Creative Economy in Global Economic Crisis: A Study on Creative Industries in Amsterdam

Master Thesis, Cultural Economics and Entrepreneurship

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A quantitative research on creative industries in Amsterdam and the impact of crisis on their development.

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Abstract

Discussion on creative industries as a major constituent of the creative economy in Western countries has been lasting for few decades. They are often seen as a changing paradigm of future economic growth in developed countries, which are no longer centered on manufacturing output and labor productivity but rather focused on attracting human capital. A lot of research has been done to understand their economic properties, production chains and their potential to drive economic development. After acknowledging their contribution to economic growth, creative industries came into the fore of cultural and economic policy agenda. Their growth opportunities are attributed to urban areas in post-industrial regions that have a specific contextual setting such as a broad market as well as a concentration of cultural and economic activities.

The recent crisis brought new research dimension for the CIs discourse. This master thesis combines the discussions of the pre- and post-crisis period on CIs and analyzes their growth potential in creative city during this recession. It analyzes the case of Amsterdam, which as a result of its path dependent development is an exemplary embodiment of the concept of a creative city.

The study is based on the assumption that CIs in Amsterdam are less susceptible to economic crises then the traditional economy of the city. By exploring their development trends over the past ten years, and more specifically in 2013, the research aims to evaluate the extent to which they were affected by economic downturn and identify the factors that influenced their development. The results of this study give further implications for economic and cultural policy in the city towards supportive environment creation and further growth strategies of CIs.

Key Words

Creative industries – Amsterdam – economic crisis – economic development – creative firms

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I. Introduction

1.1. Introduction to the Research Problem

Not too long ago, creative industries (later in this text CIs) became a new hype topic not only in policy-making discourses but among numerous scholars as well. Often seeing CIs development as an alternative path for mainstream economic growth, their advocates criticize traditional economic sectors that are alone not capable of coping with the challenges that derive from the quickly developing global economy. The understanding that big manufacturing industries cannot enhance the welfare and social inclusion, let alone provide a sustainable development path, led to the incorporation of CIs in cultural and economic growth strategies in many developed countries. In European economic policy debates, it is now widely acknowledged that countries can only stay competitive if their development manages to embrace culture, creativity and innovation that in turn translate into such economic estimates as better income, new job creation or high export rates (UNCTAD, 2008, 2010; KEA, 2006; European Commission, Green Paper, 2010). Policy makers often take CIs merits for granted without deeper investigation of the regional differences or path dependent developments.

In various academic studies that touches upon an abundance of different assets of CIs, they are often seen as a changing paradigm of future economic growth (Pratt, 2009), which is no longer centered on manufacturing output and labor productivity but focused instead on attracting human capital whose concentration has a major influence on the economic performance of the city or region and stimulating the development of CIs (Gabe,Florida & Mellander, 2012; KEA 2006). From the very beginning, CIs were seen as an urban phenomenon that is able to thrive in a diverse and multifaceted environment. This was mainly determined due to the concentration of cultural and economic activities in cities and the agglomeration externalities deriving from this concentration such as broad market ranges, ground for new activities, intense flow of information and wide networks (Scott & Storper, 2003). Coexistence of culture and market-oriented activities underpins the creativity-based economic development concept. It led to the inclusion of CIs in the wider urban growth strategies that seek cohesion between commerce and art, assuming that they could provide the city with a distinct image and enhance regional competitiveness (Landry, 2008; Musterd & Murie, 2010).

Despite the wide array of benefits that CIs proponents identify, this new approach to economic growth received many skeptical appraisals. Advocates of culture deny inclusion of this

sector into economic agendas and its instrumentalization for economic growth purpose (Garnham, 2005), whereas others criticize the non-cohesive definition and classification models. The most crucial, however, is the claim that even if economic creativity-based growth is beneficial in a certain country, one single "procrustean" (Cunningham, 2011, p. 59) model cannot be copied successfully and applied in other geographical and cultural areas with their own characteristics that don't necessarily correspond to the creative economy's needs, thus it may fail to provide the expected results. The transformation process of this concept to be able to adapt it to the context of a specific geographical space, however, is already occurring in some Asian countries and the United States (Cunningham, 2011).

To be able to better understand CIs economic contribution, research on this sector during economic downturn would analyze yet little discussed aspects. While the governments are struggling to find out which economic activities could drive the growth in post-industrial economies, the recent crisis can be seen as a "natural experiment" (Pratt, 2012) that is not merely causing devastating outcomes for European economies and societies, but could help to identify which economic fields are more resilient nowadays to the fluctuations in the economic cycle and are thus in need of more policy attention and further nurturing. Hence, this recent economic crash could prove to be useful for testing the resilience of CI to the crisis and its dependence on the decline of other economic sectors.

So far, the Netherlands with one of the strongest economies in Europe, have been highly successful in nurturing artistic and creative activities. Those activities are mostly concentrated in the biggest cities of the country. The largest share of them are based in Amsterdam, the cultural and economic centre of the Netherlands. Policies in the city put considerable emphasis on fostering creative businesses development and growth (Kloosterman, 2004). The city possesses a wide array of programs designed to assists artists, young start-ups and creative entrepreneurs, thereby supporting the development of CIs. The main objective of this thesis is to investigate CIs in Amsterdam and their growth trends over the previous 10 years and identify the impact of the global crisis. Whether historically shaped cultural environment, assets of the city's infrastructure, tailored policies and business agglomeration could have affected the resilience to the crisis of Amsterdam's CIs, is the main focus of this study.

1.2. Research Questions

By analyzing relevant literature and statistical data, and conducting a survey-based research, this thesis aims to answer the following question:

To what extent are creative industries in Amsterdam resilient to the global economic crisis?

To answer this question a list of the following main sub-questions will be considered:

1. ***Has the growth rate of CIs in Amsterdam changed since the start of the financial crisis in 2008?***
2. ***To what extent has the growth rate of CIs changed when compared to other economic sectors in Amsterdam?***
3. ***To what extent do agglomeration economies influence the development of CIs in Amsterdam?***
4. ***To what extent has the financial crisis affected the employment structure of CIs in Amsterdam over the last five years?***
5. ***To what extent did creative firms in Amsterdam experience economic difficulties over the last five years?***
6. ***What is the influence of hard and soft infrastructure on the growth of CIs in Amsterdam in 2013?***

1.3. Relevance of the Study

Until very recently, discussions on CIs focused mostly on the growth and significant contributions to economies through high employment and innovation. In creative policy discourse, the positive impact of CIs to regional economies has been always taken for granted. Nevertheless, seeing the decline of well established industries since the start of the crisis caused new considerations on the future of CIs and their long-term perspectives. Academic research on the crisis' impact on CIs is still rather scarce. The goal of this paper is to contribute to the existing studies in this field by analyzing the most recent trends and bringing more insights into understanding economic dynamics of CIs during the economic decline. The analysis of the case of Amsterdam aims to help evaluate the relevance of the current creative policy initiatives and their position in the cultural and economic agendas. Identification of CIs development patterns during two different economic periods (pre- and post crash years) will help to understand their future perspectives and economic growth potential.

1.4. Structure of the Thesis

The thesis is comprised of five major sections. After providing a brief introduction about the aim and objectives of the research, the thesis will begin with an analysis of academic literature on CIs and related study areas that will provide the theoretical background to the research. This framework consists of three major parts. To introduce the context of the discourse on CIs, their development and academic research focus in the pre-crisis period will be discussed. It analyzes literature on policy discourse, economic characteristics of CIs and their development in urban areas. The subsequent part of the literature review analyzes the most recent studies on CIs after the economic crash. The final

part of the theory section investigates studies made on CIs in Amsterdam by discussing their policies, economic contribution and agglomeration tendencies.

The third section of the thesis introduces the methodology used for the research. It presents the research design and provides hypotheses that derive from academic literature. It also discusses processes of data collection and analysis for this research. The following section introduces the results of the research and tests the hypotheses. The first part focuses on general population of CIs and identifies their development trends, while the second part investigates results retrieved from the survey on individual firms operating in market-oriented sectors of Amsterdam's CIs.

The last section of the thesis provides the analysis of the main findings of the study by linking them back to the prior discussed theory.

II. Theoretical Framework

2.1. Introduction

The discussion of creative industries' role in economic development has lasted since the end of the last century but its origins, together with a significant amount of academic and policy concern, can be traced back as early as 1970. The concept "creative industries" evolved from the previously adopted conflicting "cultural industries" term that was initially used by Adorno and Horkheimer to express the negative attitude towards commodified and mass produced culture (Galloway & Dunlop, 2007). The roots of this term lie in a Creative Nation's report released in Australia in 1994. A few years later UK's Department of Culture, Media and Sport (DCMS) was the first to investigate and acknowledge the sector's benefits in new job creation and the ability to generate wealth through qualities that were previously rarely used in economic discourse: namely human talent and creativity (Throsby, 2008).

Since then, a voluminous amount of academic literature and policy studies analyzing CIs' potential to drive economic development has been produced. Urban regeneration and at the same time the ability to ensure social inclusion occurred to be an attractive development path for deindustrialized cities (Oakley, 2004; Pratt, 2012; Flew, 2010). Regardless, there exists a gap in the research on the impact of the recent economic crisis on CIs. During the times of economic upturns, the majority of sectors grow rapidly due to general economic dynamics, thus CIs have premises for faster development as well. They already proved they have the capacity to even outperform other economic fields in terms of growth rate (KEA, 2006). Whether this growth can be sustained in a downturn is a whole new dimension for academic and policy level analysis. Most of the research studies thus far proved CIs to be a significant contributor to city economies. It remains, however, unclear how resilient creative businesses are to economic crashes in other sectors, what are the main factors driving their growth and how they manage to cope with the slowdowns. Most of the literature on the post-crash period in this area is still very recent and lacks broader comparison between different sectors of CIs not to mention development of CIs in different cities.

This literature review provides a theoretical context for research on CIs in Amsterdam. It identifies main discussion areas about creativity and their relations to economic growth. In the second part of this chapter, the development of CIs in the pre-crisis period will be discussed. The first subsection will discuss the origins of CIs as a matter of policy in European economic growth discourse. It will also include a discussion of the "creative city" as an outcome of a shift in urban

policy. The second subsection aims to illustrate the rationale behind fostering CIs; the data about CIs contribution to the European economy will be presented here. The last subsection will look into spatial clustering characteristics of CIs and discuss their significance. The second part of the literature review analyzes the articles that study CIs in the context of the crisis. It focuses on the discussion of various scenarios and outcomes in the near future perspective since scarce empirical studies cannot provide a credible answer on a sector's ability to weather the crisis. The last part of this literature review presents a specific case: Amsterdam. It discusses specific policies designed for fostering CIs as well as other major factors and assets of the city that influence their growth. The summary will provide the main findings in the literature about CIs, their policies and growth in the urban environment and links theoretical considerations with the empirical part of this study.

2.2. Pre-crisis period

This part of the literature review investigates CIs and their development before the global economic crash in 2008. By that time, literature mostly focused on policy implications and tried to identify specific characteristics that largely influence their development patterns. This part of the literature review will answer some fundamental questions of theory on CIs regarding their development and contribution to economic growth. It investigates the following issues: European policy approach to CIs before the crisis, CIs relationship with the concept of the "creative city", the impact of hard and soft infrastructure on CIs, the extent to which CIs in Europe contribute to the economies as well as the factors that foster the agglomeration of CIs.

2.2.1. Creative Industries in European Policy Discourse

The pre-crisis period marks intensive debates about the ways to foster culture and creativity driven development. The first Creative Industries Mapping Document was prepared in UK in 1998 as an outcome of changing cultural policy. CIs were initially described as: "those activities which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property" (British Council, 2010, p. 16) and included advertising, architecture, art and antique market, crafts, design, designer fashion, film and video, interactive leisure software, music, performing arts, publishing, software and computer services as well as television and radio (British Council, 2010). Policy makers in the UK agreed upon the need to foster this sector with its broad range of subsets. CIs started to be seen as a source of creative input in the production of other industries, employment for educated individuals as well as contributing to urban revitalization and social inclusion (British Council, 2010).

Following academic discussions and policy initiatives concerning the EU's economic and cultural policy in the UK, CIs were also recognized as a significant contributor to overall economic

growth in the region (KEA, 2006). Although the notion of CIs evolved and more classification models were adopted, individual creativity, symbolic value and intellectual property remained their core features (Throsby, 2008). More attention from European policy makers to CIs as the basis for creative economy was mostly inspired by the Lisbon strategy signed in 2000. The strategy declared aims to make the EU the strongest economic area word wide by 2010 through investment in infrastructure, education and innovation (Economic and Scientific Policy, 2010. The strategy was reviewed in 2005 special emphasis was put on creative economic activities and admitting the potential of European culture to contribute to economic growth. CIs economic potential was acknowledged due to the growth rate that was higher than of the rest of economy, ability to foster innovation and new technologies and contribution to sustainable growth. This started changing the perception of CIs at the policy level where they were less regarded as a field in need of state support, but more as a contributor to the conventional economy, enriching it with innovation and creativity and creating the preconditions for "leap-frog into the knowledge economy" (Banks & O'Connor, 2009, p. 269). The changing rhetoric called for the need to support CIs through the provision of infrastructure, investment, export expansion, laws in copyright and establishment of creative clusters (UNCTAD, 2008).

CIs are a mostly urban phenomenon and have better opportunities for development in cities where certain amenities are concentrated that create a specific urban vibe (Scott, 2004; Musterd & Murie, 2010; van Oosteren & Crok, 2007). Historically, cities have always shown a greater ability to foster cultural and artistic development or provide the ground for certain urban lifestyle forms that are nurtured by the city's diverse environment. Along those lines, the framework for cultural economies gradually contributed to developing the "creative city" concept that was eagerly adopted by policy makers around the world (Donald et al., 2013). The idea of it derived from academic discourse on what factors could increase the competiveness of the city and attract human capital, whose presence is vital for urban dynamics (Florida, 2002; Landry, 2008, Hospers, 2003). Montgomery (2005) claims that the future growth of cities depends on their ability to embrace talented and skilled people, CIs and culture.

The "creative city" concept defines an urban compound with a variety of cultural and creative activities that support urban growth and the social environment in the city. In the development of urban economies, creativity that is in the core of creative city concept replaces such attributes as natural resources and specific locations that used to be traditionally associated with dynamic urban economic growth but are now partly losing their relevance due to the increasing role of technology and innovation (UNCTAD, 2008). This theory suggests that those cities that are capable of providing an interesting cultural life, as well as amenities and entertainment activities that

correspond to the lifestyle of talented individuals and a vibrant atmosphere, will gain a competitive advantage against others, boost their image and will be able to attract new businesses and investors as well as other creative individuals (Montgomery, 2005; Florida, 2002; Landry, 2008; KEA, 2006). These factors that were previously seen as irrelevant for economic growth, imply a major shift in urban planning theories as well as the future perspectives of post-industrial cities.

Many global cities employed certain policies for supporting the creative labor force by establishing districts in urban environment where creative businesses could cluster and develop (Musterd & Murie, 2010). This brings the considerations about "hard" and "soft" location factors that influence industrial growth. Landry (2008) refers to hard infrastructure as a chain of broad range conditions for a city's development such as transport and health systems, educational institutions as well as cultural establishments. Hard conditions also encapsulate existing political governance, taxing systems and accessible spaces for firms to situate in (Musterd & Murie, 2010). They are necessary for the formation of industry as they provide the basic preconditions that enabling their growth. In recent years, however, increasing attention from urban policy developers has been paid to the soft infrastructure of the city, especially regarding the development of CIs. Soft infrastructure, according to Laundry (2008), refers to the various types of social interaction facilitated by informal institutions that enable the generation of new ideas. Musterd & Murie (2010) elaborate on the term and claim that it includes a set of intangible aspects such as "quality of life, urban atmospheres, housing market situations, levels of tolerance, openness and the diversity of the population" (p. 25).

Much attention to this concept was initially paid by Florida (2002) in his creative class theory. The author stated that various cultural and entertainment amenities significantly contribute to the maintenance of particular lifestyle forms. Their dense presence in the city is therefore crucial for attracting and sustaining the talented people that, in turn, significantly support local economic growth (Florida, 2002). His theory is being currently discussed by various scholars. Landry (2008) supports the necessity of soft conditions and argues that the combination of both types of infrastructure is crucial for growth as it forms a "physical setting" where interaction between entrepreneurs, artists and other educated and socially active groups can produce economically significant results (p. 133). Florida's approach, however, received much criticism due to the reductionist view and reverse causality regarding the factors that drive economic growth (Scott, 2006). Urban policies that originate from theories on hard and soft conditions are very different in their nature. Decisions related to the development of soft conditions are devoted mainly for attracting the creative workers and enhancing their well-being contrary to policies focusing on hard conditions that are mainly turned towards boosting the industry through the formation of new firms. The latter factor, according to Florida's critics (Kovàc et al. 2010; Scott, 2006) is the major catalyst of

knowledge and creativity driven cities formation as well as urban growth, whereas the soft condition theory is regarded as too simplistic and insufficient for economic development hence should only be fostered if the major, namely, hard conditions, are satisfied.

2.2.2. Quantifiable and Indirect Economic Impact of Creative Industries

In line with the policy rhetoric aimed to supporting EU economy with the growth of CIs, "direct and indirect socio-economic impact" (KEA, 2006, p. 1) of culture and creative is often stressed. The former impact determines the quantifiable figures of CIs growth such as annual turnover, value added or employment. Long before the crisis, the growth rate of CIs was estimated to have been 12.3% higher than the growth of the rest economy in Europe from 1999 to 2003. In 2003, the GDP share of CIs amounted to 2.6%, outperforming such well-established industries as real estate, food and beverage and chemicals industry. CIs alone generated 654 billion euro and created employment for 5.6 million people in the European Union area in the same year (UNCTAD, 2008).

The indirect impact of culture and creativity refers to their ability to create an engaging city's environment that could attract new creative and non-creative firms (KEA, 2006). In addition, the widespread presence of CIs can result in positive externalities on conventional economic activities. Those externalities can manifest as "knowledge spillovers" that disseminate innovative ideas, "product spillovers" that, due to specific need for creative products, can enhance the demand of non-creative ones, "network spillovers" arising as an outcome of the spatial proximity of firms, "training spillovers" through the inter-industry migration of the skilled labor force and "artistic spillovers" defined as artistic innovativeness that can contribute to other artists, creative and non-creative companies (UNCTAD, 2008).

2.2.3. Economic and Spatial Characteristics of Creative Industries

After reviewing figures that indicate the economic potential of CIs, it is important to look into the economic and spatial properties that set them apart from other industries. Caves (2000) distinguishes a set of specific characteristics that determine the industrial organization and supply chain of CIs by shaping contracts between creative workers and "humdrum partners" (p.1). Although each industry has its own specificities, Caves (2000; 2003) delineates the complex and susceptible nature of creative activities as a whole by pointing out their basic properties:

- *Nobody knows* – uncertain demand for creative production;
- *Art for art's sake* – artistic satisfaction gained through making a creative work;
- *Motley crew* – variety talents and skills needed for creative production process;
- *Infinite variety* – the abundance of differentiated creative goods in the market;

- *A list/B list* – vertical differentiation of skills possessed by creative talents;
- *Time flies* – importance to release creative product on time;
- *Ars longa* – durability of creative goods through copyright protection.

