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# A REGIONAL PERSPECTIVE OF THE CREATIVE ECONOMY IN BRAZIL

***Jorge Nogueira de Paiva Britto***[a]

[a]Professor of the Department of Economics at the Fluminense Federal University, Rio de Janeiro, Brazil.

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**ABSTRACT:** In a knowledge-based economy, initiatives based on the Creative Economy framework are supposed to promote regional economic diversification in developing countries. In Brazil, policy initiatives have focused on those activities with a view to design public policies oriented to reducing socio-economic and regional inequalities, as well as spreading those activities throughout the territory, especially towards less favored regions. Based on the Brazilian experience, this article discusses whether the pre-existing regional distribution of various types of creative activities favors or hinders the reduction of regional inequalities as a result of a policy focused on promoting creative activities and what actions could be adopted to achieve this result. Specifically, the paper discusses whether this expansion can promote an effective reduction of regional inequalities in terms of the number and quality of jobs and wage levels associated with those activities. The analysis suggests that the regional decentralization of creative activities towards less developed regions has been relatively limited in Brazil, as the more developed regions have remained more specialized in trades with higher digital and technological content, while the less developed regions have remained relatively more specialized in activities related to the cultural heritage. To reduce this imbalance, the support of local institutions and S&T infrastructure related to creative activities appears to be very important, which points out to the relevance of comprehensive policies well-adapted to very diverse local realities. This effort should have the impact of new digital-based technologies converge with the strengthening of economic potential of local and regional cultural heritage, by enhancing professional qualification of workers devoted to those activities.

**KEYWORDS:** creative economy; creativity and regional development; creative activities.

**JEL CODES:** O17; R11; R12.

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Corresponding author: Jorge N. P. Britto
E-mail address: britto.jorge@gmail.com

# ECONOMIA CRIATIVA NO BRASIL: UMA PERSPECTIVA REGIONAL

**RESUMO:** No contexto de uma economia baseada no conhecimento, as iniciativas baseadas no conceito de Economia Criativa podem promover um processo de diversificação econômica regional dos países em desenvolvimento. No Brasil, políticas públicas focalizadas nessas atividades tem sido implementadas com o objetivo de reduzir desigualdades socioeconômicas e regionais, estimulando a disseminação dessas atividades em todo o território, especialmente na direção das regiões menos favorecidas. O artigo procura discutir se essa expansão tem induzido uma redução efetiva dos desequilíbrios regionais em termos da quantidade e qualidade dos postos de trabalho criados e do nível de remuneração gerada por essas atividades. A análise sugere que a descentralização regional das atividades criativas na direção de regiões menos desenvolvidas é relativamente limitada no Brasil, com as regiões mais desenvolvidas permanecendo especializadas em áreas com maior conteúdo digital e tecnológico, enquanto que as regiões menos desenvolvidas se apresentando relativamente mais especializado em áreas relacionadas com o patrimônio cultural. Para reduzir este desequilíbrio, o apoio de instituições locais e da infraestrutura de C&T relacionadas com atividades criativas é particularmente importante, integrando o impacto das novas tecnologias de base digital com o reforço do potencial econômico do patrimônio cultural local e regional, através da melhoria da qualificação profissional dos trabalhadores nessas atividades.

**PALAVRAS-CHAVE:** economia criativa; criatividade e desenvolvimento regional; atividades criativas.

## 1. INTRODUCTION

For the United Nations Conference on Trade and Development (UNCTAD), the Creative economy is an evolving concept based on creative assets potentially generating economic growth and development (2008, 2010). In a broader definition, the Creative Economy consists of transactions that includes at the core creative people expressing a personal aesthetic in their work, comprising collaborative processes between creativity, technology and business. This economy comprises functional products and services, which encompass both formal and informal activities, as well as industrial and non-industrial sectors. Creative Industries are among the most dynamic sectors of the world economy, presenting a huge potential to boost national economies, generating jobs, income and development, due to crosscutting linkages at macro and micro levels of the economy, while promoting social inclusion, cultural diversity and human development. In the policy sphere, the Creative Economy includes as set of knowledge-based economic activities with potential to induce a process of socio-economic development, which constitutes a feasible development option for innovation, multidisciplinary policy responses and inter-ministerial action.

Initiatives based on Creative Economy have promoted economic diversification, trade and innovation in various countries and regions, contributing to the revitalization of degraded urban areas, to the development and promotion of remote rural areas and to the conservation of cultural and natural heritage (UNCTAD, 2010). At the same time, evidence shows that countries with denser creative economies have recovered more quickly from the challenges posed by the increasing globalization (STOLARICK *et al.*, 2010). To developing countries, creative activities also represent a catalyst for a more comprehensive, balanced and inclusive development, as they promote well-being and strengthen resilient paths of economic growth. They can create jobs that are less susceptible to fluctuations of the global economy, which tend to be labor intensive instead of capital intensive, generating positive externalities and constituting a basis of a local, sustainable and all-inclusive development, contributing to a better quality of life.

In Brazil, the Secretariat of the Creative Economy defines as attributes of creative activities the possibilities of innovation, the perspectives of productive and social inclusion, the exploitation of cultural diversity and the concern with the sustainability of those activities for future generations. In this perspective, the policy incorporates a focus on a set of "core" Creative Sectors, as well as the relevance of preserving the cultural intangible heritage. The focus on those activities would be to articulate to the design of public policies oriented to the aim of reducing socio-economic and regional inequalities, spreading the dissemination of those activities throughout the territory, especially in the direction of less favored regions. In this perspective, a relevant issue refers to the effective potential of creative activities to contribute to the reduction of regional inequality, spreading the dissemination of those activities throughout the territory, especially in the direction of less favored regions. Based on the Brazilian experience, this article discusses whether the pre-existing regional distribution of various types of creative activities favors or hinders the reduction of regional inequalities as a result of a policy focused on promoting creative activities and what actions could be adopted to achieve this result. Specifically, the paper discusses whether this expansion can promote an effective reduction of regional inequalities in terms of the number and quality of jobs and wage levels associated with those activities. This analysis associates the distribution and the pattern of specialization in creative activities at different territorial scales with a more detailed focus on the federative states, but also seeks evidence on the nature of the process at the level of more fragmented territorial units ("homogeneous micro-regions").

The article is organized into three blocks, as follows. The first section presents a synthesis of the main approaches that try to characterize creative activities and to develop sectoral classifications to them. The second section presents a general framework of the creative activities in the Brazilian economy, stressing the criteria applied by policy instances to classify those activities and presenting some results of studies and evaluations that have attempted to estimate the size of the Creative Economy in Brazil. The third section presents an attempt to identify inter-sectoral trends related to the regional distribution of creative activities in Brazil, in terms of jobs and salaries paid. The discussion about regional imbalances related to the distribution of those activities also includes the analysis of concentration indexes and locational indexes defined to different territorial scales. A conclusive section summarizes a number of policy implications generated from the analysis.

## 2. DEFINING THE CREATIVE ECONOMY: GENERAL APPROACHES

The creative economy concept first appeared in John Howkins' 2001 book, *The Creative Economy: How People Make Money From Ideas*, in which he defined the creative economy as "the transactions of creative products that have an economic good or service that results from creativity and has economic value" (p. 8). The term creative economy was applied to 15 industries extending from the arts to science and technology, including all the sectors whose goods and services comprise means to reinforce intellectual property rights: advertising, architecture, crafts, design, fashion, film, games and toys, music, publishing, research and development, software, TV and radio, videogames, and visual and performing arts.

Creative industries combine different dimensions of creativity (UNCTAD, 2010). Artistic creativity involves imagination and a capacity to generate original ideas and novel ways of interpreting the world, expressed in text, sound and image. Scientific creativity involves curiosity and a willingness to experiment and make new connections in problem solving. The broader concept of Economic creativity refers to a dynamic process leading towards innovation in technology, business practices, marketing, etc., with the aim of gaining competitive advantages in the economy. Another aspect refers to the relevance of some enabling factors for the development of the Creative Economy. Among these factors, we can mention the provision of infrastructure, particularly ICT and transportation, the availability of social and cultural spaces/amenities and the quality of educational systems, especially to the development of creative skills. An institutional framework that protects individuals' rights and is tolerant towards cultural and social diversity seems also to be relevant, as well as the presence of intellectual property rights regimes that reward creativity and protect local creators in global markets. In the policy sphere, we can mention the support for small and medium sized enterprises to ensure that creative industries as an economic driver are wide-spread, as well as the support to existing creative clusters, which could integrate smaller innovative and creative firms asa part of a larger industry. At the regulatory level, we can mention the relevance of instruments that promote access into the field of those industries by creative entrepreneurs.

The "Economic" Rationale of the Creative Economy remains in the hypothesis that creative industries are a major economic driver, generating faster economic growth, employment and job creation. Their growing relevance reflects a transformation from a manufacturing-based economy to a knowledge-based economy. Cultural/creative industries offer new responses and opportunities in a globalized context, not only driving growth through the creation of value, but also becoming key elements of the innovation system of the entire economy. In this context, their primary significance stems from the ways in which they stimulate the emergence of new ideas or technologies, and the processes of structural change.

The characterization and measurement of the creative economy comprises different analytical approaches. The sectoral approach defines the specific types of production that should be included in definitions of a creative economy, focusing on the characterization and analysis of creative industries. The labor market and organization of production approach focused on the flexible specialization of communities of workers with "special competencies or distinct-like capacities" (SCOTT, 2004). Florida (2002) pointed the emergence of a "creative class" as a discrete segment of society, employed in the creative industries, but also found in R&D and other "creative" occupations across all industries. The "creative index" approach focuses on a broader set of economic activities with a creative element, measuring their impact on urban and regional economies. This perspective stresses the possibility of associating the relevance of those activities with a creative index, including the computation of indices such as a bohemian index, gay index and so forth. It also stresses the "convergence of formats" as a defining feature of the creative economy, directing the focus to the media through which creative products are consumed, which are increasingly reliant upon a common digital platform, stimulating the amalgamation of arts, popular culture, telecommunications and broadcasting. Finally, the approach of "locational proclivities" emphasizes the spatial organization and geography of specific forms of cultural production in particular localities, reflecting a process of agglomeration, clustering or metropolitan primacy. This approach assumes that creativity and innovation in the modern cultural economy remains a social phenomenon rooted in a local production system and its geographic milieu. In this perspective, creative activities, at the same time, tend to be root and havethe capacity to transform urban locations.

Different models are elaborated and refined to characterize the creative economy. The original characterization elaborated by Howkins (2001) outlines 15 industries that contribute to the creative economy by generating creative products and services, ranging from the arts to science and technology, which results from creativity and has economic value. The UK DCMS model defines the creative industries as those requiring "creativity, skill and talent with the potential for wealth and job creation through the exploitation of their intellectual property" (DCMS, 1998). The Concentric Circles model developed by Throsby (2001) assumes that creative ideas originate in the core creative arts and that these ideas and influences diffuse outwards through a series of layers or concentric circles, with the proportion of cultural to commercial content decreasing as one moves outwards from the center. The UNESCO definition of Cultural Economy (2013) distinguishes six main cultural domains – Natural Heritage; Performance and Celebration; Visual Arts and Crafts; Books and Press; Audio-visual and Interactive Media; Design and Creative Services – as well as two related domains – Tourism; Sports and Recreation. The WIPO copyright model (2003) stands the role industries played directly or indirectly in the creation, manufacture, production, broadcast and distribution of copyrighted material.

Among these models, we can stand the approach developed by UNCTAD, which incorporates an attempt to capture the multiplicity of realities concerning the structure and the dynamism of creative economies. The UNCTAD model (2009, 2011 and 2014) enlarges the concept of "creativity" from activities having a strong artistic component to any economic activity producing symbolic goods and services that use creativity and intellectual capital as primary inputs. This framework distinguishes four large groups of creative industries. Activities related to the *Cultural Heritage* comprise two subgroups: (i) *Traditional cultural expressions:* art crafts, festivals and celebrations; (ii) *Cultural* *sites:* archaeological sites, museums, libraries, exhibitions, etc. The group of *Arts* includes creative industries based purely on art and culture, comprising two large subgroups: (i) *Visual arts:* painting, sculpture, photography and antiques; (ii) *Performing arts:* live music, theatre, dance, opera, circus, puppetry, etc. The group of *Media* covers two subgroups that produce creative content with the purpose of communicating with large audiences (the "new media" is classified separately): (i) *Publishing and printed media:* books, press and other publications; (ii) *Audiovisuals:* film, television, radio and other broadcasting. The broader group of *Functional creations* comprises more demand-driven and services-oriented industries that create creative goods and services with functional purposes. It is divided into the following subgroups: (i) *Design:* interior, graphic, fashion, jewelry, toys; (ii) *New media:* architectural, advertising, cultural and recreational, creative research and development (R&D), digital and other related creative services; (iii) *Creative services:* architectural, advertising, cultural and recreational, creative research and development (R&D), digital and other related creative services. There is an ongoing debate about whether science and R&D are components of the creative economy, and whether creative experimentation activities can include R&D. Recent empirical research has strengthened the relevance of the interactions between research, science and the dynamics of the creative economy.

To the developing countries, the improvement of the Creative Economy has an economic potential for wealth creation as a source of jobs, revenues and currencies for exports, but also as a catalyst for a more comprehensive and balanced development, creating well-being and reinforcing a process of inclusive development at local, regional and national levels. A study conducted by SELA (2011) argued that cultural industries might be particularly relevant to developing countries, with culture constituting an available resource in the fight against inequality and poverty, generating employment choices for indigenous people and to vulnerable or sidelined groups. In this perspective, culture not only represents a potential for creating jobs and revenues, but also for creating positive externalities, being flexible to be developed both in the rural and urban slums, benefiting the poorer groups of society. At the same time, culture plays an important role in recreating cities as safe living spaces that instill in their residents a sense of responsibility and belonging, contributing to reduce territorial inequalities.

