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Federal Government Commissioner
for Culture and the Media

Cultural and Creative Industries
Initiative of the
Federal Government

Monitoring of Selected Economic Key Data on the Culture and Creative Industries 2012

Summary

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1. Introduction

1.1 Commission

The Federal Ministry for Economic Affairs and Energy has commissioned the Centre for European Economic Research (ZEW) in Mannheim and the Fraunhofer Institute for Systems and Innovation Research ISI in Karlsruhe to conduct a study of the cultural and creative industries in Germany. The 2012 monitoring report builds upon the audits carried out over the past few years.[1] It evaluates the importance of the cultural and creative industries for the overall economy and looks at the development of its economic indicators between 2009 and 2012. The analysis contained in the report is based on data from the Federal Statistical Office (Destatis), the Federal Employment Agency, as well as figures from EUROSTAT and UNCTAD (used for international comparisons).[2]

This year's monitoring report also contains some new elements:

1. The start-up activities in the cultural and creative industries and their submarkets will be analysed.

2. A comparison will be made between the economic volatility and trend economic growth of the cultural and creative industries as a whole, as well as their 11 submarkets, and the corresponding economic developments in traditional sectors and the overall economy.

3. The report focuses on the topic of digitization and the opportunities and challenges that this presents for the cultural and creative industries and their submarkets. This includes a representative nation-wide survey of companies and self-employed persons working in the creative and cultural industries. This survey will be examined in closer detail using case studies in selected submarkets.

The monitoring report will look at the following key questions:

- What is the economic importance of the cultural and creative industries within the overall economy and compared to other traditional sectors in Germany?

- What are the key features of the individual submarkets in these industries?

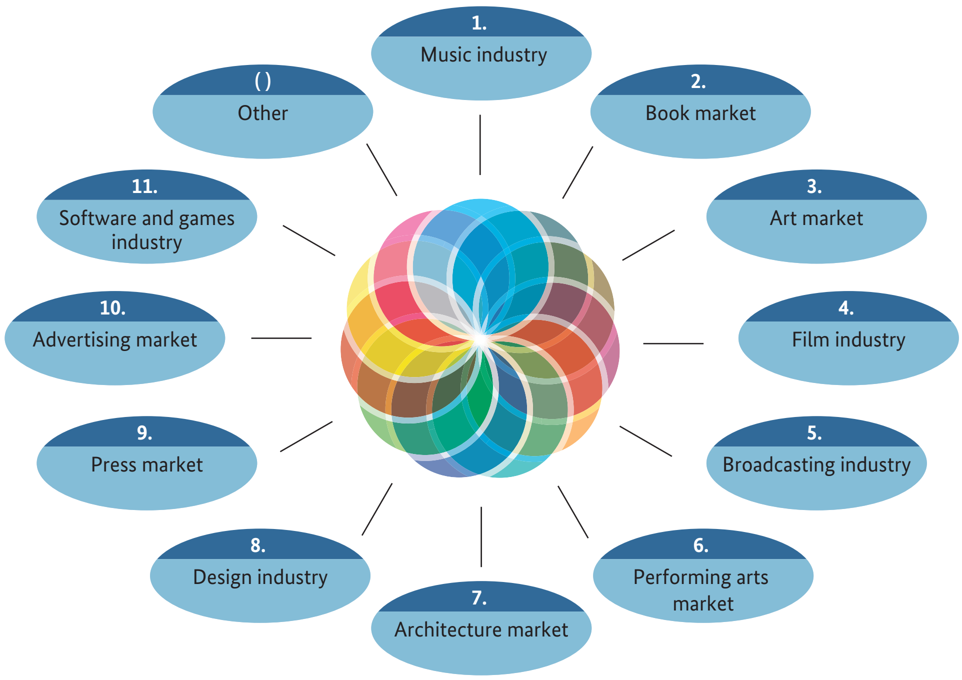
- How have the cultural and creative industries and their submarkets developed over the last few years in terms of core indicators (turnover, value added, number of companies, employment), export activities and growth in the number of start-ups?

- What role does digitization play for companies within the cultural and creative industries and their submarkets? To what extent do the companies use digital technologies? What are the opportunities and challenges that they pose?

1 Federal Ministry of Economics and Technology (2012): Monitoring of Selected Economic Key Data on Culture and Creative Industries 2011, full version Berlin, and Federal Ministry of Economics and Technology (2009), Ermittlung der gemeinsamen charakteristischen Definitionselemente der heterogenen Teilbereiche der ‚Kulturwirtschaft' zur Bestimmung ihrer Perspektiven aus volkswirtschaftlicher Sicht, Berlin (available in German only).

2 UNCTAD (2010), Creative Economy Report, Geneva.

Figure 1.1: The segments of the culture and creative industries



Source: Federal Ministry of Economics and Technology, 2009.