These specific characteristics shape the supply chains of creative production. Pratt (2004) proposed several views on how these production chains of CIs can be classified. According to the author, they can be defined by three major types: the ones that bring "the content to the audience" (publishing, films, etc.), "audiences to content" (arts) and "service-based activities" (advertising, architecture, etc.) (Pratt, 2004, p. 14). Based on the position that a certain industry occupies along those production chains, its governance type can be determined together with relevant policies that would focus on investment or financial support (Rozentale & Lavanga, 2013). Creative clusters are considered as one of the governance tools that can foster CIs development through information spillovers, facilitated interaction and necessary infrastructure (Musterd & Murie, 2010). Potts and Keane (2013) argue that, despite the ability to be established as a natural outcome of economic evolvement, policy actions and assistance can prove to be a significant accelerator to their faster development.

The studies on clustering of CIs and their innovation reach out for clusters' external connections to the wider spatial area and its influence on the production. Some authors propose two major economic externalities deriving from the agglomeration of firms – localization and urbanization economies (Lorenzen & Frederiksen, 2008; Lazzaretti et al. 2009). The first externality refers to the benefits that firms receive from being situated in a certain location that has a high concentration of other firms of a similar type. These economies derive from the specialized economic environment as a result of knowledge spillovers (Lazzaretti et al. 2009) and a highly skilled labor force (Lorenzen & Frederiksen). This process would subsequently result in highly qualitative production. Further benefits of the concentration of firms can be retrieved from the relevant institutions that are often established as a result of the particular industry formation, and work towards strengthening its growth and development.

Another externality discussed in clustering theory is defined as urbanization economies (Lorenzen & Frederiksen, 2008; Lazerretti, 2009). This concept includes not only the co-location with similar firms but also the near presence of other economic sectors as well as specific urban factors that make a positive impact on the formation of industries. Urbanization economies have a wider reaching impact and can support CIs through the bigger market demand, large networking opportunities and thus a spread of innovation (Lazzeretti et al., 2009). Although there are downsides such as higher costs for businesses that situate in urban areas, the labor market, relevant institutions

and the diversity of infrastructure embedded in the city's environment are often far more important for supply chain of CIs and pay off in the long term (Lorenzen & Frederiksen, 2008).

2.3. Creative Industries after the Economic Crash

The crisis of 2008 is the first severe global economic recession since the start of debates on the creative economy. As the previous paragraphs show, before 2008, CIs was an important discussion area in urban growth strategies. After the crash of well established traditional sectors in European economies, the focus of academic and policy rhetoric on CIs shifted from growth to investigating the challenges that the crisis raised for the creative economy: governance of CIs, stability of various CIs subsectors and their ability to survive in the context of global economic decline. There exist several approaches to CIs development in the post-crash period. While some authors believe that it must have had devastating effects on the CIs due to reduced public financing and will take years to recover and restore the same rapid growth pace (Reid et al. 2010; Flew, 2012), others avoid making straightforward conclusions and generalizations of the crisis effects and rather seek to find out how CIs depend on their relationship with general economies, private spending and policy actions (Pratt 2009, 2012; Pratt & Hutton, 2013). This chapter analyzes those approaches by discussing the impact of the crisis on different creative sectors in regards to various creative policy directions.

While the sudden crash of the financial sector drove other economic fields into a deep decline, the complex composition of CIs does not allow one to give a straightforward answer to what extent this field could have been affected and what are its general future perspectives. This confusion is partly determined by the heterogeneity of this field since it encompasses cultural organizations as well as a wide range of creative businesses. The recession usually hits the cultural sector first. Political decisions to reduce the financing for this field are often influenced by the prevailing opinions that argue subsidies for culture are too high in terms of opportunity costs and claim that this money can be invested in other fields that are widely perceived as more economically or socially significant (Pratt, 2013). Pratt (2013) explains that officials in the UK and the US strive to minimize the public spending, which results in the lack of guidance for such economic areas as CIs. Flew (2012) argues that austerity means that were introduced in the UK's public sector as a result of the crisis, will have a devastating effect on CIs through reduced share of subsidies and abolishment of important support institutions. Subsequently, in 2008-2010, the group of creative activities – arts, recreational service and entertainment industry faced much bigger decline in employment than information and communication activities (Reid et al., 2010).

Talking about CIs as a whole, De Propris (2013) notes that each creative industry has a very different weight in general statistical estimates that describe CIs contribution to economic

development. This can be determined by the economic nature of different sub-sectors of CIs as well as their different connections with traditional industries. The faster growth in the pre-crisis period, according to the author, influences their rapid recovery in the post-crash years. To illustrate, before the recession in the UK software, computer games and e-publishing industries tended to grow by 5.5% which is more than twice as fast as the average pace of overall CIs. New statistical data show that in the first year of the post-crash period the same sectors are recovering at a much faster pace than the rest of CIs (De Propris, 2013). This growth can be the result of increasing demand for innovative goods that, unlike the arts, have a relatively low dependency on the public sector.

Apart from the pre-crisis development pace, a look at the relation between various creative sub-sets and conventional economics can provide valuable evidence about the sector's response to the decline. Not only do those industries that are highly dependent on government subsidies suffer more but also those that have a strong dependency on traditional businesses whose contraction subsequently causes contraction in production in creative services firms. Pratt and Hutton (2013) argue that those firms that have a near proximity to other businesses, namely those that provide services to non-creative firms, suffer more, whereas those whose production is sold for final consumers may be more resilient. De Propris (2013) also note that many sub-sets of CIs are closely related to regular businesses and are involved as "the most innovative component of longer and more complex supply chains" (p. 26) thus there is a strong dependency on traditional businesses. The UK estimates show that "business-to-business" sales account for approximately 60% of the overall demand of creative productions or services that are generated by creative enterprises (NESTA, 2008, p. 3). Thus, the decline in those businesses would soon be reflected in the decline of CIs. Advertising is one of the most susceptible industries in this case. Economic crisis forced many businesses to tighten their activity and significantly reduce the external costs in their budgets. It resulted in the contraction of the advertising industry after the crash in 2008 (Reid et al., 2010). The case of the UK shows that although advertising was hit the most, other CIs such as architecture, fashion and software followed similar patterns and had lower than average survival rates in the UK (Reid et al.2010, NESTA, 2008).

How easy CIs in certain regions will manage to endure the crisis depends also on the policy measures. According to Pratt (2013), CIs highly rely on "proactive regulations" (p. 21) that can assure stability in the field during the downturns and continue creating conditions needed for their growth. Hence government's stronger engagement and the establishment of support measures such as additional regulations and institutions can significantly strengthen CIs. Some authors believe that after evaluating the outcome of the economic crisis, the strategy of CIs must be revisited.

Vinodrai's (2013) research on design sector in two cities – Toronto and Copenhagen illustrates how institutional coordination of creative businesses strongly influences the consistent development of CIs and fosters a faster recovery after the crisis. Creative businesses in Toronto function under liberal market conditions, whereas CIs in Copenhagen rely on special policies. The research concludes that despite the prevailing precariousness of the creative employment, labor force in design industry bears the crisis easier than the workforce in the wider economy. Coordinated market model and its institutional facets, as the case study of Denmark shows, prove to be important for the creative workforce and its ability to perform well in accordance to the changing conditions during the recession period. Contrary to the general perception that a liberal market system fosters entrepreneurship or risk-averse decisions, the coordinated model creates a safer basis for entrepreneurs and innovators to engage in the desired economic activity (Vinodrai, 2013).

The biggest issue on the recent papers that deal with CIs and their performance in times of crisis is the lack of consistent evidence that leads to radically different interpretations of the findings even if they refer to the same market. When analyzing the changes in employment within the UK's CIs, Reid et al. (2010) and De Propris (2013) present very different results. Reid et al. (2010) argue that employment in CIs severely decreased as a result of crisis, whereas De Propris (2010) presents more positive results. She takes into account creative self-employment (which is excluded by Reid et al.) whose rate in UK experienced a rapid growth during recession. The author includes three types of self-employment in CIs, namely "creative self-employment in the creative industries", "support self-employment in the creative industries" and "self-employed people doing creative jobs in other industries" thus arriving at the conclusion that decrease of creative employment simply "mirrored" (p. 27) the rise of self-employment.

In summary, CIs ability to weather the crisis remains open for further research. As discussed in this chapter, those sub-sets that are subject to either traditional businesses or public financial support tend to suffer most, while production for final consumers have better chances to bear the crisis relatively easy. Policy context and state intervention also plays an important role that can significantly impact CIs resilience to general economic decline. In many developed regions, the pre-crisis years showed an extremely fast development of all CIs, while the current situation in CIs according to Grodach and Seman (2012), is defined as "selective growth and not a period of total decline" (p. 15). As a result, the investigation on CIs ability to weather the crisis may not give a straightforward answer. An in depth investigation on various geographical regions and in different industry groups may prove useful for the full understanding of CIs dynamic during recession.

2.4. The Case of Amsterdam

This part of the literature review narrows down the discussion on CIs and their development in a context of a specific urban location. It extends the discussion about the policies of CI and their ability to support the development of those industries. This chapter, based on academic literature, presents the development patterns of CIs in the city prior to the crisis of 2008 but also provides the insights into the post-crash period although the studies in this area are thus far scarce. The first sub-chapter aims to investigate the policies related to the support of CIs and their contribution to the growing concentration of CIs. It also looks into city-specific characteristics and their impact on the development of CIs.

2.4.1. Creative Industries Policies in Amsterdam

Regardless of the fading differences among cities in the globalized world, distinctive historical and cultural features are playing an increasingly significant role in policy-making strategies. Finding what makes the city distinctive can be a successful image creation strategy as well as a way to attract human capital (Musterd, 2010). Diversity in Amsterdam proves to be an interesting case for CIs development studies. Due to its rich past, cultural environment and well-developed economy, Amsterdam is not only a desired tourist destination but also an attractive place to live and work. The city has a mixed character; it is known for being able to reconcile highbrow and amateur culture (Peck, 2011) together with its "romantic side of the wildlife" (Choosing Amsterdam, 2003). At the same time, the city is known for its long trading history, which fostered its urban economic development and created suitable conditions for the formation of various industries. Amsterdam's policy shift towards the idea of a creative city in the beginning of this century was influenced by novel theories (Florida, 2002; Hospers, 2003; Landry, 2008; Peck, 2011) on urban development strategies based on the synergy between culture, creativity and economic development.

Although many European cities struggle to initiate the move towards implementing the concept of a creative city, some places find it harder to achieve than the others. Amsterdam has historically formed as a financial and education center with an extensive cultural life. It enables the city to adopt new development strategies easier than in areas that, for a long time, were dependent on heavy industry and do not possess diverse an economic and cultural legacy accumulated in the past (Musterd & Murie, 2010). Path dependency and its importance for contemporary urban growth reinforces the discussion of hard and soft infrastructure embedded in the city together with the policies shaping them and their role in further urban development. Literature analyzing the growth of CIs in Amsterdam often emphasizes hard and soft conditions in the city as crucial factors supporting these industries (Musterd & Murie, 2010). Their significance, however, is different. In terms of the

hard conditions theory (Musterd & Murie, 2010), Amsterdam has an advantageous position for the development of various businesses among European cities. The city is situated in a good geographical position. Well-developed railway, port and airlines systems provide good communication facilities with other major cities, not only within Europe, but other parts of the world as well (Musterd & Deurloo, 2006), which is important for various businesses that do not focus only on the local markets. Besides the transport infrastructure, the city has a well-established educational system. "Knowledge infrastructures" according to Deinema (2012, p. 234) play an important role in the development of CIs in Amsterdam that stimulate their dynamics. Abundance of publicly supported study programs in universities and technological institutes prepare qualified interns or graduates for a variety of jobs in CIs (Bontje, 2008).

When city authorities initiated urban development embracing innovation, various related policies came into the fore. Those policies aimed to invest in innovation and entrepreneurship and support their growth. Although in the early 2000s most of the cultural policy attention focused on supporting and developing artistic activities in the city, cultural strategy *Amsterdam 2015* (2003) developed a broader concept of culture and included CIs in its agenda (van der Borg & Russo, 2005). Subsequent policies, mainly on the national and regional level, put much emphasis on collaboration between the CIs and traditional businesses. Funding project, *Pieken in de Delta* (2006), was established to foster the creative economy and called for applicants with new proposals that could bridge the gap between CIs and other economic sectors. Similarly, *Ons Creatieve Vermogen* (2005) was an attempt to put CIs in the focus and foster collaboration between them and non-creative businesses. Another initiative, the *Regional Innovation Strategy*, aimed to create better conditions for most innovative economic fields, namely, knowledge-based sectors and CIs (Kovàcs, 2010). The need to promote CIs development and facilitate the interaction between various actors within the sectors resulted in the *Creative Cities Amsterdam Area* platform. It was established to implement the intermediary's role between CIs. It involves broader regional participation and engages in promoting the Dutch CI through the wider international outreach. One of its goals is to attract creative professionals from abroad (Bontje, 2008).

In addition to the national and regional programs, a series of initiatives have been undertaken solely in Amsterdam that dealt with the local issues faced in trying to facilitate the CIs growth. While Amsterdam faces problems regarding the lack of affordable office space, city officials undertook the "Bureau Broedplaatsen" program. Initiated as a way to help formalize the squatted buildings, it is now directed towards assisting artists and creative start-ups find suitable workspaces (Bontje, 2008). The goal of the program is to match people from different fields, namely artists and creative entrepreneurs, with real estate owners and help them find suitable spaces for their offices

and creative projects. This policy initiative focuses on facilitating the renovation process of under-utilized buildings to create suitable working spaces. The creatives that decide to undertake reconstruction process are provided with information about the legal issues and rental subsidies (Musterd et al., 2010).

The growth of CIs in Amsterdam is positively influenced by the successful combination of institutional decisions and private initiatives. Projects such as networking platforms, *Amsterdam Creativity Exchange*, or the *PICNIC* Festival, aim to promote technology and creativity and, together with the support of official policy, are becoming widely accepted and gaining regional significance (Bontje, 2008). Despite the success of those initiatives, growth of CIs cannot always be supported by generic programs. Stam et al. (2008) argue that CIs policy can only achieve its goal if it takes into account the specific needs of different industries. For this reason, suited smaller scale programs for various CIs domains in the city were employed and now involve specific support institutions such as the Dutch Film Fund (Bontje, 2008).

Besides hard factors, soft conditions in Amsterdam have also contributed to the development of new businesses. The atmosphere of the capital city has an evident connection with location preferences of CIs (van Oosteren & Crok, 2007). Although globalization and communication technologies open the door to establishing businesses in less developed countries where they could benefit from small costs, Amsterdam remains a desirable destination for new creative start-ups, suggesting that the city's reputation, its urban lifestyle facilities and local characteristics play a significant role. Some authors put special emphasis on the presence of soft factors in urban areas. Hospers (2003) indentifies four intangible assets that support the development of a creative city: "concentration" (sufficient population and intense interaction), "diversity" (variety of citizens and city's material environment), "instability" ("tiny fluctuations" in a city life (p. 151)) and "reputation" (brand development) (p. 144). According to this theory, the image of the city plays an important role since the areas that are generally perceived as "cool" (Hospers,2003, p. 152) are more competitive in the global economy. Similar significance to the vibe of the city is given by Florida (2002) who states that tolerance levels in the society enhance the attractiveness of the urban region to creative talents. These soft factors that are widely present in Amsterdam partly explain the city's attractiveness to creative firms. Musterd and Deurloo (2006) argue that the "urban fabric" (p. 85), namely a wide range of soft conditions, encourages interaction between different players in CIs that leads to the exchange of "tacit knowledge" (p. 85) that can only be transferred through confronting interplay. Although Amsterdam succeeds in creating a lively, yet cozy environment, many researchers (Pethe, Hafner & Lawton, 2010; Dainov & Sauka, 2010; Bontje, 2008) agree that hard rather than soft factors determine this trend. Labor market, wages and policies oriented to the

development of CIs have a stronger impact on the formation of the creative city and play a substantial role in the growth of CIs.

2.4.2. Figures on Creative Industries in Amsterdam

After the start of statistical and academic research on CIs, a high economic potential of Dutch creative industries was realized. The group of creative and cultural activities, whose contribution to economic growth has been widely acknowledged, is classified into three main groups, namely, the Arts, Media and Entertainment (ME), and Creative Business Services (CBS). The Dutch classification model of CIs that first appeared in 1993 was revisited in 2008 when the composition of the arts sector was expanded (Groep et al., 2010). Art and CBS sectors are mostly comprised of small enterprises, whereas ME is dominated by large scale firms. Due to their diverse composition, CIs firms in all three fields have different economic characteristics, meaning that they have different relations to other businesses and different financial resources (Stam et al., 2008). Artistic production is much less dependent on the market since a majority of its income derives from government subsidies. The ME sector is market driven and provides products for individual consumers, whereas CBS focuses on specific customers and their needs by producing suited products (Stam et al., 2008).

Amsterdam has the highest agglomeration of total Dutch CIs (Kloosterman, 2004). High concentration of creative businesses in a capital city is a typical case for most countries.
In Amsterdam, most of those small scale art companies and creative businesses are concentrated in the inner city and take advantage of urbanization economies (van Oosteren & Crok, 2007). Musterd and Deurloo (2006) estimated that art organizations tend to concentrate in the historical centre of the city as well as neighborhoods that settled in the nineteenth and twentieth centuries, particularly in the Oud-West area. Larger organizations that, to a great extent, dominate subsets of ME are in need of a more specialized environment together with a relevant labor pool. By agglomerating in the same neighborhoods they seek to benefit from localization economies (Van Oosteren & Crok, 2007). ME firms mostly choose the western part of Amsterdam, the fringe of the city centre. CBS firms reside in the centre with a tendency to diffuse towards its closest neighborhoods (Musterd & Deurloo, 2006). Despite the ability to form specific production areas, most of these clusters have not yet fully exploited the benefits that agglomeration can provide. Mommaas (2004) argue that CIs clustering is mostly spatial and does not create a certain brand that could increase the competitiveness of the firms residing in that specific area, nor does it significantly increase the interaction between them that could lead to partnerships or a meaningful knowledge exchange. As Kloostermans's (2008) study on the agglomeration of architecture companies in Amsterdam and Rotterdam reveal, there exist no intense networking or interaction among those firms even if they are situated in the same building.

The study shows that unwillingness to collaborate with other firms derive from fearing to lose their own identity and not be able to protect the authorship of their projects. Agglomeration of those firms, however, encourages knowledge spillover that can result in more innovate decisions (Kloosterman, 2008).

CIs in Amsterdam are largely dominated by small businesses (Musterd & Murie, 2010). This trend is evident among CIs throughout the whole country where only 5% of overall CIs employ ten or more people. This is determined by the economic characteristics of those firms. The process of producing creative goods and services depends upon a large input of work and economies of scale are never achieved. As a result, out of 642,900 firms in Dutch creative sector in 2004, 37.6% had 1-9 employees, 8.2% employed 10 to 99 people and only 0.7% of the country's population of creative firms had more than 100 people working in the company. 38.3% of CIs employees work part time (Stam et al., 2008). The fact that Amsterdam has the largest number of creative businesses in the Netherlands of all three sectors – Arts, Media and Entertainment, and Creative Business Services – determines its biggest employment capacity in those industries. By 2004, the employment rate in Amsterdam's CIs constituted 12.7% of the overall national employment (Musterd & Deurloo, 2006, Kloosterman, 2004). According to more recent estimates, the share of the overall employment in CIs constitutes 7.6%. The number of companies, however, is double that and constitutes 15.6% of the Dutch business population. According to Stam et al. (2008), only in Amsterdam does employment in CIs contribute significantly to the total employment nationwide. In other Dutch cities, typically with much lower concentrations of creative firms, CIs do not generate a valuable addition to the overall employment rates as the number of jobs remain relatively small.