## 3. CREATIVE ACTIVITIES IN THE BRAZILIAN ECONOMY

The Brazilian Secretariat of the Creative Economy of the Ministry of Culture defines creative industries a as "[...] all those productive activities whose mainly process involve a creative act generator of symbolic value, which constitutes a central element of price formation, and resulting in the production of cultural and economic wealth" (MINISTÉRIO DA CULTURA, 2011, p.22). This Secretariat also argues that

> Creative Economy from the cultural, social and economic dynamics comprises the cycle of creation, production, distribution / circulation / dissemination and consumption / enjoyment of goods and services from the creative sectors characterized by the prevalence of its symbolic dimension. (2011, p. 23)

According to this perspective, the guiding principles to define creative activities comprise four main attributes. *Innovation* in creative activities comprises both improvements (incremental innovations) and the creation of something completely new (radical innovation), being related to the identification of relevant and workable solutions, especially in the creative sectors whose products are the result of the integration of new technologies and cultural content. The principle of *Social Inclusion* stresses the promotion of productive inclusion of the population through training and professional qualification and the generation of job opportunities and income, also assuming that the access to creative goods and services emerges as a premise for citizenship. The principle of Cultural Diversity assumes that the growth of the Brazilian creative economy must include the recovery, protection and promotion of the diversity of national cultural expressions in order to ensure their originality, their strength and their potential. The principle of *Sustainability* comprises a critical evaluation of the impacts of economic development, including a management of the stages of this development to ensure social, cultural, environmental and economic reproduction of traditional creative activities for future generations.

To orient a definition of an effective set of policies, the Brazilian Secretariat of the Creative Economy identifies six "core" Creative Sectors: 1) Natural and Cultural Heritage; 2) Spectacles and Celebrations; 3) Visual Arts and Crafts; 4) Books and Periodicals; 5) Audiovisual and Interactive Media; 6) Design and Creative Services. Additionally, we can consider two related creative sectors: Tourism and Sports/Leisure. It also mentions the relevance of preserving the Intangible Heritage (including oral traditions and expressions, rituals, languages and social practices), improving the general conditions of Education and Training and availability of equipment and support materials.

In recent years, several studies and evaluations have attempted to estimate the size of the Creative Economy in Brazil. Studies prepared by FIRJAN have tried to define scale of the creative industry in Brazil, with the purpose of measuring its economic importance. Based on the UNCTAD definition of creative industry, the last version of the FIRJAN study (2014) proposes a definition of the creative industry that identify four major areas and their respective segments: 1) Consumption (Advertising, Architecture, Design and Fashion); 2) Culture (Cultural expressions, Heritage and arts, Music, Performing arts); 3) Media (Editorial, Audiovisual); 4) Technology (R&D, ICT, Biotechnology). According to FIRJAN (2014), 251.000 companies formed the core of the Brazilian creative industry in 2013. Over the last decade, there was an increase of 69.1% since 2004, when they were 148.000 companies. Based on amount of salaries generated by those companies, it is estimated that the creative core activities generate a gross domestic product equivalent to R$ 126 billion, equivalent to 2.6% of the overall production in Brazil in 2013, compared to 2.1% in 2004. During this period, the GDP of Creative Industry advanced 69.8% in real terms, compared to an advance of 36.4% of the GDP in the same decade (Table 1).

**Table 1 – Creative GDP Estimate and Its Contribution to Brazilian GDP Total (2004-2013)**

| Year | Creative GDP (R$ billion) | % of Brazilian GDP |
|---|---|---|
| 2004 | 74.3 | 2.09% |
| 2005 | 80.7 | 2.20% |
| 2006 | 86.0 | 2.26% |
| 2007 | 89.3 | 2.21% |
| 2008 | 100.6 | 2.37% |
| 2009 | 100.7 | 2.38% |
| 2010 | 111.9 | 2.46% |
| 2011 | 116.4 | 2.49% |
| 2012 | 120.6 | 2.55% |
| 2013 | 126.1 | 2.60% |

Source: FIRJAN (2014).

Also, according to the FIRJAN (2014) study, the Brazilian creative industries comprised 892.500 formal workers in 2013. Between 2004 and 2013, there was an increase of 90% in the jobs generated by those industries, well above the advance of 56% observed for the entire labor market during this period (Table 2). Thus, the participation of the creative workers in the total of the Brazilian formal workers was 1.8% in 2013, compared to 1.5% in 2004. The Architecture & Engineering segment is the one with the largest representation, concentrating more than a quarter (230,000) of this universe. Soon after come the segments of Advertising and Design employing more than 100,000 workers each. Together, these three sectors concentrate half of Brazilian creative workers. With regard to the salaries, while the average monthly income of Brazilian workers was 2,073 in 2013, for creative professionals they reached R$ 5,422, almost three times the national level. Compared to 2004, the salaries of the creative class were already well above the national average: there was a real growth of 25.4% to creative activities, following the significant increase of the Brazilian worker income in that period (29.8%). Among the creative segments, the most numerous in terms of professionals also had the highest average wages – Research & Development (R$ 9,990), Architecture (R$ 6,927), ICT (R$ 5,393) and Advertising (R$ 5,075). Already compared to 2004, the highest real wage increases occurred in the segments less paid: Fashion (42.1%), Music (33.3%), Audiovisual (32.7%) and Cultural Expressions (31.6%).

**Table 2 – Jobs and Salaries in Brazilian Creative Industries (2004 and 2013)**

| Segments | Jobs (Thousands) | | | Salaries (R$ 1,000) | | |
|---|---|---|---|---|---|---|
| | 2004 | 2013 | Growth | 2004 | 2013 | Growth |
| **1) Consumption** | **211.5** | **422.9** | **100.0%** | **3,619** | **4,653** | **28.6%** |
| Advertising | 45.7 | 154.8 | 238.5% | 5,354 | 6,927 | 29.4% |
| Architecture | 62.7 | 124.5 | 98.5% | 5,701 | 5,075 | -11.0% |
| Design | 42.6 | 87.0 | 104.3% | 2,556 | 2,760 | 8.0% |
| Fashion | 60.5 | 56.7 | -6.3% | 993 | 1,412 | 42.1% |
| **2) Culture** | **43.3** | **62.1** | **43.6%** | **1,962** | **2,527** | **28.8%** |
| Cultural expressions | 18.3 | 22.5 | 22.7% | 2,880 | 3,721 | 29.2% |
| Heritage and arts | 10.2 | 16.4 | 60.9% | 3,047 | 3,157 | 3.6% |
| Music | 7.5 | 12.0 | 60.4% | 1,662 | 2,216 | 33.3% |
| Performing arts | 7.2 | 11.2 | 54.9% | 1,146 | 1,508 | 31.6% |
| **3) Media** | **64.2** | **101.4** | **58.0%** | **2,670** | **3,080** | **15.4%** |
| Editorial | 27.8 | 50.8 | 82.5% | 3,829 | 3,794 | -0.9% |
| Audio-visual | 36.3 | 50.6 | 39.1% | 1,782 | 2,364 | 32.7% |
| **4) Technology** | **150.9** | **306.1** | **102.8%** | **6,688** | **7,848** | **17.3%** |
| R&D | 82.2 | 166.3 | 102.3% | 3,791 | 4,911 | 29.6% |
| ICT | 55.5 | 112.9 | 103.6% | 8,344 | 9,990 | 19.7% |
| Biotechnology | 13.2 | 26.9 | 102.8% | 4,926 | 5,393 | 9.5% |
| **Creative industries** | **469.8** | **892.5** | **90.0%** | **4,323** | **5,422** | 25.4% |

Source: FIRJAN (2014).

Another study elaborated by Oliveira, Araujo and Silva to IPEA (2013) presents an estimation of the Creative Economy size in Brazil, both to the formal and informal sectors. To measure this size, two dimensions are used and two approaches are developed. The two different dimensions comprise the productive sector – in which the focus is on the creative character of the economic activity – and the occupational dimension of the creative classes – in which the focus is on the occupation exercised by the employee. The approaches comprise the formal economy, based on data from the Annual Report of Social Information (RAIS) of the Ministry of Labor and Employment (MTE), and the formal and informal economy, based on data from the National Household Survey (PNAD), carried out by the Brazilian Institute of Geography and Statistics (IBGE). The identification of economic sectors that define the creative economy also comprises the use of data from the Annual Survey of Services (PAS) carried by IBGE, allowing for an estimation of the value added by enterprises in creative industries, in order to identify the participation of the creative economy in the Brazilian GDP.

IPEA study uses the data from PNAD-IBGE to measure the size of formal and informal creative economy in the period 2006-2010. The number of workers in the creative economy would be around 2% according to both criteria: considering to the occupational criterion, the creative industry employed 575,000 workers in 2010, while considering the sectoral criterion it reaches 583,000 employees. According to the sectoral criterion, the more relevant sectors are publishing and print media, new media, creative services and audiovisual. According to the occupational criterion, creative and design services have concentrated most of the occupations. There are also several creative services workers (among which include, among others, architects and teaching professionals) as well as designers in companies whose core business is not exactly tied to the creative economy. In order to assess the extent of the creative economy, IPEA study used the data from PAS-IBGE corrected by the proportionality of the creative occupations derived from the RAIS to estimate the Value Added (VA) generated by the creative industries in Brazil in 2009. According to this procedure, the VA of the Brazilian creative economy corresponded to 1.1% of GDP. When comparing the VA generated by the creative industries with the VA of whole economy in 2009, we get 1.2%. It should be noted that this comparison does not incorporate the informal dimension of creative activities in the Brazilian economy.

## 4. REGIONAL DISTRIBUTION OF CREATIVE ACTIVITIES IN BRAZIL

### 4.1. HYPOTHESIS AND METHODOLOGY

The analysis is mainly descriptive, without a concern to define quantitative correlations between the factors that could influence the process of regionalization in the creative industries. Initially, the analysis relies on traditional measures (indexes) of concentration to discuss to what extent the creative activities are dispersed throughout the territory. On the other hand, the analysis also seeks to assess the degree of sectoral concentration of these activities in each territory (regions and federal states). The differentiation of creative activity sectors permits to distinguish how those with higher content "digital" and those more directly associated with the artistic and cultural heritage are regionally distributed. The hypothesis is that the regional distribution of creative activities tends to be affected by the regional specialization of the territories in each one of these groups.

We can also admit that agglomeration economies might have affected the process of regional specialization in creative activities, but the evidences show that these economies tend to be different from traditional "agglomeration economies". In creative activities, these economies would be mainly associated with some characteristics of knowledge production at the local level and to the knowledge conversion in skills and competences – disseminated among workers employed in creative activities – that reinforces the value of creativity as a means to territorial differentiation. This discussion about the relevance of the generation and diffusion of knowledge to the process of territorial development may be associated with the territorial knowledge base classification into three ideal-types proposed by Asheim *et al.* (2011) and Martin (2012): Synthetic (engineering based), Analytical (science based) and Symbolic (artistic based), forming the so-called SAS model. This analytical model seeks to consider the three types of knowledge that prevail in a region. Combining theory and empirical observation provided by this model, we could infer certain expected characteristics and some typical examples of activities structured from these bases

The symbolic knowledge base comprises an emphasis on the subjective dimension of the reality interpretation and on the collective share of worldviews, strongly grounded in cultural values of a society. According to Asheim *et al.* (2005), this kind of knowledge privileges the aesthetic attributes of products, the creation of specific designs and the economical use of various cultural artifacts. The sectors included in the broad definition of creative economy proposed by Howkins (2001) and others (UNCTAD, 2010 and 2013) tend to be strongly based on a symbolic knowledge base. These activities guide their search processes towards the creation of new ideas and values, seeking intangible results instead of the conventional process and product innovations. In this context, the tacit component of knowledge generated is predominant. Creative industries are highly specialized users of creative workers, mobilizing their talent for commercial purposes. This "creative class" is a very capacious grouping of many different kinds of professional, managerial and technical workers (not just creative workers in the cultural and creative industries), producing innovation of various types (FLORIDA, 2002, 2006). Another feature of the knowledge mobilized in this type of economic activity refers to the specific character of the context in which it was generated and assimilated. The sectors in which prevails a symbolic knowledge base attribute a limited relevance to structures such as R&D laboratories or to formal interactions between universities and firms (comprising formal contracts and formal mechanisms of knowledge transfer). Despite the relevance of the academic knowledge for the training of professionals that develop their activities in this type of industry, basic and applied research becomes less relevant as the knowledge is predominantly tacit and context specific. In these contexts, the relevance of S&T infrastructures comprises mainly the formation of creative people. Another consequence of these characteristics refers to high relevance of know-who and to the establishment of networks of interaction and to the creative cooperation among professionals. Consequently, we can justify the high relevance of locational factors for this type of industry, not only because of the relevance of tacit knowledge, but also due to the context-specific characteristic of symbolic knowledge, strongly based on territorial factors.

The improvement of the Creative Economy has an economic potential to generate a more comprehensive and well-balanced development to developing countries, reinforcing a process of inclusive development at local and regional levels. However, this process reflects the previous distribution of those activities in the territory and the previous patterns of productive specialization of the different regions in different sectors of them. In this perspective, a relevant issue refers to the effective potential of the strengthening of creative activities to contribute to the reduction of regional inequality, spreading the dissemination of those activities throughout the territory, especially in the direction of less favored regions.

In order to discuss these aspects, the following analysis presents an attempt to map of the regional distribution of jobs and remunerations in creative activities in Brazil. The basic source of information comprises data about formal jobs extracted from RAIS, the Annual Report of Social Information provided by the Brazilian Ministry of Labor and Employment. The methodology also considers a spatial criterion to locate economic activities in the territory based not only in an analysis with focus on federative states but also on the concept of "homogeneous micro-regions", defined by IBGE, the Brazilian Institute of Economic Statistics. The economic activities were distinguished according to a 4-digit Brazilian industrial classification, which is compatible with the International Standard Industrial Classification (ISIC). Different groups of creative activities were identified, in order to establish specific criteria for the identification of matched pairs comprising those activities and the territorial concentration of the entrepreneurial activity. It should be noted that the criterion used to identify creative activities have been adapted to take into account the classification of economic activities provided by this database. Concerning the data from RAIS, which include information about formal jobs collected from business units, eleven activities were considered: 1) Publishing and Printing; 2) Film, video and music; 3) Radio and TV; 4) Software development; 5) Architectural services; 6) Advertising agencies; 7) Design and Interior decoration; 8) Photographic and similar activities; 9) Performing activities; 10) Activities related to cultural heritage; 11) Activities of membership organizations linked to culture and art.