1.2 Definition

The definition of the cultural and creative industries underlying this report follows the definition of the Conference of Economic Ministers and places the focus on commercial companies:[3] "The culture and creative industries comprise all cultural and creative enterprises that are mainly market-oriented and deal with the creation, production and/or dissemination through the media of cultural/creative goods and services. The main criterion for the definition is the commercial character of the company. All market-based companies which are subject to VAT or which simply desire to profit from art, culture and creativity, belong to this group of companies. Companies not included in this group are institutions or other types of associations, which are largely not financed by the market, but instead receive funds from public financing, license fees or are supported by non-profit funds or private investors. Such a distinction between commercial or market-based companies on the one hand and non-market based companies on the other is of particular importance for the situation in Germany for reasons concerning policies of regulation and governance."

3 The Conference of Economic Ministers (2009), Leitfaden zur Erstellung einer statistischen Datengrundlage für die Kulturwirtschaft und eine länderübergreifende Auswertung kulturwirtschaftlicher Daten (available in German only).

2. Overview of the Overall Economic Importance of the Culture and Creative Industries

2.1 Key Data on the Culture and Creative Industries in Germany

The following analysis is based on data from official German statistics from the Federal Statistical Office of Germany and the Federal Employment Agency. The various data sources and calculation methods are explained in more detail in section 7.1 of the unabridged version of the report.

Around 247,000 companies produced a turnover of 143 billion euros

In 2012, the culture and creative industries included an estimated 247,000 companies with a collective turnover of around 143 billion euros. This is equal to 7.58 percent of all companies, which achieved a 2.51 percent share of the overall economic turnover. Around 772,000 people are employed in this branch of the economy, amounting to 2.67 percent of all people who are liable to social insurance contributions. In addition to this number, there are approximately 247,000 self-employed people. Taking into account the 375,000 people who are marginally employed and the 235,000 marginally self-employed people (self-employed and freelancers with an annual income of less than 17,500 euros), then the entire number of people employed in this sector was around 1.63 million in 2012. The culture and creative industries contributed 62.8 billion euros and therefore 2.35 percent to the total gross value added.

Employment and turnover rose in comparison to previous year

The key data of the culture and creative industries showed consistent positive developments in 2012 in relation to the previous year. This is due not least to generally good economic development. The number of employees paying social insurance contributions increased by 4.37 percent in relation to the previous year, while the number of marginally employed people decreased slightly in 2012 by 0.74 percent in comparison to the previous year. The number of people marginally self-employed (self-employed and freelancers with an annual income of less than 17,500 euros) rose last year by 4.55 percent to 235,000. In total, the number of companies rose by almost one percent in relation to last year. Turnover increased by 1.32 percent and the gross value added increased by 0.58 percent. Therefore, the positive trend in the key data, which has been observed since the end of the financial crisis in 2009, continued in this economic sector.

An employee earned on average 140,000 euros in turnover a year

The structure of the culture and creative industries is defined by a high number of small and micro enterprises. One company employs four people on average, three of those pay social insurance contributions. Accordingly, the turnover that each company produces remained comparatively low at an average of 579,000 euros. Consequently, a gainfully employed person earns an average of 140,000 euros of the total turnover in the sector and contributes just 62,000 euros to the gross value added. A turnover of 185,000 euros is apportioned to each of the 772,000 employees who pay social insurance contributions. The percentage of self-employed people in the culture and creative industries is 24 percent of all workers.

2.2 Contribution of the Culture and Creative Industries towards Value Added

Small growth of the gross value added

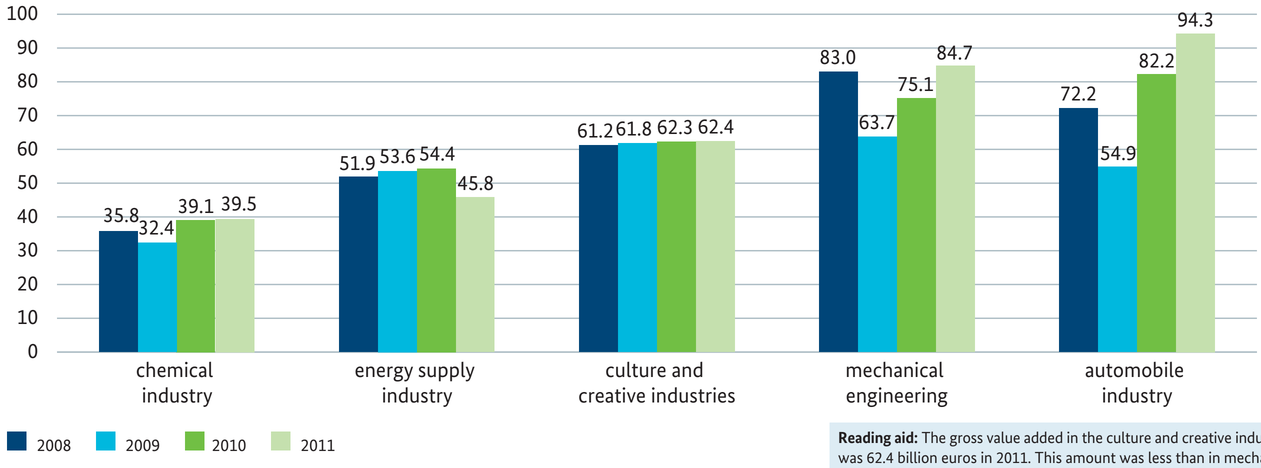
Even though only minimum rates of growth were recorded to the gross value added in the culture and creative industries during the years of 2009 and 2011, other, especially export-oriented industries, like mechanical engineering and the automobile industry, profited distinctly more from the upturn since 2009. These sectors were able to increase their gross value added since 2009 by 33 percent from 63.7 to 84.7 billion euros in mechanical engineering and by 72 percent in the automobile industry from 54.9 to 94.3 billion euros. However, the crisis-induced drop in these two sectors of the manufacturing industry was also very significant in 2009 compared to the previous year (see Figure 2.1). The performance of the chemical and energy supply industries was below that of the culture and creative industries. The energy suppliers even had to take a loss in their gross value added from 2010 to 2011.

