not provide detailed data (e.g. limited number of product groups) for the culture sector. Several activities, which are poorly represented in the Standard Industrial Classification (SIC) but important for the culture sector (e.g. crafts, design, amateur art, non-profit civil initiatives in culture), are very often excluded from CSA I-O tables. Sometimes it is very difficult to make an estimation of the product use flow and its segmentation, as this needs to be based on reliable data to be meaningful. In cases where such data are lacking, estimations need to be made. This limitation also exists on the supply side, when in some cases it is difficult to make distinctions and clearly identify the share belonging to culture sub-sectors.[80] From this point of view, the most problematic activities for estimating the share belonging to culture are: printing and related activities; advertising; architectural and industrial design; retail sale of radio and television goods; and cultural education. One approach is to survey the largest units of these industries in order to determine the share of cultural activities. However, in order to establish a reliable percentage for cultural activities, it would be necessary to calculate the share of cultural activities every year. As this is not feasible in practice, shares that are established in one year are used for several years in the calculation of CSA data. The second weakness of CSA is that this methodology requires detailed secondary data, as well as empirical research, in order to establish the I-O matrix. This requires extensive data gathering, which is very costly. Another methodological weakness is that CSAs are based on the assumption that the mix of inputs is the same for all activities and that this will remain stable over time, which means that the proportion between different cultural and non-cultural activities will not change. This can be true if the structure of cultural industries is not based on technological progress and will not be affected by changes in the production process and distribution. In other cases, all of these weaknesses can affect the reliability of CSA results.

The strength of the CSA system is that it is part of the information pyramid formed by the system of national accounts (SNA) and therefore is comparable and coherent with other economic sectors and measures. Moreover, using the SNA as a basis for developing CSA can serve to coordinate national and international guidelines for economic data gathering; the CSA can provide key economic indicators for measuring the development of the culture sector, such as the Gross National Culture Product, and income formation and productivity in the culture sector. The CSA system can also provide long-term data series with a high level of analytical interpretation, as well as identify and measure intermediate demand and linkages between culture and other activities in the national economy.

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[79] See Throsby, 2010:93.

[80] Some products are produced by several industries (for example, 70% of film industries output is film and the remaining 30% could include other products, such as advertising video). It is thus necessary to estimate the share of the principal product and of other products in total industry output for each culture sub-sector. See Ministry of Education, Finland, 2009:26-31.

Table 14.Core methodological approaches for measuring the economic contribution of cultural industries

Methodological Approach	Description	Strengths	Weaknesses
Economic size and structural analysis	Approach is dedicated to estimating the direct contribution of cultural industries in generating basic macroeconomic aggregates (GVA, GDP, gross value of production, employment, fixed capital formation, export and import, trade). Structural analysis consists of different analysing techniques for studying the structure of cultural industries, in the first line concerning distribution of macroeconomic aggregates by sub-sectors or groups of stakeholders (authors, producers, distributors, etc.). This approach is generally used for measuring the economic contribution of cultural industries over the long term, but it can also be used for short-term measurement, in which case it is based on the evaluation of business indicators (turnover, revenue sales, number of enterprises, productivity, etc.).	- Contribution of cultural industries can be compared internationally and with other sectors; - simple approach; - in combination with quantitative data collected through questionnaires and focus groups, makes it possible to examine networking and capacities between sectors; - can capture long-term and short-term direct economic impact of cultural industries; - low level of cost; - can capture overall contribution of cultural industries to economic growth.	- middle level for analytical interpretation and conclusions; - possible problems with long-term comparability and real growth rates of different economic variables (usually, short-term economic variables are presented in current prices); - very often the most important macroeconomic aggregates (GVA/GDP) are presented for the whole cultural industries sector; - allocation factors showing the proportion between culture-related and non-culture-related activities can be constructed ad hoc.
Cultural satellite accounts (CSA)	This approach measures the economic importance of a specific industry that is not observable in the traditional System of National Accounts (SNA). The CSA system integrates the demand side with the supply side of the cultural economy. The basis for the main CSA parameters is an input-output matrix prepared for the SNA. A CSA system can be developed through different modules or pillars (e.g. target analyses, volume output module, etc.), but usually it includes key SNA concepts: output, intermediate consumption and value added. An important characteristic of a CSA system is its ability to systematise a large number of statistical data (social, demographic, economic, financial and cultural), so it can be used not only for measuring the economic contribution of cultural industries, but also for analysing culture phenomena in the broad sense.	- provides set of comprehensive economic indicators, such as GDP, income formation, productivity, outcome formation, fixed capital formation, etc. - is based primarily on secondary data; - can be used to identify intermediate demand in the production process; - high level for analytical interpretation; - can provide long-term data series; - can provide data series distribution by different territorial level.	- does not provide detailed data due to limited number of product groups; - detailed secondary data (household surveys, business surveys, etc.) are very important for compiling CSA; - requires high level of expenses; - can be constructed only after extensive data gathering; - based on the assumption that the input mix remains stable over time; - ignores growth in efficiency because of the basic assumption that change in output will lead to the same proportional change in all inputs the industry uses; - time delays between CSA results and analysing data; - mainly based on statistical presentation of data; - revision of I-O table done once every five-seven years can produce non-credible estimates; - allocation factors showing the proportion between culture-related and non-culture-related activities can be constructed ad hoc.

