MAPPING MAASTRICHT

Cultural and creative industries

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MADE2MEASURE

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MAPPING MAASTRICHT

Cultural and creative industries
2009-2016

This report by Maastricht University School of Business and Economics, has been produced by the Made2Measure group - within the Maastricht Centre for Arts and Culture, Conservation and Heritage (MACCH) at Maastricht University - led by Professor Dr. Rachel A. J. Pownall, who holds the TEFAF Chair in Art Markets.

Acknowledgement

The two main researchers within the Made2Measure group, who have dedicated their time to research and analysis in the cultural and creative industries, are Anouk Duivenvoorden and Marina Gertsberg. They have been collecting the Microdata, on which the analysis relies, provided in-depth research, supported and advised students on a number of projects which are presented in this report, and initiated and organised an annual conference on the creative and cultural industries in Maastricht. This report would not have been possible without their dedication to both the industry research and academic research which supports this project, for which I am extremely grateful.

The rich data in this report is provided by the Dutch Central Bureau of Statistics, whom we thank for their help in accessing this data. A special thanks here is also extended to Anouk for her tireless dedication and commitment in obtaining and analysing this data for the Netherlands and in particularly the Maastricht region. Her commitment to this report has been central to the quality and rich detail provided.

As a team, we are also grateful to Daan van Vulpen for his support and help in compiling the heat maps, and to Kira Luttrell-Roth and Canny Sutanto at Statista for their help and creativity with the infographics.

The research also required speaking to a number of creatives in the city and reaching out globally to conduct international academic research. We would like to thank in particular, those interviewed to share their experiences, John Franzen, Manuel Calapez, Maarten van Mulken, Joris Hilterman as well as to Jessica Capra at The Artist and the Others, Ward Schoonbrood, Joop de Jong, FashionClash and Maastricht-LAB, for their insights and help. A special mention also to Pieter-Paul van de Wouw and Paul Lambrechts the Municipality of Maastricht for supporting us.

The research is financially supported by the Finance Department at Maastricht University, MACCH, and the Municipality of Maastricht, to whom we are extremely grateful.

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Introduction

This report presents the findings of the Made2Measure project in Maastricht. It is an in-depth attempt by Maastricht University to understand the value and impact of the creative industries in the city and the local region, and comparing this to the national situation. It takes the perspective of evaluating and mapping to determine how development in the creative industries, regionally and nationally, compare to other areas of the economy.

In general, the cultural and creative industries (CCIs) comprise the sub-industries of media and entertainment, arts and cultural heritage, creative business services, and fashion (as we characterize as a fourth section). As such, culture is used to refer to the artistic activities of art, film and literature, music, painting and sculpture, and more broadly under this definition to include museums, heritage and fashion.

This is reflected in the cultural policy adopted by Maastricht. Made in Maastricht, is the creative industry policy, from the local municipality. To generate a culturally flourishing city, Maastricht wants to create opportunities for young and emerging creative companies and employees, in order to retain them in the city.

At the outset of this report, we introduce the creative industries in the international literature (section 2) where academics have motivated stimulating innovation and city development through the cultural and creative industries. Before any analysis and evaluation can take place on the economic impact of these industries in Maastricht, a discussion on how the creative industries are defined is required (section 3). In what context is fashion, for example, included into the definition of the creative industries? Since these definitions differ across Europe, with the Dutch definition being less broad than the UK definition issued by the UK Department of Culture, it becomes imperative that this important aspect is defined up-front. Furthermore, the working definitions used by various departments of culture require broadening to cover the specific cultural policy of Maastricht municipality, whose policy programs fall into a broader remit than these current working definitions.

The starting point of the Made2Measure project is to measure and evaluate the size and scope of the Made in Maastricht policy for the creative industries in Maastricht. Through the lens of company, enterprise and employment data, in terms of Full Time Equivalent (FTE) drawn from the Dutch Central Bureau of Statistics (CBE) we analyse the economic impact of these cultural and creative industries.

We explain the data source (Section 4) for this analysis. We evaluate the companies in the cultural industries relative to other top sectors (Section 5), and furthermore compare to other major national cities, as well as to similar peripheral regions. We then proceed to analyse the number of entrepreneurs and their profits (Section 6). Additionally, we give some ideas on spillover effects between sectors in Maastricht and cross-border to the Euregion (Section 7). Mapping Maastricht is crucial in providing a general perspective of how the value of the cultural industries has evolved over time.

The report helps to establish how large the creative industries are in the local region, and to map the specific cultural industry subsets. With a particular emphasis on urban development through the cultural and creative industries in which the Made in Maastricht cultural policy has focused upon, and moreover, most specifically to address and document the fashion element of the policy.

Policy discourse within Maastricht is in line with the ambitions of policy makers, who are highly concerned that public money is spent effectively and efficiently on policy. The Made in Maastricht program arm of cultural policy aims to support and stimulate Maastricht's creative industries overall. The motivation for which lies in the cultural history and heritage of the city as a creative city.

Maastricht is a city where historically culture has long been interwoven with commerce, with a strong emphasis on manufacturing within the fashion industry. Today the ambition exists to re-evaluate and reshape the current context in which the city integrates fashion. A desire to move back up the production supply chain of apparel, to once again rekindle the focus on strengthening the manufacturing industry within the creative industries such that clothing and jewellery is not only bought in Maastricht, but also 'Made in Maastricht'. By stimulating the cultural industries in this manner in Maastricht, policy is directed to create real growth and employment given a boost in the city.

To justify spending in the creative industries it is vital that we take into consideration how spending in the creative industries contributes to the wider social and economic goals in the city. This is how the Made2Measure project comes in. By drawing on data and theories Made2Measure aims to evaluate the size and growth of the cultural and creative industries and potential impact that public investment can have.

> Cultural value [is]... the abstract noun which describes the works and practices of intellectual and especially artistic activity".
> Williams (1983)

As an initial starting point, the arts and creative industries can be measured for their own sake[1], defined by the output from the sub-industries that contribute to the creative industries. There is an enriched wider debate about the value from the cultural industries, broader than economic value and other material benefits that require the inclusion of social and cultural value as a broader objective of cultural policy. There is a school of thought that ascribes to a clear social function to the output generated by the cultural industries. This judgement is prevalent in the assessment of cultural policy that attributes additional cultural value to events and to objects which help to establish and maintain customs, traditions and social norms.

As culture refers to artistic activities, we ascertain to the definition of cultural value provided by Williams (1983, p87.), "Cultural value [is]... the abstract noun which describes the works and practices of intellectual and especially artistic activity"[2]. Classical theory refers to the arts and culture as providing societal value through the human spirit, nurturing cultural sensibility, as well as improving moral reasoning. For example, participation in cultural activities helps to produce engaged citizens, which should lead to improved democracy and democratic process, including the promotion of civic behaviours such as volunteering and voting.

Exposure to the cultural industries furthermore helps to facilitate a greater understanding of oneself and ones life. Helping shape reflective individuals as citizens of Europe in Maastricht, helps improve the social and cultural wellbeing of those living and working in the Euregion community. An appreciation of culture and the diversity of the human experience has an important impact on societal value through increased empathy, through an improved understanding and respect for others. Aspects of social and cultural wellbeing are becoming increasingly important factors to be considered when attempting to value the economic impact of cultural policy[3].

Other aspects of cultural value, such as regeneration of the city, urban growth, impact on innovation, are all positive consequences of the cultural policy, which are important considerations when evaluating policy and requires critical discussion in the report.

In making a convincing argument for public investment in the creative industries, it is important to understand the wider benefits on society; the regional growth and improvements to urban life. How the local community is affected, and the knock on effects of a striving cultural industry sector on public health and wellbeing. The influence on social cohesion and community empowerment are important factors to consider in the context. Even though these themes go beyond the scope of this report, they are important to keep in mind when considering the results. In addition to our economic focus is the complementary study executed by associate professor Joop de Jong et al. at Maastricht University which focuses on the social value of culture in the city.

We use national data obtained from the CBS until the most recent period available, year-end 2016 or 2015. To specifically focus on the stimulus of the municipality of Maastricht, the economic impact will be revealed in the time period following the stimulation policy, as of 2014. CBS data is only available until 2015 for entrepreneurs and until 2016 for companies. Hence, a follow-up study on the direct economic impact of this policy can only be conducted at a later date.

As Made2Measure is part of the Fashion Maastricht program, we have executed a variety of research projects concerning employment, business climate, students and spending patterns of Maastricht's inhabitants together with our students.

Beyond academic research, Made2Measure is also responsible for organizing an annual event for the creative industries, with a special focus on fashion. In 2015, Maastricht University organized a specialized symposium with a number of specialists, policy-makers and influencers from Maastricht's creative scene. The day was about sharing knowledge and identifying the needs and desires to encourage the city's creative activities to evolve. A significant conclusion of this day was that there needs to be more clarity about the scope and size of the Maastricht's creative scene.

In 2016 and 2017 the conference was larger. Maastricht University in collaboration with The Artist and the Others, hosted a two-day workshop to help students, entrepreneurs and professionals in the cultural and creative industry in their career. One day devoted to academics and one day to practitioners.

The importance of networks, entrepreneurial and business skills are essential and encouraging alternative forms of finance is important in today's climate of restricted public spending. In order to construct a blossoming creative industry with positive impact on society, both networks and alternative valuation methods are crucial.

During the conference in 2017, the focus was on international links, and what Maastricht can learn from other cities and countries. A conclusion from the conference was the importance of momentum, and that there needs to be sustained action and support services to help the creative and cultural industries in Maastricht.

NOTES

1 Caves, R.E. (2003) Contracts Between Arts and Commerce, Journal of Economic Perspectives, 17 (2).

2 Williams, R. (1983) Culture and Society, p87., Colombia University Press.

3 See the ADHC, 2017 report

Cultural and Creative Industries in International Literature

The term creative industries has its origin in policy making. Its first appearance is widely recognized to be at the end of the 1990s in the policy documents by the then newly elected British Labour government. The creative industries were then meant to mark the era of the post-industrial economy. For others, however, the creative industries indicate a different type of economy. In the post-industrial economy, the main contribution to economic growth shifted from manufacturing to services, information and research and the knowledge economy started to take form. Some now argue that the knowledge economy will be replaced by the creative economy or post-knowledge economy[1], where high skilled human capital is no longer the most sought after good, but creativity is.

This view has especially been popularized by Richard Florida in his 2001 book *The Rise of the Creative Class*. Although much criticism exists about his theory[1] (even by himself in his new book The New Urban Crisis) it has had a large impact on urban policy around the globe. His initial theory was based on the idea that human creativity is the new driving force behind economic development. The existence of a so called "Creative Class" in a city would generate urban development. Florida based his Creative Class on occupation existing alongside the Working Class and the Service Class. The Creative Class is made up of two main parts, the 'Super-Creative Core' which includes those employed as architects, designers, artists, musicians, and so on. This is essentially very similar to what we define as the Cultural and Creative Industries later in section 3. Florida, however, also adds scientists and engineers to this group of super-creatives. Around the creative core, a group of 'creative professionals' exists. These are professionals in knowledge intensive industries such as business, finance, law, health and related fields.

The Creative Class is not attracted by a city's amenities but rather to a certain culture that pertains to a city. In order for the Creative Class to fully blossom and generate economic growth, a city needs to have the 3T's of economic development; Technology, Talent and Tolerance. With his creative capital theory, Florida emphasizes the importance of a diverse group of creatives in a city who have the opportunity to mix in order to generate new ideas. His theory is based on the work of Jane Jacobs, who's work had great influence in the field of urban studies. She already argued mid 20th century that diversity in both people and companies would encourage economic growth. In terms of firms and industries, economists underwrite this view as well, in the form of competition.[2]

Time has shown us that Florida's theory was not entirely accurate. As policies based on his ideas were implemented, critics warned about the clustering of this talented creative class within cities[3]. In his latest book *The New Urban Crisis* Florida recognizes this problem. Attraction of the creative class has not resulted in a general increase in welfare for all city inhabitants, but only for the rich. Gentrification has increased inequality in cities like New York, London and San Francisco. Florida's work is mainly focused on US cities, which have a different structure than those in Europe. In the US, the rich population lives in the areas outside the inner-city, the suburbs, and the poor live in the inner city. In Europe, this is mostly organized the other way around. A reason for this difference is given by Brueckner et al.[4] and is based on amenity distribution. European cities have many historical amenities in the inner-city, which people prefer to live close by. The majority of US cities do not have this amenity advantage and therefore people prefer to reside in the quieter and more spacious suburbs. Cities' efforts to attract the creative class to their inner cities have resulted not in a solution to their problems in that area, but a shift of those problems towards the suburbs. Downtown areas have been gentrified, but poverty still exists, just in other locations.

Even though US cities are not directly comparable to those in Europe, let alone the Netherlands, the process of gentrification is visible in our country as well. Large parts of Amsterdam that once were working class neighbourhoods have been gentrified[5]. House prices have increased so steeply that people who grew up in these neighbourhoods can no longer afford housing there. They are forced to move to other parts of the city, or even beyond[6].

Florida's 2001 book also has some insightful reasoning - his creative capital theory and importance of networks for innovation are very much reflected in reality. Many cities have undertaken policy to develop incubators in order to foster their cultural and creative industries and to increase cross-pollination between subsectors – also between CCIs and other industries. Great examples within Dutch cities are the incubator policy in Amsterdam and Strijp-S in Eindhoven. The incubator policy of Amsterdam has generated 60 different creative incubators since 2000 and it is the only city with a long-term studio and creative-incubator policy in the world[7]. Strijp-S represents the success story of turning abandoned manufacturing plants into a vibrant new neighbourhood where city-dwellings, studio-dwellings, businesses, studios, shops, hospitality and theatre comes together[8]. Additionally, the main part of the annual Dutch Design Week is held here, which anchors the innovative and creative image of both the area and the city.

Following this trend in policy, Maastricht also houses a number of incubators, creative hubs and spaces within its city borders. Additionally, great efforts are being made with the new destination of the Eiffel-building and development of the Belvédère area.

Creating a diverse and yet connected creative environment takes time and careful consideration, but these efforts can really give a boost to the city. Eindhoven is again a good example. Even though Florida's ideas did not produce the utopia many urban developers had envisioned, there is much sense to this approach. Marlet and van Woerkens[9] prove this with their study on the Dutch creative class. They compared the prediction ability of both human capital theory and creative capital theory in terms of employment growth in Dutch cities and towns. They find that even though educational levels do give an indication for employment growth, the prediction based on the presence of a large creative class is even better. In another study, however, they contradict Florida's 3T theory on how to attract the creative class. They find that the indicator Tolerance is insignificant for choosing a place of residence. What they do find to be important are job opportunities, city amenities and the aesthetic qualities of cities and their location (a natural environment)[10]. Especially the latter two are important advantages for Maastricht, as both these factors are present in and around the city but are not easy – if not impossible - to imitate by cities that are not in possession of these characteristics.

The fact that presence of a creative class is an indication for employment growth could be stemming from the spillover effects of the cultural and creative industries. The term spillover originates in the economic geography and cluster theory, but now is widely used in urban studies, especially when it comes to cultural and creative industries[11]. No consensus has been reached on what exactly defines a creative spillover but the main idea is mostly similar. The Creative SpIN project[12] for example defines:

"Creative spillover is defined as benefits arising from the activities of the CCIs including artists and creative professionals, which determine positive effects on other sectors of the economy or society. Those positive externalities result from processes through which culture-based creativity spreads out from the CCIs, across economic sectors and industries, thus contributing to innovation in the wider economy."

The cultural and creative sector is pre-eminently a sector which, when expanding, adds greater value to the economy and society than only the pure expansion of the sector itself. Development of CCIs creates benefits for connected industries and can even benefit surrounding regions. Multiple studies find that the presence of CCIs in a region, can create gains in wealth for that region[13]. In addition, Boix et al. find that this wealth increase due to CCIs can generate wealth increase in neighbouring regions[14]. However, this effect is only visible in clusters of regions with high GDP. Maastricht is part of a tight cluster of regions within the Euregio. Therefore, there could be potential wealth benefits connected to developing CCI. More information on potential spillovers can be found in section 7.

NOTES

1 See for example Glaeser, E.L. (2004) Review of Richard Florida's The Rise of the Creative Class, Markusen, A. (2006) Urban Development and the Politics of a Creative Class: Evidence from a Study of Artists or Moretti, E. (2012) The New Geography of Jobs.

2 Florida, R. (2002) The Rise of the Creative Class, Basic Books.

3 Gallagher, J. (2017) Author Richard Florida now says 'creative class' not enough for cities, Detroit Free Press published 24-04-2017.

4 Brueckner, J.K., Thisse, J.F. and Zenou, Y. (1998) Why is central Paris rich and downtown Detroit poor? An amenity-based theory, European Economic Review, 43.

5 Hochstenback, C., Musterd, S. and Teernstra, A. (2014) Gentrification in Amsterdam: Assessing the Importance of Context, Population, Place and Space, 21.

6 Else Lenselink (2015), Groeten uit de Kinkerbuurt: De verhalen achter gentrificatie, Het Parool published 22-02-2018.

7 Bureau Bloedplaatsen (2016) Revised Studio and Creative Incubator Policy for Amsterdam 2015 – 2018, City of Amsterdam

8 Tenten, J. (2014) Strijp-S: Een gebied met creatieve ondernemingen, woningen en daktuinen, Stedenintransitie.nl published 11-12-2014

9 Marlet, G. and van Woerkens, C. (2007) The Dutch Creative Class and How it Fosters Urban Employment Growth, Urban Studies, 44 (13).

10 Marlet, G., and van Woerkens, C. (2005) Tolerance, aesthetics, amenities or jobs? Dutch city attraction to the creative class, Tjalling C. Koopmans Research Institute.

11 Tom Fleming Creative Consultancy (2015) Cultural and creative spillovers in Europe: Report on a preliminary evidence review.

12 http://urbact.eu/creative-spin-complete-overview

13 For example: De Miguel Molina, B. Hervás Oliver, J.L, Boix, R. and De Miguel Molina, M. (2012) The Importance of Creative Industry Agglomerations in Explaining the Wealth of European Regions, European Planning Studies, 20 (8). and Boix, R., De Miguel, B. and Hervás, J.L. (2012) Creative service businesses and regional performance: evidence for the European regions, Service Business, 7 (3).

14 Boix Demenech, R., Hervás Oliver, J.L., De Miguel Molina, B. (2014) "I want creative neighbours". Do creative service industries spillovers cross regional boundaries?, Euro-mediterranean Services Congress.

Defining Cultural and Creative Industries

The term creative industries has been coined by the UK Department of Culture, Media and Sports (DCMS) at the end of the 1990s. Since then, many have used it for research and policy making. However, up until today, no consensus has been reached on what the creative industries exactly include by definition.

Most widely used is the industry definition by the DCMS, which is defined 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."

Within their definition, there are a number of subcategories; advertising, antiques, architecture, crafts, design, fashion, film, leisure software, music, performing arts, publishing, software, TV and radio[1]. With this definition comes a list of industry codes which fall into these categories. 'Global innovation foundation' NESTA challenged this definition and indicates that the boarders should not be based on industry code, but on occupation[2]. NESTA's approach is more in line with that of Richard Florida, who's approach to the Creative Class has been discussed in section 2. Apart from this debate within the UK, other countries all have their own version of an industry code list[3]. Then there are also definitions stated by international organizations like UNCTAD. They are focused on the development of the creative economy[4].

For research in general, but specifically for quantitative research, it is crucial to have a clear definition of the creative industries. Previous studies have already shown that taking different definitions of creative industries can cause output to differ significantly. In a 2005 study, Braaksma et al. showed this very clearly[5]. Depending on the definition, the percentage of the Dutch business population occupied by the creative industries would be as low at 1.9% to as high as 19%. Hence, finding a clear definition and sticking to it is crucial for research output to be interpretable.

3.1 Quantifiable definitions

Within the Netherlands, the TNO (Dutch organization for applied scientific research) has defined their own version of the creative industry using the Dutch SBI-code system[6]. Most scientific literature and industry reports on the Dutch creative industries are based on this definition and so is the creative policy of Maastricht.

As a descriptive definition TNO states:

"The creative industry is a specific form of business that produces goods and services that are the result of individual or collective creative labor and entrepreneurship. Content and symbolism are the most important elements of the goods and services. They are purchased by consumers and businesses because they evoke a certain meaning on which an experience is then based. This is how the creative industry holds an important part in development and maintenance of lifestyles and cultural identities in society."

It is interesting to note that the definition for creative industries used by the Topsector policy differs from the one above. The most important difference is that the Topsector definition is generally aimed at parts of creative industries that are financed by the market and does not take into account publically financed areas such as theatres or the national broadcasting network[7]. One could broadly say that the Topsector definition includes only the creative industries and that the TNO defines the CCIs.

The TNO definition is unfortunately not all-inclusive either. The city of Maastricht is profiling itself as a city for fashion and offers places for emerging fashion designers and makers to develop. We would argue that these makers are part of the cultural and creative industries within the city. The TNO definition, however, unfortunately does not include fashion, and as an industry it is completely disregarded within their definition of the CCIs. The reason is likely to be that only a small part of the fashion industry entails the actual designing and creating of new concepts and items. Still, this is no reason to exclude this sector, and particularly for the purposes at hand. The DCMS definition does include fashion as a creative industry. They have taken all industry codes related to designing and manufacturing any apparel related items and have weighed these numbers with the percentage that fashion design takes up within the fashion manufacturing industry as a whole. More practically, this means that approximately 5% of the total fashion manufacturing industry is included when they talk about the creative industries. In the Netherlands such a weighted number is unfortunately not defined and we do not possess the specific expertise and data needed to make an estimation of this percentage. Furthermore the fashion manufacturing industry in the Netherlands is of such a small size that weighing with a number like 5% does not make intuitive sense. As it is commonly known that most general apparel manufacturing is not undertaken in the Netherlands, we find it safe to assume that all industry codes concerning fashion manufacturing can be added to our

custom definition of the creative industries. Additionally, the artisan or 'manufacturing' part of the fashion industry is precisely the area of focus within Maastricht.

Another definition of the CCIs that plays a large role in the city is the one used by professor Söndermann in his study of the CCIs in the Euregion Meuse-Rhine[8]. Based on data from Eurostat and calculations by his research institution (*Büro of Kulturwurtschaftsforschung*), he gave an indication of the situation for the CCIs between 2008 and 2010. This was specified among the five sub-regions within the Euregion Maas Rhine; the province of Limburg (Belgium), the province of Lüttich (Belgium), the German-speaking communities within the province of Lüttich (Belgium), South-Limburg (Netherlands) and the Aachen region (Germany). As both the current CCIs policy in Maastricht as well as this research draws inspiration from Professor Söndermann's study, we have considered his definition as well. He includes almost all SBI codes defined by TNO, along with some additional ones.

3.2 Made2Measure definition

The TNO definition is the most widely used in The Netherlands and therefore it seems appropriate to use it for this research as well. However, as it is not entirely in line with the Maastricht policy on CCIs, we have chosen to use it as a base and complement it with the most prominent definition in international research (DCMS) and the most important one for Maastricht (Söndermann). From DCMS we have taken the codes related to fashion, from Söndermann we have taken the codes related to jewellery creation. Furthermore, we have looked at which codes were overlapping in both DCMS and Söndermann but were not included in TNO. This led to the addition of software development.

TNO defines three subsectors or domains within the creative industries; Arts & Cultural Heritage (A&CH), Media & Entertainment (M&E) and Creative Business Services (CS). As CCIs is a combination of several very different industries, it cannot be treated as one homogeneous group[9]. The domains are also made up of different industries and industry codes, but these are grouped in a more coherent way and share a lot of the same dynamics. There are differences in terms of economies of scale, sensitivity to business cycle fluctuation, sources of financial capital, opportunities in innovation and managerial constraint[10]. We added the software development code to subsector CS. The codes for fashion and jewellery, however, did not fit into one of the existing domains. Therefore, for this research and our 'made to measure' definition of the creative industries in Maastricht we have added a forth subsector; Fashion. It is important to notice here that fashion designers are registered in different ways at the Chamber of Commerce. When their main industrial activity is registered as 'industrial and product design' it means not included in our fashion category, but in creative business services. This is a caveat which is created by working within industry codes rather than occupation. For a full list of the industry codes used and their distribution among the four domains, please see Appendix A.

Arts & Cultural Heritage

Performance arts
Creative arts
Cultural heritage
Other arts and heritage

Media & Entertainment

Radio and television
Press
Film
Music industry
Publishing of books
Other publishing
Live entertainment

Creative Business Services

Graphic and product design
Architecture
Communication and information
Software development

Fashion

Creation of apparel, bags and shoes
Creation of jewellery

Educational Frame

Effect of Creative Industries on Students

STUDENT
Anna Vasylyeva

PROGRAMME
University College Maastricht, PEERS

RESEARCH
Intention of students to stay in Maastricht after the graduation

UCM PEERS is a semester long research program carrying 10 ECTS. PEERS is a form of RBL, Research-Based Learning. In RBL, learning is based on research that students do themselves, rather than being dependent on research done before and by others. Small groups of students will conduct research under the guidance of a senior researcher and Anna conduced her research under the Made2Measure programme. She investigated the question: What are the major factors that determine the desire of the Maastricht University (UM) students to stay in, or leave, Maastricht upon graduation?