More recent statistical data regarding CIs development in the past few years shows that, despite the crisis in 2008, there appear to be growing tendencies in terms of jobs and the formation of new firms in CIs in Amsterdam. Rutten et al. (2012) state that, from 2009 to 2011, the growth of the cross-media sector was 0,5%, whereas the growth of CIs alone constituted 1,9%. Positive growth numbers show a certain resilience to economic downturns that affected other sectors. In comparison, the entire Dutch economy contracted by 0.2% from the year 2009 to 2011. The demand for creative work sustained economic growth tendencies in this period for the core creative production, whereas the ME sector, especially the sub-sets of Publishing and Broadcasting, experienced decrease in jobs. Employment in Radio and Television subset contracted by 1,050 jobs. Book industry lost 1000 jobs, while employment in print media domain shrunk by 1,250 jobs. This decrease, however, is presumably largely affected by the spread of digitization that changed consumption patterns and not the economic slowdown. Nevertheless, positive overall indicators of CIs growth are, to a large extent, determined by the fast development pace in the past (Rutten et al., 2012). High growth

numbers were also significantly influenced by the new trade law that enforced all companies to be registered at the Chamber of Commerce from October 2008. Hence, statistical data on the overall growth is somewhat distorted. The new legislation mostly boosted employment in the Arts and CBS because they had the largest number of freelance workers who became one person companies. The freelancing model is particularly common among CIs in Amsterdam (Stam et al., 2008). Hiring people on a project basis can enhance the flexibility of a firm's working model and significantly reduce the costs. Moreover, the research on Amsterdam's Advertising sector (Röling, 2011) reveals that firms hiring freelancers tend to look for creative talents abroad. It is done for two reasons – the lack of local digital creative professionals and the high local labor costs (Röling, 2011). Economic fluctuations had a big impact on the demand for their work. In 2009, 60% of Amsterdam's freelancers working in CIs experienced a steep decline in demand for their service (Groep et al., 2010).

2.5. Summary

Discourse on CIs as a part of the post-industrial "weightless economy" experienced various transitions and created a wide area for research along the lines of culture and creativity driven economic development. As the literature review illustrates, in the pre-crisis period discussions on CIs stressed their direct and indirect contribution to city's economies and ability to make cities competitive in the global world. Many Western cities adopted this approach which resulted in a major shift of urban policies and their focus on creativity-driven growth. Despite the significant contribution on growth, research on CIs reveals their precarious nature, which separates them from non-creative industries and has a major impact on shaping their supply chains, which diff from those of traditional industries.

While the studies during the pre-crisis period focused on the economic contribution of CIs and prospects for their future growth, the recent economic crisis opened a new research area that engages in reevaluating their economic potential by exploring their links to the conventional economy and ability to survive during the recession. Taking into account the economic specificities of CIs, scholars predict very different outcomes and scenarios of their future growth; however, most agree that the crisis hits CIs to a different extent.

As noted in the literature review, development of CIs is strongly subject to human capital and a cultural environment whose dense concentration underpin the concept of creative cities. The case of Amsterdam depicts how specific urban areas and their properties can support the development of CIs. Amsterdam, with its wide presence of hard and soft conditions, and generic and tailored policies towards a variety of CIs led to their increasing growth. The research on CIs in

Amsterdam depicts them as being an important constituent of the city's economy due to their large agglomeration and economic contribution. Whether CIs in Amsterdam can maintain their economic dynamics during the crisis is further discussed in subsequent chapters.

III. Research Methodology

3.1. Introduction

This chapter explains the chosen methodological approach and its applicability to the framework of this research. The goal of this research is to answer the question "To what extent are creative industries in Amsterdam resilient to the global economic crisis?" Amsterdam was chosen due to the city's focus on developing its CIs. CIs experienced continuous growth since their inclusion in the city's cultural and economic agenda. The extent to which they were affected by the recession can help identify if they developed a relative independency from the rest of economy and thus higher resilience to economic downturns.

The introduction to the methodology begins with the explanation of design of the empirical study where the chosen research method and hypotheses are introduced. For the purpose of defining the research population, composition of CIs in Amsterdam will be delineated. Later on, the data collection process and methods of analysis will be explained together with validity and reliability issues. After that, the structure of the chosen research method will be explained. The chapter ends with explaining general limitations that this study faced and a summary of the main aspects of the methodology.

3.2. Research Design

This thesis employed a deductive approach that helped to translate a solid theoretical framework on various aspects of the development of CIs into hypotheses and chose ways to explore them (Bryman, 2008). As a result, quantitative research method was regarded as the most suitable technique to accomplish this study. This method enabled the study of the broad population of CIs in Amsterdam that a qualitative technique could not capture and allowed the generalization of the retrieved results.

This research is twofold and is looking at the overall statistical data on CIs development from 2003 to 2013 in Amsterdam and later examines more complex aspects of their development using a survey. It has two units of analysis, namely, sectors of CIs and individual firms. This allowed first to provide an overview of the recent statistical data that reveal the general development trends of CIs in the city as a whole (including Arts, Media and Entertainment and Creative Business Services), compare their development with other sectors and in two different time frames 2003-2008 and 2009-2013. For the comparison of CIs with other industries, 18 economic sectors that exist in Amsterdam were chosen. The figures represent overall development in those industries: agriculture, fishery, mining and quarrying, industry, energy companies, construction, wholesale, retail trade, catering,

transport and logistics, postal/telecommunications, financial institutions, business services, government, education, health and welfare, other services and extra-territorial bodies.

In the second unit of analysis, individual creative firms were investigated to gather information about the basic characteristics of those firms, their approach to economic conditions and urban characteristics of Amsterdam and also their experience within the past five years in the context of the financial crisis. In this phase, only firms operating in ME and CBS are explored as they share similar economic characteristics

The first part of the study investigates the following hypothesis by answering a series of sub-questions:

1. ***Has the growth rate of CIs in Amsterdam changed since the start of the financial crisis in 2008?***

   H1: Between 2009 and 2013 CIs grew at a faster pace than in the pre-crisis period between 2003 and 2008.

2. ***To what extent has the growth rate of CIs changed when compared to other economic sectors in Amsterdam?***

   H2: Between 2009 and 2013 CIs grew at a faster pace than the rest of the economy in Amsterdam.

The survey engages in investigating the following questions and hypothesis:

3. ***To what extent do agglomeration economies influence the development of CIs in Amsterdam?***

   H3: Agglomeration economies have a positive impact on individual firms and their development in Amsterdam in 2013.

4. ***To what extent has the financial crisis affected the employment structure of CIs in Amsterdam over the last five years?***

   H4: Within the last 5 years the number of permanent workers decreased in CIs in Amsterdam.

5. ***To what extent did CIs in Amsterdam experience economic difficulties over the last five years?***

   H5: Global economic crisis did not have a significant influence on the development of individual firms in Amsterdam in the last 5 years.

6. ***What is the influence of hard and soft infrastructure on the development of CIs in Amsterdam in 2013?***

   H6: Hard and soft conditions in Amsterdam have a positive influence on the growth of CIs in 2013.

3.2.1. Composition of CIs in Amsterdam

A common issue when researching CIs is the lack of a unified classification model. This significantly reduces the comparability of CIs development in different regions and affects the statistical assessments on their economic contribution including estimates on their performance in generating output or jobs. This occurs because some classification models fail to identify all the constituents and smaller parts of sub-sectors that could otherwise enable to one determine the full extent of the industry. Thus far there exist six commonly used models that denote "creative goods and services" (Throsby, 2008, p. 219).

Despite the commonly used classification models of CIs, the Dutch government developed its own definition of CIs rather than adopting an existing one. CIs in the Netherlands are comprised of the three main fields: Arts, ME and CBS (Groep et al., 2010). The main subsectors of CIs in Amsterdam include various organizations in the following fields (for the full list of activities and their SBI codes, see Appendix 1):

Table 3.1. Sectors and Subsets of CIs in Amsterdam.

Arts	Media and Entertainment	Creative Business Services
Music & Performing Arts	Film	Advertising & Marketing
Heritage Preservation	TV	Information & Technology
Theatres	Radio	Architecture
Museums & Art Galleries	Photography	Design
	Publishing	
	Broadcasting	
	Amusement and Entertainment	
	Press	

Source: Bureau Onderzoek en Statistiek. Own elaboration.

3.3. Data Collection and Analysis

The statistical data on CI growth in Amsterdam was received from the Statistical Bureau of Amsterdam (Bureau Onderzoek en Statistiek). Data contained the information on the number of creative firms and the number of employees from 2003 to 2013 (until January 31).

In order to compare the pace of growth between CIs and other industries in Amsterdam, the data on the development of other economic sectors throughout the same period was also received. This 10 year period was chosen for the purpose of providing an adequate time frame that allows a comparison of the growth dynamics before the start of the crisis and in the post-crisis period. The analysis of the data focuses on two time frames throughout this period: the pre-crisis period from

2003 (that signifies the start of the debates on CIs) till 2008 (when economic crisis hit most European countries) and the period of 2009 – 2013 which can best reflect on the latest developments and the crisis impact.

For the survey section, creative firms were targeted using a random sampling method that was chosen as the most suitable way to research the large population of CIs in the city and to draw unbiased conclusions. The creative firms in Amsterdam were identified using internet search tools and a variety of industry specific blogs that contained links to the websites of companies or individual freelancers. The primary list of firms contained 4,000 records. For more efficient response collection given the large sample, an online survey was chosen as the best option to accomplish this research. The survey was made available in June 2013. Creative firms based in Amsterdam received an email with an invitation to the survey. A week later a reminder was sent to those that did not take the survey. Some invitations were returned as the email addresses were invalid and in some cases, the recipient responded with the correct contact information for the organization. After updating the contact information according to the automatic responses, emails with invitations were re-sent to those firms. The final number of complete responses to the survey was 460 which provides an 11.5% response rate of the total targeted sample. Response rate could have been higher without being influenced by some unforeseen circumstances, one of them related to technical issues. Some of the respondents reported about finding the survey in the spam folder of their email programs. The exact number of the emails that ended up not reaching the inbox of the targeted firms and freelancers is not known and only a few respondents reported this issue by accidently checking their spam box.

The statistical data received from the Statistical Bureau on Amsterdam was analyzed using Microsoft Excel. It was used for calculations and creation of graphs, which later allowed a comparison of the growth of CIs in different time frames. Responses to the survey were collected using Qualtrics online survey creation system and afterwards analyzed through SPSS. Since the chosen survey type included single response, multiple choice and Likert scale questions, the obtained data allowed the quantitative description of the results and their presentation using the measures of descriptive statistics. Frequency tables and cross tabulations were processed to understand the relationship between those variables and to test the research hypothesis. The statistical significance of the relationships between variables was measured using the Chi-square test.

3.2.2. The Structure of the Survey

For the second part of the study, a cross-sectional survey studying the experience of individual firms was designed. Respondents were asked to fill out the survey once at one point in time (Kelly, 2004), namely the month of June. Nevertheless, retrospective questions about their experience over the past

few years were also included since they were essential necessary to tackle the changes that occurred in the firm. The second part investigates only the developments in the commercial part of CIs and excludes the analysis of the arts sector as having different economic characteristics. This decision was made for several reasons. First, cultural organizations are largely subsidized by the Dutch government and therefore are less dependent on the market and its fluctuations than the firms that operate fully under the market conditions. This strategy was therefore chosen due to incomparability between the commercial and cultural parts of CI. On the other hand, the arts sector has been heavily struck by the austerity measures with the decision of the Dutch government to slash the budget for cultural institutions and organizations by 25%, starting in 2013. Therefore to be able to reflect experience of cultural organizations, the general survey would have not been sufficient. This issue requires a separate research that could comprehensively analyze changes in the cultural sector and the impact of subsidy cuts as a result of the crisis.

For this reason, the survey was distributed to the firms that operate in ME and CBS only. Respondents were asked to identify their sub-sector from the provided list that contained fields that were derived by merging several related sub-sets (classified according SBI codes), assuming that the respondents would find it easier to identify the sector they operate in. This list contains the following fields:

Table 3.2. Main Subsets of Market Oriented CIs.

Media and Entertainment	Creative Business Services
Publishing	Public Relation Agencies
Computer Games	Architecture
Software	Advertising
Film and video industry	Design
Radio and TV Broadcasting	Organization of Conferences and Fairs
News Agencies/Information Services	
Audio Production	
Photography	
Amusement Industry	

Source: Bureau Onderzoek en Statistiek. Own elaboration.

The survey (Appendix 2) included single response questions, multiple choice and Likert scale questions. In the beginning of the survey the questions were focused on identifying the basic characteristics of the company. Later on respondents were asked to evaluate different aspects of their activity over the past five years. Finally, five point Likert scale questions were included,

asking to assess various conditions in Amsterdam and their relevance to the creative business firms. The questions were designed to be able to test the hypothesis mentioned above and encompassed the following topics:

1. General information about the firm: sector, sub-sector, size of the firm, types and numbers of employees, location of the firm in the city;
2. Relationship to other creative and non-creative firms as well as the spatial positioning of CIs;
3. Hard and soft conditions in Amsterdam;
4. Negative economic effects on creative firms over the past 5 years;
5. The change of employment structure over the past 5 years.

3.3.1. Validity and Reliability

Before conducting the research, it was important to discuss whether the chosen methods for the testing of the hypotheses of this study were chosen adequately and whether they could provide objective results. The chosen survey method has face and content validity. Content validity is regarded as a more important determinant of suitability of the chosen methods to pursue research than face validity, which deals only with the appearance of the research form. Content validity reflects a certain level of quality that can only be properly assessed by individuals that are familiar with the topic that is being researched (Litwin, 1995). Surveys are able to reach larger samples of respondents over other research methods and thus increases the credibility of results. In addition, given the research objective – the impact of crisis on the development of CIs – a survey is an efficient way to trace the problems that the firms faced over the past years internally.

It is difficult to asses the reliability of this research in advance. Although a some subjectivity might have been embedded in the questions of the survey, this could have not been prevented due to the lack of well established methods for analyzing CIs. This is a general issue for researchers of CIs due to the diversity of the sector. It is possible that some questions were of little relevance to certain types of firms; however, those research dimensions came from the hypotheses that were formulated after reviewing the academic literature.

Questions regarding the firm's experience after the start of the crisis in 2008 have a retrospective dimension thus it is possible that the firms were not able to provide very accurate answers. Likert scale survey questions, however, reduced this limitation as it did not require very precise statements or numbers only general information. In addition, issues in reliability may have arisen due to the fact that the invitation to the survey was sent to the general emails of the firms asking to fill in the survey on behalf of the company thus not really knowing the position of the

person that was filling in the answers and his/her affiliation with the company's internal affairs. On the other hand, attempting to contact the main manager of the firm might have been too costly taking into account the time limitations and the large sample that was intended to be targeted; therefore, the response rate could have been even smaller and would not have provided representative results.

3.3.2. General Limitations

The population of creative firms in Amsterdam is very large. The randomly chosen sample covered only 26% of currently existing firms, which can be considered as a limitation of this research. Nevertheless, a lot of freelancers engage in the creative activity rather sporadically without advertising themselves via internet thus making it hard to identify them.

Another relevant limitation was the decision to conduct the survey in English. Although Amsterdam is an international city where English is regularly spoken, especially in various business industries that employ many foreigners, some freelancers reported that it was problematic to fill out a survey in English due to insufficient knowledge of this language.

3.4. Summary

Most methodological issues in the research area of CIs occur due to the difficulties in trying to determine their scope as well as their diversity in terms of their economic nature. The following research was conducted by clearly delineating the research area according to the established research practice that classifies creative firms in Amsterdam using four and five-digit SBI codes. From three sectors of CIs in Amsterdam, two commercial sectors were chosen for the following study as being more compatible for this type of study. A research design that consists from statistical overview of both sectors and a survey that analyzes more specific issues were adopted from similar types of studies and proved its usefulness to the analysis of CIs. Data on CIs growth from Statistical Bureau of Amsterdam only covers the general development trends whereas the survey explains more in depth issues that affect firms individually. Despite the existing limitations, the survey that was employed for retrieving the necessary data, aimed to capture the most important discussion areas reviewed in the theoretical framework.

The next part of this masters study will show how the above described research methods were applied and what results were retrieved from the data that was gathered.

IV. Results

4.1. Introduction

The aim of this part of the research is to answer the main research question by conducting an analysis of empirical data. This section investigates the statistical data on the growth of CIs in Amsterdam as well the results of the survey that will provide more insights on how individual firms managed to weather out the crisis. The first sub-chapter looks into two different time frames, namely 2003-2008 and 2009-2013 and compares the dynamic of the growth of CIs over those periods. It looks at the overall population of CIs in Amsterdam in 2013 and more specifically in media and entertainment and creative business services. First of all, the overview of statistical data will provide a general picture of CIs in Amsterdam in 2013 by delineating the size and market share of the different sectors of CIs. In addition to depicting the general development trends over the ten year period of employment and the number firms in CIs, the subsets of ME and CBS will be analyzed more specifically later on. Finally, the growth rate of CIs in Amsterdam will be analyzed and compared with the growth of other economic sectors in the same period of time. This will give a deeper insight on economic dynamics of CI and their capacity to drive urban economic growth by identifying the dominant subsets and those that have the greatest potential.

The second sub-chapter of this section evaluates the results retrieved from the answers to the survey questions. This part tackles and evaluates the factors that influenced the development trends of CIs analyzed in the first section. It will provide more insights into how individual firms experienced the recent crisis, what influence it had on their activity and how they managed to weather it. Moreover, it evaluates the city-related factors that might explain the statistical growth trends after the start of the crisis in 2008.

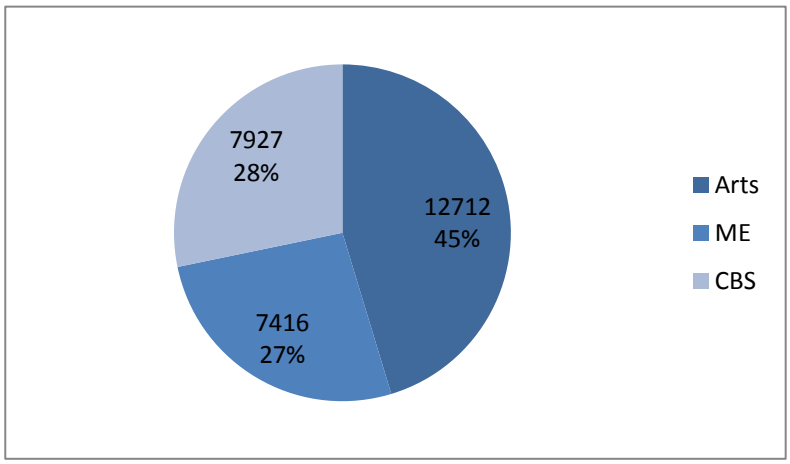
4.2. Creative Industries in Amsterdam: Statistical Overview

This chapter of research looks into statistical data of the general population of CIs in Amsterdam as well as the dynamics of traditional economic sectors in the city and answers the following sub-questions: Has the growth rate of CIs in Amsterdam changed since the start of the financial crisis in 2008? To what extent has the growth rate of CIs changed when compared to other economic sectors in Amsterdam?

4.2.1. The development trends in Creative Industries in Amsterdam 2003-2013

According to recent statistical data[1] provided by Statistical Bureau of Amsterdam, there were 28,055 creative firms in Amsterdam in 2013. Arts organizations constitute the largest share in this group that amounts to 12,712 firms which is 45% of all creative industries in the city. Market-oriented sectors of ME and CBS have a similar share of firms situated in Amsterdam (***Figure 4.1.***). ME and CBS amount to 7,416 and 7,927 firms accordingly.