### 4.2. THE REGIONAL DISTRIBUTION OF JOBS IN CREATIVE ACTIVITIES

According to data from RAIS, approximately 683,000 formal jobs were concentrated in creative activities in 2013 (Table 3), which accounted for 1.4% of the overall formal employments recorded by RAIS (approximately 49 million in 2013).Considering the classification of economic activities of RAIS, the largest share were concentrated on Software development (with 326,438 formal jobs, equivalent to 47.8% of the overall jobs in creative activities), followed by Radio and TV (with 112,820 formal jobs, equivalent to 16.5% of the overall jobs in creative activities), Publishing and Printing (with 105,744, equivalent to 15.5% of the overall jobs in creative activities), Advertising agencies (with 31,574 formal jobs, equivalent to 4.6% of the overall jobs in creative activities) and Film, video and music (with 29,921 formal jobs, equivalent to 4.4% of the overall jobs in creative activities).

With regard to the regional distribution, according to data from RAIS, 61.3% of formal jobs in creative activities were concentrated in the Southeast, compared to 50.3% for the overall formal jobs, making the participation of creative activities in that region to reach 1.7%. In terms of distribution by federative states in that region, 40.4% of formal jobs in creative activities were concentrated in São Paulo, 11.6% in Rio de Janeiro and 7.6% in Minas Gerais. In terms of relative share of the Southeast, the most significant activities were the Design and Interior decoration (with 67.2% of the formal jobs in the region), Software development (65.5%) and Advertising agencies (65.1%). The South region concentrated 17.2% of formal jobs in creative activities, corresponding to same percentage for the overall formal jobs, making the participation of creative activities in that region reaches 1.4%. In terms of distribution by federative states in the region, 6.7% of formal jobs in creative activities were concentrated in Rio Grande do Sul, 6.0%, in Paraná and 4.6% in Santa Catarina. In terms of the South relative share, the most important activities were those of Photographic and similar activities (with 22.0% of formal jobs in the region), Publishing and Printing (21.7%) and Activities related to cultural heritage (21.2%). The Northeast region concentrated 10.8% of formal jobs in creative activities, compared to 18.2% for the overall formal jobs, making the participation of creative activities in that region reach 0.8%. In terms of distribution by federative states in that region, 2.6% of formal jobs in creative activities were concentrated in Bahia, 2.4% in Ceará and 2.4% in Pernambuco. In terms of the relative participation of the Northeast, the most important activities were those of Performing activities (with 20.9% of formal jobs in the region), Activities of membership organizations linked to culture and art (20.3%), Architectural services (14.8%) and Activities related to cultural heritage (14.5%). The Midwest region concentrated 8.0% of formal jobs in creative activities, compared to 8.7% for the overall formal jobs, making the participation of creative activities in that region reach 1.3%. In terms of distribution by federative states in that region, 4.2% of formal jobs in creative activities were concentrated in the Federal District and 1.9% in Goiás. In terms of the relative share of the Midwest, the most significant activities were the Software development (with 9.0% of formal jobs in the region), Radio and TV (8.9%) and Film, video and music (8.1%). The North region concentrated 2.7% of formal jobs in creative activities, compared to 5.6% for the overall formal jobs, making the participation of creative activities in that region reach 0.7%. In

**Table 3 – Creative Activities and Formal Jobs – sectoral and regional distribution of formal jobs in creative activities – Data from RAIS (2013)**

| | Total | Publishing and Printing | Film, video and music | Radio and TV | Software development | Architectural services | Advertising agencies | Design and Interior decoration | Photographic and similar activities | Performing activities | Activities related to cultural heritage | Activities of membership organizations linked to culture and art | Sub-total creative activities | Creative activities /total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rondônia | **0.8%** | 0.4% | 0.9% | 1.0% | 0.1% | 0.1% | 0.2% | 0.4% | 0.5% | 0.3% | 0.4% | 0.0% | **0.3%** | **0.6%** |
| Acre | **0.3%** | 0.1% | 0.2% | 0.3% | 0.0% | 0.2% | 0.1% | 0.4% | 0.1% | 0.0% | 3.3% | 0.3% | **0.1%** | **0.7%** |
| Amazonas | **1.3%** | 0.9% | 1.5% | 1.6% | 0.3% | 1.6% | 1.0% | 0.2% | 0.1% | 4.3% | 0.3% | 0.2% | **0.8%** | **0.9%** |
| Roraima | **0.2%** | 0.1% | 0.2% | 0.3% | 0.0% | 0.0% | 0.1% | 0.0% | 0.1% | 0.0% | 0.2% | 0.0% | **0.1%** | **0.7%** |
| Pará | **2.3%** | 1.2% | 1.5% | 1.9% | 0.4% | 1.3% | 1.4% | 1.7% | 1.4% | 1.4% | 4.5% | 2.2% | **1.0%** | **0.6%** |
| Amapá | **0.3%** | 0.0% | 0.2% | 0.2% | 0.0% | 0.2% | 0.2% | 0.1% | 0.0% | 0.1% | 0.1% | 0.4% | **0.1%** | **0.5%** |
| Tocantins | **0.5%** | 0.2% | 0.4% | 0.4% | 0.1% | 0.2% | 0.1% | 0.3% | 0.4% | 0.1% | 0.0% | 0.1% | **0.2%** | **0.5%** |
| North | **5.6%** | **2.9%** | **4.8%** | **5.7%** | **0.9%** | **3.6%** | **3.2%** | **3.0%** | **2.7%** | **6.3%** | **8.8%** | **3.2%** | **2.7%** | **0.7%** |
| Maranhão | **1.5%** | 0.5% | 1.2% | 1.5% | 0.2% | 1.6% | 1.0% | 1.2% | 0.4% | 0.5% | 1.1% | 0.3% | **0.6%** | **0.5%** |
| Piauí | **0.9%** | 0.4% | 0.5% | 0.7% | 0.1% | 1.6% | 0.6% | 0.2% | 0.5% | 0.4% | 4.1% | 3.4% | **0.4%** | **0.7%** |
| Ceará | **3.1%** | 2.4% | 2.4% | 2.2% | 2.1% | 2.4% | 1.8% | 2.4% | 2.0% | 2.7% | 0.2% | 11.0% | **2.4%** | **1.1%** |
| Rio Grande do Norte | **1.3%** | 0.6% | 1.7% | 1.2% | 0.6% | 1.2% | 0.9% | 0.8% | 0.8% | 2.1% | 1.6% | 0.6% | **0.8%** | **0.9%** |
| Paraíba | **1.3%** | 0.9% | 1.0% | 1.5% | 0.4% | 0.2% | 0.6% | 0.3% | 0.5% | 2.2% | 0.0% | 0.4% | **0.7%** | **0.8%** |
| Pernambuco | **3.6%** | 2.8% | 2.7% | 2.3% | 2.2% | 2.1% | 3.0% | 1.0% | 3.3% | 3.8% | 2.3% | 1.5% | **2.4%** | **0.9%** |
| Alagoas | **1.0%** | 0.3% | 0.7% | 0.8% | 0.3% | 0.5% | 0.6% | 0.1% | 0.8% | 0.4% | 0.1% | 0.4% | **0.4%** | **0.5%** |
| Sergipe | **0.8%** | 0.5% | 0.5% | 0.7% | 0.2% | 1.4% | 0.9% | 0.1% | 0.6% | 0.9% | 0.2% | 0.3% | **0.4%** | **0.7%** |
| Bahia | **4.7%** | 1.8% | 2.9% | 2.9% | 2.2% | 3.9% | 3.4% | 3.6% | 2.9% | 8.0% | 4.9% | 2.4% | **2.6%** | **0.8%** |
| Northeast | **18.2%** | **10.2%** | **13.6%** | **13.6%** | **8.2%** | **14.8%** | **12.8%** | **9.7%** | **11.8%** | **20.9%** | **14.5%** | **20.3%** | **10.8%** | **0.8%** |
| Minas Gerais | **10.3%** | 7.0% | 6.2% | 7.2% | 7.9% | 8.3% | 6.4% | 6.1% | 10.9% | 10.5% | 11.2% | 5.4% | **7.6%** | **1.0%** |
| Espírito Santo | **2.0%** | 1.9% | 1.2% | 1.9% | 1.5% | 1.4% | 1.5% | 1.4% | 2.2% | 0.9% | 0.3% | 2.9% | **1.6%** | **1.2%** |
| Rio de Janeiro | **9.4%** | 10.2% | 15.9% | 14.6% | 10.9% | 17.3% | 8.4% | 11.4% | 8.6% | 16.8% | 15.6% | 7.6% | **11.6%** | **1.7%** |
| São Paulo | **28.7%** | 40.5% | 37.0% | 29.8% | 45.2% | 33.0% | 48.9% | 48.3% | 35.2% | 24.1% | 23.5% | 42.8% | **40.4%** | **2.0%** |
| Southeast | **50.3%** | **59.6%** | **60.4%** | **53.4%** | **65.5%** | **59.9%** | **65.1%** | **67.2%** | **56.9%** | **52.3%** | **50.6%** | **58.7%** | **61.3%** | **1.7%** |
| Paraná | **6.4%** | 8.6% | 5.0% | 5.7% | 5.5% | 4.1% | 3.7% | 6.4% | 6.8% | 5.5% | 14.7% | 6.2% | **6.0%** | **1.3%** |
| Santa Catarina | **4.5%** | 3.8% | 3.2% | 4.6% | 5.3% | 3.4% | 3.7% | 4.4% | 6.4% | 2.9% | 0.3% | 3.4% | **4.6%** | **1.4%** |
| Rio Grande do Sul | **6.3%** | 9.4% | 4.9% | 8.0% | 5.6% | 7.3% | 4.5% | 3.0% | 8.8% | 4.5% | 6.1% | 3.8% | **6.5%** | **1.4%** |
| South | **17.2%** | **21.7%** | **13.2%** | **18.4%** | **16.3%** | **14.8%** | **12.0%** | **13.8%** | **22.0%** | **13.0%** | **21.2%** | **13.4%** | **17.2%** | **1.4%** |
| Mato Grosso do Sul | **1.3%** | 1.0% | 1.1% | 1.4% | 0.8% | 1.0% | 1.1% | 0.3% | 0.7% | 1.9% | 0.9% | 0.6% | **1.0%** | **1.1%** |
| Mato Grosso | **1.6%** | 0.6% | 2.2% | 1.4% | 0.8% | 0.8% | 1.1% | 1.3% | 1.2% | 0.6% | 0.2% | 0.4% | **0.9%** | **0.8%** |
| Goiás | **3.1%** | 1.9% | 2.3% | 2.6% | 1.7% | 2.6% | 1.5% | 2.6% | 2.4% | 3.0% | 0.9% | 0.9% | **1.9%** | **0.9%** |
| Distrito Federal | **2.7%** | 2.1% | 2.5% | 3.4% | 5.8% | 2.4% | 3.3% | 2.1% | 2.2% | 1.8% | 2.9% | 2.4% | **4.2%** | **2.2%** |
| Midwest | **8.7%** | **5.6%** | **8.1%** | **8.9%** | **9.0%** | **6.9%** | **6.9%** | **6.2%** | **6.6%** | **7.4%** | **5.0%** | **4.4%** | **8.0%** | **1.3%** |
| TOTAL | **48,948,433** | **105,744** | **29,921** | **112,820** | **326,438** | **9,351** | **31,574** | **3,552** | **18,741** | **19,190** | **6,673** | **18,876** | **682,880** | **1.4%** |
| % creative activities in total | **100.0%** | **0.2%** | **0.1%** | **0.2%** | **0.7%** | **0.0%** | **0.1%** | **0.0%** | **0.0%** | **0.0%** | **0.0%** | **0.0%** | **1.4%** | |
| % in creative activities | | **15.5%** | **4.4%** | **16.5%** | **47.8%** | **1.4%** | **4.6%** | **0.5%** | **2.7%** | **2.8%** | **1.0%** | **2.8%** | **100.0%** | |

Source: Own elaboration based on data from RAIS (2013).

terms of distribution by federative states in that region, 1.0% of formal jobs in creative activities were concentrated in Pará and 0.8% in the Amazonas. In terms of relative share of the North, the most important activities were those of Activities related to cultural heritage (with 8.8% of formal jobs in the region) Performing activities (6.3%), Radio and TV (5.7%) and Film, video and music (4.8%).

A subsequent analysis comprises an effort to match the information about the distribution of jobs in creative activities extracted from RAIS and from the Census. The data from Census comprises a classification of activities in which the respondents were employed, while the data from RAIS refers to the classification of the sector of activity of the respondent companies. Matching those data, through a harmonization of the classification of activities, we tried to define an index of "formalization" of the labor market in creative activities, given by the relationship among the data (Table 4). According to the information collected for the set of creative activities, this ratio reached 36.2% in 2010, which is 29% lower than the ratio observed for the overall activities (51.0%), reflecting the lower level of formal employment in creative activities. Regionally, the "index of formalization" of the labor market in creative activities was highest in the Midwest region, reaching 40.5% because of the value observed in the Federal District (63.0%). In the Southeast, this index reached 39.6%, reflecting the high value observed in São Paulo (43.0%). In the South, the index reached 36.3%, reflecting the high value observed in Santa Catarina (39.6%). Contrastingly, the index presented significantly lower values in the North (23.0%) and in the Northeast (25.1%).