Understanding of these factors can help the municipality to develop policies to retain highly educated graduates, who can boost the development of the city. This research also aims to analyse Maastricht's prospective policy of developing creative and cultural industries (CCIs) in relation to graduates' intention to stay. Through primarily quantitative survey of 612 current UM students, the paper arrives at the following conclusions.

Faculty, nationality and career intentions play an important role in graduates' choice. Specific aspects of Maastricht, such as job opportunities, international nature, connection of the respondents to Dutch culture, creative and cultural places, as well as knowledge of Limburgse are major factors that encourage some respondents to stay in the city upon graduation. The development of CCIs, especially entrepreneurship has a potential to increase the graduates retention rate. However, different groups of students are interested in different CCIs. The implications of this and other findings are analysed and formulated as recommendations to the municipality.

For more information on this study, please visit www.made2measure.org

STUDENT
Frederike Bauer & Elisabeth Bussu

PROGRAMME
University College Maastricht, PEERS

RESEARCH
Students' fashion consumption in Maastricht

In today's society, materialistic products like clothing and accessories are used to express our personality and signal the belonging to a certain social group. Especially individuals showing tendencies of trendsetter behaviour appear to value appearance highly. It has also been shown that people demonstrating trendsetter behaviour spend more money on clothing and other materialistic products. With the municipality's intention to stimulate the development and growth of the local fashion industry in mind, the study's first aim was to determine whether students at Maastricht University show tendencies towards a trendsetter shopping behaviour or not.

The second aim is to determine to what extent students use and how they perceive the shopping opportunities presented by the city. Given that students make up 13 per cent of the Maastricht's population, it is of great use for the municipality to know whether shops should alter their strategic direction to cater to the student population. Thirdly it is our aim to find a possible interaction in regards to shopping preferences between trendsetters and trend followers.

Given these goals the following research questions were developed: Do Maastricht students exhibit a behavioural trend towards being either trendsetters or followers? What are students' shopping preferences and to what extent does the current shopping environment in Maastricht meet these? How does being a trendsetter or follower affect shopping behaviour and preferences of students? Our research relies on a quantitative approach with an online survey which was distributed to students of Maastricht via social media (Facebook) and e-mail. In total, 209 complete observations covering all type of degrees and eight faculties and study programs were collected.

We found that Maastricht University students show indeed a significant tendency towards being trendsetters. They are satisfied with the shopping opportunities Maastricht offers, yet the majority prefer to spend their money elsewhere. We did not find any differences between demographic groups, i.e. controlling for gender, faculty and nationality. Trendsetters and followers do not differ in their shopping behaviour but show different preferences regarding which characteristics they value in fashion items. These results lead to the recommendation for the municipality to not focus specifically on attracting more students as customers since they seem to be satisfied with the shopping environment. The reasons why students do not spend their money in Maastricht must lie elsewhere and are unlikely to be controllable by policy. ■

For more information on this study, please visit www.made2measure.org

Data

All figures, tables and results are based on our own calculations and interpretation of the data. The data used for this report comes from the Microdata database by the CBS. These are raw data files meant for personalized research by universities and other research institutions. In very general terms they contain anonymized data on personal, company and address-level. The Microdata gave us access to very detailed information on companies and entrepreneurs which is not available through any other source. However, as is often the case, this data also has some limitations and caveats. We have used two separate files from the Microdata database. In this section, we will give more information about the data used and its limitations.

The period under investigation is 2009 until 2016 or 2015, depending on the dataset used. We wanted to map the CCIs over a longer time period, so that the development is clearly visible. We have chosen 2009 as a starting point as this is the first year that the SBI (*Standaard Bedrijfsindeling*) 2008 version is adopted in all files. Converting the 1993 version to 2008 would have created noise in the data and did not have any added benefit to the research.

4.1 General Company Ledger, ABR (2009-2016)

The General Company Register (*Algemeen Bedrijven Register, ABR*) holds all organizations registered at the Dutch Chamber of Commerce. There is no restriction on legal form. It holds sole-proprietorshops (*Eenmanszaken*), PLCs (*B.V.*'s) and listed companies (*N.V.*'s), but also associations (*Verenigingen*), foundations (*Stichtigen*) and many more. In this report, all types of legal forms have been considered and they are all referred to as 'company', unless otherwise specified.

Every entry states the company's size, location and 5-digit specific SBI code, among other variables. As our definition of CCIs is based on SBI-codes, having them defined so specifically in the data is crucial. Because of this, we were able to identify CCIs from non-CCIs organizations without the use of estimations or multipliers. They could be sorted directly by linking the SBI-codes in the definition to the one under which companies they are registered at the Chamber of Commerce.

Another very important variable of the ABR database is the company location, which is specific as to the detail of their full postal code. In public databases like Eurostat, locations often only are at the country, province or sometimes NUTS level. As this report is location specific, other sources of data would have not been adequate. Knowledge of the companies'

postal codes, enabled us to categorize the companies accurately at the municipality level. In the case of Maastricht, we even looked at the data on the neighbourhood level.

The CBS data defines three statistical units in the ABR. The largest unit is the so called group unit (*ondernemingengroep*). This is a collection of different business units, or legal entities, which can be governed from one central point. When a group unit has multiple business units, it can also be operating in multiple economic activities, or SBI codes. The second statistical unit, business units (*bedrijfseenheid*), is the base of the ABR. Each entry in the file is one business unit. These are autonomous units with an external or market focus. Hence, they do not just exist for internal production of the group.

The main variables such as 'persons active', 'legal form', 'size class' and 'economic activity', and SBI, are defined at the business unit level. Business units are divided in local business units (*lokale bedrijfseenheid*). These are defined as the different local affiliates of the business unit. They are determined based on postal code, but do not have the detailed information that is given for business units. Most entries in ABR have 1 group unit, with 1 business unit and 1 local business unit. However, in some cases group units have multiple business units and also multiple location units.

As mentioned, the ABR also specifies the 'persons active' per firm. In this way, we were able to roughly identify how many FTE are present in the cultural and creative industries.

We use the term roughly, because 'persons active' cannot be used directly as a variable for employment. The number supplied in the data is calculated though an algorithm which gives an indication of how many people are working in a company based on insurance data of those companies. This insurance data is in some cases completed with questionnaires filled out by the companies. Additionally, these numbers include the companies' owners and possible relatives active there. Hence, the number gives an indication on how many FTE are filled within the industry, but it cannot be interpreted as the number of jobs.

The ABR was essential for our research and forms the core of our report. However, it holds no information on the financial aspect of the companies. For this, we used a file on the income of entrepreneurs (*Zelfstandigentab*).

The ABR dataset was available until 2016.

4.2 *Zelfstandigentab* (2009-2015)

Contrary to ABR this file contains data on the individual, rather than the company, level. Its entries have been taken from tax registrations on personal income. More specifically, it lists, among other things, the income from an individual's own enterprise, the enterprise's size class and legal form.

Important to note here is that the enterprises can vary in size, so in terms of frequency there is a lot of overlap with the ABR. However, the *Zelfstandigentab* gave us the opportunity to analyse how much profits are being earned by entrepreneurs in CCIs. As this data comes from income tax declarations, it cannot be found in any public database. It is, however, crucial in getting a good overview of profits earned in CCIs, as at least three quarters of the industry consists of entrepreneurs. Unfortunately, it is not possible to identify a link between individuals and companies. Hence, we were not able to directly link the companies registered in ABR to the profits stated in *Zelfstandigentab*. For these reasons, and as this file is based on individuals rather than companies, it is for a large part analysed and interpreted separately from the ABR. Further analysis of the cultural and creative industries in terms of entrepreneurs can be found in section 6.

The *Zelfstandigentab* dataset was available until 2015.

4.3 Financial data on companies

In order to complete the financial image of the cultural and creative industries, we intended to also analyse financial data on companies, rather than independent entrepreneurs, in the industry. In order to get this information, we employed a dataset which holds financial information on all non-financial companies in the Netherlands, NFO (*Statistiek Niet-F inanciële Organisaties*). Unfortunately, during our analysis it became clear that this file only included companies of a certain size and hence it did not give an accurate representation of CCIs in terms of companies.

As small-scale entrepreneurs make up the largest part of CCIs and they are captured in the *Zelfstandigentab*, we do not see the lack of this data as a crucial problem. However, to accurately determine the industry's value added, one does need to incorporate this data, preferably on revenue rather than profit level.

Cultural and Creative Industries in terms of companies

5

In this section, we shed light on the CCIs of Maastricht and its surroundings in terms of companies. We look at the number of established companies in the city and how many FTE these companies employ. The situation in Maastricht is compared to the Netherlands as a whole, to the more urbanized areas of our country (Randstad) and also to South-Limburg. Within the economic frames, a more detailed picture of Maastricht and the development of the CCIs per province is described.

5.1 Number of companies

One of the ways to gain insight in the size of an industry is by analysing how many companies are established in an industry, within a particular region. In this section, we therefore show how many creative companies are present in Maastricht in absolute terms, and also present this as a share of the total companies in the city. In this analysis we focus on the presence of a company, rather than company size. Section 5.2 focuses on the number of available FTE within the CCIs. The term 'company' is used to mean any type of organization, which also include for-profit companies, foundations and associations.

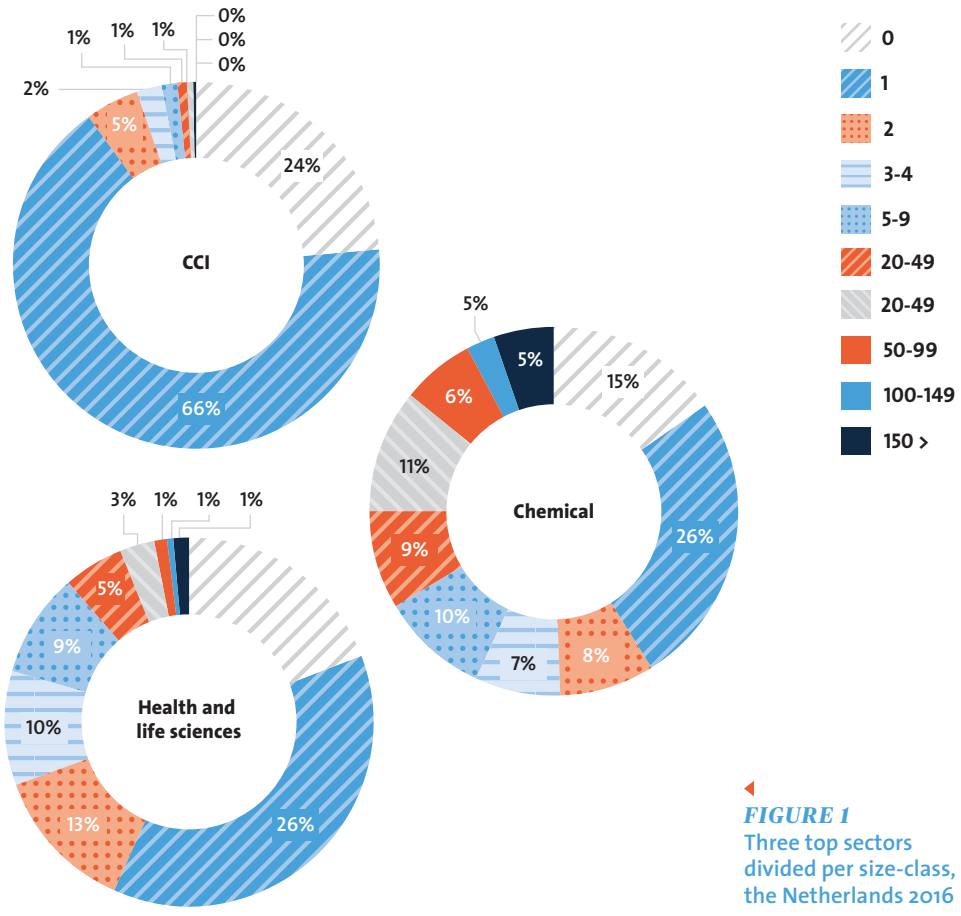


FIGURE 1
Three top sectors divided per size-class, the Netherlands 2016

	Non-CCI	AC&H	M&E	CS	Fashion	Total CCI	Total
2009	7,247	470	199	465	37	1,171	8,418
2010	6,736	495	192	473	32	1,192	7,928
2011	7,025	552	215	513	35	1,315	8,340
2012	7,349	598	230	571	40	1,439	8,788
2013	8,257	675	250	642	53	1,620	9,877
2014	8,342	705	259	651	55	1,670	10,012
2015	8,388	722	264	627	60	1,673	10,061
2016	8,740	733	279	667	57	1,736	10,476

TABLE 1
Absolute number of companies per subsector, Maastricht 2009-2016

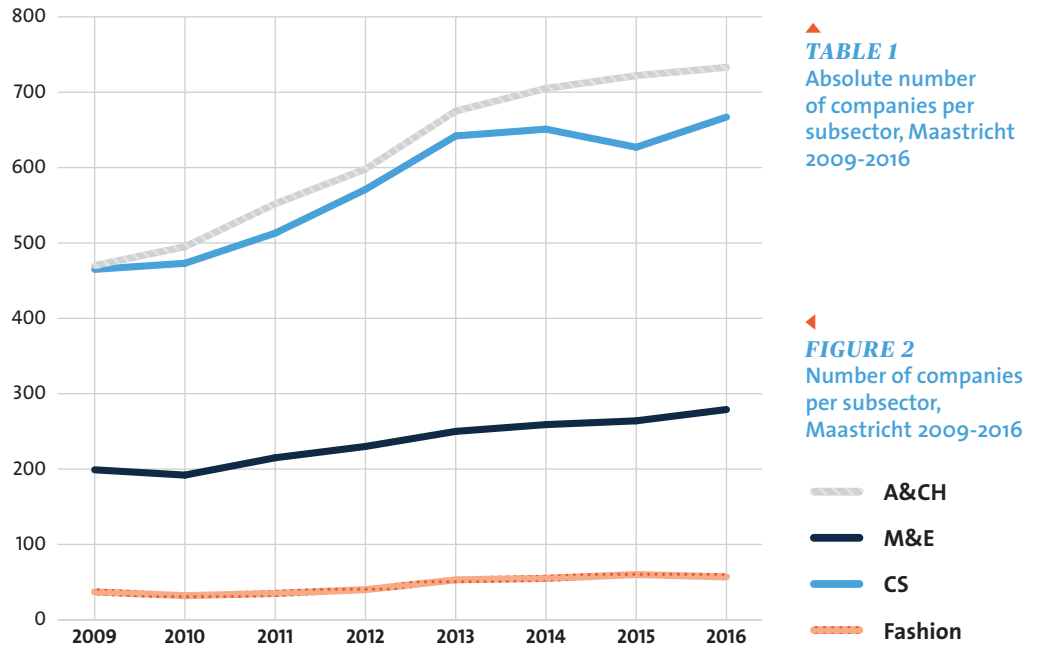


FIGURE 2
Number of companies per subsector, Maastricht 2009-2016

The CCIs sector is one of a kind when it comes to average company size. The CCIs can be seen as a sector composed of a multitude of mini-sectors. These mini-sectors are in themselves also highly fragmented. Compared to other industries, CCIs has a significantly larger number of independent entrepreneurs. The uniqueness of the CCIs as a sector becomes very clear when compared to other sectors.

Figure 1 shows company sizes within the CCIs and two other top sectors, the Chemical industry and Life Sciences & Health[1], as a comparison. Just by looking at these charts, it immediately becomes clear how different the CCIs are in their make-up from other top-sector industries in terms of average company size.

5.1.1 Companies in Maastricht

By 2016, Maastricht housed 1,736[2] creative companies within its city borders. Growth has been evident across all four sectors of the creative and cultural industries. Since 2009, this number has increased by 48% in the municipality of Maastricht, and by 50%

Year-to-year growth

	AC&H	M&E	CS	Fashion	Total CCI
2009	-	-	-	-	-
2010	5.3%	-3.5%	1.7%	-13.5%	1.8%
2011	11.5%	12.0%	8.5%	9.4%	10.3%
2012	8.3%	7.0%	11.3%	14.3%	9.4%
2013	12.9%	8.7%	12.4%	32.5%	12.6%
2014	4.4%	3.6%	1.4%	3.8%	3.1%
2015	2.4%	1.9%	-3.7%	9.1%	0.2%
2016	1.5%	5.7%	6.4%	-5.0%	3.8%
2009-2016	56.0%	40.2%	43.4%	54.1%	48.2%
GM 2009-2016	52.3%	48.4%	48.5%	35.6%	49.5%

Share of total economy

	Ac&H	M&E	CS	Fashion	Total CCI
2009	5.58%	2.36%	5.52%	0.44%	13.91%
2010	6.24%	2.42%	5.97%	0.40%	15.04%
2011	6.62%	2.58%	6.15%	0.42%	15.77%
2012	6.80%	2.62%	6.50%	0.46%	16.37%
2013	6.83%	2.53%	6.50%	0.54%	16.40%
2014	7.04%	2.59%	6.50%	0.55%	16.68%
2015	7.18%	2.62%	6.23%	0.60%	16.63%
2016	7.00%	2.66%	6.37%	0.54%	16.57%
2009-2016	25.3%	12.7%	15.3%	23.8%	19.1%
GM 2009-2016	21.9%	18.7%	18.8%	8.5%	19.6%

TABLE 2
Development creative industries per subsector, Maastricht 2009-2016

in Greater-Maastricht (GM) (Maastricht and adjacent municipalities Meerssen, Valkenburg aan de Geul and Eijsden-Margaten), providing evidence for a large increase in the creative sector in Maastricht.

In Maastricht, there is some difference between the four CCIs subsectors. This is depicted in Figure 2, which shows the absolute number of companies per CCIs subsector from 2009 until 2016. The largest number of CCIs businesses fall into the A&CH subsector with 733 companies. CS is approaching A&CH in number (667), but this is partially due to the relatively large proportion of software development companies, which make up approximately 27% of this subsector; a percentage which remains steady throughout the duration of the period under study. As this is a very significant part, Appendix B shows some figures to illustrate the situation without software development companies. Following CS is M&E with 279 companies and then by Fashion with 57 companies. The 2009 distribution was not markedly different, but the sector was much smaller 9 years ago.

Figure 2 illustrates that the number of companies in all four CCIs subsectors has increased over the period 2009-2016. Overall, this graph shows high growth in the number of CCIs companies in Maastricht. Particularly in 2013, where the Fashion subsector saw a 32.5% increase in the number of companies established. Taking the whole period the CS subsector has experienced a 43% growth in the number of companies. A small decline is visible in CS between 2014 and 2015. Table 2 gives a more detailed overview of the year-to-year growth within the subsector.

In Table 2 we also provide the percentage growth for the CCIs companies as a share of the total economy. While the total amount of companies in Maastricht increased by 25%,

	Non-CCI	AC&H	M&E	CS	Fashion
Sole-proprietorship	5,042	585	223	488	46
LLC	2,247	16	20	101	<10
Partnership	924	38	23	62	<10
Foundation	229	89	12	<10	<10

TABLE 3
Overview legal forms per subsector, Maastricht 2016

over the 8 years under study, the number of CCIs companies increased by almost twice as much, at 48%. In 2009, CCIs companies made up 14% of Maastricht based companies, in 2016 this has grown to 17%. This is an important finding, highlighting that the share of CCIs in the total economy of the city has increased by 19%.

The second row of totals in Table 2 represents the 'greater area of Maastricht', which has been defined as Greater-Maastricht and includes its directly adjacent municipalities Meerssen, Valkenburg aan de Geul and Eijsden-Margaten. Focusing also on this expanded area of Maastricht enables us to include companies which are located in adjacent municipalities that are likely to have their main focus of business in Maastricht and provide an important contribution to the overall creative and cultural output of the city. We see that looking at Maastricht in this larger perspective generally increases the growth numbers. The total number of CCIs companies in the four municipalities has grown by 50% and the share of CCIs within the total economy has grown by almost 20%.

Interesting to note here is that subsector A&CH and Fashion have experienced slightly lower growth number when looking at the larger area. This indicates that the number of these types of companies in Maastricht city has actually increased at a faster pace then in surrounding municipalities.

As mentioned in the introduction of this section, in this part of the report, the focus is not on the size, but on the number of companies. However, it is important to note that as the CCIs are very fragmented and represented for a large portion by sole-proprietorships (*eenmanszaken*), it is interesting to look at the proportions of different legal forms and company sizes in the industry. In the Netherlands, the term 'ZZP'er' (*zelfstandige zonder personeel*) is used very often to represent a company with only one employee: the owner. It is, however, not an official legal form. Most of these companies will have the legal form of a sole-proprietorship. This represents a company where the only person working there is the owner. However, the owner is personally liable in this type of legal form. Hence, there are some ZZP'ers who have set up a private limitate company (*B.V.*) to avoid this concern. We can say that therefore, all sole-proprietorships are ZZP'ers, but not all ZZP'ers are necessarily sole-proprietorships. Because all ZZP'ers are registered with the Chamber of Commerce (*KvK*), they are therefore completely represented in our dataset.

Since a ZZP'er is not an official legal form, this does have the consequence that we were not able to completely isolate them as a category. The next best alternative is to look at the number of sole-proprietorships in CCIs and at the number of companies with either no employees, or just one employee. The latter will be analysed in more detail later in the report. Table 3 gives more insight into the different legal forms that exist within the CCIs in Maastricht in 2016.

We find that most CCIs companies are organized in the form of a sole-proprietorship, private limited company, partnership (*V.O.F.*) or foundation (*stichting*). As Figure 3 shows, by far the largest amount of CCIs companies, 77% are organized as sole-proprietorships. For non-CCIs companies, this is lower, 58%. For legal forms PLC and partnership we are restricted from observing the subsector Fashion, as there are less than ten observations, and we are required to have more than ten observations to access the information from data from the CBS. We are still able to analyse the three remaining subsector in terms of PLCs and partnerships. Of these companies, almost three-quarters, 74%, fall into the CS subsector of the CCIs. Approximately 7% of CCIs companies are organized as a partnership. The majority of these are again, CS companies. Finally, there are some companies represented as foundations. It comes as no surprise that the large majority of these fall in the A&CH subsector. There are also some within in M&E, but for the other two subsector there were less than the ten required observations, so no further information about them can be disclosed.