Multiplier analysis	Measures three kinds of economic contribution of cultural industries: direct impact, indirect impact and induced impact. Approach is a systematic analysis of the economic relationship between cultural industries and other sectors of the economy. The methodological base is the construction of an input-output table (I-O), which illustrates the relationship between different branches of industry activities. By using input-output tables at a high level of aggregation along with surveys, different multiplier coefficients (employment multiplier, gross value added multiplier, output multiplier, tax revenue multiplier, etc.) can be calculated. This approach makes it possible to estimate the indirect economic contribution of cultural industries.	- can be used as an advocacy tool in lobbying for a better position of cultural industries; - applicable to different economic analysing levels (organization, local community, region, project); - can capture direct, indirect and induced effects on industries, consumers and government; - can provide more comprehensive ways for estimating money flows between different sectors; - input-output model can be tailored to specific local economies.	- methodology can be applied in different ways which can decrease its reliability; - wrong conclusions can be reached based on value of multipliers; - input-output tables at a high level of aggregation can be constructed only after extensive data gathering; - problems with real growth rates of different economic variables; - can capture only short-term impact of cultural industries; - ignores growth in factor efficiency because of the basic assumption that change in output will lead to the same proportional change in all inputs; - does not take into account economy of scale, unused capacity, etc. - the assumption that the mix of input will remain stable over time; - time delays between multipliers and analysing data; - changes in input mix during the year due to lower production costs can produce incorrect multiplier; - low level of validity for decision-making in the sphere of cultural industries; - differences in concept of cultural industries; - in many cases it is not possible to disaggregate input-output tables.

Production function	Measures the average relationship between output and input (capital and labour) in cultural industries and their impact on economic growth. With modification of the standard Cob-Douglas production function, such as the Tinbergen production function, etc., it can be used for measuring the impact of the creative class on economic growth, creativity, technological inefficiency, effect of volunteers work activities etc.	-can solve the problem of measuring output in some cultural fields (e.g. museums, libraries, etc.); -very good for analysing factors that influence output of cultural industries by using dummy variables; -applicable at firm, industry and macroeconomic level; -can capture impact of production factors on cultural industries growth; -high level for analytical interpretation; -can be used for estimating and predicting economic impact of cultural industries on different levels or components of production factors; -can be a good tool for predicting the economic contribution of cultural industries in developing countries.	-high level of aggregation at the industry and macroeconomic level; - only applies to real value of input and output data; - statistic-econometrical problems with time-series.
Disequilibrium model	The disequilibrium economic model is constructed for measuring, estimating and predicting the economic contribution of the creative sector and cultural industries. This dual-economy model of growth suggests a relevant two-sector decomposition of the economy into creative and traditional sectors. The creative sector can be classified in different ways depending on country or policy contexts. The model is based on the assumption that the disequilibrium results from the different efficiency of certain sectors of the national economy. Accordingly, a part of economic growth can be attributed to the effects of reallocating resources from less productive to more efficient sectors of the economy.	- can be used for measuring, predicting and estimating the economic contribution of the creative sector and cultural industries at different levels of reallocation of capital stock and labour inputs; - provides a more realistic description of the situation of the economy; - can be modified for cross-country comparison or comparison between different groups of countries; - can explain the shift of resources toward creative sector/cultural industries as one of the important sources of economic growth.	- limitation in data available, especially for fixed capital formation in constant prices; - much more suitable for situations in developed countries than in developing countries; - long-term data required for good quality and reliable prediction; - in countries where the creative sector represents a small part of the total economy, there may be a lack of statistical significance when testing the effects of the reallocation of investment and labour inputs from the non-creative to the creative sector.

5.2 Development of cultural statistics and other tools

Cultural industries are not a homogeneous sector and their activities may be very varied and exist in different domains. As a result, it is not easy to gather systematic data according to the value chain model. Another particular characteristic of cultural industries is that they bring together several segments of society, such as stakeholders involved in the public or private sector, and different types of organizations – profit-making firms or non-profit organizations. Their economic contribution indicators can thus be very different due to their different roles and market dimension, while the type and level of their activities can be much the same.