We can also articulate the level of "formalization" of the labor market in creative activities to two additional aspects. The first involves the formal education level of employees in those activities, assessing the participation of workers with higher education level in creative activities and comparing this indicator with the indicator observed for the overall set of economic activities. Data presented in Table 4 indicate that the share of employees with higher education in creative activities is higher in the Southeast (46.4%), in the Midwest (40.3%) and in the South (35.5%), when compared to the Northeast (28.5%) and the North (22.5%). Besides that, when compared to the share of employees with higher education in the overall activities, the share in creative actives is higher in the Southeast (2.43) and in the South (2.08), particularly when compared to the Northeast (1.61) and the North (1.26). The second aspect involves the enrollment in higher level education in academic fields related to creative activities[1],

[1] The analysis selected the followed academic fields: Computer science, Information processing, Architecture and urbanism, Arts (general courses), Handicraft, Fine Arts, Design and styling, Music and performing arts, Audio-visual techniques and media production.

## Table 4 – Index of formalization in labor market – formal jobs extracted from RAIS compared to total occupations extracted from Demographic Census (2010)

| | Index of formalization – Comparison between Census (2010) and RAIS (2010) | | | Share of Higher education Employees – RAI S (2013) | | | Enrollment in education of higher level education – Census MEC (2014) | | |
|---|---|---|---|---|---|---|---|---|---|
| | Index of formalization in – Total | Index of formalization in Sub-total creative activities | Index of formalization in –Creative activities /total | Higher education – Creative Activities | Higher education – Overall Activities | Comparison – Creative Activities/ Overall Activities | Enrollment in education of higher level –academic fields related to creative activities | Enrollment in education of higher level – overall academic fields | % of Enrollment in education of higher level –academic fields related to creative activities |
| Rondônia | 45.7% | 25.7% | 56.2% | 11.5% | 14.7% | 0.78 | 2,816 | 47,915 | 5.9% |
| Acre | 43.4% | 24.2% | 55.7% | 16.3% | 22.0% | 0.74 | 1,862 | 25,166 | 7.4% |
| Amazonas | 43.5% | 23.9% | 55.0% | 23.4% | 18.4% | 1.27 | 8,038 | 138,407 | 5.8% |
| Roraima | 43.3% | 29.5% | 68.1% | 18.7% | 27.5% | 0.68 | 1,090 | 20,991 | 5.2% |
| Pará | 32.8% | 24.9% | 76.0% | 26.4% | 17.0% | 1.55 | 6,711 | 134,849 | 5.0% |
| Amapá | 41.5% | 14.4% | 34.8% | 23.5% | 14.0% | 1.68 | 2,624 | 31,165 | 8.4% |
| Tocantins | 40.9% | 11.8% | 28.8% | 22.1% | 21.3% | 1.04 | 1,909 | 49,119 | 3.9% |
| **North** | 38.5% | 23.0% | 59.8% | **22.5%** | **17.9%** | **1.26** | **25,050** | **447,612** | **5.6%** |
| Maranhão | 27.0% | 15.0% | 55.6% | 18.1% | 16.1% | 1.13 | 5,908 | 119,697 | 4.9% |
| Piauí | 31.1% | 17.1% | 55.2% | 19.4% | 22.9% | 0.85 | 4,356 | 95,724 | 4.6% |
| Ceará | 39.4% | 29.4% | 74.6% | 26.9% | 18.7% | 1.44 | 18,209 | 225,460 | 8.1% |
| Rio Grande do Norte | 46.4% | 23.0% | 49.5% | 25.6% | 18.8% | 1.37 | 5,402 | 109,016 | 5.0% |
| Paraíba | 39.2% | 33.4% | 85.1% | 26.4% | 19.5% | 1.36 | 8,333 | 127,875 | 6.5% |
| Pernambuco | 45.1% | 26.5% | 58.8% | 37.4% | 19.2% | 1.95 | 15,456 | 225,993 | 6.8% |
| Alagoas | 42.0% | 21.3% | 50.8% | 20.1% | 12.9% | 1.56 | 4,350 | 81,914 | 5.3% |
| Sergipe | 44.4% | 30.0% | 67.7% | 24.0% | 20.4% | 1.18 | 3,767 | 68,472 | 5.5% |
| Bahia | 36.6% | 24.5% | 66.9% | 29.2% | 15.3% | 1.91 | 14,896 | 316,210 | 4.7% |
| **Northeast** | 38.4% | 25.1% | 65.4% | **28.5%** | **17.7%** | **1.61** | **80,677** | **1,370,361** | **5.9%** |
| Minas Gerais | 50.2% | 32.0% | 63.8% | 37.8% | 16.3% | 2.32 | 44,775 | 661,585 | 6.8% |
| Espírito Santo | 50.8% | 33.3% | 65.7% | 37.7% | 17.0% | 2.22 | 8,496 | 118,693 | 7.2% |
| Rio de Janeiro | 57.1% | 36.6% | 64.2% | 43.9% | 21.3% | 2.07 | 40,086 | 544,605 | 7.4% |
| São Paulo | 64.4% | 43.0% | 66.8% | 49.1% | 19.5% | 2.51 | 158,749 | 1,702,174 | 9.3% |
| **Southeast** | 58.9% | 39.6% | 67.3% | **46.4%** | **19.1%** | **2.43** | **252,106** | **3,027,057** | **8.3%** |
| Paraná | 52.4% | 35.0% | 66.6% | 36.9% | 18.3% | 2.02 | 30,217 | 374,501 | 8.1% |
| Santa Catarina | 57.8% | 39.6% | 68.6% | 39.7% | 16.5% | 2.41 | 24,496 | 227,099 | 10.8% |
| Rio Grande do Sul | 50.7% | 35.5% | 70.1% | 31.1% | 16.1% | 1.93 | 35,941 | 391,564 | 9.2% |
| **South** | 53.0% | 36.3% | 68.5% | **35.5%** | **17.0%** | **2.08** | **90,654** | **993,164** | **9.1%** |
| Mato Grosso do Sul | 47.5% | 30.9% | 65.0% | 25.8% | 16.9% | 1.52 | 6,512 | 88,267 | 7.4% |
| Mato Grosso | 45.3% | 23.0% | 50.8% | 28.2% | 15.9% | 1.78 | 7,445 | 128,380 | 5.8% |
| Goiás | 44.4% | 30.6% | 69.0% | 29.3% | 16.4% | 1.79 | 12,534 | 210,215 | 6.0% |
| Distrito Federal | 85.4% | 63.0% | 73.7% | 51.6% | 27.8% | 1.86 | 16,935 | 183,811 | 9.2% |
| **Midwest** | 52.8% | 40.5% | 76.6% | **40.3%** | **19.9%** | **2.03** | **43,426** | **610,673** | **7.1%** |
| **TOTAL** | 51.0% | 36.2% | 71.0% | **41.5%** | **18.5%** | **2.24** | **491,913** | **6,448,867** | **7.6%** |

Source: Author's elaboation based on data from based on data from Brazilian Census (2010), RAIS (2010 and 2013) and the Brazilian Census (MEC, 2014).

compared to the enrollment in higher level education for the overall academic fields, reflecting the potential contribution of the universities to the improvement of the quality of employment in those activities. Data to elaborate this analysis were extracted from the Brazilian Census of Higher Education conducted by the Ministry of Education. The share of the enrollment in higher level education in academic fields related to creative activities is higher in the South (9.1%) and in the Southeast (8.3%), when compared to the Midwest (7.1%), the Northeast (5.9%) and the North (5.6%). Considering these evidences, we can postulate that the formalization" of the labor market in creative activities tend to be positively correlated with the level of education of the employees in those activities and, additionally, with the enrollment in higher level education for academic fields related to those activities, which could generate proper qualified people to be absorbed by the labor market.

### 4.3. THE REGIONAL DISTRIBUTION OF SALARIES IN CREATIVE ACTIVITIES

The RAIS database also provides information about the amount of monthly salaries paid in creative activities. According to data from RAIS, in 2013 approximately 2.2% of the overall monthly remuneration were concentrated in creative activities, totaling approximately R$ 2.2 billion per month in 2013 (Table 5). Of this total, the largest share was concentrated on Software development (with 55.8% of the monthly remuneration in creative activities), followed by Radio and TV (17.2%), Publishing and Printing (13.1%), Advertising agencies (5.2%) and Film, Video and Music (2.4%). In terms of the regional relevance of creative activities, their share in the overall monthly remuneration is higher to the Southeast (2.9%), being particularly high to São Paulo (3.3%) and Rio de Janeiro (2.9%), followed by the South (1.8%) and by the Midwest (1.6%).

With regard to regional distribution of salaries, according to data from RAIS, 71.3% of the monthly remuneration in creative activities were concentrated in the Southeast, against 53.8% for the overall monthly salaries, making the participation of creative activities in that region to rise to 2.9%. In terms of distribution by federative states in the region, 49.3% of the monthly remuneration for creative activities were concentrated in São Paulo, 14.8% in Rio de Janeiro and 5.9% in Minas Gerais. In terms of the relative share of the Southeast, the most important activities were those of Advertising agencies (with 80.9% of the monthly remuneration concentrated in that region) Software development (72.4%), Film, video and music (72.6%) and Architectural services (71.2%).Among the other regions, 13.2% of the monthly remunerations in creative activities were concentrated in the South, compared to 16.0% for the overall monthly salaries, making the participation of creative activities in that region reach 1.8%. In

## Table 5– Creative Activities and Income Generation – Monthly Labor Income (R$) in formal jobs – Data from RAIS (2013) – RS 1000

| | Total | Publishing and Printing | Film, video and music | Radio and TV | Software development | Architectural services | Advertising agencies | Design and Interior decoration | Photographic and similar activities | Performing activities | Activities related to cultural heritage | Activities of membership organizations linked to culture and art | Sub-total creative activities | Creative activities /total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rondônia | 0.7% | 0.2% | 0.6% | 0.5% | 0.0% | 0.0% | 0.1% | 0.2% | 0.3% | 0.2% | 0.2% | 0.0% | 0.1% | 0.5% |
| Acre | 0.3% | 0.0% | 0.1% | 0.2% | 0.0% | 0.1% | 0.0% | 0.2% | 0.1% | 0.0% | 2.1% | 0.3% | 0.1% | 0.6% |
| Amazonas | 1.3% | 0.7% | 0.9% | 1.1% | 0.1% | 1.2% | 0.6% | 0.1% | 0.1% | 5.7% | 0.1% | 0.2% | 0.5% | 0.9% |
| Roraima | 0.2% | 0.0% | 0.1% | 0.2% | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | 0.1% | 0.0% | 0.0% | 0.5% |
| Pará | 2.1% | 0.8% | 0.9% | 0.9% | 0.3% | 0.8% | 0.7% | 1.0% | 1.1% | 0.9% | 13.0% | 1.9% | 0.7% | 0.7% |
| Amapá | 0.3% | 0.0% | 0.1% | 0.1% | 0.0% | 0.1% | 0.1% | 0.0% | 0.0% | 0.1% | 0.0% | 0.2% | 0.0% | 0.3% |
| Tocantins | 0.5% | 0.1% | 0.2% | 0.2% | 0.0% | 0.1% | 0.1% | 0.1% | 0.3% | 0.1% | 0.0% | 0.0% | 0.1% | 0.4% |
| North | 5.3% | 1.8% | 3.1% | 3.1% | 0.5% | 2.3% | 1.5% | 1.7% | 2.1% | 6.9% | 15.5% | 2.7% | 1.6% | 0.6% |
| Maranhão | 1.2% | 0.2% | 0.7% | 0.8% | 0.1% | 0.9% | 0.4% | 0.7% | 0.3% | 0.3% | 0.5% | 0.2% | 0.3% | 0.5% |
| Piauí | 0.7% | 0.2% | 0.3% | 0.4% | 0.0% | 0.7% | 0.2% | 0.1% | 0.4% | 0.2% | 2.0% | 2.4% | 0.2% | 0.6% |
| Ceará | 2.3% | 1.4% | 1.5% | 1.3% | 1.3% | 1.8% | 0.7% | 2.3% | 1.4% | 1.4% | 0.0% | 8.8% | 1.4% | 1.3% |
| Rio Grande do Norte | 1.1% | 0.3% | 1.0% | 0.7% | 0.4% | 1.1% | 0.4% | 0.4% | 0.6% | 1.4% | 0.5% | 0.4% | 0.5% | 0.9% |
| Paraíba | 1.0% | 0.4% | 0.7% | 0.8% | 0.2% | 0.1% | 0.2% | 0.1% | 0.4% | 1.3% | 0.0% | 0.2% | 0.4% | 0.8% |
| Pernambuco | 3.0% | 2.3% | 1.6% | 1.7% | 1.7% | 2.1% | 1.6% | 0.6% | 2.3% | 2.4% | 1.1% | 1.3% | 1.8% | 1.3% |
| Alagoas | 0.8% | 0.1% | 0.4% | 0.5% | 0.1% | 0.3% | 0.2% | 0.1% | 0.6% | 0.2% | 0.0% | 0.2% | 0.2% | 0.5% |
| Sergipe | 0.8% | 0.3% | 0.3% | 0.4% | 0.1% | 0.6% | 0.3% | 0.0% | 0.5% | 0.6% | 0.0% | 0.2% | 0.2% | 0.6% |
| Bahia | 3.9% | 1.2% | 1.8% | 2.2% | 1.3% | 4.0% | 1.8% | 2.8% | 2.2% | 8.4% | 1.7% | 2.3% | 1.6% | 0.9% |
| Northeast | 14.6% | 6.5% | 8.3% | 8.7% | 5.2% | 11.6% | 5.6% | 7.2% | 8.5% | 16.3% | 5.9% | 15.9% | 6.5% | 1.0% |
| Minas Gerais | 8.8% | 5.4% | 4.1% | 4.7% | 6.5% | 6.3% | 2.8% | 3.9% | 8.6% | 8.8% | 8.9% | 6.6% | 5.9% | 1.5% |
| Espírito Santo | 1.7% | 1.5% | 0.8% | 1.3% | 1.2% | 1.0% | 0.9% | 0.9% | 1.8% | 0.5% | 0.2% | 2.9% | 1.3% | 1.6% |
| Rio de Janeiro | 11.2% | 11.6% | 18.9% | 29.1% | 11.4% | 18.5% | 8.7% | 11.7% | 8.6% | 18.6% | 29.4% | 8.9% | 14.8% | 2.9% |
| São Paulo | 32.2% | 51.9% | 48.8% | 33.0% | 53.3% | 45.5% | 68.6% | 53.5% | 43.3% | 29.5% | 20.7% | 48.5% | 49.3% | 3.3% |
| Southeast | 53.8% | 70.4% | 72.6% | 68.1% | 72.4% | 71.2% | 80.9% | 70.0% | 62.3% | 57.4% | 59.1% | 67.0% | 71.3% | 2.9% |
| Paraná | 5.9% | 7.7% | 3.7% | 4.3% | 3.6% | 3.4% | 2.4% | 7.1% | 7.0% | 8.1% | 9.7% | 4.9% | 4.4% | 1.6% |
| Santa Catarina | 4.1% | 2.4% | 2.5% | 2.6% | 4.4% | 2.5% | 1.9% | 6.6% | 6.5% | 2.1% | 0.1% | 2.5% | 3.5% | 1.9% |
| Rio Grande do Sul | 6.0% | 6.2% | 3.8% | 4.5% | 5.7% | 4.7% | 2.8% | 2.7% | 7.9% | 3.3% | 5.3% | 2.6% | 5.3% | 1.9% |
| South | 16.0% | 16.4% | 10.1% | 11.4% | 13.6% | 10.6% | 7.1% | 16.5% | 21.3% | 13.5% | 15.2% | 10.0% | 13.2% | 1.8% |
| Mato Grosso do Sul | 1.2% | 0.5% | 0.8% | 0.8% | 0.4% | 0.7% | 0.4% | 0.2% | 0.6% | 1.7% | 0.6% | 0.4% | 0.5% | 0.9% |
| Mato Grosso | 1.5% | 0.3% | 1.4% | 0.8% | 0.6% | 0.4% | 0.4% | 0.8% | 0.9% | 0.4% | 0.1% | 0.4% | 0.6% | 0.9% |
| Goiás | 2.7% | 1.4% | 1.8% | 1.6% | 0.9% | 1.5% | 0.7% | 2.1% | 2.0% | 2.3% | 0.3% | 0.6% | 1.1% | 0.9% |
| Distrito Federal | 4.9% | 2.8% | 1.9% | 5.5% | 6.4% | 1.7% | 3.4% | 1.6% | 2.3% | 1.6% | 3.2% | 3.0% | 5.2% | 2.3% |
| Midwest | 10.2% | 4.9% | 5.9% | 8.7% | 8.3% | 4.2% | 4.8% | 4.6% | 5.8% | 6.0% | 4.3% | 4.4% | 7.5% | 1.6% |
| TOTAL | 101,491,948 | 288,125 | 53,630 | 378,568 | 1,224,553 | 19,631 | 114,788 | 6,188 | 22,308 | 34,441 | 22,032 | 31,970 | 2,196,234 | 2.2% |
| % creative activities in total | 100.0% | 0.3% | 0.1% | 0.4% | 1.2% | 0.0% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 2.2% | |
| % in creative activities | | 13.1% | 2.4% | 17.2% | 55.8% | 0.9% | 5.2% | 0.3% | 1.0% | 1.6% | 1.0% | 1.5% | 100.0% | |