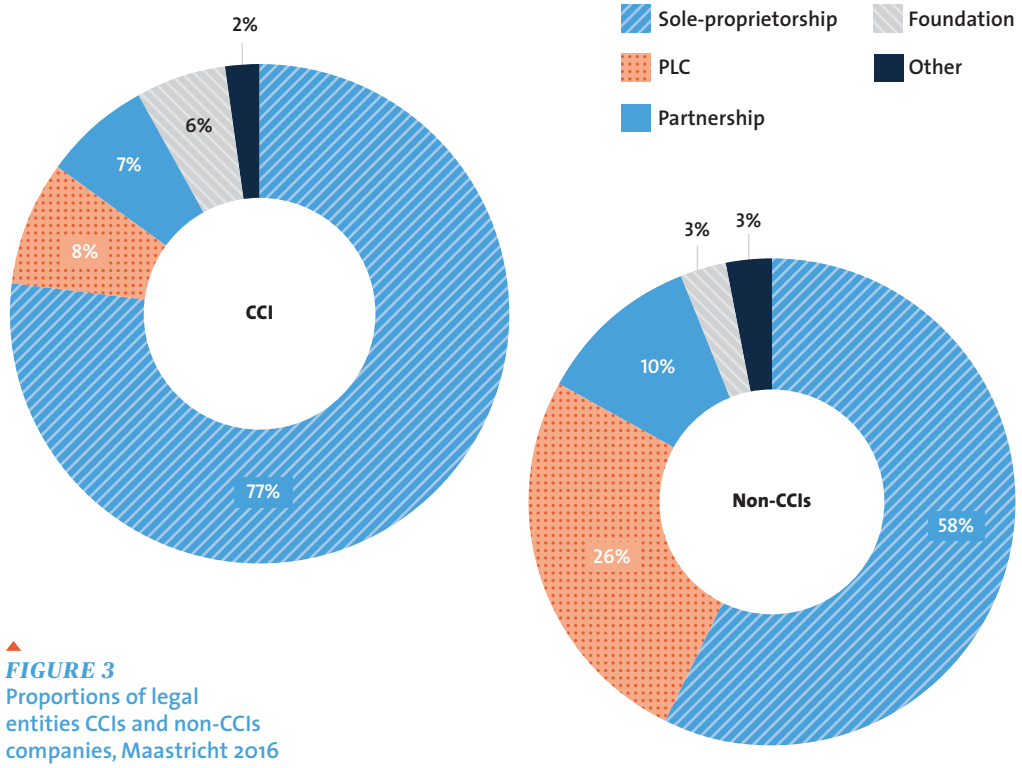


FIGURE 3
Proportions of legal entities CCIs and non-CCIs companies, Maastricht 2016

Economic Frame

Maastricht Magnified

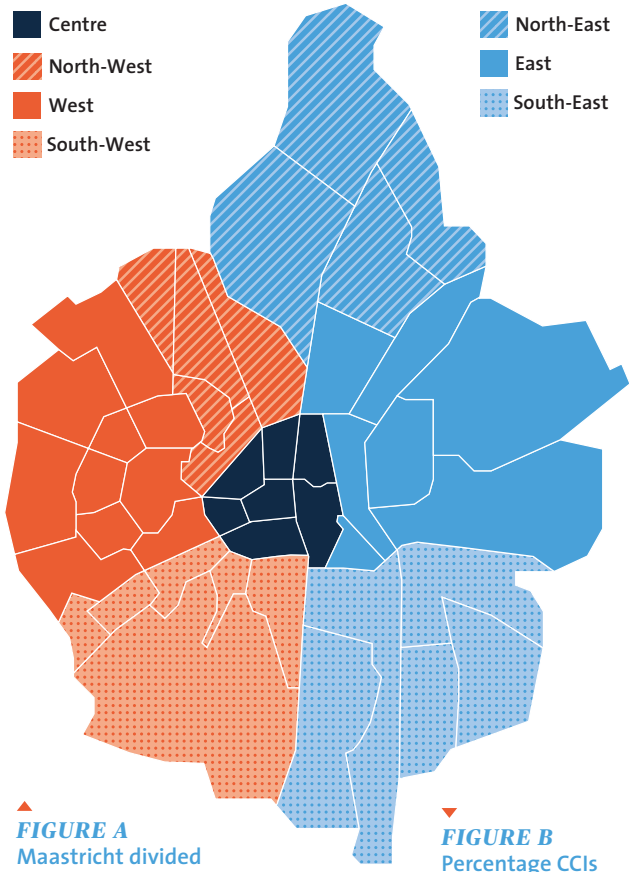


FIGURE A
Maastricht divided into boroughs

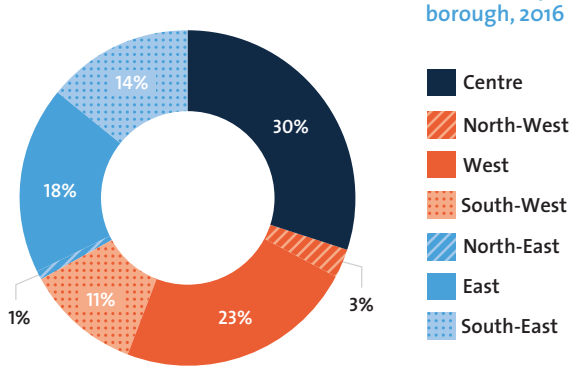


FIGURE B
Percentage CCIs companies of Maastricht per borough, 2016

It is revealing to study how the creative industries are distributed across the city. The different boroughs have been defined by the CBS and are taken directly from their 'Wijk en Buurtkaart' 2016. Figure A gives an overview. Figure B shows the percentage shares of total CCIs companies in Maastricht per borough.

Cultural and creative companies are not equally spread among Maastricht's seven boroughs. As is to be expected, the majority of CCIs companies, 30%, are currently located in the city centre. However, a large part are also located in the West, East and South-East of the city. The smallest shares are attributed to the North-West and North-East. This is unsurprisingly as they are the two smallest boroughs of Maastricht. In 2016, North-West had 2175[A] inhabitants and 212 companies and North-East 2710 inhabitants and 160. In comparison, the centre respectively had 18 275 and 3061. In terms of development, the North-West borough has seen the fastest growth. Between 2009 and 2016, the number of CCIs companies in that borough increased by 76%. However, they started from a very low base.

Figure C illustrates the development in all boroughs. Not all boroughs have experienced

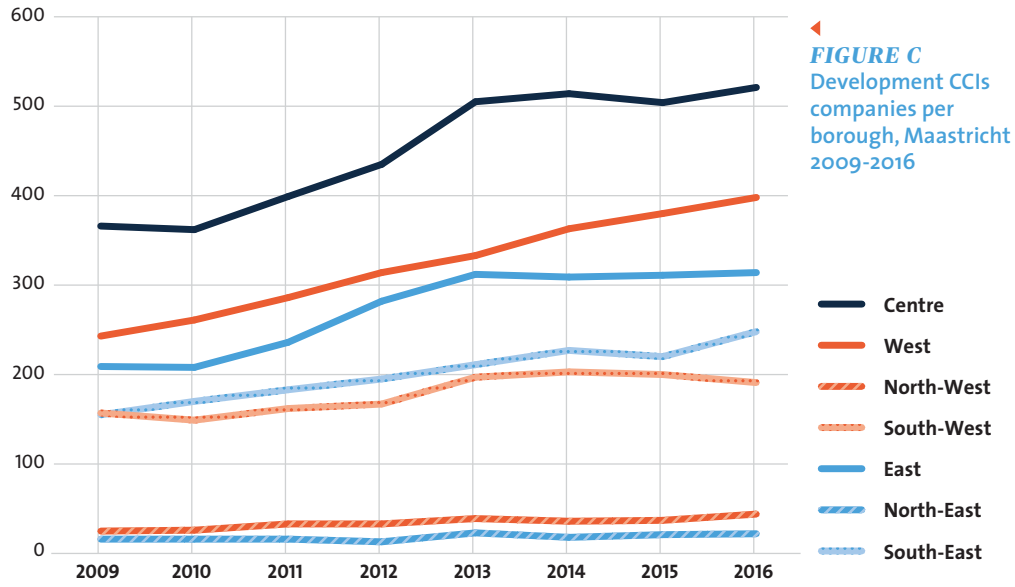


FIGURE C
Development CCIs companies per borough, Maastricht 2009-2016

the same development in the number of CCIs companies over the period 2009-2016. As Figure C shows absolute numbers, we are not observing the relative growth per borough. Centre, South-West and East saw the highest rise in absolute terms but they are three of the four largest boroughs in the city, so it makes intuitive sense that they would attract more companies in absolute number.

Table A presents the internal growth rates in the boroughs in terms of the number of companies in the CCIs. We find that the North-West has the largest growth in terms of the number of relative CCIs companies. The West and the South-East also show a large relative growth. When we look at the CCIs companies as a share of total companies in the different boroughs, the North-West reveals itself to be a true

Maastricht	Growth CCI companies 2009-2016	CCI companies as share of total companies in borough
Centre	42%	17.0%
South-West	22%	18.2%
West	64%	19.0%
North-West	76%	20.8%
East	50%	14.3%
North-East	38%	13.8%
South-East	60%	14.5%

TABLE A
Relative growth rates and CCI share of total companies per borough, Maastricht 2016

creative borough as more than one in five companies (21%) belong to the CCIs. When we consider that the average across the city is for 17% of companies belong in the CCIs, we see that this is more than 4% higher than the city average. Other boroughs that have more CCIs than the city average are West, South-West and Centre. Whereas, relatively speaking, the smallest percentage of CCIs companies are situated in the North-East. ■

NOTES

A CBS Kerncijfers wijken en buurten 2016

5.1.2 Companies in the Netherlands, Eindhoven and Arnhem

Taking the Netherlands as a whole, for comparison, table 4 shows the same table 2, but now country wide. The numbers show some interesting differences. Firstly, we see that for the Netherlands in general, the CCIs and its subsectors have shown large positive growth over the past eight years. The growth in the CCIs from a country perspective is higher than in Maastricht, with the exception of the fashion subsector. Where the number of fashion companies nationally has increased by 40%, in Maastricht city this was 54%. When looking at the share of fashion companies in the total economy, this also increased by 24% in Maastricht and by only 8% in the Netherlands as a whole. However, it is very interesting to note that the share of the CCIs in the Netherlands is only 13%, lower than the share in Maastricht, which is 17%.

When interpreting Table 4 and comparing it with the numbers for Maastricht, it is important to keep in mind that Table 4 includes our country's urbanized areas. As mentioned in section 2, the development of CCIs has

TABLE 4
Development creative industries per subsector, the Netherlands 2009-2016

Year-to-year growth

	AC&H	M&E	CS	Fashion	Total CCIs
2009	-	-	-	-	-
2010	8.4%	0.9%	1.8%	-1.9%	3.6%
2011	9.7%	7.2%	8.2%	2.9%	8.4%
2012	9.5%	9.2%	9.8%	11.1%	9.6%
2013	13.5%	10.3%	11.5%	9.7%	11.9%
2014	4.6%	5.0%	1.8%	5.9%	3.5%
2015	4.5%	3.3%	5.6%	3.9%	4.7%
2016	5.9%	4.7%	5.7%	3.5%	5.5%
2009-2016	71.0%	47.8%	53.2%	40.2%	57.5%

Share of total economy

	AC&H	M&E	CS	Fashion	Total CCIs
2009	3.56%	2.31%	4.81%	0.26%	10.95%
2010	4.05%	2.44%	5.12%	0.27%	11.88%
2011	4.24%	2.50%	5.30%	0.27%	12.30%
2012	4.37%	2.57%	5.48%	0.28%	12.69%
2013	4.47%	2.55%	5.50%	0.27%	12.80%
2014	4.53%	2.60%	5.43%	0.28%	12.84%
2015	4.63%	2.63%	5.61%	0.29%	13.15%
2016	4.70%	2.64%	5.68%	0.28%	13.31%
2009-2016	32.0%	14.1%	18.2%	8.2%	21.6%

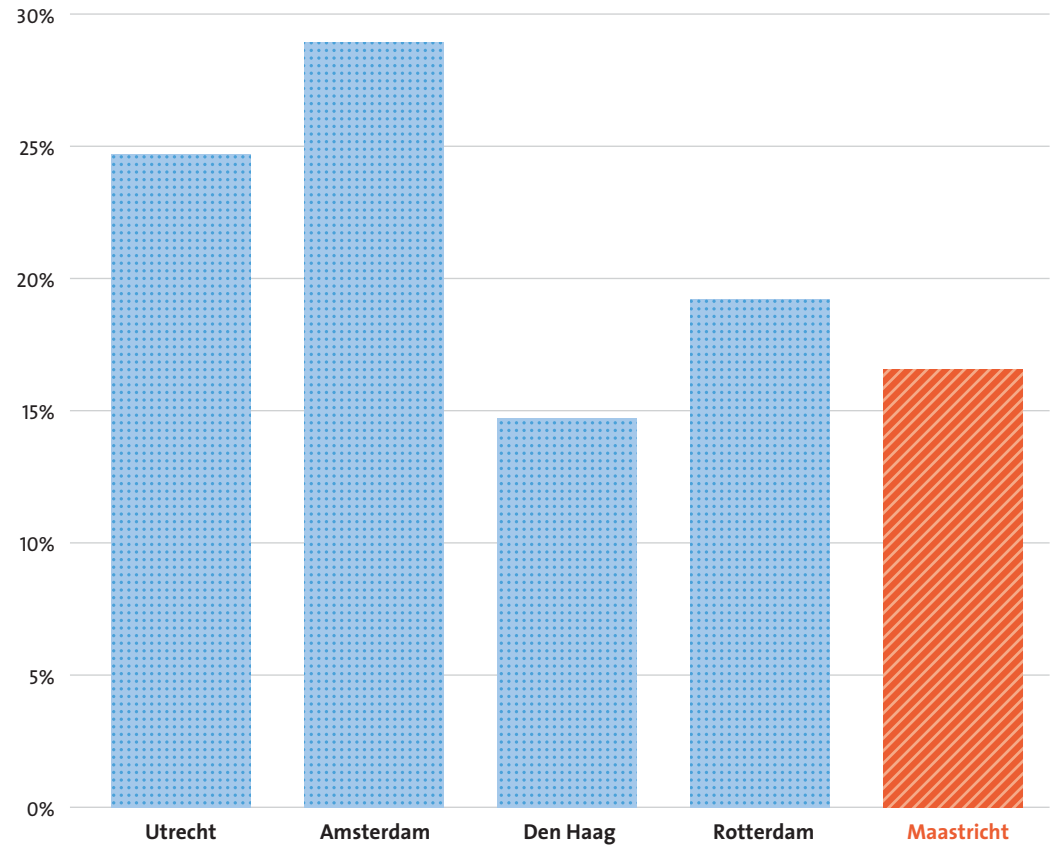


FIGURE 4
Share of CCIs companies in total economy, Randstad and Maastricht 2016

for a long time been centered around urbanized areas. Hence, these areas have an important advantage and will always host a disproportional amount of CCIs companies within their borders. Within the Netherlands, Amsterdam is the epicenter of the CCIs. This is not only visible by the absolute number of creative companies established in the city, but also by the percentage of the total economy represented by CCIs companies. Figure 4 illustrates this share for the four largest cities in the Netherlands, also specified as the 'Randstad'.

In the Randstad as a whole, the CCIs make up almost a quarter (23.5%) of the total economy. This is over 6% more than in Maastricht. This percentage can mainly be attributed to the presence of so many creative and cultural companies in Amsterdam. As shown in Figure 4, just under a third (29%) of all companies located in Amsterdam fall within the CCIs in 2016. Utrecht has a slightly smaller share with one in four (25%). Rotterdam slightly fewer in proportion with just under one in five (19%). Most interesting to notice though, is that CCIs companies in The Hague only make up 15% of the total. In 2016, Maastricht, at 17%, thus had a larger share of CCIs companies than in The Hague.

Year-to-year growth

	AC&H	M&E	CS	Fashion	CCIs
2009	-	-	-	-	-
2010	2.26%	3.85%	5.94%	-6.25%	3.85%
2011	10.12%	5.41%	13.48%	0.00%	10.53%
2012	6.44%	9.19%	11.04%	20.00%	8.96%
2013	12.70%	12.38%	12.50%	44.44%	13.02%
2014	3.08%	9.03%	1.35%	21.15%	3.64%
2015	4.61%	2.63%	4.90%	3.17%	4.36%
2016	6.86%	6.10%	7.05%	0.00%	6.66%
2009-2016	56%	59%	71%	103%	63%

Share of total economy

	AC&H	M&E	CS	Fashion	CCIs
2009	7.64%	3.07%	7.19%	0.29%	18.19%
2010	8.11%	3.31%	7.91%	0.28%	19.62%
2011	8.47%	3.31%	8.50%	0.27%	20.54%
2012	8.34%	3.34%	8.73%	0.30%	20.71%
2013	8.18%	3.27%	8.55%	0.37%	20.37%
2014	8.11%	3.43%	8.34%	0.44%	20.31%
2015	8.17%	3.39%	8.42%	0.43%	20.40%
2016	8.30%	3.42%	8.57%	0.41%	20.71%
2009-2016	8.66%	11.33%	19.33%	41.81%	13.86%

TABLE 5
Development creative industries per subsector, Arnhem 2009-2016

Since Amsterdam, Utrecht, The Hague and Rotterdam form the most important urbanized area of the Netherlands, it may not be completely accurate to compare Maastricht with these cities. Arnhem and Eindhoven are both cities with creative ambition located outside this urbanized zone. Eindhoven is the largest of these three cities, with 224,755 inhabitants, whereas Maastricht and Arnhem are more comparable in size with 122,533 and 152,818 inhabitants in 2016, respectively[3].

Table 5 and 6 show the year-on-year company growth and the share of the CCIs in the total economy for Arnhem and Eindhoven, respectively. Although both cities are known for their creative ambition, Arnhem is more known in terms of fashion, and Eindhoven in terms of design. For both these cities, this ambition is reflected by the large share of CCIs companies in the total economy. In Arnhem and Eindhoven creative companies made up 21% and 20% respectively of the total number of companies in 2016.

Similar to the growth in the number of companies in the CCIs in the Netherlands on average of 22%, the growth in Eindhoven has been 20% since 2009. The growth in this share

Year-to-year growth

	AC&H	M&E	CS	Fashion	CCIs
2009	-	-	-	-	-
2010	8.62%	11.70%	6.71%	0.00%	7.86%
2011	10.45%	7.38%	14.27%	-2.70%	11.96%
2012	8.44%	9.53%	11.00%	27.78%	10.28%
2013	9.88%	10.73%	11.84%	17.39%	11.23%
2014	4.21%	5.67%	1.51%	-7.41%	2.69%
2015	4.78%	5.19%	5.06%	8.00%	5.04%
2016	3.86%	4.28%	5.11%	12.96%	4.75%
2009-2016	62%	69%	70%	65%	67%

Share of total economy

	AC&H	M&E	CS	Fashion	CCIs
2009	4.34%	2.23%	8.86%	0.22%	15.66%
2010	4.88%	2.58%	9.78%	0.23%	17.47%
2011	5.10%	2.62%	10.57%	0.21%	18.50%
2012	5.21%	2.70%	11.05%	0.25%	19.21%
2013	5.15%	2.70%	11.12%	0.27%	19.23%
2014	5.21%	2.76%	10.95%	0.24%	19.16%
2015	5.33%	2.84%	11.24%	0.25%	19.66%
2016	5.27%	2.82%	11.26%	0.27%	19.62%
2009-2016	21.39%	26.27%	27.07%	23.46%	25.33%

TABLE 6
Development creative industries per subsector, Eindhoven 2009-2016

in Arnhem is lower, at only 14%. Less than in Maastricht over the same time period, which exhibited 20% for the Greater-Maastricht area and 19% for Maastricht itself.

When comparing Maastricht to the country average, urbanized areas and two other cities with creative ambition, there is still room to grow. In terms of the number of companies established in Maastricht, the share of CCIs companies is still on the lower side. Potential is visible in overall growth though. Especially the subsector fashion shows an interesting growth pattern and has increased by almost 24% from 2009 to 2016 in terms of the number of companies.

Economic Frame

Top sector policy

In 2011, the ministry of Economic Affairs introduced a national policy aimed at stimulation of the Dutch knowledge economy. The policy differed from both previous Dutch and European governmental business policies. Until then business policies had been generic, not specified towards certain sectors within the economy. With the top sector policy (*topsectorenaanpak*), the Dutch government went into a different direction. It specified nine 'top sectors'. These sectors were selected based on Dutch companies having a strong international market and export position. The sectors were: Chemicals, Energy, High Tech Systems and Materials, Life Sciences and Health, Argi and Food, Logistics, Horticulture and Starting Materials, Water, and the Creative Industries.

FIGURE D.
CCIs companies as a share of total companies, the Netherlands per province 2016

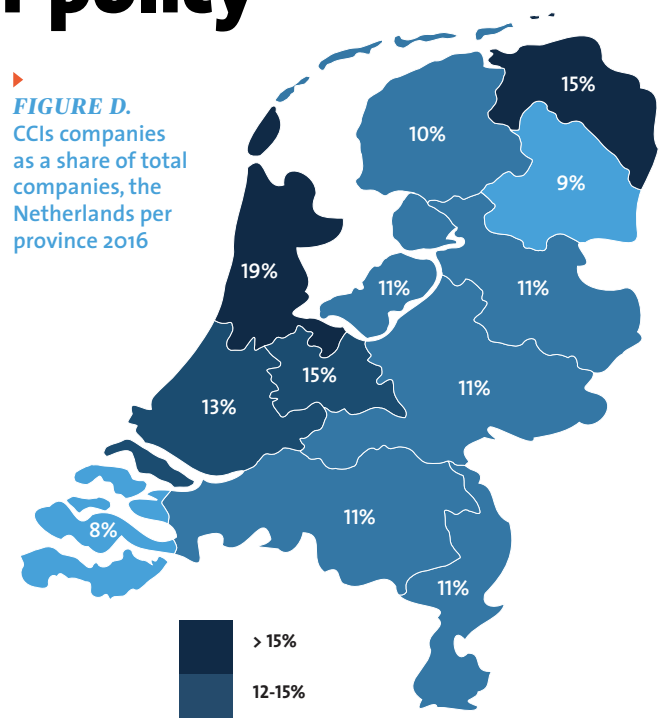


FIGURE E
Growth of CCIs companies as a share of total companies, the Netherlands per province 2011-2016

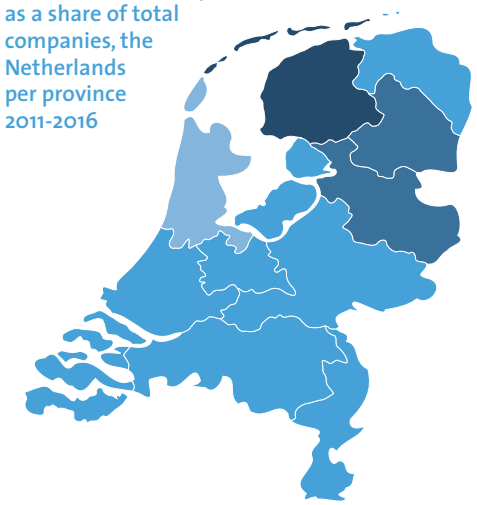
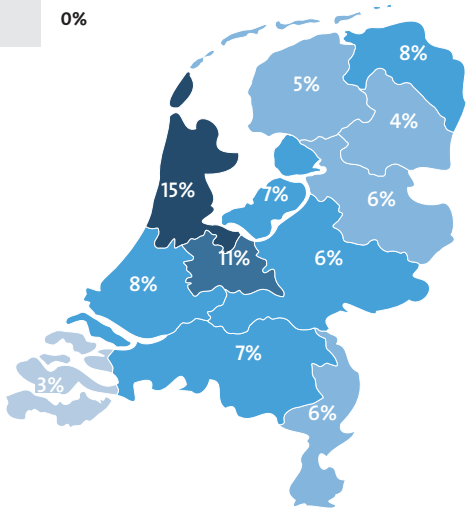


FIGURE F
Entrepreneurial CCIs profit as a share of total entrepreneurial profit, the Netherlands 2015



In 2017, an evaluation of the top sector policy was published by Dialogic[A], which indicated a number of positive developments within the creative industries due to the national policy. First of all, the mere fact of being a top sector has brought a lot of positivity to the creative industries in terms of acknowledgement of their importance within the economy. Additionally, the organization of the sector has been improved by enhanced structure. The sector now has a joint agenda and is better able to converse with governmental bodies and other sectors. Hence, knowledge sharing has been substantially improved. Furthermore, a start has been made with a strategical plan towards the future and the added value of the creative industries. However, the continued fragmentation of the sector, also discussed throughout this report, may endanger this process. This is also a potential problem when it comes to finding capital for more risky projects within the industry.

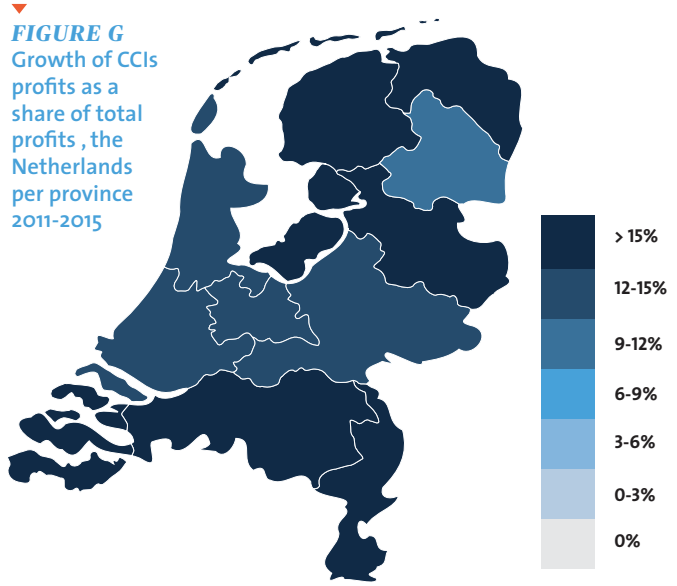
Figure D shows the number of CCIs companies as a share of the total amount of companies per province in 2016. North-Holland has the highest share with 19%. This is hardly surprising as cultural and creative epicenter Amsterdam is located there. Utrecht and Groningen share second place with 15%. As Groningen is a rather peripheral province, this is remarkable. Most provinces have a CCIs share of 10-11%. As the country average is 13% in 2016, it is clear that this number is due to a minority of areas which have a relatively high share of CCIs companies.

Where Figure D depicted the shares of CCIs in 2016, Figure E shows the growth of these shares since 2011. All provinces have experienced a positive growth. Markedly, the province with the highest CCIs share, North-Holland, has experienced the lowest growth in that share. Friesland's share went up the quickest, from 8.9% in 2011 to 10.3% in 2016. The CCIs share in Limburg increased with 7.5% over the 5 year period.

Figure F depicts the share of CCIs profits in the total profits made by entrepreneurs in 2015 (last data available). Comparing this Figure to Figure D gives insight in how small many companies in CCIs are. The share in number of companies is consequently higher than the profits that are being made, even when the majority of CCIs companies are entrepreneurs. Figure F shows that relatively most profit is being made in North-Holland and the least in Zeeland. The average share of CCIs profits in Limburg is 6%, much lower than the share of 9% in Maastricht.