A large number of studies emphasise that most of the difficulties in measuring the economic contribution of cultural industries are caused by the lack of quality data and the inaccuracy of existing data, not only for developing countries but worldwide. In some countries there is a lack of primary data for cultural industries (e.g. in Africa, West Balkan countries); in others there is a lack of data at the sub-sectoral level (e.g. design, crafts). 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 (e.g. crafts, design, and multimedia). So the first top priority is to establish the means for collecting data in developing and transition countries and to strengthen on-going activities for collecting comparable and reliable data at the international level. These efforts should be supported and conducted in cooperation with national statistics offices, the UNESCO-national commission in each country, the UIS and other international organizations that deal with these issues. It is furthermore necessary to develop a pragmatic approach for measuring the economic contribution of cultural industries that can be extended to all UNESCO member states. In this process, special attention should be given to the UIS capacity building programme on cultural statistics and to technical support in this field.

While inconsistency in conceptual terms can definitely be a difficulty in measuring the economic contribution of cultural industries, the lack of key data is the major problem in developing countries (Van der Pol, 2008; UNDP 2008).Measurement tools and a policy-based indicators framework need to be developed in these countries, together with the systematic implementation of policy measures devoted to the registration of cultural industries enterprises and organizations. However, in the poorest 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. The UIS support for this activity will be important, both through technical support for the development of surveys and through capacity building in UIS Member States for collecting statistical data by the survey method and using different techniques of economic analysis for measuring the economic contribution of cultural industries.

5.3 Towards international standards for measuring the economic contribution of cultural industries

The review of studies of several regions shows that these studies are of different quality, validity and reliability. In most cases, they were commissioned by academic institutions and non-governmental organizations, which ensured some level of quality and objective analysis. On the other hand, there were also studies (especially economic impact studies in the United States) “that were generally commissioned by public institutions supporting the arts and thus could run the risk of appearing non-objective and being easily dismissed” (Everitt, 2009:320). In most countries, these research studies were the first attempt to collect systematic data on cultural industries.

All of the definitions and concepts following the discussion about the creative economy paradigm are driven by the pragmatic concern of delivering useful policy tools for effective intervention; they thus tend to be normative, sometimes strategic, but quite rarely descriptive and comprehensive. The concepts used in these studies are very different (culture sector, creative industries, cultural industries, copyright-based industries, etc.), depending on the classification criteria and on the structure of the value chain (e.g. culturality, creativity, copyright, experience, etc.). Comprehensive analyses of the economic studies that have been done in this review, concerning the concepts of creative and cultural industries have the following general characteristics:

- basic resource is "human capital" – people and their intellect, creativity, inspiration, talents and skills;
- economic value comes from individual inspiration and mainly from cultural-based creativity;
- creativity (sometimes culture-based creativity), understood in the broadest sense, is treated as a product factor;
- protection of intellectual property and copyrights are the key factor for the realisation of economic value;
- identification of the domains of creative or cultural industries is mainly of a statistical-economical nature, and it is based on the product-based approach (by using Product classification), industry-based approach (by using Standard Industry classification) and employment-based approach (by using International Standard Classification of Occupation);
- grouping of cultural and creative industries is primarily based on the value chain model which divides the entire chain of values into economic activities that are linked to: creating contents, reproduction, distribution and exhibition/consumption, and sometimes to providing product inputs, equipment or infrastructural support;
- defining cultural industries in the traditional manner as activities oriented towards the mass-reproduction and mass-distribution of cultural goods, while the term creative industries uses creativity as the primary criterion for the classification domains that produce cultural outputs having primarily a ”utilitarian“ function integrated with their aesthetic function; and
- In some cases, cultural industries are considered to be a part of the creative sector or creative industries, while in some places there is a clear demarcation between cultural and creative industries (e.g. the EU).

A common methodological issue is that these studies aim to present the measurement of the economic contribution of cultural industries in a very understandable manner, and so use mainstream economic indicators, such as the value of output (GDP, GVA or VA), employment, and the business base in cultural industries (number of enterprises). Several countries have developed cultural satellite accounts (CSA), such as Finland, Spain, and some South American countries (e.g. MERCOSUR), and currently Canada is working on a CSA project. The development of CSA at the EU level was discussed in Eurostat, since 2000 in the final report of the LEG-Culture project (Eurostat, 2000). Later, in the report of Eurostat's ESSnet-Culture Group, there were recommendations for setting up a Task Force with the mission to identify the requirements that will be necessary for the development of cultural satellite accounts in Europe and the definition of standards (ESSnet-Culture, 2011:115).