Figure 4.1. Creative Industries in Amsterdam according to the Number of Firms, 2013.

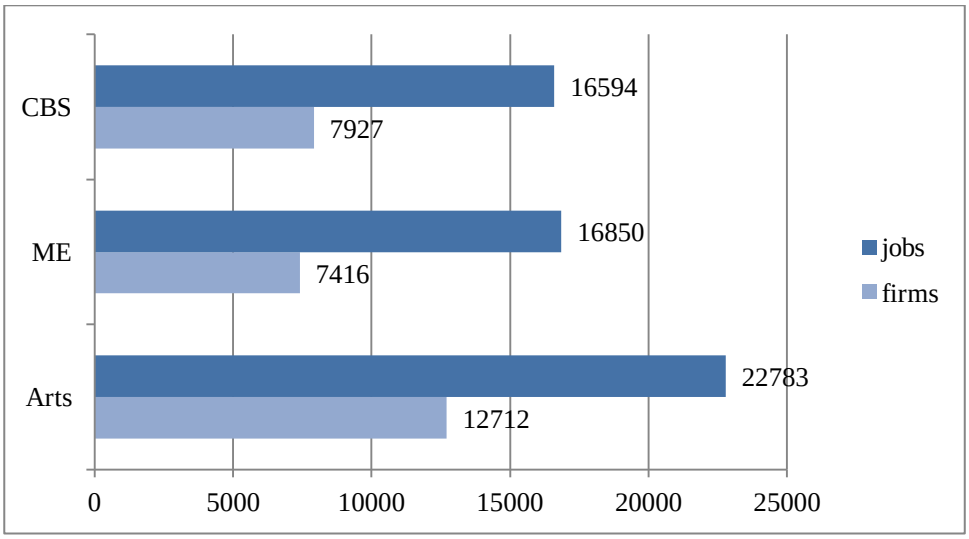


Source: Bureau Onderzoek en Statistiek. Own elaboration.

As already discussed, CIs are mostly comprised of small scale or micro sized firms. This also appears to be the case in Amsterdam since 28.055 firms created only 56.227 jobs which results to two work places on average. A relatively small number of jobs compared to the number of firms is to a large part determined by the high number of self-employed workers who often work in the CIs part-time. The job distribution, however, varies significantly according to the sub-sector. Some subsectors encompass firms that, due to their production particularities, tend to grow large and hence dominate these industries. In the Arts sector Theatres and Performing Venues together with Museums are the sub-sets that on average create the highest number of jobs, 54 and 43 jobs respectively per one organization. Among the firms that operate in the ME sector, the firms that belong to the Cinema and Television Broadcasting subsets created on average 33 and 31 jobs, while the majority of individual firms in remaining subsets generated approximately 3,5 jobs for their industry. The sector of CBS is less diverse in this respect. 117 firms that engage in Organization of Conferences and Fairs had 6 employees on average in 2013, whereas CBS firms of different subsets employed 2 persons per firm on average.

[1] The statistical data captures the growth of creative industries in Amsterdam until Januarry 31st, 2013.

Figure 4.2. Number of Firms and Employment in Creative Sectors, 2013.



Source: Bureau Onderzoek en Statistiek. Own elaboration.

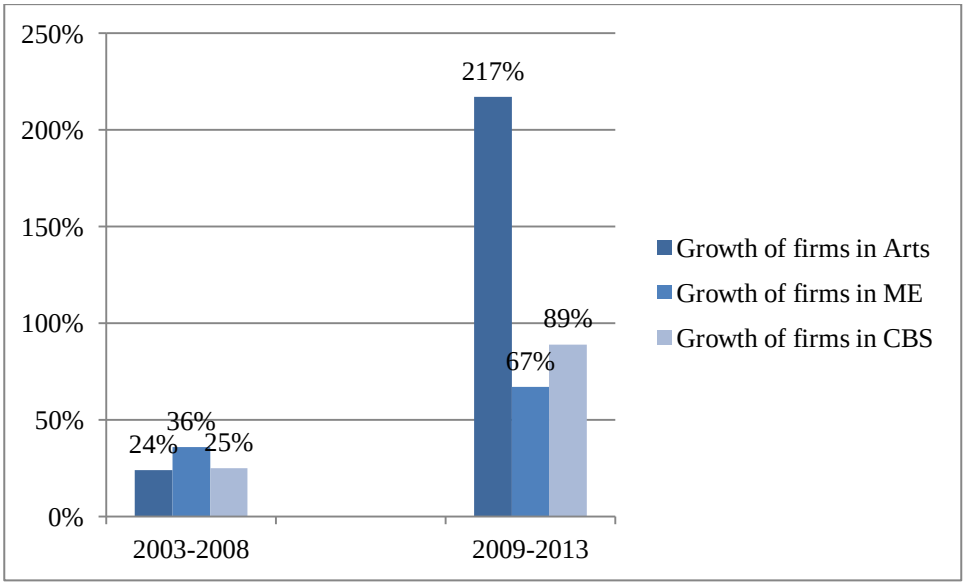
As two figures show (Figures 4.1; 4.2.) both of the more profit-oriented parts of CIs in Amsterdam are almost of the same size in terms of the number of companies in Amsterdam. The distribution of jobs among CIs yields similar figures. In 2013 the Arts sector, however, remained larger then ME and CBS taken separately.

Although the number of firms in ME and CBS in 2013 was somewhat similar, their growth pace over the period between 2003 and 2013 differs considerably. Figure 4.3. shows that between 2009 and 2013 ME and CBS experienced a more intense growth in terms of formation of the new firms than over the period of 2003-2008. The overall growth rate in the number of firms in ME subsectors between 2003 and 2008 was 11 percent higher than in firms that operate in CBS sector. Nevertheless, the subsets of the latter sector experienced a higher growth in employment over the same period compared with the subsectors of ME (Figure 4.4.). In 2003-2008 the overall increase in jobs generated by both sectors was 8% and 12% respectively. The Art sector experienced the slowest growth in number of jobs and number firms in the same period. The growth rate of firms reached 24%, whereas the growth rate of jobs was only 0.8% over 2003-2008..

Since the start of the crisis, growth rates of both creative sectors increased significantly. From 2009 until 2013 (January 31st) ME industry grew by 67% increasing the overall business population by 2,971 new firms. Employment, however, had only modest growth rate of 6%. A much faster development can be noticed in CBS. Despite the beginning of economic recession in Europe, the growth rate of the new firms in these industries intensified by 89%, whereas the number of job increased by 42% and considerably outperformed the growth in ME sector in terms of percentage growth. Although the fast development of CBS shows bigger economic dynamics and 2013 the number of firms in this sector was significantly higher, the smaller number of firms in ME

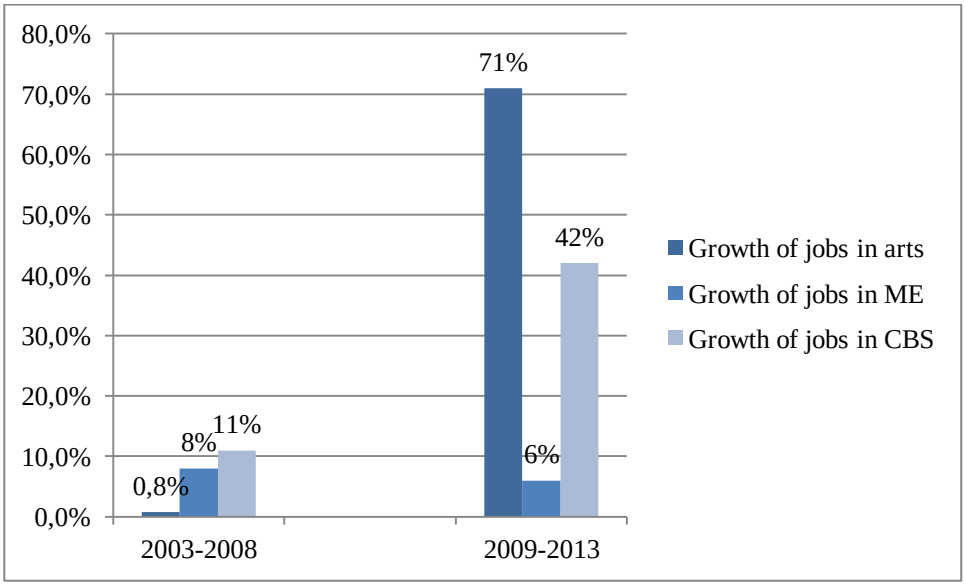
subsets generated bigger employment in the same year. Contrary to the years 2003-2008, in 2009-2013 the Arts sector experienced the most intense growth. The number of firms increased more than three times in 2013 (from 4,015 to 12,712). Although employment slowed, nevertheless, it reached 71% of growth and significantly outperformed market-oriented sectors of CIs.

Figure 4.3. The Growth Rate of Firms in CIs in the periods of 2003-2008 and 2009-2013.



Source: Bureau Onderzoek en Statistiek. Own elaboration.

Figure 4.4. The Growth Rate of Employment in CIs in the periods of 2008-2008 and 2009-2013.



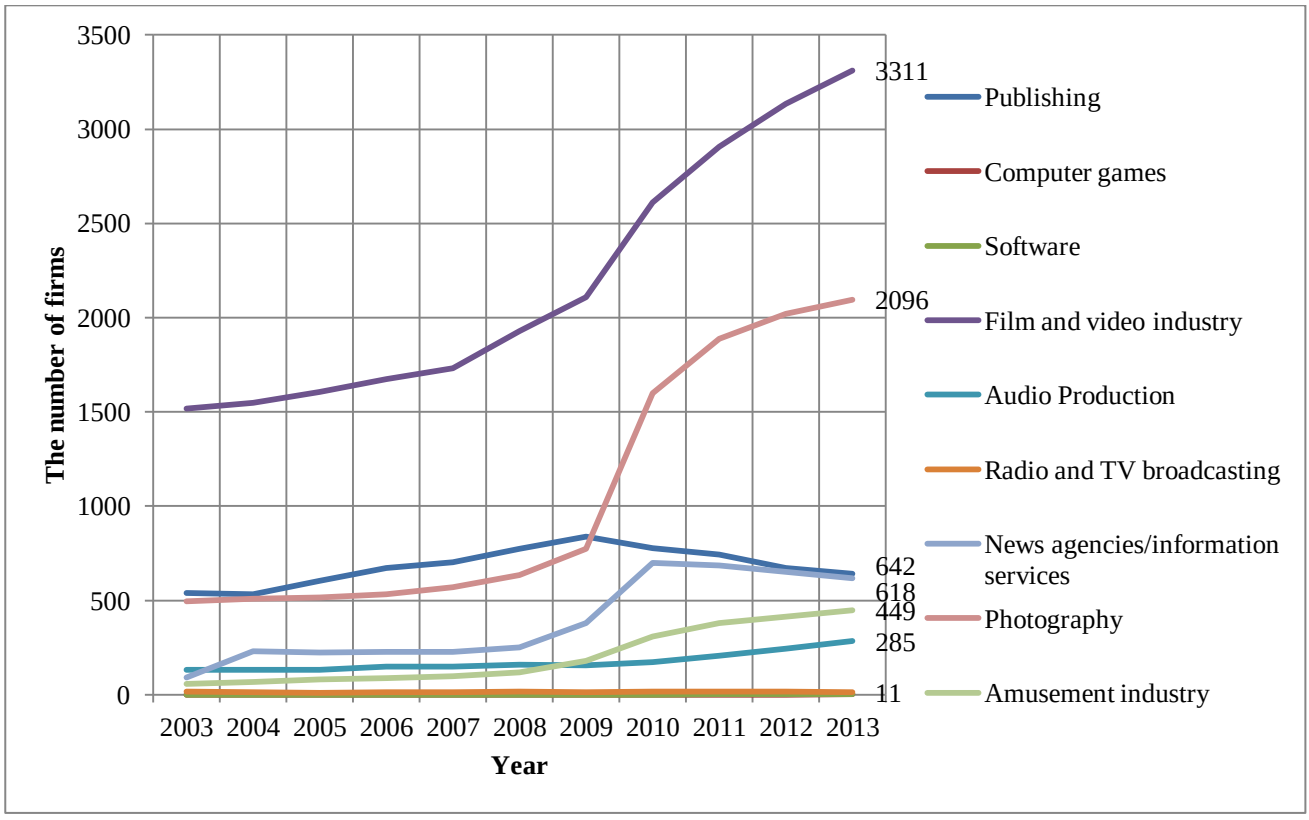
Source: Bureau Onderzoek en Statistiek. Own elaboration.

A highly intensified growth of CIs in Amsterdam since the time of economic crash in Europe was strongly affected by the changes in legislation made by the Dutch government in 2008. The statistical data on the growth of CIs was deviated and artificially boosted due to the new Law on

Commercial Register. This law now requires all new companies and self-employed individuals be registered at the Chamber of Commerce (Groep et al., 2010). The ones that existed before but were not registered in this institution started doing so after the law was approved which resulted in a boom of new entries, particularly of small scale businesses and freelancers. Therefore the statistical data mistakenly suggests that this economic field experienced no negative effects of the recent crisis and, contrary to the expectations, shows a high growth rate. The number of newly registered freelancers was particularly high in the arts sector, which resulted in its much higher growth rate.

Although overall development of CIs shows positive trends, the growth of their various subsets have very different patterns. The development of some sub-sectors remained constant whereas others had a rapid increase of new firms and jobs. In ME, Film and Video Industry dominated the sector since 2003 and experienced rapid growth in 2010. The same year the number of Photography firms also experienced a high increase which can be associated with the new law since most of the photographers in Amsterdam work as freelancers (in 2013 there were 2096 firms and 2407 jobs in this industry).

Figure 4.5. The Number of Firms in the Subsets of ME, 2003-2013.



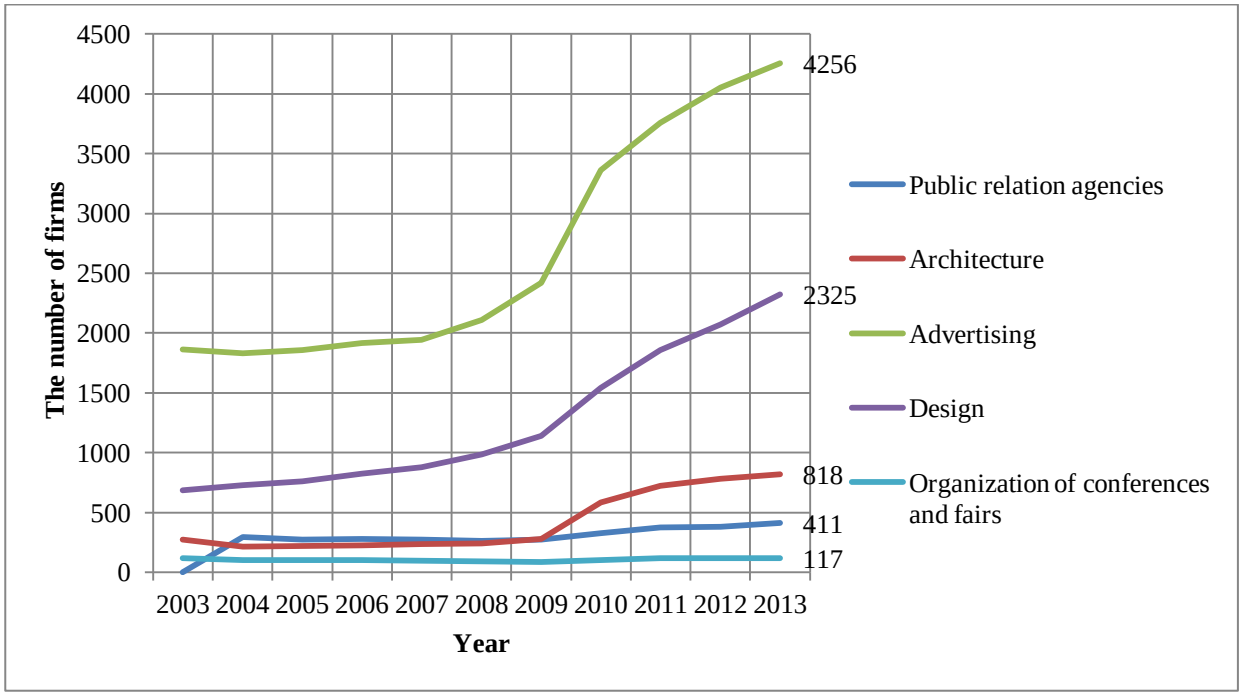
Source: Bureau Onderzoek en Statistiek. Own elaboration.

Although the majority of industries in the ME sector grew faster since the beginning of the crisis than over the pre-crisis period, a few subsets experienced a decline in the number of firms. The subset of News Agencies and Information Services grew rapidly by 51% in 2009; however,

since 2011, the number of firms in this subset has been decreasing steadily. The third largest subset in this field Publishing also experienced a downward trend since 2010 (-7%). A similar decrease can be noticed in Radio and TV Broadcasting where the number of firms decreased from 17 in 2011 to 11 in 2013. The remaining sectors however, grew steadily, although the growth since 2010/2011 has slowed down.

As in the case of ME, the highest growth rate of firms in different subsets of CBS was achieved in 2010. Although architecture does not occupy a big share in this sector in terms of the number of firms, its growth reached 108% the same year. The advertising industry that has been dominating the sector since 2003 grew by 39% in 2010. Design being the second largest industry in the sector, reached a growth rate of 35%.

Figure 4.6. The Number of Firms in the Subsets of CBS in Amsterdam, 2003-2013.



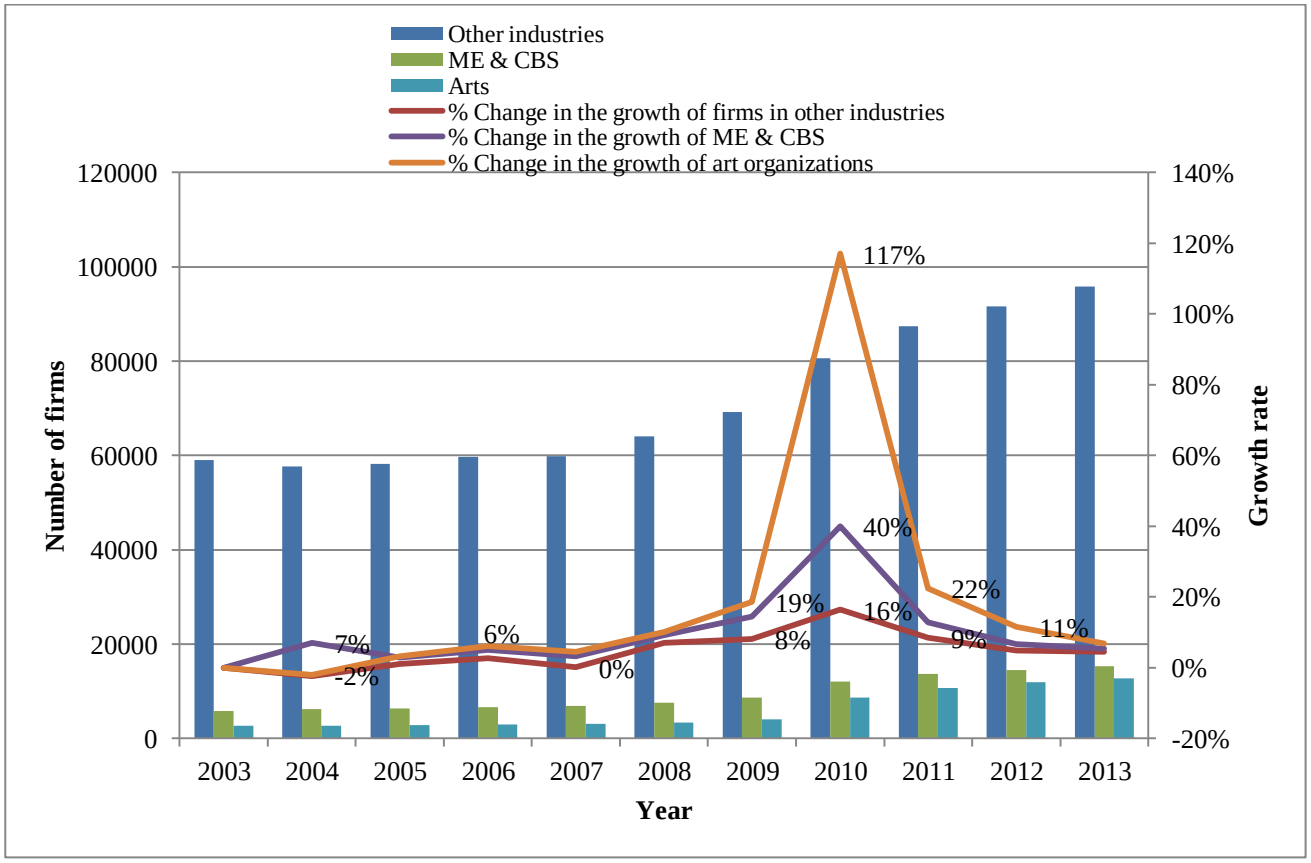
Source: Bureau Onderzoek en Statistiek. Own elaboration.