Figure G does show that the share of CCIs profits has increased since 2011. All provinces except Drenthe have experienced a growth in this share of more than 12%. Although this does not necessarily indicate that the top sector policy is working, it does show that the CCIs have experienced growth throughout the whole country. ■

FIGURE G
Growth of CCIs profits as a share of total profits , the Netherlands per province 2011-2015



NOTES

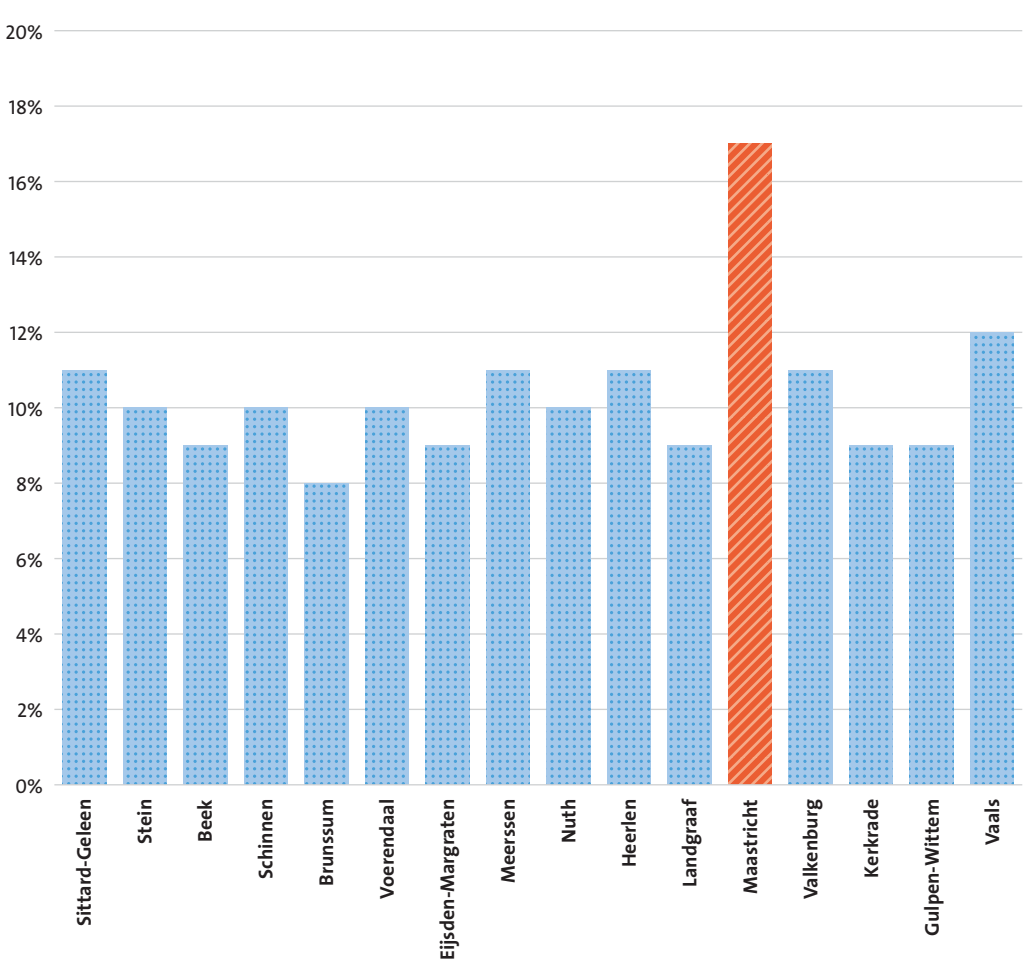
A Janssen, M. et al. (2017) Evaluatie Topsectorenaanpak, Dialogic 2017.

5.1.3 Companies in South-Limburg

For a more complete picture, we also look at other municipalities in South-Limburg in comparison to Maastricht. This includes Sittard-Geleen, Stein, Beek, Schinnen, Brunssum, Voerendaal, Eijsden-Margaraten, Meersen, Nuth, Heerlen, Landgraaf, Valkenburg aan de Geul, Kerkrade, Gulpen-Wittem and Vaals. The municipalities Onderbanken and Simpelveld were omitted for this section, since they contained subsectors with less than ten observations. Moreover, many municipalities in the region do not have more than ten fashion companies and hence we are unable to report directly on the fashion subsectors. Exceptions are Heerlen and Sittard-Geleen, which will be evaluated separately in this section.

To provide an overview of the municipalities in South Limburg, Figure 5 illustrates the number of CCIs companies as a share of the total companies in each municipality in 2016. The share of CCIs companies in Maastricht is by far the largest (16.6%), followed by Vaals and Meerssen.

FIGURE 5
Share CCIs of total companies, Zuid-Limburg per municipality 2016



Municipality	CCI companies
Sittard-Geleen	826
Stein	190
Beek	139
Schinnen	112
Brunssum	138
Voerendaal	115
Eijsden-Margraten	226
Meerssen	201
Nuth	151
Heerlen	656
Landgraaf	201
Maastricht	1,736
Valkenburg	185
Kerkrade	265
Gulpen-Wittem	140
Vaals	87
Total	5,368

TABLE 7
CCIs companies absolute, South-Limburg per municipality 2016. Eindhoven 2009-2016

Although Heerlen and Sittard-Geleen, after Maastricht, have the most CCIs companies in absolute terms, their share of the total amount of companies is in line with the average when compared to the other municipalities in South-Limburg. In general, the CCIs share of most municipalities is lower than the national average of 13.3%. Landgraaf and Brunssum have far fewer companies in the CCIs, with only 8.7% and 8.4% share respectively. The absolute number of CCIs companies in 2016 are shown in Table 7. The total number of CCIs companies in South-Limburg aggregates to 5573[4] in 2016.

The municipalities Maastricht, Sittard-Geleen and Heerlen have the highest number of CCIs companies and are illustrated in more detail in Figure 6. Note that although the subsector Fashion was omitted for Figures 5 and Table 7, it is included again here in the following aggregate numbers in Figure 6.

Across the four subsectors of the CCIs, we find that in 2016 there were a total of 1,736 CCIs companies present in Maastricht, 826 in Sittard-Geleen and 656 in Heerlen. As Figure 6 shows, the majority of CCIs companies in Maastricht are in the A&CH subsector. Whereas in Heerlen and Sittard-Geleen, CS are by far the more important subsector of the CCIs in terms of number of establishments. The relatively larger size of A&CH reflects how this subsector is perceived in the Maastricht.

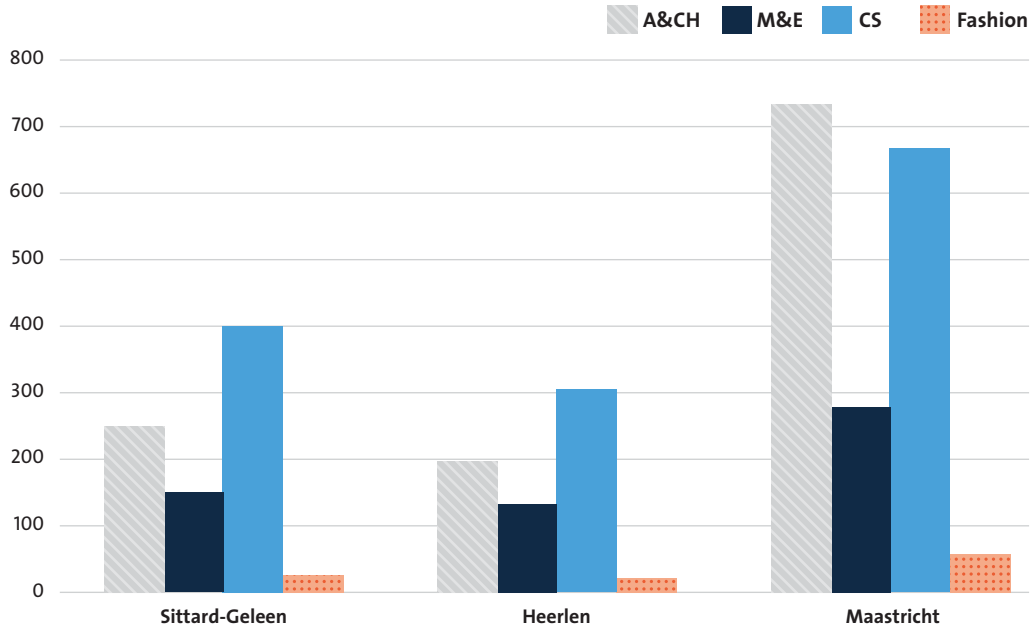


FIGURE 6
CCIs companies absolute per subsector, Heerlen, Sittard, Maastricht 2016

Year-to-year growth

	A&CH	M&E	CS	Fashion	Total CCI
2009	-	-	-	-	-
2010	0.6%	-3.4%	-4.5%	6.3%	-2.4%
2011	2.3%	11.4%	6.6%	17.6%	6.6%
2012	17.7%	8.7%	9.9%	-5.0%	11.4%
2013	17.5%	8.0%	19.9%	26.3%	16.9%
2014	5.0%	-0.7%	-1.9%	8.3%	0.8%
2015	0.8%	2.0%	4.2%	-3.8%	2.4%
2016	-2.3%	-0.7%	8.4%	4.0%	3.1%
2009-2016	47.1%	27.1%	48.7%	62.5%	44.2%

Share of total economy

TABLE 8
Development of creative industries per subsector, Sittard-Geleen 2016

	A&CH	M&E	CS	Fashion	Total CCI
2009	2.70%	1.87%	4.27%	0.25%	9.10%
2010	2.91%	1.94%	4.37%	0.29%	9.51%
2011	2.85%	2.07%	4.46%	0.33%	9.69%
2012	3.16%	2.12%	4.62%	0.29%	10.19%
2013	3.33%	2.05%	4.97%	0.33%	10.69%
2014	3.40%	1.98%	4.74%	0.35%	10.46%
2015	3.43%	2.03%	4.95%	0.34%	10.75%
2016	3.27%	1.96%	5.23%	0.34%	10.80%
2009-2016	21.0%	4.6%	22.3%	33.7%	18.6%

Year-to-year growth

	A&CH	M&E	CS	Fashion	Total CCI
2009	-	-	-	-	-
2010	4.1%	-8.3%	3.8%	12.5%	1.6%
2011	9.3%	3.4%	15.0%	11.1%	10.7%
2012	12.1%	24.2%	7.7%	35.0%	13.3%
2013	15.1%	11.5%	8.8%	-7.4%	10.6%
2014	-6.6%	4.8%	6.2%	0.0%	1.3%
2015	2.5%	-2.3%	4.7%	-12.0%	1.9%
2016	-3.4%	3.1%	5.5%	-4.5%	1.9%
2009-2016	35.9%	38.5%	64.0%	31.3%	48.1%

Share of total economy

	A&CH	M&E	CS	Fashion	Total CCI
2009	2.80%	1.86%	3.59%	0.31%	8.56%
2010	3.10%	1.81%	3.96%	0.37%	9.23%
2011	3.26%	1.80%	4.38%	0.39%	9.83%
2012	3.49%	2.13%	4.51%	0.51%	10.64%
2013	3.66%	2.17%	4.47%	0.43%	10.73%
2014	3.37%	2.24%	4.67%	0.42%	10.70%
2015	3.47%	2.20%	4.92%	0.37%	10.96%
2016	3.25%	2.19%	5.03%	0.35%	10.82%
2009-2016	15.9%	18.2%	39.9%	12.0%	26.4%

TABLE 9
Development of creative industries per subsector, Heerlen 2016

The importance of A&CH is for example reflected in the number of visits to subsidized performances, which were 415 per 1,000 inhabitants in 2015, compared to only 301 in Eindhoven for example. Additionally, Maastricht, together with Arnhem, spends the highest amount of cultural subsidy per capita in the country[5].

Although Maastricht has substantially more CCIs companies than Heerlen and Sittard-Geleen, Table 8 and 9 show that in both cities the total CCIs have grown at a similar rate, increasing by 48% between 2009 and 2016. In Heerlen, this growth occurred predominately in the CS companies in the city. By 2016 there were 64% more CS companies than in 2009. In Sittard-Geleen, the largest growth occurred in the subsector Fashion, where the number of companies increased by 62.5% from 2009-2016. The growth was not constant over the years, with a number of large growth spurts occurring in 2010-2011 and 2012-2013.

Educational Frame

Student research on sustainable fashion

STUDENT
Helen Verploegen

PROGRAMME
UCM Capstone Assignment (Bachelor thesis)

RESEARCH
Cognitive Clothes: Using cognitive psychology to promote sustainable clothing consumption

Helen's bachelor thesis at University College Maastricht was supervised by Made2Measure. She used theories in cognitive psychology to develop a toolkit for designers and retailers who want to encourage their clients to buy sustainably. As local produced clothing and jewellery can often be classified as sustainable, these guidelines can directly be applied by Maastricht designers.

In light of the development of fast fashion, the need for consumption of sustainable clothing is growing in size. In her research, Helen explains fast fashion in a historical perspective and analyses the negative geological and social consequences of the current fast fashion system and hence the importance of sustainable alternatives. During this analysis she identifies the barriers consumers perceive to interact with these alternatives due to a lack of reliable information, availability, and economic resources. In response to this she argues that theories from cognitive psychology would be relevant in promoting sustainable clothing consumption. This is especially relevant as the effectiveness of this application has been proven in other domains but has until now remained undeveloped in the domain of clothing.

She highlights the key underlying ideas of cognitive psychology and emphasizes the importance of Dual-Process Theory. Here the importance of providing information was analysed, referring to the Elaboration-Likelihood Model and theory on Mindful Decision Making. Two specific properties of this information were deemed most effective in previous literature, namely the use of information which elicits positive emotions, as this has the ability to promote full use of cognitive capacities. Secondly, information which highlights the consumers sustainable behaviour in other domains, which has the potential effect of promoting sustainable behaviour in alternative domains through a Positive Spillover Effect.

An empirical study was designed to see if these types of information were indeed affective in promoting more sustainable clothing consumption. This resulted in mixed results which did not yield significant results for the effects of positive emotions or a positive spillover. Further research with a larger sample or considering more sophisticated variables would be beneficial to further investigate these effects in terms of sustainable clothing consumption. When considering additional motivational variables for sustainable clothing consumption it was found that perceiving oneself as sustainable is not related to subsequent sustainable clothing choices, which is arguably reflective of an attitude-behaviour gap.

Alternatively, however it was found that sustainable clothing choices were related to sustainable motivations. Lastly, the results indicated that higher average clothing consumption is related to more sustainable clothing choices. This could suggest that more engagement with clothing consumption can help to motivate more sustainable behaviour as these consumers have a higher feeling of involvement or potentially guilt.

Based on her findings, Helen created guidelines for sustainable designers and shop-owners. The five key tips are given on the next page.

For the complete set of guidelines, please visit www.made2measure.org

Five key tips to encourage customers to buy sustainably:

1

Give detailed information on the pollution of your production, the level of CO_2 emission, water and waste

2

Include the entire supply chain in product descriptions, including information on working conditions

3

Break down the price of a product by showing the true costs and mark-up

4

Keep it positive! Avoid doom scenarios that make people sad or hopeless. Instead, focus on capabilities and the gains of a sustainable buy.

5

Combine domains by reminding people of when they behaved sustainable in other sectors. Make them feel capable of being sustainable! Collaborate with organisations in other sectors to strengthen your efforts. ■

5.2 Number of Full Time Equivalents (FTE)

The number of companies is an important indicator when it comes to determining the size of an industry at a certain location. However, as mentioned in section 5.1.1., companies in the CCIs tend to be small. Hence, it is interesting to investigate how many FTEs are distributed throughout the industry. As mentioned in section 4, we would like to emphasize that these numbers do not necessarily represent the number of jobs available in the sector but solely an estimation of the number of FTEs occupied at a point of measurement. For more information, please refer to section 4 on Data.

5.2.1 FTE in Maastricht

In 2016, the 1,736 CCIs companies in Maastricht had represented a total of 2,265 FTEs. Important to acknowledge is that not all of these FTEs are necessarily creative jobs. They are all registered at a creative company where the SBI code fits within our definition of the CCIs, but people in occupations which are not always directly classified as creative, such as receptionists, accountants and cleaners, are also calculated in this number of FTEs. Hence, the creative industry in terms of FTE may suffer from over representation in this number. However, this is compensated by a potential bias downwards from those with a creative occupation who are not employed in a company which SBI corresponds to the CCIs definition, who are not included in these Figures. Many international research institutions with experience in the creative industries are currently switching towards a model in which they can capture just the creative occupations, regardless of the company in which they are employed. UK's research institution NESTA started this trend, which also represents the manner in which Professor Richard Florida looked at the Creative Class in 2001, on occupational rather than organizational level.

Due to data limitations, we are not able to analyse the CCIs on occupational level. This also means that some companies that do contribute to the cultural and creative environment of Maastricht will not be included in our figures. An example is Mosa Tegels. We are aware that a number of expert creative designers are employed at this company. However, Mosa Tegels is registered at the Chamber of Commerce under 'manufacturing of ceramic tiles' which does not fall under our definition of the CCIs (for the full definition including SBI codes, see Appendix A).

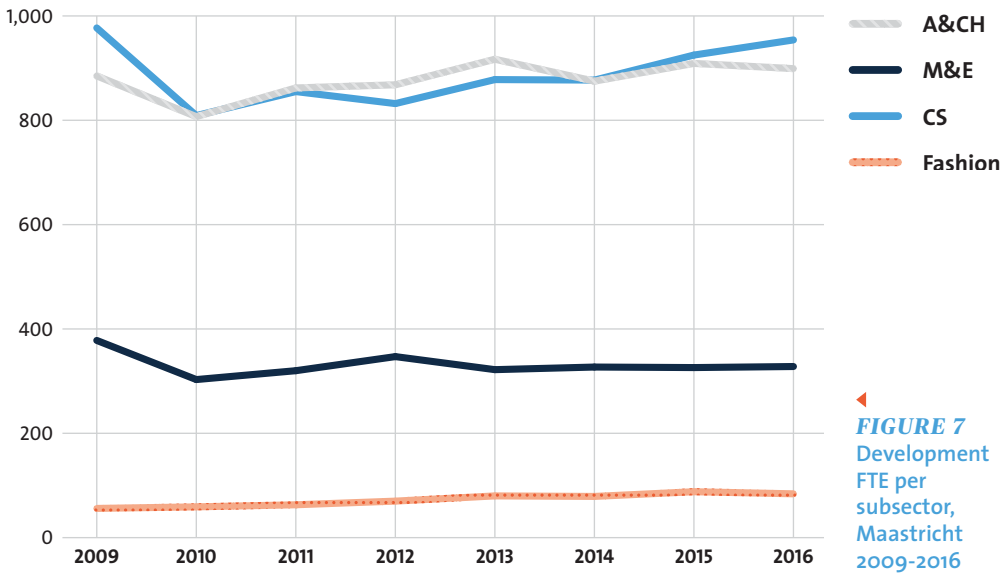


FIGURE 7
Development FTE per subsector, Maastricht 2009-2016

In Figure 7, the change in FTE in Maastricht over the years are depicted by subsector of the CCIs. For all subsector except Fashion, a decline of FTE is noticeable between 2009 and 2010, coinciding with the end of the global financial crisis of 2007-2009; it could be reasoned that the decline in FTE is related. Austerity measure and budget cuts by the national government at that time meant cultural sectors suffered. This seems to be reflected in the data.

Since 2010, all areas have experienced growth in the number of FTE. By 2016, however, not all sectors had recovered completely to the level of FTE from 2009. At first sight, this may seem contradictory to the increase in number of CCIs companies we have seen in section 5.2. Although the number of companies has increased, companies on average have become smaller.

This is also visible in Table 10, which shows the average number of FTEs per company.

A company outside the creative industry in 2009 would on average have almost 8 FTE in 2009. By 2016, this number had decreased to

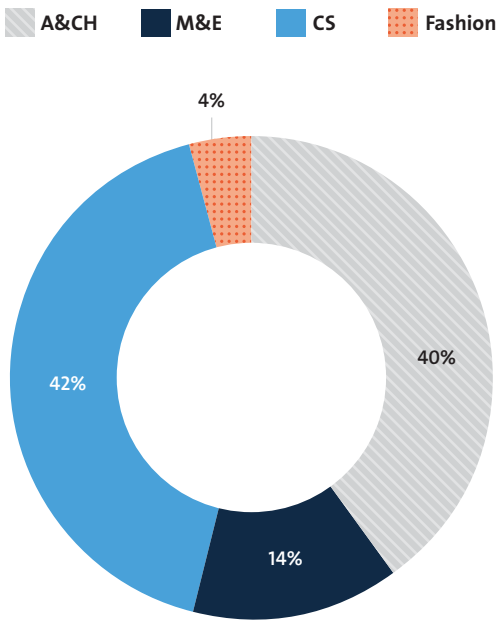


FIGURE 8
Share of FTEs per subsector, Maastricht 2016

TABLE 10
Average number of FTE per company, Maastricht 2009-2016

	Non-CCI	A&CH	M&E	CS	Fashion	CCI	Total
2009	7.8	1.9	1.9	2.1	1.5	2.0	6.9
2010	7.8	1.6	1.6	1.7	1.8	1.7	6.8
2011	7.3	1.6	1.5	1.7	1.8	1.6	6.4
2012	7.0	1.5	1.5	1.5	1.8	1.5	6.1
2013	6.3	1.4	1.3	1.4	1.5	1.4	5.5
2014	6.6	1.2	1.3	1.3	1.4	1.3	5.8
2015	5.8	1.3	1.2	1.5	1.5	1.3	5.1
2016	5.7	1.2	1.2	1.4	1.5	1.3	4.9
2009-2016	-0.27	-0.35	-0.38	-0.32	-0.03	-0.33	-0.29

Year-to-year growth

	A&CH	M&E	CS	Fashion	Total CCI
2009	-	-	-	-	-
2010	-8.8%	-19.8%	-17.2%	5.4%	-13.9%
2011	6.8%	5.6%	5.7%	6.8%	6.2%
2012	0.7%	8.4%	-2.7%	11.1%	0.8%
2013	5.6%	-7.2%	5.5%	14.3%	3.8%
2014	-4.6%	1.6%	-0.1%	-1.3%	-1.8%
2015	3.9%	-0.3%	5.5%	11.4%	4.2%
2016	-1.1%	0.6%	3.1%	-4.5%	0.8%
2009-2016	1.6%	-13.2%	-2.4%	50.0%	-1.4%
GM 2009-2016	1.6%	2.3%	0.4%	76.2%	3.7%

Share of total economy

	A&CH	M&E	CS	Fashion	Total CCI
2009	1.51%	0.65%	1.67%	0.10%	3.93%
2010	1.49%	0.56%	1.49%	0.11%	3.65%
2011	1.62%	0.60%	1.60%	0.12%	3.94%
2012	1.63%	0.65%	1.56%	0.13%	3.98%
2013	1.70%	0.60%	1.63%	0.15%	4.08%
2014	1.52%	0.57%	1.52%	0.14%	3.75%
2015	1.78%	0.64%	1.81%	0.17%	4.39%
2016	1.74%	0.63%	1.85%	0.16%	4.38%
2009-2016	14.9%	-1.8%	10.5%	69.7%	11.6%
GM 2009-2016	12.0%	12.8%	10.6%	94.2%	14.3%

TABLE 11
Development FTE per subsector, Maastricht 2009-2016

almost 6. CCIs companies in contrast, have a much lower average number of FTEs. When we look at the rate of decline in these averages between 2009 and 2016, it is clear that there is a city wide tendency towards smaller companies. The only subsector that stands out is Fashion, as the decline in that sector is only -0.03 - much smaller than the other subsectors.

Figure 8 illustrates this breakdown in how FTEs in the CCIs are distributed across the four subsectors. CS employ the most (42%), then A&CH employing 40%, M&E employ 14% and Fashion just 4%.

Interesting numbers are also provided in Table 11. The year-to-year growth of the subsectors in terms of FTE corresponds with Figure 7. A&CH has grown, but only slightly, while M&E and CS have fallen in the number of FTEs since 2009. Fashion on the other hand has grown by 50%. When we look at the expanded area of Greater-Maastricht, including Eijsden-Margaten, Valkenburg a/d Geul and Meerssen, the number of FTE in fashion has experienced a massive growth of over 76%. For the three other subsectors, the image is much less impressive, with marginal, albeit positive growth when looking at their share in the total number of FTE in Greater-Maastricht. Fashion is the rising star in terms of FTE, and almost doubles its share in the total number of FTE in the larger Maastricht area.

When comparing Table 11 to Table 2, one clearly notices the differences it can make to analyse the CCIs in terms of the number of companies or in terms of number of FTE. The share of CCIs companies that make up the total number of companies in Maastricht is approximately four times larger than the share of FTEs in the CCIs. In section 5.1 we saw that 17% of the companies in Maastricht are part of the CCIs. However, table 11 reveals that only 4.4% of the FTEs in Maastricht are attributed to the CCIs. An obvious explanation for this fact is the earlier mentioned fragmentation of the industry. The number of sole-proprietorships is much higher than in other industries. Hence, there are more companies with fewer FTEs. In an attempt to look at this issue in more detail, section 7 analyses the profits made by CCIs companies and the share of those profits in the total economy.