Source: Author's elaboration based on data from RAIS (2013).

terms of the distribution by federative states in the region, 5.3% of the monthly remunerations in creative activities were concentrated in Rio Grande do Sul, 4.4% in Paraná and 3.5% in Santa Catarina. In terms of the relative share of the South, the most important activities were those of Photographic and similar activities (with 21.3% of the monthly remuneration concentrated in that region), Design and Interior decoration (16.5%) and Publishing and Printing (16.4 %). The Midwest region concentrated 7.5% of the monthly remunerations in creative activities, compared to 10.2% for the overall monthly salaries, making the participation of creative activities in that region reach 1.6%. In terms of the distribution by federative states in the region, 5.2% of monthly remunerations in creative activities were concentrated in the Federal District (Brasília) and 1.1% in Goiás. In terms of the relative share of the Midwest, the most important activities were those of Radio and TV (with 8.7% of the monthly remuneration concentrated in that region), Software development (8.3%), and Performing activities (6.0%). The Northeast region concentrated 6.5% of the monthly remunerations in creative activities, compared to 14.6% for the overall monthly salaries, making the participation of creative activities in that region reach 1.0%. In terms of distribution by federative states in the region, 1.8% of the monthly remuneration in creative activities was concentrated in Pernambuco, 1.6% in Bahia and 1.4% in Ceará. In terms of the relative participation of the Northeast, the most important activities were those of Performing activities (with 16.3% of the monthly remuneration concentrated in that region), Activities of membership organizations linked to culture and arts (15.9%), Architectural services (11.6%), Radio and TV (8.7%), and Film, video and music (8.3%). The North region concentrated 1.6% of the monthly remunerations in creative activities, compared to 5.3% for the overall monthly salaries, making the participation of creative activities in that region to reach 0.6%. In terms of distribution by federative states in the region, 0.7% of the monthly remuneration for creative activities was concentrated in Pará and 0.5% in the Amazonas. In terms of the relative share of the North, the most important activities were those of Activities related to cultural heritage (with 15.1% of the monthly remuneration concentrated in that region) and Performing activities (6.9%).

Based on the classification of economic activities used by RAIS, we can also analyze the distribution of the average monthly remuneration of workers involved in creative activities in 2013 (Table 6). For the set of creative activities, the monthly average salary reached R$ 3,216 in 2013, corresponding to a value 55.1% higher than the overall monthly average salary accounted by RAIS (R$ 2,073). Among the creative activities considered, this salary was highest in Software development (R$ 3,751), Advertising agencies (R$ 3,636), Radio and TV (R$ 3,356) and Activities related to cultural heritage (R$ 3,302). In contrast, among the selected activities, those with lower average monthly salaries were the Activities of membership organizations linked to culture and arts (R$ 1,694) and Photographic and similar activities (R$ 1,190).

## Table 6 – Creative Activities and Income Generation – Personal monthly worker income (R$)– Data from RAIS (2013)

| | Total | Publishing and Printing | Film, video and music | Radio and TV | Software develop-ment | Architec-tural services | Advert-ising agencies | Design and Interior decoration | Photo-graphic and similar activities | Perfor-ming activities | Activities related to cultural heritage | Activities of membership organizations linked to culture and art | Sub-total creative activities | Creative activities /total | Comp reg total | Comp reg creative activities |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rondônia | 1,903 | 1,276 | 1,292 | 1,595 | 1,533 | 968 | 1,399 | 909 | 891 | 942 | 1,962 | 687 | 1,437 | 75.5% | 91.8% | 44.7% |
| Acre | 2,041 | 1,281 | 1,273 | 1,826 | 1,716 | 1,175 | 1,462 | 897 | 802 | 2,214 | 2,111 | 1,491 | 1,723 | 84.4% | 98.4% | 53.6% |
| Amazonas | 2,020 | 1,974 | 1,147 | 2,152 | 1,817 | 1,570 | 1,980 | 1,009 | 914 | 2,383 | 968 | 1,568 | 1,977 | 97.9% | 97.4% | 61.5% |
| Roraima | 2,186 | 1,044 | 951 | 1,824 | 1,949 | 798 | 1,041 | | 881 | 679 | 1,326 | 1,910 | 1,513 | 69.2% | 105.4% | 47.0% |
| Pará | 1,900 | 1,755 | 1,110 | 1,621 | 2,764 | 1,355 | 1,729 | 1,028 | 952 | 1,065 | 9,516 | 1,520 | 2,096 | 110.4% | 91.6% | 65.2% |
| Amapá | 2,480 | 960 | 884 | 1,937 | 1,615 | 764 | 1,315 | 621 | 925 | 924 | 941 | 1,033 | 1,454 | 58.6% | 119.6% | 45.2% |
| Tocantins | 1,883 | 1,932 | 1,202 | 1,943 | 1,745 | 1,097 | 1,350 | 732 | 854 | 925 | 1,108 | 674 | 1,679 | 89.2% | 90.8% | 52.2% |
| North | 1,970 | 1,718 | 1,149 | 1,826 | 2,179 | 1,373 | 1,717 | 958 | 914 | 1,945 | 5,840 | 1,436 | 1,888 | 95.9% | 95.0% | 58.7% |
| Maranhão | 1,654 | 1,341 | 1,062 | 1,726 | 1,724 | 1,142 | 1,514 | 1,051 | 798 | 963 | 1,562 | 1,162 | 1,525 | 92.2% | 79.8% | 47.4% |
| Piauí | 1,630 | 1,253 | 997 | 1,954 | 1,436 | 916 | 1,123 | 786 | 922 | 896 | 1,577 | 1,196 | 1,399 | 85.8% | 78.6% | 43.5% |
| Ceará | 1,542 | 1,574 | 1,117 | 2,043 | 2,300 | 1,628 | 1,508 | 1,664 | 836 | 936 | 698 | 1,365 | 1,864 | 120.9% | 74.4% | 57.9% |
| Rio Grande do Norte | 1,736 | 1,545 | 1,071 | 1,852 | 2,426 | 1,894 | 1,366 | 866 | 839 | 1,210 | 1,014 | 936 | 1,798 | 103.6% | 83.7% | 55.9% |
| Paraíba | 1,520 | 1,245 | 1,215 | 1,768 | 2,020 | 897 | 1,224 | 763 | 867 | 1,066 | | 979 | 1,583 | 104.1% | 73.3% | 49.2% |
| Pernambuco | 1,703 | 2,251 | 1,090 | 2,531 | 2,943 | 2,078 | 1,917 | 1,009 | 816 | 1,157 | 1,615 | 1,396 | 2,390 | 140.3% | 82.1% | 74.3% |
| Alagoas | 1,548 | 1,095 | 1,002 | 1,990 | 1,545 | 1,157 | 924 | 1,061 | 867 | 886 | 745 | 877 | 1,475 | 95.3% | 74.7% | 45.9% |
| Sergipe | 1,885 | 1,504 | 920 | 2,120 | 1,714 | 936 | 1,116 | 489 | 892 | 1,288 | 767 | 1,160 | 1,580 | 83.8% | 90.9% | 49.1% |
| Bahia | 1,731 | 1,764 | 1,152 | 2,514 | 2,090 | 2,180 | 1,888 | 1,370 | 893 | 1,897 | 1,126 | 1,599 | 1,989 | 114.9% | 83.5% | 61.8% |
| Northeast | 1,664 | 1,723 | 1,099 | 2,140 | 2,348 | 1,643 | 1,607 | 1,284 | 854 | 1,396 | 1,342 | 1,330 | 1,923 | 115.6% | 80.2% | 59.8% |
| Minas Gerais | 1,762 | 2,098 | 1,170 | 2,211 | 3,107 | 1,587 | 1,589 | 1,118 | 942 | 1,506 | 2,608 | 2,068 | 2,489 | 141.2% | 85.0% | 77.4% |
| Espírito Santo | 1,851 | 2,250 | 1,230 | 2,359 | 3,059 | 1,482 | 2,153 | 1,061 | 983 | 997 | 1,596 | 1,693 | 2,484 | 134.2% | 89.3% | 77.2% |
| Rio de Janeiro | 2,467 | 3,089 | 2,136 | 6,703 | 3,906 | 2,245 | 3,799 | 1,782 | 1,187 | 1,989 | 6,233 | 2,003 | 4,083 | 165.5% | 119.0% | 126.9% |
| São Paulo | 2,328 | 3,490 | 2,360 | 3,717 | 4,422 | 2,899 | 5,096 | 1,932 | 1,465 | 2,190 | 2,913 | 1,919 | 3,925 | 168.6% | 112.3% | 122.0% |
| Southeast | 2,219 | 3,218 | 2,156 | 4,281 | 4,146 | 2,495 | 4,521 | 1,814 | 1,304 | 1,968 | 3,859 | 1,932 | 3,738 | 168.4% | 107.0% | 116.2% |
| Paraná | 1,927 | 2,453 | 1,332 | 2,498 | 2,474 | 1,758 | 2,371 | 1,958 | 1,223 | 2,643 | 2,180 | 1,338 | 2,345 | 121.7% | 92.9% | 72.9% |
| Santa Catarina | 1,865 | 1,758 | 1,406 | 1,882 | 3,100 | 1,541 | 1,806 | 2,630 | 1,191 | 1,259 | 1,483 | 1,235 | 2,463 | 132.1% | 89.9% | 76.6% |
| Rio Grande do Sul | 1,982 | 1,816 | 1,398 | 1,884 | 3,789 | 1,365 | 2,275 | 1,568 | 1,073 | 1,301 | 2,868 | 1,138 | 2,595 | 130.9% | 95.6% | 80.7% |
| South | 1,931 | 2,058 | 1,375 | 2,075 | 3,127 | 1,514 | 2,159 | 2,086 | 1,154 | 1,861 | 2,370 | 1,255 | 2,472 | 128.0% | 93.1% | 76.9% |
| Mato Grosso do Sul | 1,897 | 1,432 | 1,340 | 1,926 | 1,639 | 1,336 | 1,246 | 1,136 | 984 | 1,551 | 2,196 | 1,158 | 1,617 | 85.2% | 91.5% | 50.3% |
| Mato Grosso | 1,895 | 1,333 | 1,169 | 1,824 | 3,078 | 1,014 | 1,184 | 1,129 | 942 | 1,105 | 1,778 | 1,382 | 2,092 | 110.4% | 91.4% | 65.0% |
| Goiás | 1,791 | 1,898 | 1,346 | 2,129 | 2,105 | 1,168 | 1,676 | 1,393 | 961 | 1,369 | 1,153 | 1,232 | 1,912 | 106.8% | 86.4% | 59.5% |
| Distrito Federal | 3,783 | 3,681 | 1,385 | 5,336 | 4,146 | 1,445 | 3,734 | 1,318 | 1,222 | 1,599 | 3,653 | 2,081 | 4,046 | 106.9% | 182.4% | 125.8% |
| Midwest | 2,438 | 2,411 | 1,309 | 3,290 | 3,447 | 1,271 | 2,503 | 1,302 | 1,047 | 1,453 | 2,846 | 1,715 | 3,004 | 123.2% | 117.6% | 93.4% |
| TOTAL | 2,073 | 2,725 | 1,792 | 3,356 | 3,751 | 2,099 | 3,636 | 1,742 | 1,190 | 1,795 | 3,302 | 1,694 | 3,216 | 155.1% | 100.0% | 100.0% |
| % creative activities in total | 100.0% | 131.4% | 86.4% | 161.8% | 180.9% | 101.2% | 175.3% | 84.0% | 57.4% | 86.6% | 159.2% | 81.7% | 155.1% | | | |
| % in creative activities | | 84.7% | 55.7% | 104.3% | 116.6% | 65.3% | 113.0% | 54.2% | 37.0% | 55.8% | 102.7% | 52.7% | 100.0% | | | |

Source: Author's elaboration based on data from RAIS (2013).