None of the subsectors of creative business services declined since the start of the global crisis; however, firms that operate in the subset of conferences and fairs did not experience any growth in 2012 and 2013.

4.2.2. The Development of Creative and Non-creative Industries in Amsterdam

After reviewing the development of three sectors of CIs in Amsterdam, it is important to analyze their development trends in the context of the overall economy of Amsterdam. As Figures 4.7. and 4.8. illustrate, the growth rate of CIs significantly outperforms other economic sectors in Amsterdam in both periods researched: 2003-2008 and 2009-2013.

Figure 4.7. Absolute and Percentage Change in the Growth of Firms in Amsterdam 2003-2013.



Source: Bureau Onderzoek en Statistiek. Own elaboration.

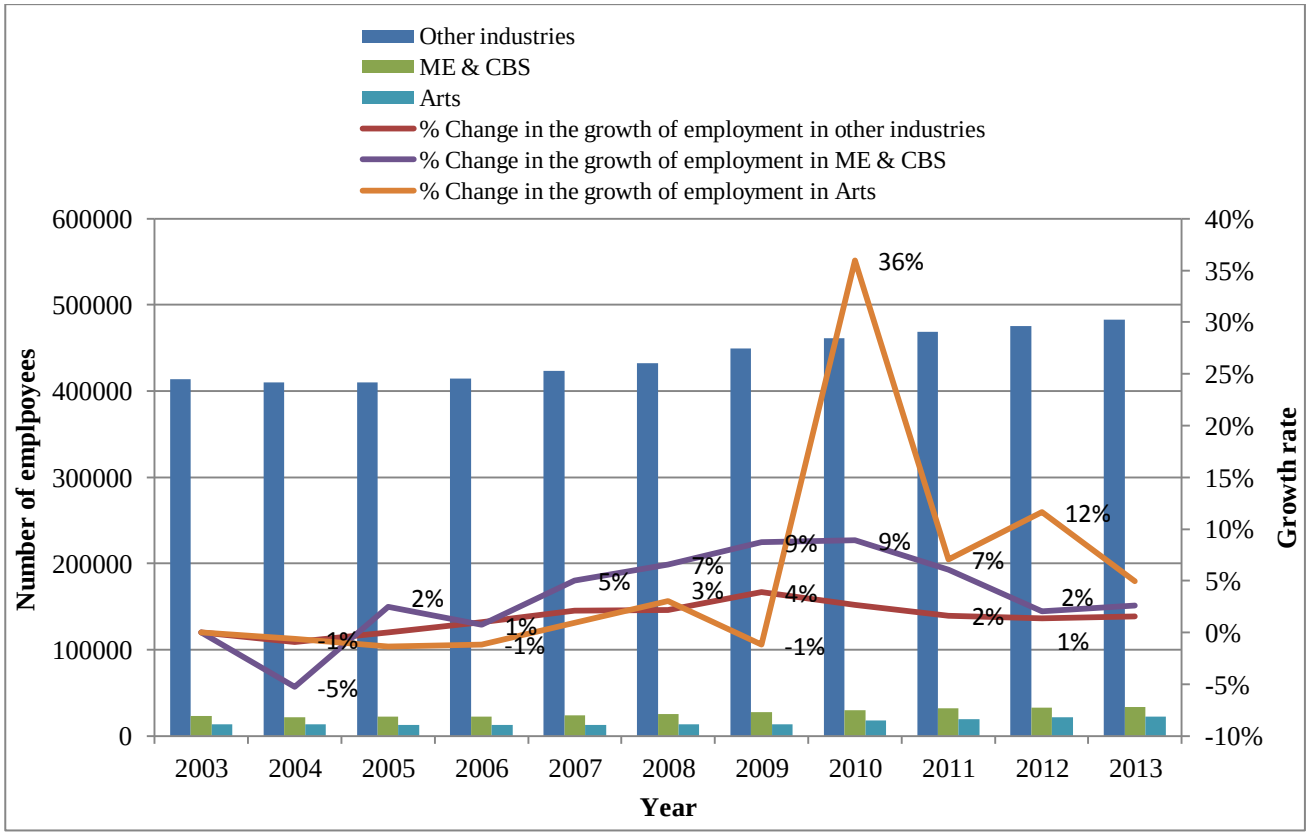
Regardless of the emergence of the global economic crisis, the development of CIs and the rest of economy in Amsterdam intensified significantly since 2009. The greatest leap was experienced in 2010 when the growth of Arts reached 117% whereas ME and CBS together increased by 40% compared with the previous year. The number of firms in traditional economic sectors during the same year increased only by 16%. Nevertheless, CIs experienced a deeper decline in the growth rate of firms. The growth of the Arts sector decreased to 22%, while the growth of ME and CBS dropped from 40% to 13% in 2011. The growth of the non-creative economic sectors also experienced a slowdown, however, it was less rapid and the growth rate decreased only by 7% (from 16% in 2010 to 9% in 2011).

Despite the fluctuations in the rate of growth and its declining trend after 2010, 18 economic sectors taken together as well as creative industries had mostly positive development trends. The number of firms in CIs has increased steadily since 2003, whereas in other sectors together the actual increase in the number of new firms was being recorded since 2004.

The growth rate of employment in CIs and other economic activities yield less optimistic results. Although in 2009 and 2010 the number of firms in both CIs and the rest of economy in the

city grew intensively, the employment rate did not experience such a high leap and increased only by a few percent suggesting that many economic sectors in Amsterdam are dominated by small scale firms.

Figure 4.8. Absolute and Percentage Change in he Growth of Employment in Amsterdam, 2003-2013.



Source: Bureau Onderzoek en Statistiek. Own elaboration.

From 2006 till 2010 the growth rate of jobs in ME and CBS was growing steadily. Employment in the Arts sector after a decline in 2009 grew by 36% in 2010 and significantly outperformed other economic sectors. Its faster growth in comparison to other sectors can also be noticed in subsequent years. From 2010 till 2012 ME and CBS experienced a decrease in the growth of new jobs, however, in 2013 it stabilized and increased by 1%. Despite the fluctuations in the growth rate of CIs, the actual total number of jobs in ME and CBS within ten year period only decreased from 2003 to 2004. The Arts sector experienced a steady decrease (-1) in the number of jobs over the period of 2003-2006. Since 2004 employment was growing although at a different pace. The rest of the economy in Amsterdam also developed gradually in terms of job growth and the actual number of employment. As well as in two market oriented sectors of CIs in Amsterdam, the negative development trend when the actual number of jobs declined was only traced from 2003 till 2004. Although from 2003 till 2004 CIs declined more than other sectors taken together, in the following

years they exceeded them in terms of percentage growth of employment. Although a few years after the start of the crisis this growth of jobs in CIs and other industries was suspended, up until January 31st the economy in Amsterdam maintained positive employment growth. Although the new law boosted the number of new jobs and firms in all sectors of CIs in 2009 and 2010, the steady growth before the start of the crisis and stability of other economic sectors suggests that the growth in CIs would have been experienced to a smaller extent anyway.

4.3. Creative Firms in Amsterdam

This part of the study investigates the market-oriented firms of CIs in Amsterdam, namely ME and CBS and answers the following empirical questions deriving from theoretical part: To what extent do agglomeration economies influence the development of CIs in Amsterdam? To what extent has the financial crisis affected the employment structure of CIs in Amsterdam over the last five years? To what extent did creative firms in Amsterdam experience economic difficulties over the last five years? What is the influence of hard and soft infrastructure on the development of CIs in Amsterdam in 2013?

4.3.1. The Description of the Research Sample

The gathered responses to the online survey only partly represent the actual population of creative firms in Amsterdam in 2013. The total respondents to the enterprise survey that was conducted throughout the month of June was 528. Firms operating in the ME sector account for 35% of the total number of responses whereas firms in the CBS accounted for the remaining 65%[2]. Some subsets of CIs are underrepresented in the sample, and some are overrepresented when compared to the actual percentages in 2013. As shown in the population graphs of the CIs in the previous part, the three largest creative subsets in Amsterdam as of January 31st were Advertising Industry, Film and Video Industry, and Design.

The frequency table of creative subsectors in the sample reflects certain deviations when compared to the actual population. In the frequency table that reflects the share of responses of each subsector, the largest percentage of the responses belongs to the Design subsector (150 responses or 28.4 % of the total sample), which is overrepresented in regard to other largest industries in the city such as Advertising. Advertising, for instance, in 2013 constituted 28 % of the total population of creative firms in Amsterdam, but only 9.3 % of the total respondents. Second largest subset in the sample is Film and Video Industry. Its share (19.7%) in the sample somewhat corresponds its actual

[2] Appendix 4: Table 1.

share in the population (21%). No significant deviations from the actual share in the population have been identified in the remaining industries as well.

Table 2: Composition of the Sample per Subsector.

Sector	Frequency	Percent
Publishing	48	9,1
Photography	65	12,3
Film and Video Industry	104	19,7
Broadcasting (radio & TV)	8	1,5
News Agencies/Information Service	14	2,7
Audio Production	12	2,3
Software	8	1,5
Amusement Industry	13	2,5
Design	150	28,4
Public Relation Agencies	10	1,9
Architecture	43	8,1
Advertising	49	9,3
Organization of Conferences and fairs	4	,8
Total	528	100,0

The uneven share of freelance workers in various subsets can explain this distribution of responses to the survey. Among the total number of 528 responses, 351 reported being self-employed. Although freelancers are somewhat overrepresented in the sample, to a certain extent this reflects the constitution of CIs in Amsterdam and confirms the statements of previous research (Stam et al., 2008) that declared CIs being dominated by freelance creative employees and micro firms. Large scale firms are not common in CIs. Besides self-employed individuals that constitute 66.5% of the total sample, 26.9% of all respondents represent micro-scale enterprises. 28 enterprises or 5.3 % of the total sample reported having from 10 to 49 employees which ascribes them to the medium-sized firms, whereas only 7 firms in this sample are large-sized.

Table 3: The Number of Employees.

Size of the Firm	Frequency	Percent
Only me	351	66,5
2 - 9	142	26,9
10 - 49	28	5,3
50 - 249	7	1,3
Total	528	100,0

For the purpose of indentifying the subsets of the overall sample having the highest share of self-employed individuals, cross tabulation to identify the size of the firms and its relationship to the specific subset was processed[3]. It revealed that the freelancing model is common between all the subsets of the survey sample. The largest percentage of freelancers is recorded in Photography and constitutes 89.2 % of the total representation of this subset in the sample. This large share of self employment can be easily explained by the nature of this creative occupation. Another subset that is dominated by freelancers in the survey is News Agencies and Information Services whose freelance respondents constitute 78.6% of the total respondents of this subset. Design subset, although being slightly less dominated by self-employment (68 %), however, accounts for 102 freelance designers out of the total number of 528 responses.

Micro enterprises (2-9 employees) also constitute a large share of the sample. Most of them represent the Design subset (40 firms) and the Film and Video Industry subset (27 firms). Medium and large sized firms have the smallest share in the sample. Among 28 medium sized (50-249) firms in the sample, six firms reported operating in Advertising sector and seven firms in Design. Only 7 large-scaled firms were found in the sample operate in Advertising (3), Architecture (1), Design (1), Radio & TV Broadcasting (1) and Film and Video Industry (1).

When looking at the firms in the sample it was also important to identify what age most of the firms are to be able to assess if there is an overrepresentation of the ones that got newly enrolled in Commercial Register. The distribution of sample firms in different age frames differs although this difference is not tremendous and is represented by considerable numbers of firms from all age groups[4]. As expected, older firms are less represented in the survey sample. The youngest firms (less than 5 years of age) constitute the largest percent (32%) of the total sample, whereas the ones that operate for 20 years and more have the smallest representation (15.9%). Firms operating in the market from 5 to 10 years and those from 11 to 20 years constitute a similar share in the sample, 26.9% and 25.2% respectively.

The market geography of those firms stretches among many countries, their main target market, however, is the Netherlands (71%). Other European countries as their target markets are for 45.5% of those firms, while Amsterdam's market is important for 41.6 of the creative firms.

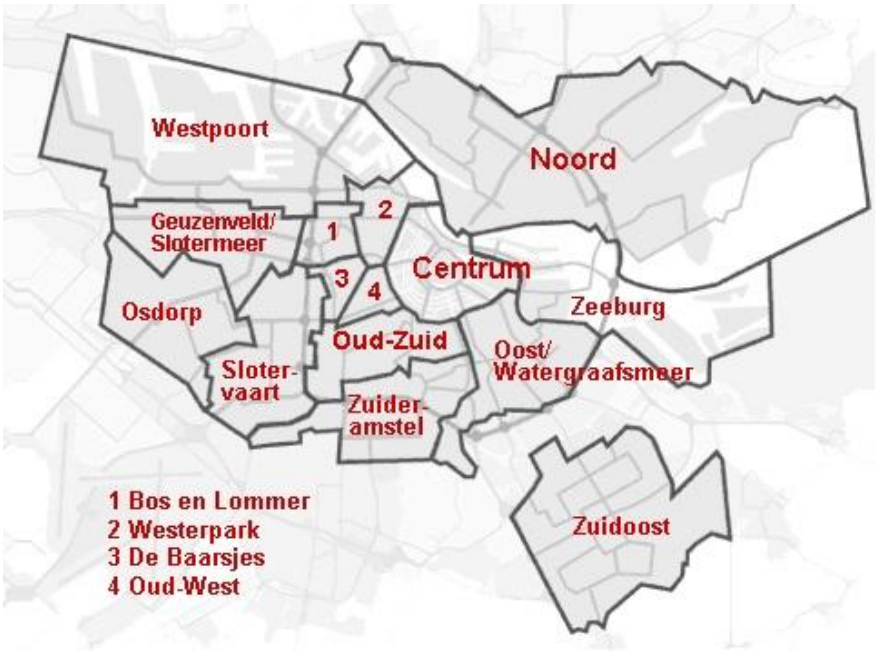
4.3.2. Agglomeration of Creative firms in Amsterdam

To begin, in line with the first hypothesis on creative firms it is important to find out whether creative firms tend to cluster in the same areas of the city and whether agglomeration economies are

[3] Appendix 4: Table 4.
[4] Appendix 4: Table 5.

important for their development. Answering these questions could help to explain the continuous growth of CIs (as was seen in the previous chapter analyzing overall population) in the city despite the global economic recession. To begin, it is important to see if the sample firms are more likely to situate in the areas with a high concentration of other creative firms. As noted by Mommaas (2004) and Kloosterman (2008), Amsterdam does not have specialized clusters that consciously exploit the benefits of agglomeration such as sharing of knowledge and resources or image creation. Nevertheless, spatial concentration of firms in certain areas of the city can be observed and this proximity may have tangible as well as intangible benefits for those firms. For this reason, firms were asked if they reside in an area with dense concentration of other creative firms. More than half of the firms in the research sample (55.7 %) reported to be situated in such area in the city[5].

Figure 4.9. The Neighborhoods in Amsterdam.



Source: Amsterdam Sights.

To be able to identify the areas that are most frequently chosen by the firms of ME and CBS, firms were asked to indicate which of 15 neighborhoods in Amsterdam they are situated in (Figure 4.9.). The largest share, 31.6%, of the sample firms (n=528) are residing in Centrum[6]. The second most popular neighborhood among the creative firms is Oud-Zuid with 12.9% of the sample firms residing there. Another neighborhood with a dense concentration of CIs firms is Oost/Watergraafsmeer (10.6%). Three districts that share the same number of firms are Westerpark, Noord and Zeeburg (7.2%). Although certain share of CIs in Amsterdam can be found in each neighborhood, creative firms are least likely to situate in the city areas that stretch further away

[5] Appendix 4: Table 6.
[6] Appendix 4: Table 7.

from the city centre, namely Zuidoost or Osdorp, hence indicating a clear preference to be located in the city centre.

Besides spatial agglomeration, various creative firms often choose to reside in the same buildings to pursue their activity, where they can share various resources. This is often a choice of smaller firms that do not need a large space and want to save costs. In Amsterdam, one of the policy programs that engages in facilitating the activity of creative firms is the Broedplaatsen program whose objectives were discussed in the previous chapters. In the survey sample, those creative firms and freelancers that took the opportunity to benefit from this program amount to 41 firm or 7.8% of the total sample. Seven among them reside in NDSM former shipyard area that is being turned into a creative district. Another 20.8% of firms indicated residing in another type of creative buildings that are not a part of the Bureau Broedplaatsen program[7].

In the previously discussed literature on urban agglomeration of creative firms it was claimed that the spatial proximity in global cities have specific benefits that those firms can enjoy (Lorenzen & Frederiksen, 2012). The survey included a wide range of questions to find out whether those aspects are actually important for the firms in the sample. Respondents were asked to assess certain aspects connected to their external business environment. Questions aimed at determining the importance for creative firms of being situated closely to other creative firms, the benefits of local universities in terms of their capacity to provide relevant labor force and their approach to employing creative talents from abroad. 40% of firms in the sample somewhat agreed that close proximity to other similar type of creative firms have a positive impact on the development of their business. Another 15% strongly agreed that the proximity counts in their activity[8]. Although the majority of the total sample firms believed agglomeration to have a positive effect on their own business, the differences found between the answer categories among various subsectors, trying to find out if people working in certain subsectors favor this aspect more than others, did not reveal statistically significant results.

The importance of close proximity for a large number of firms can be explained by the fact that 31.1% of those firms reported to be collaborating in their daily activity with other creative firms[9]. Moreover, networking and specific knowledge sharing between creative firms also play a significant role in the business of a large share of firms. 42.9% of respondents answered that knowledge exchanges with other creative firms is somewhat important for their businesses and 22.2% thought that it is very important. Networking with them as somewhat important is seen by

[7] Appendix 4: Tables 8-10.
[8] Appendix 4: Table 11.
[9] Appendix 4: Table 12-14.