5.2.2 FTE in the Netherlands, Arnhem and Eindhoven

For comparison we again look at the Netherlands as a whole. When comparing Table 12, which presents the growth in the number of FTE per subsector of the Netherlands, to Table 11, for Maastricht, the

Year-to-year growth

	A&CH	M&E	CS	Fashion	Total CCI
2009	-	-	-	-	-
2010	-6.0%	-4.7%	-14.8%	-11.7%	-10.5%
2011	2.5%	-3.5%	-0.5%	-2.4%	-0.6%
2012	3.2%	-2.4%	-0.1%	-1.0%	0.1%
2013	7.6%	-0.3%	1.6%	7.9%	2.8%
2014	0.8%	2.5%	-0.2%	-0.6%	0.7%
2015	3.2%	3.3%	4.0%	0.0%	3.5%
2016	3.0%	-4.5%	5.4%	0.5%	2.5%
2009-2016	14.7%	-9.6%	-5.9%	-8.2%	-2.2%

Share of total economy

	A&CH	M&E	CS	Fashion	Total CCI
2009	1.07%	1.09%	2.60%	0.09%	4.85%
2010	1.08%	1.11%	2.37%	0.09%	4.64%
2011	1.12%	1.09%	2.39%	0.08%	4.69%
2012	1.18%	1.08%	2.42%	0.09%	4.76%
2013	1.27%	1.08%	2.47%	0.09%	4.92%
2014	1.27%	1.10%	2.45%	0.09%	4.91%
2015	1.32%	1.14%	2.56%	0.09%	5.11%
2016	1.31%	1.05%	2.61%	0.09%	5.06%
2009-2016	22.4%	-3.6%	0.3%	-2.1%	4.3%

TABLE 12
Development FTE per subsector, the Netherlands 2009-2016

Year-to-year growth

	A&CH	M&E	CS	Fashion	Total CCI
2009	-	-	-	-	-
2010	8.1%	3.5%	-7.5%	-28.2%	1.5%
2011	3.8%	-19.8%	2.6%	7.1%	-0.4%
2012	1.1%	0.7%	-0.7%	20.0%	0.5%
2013	0.6%	5.8%	7.6%	58.3%	4.1%
2014	-1.8%	3.8%	2.0%	28.1%	0.6%
2015	-3.7%	2.3%	5.3%	11.0%	0.5%
2016	5.3%	-0.6%	4.8%	-4.9%	4.1%
2009-2016	13.5%	-6.6%	14.1%	97.4%	11.3%

Share of total economy

	A&CH	M&E	CS	Fashion	Total CCI
2009	2.41%	0.79%	1.82%	0.05%	5.07%
2010	2.66%	0.84%	1.72%	0.03%	5.25%
2011	2.78%	0.68%	1.77%	0.04%	5.26%
2012	2.77%	0.67%	1.74%	0.04%	5.22%
2013	2.77%	0.71%	1.86%	0.07%	5.40%
2014	2.75%	0.74%	1.92%	0.09%	5.50%
2015	2.70%	0.77%	2.06%	0.10%	5.63%
2016	2.77%	0.75%	2.10%	0.09%	5.70%
2009-2016	14.8%	-5.6%	15.4%	99.7%	12.6%

most striking is the difference between the increase in Fashion FTEs in Greater-Maastricht and the 8% decline in the Netherlands as a whole. The Fashion subsector in general shows a decline in FTE from 2010 until 2012, this dip has not occurred in Maastricht or its surroundings. The growth in the FTE in Fashion of 50% in Maastricht has been much larger year-on-year than in the Netherlands as a whole, which experienced a decline of 8%. The comparison also shows that the share of FTE in the CCIs remains below the national average for all years in the study. However, Maastricht has experienced a growth in the share of the Fashion subsector between 2009 and 2016 at more than 2.5 times as fast.

TABLE 13
Development FTE per subsector, Arnhem 2009-2016

Section 5.1.2 already indicated the difficulty comparing Maastricht to the Randstad, where many creative companies are clustered in urban areas. For this section, the relation would even be more skewed as these urban areas generally also attract larger companies who employ more FTE. Hence, we have disregarded the number of CCIs FTE in the Randstad for this section and compare the situation in Maastricht to the more comparable cities Arnhem and Eindhoven.

Year-to-year growth

	A&CH	M&E	CS	Fashion	Total CCI
2009	-	-	-	-	-
2010	-6.1%	-8.8%	-27.9%	-57.3%	-23.7%
2011	8.6%	1.6%	62.6%	14.3%	46.1%
2012	3.0%	-0.4%	-8.4%	12.5%	-6.0%
2013	11.6%	12.1%	-20.9%	25.6%	-13.1%
2014	-5.2%	6.3%	6.3%	-12.4%	3.6%
2015	-3.9%	7.8%	-1.8%	-1.0%	-1.4%
2016	2.9%	16.0%	1.8%	-3.1%	3.2%
2009-2016	9.9%	37.6%	-9.8%	-42.1%	-3.9%

Share of total economy

	A&CH	M&E	CS	Fashion	Total CCI
2009	0.92%	0.40%	4.23%	0.12%	5.67%
2010	0.99%	0.42%	3.50%	0.06%	4.97%
2011	1.01%	0.40%	5.34%	0.06%	6.81%
2012	1.07%	0.41%	5.02%	0.07%	6.56%
2013	1.21%	0.47%	4.05%	0.09%	5.83%
2014	1.16%	0.50%	4.35%	0.08%	6.10%
2015	1.18%	0.57%	4.52%	0.09%	6.36%
2016	1.15%	0.63%	4.35%	0.08%	6.20%
2009-2016	25.2%	56.6%	2.7%	-34.0%	9.4%

Table 13 illustrates the development of FTE in Arnhem. The year-to-year growth rates of all sectors differ quite significantly with Maastricht, but there is one similarity that stands out. In Arnhem the number of Fashion FTE has experienced a large increase as well. Even though the share of Fashion FTE as a percentage of total FTE in the city is smaller than in Maastricht, it did almost double between 2009 and 2016.

Eindhoven on the other hand, of which the development in FTE is shown in Table 14, has quite the opposite situation. The number of Fashion FTE has gone down quite dramatically by 42%, and so has its percentage share of total FTE in the city. M&E increased in the number of FTE.

TABLE 14
Development FTE per subsector, Eindhoven 2009-2016

What we see from these comparisons is that the distribution of FTEs between CCIs sectors is really specific to the individual cities. There is no general tendency which is followed by all cities. There could, however, be a tendency in the region, in neighbouring municipalities, to which we now turn our attention.

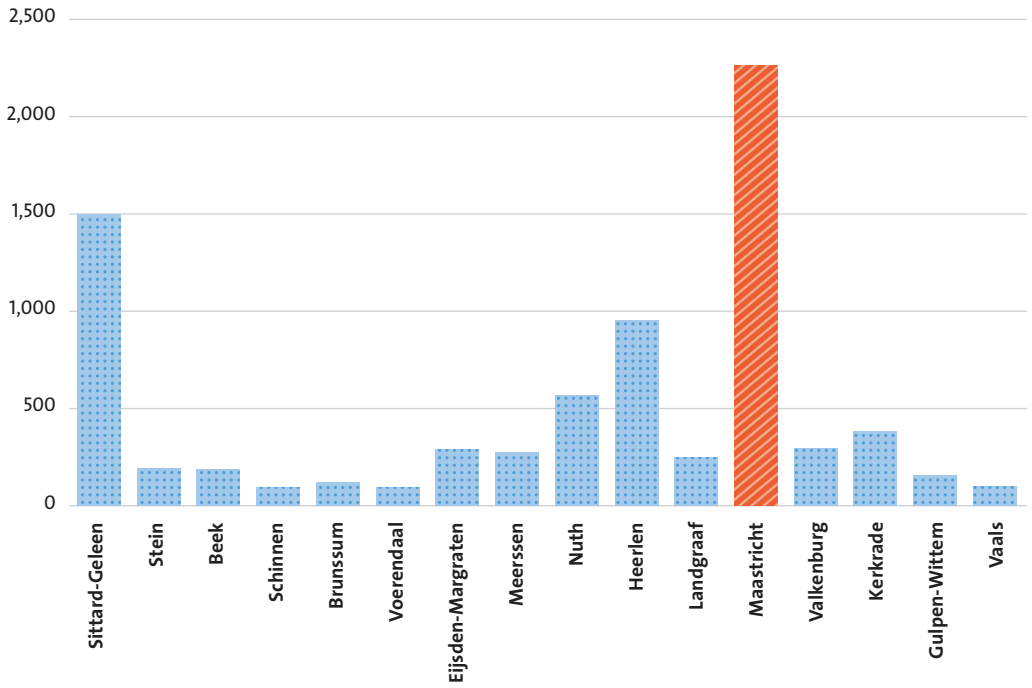


FIGURE 9
CCIs FTE absolute, South-Limburg per municipality 2016

5.2.3 FTE in South-Limburg

In order to see if there is an identifiable trend in the region, we first look at the number of CCIs FTE in the different municipalities of South-Limburg. Figure 9 shows the total FTE for which the CCIs can take credit in 2016.

From Figure 9 we see that Maastricht has the most FTE in the cultural and creative industries in absolute terms, followed by Sittard-Geleen and Heerlen. The distribution in 2016 of FTE between the four subsectors in those cities is shown in Figure 10.

CS holds the most FTE in all cities, in Maastricht closely followed by A&CH. Interesting is the fact that M&E in Sittard-Geleen is the second largest subsector in terms of FTE, while it was the third in terms of companies. It also has more FTE than Maastricht does. For the development of CCIs FTE in Sittard-Geleen and Heerlen, please refer to Appendix C.

Figure 11 shows CCIs FTE as a share of total FTE per municipality in South-Limburg. What is immediately striking here is that Maastricht is not the municipality with the largest share of cultural and creative FTE. This place is reserved for Nuth. So even though Maastricht by far had the largest share of CCIs companies, it has a very average share of CCIs FTE. The difference between Figure 11 and Figure 5 again captures the difference in results when analysing the creative industries in terms of companies, or in terms of FTE. Most likely, there are one or a few larger CCIs companies in Nuth, Meerssen and Valkenburg. Because CCIs companies have such a low average number of FTE, one or two larger ones can already make a significant difference.

FIGURE 10
CCIs FTE absolute, Heerlen, Sittard-Geleen, Maastricht 2016

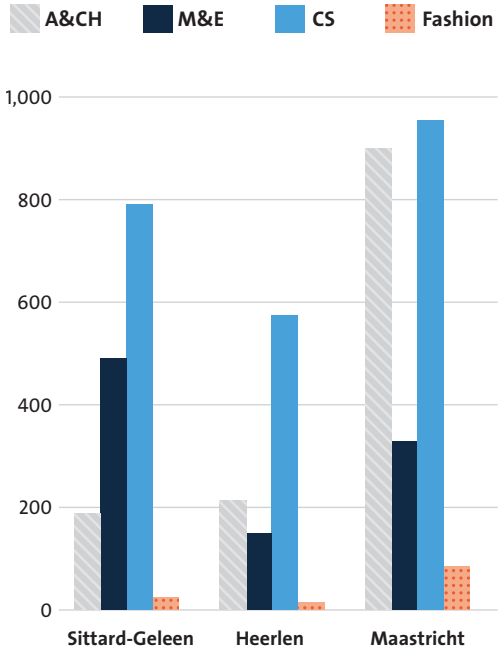
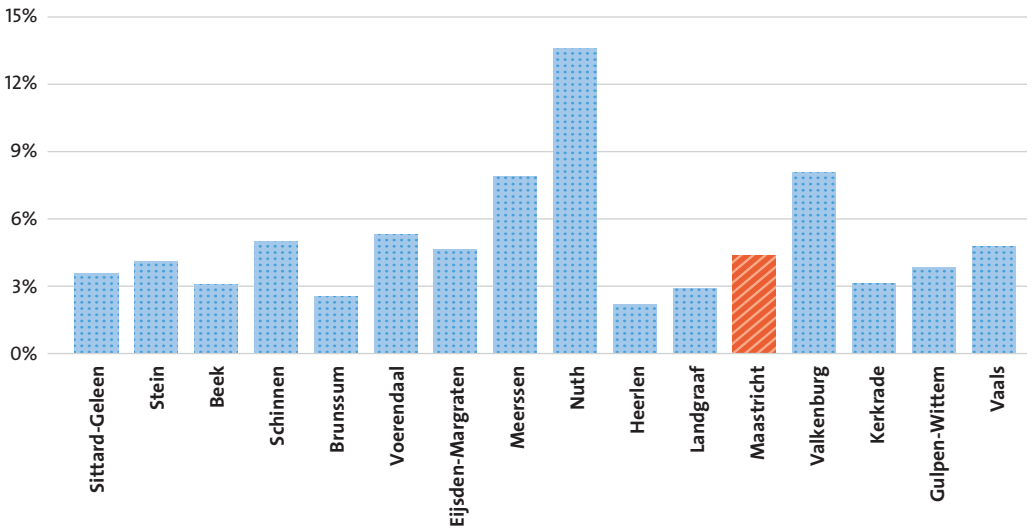


FIGURE 11
Share CCIs of total FTE, South-Limburg per municipality 2016



NOTES

1 Industry codes taken from CBS Monitor topsectoren 2016

2 The uitvoeringsnota creative industrie of 2014 states a number of 1047 companies in Maastricht. Our analysis generated a number of 1670 for that year. This discrepancy is a consequence of our redefinition of what are CCIs companies (see section 3) and possibly our definition of what a company is. We are aware that there is a significant difference between the numbers, but do stand behind our Figure as a good representation of the number of companies in the cultural and creative industries of Maastricht, due to the high quality and detailed representation of the CBS data.

3 CBS - Statline

4 When comparing our Figures to those of Professor Söndermann in his Regionales Profil der Kultur- und Kreativwirtschaft in der Euregio Maas Rhein, there is a vast difference visible. Söndermann reports 2472 CCIs companies in South-Limburg in 2010, while we found a number of 3818. As we do not have insight in Professor Söndermann's data, we cannot identify the reason for the discrepancy with certainty. We suspect, however, that it is due to a difference in data sources and possibly the definition of what a company is. For more information about our definition please see section 4.

5 Ministerie van Onderwijs, Cultuur en Wetenschap (2016) Cultuur in beeld 2016, Rijksoverheid.

Cultural and Creative Industries in terms of entrepreneurs

The cultural and creative industries are characterized for a large part by the high proportion of small-scale entrepreneurs. Section 5 showed that in Maastricht, 77% of companies in the CCIs are sole-proprietorships, which only employ the owner of the company. In this section, we do not restrict ourselves to only looking at the cultural and creative industries in terms of *companies*, but rather in terms of entrepreneurs. There is naturally a lot of overlap between the number of companies and entrepreneurs, as many companies are owned by *entrepreneurs*. In the following section we look at entrepreneurs on a personal level with data based on tax claims regarding income from own company (*inkomen uit eigen onderneming*).

For this section, we define an entrepreneur as someone who owns a company and is personally liable for that company's risk. Additionally, we can regard the profits of this company as (part of) his or her income. In Dutch, we would use the term *zelfstandig ondernemer*. A single entrepreneur can own multiple companies and one company can of course have multiple owners. For that reason, it is important to point out that this section does not claim to say anything about the number of entrepreneurial companies, but only about the number of entrepreneurs, in terms of the actual people, who receive an income from owning a company in the CCIs.

6.1 Number of entrepreneurs

The size of the companies of these entrepreneurs may vary. Within the creative industries, many entrepreneurs run a sole-proprietorship. However, all types of legal entities where the entrepreneurs is personally liable for the company and has to pay income taxes over his or her profits are possible[1]. We hence look at entrepreneurs regardless of the type of company they own.

6.1.1 Entrepreneurs in Maastricht

In 2015, there were 6,090 people in Maastricht who received income from their own company (either turning a profit or a loss). Of those, 1,044 people had a company falling into the CCIs. Figure 12 shows how these entrepreneurs are distributed over the four subsectors from 2013 until 2015. In Maastricht, A&CH has the highest number of entrepreneurs, closely followed by CS. Fashion has approximately 40 entrepreneurs, the smallest subsector.

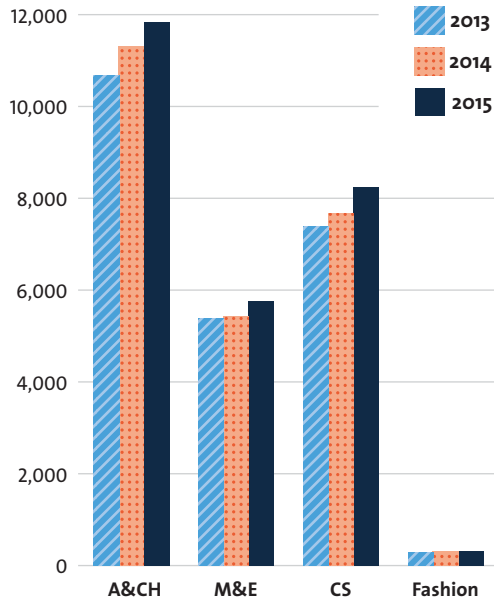


FIGURE 12
Number of entrepreneurs per subsector, Maastricht 2013-2015

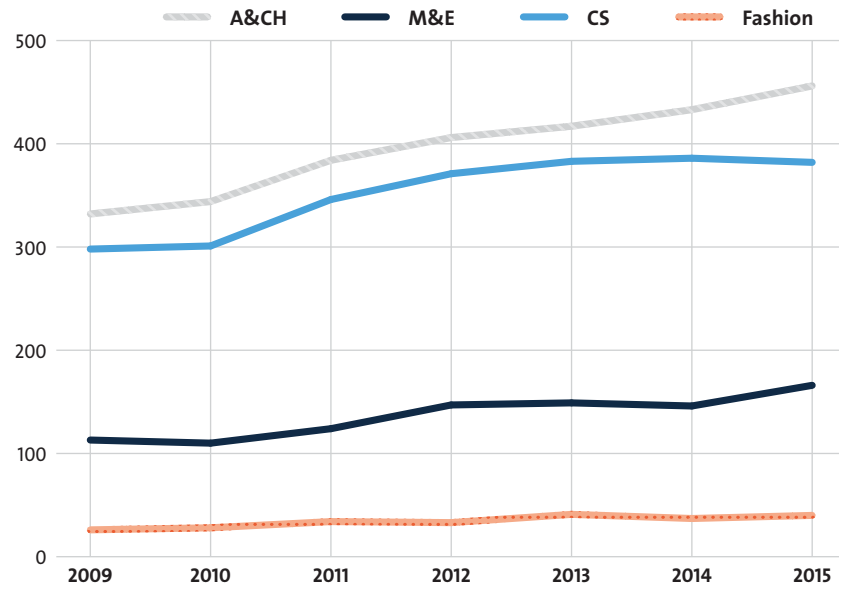


FIGURE 13
Number of entrepreneurs per subsector, Maastricht 2009-2015

TABLE 15
Development of CCIs entrepreneurs per subsector, Maastricht 2009-2015

Year-to-year growth

	A&CH	M&E	CS	Fashion	Total CCI
2009	-	-	-	-	-
2010	3.6%	-2.7%	1.0%	7.7%	1.8%
2011	11.6%	12.7%	15.0%	21.4%	13.4%
2012	5.7%	18.5%	7.2%	-2.9%	7.8%
2013	2.7%	1.4%	3.2%	24.2%	3.4%
2014	3.8%	-2.0%	0.8%	-9.8%	1.2%
2015	5.3%	13.7%	-1.0%	8.1%	4.2%
2009-2015	37.3%	46.9%	28.2%	53.8%	35.8%
GM 2009-2015	33.1%	54.5%	30.0%	55.9%	35.7%

Share of total economy

	A&CH	M&E	CS	Fashion	Total CCI
2009	6.80%	2.31%	6.10%	0.53%	15.75%
2010	6.99%	2.24%	6.12%	0.57%	15.92%
2011	6.73%	2.17%	6.06%	0.60%	15.56%
2012	6.85%	2.48%	6.26%	0.56%	16.14%
2013	7.03%	2.51%	6.46%	0.69%	16.69%
2014	7.09%	2.39%	6.32%	0.61%	16.41%
2015	7.49%	2.73%	6.27%	0.66%	17.14%
2009-2015	10.1%	17.8%	2.8%	23.3%	8.8%
GM 2015	5.62%	2.28%	5.32%	0.51%	13.72%
GM 2009-2015	11.1%	29.0%	8.5%	30.1%	13.3%

Creative Frame

Fashion

Maarten graduated from the Maastricht Academy of Fine Arts and Design in 2016 and started his fashion label, which carries his own name, in 2017. He was born in Stein and lives in Maastricht. Next to the work for his label he is also active as sales consultant at high-end women's fashion boutique Kiki Niesten and as costume designer at Jan Fabre. These jobs supply him both with a valuable network to develop his label, as well as the financial means to create collections. Maarten's T-shirts are currently on sale at Kiki Niesten.

NAME
Maarten van Mulken

AGE
27

PROFESSION
Fashion designer

COMPANY
Maarten van Mulken

START COMPANY
February 2017

maartenvanmulken.com

In 2017, Maarten won the RADIKAL FASHION FILM AWARD by Pascal Baillien at FASHIONCLASH Festival. This prize gave him the opportunity to develop a fashion film, named Kill Your Darlings, which premiered during the FASHIONCLASH Film Festival. The film is currently planned to show at 25 festivals throughout the world. The attention the film receives is a great launch for Maarten's career. Through this medium he can both create awareness for his label, as well as communicate the idea of his collection. His main goal is to sell clothes, to make a living from the sales and to have people wear his items. However, the items he designs do exude a message about themes we experience frequently in daily life, but never consciously think about. He wants to make people think through fashion.

Starting his own label required a lot of time gathering information. He mentions that his education did not supply this at all, so entrepreneurial knowledge had to come from external sources. Maarten approached designers further in their career and people who had already started a similar type of business to acquire this knowledge. A lot of help also can from his mom, who used to be an accountant. However, his biggest help was, and still is, FASHIONCLASH.

Start-up costs for fashion labels are relatively high due to the steep initial investments in fabric and production costs that go into designing and creating a collection. As his education had been expensive enough, Maarten did not opt for a bank loan but rather used earnings from his jobs at Kiki Niesten and Jan Fabre, supplemented by a loan from his parents. When he started, he did not have any knowledge about possible subsidies that existed either locally or internationally. He followed a class at The Artist and the Others to gain some more insights in this subject.

However, even with the right knowledge it is hard to find financing for his label. Most funding schemes either require interdisciplinary work, or an upfront investment from the designer itself. This is often not possible for young designers. "But they do not realise that when they would supply me with funds, I would have a successful company within two years", Maarten says. This claim is specifically aimed towards local government, for which Maarten has many well thought out ideas. For this he draws inspiration from the development of Antwerp as a fashion capital, which is still very much centered on the Antwerp Six, a group of fashion designers who gained much of their fame in the 80s.

"Maastricht is a quality focused city and it should distinguish itself that way", Maarten says, "the city first needs to make sure they retain the talent, before they expect profits. The profits will come once they are successful. If the municipality would pick a number of designers who are really committed to staying in Maastricht and stimulate their success, it would benefit the city on multiple levels. Successful designers, who are bred here, will always represent the Maastricht name, where ever they are located. Creating such a group of designers would make the city more creative, and would also give a boost to the academy. Students will want to go there because of its 'famous' alumni."

Maarten's ideas on how to stimulate designer visibility are practical and include benefits for local government. "Everyone needs something else, but from my perspective it is crucial to have (very) affordable studios and showrooms in the city centre. The municipality could even use this as a profiling tool for the city. If I am getting that studio for free, or a very low price, I am happy to show their guests around or give little presentations, but the balance is very important." He mentions that he and many others do not have the idea that local policy makers really listen to their needs. "It feels like only the policy makers are making plans, it needs to be a more collaborative process."

At the moment, Maarten and his company are based in Maastricht because it is going well here. Working at Kiki Niesten is great for his network and brand. FASHIONCLASH is, however, Maarten's main motive for staying in the city. Showing at their festivals has made it possible to win the RADIKAL FASHION FILM AWARD and this in turn has set many things in motion. Additionally, he has been chosen by FORZA FASHION HOUSE/FASHIONCLASH to take part in their business development programme where he and four other local designers get the possibility to develop their entrepreneurial skills through one-on-one coaching sessions. Through the efforts of FASHIONCLASH, Maarten's new collection will get help of professional buyers, stylists, pr-experts and others with in-depth knowledge about the industry.

Maarten also points out how important FASHIONCLASH Festival is to young designers. "They are not aimed at bringing in large sums of money, but at the quality of the clothes. This gives young designers the chance to present the idea of their brands, rather than just the apparel that needs to be sold. By communicating that idea, people will get used to it and are therefore more inclined to buy items of that brand which are in the shops".