Concerning the regional distribution, a higher monthly salary (R$ 3,738) was observed in the Southeast, where we can also observe a high positive differential between the remuneration in creative activities and in the overall activities, which reached 68.4%. This trend also occurred in the Midwest, where the remuneration in creative activities reached R$ 3,004, a figure 23.2% higher than in the overall activities in the region. In the South, the remuneration in creative activities reached R$ 2,472, a figure 28.0% higher than in the overall activities. In the Northeast, these values reached R$ 1,923 and 15.6%, respectively. Contrasting to the other regions, in the North the remuneration generated in creative activities reached R$ 1,888, a figure 4.1% lower than that observed in the overall activities.

Among the selected activities, the higher average monthly salaries were observed in the case of Radio and TV, in Rio de Janeiro (R$ 6,703) and in the Federal District (R$ 5,336). In Advertising agencies, higher salaries levels were observed in São Paulo (R$ 5,096). In Software development, higher salaries were observed in São Paulo (R$ 4,422) and in the Federal District (R$ 4,146). In contrast, those salaries were particularly low for the sectors of Design and Interior decoration and for Photographic and similar activities in the Northeast and in the North. In the Northeast, the salaries paid in Design and Interior decoration reached R$ 1,284, while in the Photographic and similar activities they reached R$ 854. In the North region, the salaries paid in the sector of Design and Interior decoration reached R$ 958 while in the Photographic and similar activities they reached R$ 914.

### 4.4. SECTORAL AND REGIONAL CONCENTRATION INDEXES IN CREATIVE ACTIVITIES

The data extracted from RAIS permit to compare the dynamics of selected creative activities in the period 2006-2013 with the performance of the overall economic activities. In terms of total employment, creative activities showed a 51% growth in that period, compared to a 39% growth for the overall activities (Table 7). Among the different creative activities, those that had a higher employment growth were the Software Development (106%), Design and Interior decoration (91%), Performing activities (63%) and Organizations linked to culture and art (52%). Concerning the amount of remunerations, creative activities increased by 166% in that period, compared to a growth of 147% for the overall activities reported by RAIS. Among the various creative activities, those that had a higher growth of the amount of remunerations were the Design and Interior decoration (381%) Software development (254%) and Performing activities (192%). Finally, as regards the average monthly salaries, creative activities grew by 76.5% in that period, compared to a growth of 77.3% to the overall activities. Among creative activities, those that had a higher growth of average monthly

**Table 7 – Sectoral Trend of Indicators – 2006-2010 (data from RAIS)**

| | Number of workers | | | | Labor income – Total Monthly Payed (R$ 1000) | | | | Personal worker income (R$) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | 2006 | 2010 | 2013 | Var | 2006 | 2010 | 2013 | Var | 2006 | 2010 | 2013 | Var |
| Publishing and Printing | 109,362 | 114,910 | 105,744 | -3% | 180,808 | 250,311 | 288,125 | 59% | 1,653 | 2,178 | 2,725 | 65% |
| Film, video and music | 21,056 | 24,528 | 29,921 | 42% | 22,560 | 34,090 | 53,630 | 138% | 1,071 | 1,390 | 1,792 | 67% |
| Radio and TV | 82,490 | 108,177 | 112,820 | 37% | 168,725 | 284,142 | 378,568 | 124% | 2,045 | 2,627 | 3,356 | 64% |
| Software development | 158,747 | 255,876 | 326,438 | 106% | 345,763 | 740,993 | 1,224,553 | 254% | 2,178 | 2,896 | 3,751 | 72% |
| Architectural services | 9,066 | 12,132 | 9,351 | 3% | 12,905 | 23,991 | 19,631 | 52% | 1,423 | 1,977 | 2,099 | 48% |
| Advertising agencies | 26,877 | 30,896 | 31,574 | 17% | 49,115 | 79,980 | 114,788 | 134% | 1,827 | 2,589 | 3,636 | 99% |
| Design and Interior decoration | 1,862 | 2,354 | 3,552 | 91% | 1,286 | 3,047 | 6,188 | 381% | 691 | 1,294 | 1,742 | 152% |
| Photographic and similar activities | 12,601 | 17,931 | 18,741 | 49% | 8,872 | 16,884 | 22,308 | 151% | 704 | 942 | 1,190 | 69% |
| Performing activities | 11,740 | 15,486 | 19,190 | 63% | 11,809 | 21,200 | 34,441 | 192% | 1,006 | 1,369 | 1,795 | 78% |
| Activities related to cultural heritage | 6,158 | 6,832 | 6,673 | 8% | 10,172 | 18,016 | 22,032 | 117% | 1,652 | 2,637 | 3,302 | 100% |
| Organizations linked to culture and art | 12,426 | 17,516 | 18,876 | 52% | 12,181 | 23,105 | 31,970 | 162% | 980 | 1,319 | 1,694 | 73% |
| **Creative Activities** | **452,385** | **606,638** | **682,880** | 51% | **824,197** | **1,495,760** | **2,196,234** | 166% | **1,822** | **2,466** | **3,216** | 77% |
| **Manufacture sectors** | **7,122,536** | **8,499,202** | **8,998,796** | 26% | **8,869,054** | **14,151,537** | **19,717,026** | 122% | **1,245** | **1,665** | **2,191** | 76% |
| **Services sectors** | **18,951,696** | **23,268,395** | **26,066,422** | 38% | **25,415,751** | **42,504,082** | **61,505,731** | 142% | **1,341** | **1,827** | **2,360** | 76% |
| **Total** | **35,155,249** | **44,068,355** | **48,948,433** | 39% | **41,116,759** | **69,999,187** | **101,491,948** | 147% | **1,170** | **1,588** | **2,073** | 77% |
| **% of Creative activities** | **1.29%** | **1.38%** | **1.40%** | 9% | **2.00%** | **2.14%** | **2.16%** | 8% | **1.56** | **1.55** | **1.55** | -1% |

Source: Own elaboration based on data from RAIS (2006, 2010, 2013).

salaries were the Design and Interior Decoration (152.2%), Activities related to cultural heritage (99.9%), Advertising agencies (98.9 %) and Performing activities (78.4%). In this case, creative activities showed a similar growth in the period 2006-2013, when compared to the overall activities.

**Table 8 – Index of regional concentration of creative activities based on distribution among federative states – Herfindhal Index (HHI) (2006, 2010 and 2013)**

| | Number of workers | | | | Labor income – total monthly payments. | | | |
|---|---|---|---|---|---|---|---|---|
| | 2006 | 2010 | 2013 | Var | 2006 | 2010 | 2013 | Var |
| Publishing and Printing | 0.2096 | 0.2048 | 0.2003 | -4.5% | 0.3087 | 0.2982 | 0.2979 | -3.5% |
| Film, video and music | 0.1971 | 0.1848 | 0.1774 | -10.0% | 0.3002 | 0.2770 | 0.2811 | -6.3% |
| Radio and TV | 0.1323 | 0.1426 | 0.1328 | 0.4% | 0.2154 | 0.2196 | 0.2051 | -4.8% |
| Software development | 0.2167 | 0.2481 | 0.2368 | 9.3% | 0.3158 | 0.3340 | 0.3125 | -1.0% |
| Architectural services | 0.1636 | 0.1732 | 0.1590 | -2.8% | 0.2217 | 0.2197 | 0.2528 | 14.0% |
| Advertising agencies | 0.2213 | 0.2509 | 0.2599 | 17.5% | 0.4225 | 0.4620 | 0.4823 | 14.2% |
| Design and Interior decoration | 0.3118 | 0.2040 | 0.2605 | -16.4% | 0.3444 | 0.2746 | 0.3142 | -8.8% |
| Photographic and similar activities | 0.1336 | 0.2148 | 0.1639 | 22.7% | 0.2052 | 0.2849 | 0.2202 | 7.3% |
| Performing activities | 0.1500 | 0.1329 | 0.1169 | -22.1% | 0.1830 | 0.1623 | 0.1501 | -18.0% |
| Activities related to cultural heritage | 0.1771 | 0.1424 | 0.1266 | -28.5% | 0.2885 | 0.1606 | 0.1687 | -41.5% |
| Organizations linked to culture and art | 0.0987 | 0.1560 | 0.2146 | 117.5% | 0.1276 | 0.1943 | 0.2627 | 105.9% |
| **Sub-total creative activities** | **0.1781** | **0.2014** | **0.1977** | **11.0%** | **0.2699** | **0.2851** | **0.2788** | **3.3%** |
| **Sub-total manufacture** | **0.1607** | **0.1567** | **0.1493** | **-7.1%** | **0.2297** | **0.2131** | **0.1943** | **-15.4%** |
| **Sub-total services** | **0.1153** | **0.1167** | **0.1156** | **0.3%** | **0.1339** | **0.1290** | **0.1259** | **-6.0%** |
| **Total** | **0.1250** | **0.1234** | **0.1202** | **-3.9%** | **0.1552** | **0.1468** | **0.1403** | **-9.6%** |

Source: Author's elaboration based on data from RAIS (2006, 2010, 2013).

As the most dynamic creative activities, in terms of growth rates, tend to be concentrated in more developed regions, an expected consequence would be a process of spatial concentration of these activities, measured by an index of territorial concentration of creative activities. The expected impact would be an increase in the territorial concentration of creative activities, when compared to the territorial concentration of the whole set of economic activities These trends can be evaluated considering the evolution of territorial concentration indexes (similar to the traditional Herfindhal-Hirschman index) for the different creative activities between 2006 and 2013, calculated to jobs and remunerations (Table 8). These indexes assume a higher value (close to 1) the higher is the territorial concentration of creative activities among the federative states. For the whole set of creative activities, the growth of the territorial concentration is relatively modest: for the jobs, the concentration index increased 11.0% between 2006 and 2013 and for the remunerations, this growth was 3.3%. However, when compared to the overall activities, the contrast is evident, with the territorial concentration index decreasing 3.9% in terms of jobs and 9.6% in terms of remunerations. In some creative activities, the growth of the territorial concentration is more evident, as in the case of Organizations linked to culture and art, Photographic and similar activities and Advertising agencies. In contrast, to other activities occurred a decrease in the territorial concentration, as in the case of Film, video and music, Publishing and Printing, Performing activities and Activities related to cultural heritage.