At present, the statistics for cultural industries have not been harmonised in a systematic manner, and there is no unique statistical methodology. Under these circumstances, methodologies for measuring the economic contribution of cultural industries can only be understood and interpreted in their specific local, regional or national contexts. However, despite the many methodological difficulties, using sub-market and sub-sector analysis to measure the economic contribution of the culture sector can improve the understanding of supply, demand, consumer patterns, and other factors that influence the development of cultural industries. For example, it has often been demonstrated that cultural industries have very dynamic growth at the economic level. Furthermore, the comparison of different measurement approaches supports the view that culture has an important economic dimension and thus can play a significant developmental role.

The general measures described in these studies can be a powerful means for analysing the driving forces in certain areas of cultural industries and their contribution to economic growth within national contexts. However, they cannot be accepted as consistent indicators for gaining a global picture of the development of cultural industries. The analysis in this report points out that there is a need to establish a methodology for the collection and analysis of comparable and reliable data on cultural industries that mapping studies rarely provide. With the growing tendency of countries to measure the economic contribution of cultural industries and their efforts to create a solid basis for benchmarking analysis, it will be necessary in the future to develop, test and implement a UNESCO handbook for measuring the economic contribution of cultural industries. This could serve as a tool to help Member States understand methodological techniques and develop consistent and relevant studies with a high level of international comparability. This work should be developed through several stages: during the first stage, consistent guidelines for measuring the economic contribution of cultural industries should be developed, with suggestions for alternative solutions for existing methodological issues and limitations. The second stage will be dedicated to piloting methodological guidelines in selected countries in order to find out how appropriate the proposed concepts, tools and techniques are for different Member states and to producing country case studies based on the UNESCO handbook. The last stage will include improving the guidelines and their finalisation, and the publication of the handbook with country case studies on measuring the economic contribution of cultural industries.

In identifying and developing measures for the economic contribution of cultural industries, the focus should be on concrete measures that can provide the basis for

formulating and implementing relevant cultural and economic policy. Our analysis argues that different methodologies and calculation techniques will be required for assessing the importance of culture-based components in partially cultural activities. This is an important issue because it is much easier to harmonise core cultural industries than those with partial cultural content at the distribution level or in supporting services. In this regard, the heterogeneity of cultural industries and the very extensive composition of sub-sectors create the need for a common conceptual framework for measuring their economic contribution. Also, operative and working definitions and approaches for measuring the economic contribution of cultural industries should be harmonised, including definitions used in descriptive terms and classification. While work on harmonisation began with the 2009 UNESCO FCS, more effort will be required in the future to ensure implementation of the framework for cultural statistics in Member States and to adapt cultural statistics to new classification standards.

One way to create international baseline measures at this point is to use some of the very understandable measures presented in **Table 15**. At different analytical levels, they can satisfy the needs for measuring the economic contribution of cultural industries in both developing and developed countries. It is not possible to expect 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. A number of economic-size related indicators, such as market share, turnover, sales revenues and other economic indicators in cultural industries, make it possible to do calculations on the basis of national statistics and structural business statistics (e.g. from financial reports) and convert this into real value by using different price indexes. Due to the high correlation between value added and turnover or sales revenues, these indicators can be used as proxy indicators and alternative measures of economic size and contribution of certain cultural industries sub-sectors. There is also a possibility to estimate the economic contribution of non-marketable production of cultural industries by using expenses as a proxy indicator for market value. It is evident that when each measure is critically reviewed, certain limitations will appear. But 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.

The main operational limitation is due to different levels of economic activity aggregation in business registers for some activities (e.g. design), inadequate digit levels in SIC classifications in some countries (e.g. crafts, multimedia), or inadequate cultural employment statistics (lack of occupation classification statistics or available only at the high level of aggregation).

Table 15. Basic model for measuring the economic contribution of cultural industries