46.3% and very important by 24.5% of the creative firms in the sample. The percentage of firms that neglected the importance of those two factors appeared be to very low hence indicating the benefits of spatial agglomeration that creative firms can enjoy.

That spatial proximity gives benefits to the creative firms can also be explained by factors related to their production. 38.7% of firms somewhat agreed that production and services of other creative firms are an important input for their own production. 41.6% of respondents somewhat agreed to the statement that other creative firms constitute an important share of demand for their production. Firms in ME were more likely to regard other creative enterprises as being their major clients than the firms in CBS. 14.3% of businesses in ME strongly agreed that a significant amount of their production is demanded by other creative firms, while in CBS only 9% of firms regarded this to be the case. The analysis on the differences of both variables shows a statistically significant ($p=0.012$) weak relationship (Cramer's $V=0.165$)[10].

Theory on agglomeration economies stresses the ability of global cities to host a wide range of educational institutions that can support firms with a skilled labor pool. Moreover, those cities are often capable of attracting creative talents from abroad and hence strengthen the local industries (Lorenzen & Frederiksen, 2012). Despite the variety of high and professional education options existing in Amsterdam and the offer of a broad range of study programs, a large share of the respondents, 28.3%, strongly disagreed to the statement that local educational institutions provide them with a skilled labor force, while only 5.1% of total respondents strongly agreed. In addition, Amsterdam is known as a popular work destination among creative talents from other countries. Their input was important for a significant number of the local firms. 24.1% of respondents somewhat agreed that their work is important for their business, while 12.9% agreed strongly[11].

4.3.3. Employment in Amsterdam's Creative Firms

Further on discussing the specificities of creative firms in Amsterdam, it is important to review their employment structure and whether there have been any significant changes within the past 5 years. Besides permanent employees various creative sectors often employ a considerable number of interns, free-lancers and part-time workers. Hence, another aim of the survey was to find out the number of those various types of employees within a firm and how it has changed over the past years.

As already noted, 60% of the researched sample reported being freelance workers that work on various projects for other firms. For this reason, the analysis of the employment in creative

[10] Appendix 4: Table 15-16.
[11] Appendix 4: Table 17-18.

firms only encompasses those enterprises that are comprised of two and more employees. The number of those firms in the sample is 177. The firms were asked questions about the general employment in their business without dividing it into creative and non-creative occupations as the research aimed to identify general employment trends.

The employment composition of the creative firms that were included in the sample varies considerably. The highest percent of the sample firms (34.5%) had only 2 full-time employees and even 16.9% of the sample firms had no people in their business working full time, while 3 firms in the remaining sample group had more than a hundred full-time employees. More than half of the sample firms employ one and more persons working part-time. Meanwhile 44.3% of firms employ freelance workers. Although most of those creative firms employ only one freelancer, five bigger firms have a significantly larger number of self-employed individuals (25; 45; 50; 55 and 120). The share of freelancers on average per firm in the sample hence does not provide representative results. Although the mean of freelancers is 3.73 (n=177) it has a standard deviation of 11.7.[12] Other temporary employees were less common in the sample firms. 34.5% of firms reported employing interns, while only 6.8% of them stated having volunteers[13].

It is important to see if the current employment situation was to any degree affected and shaped by the recession since 2009. By examining the patterns in cross-tabulations, the relationship between the two sectors of CIs (ME and CBS) and the changes in various groups of employees over the past five years can be determined. Although a large share of firms (n=159) did not experience any shift in terms of a change of the growth of temporary employees (freelancers and interns) versus permanent employees (part-time and full-time employees), a moderate growth in the number of freelancers and interns can be identified. 28.6% of firms in ME sector experienced a slight increase in the number of freelancers over that period, while 17.5% reported about the significant increase of this type of employees. Among the sample firms in CBS sector this increase was somewhat smaller than in ME sector and comprised 18.8% and 15.6% respectively. Statistical analysis revealed the moderate statistically significant relationship (Cramer's V=0.267) between the sectors of CIs and the change in the number of freelancers (p=0.046). The same analysis processed on the change in the number of interns revealed a very strong relationship between the differences of these variables according to the sector (Cramer's V=0.323; p=0.005). 6.3% of firms in ME had a significant increase of the interns. In CBS firms this number was higher and reached 10.4%. A big difference between both sectors can be noticed when comparing the number of firms that had a

[12] Appendix 4: Tables 19-21.
[13] Appendix 4: Tables 22-23.

large decrease of interns. In CBS this decrease was experienced only by 3.1% of firms while in ME these firms reached15.9%[14].

Besides the increasing number of temporary employees, the number of part-time employees slightly increased in 15.7% of the total number of creative firms, while the number of full-time employees despite the crisis grew by 13.8% in the sample firms. Significant increase of both types of workers can be observed in a small number of firms. Only 6.9% of the sample firms experienced a high increase of part-time employees, whereas significant increase of full-time employees was noticed by 8.8% of firms[15]. Moreover, a large share of firms in the sample (39.1%) reported to have experienced no change in the number of full and part-time people working in their firm.

4.3.4. The Impact of Negative Economic Factors on the Creative Firms in Amsterdam

To be able to better understand the extent to which individual creative firms in Amsterdam experienced the economic downturn, it is important to evaluate various economic factors and their impact on different subsectors of CIs in the city. For this reason, a variety of questions asking to indicate the extent to which firms suffered certain negative effects were included in the enterprise survey.

Assuming that the economic downturn affected consumer spending, firms were asked how the demand for their products fluctuated within the past five years. The gathered responses revealed that most of the creative firms in the city have dealt with reduced demand. A large percentage of respondents stated that they have been affected by this factor frequently (29.2%) and 12.1% of firms deals with it constantly, while only 13.3% have never faced this issue since the start of economic crisis. Looking how this issue was experienced by various subsectors of CIs, it becomes clear that some sectors are less affected than others. 50% of sample firms that operate in the Organization of Conferences and Fairs subsector reported to have been influenced by reduced demand for their services constantly while 37.5% of software firms have never experienced it over the same period of time. Further, 50% of Public Relation agencies and 43.1% of Photography subset had to cope with decline in demand frequently. The results show that firms in CBS were more prone to be affected by this aspect than the firms in ME sector. The highest percentage of firms least facing this issue was identified in the Software and News Agencies and Information Services subsets. The analysis on both variables (reduced demand and subsector of CIs) yielded statistically significant ($p=0.005$) moderate relationship between the differences of those variables. Reduced

[14] Appendix 4: Table 24-25.
[15] Appendix 4: Tables 26-27.

demand could signify intensified competition among creative firms that engage in the same activity. Hence, only 13.7% of respondents reported to have never experienced that while 28.3% of creative firms frequently had to deal with the outcomes of the growing competitiveness with their peers[16].

Since the decline in demand is not necessarily an outcome of economic crisis as it can also result from changing technologies and product innovation, firms were asked to evaluate to what extent technological advance has affected their sector in terms of declining demand. This issue has only affected few subsectors[17]. 28.6% of firms in News agencies and Information Services and 12.1% of Photography firms were constantly affected by decreasing demand for their services. Publishing subset, as expected, was also affected by advancing technologies. 23.3% of firms reported to be frequently experiencing the decrease in demand due to more innovative means. Among those that have never experienced a decline due to technological changes were Software (62.5%) and Organization of Conferences and Fairs (75%).

Other negative factors experienced by creative firms over the five year period involve financial difficulties and the need for additional financing besides own income. The former aspect was frequently faced by 21.8% and constantly by 11.6% of creative firms in the sample, while 14.8% reported to have never faced it in the same period. Over the past five years own income from their activity was insufficient constantly for 11.2% of total sample of creative firms, however, 31.1% have never experienced this issue. Almost half of the total sample (47.8%) did not increase their debts throughout this period despite reduced demand which reveal a relative financial stability in CIs after the start of the crisis.

It was also important to find out to what effect the above mentioned financial problems had on the employees in Amsterdam's CIs by looking into the percentage of firms that had to reduce the number of people working in creative firms. For the purpose of achieving precise results, freelancers were excluded from this analysis. Results revealed that 45.3% of the sample firms did not encounter a need to fire employees, whereas 13.8% did it frequently and 5% constantly[18].

Another significant indicator of economic stability was the level of salaries. Firms (including freelancers) were asked if and how often the cuts on salaries occurred over the past 5 years. A significant share of firms (42.1%) reported to have never had a decrease in the salaries for their employees, however, the rest of the sample firms experienced that to a certain extent. In 12.9% of firms it occurred frequently, while 7.6% had constant cuts on salaries[19]. A comparison between firms of a different size revealed that large firms tended to experience it to a much lower extent than

[16] Appendix 4: Table 28-29.
[17] Appendix 4: Table 30.
[18] Appendix 4: Table 31-34.
[19] Appendix 4: Table 35.

freelancers or micro-sized firms. The test of statistical significance (p=0.1), however, did not prove this difference to be statistically significant.

4.3.5. Hard and Soft Conditions in Amsterdam

Along the lines of creative city concept, hard and soft condition theories were discussed in theoretical framework. Despite extensive theoretical debates, there exist no credible evidences whether soft conditions make much influence on the firms in a specific area. Meanwhile, hard conditions are generally considered to be more significant for economic growth (Musterd & Murie, 2010; Dainov & Sauka, 2010). In the context of these theoretical considerations, firms were asked to evaluate the important of specific aspects that are in the centre of hard and soft conditions theory[20].

To begin with, it was important to asses the satisfaction among creative firms with specific hard conditions in Amsterdam assuming them to be the primary reasons for establishing a firm in a specific location. The types of hard conditions included in the survey encompass factors related to labor, physical space, communication and policy strategies. When asked if the labor costs for hired employees are satisfactory in Amsterdam, majority of respondents (63.4%, n=473) did not have a clear opinion on this matter. 17.8% of creative firms were somewhat dissatisfied with the labor costs while 12.9% was somewhat satisfied. Strong dissatisfaction was expressed by 4.4% of individual firms in the sample, whereas only 1.5% of firms were strongly satisfied with this aspect.

Concerning the quality of the office space, there has been a higher percent of positive evaluations than the answers expressing negative opinion. 36.3% regarded it more favorably as opposed to 27.4% of firms being dissatisfied to as certain extent. Rental rates, however, were evaluated less favorably. 31.3% of the sample firms reported being somewhat dissatisfied and 21.8% very dissatisfied, while only 1.9% of respondents reported prices for rent being completely satisfactory for their firms.

Despite the variety of programs in the city designed to support the development of CIs that were undertaken since the start of discourse on CIs development, a large percent of respondents expressed their discontent regarding the current policies in the city. 13.7% were very dissatisfied and 20.3% somewhat dissatisfied with the policies to foster their industry, while only 4% of sample firms regarded them as very satisfying. Tax system applied for the firms in CIs was also not viewed positively by a larger share of respondents. 11% of firms were very dissatisfied as opposed to only 2.1% very satisfied with the current tax policy.

[20] Appendix 4: Table 36-42

The sample firms were more likely to favor basic hard conditions of the city that shape the basis for the development of any industry, namely, the transport infrastructure and geographical position of Amsterdam. These two categories, of all the hard factors listed in the survey, stand out significantly in terms of the positive evaluations from the firms. 39.7% of all sample firms were somewhat satisfied and 21.4% very satisfied with the local transport system, whereas strong dissatisfaction was expressed only by 2.7% of creative firms. The geographical position of the city was rated even more favorably. 44.6% of respondents were somewhat satisfied and 35.1% expressed their opinion of being very satisfied with this condition.

The majority of the soft factors existing in Amsterdam, were more prone to be evaluated positively[21]. When asked to indicate if Amsterdam's social atmosphere and "buzz" has a positive impact on their businesses, a significant part of the respondents strongly agreed to this statement (39.3%) constituting the largest answer category. 32.8% somewhat agreed whereas only 2.3% strongly disagreed. Other soft conditions like the image of the city, tolerance, cultural environment and urban social life were also considered as important to those creative firms. The image of the city as being somewhat important to creative firms was perceived by 42.3% whereas 18.4% of respondents considered it as very important. Similarly, the cultural environment as somewhat important was perceived by 42.1% of firms and even 39.7% claimed it to be very important for their company when only for 2.7% of creative firms it was not at all important. A diverse and tolerant atmosphere, whose importance is being increasingly emphasized in line with Florida's theory, seem to play an important role in the activity of creative firms. The largest percent of respondents (38.3%) considered it to be important for them. Similarly, 37.4% of firms considered this factor as somewhat important for their activity. Lastly, firms were asked to evaluate urban social life in Amsterdam where responses also favored its importance. The majority of respondents 41% assumed it somewhat important in their activity and 28.3% as very important. Only 5.7% of creative firms regarded this condition as not at all important. Theses findings confirm, to a certain extent, the idea that soft conditions in the city play a significant role for creative firms in terms of a social aspects and image of the place they're situated in. Although Amsterdam is also an economic centre of the Netherlands, little satisfaction of hard conditions may indicate that they are not the primary reason for establishing a firm in this city. It may be influenced to a larger extent by the lively atmosphere, large local market, and presence of other creative firms that are often the primary target market and cultural offering that Amsterdam provides.

[21] Appendix 4: Tables 43-47.

4.4. Summary

Two previous sub-chapters of this work provided an in-depth discussion of the relevant results retrieved from analysis of statistical data as well as the responses to the online survey. Statistical data revealed intensive growth trends of all three sectors of CIs in Amsterdam, whereas the survey results showed the extent to which individual firms in ME and CBS experienced the crisis. In additional, the importance of various city specific characteristics were discussed to find out to what extent they can influence the development of creative firms.

When trying to test the first hypothesis, the growth trends of Arts, ME and CBS were analyzed. The data on the growth of firms as well as employment was investigated. After calculating the growth rates in all three sectors and the subsets of ME and CBS, immense differences between the growth dynamics in 2003-2008 and 2009-2013 have been identified. In terms of the number of firms, Arts sectors grew by 24% in the pre-crisis period and 217% after the start of the crisis. In the CBS sector this difference was less severe and from 25% of growth in 2003-2008 increased to 98% in 2009-2013. The ME sector experienced the lowest growth rate among creative sectors in post-crash period and amounted to 67% in 2009-2013. With few exceptions, the majority of subsets of ME and CBS grew at a much more rapid pace since 2009 if compared to the pre-crisis period. Only a few subsets of ME, namely, Publishing, Radio and TV Broadcasting and News Agencies/Information Services experienced a decrease in the number of firms and developed at a slower pace than in the pre-crisis period. The highest growth dynamic was noticed in Photography (107%) and Architecture (108%) in 2010.

The analysis on the growth of employment showed that it has also intensified after the start of the global crisis. Its growth pace, however, remained relatively low compared with the growth of the new firms, thus indicating that most of the new firms are self-employed individuals and that this sudden increase is for the most part related with the new law. In 2010 the growth of employment had a very rapid increase in the Arts sector. Employment in ME and CBS maintained a steady growth.

To be able to test the second hypothesis, the growth and employment pace was compared to the total growth rate of other industries in the city. This hypothesis can be accepted by looking at the growth trends. The comparison of both data - on the growth employment and the growth of firms revealed that all three sectors of CIs for the most part in 2009-2013 were growing at a faster pace than other industries. Moreover, in 2010, those industries were significantly outperformed by the sectors of CIs. Although the growth rate of CIs dropped down sharply in 2011 and kept

decreasing in the subsequent years, only in 2013 the total growth of non-creative industries and profit-oriented sectors of CIs (ME and CBS) reached the same rate of growth (5%).

After having evaluated the basic development trends of all three sectors of CIs and, more specifically, the sectors of ME and CBS, it was important to look into aspects discussed in theoretical framework and their influence on Amsterdam's creative firms. When analyzing the sample it was noticed that majority of the sample firms are situated in the central areas of the city. Moreover, 28.6% of them choose to reside in the buildings designed for creative professionals. Although being close to other creative firms may have not been the primary reason for establishing a firm in particular area or space, this proximity proves to be beneficial for the majority of firms. The third hypothesis that was formulated in line to the study of Lorenzen & Frederiksen (2008) on agglomeration economies and their influence on CIs, can be partly accepted. The answers received from respondents confirmed few important benefits of this agglomeration. Networking and knowledge exchanges were proved to be important for the most part of the firms in ME and CBS. Another assumption that Amsterdam's educational institutions can provide creative firms with a relevant labor pool failed, since only a small percentage of firms confirmed this to be the case in their experience. Nevertheless, a significant share of firms (37%) to a different extent benefit from foreign talents thus confirming the international character of Dutch CIs.

The fourth hypothesis aimed to test whether any significant differences in the employment structure occurred during the post-crash period in terms of declining number of permanent employees. This hypothesis can be rejected since the percentage of firms that experienced a decline in the number of full and part-time employees is very small. In addition, it almost equals to the percentage of firms that had an increase in the number of this type of employees. The structure of the employment, however, did change to some extent. A high number of firms in ME (41.6%) and CBS (34.4%) had a certain increase in the number of freelancers.

Further measuring the extent to which firms had to cope with internal difficulties resulting form the crisis and testing the fifth hypothesis, it was also noticed that a significant number of firms had dealt with financial difficulties. Nevertheless, a low percentage of them had cuts on the overall employment. However, this hypothesis, stating that firms had no significant negative impact as a result of the crisis cannot be fully confirmed since other indicators reveal less positive development aspects of those firms. A significant share of firms experienced a certain decrease in the demand for their production or services. Among the subsets that suffered this most frequently are Organization of Conferences and Fairs (50%) and News Agencies/Information Services (35.7%). Besides that, the majority of firms to a different degree experienced an intensified competition with other firms of their type and financial difficulties. Nevertheless, the majority of firms have never or rarely

encountered a need to make cuts on salaries. In this regard, large enterprises proved to be most resilient for this need, while freelancers and micro-sized firms tended to be more willing to employ this type of money saving methods. Considerable number of firms had to deal with financial difficulties.

Along the lines of the concept of a creative city and the theory on hard and soft conditions, the last hypothesis can only partly be accepted. Firms evaluated various hard conditions in Amsterdam very differently, thus it was hard to generalize their overall influence. The city's geographical position and well-developed transport infrastructure are regarded positively by most of the creative firms. Other factors, however, such as rental rates, tax system and policies to foster the development of creative firms were not satisfactory for a larger part of those firms. Soft conditions, on the contrary, received mostly positive evaluations. For the large majority of firms, Amsterdam's atmosphere and urban buzz have a positive impact in their activity. Other related factors such as image of the city, tolerance or cultural offer proved to be important to a different extent for more than half of the sample firms. Nevertheless, this influence may be indirect, and manifest by supporting the lifestyle of creative professionals or being an important addition to the image of their firms.

V. Conclusion

This research on CIs in Amsterdam aimed to contribute to the academic discourse on the impact of the crisis on the creative economy. The main goal of the thesis was by using the case of Amsterdam to find out to what extent CIs were resilient to the economic recession. For this purpose, growth dynamics of CIs over the previous 10 years were investigated as well as the experience of creative firms since the start of recession. By examining their development trends and the population of creative firms some general conclusions can be drawn.

Market-oriented CIs in Amsterdam were developing at a faster pace than traditional economic fields in the city according to the growth of new firms in the pre-crisis period and after its start. Moreover, their growth is contrary to what could have been expected intensified significantly during the year that marks economic crashes in Europe. Although the extreme increase of firms in 2010 resulted primarily from the new law in trade, the steady growth of CIs in the past must have maintained the upward trend regardless. Although employment in those industries was growing at a slower pace than the number of firms, it also outperformed the growth of non-creative industries taken together which confirms the discussions of academics on CIs as a significant contributor to the employment in the city. At the same time, the considerably lower growth of employment compared with the growth of firms, reveals that most of the new creative firms do not have a large number of employees. This reflects the literature findings that revealed CIs in the city being comprised largely of freelancers, micro-sized and small-sized firms.