**Table 9 – Index of sectoral concentration among creative activities – Herfindhal Index (HHI) – 2006, 2010 and 2013**

| | Number of workers | | | | Labor income – total monthly payments | | | |
|---|---|---|---|---|---|---|---|---|
| | RAIS 2006 | RAIS 2010 | RAIS 2013 | var RAIS | RAIS 2006 | RAIS 2010 | RAIS 2013 | var RAIS |
| Rondônia | 0.2692 | 0.2951 | 0.2977 | **10.6%** | 0.3556 | 0.3445 | 0.3412 | **-4.1%** |
| Acre | 0.2596 | 0.2670 | 0.2342 | **-9.8%** | 0.3245 | 0.3496 | 0.2770 | **-14.7%** |
| Amazonas | 0.2167 | 0.1745 | 0.2000 | **-7.7%** | 0.2377 | 0.1807 | 0.2203 | **-7.3%** |
| Roraima | 0.2777 | 0.2769 | 0.3348 | **20.6%** | 0.3887 | 0.3461 | 0.4345 | **11.8%** |
| Pará | 0.1793 | 0.1851 | 0.1748 | **-2.5%** | 0.2051 | 0.1880 | 0.1773 | **-13.6%** |
| Amapá | 0.2668 | 0.3308 | 0.2076 | **-22.2%** | 0.3334 | 0.4103 | 0.3046 | **-8.6%** |
| Tocantins | 0.2268 | 0.1906 | 0.2320 | **2.3%** | 0.2750 | 0.2099 | 0.2829 | **2.9%** |
| **North** | **0.1878** | **0.1836** | **0.1960** | **4.3%** | **0.2143** | **0.1811** | **0.1945** | **-9.3%** |
| Maranhão | 0.2369 | 0.2451 | 0.2399 | **1.3%** | 0.3088 | 0.2758 | 0.2888 | **-6.5%** |
| Piauí | 0.1936 | 0.1829 | 0.1517 | **-21.6%** | 0.2593 | 0.2244 | 0.1886 | **-27.3%** |
| Ceará | 0.2085 | 0.2060 | 0.2427 | **16.4%** | 0.2831 | 0.2878 | 0.3223 | **13.8%** |
| Rio Grande do Norte | 0.1812 | 0.1718 | 0.2025 | **11.8%** | 0.2247 | 0.1991 | 0.2846 | **26.6%** |
| Paraíba | 0.2884 | 0.2295 | 0.2240 | **-22.3%** | 0.3004 | 0.2699 | 0.2705 | **-9.9%** |
| Pernambuco | 0.1918 | 0.1917 | 0.2543 | **32.6%** | 0.2364 | 0.2499 | 0.3445 | **45.8%** |
| Alagoas | 0.2572 | 0.2263 | 0.2207 | **-14.2%** | 0.3348 | 0.2907 | 0.3006 | **-10.2%** |
| Sergipe | 0.2728 | 0.2169 | 0.1810 | **-33.7%** | 0.3779 | 0.2570 | 0.2347 | **-37.9%** |
| Bahia | 0.1837 | 0.2353 | 0.2309 | **25.7%** | 0.2275 | 0.2726 | 0.2626 | **15.4%** |
| **Northeast** | **0.1822** | **0.1924** | **0.2099** | **15.2%** | **0.2275** | **0.2423** | **0.2741** | **20.5%** |
| Minas Gerais | 0.3185 | 0.2536 | 0.2965 | **-6.9%** | 0.3421 | 0.3265 | 0.4179 | **22.1%** |
| Espírito Santo | 0.2074 | 0.2701 | 0.2703 | **30.3%** | 0.2910 | 0.3570 | 0.3592 | **23.4%** |
| Rio de Janeiro | 0.2061 | 0.2359 | 0.2691 | **30.6%** | 0.2721 | 0.2960 | 0.3120 | **14.7%** |
| São Paulo | 0.2521 | 0.2925 | 0.3310 | **31.3%** | 0.3032 | 0.3560 | 0.4011 | **32.3%** |
| **Southeast** | **0.2439** | **0.2720** | **0.3105** | **27.3%** | **0.2845** | **0.3258** | **0.3694** | **29.9%** |
| Paraná | 0.1867 | 0.2155 | 0.2666 | **42.8%** | 0.2119 | 0.2502 | 0.2935 | **38.5%** |
| Santa Catarina | 0.2001 | 0.2882 | 0.3470 | **73.4%** | 0.2562 | 0.4104 | 0.4987 | **94.6%** |
| Rio Grande do Sul | 0.2489 | 0.2363 | 0.2635 | **5.8%** | 0.2559 | 0.2844 | 0.4071 | **59.1%** |
| **South** | **0.2022** | **0.2334** | **0.2815** | **39.2%** | **0.2214** | **0.2906** | **0.3821** | **72.6%** |
| Mato Grosso do Sul | 0.2067 | 0.2255 | 0.2504 | **21.1%** | 0.2541 | 0.2566 | 0.2711 | **6.7%** |
| Mato Grosso | 0.2024 | 0.2092 | 0.2445 | **20.8%** | 0.2567 | 0.2446 | 0.3885 | **51.3%** |
| Goiás | 0.2642 | 0.3212 | 0.2506 | **-5.1%** | 0.2841 | 0.3100 | 0.2940 | **3.5%** |
| Distrito Federal | 0.4668 | 0.4516 | 0.4678 | **0.2%** | 0.4542 | 0.4649 | 0.5013 | **10.4%** |
| **Midwest** | **0.3255** | **0.3416** | **0.3411** | **4.8%** | **0.3695** | **0.3951** | **0.4324** | **17.0%** |
| **TOTAL** | **0.2233** | **0.2527** | **0.2865** | **28.3%** | **0.2713** | **0.3139** | **0.3619** | **33.4%** |

Source: Author's elaboration based on data from Census (2010) and RAIS (2006, 2010, 2013).

Another relevant aspect refers to the sectoral concentration of employment and remuneration among the different creative activities, analyzed according to different territorial levels (country, regions and federative states). To measure this evolution between 2006 and 2013, we consider the evolution of a sectoral concentration index, also captured by a Herfindhal-Hirschman Index, which assumes a higher value (close to 1) the higher the sectoral concentration occurs in the territory. Concerning the country as a whole, we observed an increase in that index for jobs and remunerations, indicating the growing relevance of the most dynamic creative activities. In terms of formal jobs, this increase was 28.3% and for the remunerations, the growth was even higher, reaching 33.4% between 2006 and 2013 (Table 9). Regionally, the growth of the sectoral concentration of creative activities is more intense in the more developed regions. The South region is where these rates have risen more, with the sectoral concentration index increasing 39.2% for the jobs and 72.6% for the remunerations between 2006 and 2013. In the Southeast also occurred a significant increase of those indexes, which reached 27.3% for jobs and 29.9% for the remunerations between 2006 and 2013. In those regions, those rates have risen for all federative states over that period. In contrast, in the Northeast, North and Midwest regions the indexes of sectoral concentration to jobs and remunerations had a much lower growth over the period considered, and some federative states experienced a decrease of those indexes.

### 4.4. RELATIVE PRODUCTIVE SPECIALIZATION IN CREATIVE ACTIVITIES

We can also articulate the analysis of the sectoral concentration among cultural activities in regions and federative states to an analysis of their productive specialization in different groups of creative activities. To develop this analysis, we opted to group the creative activities in three blocks: 1) General Media, including Publishing and Printing; Film, video and music; Radio and TV; Advertising agencies; Photographic and similar activities; 2) Information Technologies, including the Software development; 3) Architecture, Design and Arts, including Architectural services; Design and Interior decoration; Performing activities; Activities related to cultural heritage; Activities of membership organizations linked to culture and art. The identification of productive specialization uses data collected from the RAIS for the years 2006 and 2013, covering the number of employees and the total amount of remuneration received in each one of those blocks of creative activities, presented in Table 10**.** The existence of a process of productive specialization in the blocks of creative activities for regions and federative states were evaluated recurring to a traditional tool applied to regional economic studies, based on the calculus of a Relative Specialization Index (QL) that try to consider the relative weight of the indicator (number of employees or amount of remuneration received) in each field of economic activity for the regions and federative states, when compared to the same weight for the whole country.

An analysis of the data indicates that the index of productive specialization in the block of General Media is higher in more developed federative states in the Southeast and in the South, particularly in Rio de Janeiro, São Paulo and, with less intensity, in Rio Grande do Sul and Distrito Federal. The same trend occurs, more intensely, to the block of Information Technologies. In contrast, the index of productive specialization in the block of Architecture, Design and Arts is relatively higher to federative states located in the Northeast. On the other hand, comparing the indexes for the years 2006 and 2010 to the whole set of creative activities, we can observe an increase in the indexes for the Southeast and South regions, accompanied by a fall in the indexes to other regions.

## Table 10 – Index of productive specialization (Relative Specialization Index -QL) in creative activities (2006 and 2013)

| | Number of workers | | | | | | | | Labor income – total monthly payments | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2006 | | | | 2013 | | | | 2006 | | | | 2013 | | | |
| | General Media | Information Technologies | Architecture, Design and Arts | Sub-total creative activities | General Media | Information Technologies | Architecture, Design and Arts | Sub-total creative activities | General Media | Information Technologies | Architecture, Design and Arts | Sub-total creative activities | General Media | Information Technologies | Architecture, Design and Arts | Sub-total creative activities |
| **Rondônia** | 0.74 | 0.08 | 0.92 | **0.55** | 0.91 | 0.08 | 0.88 | **0.57** | 0.37 | 0.03 | 0.89 | **0.26** | 0.52 | 0.03 | 1.19 | **0.30** |
| **Acre** | 0.67 | 0.08 | 0.30 | **0.71** | 0.67 | 0.05 | 0.26 | **0.54** | 0.37 | 0.04 | 0.15 | **0.39** | 0.40 | 0.02 | 0.17 | **0.30** |
| **Amazonas** | 0.86 | 0.22 | 3.53 | **0.70** | 0.92 | 0.23 | 2.01 | **0.71** | 0.65 | 0.12 | 3.20 | **0.51** | 0.66 | 0.12 | 1.95 | **0.46** |
| **Roraima** | 0.90 | 0.08 | 0.78 | **0.67** | 1.07 | 0.07 | 1.37 | **0.66** | 0.49 | 0.04 | 1.06 | **0.34** | 0.54 | 0.04 | 1.56 | **0.31** |
| **Pará** | 0.58 | 0.23 | 0.44 | **0.52** | 0.65 | 0.16 | 0.18 | **0.50** | 0.47 | 0.21 | 0.18 | **0.41** | 0.40 | 0.13 | 0.11 | **0.33** |
| **Amapá** | 0.68 | 0.21 | 0.92 | **0.60** | 0.51 | 0.11 | 0.88 | **0.40** | 0.31 | 0.08 | 0.88 | **0.26** | 0.25 | 0.04 | 1.67 | **0.16** |
| **Tocantins** | 0.50 | 0.06 | 1.15 | **0.44** | 0.58 | 0.17 | 0.90 | **0.41** | 0.31 | 0.03 | 0.72 | **0.25** | 0.39 | 0.09 | 0.36 | **0.25** |
| **North** | 0.68 | 0.18 | 0.83 | **0.57** | 0.75 | 0.16 | 0.22 | **0.55** | 0.48 | 0.13 | 0.47 | **0.39** | 0.47 | 0.10 | 0.11 | **0.34** |
| **Maranhão** | 0.54 | 0.12 | 0.98 | **0.43** | 0.64 | 0.13 | 1.00 | **0.46** | 0.38 | 0.09 | 1.10 | **0.29** | 0.44 | 0.07 | 0.88 | **0.29** |
| **Piauí** | 0.57 | 0.21 | 0.52 | **0.48** | 0.65 | 0.09 | 0.48 | **0.56** | 0.34 | 0.25 | 0.30 | **0.31** | 0.47 | 0.05 | 0.36 | **0.34** |
| **Ceará** | 0.77 | 0.53 | 0.58 | **0.72** | 0.74 | 0.69 | 2.19 | **0.78** | 0.65 | 0.66 | 0.26 | **0.66** | 0.59 | 0.57 | 1.72 | **0.62** |
| **Rio Grande do Norte** | 0.64 | 0.12 | 1.00 | **0.54** | 0.75 | 0.45 | 1.66 | **0.67** | 0.41 | 0.08 | 0.83 | **0.33** | 0.50 | 0.35 | 1.48 | **0.45** |
| **Paraíba** | 0.91 | 0.15 | 1.10 | **0.68** | 0.81 | 0.28 | 1.06 | **0.61** | 0.66 | 0.19 | 0.65 | **0.50** | 0.60 | 0.21 | 0.78 | **0.43** |
| **Pernambuco** | 0.67 | 0.58 | 0.28 | **0.75** | 0.72 | 0.60 | 0.66 | **0.68** | 0.73 | 0.73 | 0.17 | **0.90** | 0.65 | 0.58 | 0.48 | **0.62** |
| **Alagoas** | 0.51 | 0.17 | 1.45 | **0.41** | 0.52 | 0.25 | 0.68 | **0.42** | 0.44 | 0.09 | 2.80 | **0.33** | 0.40 | 0.14 | 0.58 | **0.28** |
| **Sergipe** | 0.86 | 0.16 | 0.29 | **0.67** | 0.72 | 0.25 | 0.37 | **0.57** | 0.60 | 0.11 | 0.23 | **0.44** | 0.48 | 0.13 | 0.23 | **0.33** |
| **Bahia** | 0.55 | 0.56 | 0.67 | **0.60** | 0.51 | 0.47 | 0.76 | **0.53** | 0.54 | 0.42 | 0.42 | **0.53** | 0.43 | 0.32 | 0.47 | **0.42** |
| **Northeast** | 0.65 | 0.40 | 1.22 | **0.62** | 0.66 | 0.45 | 1.03 | **0.61** | 0.57 | 0.41 | 1.09 | **0.56** | 0.52 | 0.35 | 1.10 | **0.47** |
| **Minas Gerais** | 0.67 | 1.33 | 1.03 | **0.84** | 0.72 | 0.76 | 1.12 | **0.74** | 0.57 | 0.89 | 0.94 | **0.68** | 0.58 | 0.74 | 1.18 | **0.66** |
| **Espírito Santo** | 0.83 | 0.63 | 0.81 | **0.78** | 0.91 | 0.78 | 0.80 | **0.86** | 0.76 | 0.72 | 0.81 | **0.74** | 0.77 | 0.72 | 0.86 | **0.74** |
| **Rio de Janeiro** | 1.41 | 1.23 | 0.82 | **1.41** | 1.32 | 1.16 | 0.82 | **1.28** | 1.87 | 1.21 | 0.58 | **1.68** | 1.83 | 1.02 | 0.69 | **1.47** |
| **São Paulo** | 1.24 | 1.39 | 1.86 | **1.25** | 1.26 | 1.58 | 1.43 | **1.36** | 1.30 | 1.53 | 1.76 | **1.34** | 1.34 | 1.66 | 1.58 | **1.47** |
| **Southeast** | 1.14 | 1.32 | 0.84 | **1.18** | 1.15 | 1.30 | 1.16 | **1.20** | 1.28 | 1.34 | 0.73 | **1.29** | 1.30 | 1.34 | 1.16 | **1.31** |
| **Paraná** | 1.01 | 0.47 | 0.96 | **0.88** | 1.05 | 0.86 | 0.84 | **0.98** | 0.84 | 0.38 | 1.01 | **0.71** | 0.93 | 0.61 | 0.78 | **0.80** |
| **Santa Catarina** | 0.86 | 0.76 | 1.07 | **0.86** | 0.92 | 1.17 | 1.04 | **0.99** | 0.54 | 0.68 | 1.08 | **0.64** | 0.63 | 1.07 | 1.12 | **0.82** |
| **Rio Grande do Sul** | 1.37 | 0.52 | 1.32 | **1.11** | 1.28 | 0.89 | 0.65 | **1.11** | 0.88 | 0.40 | 1.91 | **0.71** | 0.84 | 0.94 | 0.52 | **0.87** |
| **South** | 1.11 | 0.57 | 0.61 | **0.96** | 1.10 | 0.95 | 0.77 | **1.03** | 0.78 | 0.46 | 0.41 | **0.69** | 0.82 | 0.85 | 0.61 | **0.83** |
| **Mato Grosso do Sul** | 0.84 | 0.52 | 1.00 | **0.75** | 0.86 | 0.65 | 0.69 | **0.78** | 0.56 | 0.24 | 1.22 | **0.47** | 0.56 | 0.31 | 0.47 | **0.46** |
| **Mato Grosso** | 0.65 | 0.22 | 0.81 | **0.52** | 0.71 | 0.47 | 0.87 | **0.60** | 0.40 | 0.11 | 0.67 | **0.30** | 0.42 | 0.42 | 0.72 | **0.41** |
| **Goiás** | 0.88 | 0.96 | 0.32 | **0.86** | 0.74 | 0.54 | 0.35 | **0.66** | 0.75 | 0.53 | 0.21 | **0.67** | 0.57 | 0.35 | 0.23 | **0.47** |
| **Distrito Federal** | 0.88 | 3.95 | 0.47 | **1.67** | 1.01 | 2.17 | 0.65 | **1.40** | 0.57 | 1.84 | 0.37 | **0.99** | 0.82 | 1.31 | 0.49 | **1.01** |
| **Midwest** | 0.83 | 1.72 | 2.06 | **1.04** | 0.83 | 1.04 | 0.85 | **0.89** | 0.59 | 1.15 | 1.93 | **0.77** | 0.66 | 0.81 | 0.48 | **0.72** |
| **TOTAL** | 1.00 | 1.00 | 1.00 | **1.00** | 1.00 | 1.00 | 1.00 | **1.00** | 1.00 | 1.00 | 1.00 | **1.00** | 1.00 | 1.00 | 1.00 | **1.00** |

Source: Author's elaboration based on data from RAIS (2006, 2010, 2013).