Maarten notes that people in his Maastricht network are giving up on their art because they cannot make a living with it. His network in the city is not increasing anymore. Luckily he has a wide network in Antwerp and FASHIONCLASH to help him reach even beyond that. The future of Maarten's label is looking bright; he is applying for *het Stimuleringsfonds*, is selling in one of the most high-end boutiques in the Netherlands and has many more projects coming up. ■

Figure 13 gives more insight into how the number of entrepreneurs has developed since 2009. We see a strong growth in 2011-2012 in all sectors except Fashion. There was a strong growth in the Fashion subsector in 2011 only (not clearly visible due to the dimensions of the graph but clearly observed in Table 15 with growth of 21.4%). For the subsector A&CH and CS we see that whilst growth slowed in 2013 and 2014, and picked up again in 2015 – even after a small decline in 2014 for the subsector M&E – the Fashion subsector experienced high growth during 2013, at 24%. The Fashion subsector decreased in terms of year-to-year growth during 2014, but then experienced growth again during 2015 of 8%. Important to notice here is that a period of marginal or slow growth does not mean that no new entrepreneurs come to the field. These numbers are generated by all entrepreneurs that existed in a given year. It could also be the case for example that five entrepreneurs quit their companies, while five started; this results in zero additional companies, whilst the industry is still active.

Table 15 shows the year to year growth in terms of percentages. All subsector experienced the large growth in 2011, except M&E where the growth was larger in 2012 and 2015. Relatively seen, the number of fashion entrepreneurs grew fastest between 2009 and 2015 and CS the slowest. The 'Total CCIs' column in the bottom half of the table indicates the fraction of the total entrepreneurs in the city in the CCIs. This has grown by almost 9%, from 16% in 2009 to more than 17% in 2015.

GM in the total growth rows in table M stands for 'Greater-Maastricht', an aggregate of Maastricht and its adjacent municipalities Meerssen, Eijsden-Margraten and Valkenburg a/d Geul. We include this extended version of Maastricht as many smaller scale entrepreneurs list their company at their home address. Due to the short distances from surrounding municipalities to Maastricht, it is likely that the main focus of entrepreneurs established there takes place within Maastricht and therefore form a part of the city's CCIs.

Comparing Maastricht with larger Maastricht we find that the growth in each subsector is similar. The percentage that CCIs entrepreneurs make up in the total economy is smaller from the perspective of Greater-Maastricht. However, what is striking is that the growth of this share between 2009-2015 is higher than in Maastricht city, at 13.3%. This means that each year there are relatively more new CCIs entrepreneurs than entrepreneurs in other industries who start their companies within the Greater-Maastricht area. Since this growth is positive, it is not just the case that relatively more entrepreneurs from other industries stop, while those in the CCIs continue.

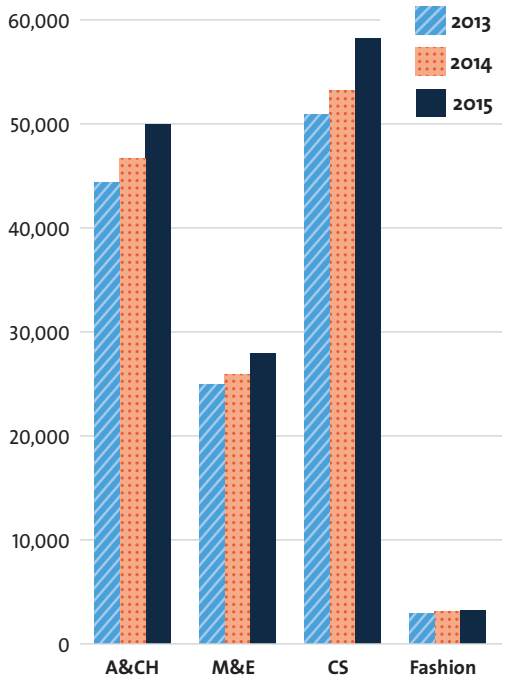


FIGURE 14
Number of entrepreneurs per subsector, the Netherlands 2013-2015

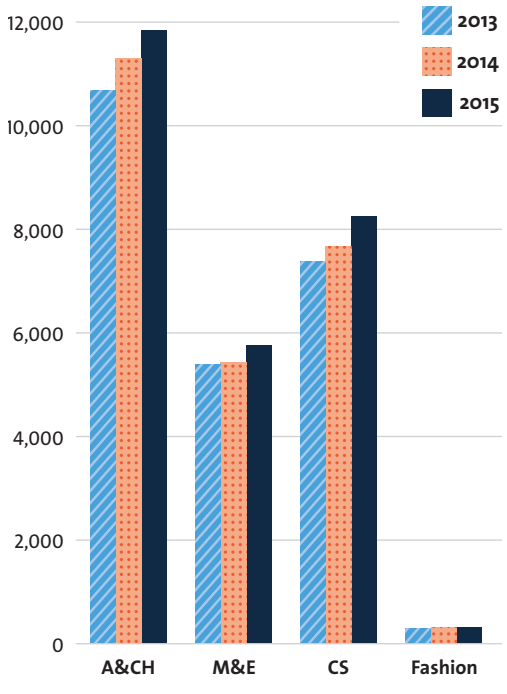


FIGURE 15
Number of entrepreneurs per subsector, Amsterdam 2013-2015

6.1.2 Entrepreneurs in the Netherlands and Amsterdam

Figures 14 and 15 show a similar picture for the Netherlands as a whole and Amsterdam. In the Netherlands, A&CH and CS are also the largest subsectors of the CCIs. However, whereas in Maastricht A&CH form a larger number than CS, this is the other way around in the Netherlands (Figure 14). This can be explained

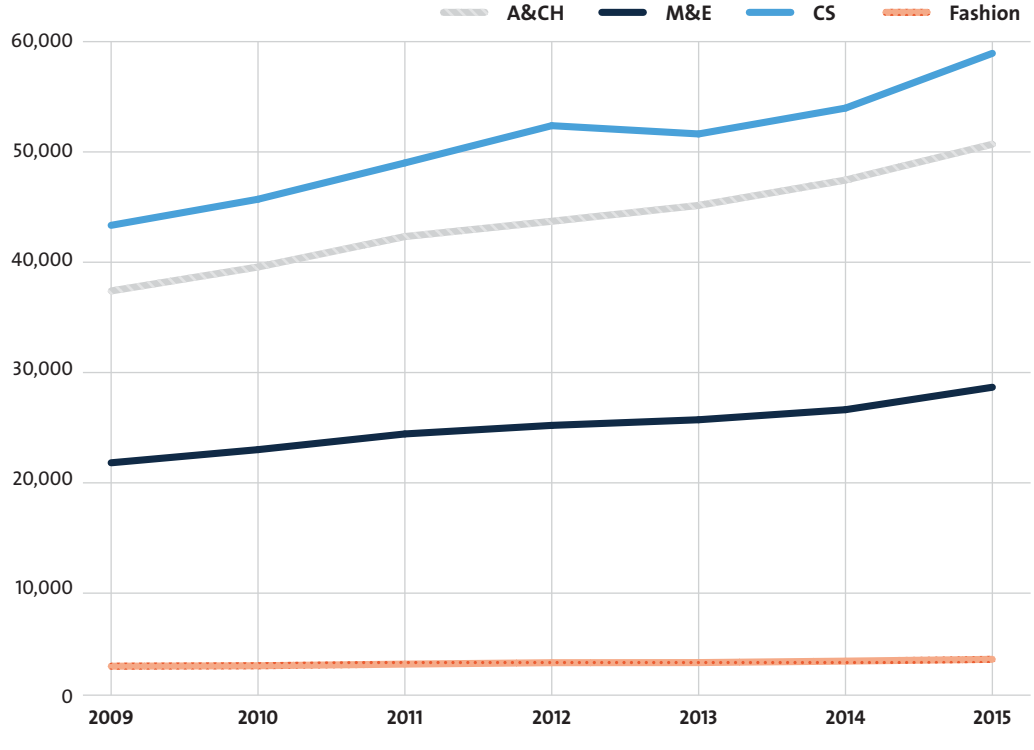


FIGURE 16
Number of entrepreneurs per subsector, the Netherlands 2009-2015

Year-to-year growth

	A&CH	M&E	CS	Fashion	Total CCI
2009	-	-	-	-	-
2010	5.9%	5.7%	5.6%	1.6%	5.6%
2011	7.1%	6.4%	7.3%	5.6%	7.0%
2012	3.3%	3.3%	7.0%	4.5%	4.9%
2013	3.3%	2.1%	-1.5%	0.4%	1.0%
2014	5.2%	3.7%	4.6%	4.5%	4.6%
2015	7.0%	7.9%	9.3%	5.3%	8.1%
2009-2015	36.3%	32.5%	36.6%	23.7%	35.3%

Share of total economy

	A&CH	M&E	CS	Fashion	Total CCI
2009	3.94%	2.27%	4.58%	0.28%	11.07%
2010	4.05%	2.32%	4.69%	0.28%	11.33%
2011	4.14%	2.36%	4.80%	0.28%	11.58%
2012	4.16%	2.37%	5.01%	0.29%	11.83%
2013	4.25%	2.39%	4.87%	0.28%	11.80%
2014	4.34%	2.41%	4.95%	0.29%	11.98%
2015	4.43%	2.48%	5.17%	0.29%	12.37%
2009-2015	12.5%	9.4%	12.8%	2.1%	11.7%

TABLE 16
Development CCIs entrepreneurs per subsector, the Netherlands 2009-2015

by the distinct position Maastricht holds in the A&CH sector, explained in section 5. The tilt towards A&CH is also visible in our country's capital, as is shown in Figure 15.

Almost 25% of the total entrepreneurs in A&CH are established in Amsterdam. In comparison to Maastricht and the Netherlands as a whole are M&E and CS relatively similar in size. Also in Amsterdam we see that Fashion is by far the smallest of the four subsectors.

Taking the Netherlands in total, Figure 16 gives an overview of the absolute growth of the different CCIs sectors. Again it stands out that CS is a larger sector than A&CH. The graphs show steep increases in the number of entrepreneurs in all sectors, especially in the years 2009-2011. In the middle of the research period, the number of entrepreneurs seems to slow down, but then gets another impulse in 2014-2015.

Table 16 illustrates the growth of the specific sectors in more detail. The number of entrepreneurs in CCIs has grown by more than 35% and the fastest growing subsector was the CS. The growth in this sector has not been steady over the years, however, and 2013 even saw a slight decline. This is not comparable to Maastricht, where growth was much higher over this period, and although growth slowed in 2013 it was still positive. The decline started only in 2015. Another difference is the growth of entrepreneurs in Fashion, which was only 24% countrywide, compared to 56% in Maastricht. Maastricht has a higher share of CCIs entrepreneurs (14%) than in the Netherlands at 12%.

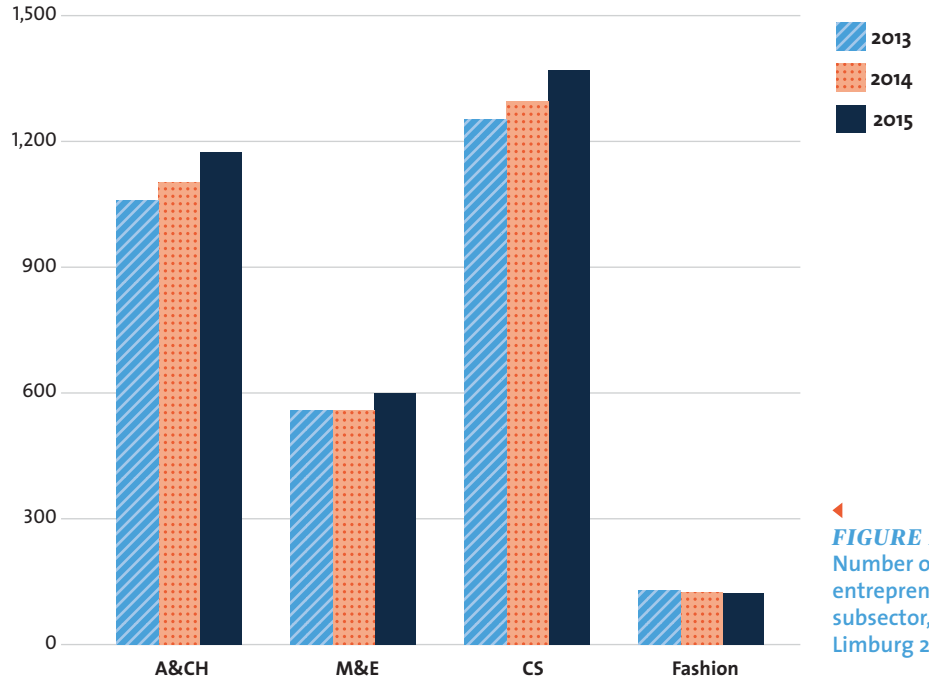


FIGURE 17
Number of entrepreneurs per subsector, South-Limburg 2013-2015

6.1.3 Entrepreneurs in South-Limburg

When we look at the region South-Limburg, as is illustrated in Figure 17, the proportions of subsectors are is similar to those in Figure 14. All sectors except Fashion have experienced growth in the three years depicted. Comparing Figure 13 to Figure 16 tells us that the proportions in which CCIs entrepreneurs are divided over the different subsectors in Maastricht and South-Limburg is similar. The main difference is that CS is the largest industry when looking at South-Limburg and not A&CH, as is the case in Maastricht.

TABLE 17
Percentage share of CCIs entrepreneurs in Maastricht as a total of CCIs entrepreneurs in South Limburg, 2013-2015

Share Maastricht	2013	2014	2015
A&CH	39.3%	39.3%	38.8%
M&E	26.7%	26.2%	27.6%
CS	30.6%	29.8%	27.9%
Fashion	31.5%	29.6%	32.3%
Total CCI	33.0%	32.5%	31.9%

The CCIs of Maastricht do have a large impact on the whole region. As can be seen in Table 17, CCIs entrepreneurs in Maastricht accounted for 32% of the total CCIs entrepreneurs in the region. As mentioned, this share is even larger when it comes to A&CH. All subsectors saw a slight reduction in these shares in 2014 compared to the year before, but most of them increased as a share in 2015. Only CS experienced a relative decline in share that year. This means that either relatively more CS entrepreneurs started in other municipalities, or that more entrepreneurs closed their business in Maastricht. Important to keep in mind, however, is that this does not mean that CCIs activity in Maastricht has declined. Entrepreneurs located in another municipality in South-Limburg could still have their main focus of business in Maastricht.

Table 18 shows the growth of entrepreneurs in all four sectors in more detail. Considering South-Limburg as a whole, M&E is the fastest growing subsector in CCIs, followed by CS. In terms of their share in the total economy of South-Limburg, all subsectors have increased except for Fashion, which declines slightly.

As Maastricht is the largest municipality in South-Limburg, it is not surprising to see that it represents a large part of the CCIs entrepreneurs of the region. In order to compare these shares, we will also look at the second and third largest municipalities of the region, respectively Sittard-Geleen and Heerlen[2].

First of all, the proportions of the different subsectors in these municipalities are displayed in Figures 18 and 19. Both municipalities have a smaller number of entrepreneurs in all subsectors than Maastricht does. As expected, Maastricht is quite unique with its large A&CH subsector. In both Heerlen and Sittard-Geleen, CS is the largest subsector, A&CH follows but has significantly less entrepreneurs. Fashion is small in both municipalities, with numbers not rising above 20 in 2015. Table 19 indicates what percentage CCIs entrepreneurs in Heerlen and Sittard-Geleen contribute to South-Limburg as a whole. While approximately one out of three CCIs companies in South-Limburg is based in Maastricht, these numbers are lower in Heerlen and Sittard-Geleen. Sittard-Geleen represents about 1 out of 6 CCIs entrepreneurs in the region, and Heerlen 1 out of 10. These numbers are slightly higher when it comes to subsector CS. Additionally, with 14.5% Sittard-Geleen also houses a significant part of the Fashion entrepreneurs in South-Limburg.

TABLE 18
Development CCIs entrepreneurs, South Limburg 2009-2015

Year-to-year growth

	A&CH	M&E	CS	Fashion	Total CCI
2009	-	-	-	-	-
2010	3.72%	2.75%	3.87%	7.55%	3.77%
2011	7.71%	11.36%	13.33%	3.51%	10.52%
2012	5.24%	8.80%	4.69%	6.78%	5.70%
2013	1.53%	2.76%	-1.57%	3.17%	0.50%
2014	3.87%	-0.18%	3.43%	-3.85%	2.60%
2015	6.63%	7.71%	5.79%	-0.80%	6.17%
2009-2015	32.21%	37.53%	32.72%	16.98%	32.71%

Share of total economy

	A&CH	M&E	CS	Fashion	Total CCI
2009	3.31%	1.63%	3.85%	0.39%	9.17%
2010	3.40%	1.66%	3.96%	0.42%	9.44%
2011	3.34%	1.69%	4.10%	0.40%	9.52%
2012	3.42%	1.78%	4.17%	0.41%	9.79%
2013	3.49%	1.84%	4.12%	0.43%	9.87%
2014	3.54%	1.79%	4.17%	0.40%	9.91%
2015	3.73%	1.91%	4.35%	0.39%	10.38%
2009-2015	12.78%	17.32%	13.22%	-0.20%	13.21%

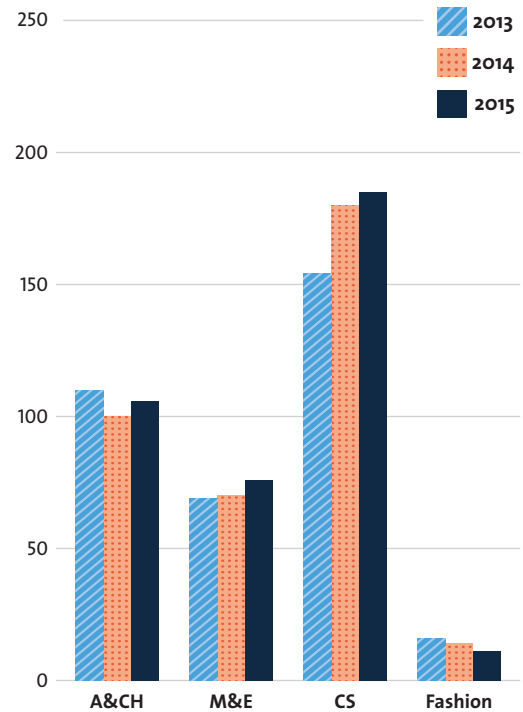


FIGURE 18
Number of entrepreneurs per subsector, Heerlen 2013-2015

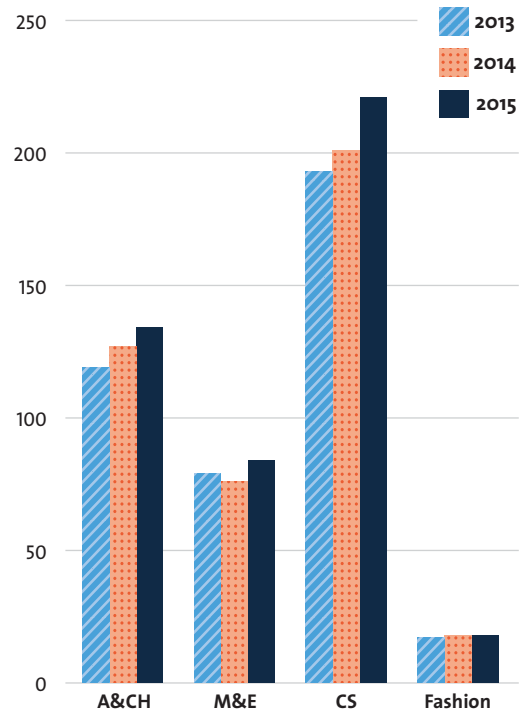


FIGURE 19
Number of entrepreneurs per subsector, Sittard-Geleen 2013-2015

TABLE 19
Share of CCIs Heerlen and Sittard-Geleen of total CCIs South Limburg, 2015

	A&CH	M&E	CS	Fashion	Total CCI
Heerlen	9.0%	12.6%	13.5%	8.9%	11.6%
Sittard-Geleen	11.4%	14.0%	16.1%	14.5%	14.0%

Creative Frame

Media & Entertainment

Joris was born in Maastricht and studied to be a photographer in Heerlen. He founded his company over two and a half years ago and it has gotten more serious over time. At the moment, he works for his company full time and complements his income by working at photography store foto Rembrandt. Joris' trade-mark is creating portraits with a story, taken with an analogue camera. He is located at StartersValley, where he has an office, studio and development space.

NAME
Joris Hilterman

AGE
24

PROFESSION
Photographer

COMPANY
Joris Hilterman

START COMPANY
End of 2015

jorishilterman.com

The photography study programme in Heerlen which Joris followed was mainly aimed at photography as a profession, rather than an art. There was not much preparation for becoming an independent photographer or entrepreneur. Over the years, Joris has gained knowledge about how to run your own business from multiple sources. At the moment, his company does not return a profit but at some point in the next years it does need to for tax reasons. He says about himself that he does not possess so much entrepreneurial talent, nor is he looking to make a lot of money. Photography is his passion and he wants to keep it that way. By thinking too much about the business-side of things, he is afraid of losing this passion. This is why he makes a deviation between his 'free work' and work on commission. From the latter he can earn his money, while the first is there to retain the fun in his work.

PHOTO BY JORIS HILTERMAN

Joris indicates that as a photographer you need to find you 'niche' or trade-mark. Something you can specialise in and which will attract people to you. For him, it is making analogue portraits. One of his projects has been in collaboration with the Salvation Army of Maastricht. He made portraits of 35 homeless people with the aim of taking away the stigmatization and changing public opinion through his images. Not the fact that his models are homeless, but their personality is the subject of the portraits. All models got a print of their portrait and

PHOTO BY JORIS HILTERMAN

Joris is planning on bundling those in a book. Because of the societal impact of this project, he received a subsidy through the *innovatieagenda cultuur* of Maastricht.

For the financial side of things, Joris has an accountant. "I can recommend that to anyone", he says. When he started his company, financing came from his own savings. It became increasingly serious over time and he also needed that time to gain confidence about his work. He mentions receiving the subsidy for his Salvation Army project as a changing point. "That felt as my first entry in the photography world." He is now planning to request financing for the creation of the book and an exhibition about the Salvation Army project, but is struggling with finding the right way. The lack of knowledge about options and unclarity of the system is disturbing his creative process. It distracts him from photography.

Joris has educated himself on financing options through courses by, for example, The Artist and the Others. "This is something everyone should learn at the academy or schools. What are the possibilities when you graduate, what subsidies are there, how do you apply to them? It would be really great if there would be clearer communication between art educations and policy makers in terms of subsidies and types of local support. If, for example, someone from the municipality came to the schools to educate students about the different types of subsidies".

Joris rents a desk at StartersValley and his studio and development space are also located there. Next to personal reasons, this is an important motive for him to stay in Maastricht. "I like where I am now, at my office I have everything I need to do my own thing. That is the most important for me." He is there five days a week. "Having an office really increases productivity", he says. His friends at Yongbloed are also located at StartersValley and they help each other out. Joris takes pictures for their creative concepts, and they in turn help him with making his project plans.

The size of Maastricht seems to have pros and cons. Because everyone knows each other, networking can go quickly and good news travels fast. However, a conflict also spreads easily. This can form a problem for young creatives, as they are often asked to work for free or a very small compensation. This is also part of the advice Joris wants to give to starting photographers; know the value of your work and do not work for free. "Do not see each other as competition, but create a network to stand strong." He also adds that it is crucial to start marketing yourself as soon as possible and to learn how to deal with clients.

Advice on what creatives need in the city? "Work spaces", Joris says. There are many initiatives that offer this, but they all seem like their own island. As examples he mentions Strijp-S in Eindhoven and the CBS building in Heerlen. "Those are defined creative areas, there is not really such a place in Maastricht at the moment, they are all little islands. More connectivity between them would be great and such an area can retain creatives in the city". ■

6.1.4 Small entrepreneurs

Within the Netherlands, a popular term for a small scale entrepreneurs is ZZP'er, or Independent without Personnel. This term is not an official legal form, but is defined as "a person who works for their own account or risk in their own company or practice (entrepreneur), or as the majority shareholder in a private company, or in another independent form (such as an independently executed profession) and thereby does not employ any personnel." [3]

Because the data on entrepreneurs does not include majority shareholders (*directeur-grootaandeelhouders*) nor other independents (*overige zelfstandigen*), we are not able to provide a complete picture of the number of CCIs ZZP'ers[4]. Additionally, the 'size class' variable in the entrepreneurial data specifies FTE rather then amount of people employed, it is not a clean measure for whether or not an entrepreneur has employees. If the size class is for example 1, this can mean that there is just 1 person (and thus only the owner) working in the company, but it could also be the owner for 0.5 FTE and his or her employee for 0.5 FTE. Hence, it is not possible to isolate ZZP'ers from the entrepreneurial data. However, it is interesting to analyse this data in terms of size.