Looking at the different market-driven sectors of CIs, the bigger overall growth in the past five years was tackled in CBS. Although according to the number of new firms this difference is not tremendous, however, it strongly exceeds ME in terms of employment growth. The ME sector is dominated by Film and Video Industry and Photography which constitute the largest share of the total population of firms while the most dynamic sector in terms of growth is Audio Production. The largest subsets of CBS are Advertising and Design. Design had also the highest growth rate in 2013. Faster growth of CBS, in both employment and new firms, does not support the considerations of other authors who argued that firms providing services to non-creative businesses are more susceptible to economic downturns.

Although analysis of the statistical data show positive results on CIs growth in the city, the online survey revealed that creative firms came across certain economic issues within the past years. Despite the financial difficulties that many firms faced, they generally maintained a certain level of resilience to the outcomes brought through intensified competition and reduced demand for their production. This prevented them from reducing the number of employees or making salary

cuts. For most firms it also had no considerable effect on the employment structure in terms of decreasing number of full time employees and their substitution by temporary employees.

As the literature review showed, the importance of hard and soft conditions, whose assets build a necessary setting for the development of CIs in the cities, is evaluated differently by various authors. While Florida (2002) stresses the importance of provision of soft factors that are able to support the lifestyle of creative workers, Kovàc et al. (2010) emphasize that policies should focus on basic economic infrastructure and the needs of firms rather than individuals. The research on creative firms revealed that despite the well-established business environment in Amsterdam, soft conditions of the city were regarded being more satisfactory for the creative firms while many hard factors mentioned in the survey were not regarded positively.

The research results show that the effects of the crisis on CIs in Amsterdam cannot be determined yet. It is, therefore, too early to state that the economic crisis did not have significant negative effects on CIs development and growth. Although their growth managed to maintain a positive trend, it has slowed down significantly since 2011 and even more in the subsequent years, namely 2012 and 2013. To a certain extent, the negative aspects began to be experienced by individual firms. While in the pre-crisis period and after the crash, CIs have significantly outperformed the growth rate of overall economy, in 2013 they dropped to a similar growth rate. This may suggest than the slowed growth of CIs will continue in subsequent years.

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Appendices

Appendix 1: List of Sectors and Subsets of Creative Industries according to SBI codes

Arts

7990	Informatieverstrekking op het gebied van toerisme	Information in the field of tourism
90011	Beoefening van podiumkunst	Cultivation of performing arts
90012	Producenten van podiumkunst	Producers of performing arts
9002	Dienstverlening voor uitvoerende kunst	Services of the performing arts
9003	Schrijven en overige scheppende kunst	Writing and other creative arts
90041	Theaters en schouwburgen	Theatres and performance venues
91011	Openbare bibliotheken	Public libraries
91012	Kunstuitleencentra	Art centers
91019	Overige culturele uitleencentra en openbare archieven	Other lending cultural centers and archives
91021	Musea	Museums
91022	Kunstgalerieën en –expositieruimten	Art galleries and exhibition spaces
9103	Monumentenzorg	Cultural heritage preservation
94993	Steunfondsen (niet op het gebied van welzijnszorg)	Support funds
94994	Vriendenkringen op het gebied van cultuur, fanclubs	Friend groups in the field of culture, fan clubs

Media en entertainment

Publishing	5811	Uitgeverijen van boeken	Book publishing
	5813	Uitgeverijen van kranten	Newspaper publishing
	5814	Uitgeverijen van tijdschriften	Journal publishing

	5819	Overige uitgeverijen (niet van software)	Other publishing
Computer Games	5821	Uitgeverijen van computerspellen	Computer games
Software	5829	Overige uitgeverijen van software	Software
Film and Video Industry	59111	Productie van films (geen televisiefilms)	Film Production (except series)
	59112	Productie van televisieprogramma's	Production of television programs
	5912	Facilitaire activiteiten voor film- en televisieproductie	Facilities for film and television production
	5913	Distributie van films en televisieproducties	Distribution of films and television production
	5914	Bioscopen	Cinemas
Audio production	5920	Maken en uitgeven van geluidsopnamen	Creation and publishing of sound recordings
Broadcasting (Radio & TV)	6010	Radio-omroepen	Radio broadcasting
	6020	Televisie-omroepen	Television broadcasting
News agencies/information service	6321	Persagentschappen	News agencies
	6329	Overige dienstverlenende activiteiten op het gebied van info	Other service activities in the field of information
Photography	74201	Fotografie	Photography
Amusement Industry	90013	Circus en variété	Circus and variety shows
	93211	Pret- en themaparken	Amusement and theme parks
	93212	Kermisattracties	Fairground attraction

Creative Business Services

Public Relation Agencies	7021	Public relations bureaus	Public relation agencies
Architecture	7111	Architecten	Architecture
Advertising	7311 7312	Reclamebureaus Handel in advertentieruimte en -tijd	Advertising Trade of advertising service
Design	7410	Industrieel ontwerp en vormgeving	Design and industrial design
Organization of conferences and fairs	8230	Organiseren van congressen en beurzen	Organization of conferences and fairs

Source: Gemeente Amsterdam. Dienst Onderzoek en Statistiek

Appendix 2: Survey of Creative Firms

Q1 Which one of the following sectors best describes your company's activity?

- ❍ Media and Entertainment (1)
- ❍ Creative Business Services (2)

Q2 Which of the following sub-sets does your company operate in?

- ❍ Publishing (1)
- ❍ Photography (2)
- ❍ Film and video industry (3)
- ❍ Broadcasting (radio & TV) (4)
- ❍ News agencies/information service (5)
- ❍ Audio production (6)
- ❍ Software (7)
- ❍ Computer games (8)
- ❍ Amusement industry (9)
- ❍ Design (10)
- ❍ Public relation agencies (11)
- ❍ Architecture (12)
- ❍ Advertising (13)
- ❍ Organization of conferences and fairs (14)

Q3 For how many years has your company been operating?

- ❍ Less than 5 years (1)
- ❍ 5 to 10 years (2)
- ❍ 11 to 20 years (3)
- ❍ More than 20 years (4)

Q4 How many employees does your company have?

- ❍ Only me (1)
- ❍ 2 - 9 (2)
- ❍ 10 - 49 (3)
- ❍ 50 - 249 (4)
- ❍ 250 and more (5)

Q5 What is the approximate number of people working in your company as:

_____ Part-time employees (1)
_____ Full-time employees (2)
_____ Freelancers (3)
_____ Volunteers (4)
_____ Interns (5)

Q6 What is your primary target market? (Multiple answers possible)

- ❑ Final consumers (1)
- ❑ Other creative firms/organizations (2)
- ❑ Other non-creative firms (3)

Q7 What is the geography of your market? (Multiple answers possible)

- ❑ Local (Amsterdam) (1)
- ❑ The Netherlands (2)
- ❑ Europe (3)
- ❑ United States (4)
- ❑ Other countries (5)

Q8 Which of the following districts in Amsterdam is your company located in?

- ❍ Centrum (1)
- ❍ Bos en Lommer (2)
- ❍ Westerpark (3)
- ❍ De Baarsjes (4)
- ❍ Oud-West (5)
- ❍ Westpoort (6)
- ❍ Noord (7)
- ❍ Geuzenveld/Slotermeer (8)
- ❍ Osdorp (9)
- ❍ Slotervaart (10)
- ❍ Oud-Zuid (11)
- ❍ Zuideramstel (12)
- ❍ Oost/Watergraafsmeer (13)
- ❍ Zeeburg (14)
- ❍ Zuidoost (15)

Q9 Are you located in an area in Amsterdam with a dense concentration of creative firms?

- ❍ Yes (1)
- ❍ No (2)
- ❍ I don't know (3)

Q10 Are you located in one of the buildings of the Broedplaatsen program?

- ❍ Yes (1)
- ❍ No (2)

If No Is Selected, Then Skip To Are you located in another building f...

Q11 Please indicate the name of the building:

If Please indicate the name of... Is Not Empty, Then Skip To Please indicate to what extent you ag...

Q12 Are you located in another building for creative firms?

- ❍ Yes (1)
- ❍ No (2)

Q13 Please indicate to what extent do you agree with the following statements:(1=Strongly Disagree, 2=Somewhat Disagree, 3=Neither Agree nor Disagree, 4=Somewhat Agree, 5=Strongly Agree):

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)
A close proximity of similar creative firms has a positive impact on our business. (1)	❍	❍	❍	❍	❍
Proximity to non-creative firms is important for our business. (2)	❍	❍	❍	❍	❍
Proximity to our primary target market has a positive influence on our business. (3)	❍	❍	❍	❍	❍
We aim to create novel products or services. (4)	❍	❍	❍	❍	❍
Local universities provide us with skilled employees that are needed for our business. (5)	❍	❍	❍	❍	❍
Creative talents from foreign countries are important for our business. (6)	❍	❍	❍	❍	❍
Amsterdam's atmosphere, its liveliness and buzz, has a positive impact on our business. (7)	❍	❍	❍	❍	❍
Non-creative firms generate a significant share of demand for our	❍	❍	❍	❍	❍

production. (8)					
Creative firms generate a significant share of demand for our production. (9)	❍	❍	❍	❍	❍
Our everyday activity involves collaboration with non-creative firms. (10)	❍	❍	❍	❍	❍
We collaborate with other creative firms on a daily basis. (11)	❍	❍	❍	❍	❍
Non-creative firms provide us with significant input for our own production/services. (12)	❍	❍	❍	❍	❍
Production/services of other creative firms are an important input for our own production. (13)	❍	❍	❍	❍	❍

Q14 Please indicate how important are the following factors for your company:(1=Unimportant, 2=Somewhat Unimportant, 3=Neither Important nor Unimportant, 4=Somewhat Important, 5=Very Important)

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)
Image of the city (1)	❍	❍	❍	❍	❍
Diverse and tolerant atmosphere (2)	❍	❍	❍	❍	❍
Cultural environment (3)	❍	❍	❍	❍	❍
Knowledge exchanges with other creative firms	❍	❍	❍	❍	❍

(4)					
Networking with other creative firms (5)	❍	❍	❍	❍	❍
Knowledge exchanges with non-creative firms (6)	❍	❍	❍	❍	❍
Specialized labor force (7)	❍	❍	❍	❍	❍
Labor pool with broad and varied skills (8)	❍	❍	❍	❍	❍
Urban social life (9)	❍	❍	❍	❍	❍

Q15 Within the past 5 years how much has your company been affected by the following factors?(1 = Never; 2 = Very Little, 3 = Somewhat, 4 = Frequently, 5 = Constantly)

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)
Reduced demand for your products/services (1)	❍	❍	❍	❍	❍
Turnover decline (2)	❍	❍	❍	❍	❍
Technological advances decreased demand for our products and services (3)	❍	❍	❍	❍	❍
Financial difficulties (4)	❍	❍	❍	❍	❍
A need for additional finances besides own income (5)	❍	❍	❍	❍	❍
Increase in company's debts (6)	❍	❍	❍	❍	❍

Increase in competition with other creative firms (7)	❍	❍	❍	❍	❍
Cuts on employment (8)	❍	❍	❍	❍	❍
Cuts on salaries (9)	❍	❍	❍	❍	❍
Shortage of skilled employees (10)	❍	❍	❍	❍	❍

Q16 How has the number of employees in your company changed within the past 5 years? (1=Decreased Significantly, 2=Decreased Slightly, 3=No Change, 4=Increased Slightly, 5=Increased Significantly)

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	Not Applicable (6)
Number of freelance workers (1)	❍	❍	❍	❍	❍	❍
Number of part-time employees (2)	❍	❍	❍	❍	❍	❍
Number of interns (3)	❍	❍	❍	❍	❍	❍
Number of full-time employees (4)	❍	❍	❍	❍	❍	❍
Number of volunteers (5)	❍	❍	❍	❍	❍	❍

Q17 To what extent are you satisfied with the following conditions in Amsterdam? (1=Very Dissatisfied, 2=Somewhat Dissatisfied, 3=Neither Satisfied nor Dissatisfied, 4=Somewhat Satisfied, 5=Very Satisfied)

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)
Labor cost (1)	❍	❍	❍	❍	❍
Tax system (2)	❍	❍	❍	❍	❍
Office space	❍	❍	❍	❍	❍

(3)					
Rental rates (4)	❍	❍	❍	❍	❍
Access to public financial support (5)	❍	❍	❍	❍	❍
Transport system (6)	❍	❍	❍	❍	❍
Geographical position of Amsterdam (7)	❍	❍	❍	❍	❍
Public sector's initiatives to support your industry (8)	❍	❍	❍	❍	❍

Appendix 3: Variables of the Survey

Sector of CIs
Sub-sector of CIs
Years of activity
Number of employees
Type of employees-Part-time employees
Type of employees -Full-time employees
Type of employees -Freelancers
Type of employees -Volunteers
Type of employees -Interns
Primary target market -Final consumers
Primary target market -Other creative firms/organizations
Primary target market -Other non-creative firms
Market-Local (Amsterdam)
Market-The Netherlands
Market-Europe
Market-United States
Market-Other countries
District in Amsterdam
Area with a dense concentration of creative firms
Location in the building of the Broedplaatsen program
Building for creative firms
A close proximity of similar creative firms has a positive impact on our business.
Proximity to non-creative firms is important for our business.
Proximity to our primary target market has a positive influence on our business.
We aim to create novel products or services.
Local universities provide us with skilled employees that are needed for our business.
Creative talents from foreign countries are important for our business.
Amsterdam's atmosphere, its liveliness and buzz, has a positive impact on our business.
Non-creative firms generate a significant share of demand for our production.
Creative firms generate a significant share of demand for our production.
Our everyday activity involves collaboration with non-creative firms.

We collaborate with other creative firms on a daily basis.

Non-creative firms provide us with significant input for our own production/services.

Production/services of other creative firms are an important input for our own production.

Importance - Image of the city

Importance - Diverse and tolerant atmosphere

Importance - Cultural environment

Importance - Knowledge exchanges with other creative firms

Importance - Networking with other creative firms

Importance - Knowledge exchanges with non-creative firms

Importance - Specialized labor force

Importance - Labor pool with broad and varied skills

Importance - Urban social life

Reduced demand for your products/services

Turnover decline

Technological advances decreased demand for our products and services

Financial difficulties

A need for additional finances besides own income

Increase in company's debts

Increase in competition with other creative firms

Cuts on employment

Cuts on salaries

Shortage of skilled employees

Change of the number of freelance workers

Change of the number of part-time employees

Change of the number of interns

Change of the number of full-time employees

Change of the number of volunteers

Content with labor cost

Tax system

Office space

Rental rates

Access to public financial support

Transport system

Geographical position of Amsterdam

Public sector’s initiatives to support your industry

Appendix 4: Tables of the Results from Survey on Creative Firms

Table 1: Frequencies. Composition of the Sample per Sector.

		Frequency	Percent	Valid Percent
Valid	Media and Entertainment	185	31,8	35,0
	Creative Business Services	343	58,9	65,0
	Total	528	90,7	100,0

Table 2: Frequencies. Composition of the Sample per Subsector.

		Frequency	Percent	Valid Percent
Valid	Publishing	48	8,2	9,1
	Photography	65	11,2	12,3
	Film and video industry	104	17,9	19,7
	Broadcasting (radio & TV)	8	1,4	1,5
	News agencies/information service	14	2,4	2,7
	Audio production	12	2,1	2,3
	Software	8	1,4	1,5
	Amusement industry	13	2,2	2,5
	Design	150	25,8	28,4
	Public relation agencies	10	1,7	1,9
	Architecture	43	7,4	8,1
	Advertising	49	8,4	9,3
	Organization of conferences and fairs	4	,7	,8
	Total	528	90,7	100,0

Table 3: Frequencies. The Number of Employees

		Frequency	Percent	Valid Percent
Valid	Only me	351	60,3	66,5
	2 - 9	142	24,4	26,9
	10 - 49	28	4,8	5,3
	50 - 249	7	1,2	1,3
	Total	528	90,7	100,0

Table 4: Cross tabulation. The Number of Employees According to the Subset of CIs

	Publishing	Photography	Film and video industry	Broadcasting (radio & TV)	News agencies/information service	Audio production	Software	Amusement industry	Design	Public relation agencies	Architecture	Advertising	Organization of conferences and fairs	

Only me	32 66,7%	58 89,2%	72 69,2%	4 50,0%	11 78,6%	6 50,0%	5 62,5%	9 69,2%	102 68,0%	5 50,0%	25 58,1%	21 42,9%	1 25,0%	351 66,5%
2 - 9	14 29,2%	7 10,8%	27 26,0%	3 37,5%	1 7,1%	5 41,7%	3 37,5%	3 23,1%	40 26,7%	4 40,0%	14 32,6%	19 38,8%	2 50,0%	142 26,9%
10 t - 49	2 4,2%	0 ,0%	4 3,8%	0 ,0%	2 14,3%	1 8,3%	0 ,0%	1 7,7%	7 4,7%	1 10,0%	3 7,0%	6 12,2%	1 25,0%	28 5,3%
50 - 249	0 ,0%	0 ,0%	1 1,0%	1 12,5%	0 ,0%	0 ,0%	0 ,0%	0 ,0%	1 ,7%	0 ,0%	1 2,3%	3 6,1%	0 ,0%	7 1,3%
Total	48 100,0%	65 100,0%	104 100,0%	8 100,0%	14 100,0%	12 100,0%	8 100,0%	13 100,0%	150 100,0%	10 100,0%	43 100,0%	49 100,0%	4 100,0%	528 100,0%

Table 5: Frequencies. The Age of Creative Firms.

		Frequency	Percent	Valid Percent
Valid	Less than 5 years	169	29,0	32,0
	5 to 10 years	142	24,4	26,9
	11 to 20 years	133	22,9	25,2
	More than 20 years	84	14,4	15,9
	Total	528	90,7	100,0

Table 6: Frequencies. Are you located in an area in Amsterdam with a dense concentration of creative firms?

		Frequency	Percent	Valid Percent
Valid	Yes	294	50,5	55,7
	No	127	21,8	24,1
	I don't know	107	18,4	20,3
	Total	528	90,7	100,0

Table 7: Frequencies. Distribution of Firms among Different Neighborhoods in the City.

		Frequency	Percent	Valid Percent
Valid	Centrum	167	28,7	31,6
	Bos en Lommer	17	2,9	3,2
	Westerpark	38	6,5	7,2
	De Baarsjes	27	4,6	5,1
	Oud-West	24	4,1	4,5
	Westpoort	8	1,4	1,5
	Noord	38	6,5	7,2
	Geuzenveld/Slotermeer	8	1,4	1,5
	Osdorp	3	,5	,6

	Slotervaart	11	1,9	2,1
	Oud-Zuid	68	11,7	12,9
	Zuideramstel	20	3,4	3,8
	Oost/Watergraafsmeer	56	9,6	10,6
	Zeeburg	38	6,5	7,2
	Zuidoost	5	,9	,9
	Total	528	90,7	100,0

Table 8: Frequencies. Are you located in one of the buildings of the Broedplaatsen program?

		Frequency	Percent	Valid Percent
Valid	Yes	41	7,0	7,8
	No	487	83,7	92,2
	Total	528	90,7	100,0

Table 9: The Name of the Building for Creative Firms.