In order to confirm these evidences, we can also consider the distribution of employments in creative activities among different territorial units based on the concept of "homogeneous micro-regions", defined by IBGE, the Brazilian Institute of Economic Statistics. Considering the distinction between the three blocks of creative activities previously mentioned – General Media; Information Technologies; Architecture, Design and Arts – the analysis comprises the identification of a Relative Specialization Index (QL) for the year 2013 that compares the relative weight of the number of employees in each block of creative activities for the micro-regions with same weight calculated for the whole country.

Table 11 presents, to different regions and federative states, the number of micro-regions in which that Relative Specialization Index shows a value greater than 1, for the different blocks and to the whole set of creative activities. These data can illustrate the process of spatial agglomeration of creative activities among the territory, despite the fact that the factors that affect the process of spatial specialization in creative activities tend to be different from traditional "agglomeration economies". With regard to the regional distribution of micro-regions specialized in creative activities, Table 11 indicates that, to the whole country, among the 558 Micro-regions, 70 (12.5%) were relatively more specialized in General Media, 24 (4.3%) were relatively more specialized in Information Technologies General Media and 73 (13.1%) were relatively more specialized in Architecture, Design and Arts. Combining the whole set of creative activities, there are 27 Micro-regions (4.8% of the total) relatively more specialized in those activities.

Concerning the regional distribution of those nucleolus of territorial specialization in creative activities, a special featured can be attributed to the South region (responsible for 16.8% of the Micro-regions), which concentrates 48.6% of the Micro-regions specialized in General Media, 45.8% of the Micro-regions specialized in Information Technologies and 17.8% of the Micro-regions specialized in Architecture, Design and Arts, resulting in 44.4% of the Micro-regions specialized in the whole set of creative activities. Compared to the number of Micro-regions of the South region, the presence of Micro-regions specialized in General Media reaches 36.2% of them. The Southeast, which is responsible for 28.7% of the Micro-regions of the country, concentrates 37.5% of the Micro-regions specialized in Information Technologies, 35.6% of the Micro-regions specialized in Architecture, Design and Arts and 27.1% of the Micro-regions specialized in General Media, resulting in 37.0% of the Micro-regions specialized in the whole set of creative activities. Compared to the number of Micro-regions of the Southeast, the presence of Micro-regions specialized in Architecture, Design and Arts reaches 16.3% of them, while to General Media it reaches 11.9% of them. The Midwest, which is responsible for 9.3% of the Micro-regions of the country, concentrates 12.5% of the

## Table 11 – Number of micro-regions with Relative Specialization Index (QL)greater than 1 ( 2013)

| | | | Number of micro-regions with Relative Specialization Index (QL)greater than 1 | | | | % of micro-regions with Relative Specialization Index (QL) greater than 1 | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Municipalities | Micro regions | General Media | Information Technologies | Architecture, Design and Arts | Sub-total creative activities | General Media | Information Technologies | Architecture, Design and Arts | Sub-total creative activities |
| **Rondônia** | 52 | 8 | 2 | | 1 | | 25.0% | 0.0% | 12.5% | 0.0% |
| **Acre** | 22 | 5 | | | 1 | | 0.0% | 0.0% | 20.0% | 0.0% |
| **Amazonas** | 62 | 13 | | | 1 | | 0.0% | 0.0% | 7.7% | 0.0% |
| **Roraima** | 52 | 8 | 2 | | 1 | | 25.0% | 0.0% | 12.5% | 0.0% |
| **Pará** | 144 | 22 | 1 | | 2 | | 4.5% | 0.0% | 9.1% | 0.0% |
| **Amapá** | 16 | 4 | | | | | 0.0% | 0.0% | 0.0% | 0.0% |
| **Tocantins** | 139 | 8 | | | | | 0.0% | 0.0% | 0.0% | 0.0% |
| **North** | **450** | **64** | **5** | | **5** | | **7.8%** | **0.0%** | **7.8%** | **0.0%** |
| **Maranhão** | 217 | 21 | 2 | | 2 | | 9.5% | 0.0% | 9.5% | 0.0% |
| **Piauí** | 224 | 15 | | | 2 | 1 | 0.0% | 0.0% | 13.3% | 6.7% |
| **Ceará** | 184 | 33 | 1 | 1 | 5 | 1 | 3.0% | 3.0% | 15.2% | 3.0% |
| **Rio Gr. do Norte** | 167 | 19 | 1 | | 6 | | 5.3% | 0.0% | 31.6% | 0.0% |
| **Paraíba** | 223 | 23 | 2 | | 1 | | 8.7% | 0.0% | 4.3% | 0.0% |
| **Pernambuco** | 185 | 19 | 1 | | 4 | 1 | 5.3% | 0.0% | 21.1% | 5.3% |
| **Alagoas** | 102 | 13 | | | | | 0.0% | 0.0% | 0.0% | 0.0% |
| **Sergipe** | 75 | 13 | | | 1 | | 0.0% | 0.0% | 7.7% | 0.0% |
| **Bahia** | 417 | 32 | | | 4 | | 0.0% | 0.0% | 12.5% | 0.0% |
| **Northeast** | **1,794** | **188** | **7** | **1** | **25** | **3** | **3.7%** | **0.5%** | **13.3%** | **1.6%** |
| **Minas Gerais** | 853 | 66 | 2 | 2 | 6 | 1 | 3.0% | 3.0% | 9.1% | 1.5% |
| **Espírito Santo** | 78 | 13 | 1 | 2 | 3 | 2 | 7.7% | 15.4% | 23.1% | 15.4% |
| **Rio de Janeiro** | 92 | 18 | 2 | 2 | 4 | 2 | 11.1% | 11.1% | 22.2% | 11.1% |
| **São Paulo** | 645 | 63 | 14 | 3 | 13 | 5 | 22.2% | 4.8% | 20.6% | 7.9% |
| **Southeast** | **1,668** | **160** | **19** | **9** | **26** | **10** | **11.9%** | **5.6%** | **16.3%** | **6.3%** |
| **Paraná** | 399 | 39 | 7 | 6 | 8 | 6 | 17.9% | 15.4% | 20.5% | 15.4% |
| **Santa Catarina** | 295 | 20 | 5 | 4 | | 3 | 25.0% | 20.0% | 0.0% | 15.0% |
| **Rio Grande do Sul** | 497 | 35 | 22 | 1 | 5 | 3 | 62.9% | 2.9% | 14.3% | 8.6% |
| **South** | **1,191** | **94** | **34** | **11** | **13** | **12** | **36.2%** | **11.7%** | **13.8%** | **12.8%** |
| **Mato Grosso do Sul** | 79 | 11 | 1 | 1 | 3 | 1 | 9.1% | 9.1% | 27.3% | 9.1% |
| **Mato Grosso** | 141 | 22 | 2 | 1 | | | 9.1% | 4.5% | 0.0% | 0.0% |
| **Goiás** | 246 | 18 | 1 | | 1 | | 5.6% | 0.0% | 5.6% | 0.0% |
| **Distrito Federal** | 1 | 1 | 1 | 1 | | 1 | 100.0% | 100.0% | 0.0% | 100.0% |
| **Midwest** | **467** | **52** | **5** | **3** | **4** | **2** | **9.6%** | **5.8%** | **7.7%** | **3.8%** |
| **TOTAL** | **5,570** | **558** | **70** | **24** | **73** | **27** | **12.5%** | **4.3%** | **13.1%** | **4.8%** |

Source: Author's elaboration based on data from RAIS (2006, 2010, 2013).

Micro-regions specialized in Information Technologies, 7.1% of the Micro-regions specialized in General Media and 5.5% of the Micro-regions specialized in Architecture, Design and Arts, resulting in 7.4% of the Micro-regions specialized in the whole set of creative activities. Compared to the number of Micro-regions of the Midwest, the presence of Micro-regions specialized in General Media reaches 9.6% of them, followed by a share of 7.7% to Micro-regions specialized in Architecture, Design and Arts.

The picture is quite different in less developed regions. The Northeast, which is responsible for 33.7% of the Micro-regions of the country, concentrates 34.2% of the Micro-regions specialized in Architecture, Design and Arts, but only 10.0% of the Micro-regions specialized in General Media and only 4.2% of the Micro-regions specialized in Information Technologies, resulting in 11.1% of the Micro-regions specialized in the whole set of creative activities. Compared to the number of Micro-regions of the Northeast region, the presence of Micro-regions specialized in Architecture, Design and Arts reaches 13.3% of them. The North, which is responsible for 11.5% of the Micro-regions of the country, concentrates only 7.1% of the Micro-regions specialized in General Media and only 6.8% of the Micro-regions specialized in Architecture, Design and Arts. These evidences confirm the trend previously mentioned that the productive specialization in the block of Architecture, Design and Arts – reflected in the presence of a high number of Micro-regions specialized in those activities – is relatively higher to federative states located in the Northeast. On the other hand, according to this criterion, the productive specialization in the block of General Media is relatively higher in the South, while in the Southeast we can identify a more balanced pattern of specialization among the three blocks of creative activities.

## 5. CONCLUDING REMARKS

In the last decade, Brazil has tried to establish a comprehensive policy to foster the development of creative actives, which resulted in the creation of the Secretariat of the Creative Economy and in the design public policies that tried to amplify the impacts of those actives as a mean to reduce socio-economic and regional inequalities. At the territorial level, these inequalities are reflected in the presence of regions that historically concentrated more wealth and have better social indicators (South and Southeast) while there are other less dynamic regions with highest levels of poverty, most notably the Northeast. The analysis pointed the evolution of the sectoral concentration of employments and remunerations among the different creative activities, according to different territorial levels (country, regions and federative states). Between 2006 and 2013, to the country as a whole, there was an increase in sectoral concentration for jobs and remunerations, indicating an increase in the relevance of the most dynamic creative activities. Regionally, there is a more intense growth of the sectoral concentration of creative activities in the more developed regions. The South region is where these rates have risen more, followed by the Southeast. In these regions, those rates have risen for all federative states over the period. In contrast, in the Northeast, North and Midwest the index of sectoral concentration to jobs, remunerations and establishments had a much lower growth over the period considered, and some federative states experienced a decrease those rates.

The other side of this process was the growth of the index of territorial concentration for the different creative activities between 2006 and 2013, calculated to jobs and remunerations. For the set of creative activities, the increased of the territorial concentration is less evident: for the jobs, the territorial concentration index increased 11.0% and for the remunerations, this growth reached 3.3%. In some creative activities the growth of the territorial concentration is more evident, as in the case of Organizations linked to culture and art, Photographic and similar activities and Advertising agencies. In contrast, in other activities there were evidences of a decrease in the territorial concentration, as in the case of Film, video and music, Publishing and Printing, Performing activities and Activities related to cultural heritage.

Considering these trends, it is possible to suggest that there is an ongoing process of regional specialization in the distribution of creative activities in Brazil, combining a greater sectoral specialization – which tends to be more intense for developed regions – with the prospect of some regional decentralization induced by cultural-based activities. In general, the data suggest that the regional decentralization of competences in creative activities in the direction of less developed regions is relatively limited, with the more developed regions remained specialized in areas with higher digital and technological content, while the less developed regions becoming relatively more specialized in areas related to the cultural heritage. In this sense, an evaluation of the recent Brazilian experience indicates that the impact of the creative industries to the reduction of regional inequalities tended to be partial. The enlargement of the impact of digital technologies tends to affect more directly activities relatively concentrated in more developed regions. On the other hand, the strengthening of the links between cultural diversity, traditions, creative industries and local development open opportunities to exploit the richness of cultural heritage of less developed regions.

To reduce this imbalance, the strengthening of territorial nucleons of dynamic creative activities, with the support of local institutions and of the S&T infrastructure seem to be very important, reinforcing the relevance of comprehensive policies well-adapted to very diverse local realities. The spread of the most dynamic creative activities with higher digital and technological content for the less developed regions seems to be particularly important. This effort should integrate the impact of new digital-based technologies with the strengthening of the economic potential of local and regional cultural heritage. In this sense, a critical aim to the policies would be the improvement of the professional qualification of the workers in those activities, in order to amplify the possibilities of productive inclusion of the population. There is also a potential to spread the growth of skills and competences in creative activities strengthening the regional decentralization of the S&T infrastructure in those areas. It is also necessary to promote the recovery, protection and promotion of the diversity of national cultural expressions to ensure their originality, their strength and their potential to generate an inclusive socio-economic growth.

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