As mentioned before, the CCIs are very fragmented and made up of many small companies. In Section 5, it was already visible that 77% of companies in the CCIs of Maastricht are sole-proprietorships. This does not necessarily mean that they do not have any personnel, but since the owner of a sole-proprietorship is personally liable for her or his company, it is very likely an entrepreneur chooses another legal form when the company grows beyond its own efforts only. He or she would then most likely become the majority shareholder in a private company (*B.V*). Table 19 shows the small entrepreneurs within the CCIs of Maastricht. These are entrepreneurs with a size class of 0 to 1 FTE. Zero in this case means less than a half. This is highly legitimate as not all entrepreneurs work full time for their company. We have chosen to include 'part-time entrepreneurs' because in some areas of the CCIs it is very tough to gain an income which covers cost of living completely. Individuals are sometimes forced to acquire their income from alternative employment. As a consequence, we suspect that the number of entrepreneurs who work for their company part-time is higher in CCIs than in other industries. Additionally, these entrepreneurs are still very much part of the CCIs and it would be incorrect to disregard them.

	Maastricht	Amsterdam	Netherlands
Non-CCI	67.2%	74.6%	67.3%
A&CH	92.1%	95.2%	92.3%
M&E	83.1%	91.4%	86.5%
CS	84.8%	88.1%	84.8%
Fashion	67.5%	88.7%	79.1%
Total CCI	87.1%	92.0%	87.7%
Total	70.6%	80.2%	69.8%

TABLE 20
Share of small entrepreneurs per subsector, 2015

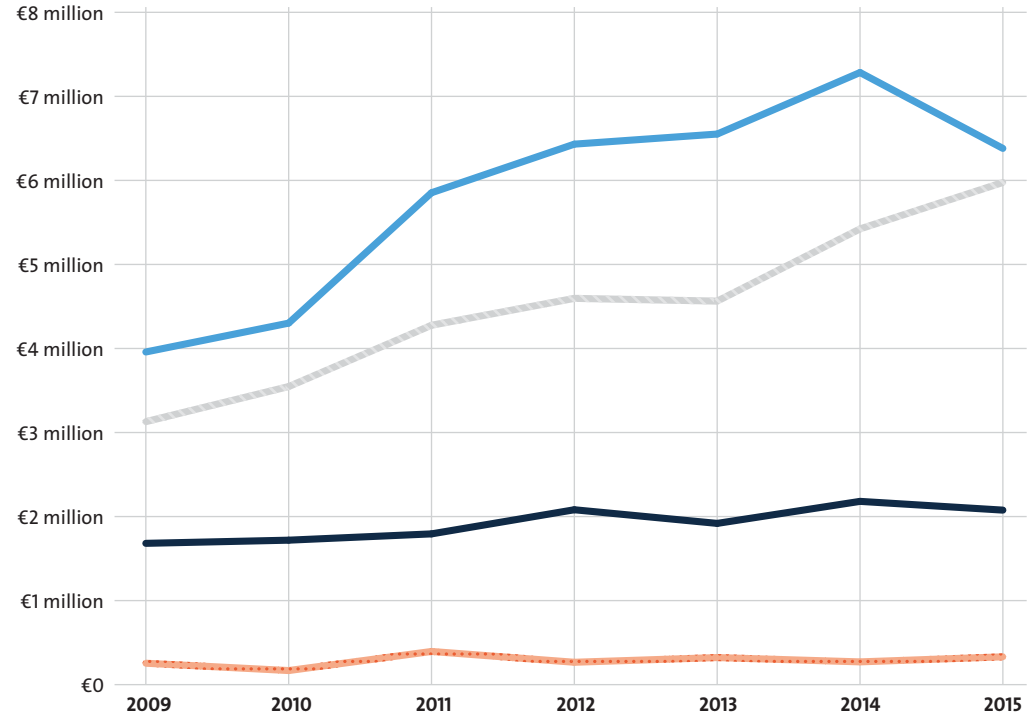


FIGURE 20
Entrepreneurial profits per subsector, Maastricht 2009-2015

Table 20 shows the proportions of small entrepreneurs among the total amount of entrepreneurs per CCIs subsector, for CCIs in total and for all industries in Maastricht, Amsterdam and the Netherlands as a whole. It is immediately visible that the non-CCIs sector have a much smaller percentage of small entrepreneurs than CCIs does. For Maastricht we see that 67% of entrepreneurs classify as small in non-CCIs industries, while 87.1% does in CCIs. A&CH is the subsector with the largest proportion of small entrepreneurs (92.1%). In Amsterdam, the relative numbers of small entrepreneurs lay a bit higher in general with 75% for non-CCIs industries and 92% within CCIs. Their A&CH entrepreneurs are almost completely made-up of small ones (95%). The average proportions of the Netherlands are very similar to those in Maastricht.

The fragmentation of the CCIs compared to other sectors emphasizes the importance of networks. The fragmentation can create diversity, but this diversity only leads to added value when the entrepreneurs are given an opportunity to meet each other. When a link exists between them, the total of all these small entrepreneurs will be more valuable the sum of all parts due to synergies, co-creation and innovation.

6.2 Profits of entrepreneurs

Since the dataset we use for this section is based on income tax declarations, we know for each entrepreneur how much profits (or losses) they made each year. Figure 20 shows the accumulated profits and losses per sector in Maastricht for the period 2009-2015.

	Non-CCI	A&CH	M&E	CS	Fashion	Total CCI
2009	€ 110,275,851	€ 3,129,306	€ 1,681,275	€ 3,958,259	€ 254,718	€ 9,023,558
2010	€ 109,762,479	€ 3,546,879	€ 1,718,919	€ 4,301,711	€ 167,546	€ 9,735,055
2011	€ 129,421,087	€ 4,276,268	€ 1,793,849	€ 5,853,034	€ 394,712	€ 12,317,863
2012	€ 129,793,027	€ 4,596,319	€ 2,080,908	€ 6,431,486	€ 266,235	€ 13,374,948
2013	€ 126,736,415	€ 4,563,609	€ 1,918,610	€ 6,551,503	€ 322,030	€ 13,355,752
2014	€ 137,718,448	€ 5,422,919	€ 2,180,729	€ 7,283,801	€ 270,725	€ 15,158,174
2015	€ 128,435,745	€ 5,975,461	€ 2,076,600	€ 6,380,792	€ 330,991	€ 14,763,844

TABLE 21
Absolute aggregated profits entrepreneurs per subsector, Maastricht 2009-2015

Immediately of interest here is the high relative profits of CS. Even though A&CH is dominating in Maastricht in terms of companies, FTE and entrepreneurs, its profits lag behind those made in the CS. Intuitively, this may not come as a surprise. The CS as a subsector is much more market-driven than A&CH. Additionally, a large part of this high profit is due to the inclusion software development industry code. When these entrepreneurs are left out, the graphs of CS and A&CH are very comparable (see Appendix B for a depiction). Table 21 shows the absolute aggregated profits, including software.

In Table 22 we see how much profits in CCIs contribute to the total profits earned by Maastricht-based entrepreneurs. The CCIs in Maastricht in 2014 and 2015 generated €15million, a jump of 12% from the profit-level of 2012 and 2013. The contribution of CCIs in general has increased between 2013 and 2015, as well as that of subsectors A&CH and M&E. The share of profits made by CS has declined a bit from 2014 to 2015 and Fashion is stagnant over those three years, with a slight dip in 2014.

Table 23 shows the same data as Table 22, but now for the area that we call Greater-Maastricht. We see that in the city, CCIs has a larger share in total entrepreneurial profits than in the Greater-Maastricht area.

However, as is illustrated by Table 24, the entrepreneurs in the surrounding municipalities of Maastricht do generate a significant amount of extra profit. In 2014 and 2015, CCIs entrepreneurs in Greater-Maastricht generated more than €21million, a 10% increase compared to 2012 and 2013.

	A&CH	M&E	CS	Fashion	Total CCI
2013	3.26%	1.37%	4.68%	0.23%	7.56%
2014	3.55%	1.43%	4.76%	0.18%	8.15%
2015	4.17%	1.45%	4.46%	0.23%	8.69%

TABLE 22
CCIs subsector share of total entrepreneurial profits, Maastricht 2009-2015

	A&CH	M&E	CS	Fashion	Total CCI
2013	2.47%	1.20%	3.96%	0.14%	7.78%
2014	2.57%	1.32%	4.00%	0.12%	8.01%
2015	3.29%	1.32%	3.90%	0.17%	8.67%

TABLE 23
CCIs subsector share of total entrepreneurial profits, Greater-Maastricht 2009-2015

	A&CH	M&E	CS	Fashion	Total CCI
2009	€ 4,558,971	€ 2,390,139	€ 6,487,681	€ 366,595	€ 13,803,386
2010	€ 5,035,331	€ 2,482,219	€ 8,128,731	€ 437,942	€ 16,084,223
2011	€ 5,936,147	€ 2,750,436	€ 9,523,960	€ 928,428	€ 19,138,971
2012	€ 6,334,579	€ 3,067,639	€ 9,762,164	€ 325,485	€ 19,489,867
2013	€ 6,083,720	€ 2,954,306	€ 9,735,671	€ 352,534	€ 19,126,231
2014	€ 6,774,886	€ 3,494,113	€ 10,566,272	€ 310,399	€ 21,145,670
2015	€ 8,112,399	€ 3,252,343	€ 9,617,225	€ 413,047	€ 21,395,014

TABLE 24
CCIs subsector total entrepreneurial profits, Greater-Maastricht 2009-2015

Table 25 gives a more comprehensible view of the profits in Maastricht as it shows the average profit per sector. It is important to keep in mind here that not all entrepreneurs in the dataset are of equal size nor do they put an equal amount of effort into their company. However, for comparison purposes it is revealing to look at average profits, as this gives an insight on whether profits are just increasing because there are more entrepreneurs, or whether there is actually more value being generated in the industry.

From the growth percentages in Table 25 we see that the average profits for entrepreneurs overall have declined. Non-CCIs entrepreneurs show a decline of 5% and all entrepreneurs together a decline of 4%. A&CH and CS on the other hand show a significant growth, 39% and 26% respectively. M&E shows a decline of 16% between 2009 and 2015, but when looking at the absolute averages per year, it is apparent that profits in this subsector fluctuate profoundly from year to year.

Average profits in Fashion do seem to have a persistent decline since 2009. However, as we saw in section 6.1.1., this subsector has experienced a vast relative growth in number of entrepreneurs over the 2009-2015. Hence, many entrepreneurs are in their start-up phase during our research period and did not earn much profit. The first years of a business start-up are known to be centered around investments much more than profits and it takes an average of three years for a start-up to become profitable.

TABLE 25
Average profits entrepreneurs per subsector, Maastricht 2009-2015

	Non-CCI	A&CH	M&E	CS	Fashion	Total CCI	Total
2009	€ 26,812	€ 9,426	€ 14,879	€ 13,283	€ 9,797	€ 11,734.15	€ 24,436.59
2010	€ 26,538	€ 10,311	€ 15,627	€ 14,291	€ 5,984	€ 12,433.02	€ 24,293.05
2011	€ 26,856	€ 11,136	€ 14,467	€ 16,916	€ 11,609	€ 13,871.47	€ 24,835.98
2012	€ 26,105	€ 11,321	€ 14,156	€ 17,336	€ 8,068	€ 13,975.91	€ 24,147.07
2013	€ 25,640	€ 10,944	€ 12,877	€ 17,106	€ 7,854	€ 13,490.66	€ 23,612.37
2014	€ 26,988	€ 12,524	€ 14,937	€ 18,870	€ 7,317	€ 15,127.92	€ 25,041.22
2015	€ 25,453	€ 13,104	€ 12,510	€ 16,704	€ 8,275	€ 14,141.61	€ 23,513.89
2009-2015	-5.1%	39.0%	-15.9%	25.8%	-15.5%	20.5%	-3.8%

Creative Frame

Creative Business Services

Manuel has been born in Lisbon and, because his wife is from here, moved to Maastricht four years ago. He has a Masters in Chemistry from Instituto Superior Técnico in Lisbon, but has done several things since then, such as music, video and photography. He followed courses in web development as well. In Lisbon, he had a company in partnership with his father and now, in Maastricht, he is a web developer based at the Withuishof.

NAME
Manual Calapez

AGE
37

PROFESSION
Web developer

COMPANY
The Concept Catcher

START COMPANY
March 2015

theconceptcatcher.com

When Manuel came to Maastricht, he decided to establish a company in web development. This seems to have been a good idea, his company just had its three year anniversary and has never made a loss. When he started, he was not aware of any subsidies or support for small-scale entrepreneurs, but did not really need it either as his start-up costs were relatively low. “I needed a space and a laptop, that’s it.” He did hire an accountant because he felt a bit overwhelmed by the Dutch tax authorities and wanted to make sure he did not make any mistakes. “I like Maastricht because it has a comparable scale to Lisbon, the way of being is somewhat similar”, Manuel says. He mentions how easy it was to find a bunch of creatives he could talk to when he was starting his company and how easily the network spread out.

“When you know a couple of people, you quickly know many. People are more open here than for example in de Randstad, they easily talk to you.” Most of his clients Manuel gets through word-of-mouth but sometimes he even finds them literally on the streets. When he was working at Collective Workspace in the centre he would often visit the market and its food trucks. “They all need websites.” He adds that the Burgundian culture in Maastricht also facilitates this network. “People are often going for a drink and know others to whom you can get introduced. Even at the playground of his children’s school Manuel sometimes finds new clients.

In general, Manuel is very positive about the situation in Maastricht for his company. He also experienced the creative sector as quite developed when he started. He mentions events at Bureau Europa, where “it felt like all of creative Maastricht was in one room”, and the existence of creative hubs like de Brandweer, Withuishof and Collective Workspace. “It feels like there is a connection between people and there is an idea about what it means to be creative and not do things the mainstream way.” He appreciates the fact that in Maastricht contact seems to go from person to person, rather than from agency to agency.

If he has to name one downside to Maastricht, it is the absence of large companies with unlimited budgets. His clients are mainly local small- to medium-sized companies or individuals and they have limited budgets. “Sometimes, for very complicated projects, I was not able to charge what I thought the work was really worth.” This is also where he sees added value for the municipality. He suggests an effort could be made to get larger companies to Maastricht and advise those companies on small-scale entrepreneurs they could hire. “It needs to feel like the municipality is behind ZZP’ers in sustaining work opportunities in the area.” In addition, Manuel is positive about subsidies for small-scale entrepreneurs. Even though he does not necessarily need them himself, he does profit from them indirectly as he often works for companies that do rely on subsidies. Those are the types of companies which hire small-scale entrepreneurs like him.

For newly starting web developers or software entrepreneurs, he has two suggestions; specialization and networking. “Specialization is a two-edged sword. You may not get all the jobs in the beginning, but in the end it does make a big difference”. Then he says that new entrepreneurs in the city should go out and meet some people. Not at official networking spaces or events, but just in the bars and coffeehouses of the city. “Do not work at home”, is the main message. Working at one of the creative hubs or spaces in the city helps a lot in developing your client-base and business. ■

6.2.1 The Netherlands

Figure 21 for the Netherlands shows a slightly different image than Figure 20 did. We know from section 6.1 that the number of entrepreneurs in CS is slightly larger than A&CH in the Netherlands as a whole. Their profits however, are almost twice as high. The difference is much more significant then when looking only at Maastricht.

When comparing the last rows of Table 21 and 26 it shows clearly that the increase in entrepreneurial profits in CCIs have relatively grown much more in Maastricht than in the Netherlands, over the 2009-2015 period. All subsectors, except M&E, and consequently also the total CCIs show a higher growth rate over these years than the national average does. The surplus is quite significant. Where the national growth in CCIs entrepreneurial profits were 39%, those in Maastricht increased with 64%.

Comparing Table 27 to Table 27 shows that in the Netherlands the average income of an entrepreneur in CCIs would be € 18,441, while it is lower in Maastricht at €14,141. But even though the average is higher, comparing the growth rate shows opportunities for CCI entrepreneurs in Maastricht. Where the national average income grew with 2.5%, in Maastricht it grew with 20%. Seeing that the income for entrepreneurs in general declined with 3-4%, looking at either the Netherlands or Maastricht, this tells us the average income of a CCIs entrepreneur in Maastricht is growing significantly faster than the rest of the economy. This is a great indication that entrepreneurs in the CCIs in Maastricht are doing well.

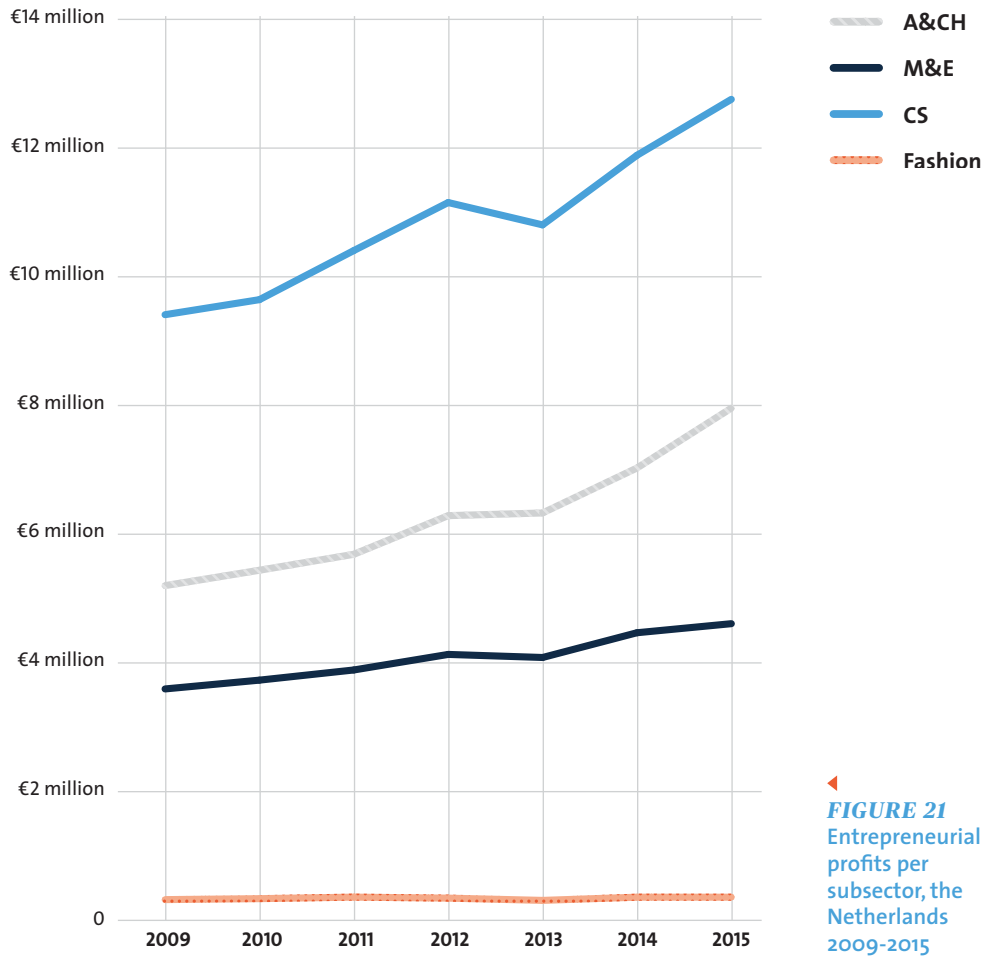


FIGURE 21
Entrepreneurial profits per subsector, the Netherlands 2009-2015

	A&CH	M&E	CS	Fashion	Total CCI
2009	€ 520,171,151	€ 359,614,267	€ 941,140,374	€ 32,262,444	€ 1,853,188,236
2010	€ 544,042,860	€ 373,286,473	€ 964,494,269	€ 33,734,108	€ 1,915,557,710
2011	€ 568,816,752	€ 389,064,764	€ 1,040,767,562	€ 36,121,321	€ 2,034,770,399
2012	€ 628,855,481	€ 413,239,090	€ 1,115,400,009	€ 34,526,521	€ 2,192,021,101
2013	€ 633,022,018	€ 408,449,090	€ 1,080,647,344	€ 31,022,619	€ 2,153,141,071
2014	€ 702,857,953	€ 446,893,590	€ 1,188,751,331	€ 35,994,859	€ 2,374,497,733
2015	€ 795,880,334	€ 460,975,847	€ 1,275,719,595	€ 35,983,109	€ 2,568,558,885
2009-2015	53.0%	28.2%	35.6%	11.5%	38.6%

TABLE 26
Absolute aggregated profits entrepreneurs per subsector, the Netherlands 2009-2015

TABLE 27
Average profits entrepreneurs per subsector, the Netherlands 2009-2015

	Non-CCI	A&CH	M&E	CS	Fashion	Total CCI	Total
2009	€ 28,547	€ 14,195	€ 17,071	€ 22,096	€ 12,295	€ 18,005	€ 27,380
2010	€ 28,866	€ 14,016	€ 16,771	€ 21,453	€ 12,653	€ 17,623	€ 27,592
2011	€ 28,919	€ 13,682	€ 16,429	€ 21,570	€ 12,832	€ 17,493	€ 27,595
2012	€ 28,035	€ 14,638	€ 16,897	€ 21,605	€ 11,740	€ 17,970	€ 26,845
2013	€ 27,858	€ 14,258	€ 16,360	€ 21,240	€ 10,505	€ 17,477	€ 26,633
2014	€ 29,314	€ 15,052	€ 17,269	€ 22,337	€ 11,668	€ 18,424	€ 28,009
2015	€ 27,663	€ 15,935	€ 16,515	€ 21,926	€ 11,082	€ 18,441	€ 26,523
2009-2015	-3.1%	12.3%	-3.3%	-0.8%	-9.9%	2.42%	-3.1%

NOTES

1 A caveat to this data is that it indeed only includes those that pay income taxes on their company's earnings. Often, when a company is doing well, an entrepreneur might switch legal form in order to get tax benefits. Although these are rare in the creative and cultural industries (77% is a sole-proprietorship), they are excluded from our profit numbers.

2 Based on the number of inhabitants at 30 April, 2017 – CBS Statline

3 Definition ZZP'er CBS - https://www.cbs.nl/nl-nl/faq/zzp/wie-zijn-de-zzp-ers-

4 At the time of writing, new data was released CBS which identifies ZZP'ers. It would be complementary to this study to analyse the ZZP market based on these files.

Creative Frame

Arts & Cultural Heritage

NAME
John Franzen

AGE
37

PROFESSION
Artist

COMPANY
John Franzen

START COMPANY
2010

johnfranzen.com

John Franzen was born in Germany and lived in Belgium for a large part of his life. He came to Maastricht to study at the Art Academy in 2003. After graduating in 2008, he stayed in Maastricht to work as an independent artist. The biography on his website states that he works in two different studios; "one is bright and small, where he does his drawings and most of his delicate and meditative pieces. The other is a big, post-industrial space, where he is able to develop his biggest and roughest pieces." His works carry names like Pristine, Drawn by Blood, Darkness and Someone Died. His work has been exhibited around the globe. Just in 2017, his art works could be viewed in Belgium, France and Hong Kong.

Franzen calls himself a commercial artist, he makes art for the market. He says there is not that much difference with academic, institutional artists. They make art aimed at getting subsidies, commercial artists make art for the market. "Artists are in constant survival-mode", he says.

When he started his company approximately eight years ago, he could not live from his art. He did construction jobs on the side to supply in his cost of living. "Many artists are used to live below the minimum income level", he mentions. For him, this situation turned around a couple of years ago. Since four years he can live of his art and he now even changed the legal form of his company from *eenmanszaak* to *B.V.*, because this has tax benefits. Franzen says artists could profit if they had knowledge about different tax benefits, but tax deductions on art would be even more ideal. He mentions how this would attract all types of art-related activities to the city. Not only artists, but also galleries and perhaps even auction houses.

Work from John's series Each Line One Breath

He has big ideas on how to use art to put Maastricht on the map. His main advice is marketing. He himself has a nice looking website, which displays his work, bio and previous exhibitions. "The best thing I ever did was online marketing, that is how I got my work into galleries." To him, doing marketing does not mean just having a website or putting some work on Instagram. "In the beginning you need to be pro-active, approach online art blogs and magazines." One of his ideas starts here. He is aware that many artists are not comfortable with online marketing, but for those who are open to it, it could be organized by a third party. The idea is to have an online platform which promotes local artists internationally. This links to one of his other points, local artists should aim their marketing efforts at the local market. Franzen indicates that the city is small enough for people to know who you are and that you are an artist. "If someone has an exhibition space here, they will come to you." He is thinking bigger, for example suggesting an exhibition with local artists which could travel the world. He is highly convinced that as long as the theme of such an exhibition is marketable, there will be interest.

When thinking about the city, he sees an exhibition space in Maastricht for local artists, but always with exhibitions curated around a certain theme. In this way, the exhibition becomes marketable and can attract attention. He also mentions that lack of affordable working spaces is an issue. He explains that the income of an artist fluctuates extremely and that it therefore is hard to handle a large amount of fixed cost per month, such as studio rent. Additionally, he indicates it would be great when policy makers sometimes would ask what he artists really need. Just come by to get some ideas. With this he does note that it is important to go to the artists and not have them come to you. "Many artists are not inclined to go out into the world, but if you come to them, they are very open to that." ■

Potential spillovers and surrounding regions

The CCIs are known to have spillover effects towards other industries, society and even bordering regions. We already saw that the existence of a creative class is an indication for employment development in a city and that the presence of the CCIs can increase the general wealth in a region[1]. Even though research on the spillover effects of Maastricht's cultural and creative economy is beyond the scope of our research, we do want to point out the possible additional advantages of developing CCIs within the city.