		Frequency	Percent	Valid Percent
Valid		541	93,0	93,0
	1800 Roeden	1	,2	,2
	ACTA	1	,2	,2
	Art & crafts	1	,2	,2
	Arts&crafts	1	,2	,2
	Broedplaats Plinten / Indische Buurt	1	,2	,2
	Da Vinci	1	,2	,2
	damrak 70	1	,2	,2
	Expositon in sloterdijk	1	,2	,2
	feike de boerlaan 147	1	,2	,2
	Het Sieraad	2	,3	,3
	Het veem	1	,2	,2
	Het Veem	1	,2	,2
	Ijsbrand	2	,3	,3
	kraijenhoffstraat 34	1	,2	,2
	Loods6	1	,2	,2
	Marci Panis	1	,2	,2
	meneer de wit	1	,2	,2
	Ndsm	1	,2	,2
	NDSM loods	1	,2	,2
	NDSM Scheepsbouwloods	1	,2	,2
	NDSM werf	1	,2	,2
	Ndsm wharf	1	,2	,2
	NDSM-loods	1	,2	,2
	NDSM-werf	1	,2	,2
	pakhuis de zwijger	1	,2	,2

	Pakhuis Wilhelmina	1	,2	,2
	Planciusschool	1	,2	,2
	plantagedok	1	,2	,2
	Sieraad	1	,2	,2
	VKG	1	,2	,2
	vlught	1	,2	,2
	Volkskrantgebouw	1	,2	,2
	westerdok	1	,2	,2
	Westerdok	1	,2	,2
	Willem Beukelsstraat	1	,2	,2
	Wittenplaats	1	,2	,2
	Zamenhofstraat 150	3	,5	,5
	Total	582	100,0	100,0

Table 10: Frequencies. Are you located in another building for creative firms?

		Frequency	Percent	Valid Percent
Valid	Yes	90	15,5	20,8
	No	343	58,9	79,2
	Total	433	74,4	100,0

Table 11: Frequencies. A close proximity of similar creative firms has a positive impact on our business (1-strongly disagree; 5-strongly agree).

		Frequency	Percent	Valid Percent
Valid	1	18	3,1	3,8
	2	48	8,2	10,1
	3	147	25,3	31,1
	4	189	32,5	40,0
	5	71	12,2	15,0
	Total	473	81,3	100,0

Table 12: Frequencies. We collaborate with other creative firms on a daily basis (1-strongly disagree; 5-strongly agree).

		Frequency	Percent	Valid Percent
Valid	1	49	8,4	10,4
	2	104	17,9	22,0
	3	105	18,0	22,2
	4	147	25,3	31,1
	5	68	11,7	14,4
	Total	473	81,3	100,0

Table 13: Frequencies. How important are the knowledge exchanges with other creative firms?

		Frequency	Percent	Valid Percent
Valid	1	14	2,4	3,0
	2	35	6,0	7,4
	3	116	19,9	24,5
	4	203	34,9	42,9
	5	105	18,0	22,2
	Total	473	81,3	100,0

Table 14: Frequencies. How important is networking with other creative firms?

		Frequency	Percent	Valid Percent
Valid	1	15	2,6	3,2
	2	28	4,8	5,9
	3	95	16,3	20,1
	4	219	37,6	46,3
	5	116	19,9	24,5
	Total	473	81,3	100,0

Table 15: Frequencies. Production/services of other creative firms are an important input for our own production.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	30	5,2	6,3	6,3
	2	64	11,0	13,5	19,9
	3	133	22,9	28,1	48,0
	4	183	31,4	38,7	86,7
	5	63	10,8	13,3	100,0
	Total	473	81,3	100,0	
Missing	System	109	18,7		
Total		582	100,0		

Table 16: Cross tabulation. Importance of demand, generated by other creative firms for both sectors (1-strogly disagree; 5-strongly agree).

		Media and Entertainment	Creative Business Services	Total
	1	5	32	37
		3,1%	10,3%	7,8%
	2	22	32	54
		13,7%	10,3%	11,4%
	3	39	95	134

		24,2%	30,4%	28,3%
	4	72	125	197
		44,7%	40,1%	41,6%
	5	23	28	51
		14,3%	9,0%	10,8%
Total		161	312	473
		100,0%	100,0%	100,0%

Table 17: Frequencies. Local universities provide us with skilled employees that are needed for our business (1-strongly disagree; 5-strongly agree).

		Frequency	Percent	Valid Percent
Valid	1	134	23,0	28,3
	2	104	17,9	22,0
	3	142	24,4	30,0
	4	69	11,9	14,6
	5	24	4,1	5,1
	Total	473	81,3	100,0

Table 18: Frequencies. Creative talents from foreign countries are important for our business (1-strongly disagree; 5-strongly agree).

		Frequency	Percent	Valid Percent
Valid	1	97	16,7	20,5
	2	73	12,5	15,4
	3	128	22,0	27,1
	4	114	19,6	24,1
	5	61	10,5	12,9
	Total	473	81,3	100,0

Table 19: Frequencies. The number of full-time employees per firm.

		Frequency	Percent	Valid Percent
Valid	0	30	16,9	16,9
	1	31	17,5	17,5
	2	61	34,5	34,5
	3	12	6,8	6,8
	4	9	5,1	5,1
	5	2	1,1	1,1
	6	4	2,3	2,3
	7	4	2,3	2,3
	8	4	2,3	2,3
	9	2	1,1	1,1
	10	5	2,8	2,8
	12	2	1,1	1,1

	13	1	,6	,6
	15	2	1,1	1,1
	20	1	,6	,6
	27	1	,6	,6
	30	1	,6	,6
	50	1	,6	,6
	60	1	,6	,6
	100	1	,6	,6
	120	1	,6	,6
	190	1	,6	,6
	Total	177	100,0	100,0

Table 20: Frequencies. The number of part-time employees per firm.

		Frequency	Percent	Valid Percent
Valid	0	77	43,5	45,6
	1	23	13,0	13,6
	2	28	15,8	16,6
	3	12	6,8	7,1
	4	10	5,6	5,9
	5	1	,6	,6
	6	1	,6	,6
	7	3	1,7	1,8
	8	1	,6	,6
	10	2	1,1	1,2
	14	2	1,1	1,2
	15	2	1,1	1,2
	18	1	,6	,6
	20	1	,6	,6
	25	1	,6	,6
	27	1	,6	,6
	45	1	,6	,6
	49	1	,6	,6
	52	1	,6	,6
	Total	169	95,5	100,0
Missing	System	8	4,5	
Total		177	100,0	

Table 21: Frequencies. The number of freelancers per firm.

		Frequency	Percent	Valid Percent
Valid	0	98	55,4	55,7
	1	17	9,6	9,7
	2	13	7,3	7,4
	3	10	5,6	5,7

	4	6	3,4	3,4
	5	8	4,5	4,5
	6	5	2,8	2,8
	7	3	1,7	1,7
	9	1	,6	,6
	10	2	1,1	1,1
	12	2	1,1	1,1
	20	6	3,4	3,4
	25	1	,6	,6
	45	1	,6	,6
	50	1	,6	,6
	55	1	,6	,6
	120	1	,6	,6
	Total	176	99,4	100,0

Table 22: Frequencies. The number of interns per firm.

		Frequency	Percent	Valid Percent
Valid	0	116	65,5	65,5
	1	35	19,8	19,8
	2	10	5,6	5,6
	3	6	3,4	3,4
	4	3	1,7	1,7
	6	3	1,7	1,7
	8	1	,6	,6
	10	1	,6	,6
	12	1	,6	,6
	18	1	,6	,6
	Total	177	100,0	100,0

Table 23: Frequencies. The number of volunteers per firm.

		Frequency	Percent	Valid Percent
Valid	0	165	93,2	93,2
	1	2	1,1	1,1
	2	5	2,8	2,8
	3	1	,6	,6
	4	1	,6	,6
	10	1	,6	,6
	20	2	1,1	1,1
	Total	177	100,0	100,0

Table 24: Cross tabulation. Change in the number of freelancers according to the sector of CIs (1-descreased significantly; 5-increased significantly).

		Media and Entertainment	Creative Business Services	Total
	1	2	5	7
		3,2%	5,2%	4,4%
	2	7	3	10
		11,1%	3,1%	6,3%
	3	21	35	56
		33,3%	36,5%	35,2%
	4	18	18	36
		28,6%	18,8%	22,6%
	5	11	15	26
		17,5%	15,6%	16,4%
	Not Applicable	4	20	24
		6,3%	20,8%	15,1%
Total		63	96	159
		100,0%	100,0%	100,0%

Table 25: Cross tabulation. Change in the number of interns according to the sector of CIs (1-decreased significantly; 5-increased significantly).

		Media and Entertainment	Creative Business Services	Total
	1	10	3	13
		15,9%	3,1%	8,2%
	2	5	2	7
		7,9%	2,1%	4,4%
	3	21	44	65
		33,3%	45,8%	40,9%
	4	12	10	22
		19,0%	10,4%	13,8%
	5	4	10	14
		6,3%	10,4%	8,8%
	Not Applicable	11	27	38
		17,5%	28,1%	23,9%
Total		63	96	159
		100,0%	100,0%	100,0%

Table 26: Frequencies. Change in the number of part-time employees in creative firms (1-decreased significantly; 5-increased significantly).

		Frequency	Percent	Valid Percent
Valid	1	3	1,7	1,9
	2	11	6,2	6,9
	3	78	44,1	49,1
	4	25	14,1	15,7
	5	11	6,2	6,9
	Not Applicable	31	17,5	19,5
	Total	159	89,8	100,0

Table 27: Frequencies. Change in the number of full-time employees in creative firms (1-decreased significantly; 5-increased significantly).

		Frequency	Percent	Valid Percent
Valid	1	10	5,6	6,3
	2	17	9,6	10,7
	3	70	39,5	44,0
	4	22	12,4	13,8
	5	14	7,9	8,8
	Not Applicable	26	14,7	16,4
	Total	159	89,8	100,0

Table 28: Cross tabulation. Frequency of reduced demand for products/services according to subset (1-never; 5-constantly).

	Publishing	Photography	Film and video industry	Broadcasting (radio & TV)	News agencies/information service	Audio production	Software	Amusement industry	Design	Public relation agencies	Architecture	Advertising	Organization of conferences and fairs	
1	6	6	13	1	4	1	3	2	14	2	2	8	1	63
	14,0%	10,3%	14,3%	16,7%	28,6%	11,1%	37,5%	16,7%	10,2%	20,0%	5,1%	19,0%	25,0%	13,3%
2	9	4	23	1	1	3	0	4	35	0	5	8	1	94
	20,9%	6,9%	25,3%	16,7%	7,1%	33,3%	,0%	33,3%	25,5%	,0%	12,8%	19,0%	25,0%	19,9%
3	8	15	24	2	1	2	4	4	41	3	9	8	0	121
	18,6%	25,9%	26,4%	33,3%	7,1%	22,2%	50,0%	33,3%	29,9%	30,0%	23,1%	19,0%	,0%	25,6%
4	16	25	23	2	3	1	1	2	36	5	11	13	0	138
	37,2%	43,1%	25,3%	33,3%	21,4%	11,1%	12,5%	16,7%	26,3%	50,0%	28,2%	31,0%	,0%	29,2%
5	4	8	8	0	5	2	0	0	11	0	12	5	2	57

	9,3%	13,8%	8,8%	,0%	35,7%	22,2%	,0%	,0%	8,0%	,0%	30,8%	11,9%	50,0%	12,1%
Total	43	58	91	6	14	9	8	12	137	10	39	42	4	473
	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Table 29: Frequencies. Increase in competition with other creative firms.

		Frequency	Percent	Valid Percent
Valid	1	65	11,2	13,7
	2	98	16,8	20,7
	3	127	21,8	26,8
	4	134	23,0	28,3
	5	49	8,4	10,4
	Total	473	81,3	100,0

Table 30: Cross tabulations. Frequency of decrease in demand due to technological advancement according to subset (1-never; 5-constantly).

	Publishing	Photography	Film and video industry	Broadcasting (radio & TV)	News agencies/information service	Audio production	Software	Amusement industry	Design	Public relation agencies	Architecture	Advertising	Organization of conferences and fairs	
1	14	12	34	1	5	2	5	4	48	1	15	16	3	160
	32,6%	20,7%	37,4%	16,7%	35,7%	22,2%	62,5%	33,3%	35,0%	10,0%	38,5%	38,1%	75,0%	33,8%
2	11	10	17	2	2	1	1	5	37	6	11	13	1	117
	25,6%	17,2%	18,7%	33,3%	14,3%	11,1%	12,5%	41,7%	27,0%	60,0%	28,2%	31,0%	25,0%	24,7%
3	5	14	25	1	2	4	2	3	36	3	10	7	0	112
	11,6%	24,1%	27,5%	16,7%	14,3%	44,4%	25,0%	25,0%	26,3%	30,0%	25,6%	16,7%	,0%	23,7%
4	10	15	12	2	1	2	0	0	15	0	2	4	0	63
	23,3%	25,9%	13,2%	33,3%	7,1%	22,2%	,0%	,0%	10,9%	,0%	5,1%	9,5%	,0%	13,3%
5	3	7	3	0	4	0	0	0	1	0	1	2	0	21
	7,0%	12,1%	3,3%	,0%	28,6%	,0%	,0%	,0%	,7%	,0%	2,6%	4,8%	,0%	4,4%
Total	43	58	91	6	14	9	8	12	137	10	39	42	4	473
	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Table 31: Frequencies. Financial difficulties (1-never; 5-constantly).

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	70	12,0	14,8	14,8
	2	100	17,2	21,1	35,9

	3	145	24,9	30,7	66,6
	4	103	17,7	21,8	88,4
	5	55	9,5	11,6	100,0
	Total	473	81,3	100,0	
Missing	System	109	18,7		
Total		582	100,0		

Table 32: Frequencies. A need for additional financing (1-never; 5-constantly).

		Frequency	Percent	Valid Percent
Valid	1	147	25,3	31,1
	2	77	13,2	16,3
	3	99	17,0	20,9
	4	97	16,7	20,5
	5	53	9,1	11,2
	Total	473	81,3	100,0

Table 33: Frequencies. Increase in company's debts (1-never; 5-constantly).

		Frequency	Percent	Valid Percent
Valid	1	226	38,8	47,8
	2	85	14,6	18,0
	3	89	15,3	18,8
	4	50	8,6	10,6
	5	23	4,0	4,9
	Total	473	81,3	100,0

Table 34: Frequencies. Cuts on employment (1-never; 5-constantly).

		Frequency	Percent	Valid Percent
Valid	1	72	40,7	45,3
	2	31	17,5	19,5
	3	26	14,7	16,4
	4	22	12,4	13,8
	5	8	4,5	5,0
	Total	159	89,8	100,0

Table 35: Cross tabulations. Frequency of cuts on salaries according to the size of the firm (1-never; 5-constantly).

		Only me	2 - 9	10 - 49	50 - 249	
	1	132	54	9	4	199
		42,0%	42,5%	36,0%	57,1%	42,1%
	2	46	25	11	1	83
		14,6%	19,7%	44,0%	14,3%	17,5%

	3	64	26	2	2	94
		20,4%	20,5%	8,0%	28,6%	19,9%
	4	46	13	2	0	61
		14,6%	10,2%	8,0%	,0%	12,9%
	5	26	9	1	0	36
		8,3%	7,1%	4,0%	,0%	7,6%
Total		314	127	25	7	473
		100,0%	100,0%	100,0%	100,0%	100,0%

Table 36: **Frequencies**. To what extent are you satisfied with labor cost (1-very dissatisfied, 5-very satisfied)?

		Frequency	Percent	Valid Percent
Valid	1	21	3,6	4,4
	2	84	14,4	17,8
	3	300	51,5	63,4
	4	61	10,5	12,9
	5	7	1,2	1,5
	Total	473	81,3	100,0

Table 37: Frequencies. To what extent are you satisfied with office space (1-very dissatisfied; 5-very satisfied)?

		Frequency	Percent	Valid Percent
Valid	1	39	6,7	8,2
	2	91	15,6	19,2
	3	171	29,4	36,2
	4	125	21,5	26,4
	5	47	8,1	9,9
	Total	473	81,3	100,0

Table 38: Frequencies. To what extent are you satisfied with rental rates (1-very dissatisfied; 5-very satisfied)?

.		Frequency	Percent	Valid Percent
Valid	1	103	17,7	21,8
	2	148	25,4	31,3
	3	156	26,8	33,0
	4	57	9,8	12,1
	5	9	1,5	1,9
	Total	473	81,3	100,0

Table 39: Frequencies. To what extent are you satisfied with public sector's initiatives to support your industry (1-very dissatisfied; 5- very satisfied)?

		Frequency	Percent	Valid Percent
Valid	1	65	11,2	13,7
	2	96	16,5	20,3
	3	198	34,0	41,9
	4	95	16,3	20,1
	5	19	3,3	4,0
	Total	473	81,3	100,0

Table 40: Frequencies. To what extent are you satisfied with tax system (1-very dissatisfied; 5-very satisfied)?

		Frequency	Percent	Valid Percent
Valid	1	52	8,9	11,0
	2	121	20,8	25,6
	3	222	38,1	46,9
	4	68	11,7	14,4
	5	10	1,7	2,1
	Total	473	81,3	100,0

Table 41: Frequencies. To what extent are you satisfied transport system (1-very dissatisfied; 5-very satisfied)?

		Frequency	Percent	Valid Percent
Valid	1	13	2,2	2,7
	2	38	6,5	8,0
	3	133	22,9	28,1
	4	188	32,3	39,7
	5	101	17,4	21,4
	Total	473	81,3	100,0

Table 42: Frequencies. To what extent are you satisfied with geographical position of Amsterdam (1-very dissatisfied; 5-very satisfied)?

		Frequency	Percent	Valid Percent
Valid	1	4	,7	,8
	2	9	1,5	1,9
	3	83	14,3	17,5
	4	211	36,3	44,6
	5	166	28,5	35,1

	Total	473	81,3	100,0

Table 43: Frequencies. Amsterdam's atmosphere, its liveliness and buzz, has a positive impact on our business (1-strongly disagree; 5-srongly agree).

		Frequency	Percent	Valid Percent
Valid	1	11	1,9	2,3
	2	45	7,7	9,5
	3	76	13,1	16,1
	4	186	32,0	39,3
	5	155	26,6	32,8
	Total	473	81,3	100,0

Table 44: Frequencies. How important is image of the city (1-very unimportant; 5-very important)?

		Frequency	Percent	Valid Percent
Valid	1	29	5,0	6,1
	2	42	7,2	8,9
	3	115	19,8	24,3
	4	200	34,4	42,3
	5	87	14,9	18,4
	Total	473	81,3	100,0

Table 45: Frequencies. How important is cultural environment (1-very unimportant; 5-very important)?

		Frequency	Percent	Valid Percent
Valid	1	13	2,2	2,7
	2	15	2,6	3,2
	3	58	10,0	12,3
	4	199	34,2	42,1
	5	188	32,3	39,7
	Total	473	81,3	100,0

Table 46: Frequencies. How important is diverse and tolerant atmosphere (1-very unimportant, 5-very important)?

		Frequency	Percent	Valid Percent
Valid	1	17	2,9	3,6
	2	18	3,1	3,8
	3	80	13,7	16,9
	4	177	30,4	37,4

	5	181	31,1	38,3
	Total	473	81,3	100,0

Table 47: Frequencies. How important is urban social life (1-very unimportant, 5-very important)?

		Frequency	Percent	Valid Percent
Valid	1	27	4,6	5,7
	2	22	3,8	4,7
	3	96	16,5	20,3
	4	194	33,3	41,0
	5	134	23,0	28,3
	Total	473	81,3	100,0