Indicator	Measure	Description	Policy relevance, analysis and interpretation
Gross value added	Gross value added/GDP of cultural industries or sub-sectors	Gross value added/GDP of cultural industries or sub-sectors in absolute terms (and per capita)	Can be used for measuring economic value and level of activity in cultural industries, importance of cultural industries in generation of economic macro aggregates; identifying type of relationship between cultural industries and the overall economy and cultural industries development model (e.g. growth model, welfare model, etc.); and for identifying structural change in economy towards creative economy.
	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 sub-sectors	Turnover of cultural industries or sub-sectors in absolute terms (and per enterprise)	Can be used for indication of economic value and level of activity in cultural industries; indication of environment for cultural industries, market penetration of cultural industries, economic strength of cultural industries, and for assessment of economic contribution of cultural industries to development.
	Turnover of cultural industries in relative terms	Share of cultural industries turnover in overall economy's turnover	
	Distribution of turnover by cultural industries 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 (%)	Can be used for measuring importance of cultural employment in overall employment, potential for job creation, etc.
	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 activity	Stock of business	Number of businesses by size in cultural industries	Can be used for indication of cultural diversity and level of supply of cultural products and services; start-up and mortality indicators can be used for measuring turbulence in enterprise life-cycle, sub-sector maturity; for modelling cultural industries support programmes; for indication of business structure, concentration or diversification; and for analysing similarity and differences between cultural industries and rest of economy, etc.
	Distribution of businesses by sub-sectors	Number of businesses by size in cultural industries sub-sectors	
	Business start-ups	Number of new businesses in cultural industries per 10,000 population	
	Business mortality	Number of closed businesses in cultural industries per 10,000 population	
	Distribution of start-ups by sub-sector	Number of new businesses in cultural industries sub-sectors per 10,000 population	
	Distribution of business mortality	Number of closed businesses in cultural industries sub-sectors per 10,000 population	

As measures presented in Table 15 are grouped in different clusters, they can be tested as sub-indicators with the aim of constructing a Cultural Industries Development Index (CIDI) in the future. The CIDI should be constructed as a composite index – a combination of single indexes which can be used for measuring how countries are making progress with cultural industries policies and strategies for economic development, and how these strategic initiatives are stimulating or restricting the development of cultural industries. The first stage of developing a CIDI could be the elaboration of its theoretical base (sub-indicators, correlation between sub-indicators and economic and policy dimensions, which should be measured, etc.). The next step would be to test each sub-component of the index on a sample group of countries to see how well the different components correspond to the practical situations in various countries. Indexes can be constructed in two ways: as a simple arithmetic average of the scores of the index's sub-components or as a normalisation of the value of variables/indicators, combined with equal weight and averaged to provide a score for the whole index; or this can be done with ranking.

Several variables can be grouped together and used in the construction of a Cultural Industries Development Index: the first cluster of a CIDI should contain basic information on the economic dimension of cultural industries, as commonly reported by countries (number of enterprises, number of businesses by size, number of self-employed, etc.); the second cluster should contain information on the economic activity of cultural industries (GVA/VA, turnover, sales revenue, etc.); the third cluster should contain information on employment (number of employees, number of self-employed, average earnings, etc.). The basic modality of a CIDI can have different components depending on what the analytical purposes are. A disadvantage of the index method is that an aggregated index does not make it possible to see the relative importance of its different components. With harmonisation at the international level, it is very difficult to understand why country indexes change over time without structural analysis of cultural industries and policy. So, a CIDI may be useful as an additional measure for assessing the economic contribution of cultural industries and their development. Nevertheless, it can be a good instrument because it can be comparable over time and place and internationally, constructed with available data and adapted to local contexts, and thus likely to influence political actions.

The main reason for measuring the economic contribution of cultural industries is that there should not be only an ex-post evaluation of cultural or economic policy, but also an estimation and ex-ante evaluation of the developmental potential of cultural industries. So, before measuring the economic contribution of cultural industries at the international level, this effort should begin with a simple and basic measure, modular in design, that will be possible for countries to estimate the developmental potential of their cultural industries at a level and timing that is appropriate for their current capacities and interests.

In the future, it will be necessary to conduct empirical research and further studies in this field, as well as work on an econometrical model for assessing and estimating the economic contribution of cultural industries at the cross-country level. Also, a theoretical model should be used for an ex-ante evaluation of the possible developmental effects of cultural industries, as well as for an evaluation (quantification) of the implications of cultural and economic policy measures in this field.

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Cultural industries are increasingly becoming important components of today's economy and important contributors to development. Their impact on gross domestic product and employment can improve a country's foreign trade position and competitiveness. In order to quantify this effect at a global level, cross-nationally comparable statistics are needed. However, current methodologies are not applicable worldwide, especially in developing countries. The UNESCO Institute for Statistics (UIS) is seeking to develop new guidelines to measure the contribution of culture to economies that will be different from or complementary to current practices.

To this end, this report provides an exhaustive literature review of current methodologies. It compares and contrasts the approaches, highlighting their advantages and limitations. Finally, initial suggestions for an improved methodology are provided. This report provides the background information required by governments interested in measuring the economic impact of culture in their countries.

The technical material provided here will be used to develop a UIS methodological handbook on measuring this important field.

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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.