A prominent report concerning spillovers of CCIs in Europe has been created in 2015 by Tom Fleming Creative Consultancy. They define three main types of spillovers[2]:

1. Knowledge spillovers

"refer to the new ideas, innovations and processes developed within arts organizations and by artists and creative businesses which spill over into the wider economy and society without directly rewarding those who created them."

2. Industry spillovers

"refer to the vertical value chain and horizontal cross-sector benefits to the economy and society in terms of productivity and innovation that stem from the influence of a dynamic creative industry"

3. Network spillovers

"relate to the impacts and outcomes to the economy and society that sill over from the presence of a high density of arts and/or creative industries in a specific location"

The report mentions a number of concrete spillover possibilities which are interesting for Maastricht to explore when further developing the CCIs in the city. First of all, expanding CCIs does not only create new jobs, it also increases the employability and skills development of inhabitants of the city. Exposure to art is in general known to stimulate employees and increase productivity, regardless of the sector in which they are employed[3], but cultural events in a city can also contribute to the professional development of artists themselves[2]. Additionally, creative professionals (designers, software developers) are likely to work for companies outside of the cultural and creative industry and hence add cross-sector value. Innovation through co-creation and networking within CCIs might even result in new companies in other sectors. As can be concluded from section 6, the CCIs are an industry dominated by entrepreneurs. This, in combination with the idea that employees expand their social network through artistic intervention tell us that CCIs can improve business culture and boost entrepreneurship[2].

Another spillover of CCIs which is applicable to Maastricht is the potential to strengthen cross-border collaborations. Being in the centre of Western-Europe, Maastricht is ideally located to exploit the advantages of such spillovers. Just as CCIs can help in generating entrepreneurship across sections, it can also help develop new and more competitive markets in border regions[2]. As networks are so important within CCIs, it is pre-eminently the industry to encourage knowledge sharing across borders.

The spillover effects are two-sided. First of all, development of CCIs in Maastricht can through spillover effects benefits surrounding regions. The positive development of these regions in turn benefits Maastricht again, as it will profit from being located in a wealthy and entrepreneurial area. On the other hand, existence or development of vibrant CCIs in neighbouring regions can help Maastricht develop its CCIs even further and ultimately benefit from increased wealth, employment and unique business climate through cross-border innovation.

Apart from the broader research executed previously by Prof. Dr. Söndermann, there has not been any study on the CCIs in the Euregion Meuse Rhine. The reason for this (and also why it is not included in this study) is the unavailability of data at the microlevel. Since the CCIs are so fragmented and dominated by micro-entrepreneurs, it is important to be able to illustrate specifically their presence and financial behaviour. Microdata was therefore was used for this study, which is not widely available in each region. To fully map the current situation of the cultural and creative industries and its potential in the future, a detailed study for the whole Euregion is necessary, preferably over a mid- to long-term time period.

NOTES

1 See section 2

2 Tom Fleming Creative Consultancy (2015) Cultural and creative spillovers in Europe: Report on a preliminary evidence review

3 For example Martorella, R. (1990) Arts and business. Westport; London: Praeger or Shane, C. (1996) The investment on the wall, Financial Executive.

Highlights, insights, barriers & bottlenecks

To conclude our report, we will supply some highlights, insights and barriers & bottlenecks about the creative industries in Maastricht and its surroundings.

Highlights will be aimed toward the findings from this report. They reflect what stood out to us when analysing the data. The Made2Measure project did not just entail this report, we also hosted three conferences (of which two in cooperation with The Artist and the Others) and had a number of students who studied the CCIs in different projects. Over this period, we have also attended conferences and talked to creatives about their experiences. Insights reflects the ideas that have arisen during those activities.

Barriers & bottlenecks are potential issues we foresee in the development of the CCIs in Maastricht and possible solutions. These have come from conclusions in the report, literature analysis, discussion with students and insights from creatives in the city.

Highlights

1

In 2016, 1 out of 6 companies and entrepreneurs (2015) in Maastricht are associated with the creative and cultural industries, higher than the national average. (The National average is 13% for companies, compared to 17% for Maastricht, and 12% for entrepreneurs, compared to 17% in Maastricht).

2

The share of the CCIs in the Maastricht economy has grown at a rate of 19% over the period from 2009-2016, with the number of companies in the CCIs having increased in Maastricht by almost 48% over the past 8 years of available data.

3

The number of A&CH companies has increased by 56%, Fashion companies has increased by 54%, CS by 44% and those in M&E by 40%.

4

The relative growth of the fashion industry in Maastricht has been larger than the national average (54% compared to 40%). The fashion industry has grown more than twice as fast as the national average (by 54% compared to 24%), whilst the overall growth in the number of entrepreneurs in the CCIs is similar in Maastricht to the national average of 35%. In terms of FTE, Maastricht experienced a growth in the Fashion subsector of 50%, compared to an 8% decrease on the national level.

5

By 2015 (last available data) the share of the Fashion entrepreneurs compared to the national average is more than twice as large - the increase in the relative share of fashion entrepreneurs grew by 23%, compared to only 2% nationally.

6

The CCIs entrepreneurs in Maastricht in 2014 and 2015 generated €15million, and €21million in Greater-Maastricht a jump of 12% (10%) from the profit-level of 2012 and 2013.

Overview

Data from the CBS on companies, sole-traders, entrepreneurs and industry size in terms of FTE provide a fresh perspective on the impact and value of the CCIs in Maastricht, compared with South-Limburg, other cities, the Randstad and the Netherlands.

In Maastricht

In Maastricht the largest share of all the CCIs companies and entrepreneurs is in the A&CH subsector , followed by the CS subsector. This subsector was followed by M&E and then by the Fashion subsector.

Insights

1
Clustering similar types of business activities provides economic advantages such as access to talent, transfers of technology and support services. To build upon the clustering effects from creative hubs, we recommend developing very specific regions within Maastricht and promote these regions as such.

2
When providing any type of support, listen to the needs of young entrepreneurial creatives such that facilities are developed to become attractive to them.

3
State-subsidy is not the only form of support available to the creative and cultural industries. Alternative sources of finance than state-subsidy could be encouraged: Creative companies will come when there is finance available.

4
Encourage Made in Maastricht by showcasing exhibitions for supported artists and designers within the city.

5
Given the high proportion of sole-proprietors within the CCIs, fostering entrepreneurial developments in the CCIs will serve to increase the number of independent entrepreneurs (without personnel), thus anchoring Maastricht's relatively strong position for these types of business legal entities.

6
Initiatives to help young artists and creatives, such as The Artist and the Others and FASHIONCLASH, are crucial for recent academy graduates to find their direction.

Overview

The insight on the size and scope of the creative and cultural industries in Maastricht presented in this report may be used to inform policy decisions. The economic impact from the CCIs is analysed using the data from CBS, which is one of the best sources of data on a large cross section of companies.

In Maastricht

In addition to direct impact from economic activity in the CCIs in Maastricht the social and cultural value arising from indirect economic impact have not been incorporated into this study. Social and cultural value is analysed in our partners report by MACCH by academics at FASoS at Maastricht University.

Barriers and bottlenecks

1
Supply of studios and workplaces remains unaffordable to many starting entrepreneurs in the CCIs. Especially in those subsectors which are not necessarily market driven. More attractive rents would retain talent.

2
Gentrification creates further inequality – so cultural policy to raise access to housing, funding, education and policies to stimulate cultural and creative enterprises across the diversity of the population will help avoid an imbalance in equal opportunities for all.

3
For a fashion city, there is a lack of visibility of local fashion designers in Maastricht. This visibility is two-sided. On the one hand, local stimulation policies do not always find the designers. Secondly, the designers' physical presence in the city is missing. Increased direct visibility could be achieved by offering studio and showroom space in the city centre and by an increase in publicity about these spaces.

4
Short-term financing will not commit creatives to the city. The marketplace for talent could be incentivized by providing long-term financing. Creatives will come and stay when there is adequate finance available.

5
There is a lack of knowledge about all forms of financing among many creatives. This can be corrected through education, either at one of the different knowledge institutions in the city or though the creative hubs.

6
Maastricht is located in a border region, with inadequate infrastructure to many Dutch cities. International connections are therefore crucial for stimulating economic growth. Knowledge about the size and scope of CCIs in the Euregion as a whole and its potential are essential in realising further development.

Overview

There are a number of barriers and bottlenecks that refrain from the successful adoption of policies to stimulate the CCIs. Most frequently cited problems by young professionals as to why they refrain from starting new business ventures.

In Maastricht

Beyond the regional policy to improve infrastructure between regional, national, and international cities, positive attributes from low congestion, short commuting time, and relatively cheaper housing prices, an online presence can fuel the development of the CCIs.

A.

Made2Measure definition of creative industries, per SBI-code

Arts & Cultural Heritage (A&CH)

SBI-code	Description
90.01	Podiumkunst en -vermaak
90.01.1	Beoefening van podiumkunst
90.01.2	Producenten van podiumkunst
90.02	Dienstverlening voor uitvoerende kunst
90.03	Schrijven en overige scheppende kunst
90.04.1	Theaters en schouwburgen
91.01.1	Openbare bibliotheken
91.01.2	Kunstuileencentra
91.01.9	Overige culturele uitleencentra en openbare activiteiten
91.02.1	Musea
91.02.2	Kunstgalerieën en expositieruimten
91.03	Monumentenzorg
94.99.3	Steunfondsen (niet op het gebied van welzijnszorg)
94.99.4	Vriendenkringen op het gebied van cultuur, fanclubs
79.90	Informatieverstrekking op het gebied van toerisme

Media & Entertainment (M&E)

SBI-code	Description
58.11	Uitgeverijen van boeken
58.13	Uitgeverijen van dagbladen
58.14	Uitgeverijen van tijdschriften
58.19	Overige uitgeverijen (niet van software)
58.21	Uitgeverijen van computerspellen
58.29	Overige uitgeverijen van software
59.11.1	Productie van films (geen televisiefilms)
59.11.2	Productie van televisieprogramma's
59.12	Facilitaire activiteiten voor film- en televisieproductie
59.13	Distributie van films en televisieproducties
59.14	Bioscopen
59.20	Maken en uitgeven van geluidsopnamen
60.10	Radio-omroepen
60.20	Televisieomroepen
63.91	Persagentschappen
63.99	Overige dienstverlenende activiteiten op het gebied van info
74.20.1	Fotografie
90.01.3	Circus en variété
93.21.1	Pret- en themaparken
93.21.2	Kermisattracties

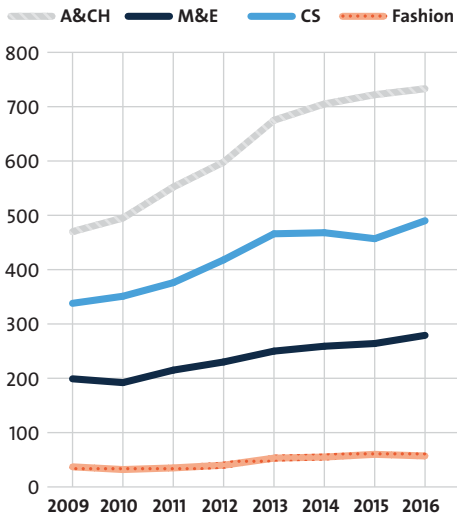
Creative Business Services (CS)

SBI-code	Description
70.21	Public relations bureaus
71.11	Architecten
71.11.1	Architecten (geen interieur architecten)
71.11.2	Interieurarchitecten
73.11	Reclamebureaus
73.12	Handel in advertentieruimten en -tijd
74.10	Industrieel ontwerp en vormgeving
74.10.1	Communicatie en grafisch ontwerp
74.10.2	Industrieel en product ontwerp
74.10.3	Interieur en ruimtelijk ontwerp
62.01	Ontwikkelen, produceren en uitgeven van software

Fashion

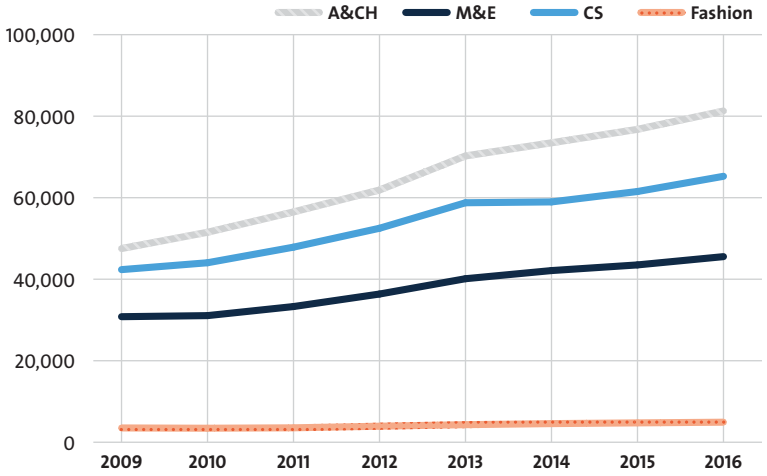
SBI-code	Description
14.11	Vervaardiging van kleding van leer
14.12	Vervaardiging van werkkleding
14.13	Vervaardiging van overige bovenkleding
14.14	Vervaardiging van onderkleding
14.19	Vervaardiging van baby- en sportkleding en kledingaccessoires
14.20	Vervaardiging van artikelen van bont
14.31	Vervaardiging van gebreide en gehaakte kousen en sokken
14.39	Vervaardiging van gebreide en gehaakte kleding (geen kousen en sokken)
15.12	Vervaardiging van koffers, tassen e.d. en van zadel- en tuigmakerswerk
15.20	Vervaardiging van schoenen
32.12	Bewerken van edelstenen en vervaardiging van sieraden e.d. (geen imitatie)
32.13	Vervaardiging van imitatiesieraden

B. Cultural and creative industries excluding software development



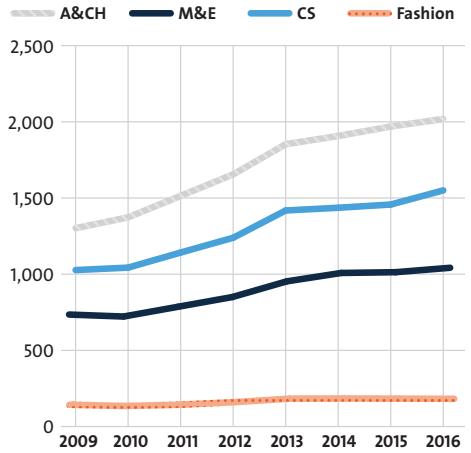
	Non-CCI	A&CH	M&E	CS	Fashion
2009	7,247	470	199	338	37
2010	6,736	495	192	351	32
2011	7,025	552	215	376	35
2012	7,349	598	230	418	40
2013	8,257	675	250	466	53
2014	8,342	705	259	468	55
2015	8,388	722	264	457	60
2016	8,740	733	279	490	57

◂ *FIGURE I* & ▲ *TABLE I*
Number of companies per subsector (excluding software development companies), Maastricht 2009-2016



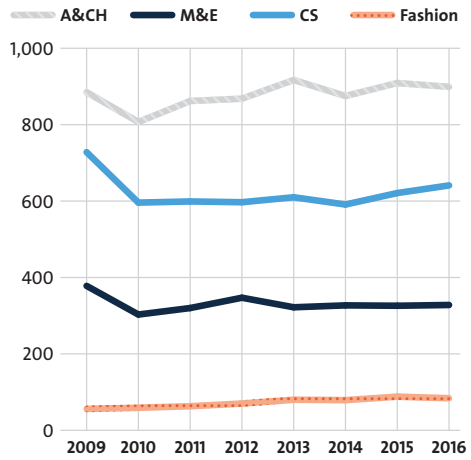
◂ *FIGURE II* &
▾ *TABLE II*
Number of companies per subsector (excluding software development companies), the Netherlands 2009-2016

	Non-CCI	A&CH	M&E	CS	Fashion
2009	1,187,291	47,524	30,803	42,352	3,508
2010	1,122,250	51,520	31,068	44,038	3,441
2011	1,169,162	56,510	33,293	47,864	3,541
2012	1,236,100	61,884	36,363	52,500	3,933
2013	1,369,487	70,245	40,122	58,758	4,315
2014	1,412,283	73,468	42,119	58,965	4,571
2015	1,439,003	76,772	43,509	61,518	4,751
2016	1,497,338	81,266	45,540	65,250	4,918



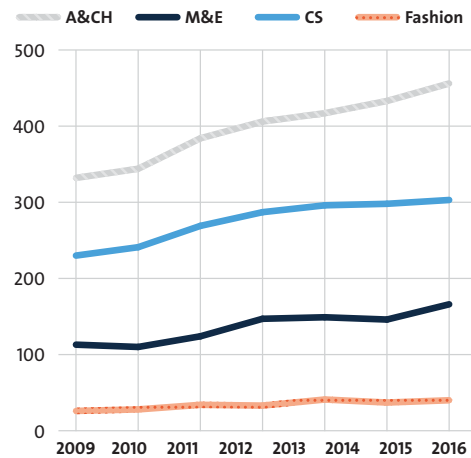
year	Non-CCI	A&CH	M&E	CS	Fashion
2009	35,338	1,302	735	1,027	143
2010	33,239	1,373	722	1,043	135
2011	34,525	1,514	786	1,142	143
2012	36,108	1,655	850	1,239	160
2013	39,998	1,853	953	1,418	183
2014	40,751	1,907	1,008	1,436	184
2015	40,815	1,969	1,013	1,457	183
2016	42,199	2,019	1,042	1,550	182

◂ *FIGURE III* & ▲ *TABLE III*
Number of companies per subsector (excluding software development companies), South- Limburg 2009-2016



	Non-CCI	A&CH	M&E	CS	Fashion
2009	56,192	885	378	728	56
2010	52,277	807	303	596	59
2011	51,261	862	320	599	63
2012	51,099	868	347	597	70
2013	51,673	917	322	610	80
2014	55,419	875	327	591	79
2015	48,957	909	326	621	88
2016	49,425	899	328	641	84

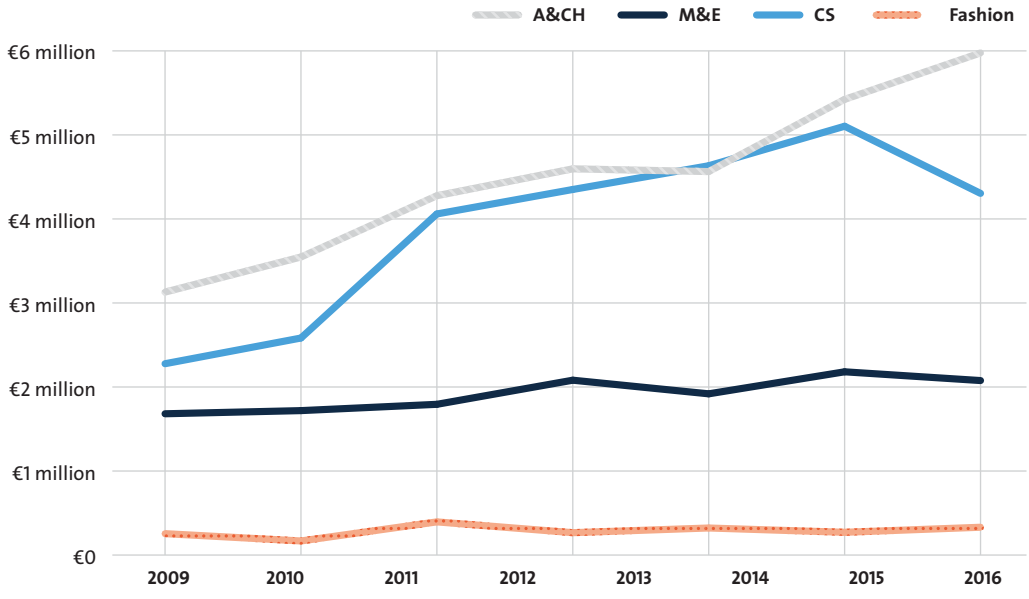
◂ *FIGURE IV* & ▲ *TABLE IV*
FTE per CCIs subsector (excluding software development companies), Maastricht 2009-2016



	Non-CCI	A&CH	M&E	CS	Fashion
2009	4,113	332	113	230	26
2010	4,136	344	110	241	28
2011	4,819	384	124	269	34
2012	4,972	406	147	287	33
2013	4,943	417	149	296	41
2014	5,103	433	146	298	37
2015	5,046	456	166	303	40

◂ *FIGURE V* & ▲ *TABLE V*
Number of entrepreneurs per subsector (excluding software development companies), Maastricht 2009-2015

B. Cultural and creative industries excluding software development



▲ *FIGURE VI &* ▼ *TABLE VI*
Entrepreneurial profit per subsector (excluding software development companies), Maastricht 2009-2015

	Non-CCI	A&CH	M&E	CS	Fashion
2009	€ 110,275,851	€ 3,129,306	€ 1,681,275	€ 2,276,984	€ 254,718
2010	€ 109,762,479	€ 3,546,879	€ 1,718,919	€ 2,582,792	€ 167,546
2011	€ 129,421,087	€ 4,276,268	€ 1,793,849	€ 4,059,185	€ 394,712
2012	€ 129,793,027	€ 4,596,319	€ 2,080,908	€ 4,350,578	€ 266,235
2013	€ 126,736,415	€ 4,563,609	€ 1,918,610	€ 4,632,893	€ 322,030
2014	€ 137,718,448	€ 5,422,919	€ 2,180,729	€ 5,103,072	€ 270,725
2015	€ 128,435,745	€ 5,975,461	€ 2,076,600	€ 4,304,192	€ 330,991

C. Detailed development CCIs FTE Sittard-Geleen and Heerlen

Year-to-year growth

	A&CH	M&E	CS	Fashion	Total CCI
2009	-	-	-	-	-
2010	-2.8%	24.7%	-16.6%	26.3%	5.9%
2011	-21.0%	4.2%	-7.0%	-4.2%	-2.8%
2012	6.3%	-32.2%	-2.2%	-26.1%	-19.6%
2013	10.2%	-29.8%	9.5%	52.9%	-9.9%
2014	-3.1%	-8.2%	3.8%	0.0%	-2.4%
2015	-6.3%	9.1%	53.9%	-15.4%	23.8%
2016	-20.3%	-4.5%	0.0%	13.6%	-4.4%
2009-2016	-34.9%	-40.8%	32.7%	31.6%	-13.8%

Share of total economy

	A&CH	M&E	CS	Fashion	Total CCI
2009	0.62%	1.78%	1.28%	0.04%	3.73%
2010	0.56%	2.06%	0.99%	0.05%	3.66%
2011	0.49%	2.40%	1.03%	0.05%	3.97%
2012	0.53%	1.65%	1.02%	0.04%	3.23%
2013	0.61%	1.20%	1.16%	0.06%	3.02%
2014	0.53%	1.00%	1.09%	0.06%	2.67%
2015	0.53%	1.15%	1.78%	0.05%	3.51%
2016	0.45%	1.18%	1.90%	0.06%	3.59%
2009-2016	-27.41%	-33.98%	48.11%	46.83%	-3.79%

▲
Development CCIs FTE, Sittard-Geleen 2009-2016

C. Detailed development CCIs FTE Sittard-Geleen and Heerlen

Year-to-year growth

	A&CH	M&E	CS	Fashion	Total CCI
2009	-	-	-	-	-
2010	14.3%	-19.6%	-15.2%	0.0%	-7.2%
2011	-5.2%	24.4%	-8.6%	20.0%	-3.2%
2012	-2.7%	24.3%	30.4%	16.7%	17.9%
2013	-3.6%	25.6%	11.3%	4.8%	9.1%
2014	-11.6%	-21.6%	-6.1%	9.1%	-9.8%
2015	-6.1%	14.5%	4.1%	-29.2%	2.3%
2016	6.5%	-0.7%	8.9%	-17.6%	6.3%
2009-2016	-10.1%	39.3%	19.8%	-6.7%	13.3%

Share of total economy

	A&CH	M&E	CS	Fashion	Total CCI
2009	0.35%	0.16%	0.72%	0.02%	1.25%
2010	0.26%	0.08%	0.39%	0.01%	0.75%
2011	0.54%	0.23%	0.78%	0.04%	1.59%
2012	0.55%	0.29%	1.06%	0.05%	1.94%
2013	0.51%	0.36%	1.15%	0.05%	2.06%
2014	0.50%	0.31%	1.20%	0.06%	2.06%
2015	0.44%	0.33%	1.15%	0.04%	1.95%
2016	0.49%	0.35%	1.33%	0.03%	2.20%
2009-2016	39.36%	115.92%	85.75%	44.72%	75.76%

▲ Development CCIs FTE, Heerlen 2009-2016

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