2.3 Employees in the Culture and Creative Industries

Slight increase in employment

Employment also remained fairly stable in the cultural and creative industries. The number of the employed persons has risen slightly since 2009. This behavior is similar to comparable industries, where the number of employees varied only slightly over the same period of observation.

Figure 2.1: Contribution of the culture and creative industries to the gross value added compared to other economic sectors 2008–2011 (in billions of euros)



Reading aid: The gross value added in the culture and creative industries was 62.4 billion euros in 2011. This amount was less than in mechanical engineering and in the automobile industry, but more than in the chemical industry and energy suppliers.

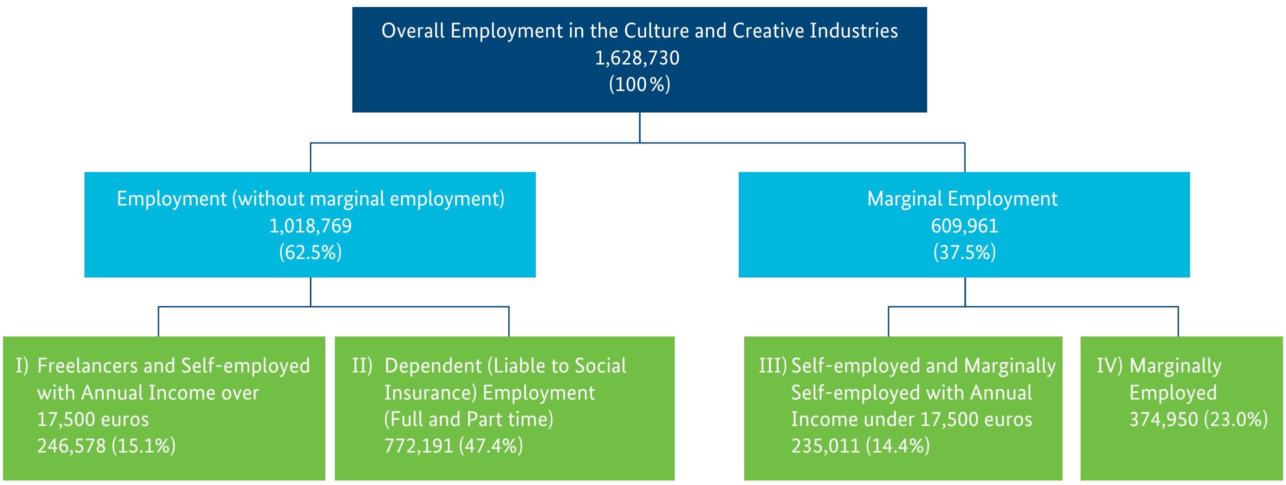
Note: The culture and creative industries include the WZ-2008 2-digit selections: 58, 59–60, 73, 90–92.
Source: National Accounts, Destatis, 2013; own computations ZEW.

In 2012, the culture and creative industries was comprised of 1.02 million people working as freelancers and self-employed people or as persons in positions of dependent employment. The people in dependent employment (or employees liable to social insurance contributions) constituted 47.4 percent of these people, a decidedly smaller proportion than in other industries. That means the numbers reflect the relatively high portion of freelancers and self-employed people. Additionally, there were around 610,000 in marginal self-employment, a comparatively large number, so that the total number of people employed in 2012 was around 1.63 million.

Almost exactly as many people were employed in the culture and creative industries as in mechanical engineering. However, there were considerably more workers in the automobile, the financial services sectors and even the chemical and energy supply industries. In comparable industries, almost all of the people employed are liable for social insurance contributions or are dependently employed. However in the culture and creative industries, there proves to be a large amount of freelance workers and self-employed people with an annual income of less than 17,500 euros.

In the period of observation from 2009 to 2012, the dependent employees increased significantly and the numbers of freelancers and the self-employed increased slightly. The number of marginally employed persons declined slightly.

Figure 2.2: Structure of employment in the culture and creative industries 2012*



Note: *Data estimated. The number of self-employed people corresponds to the number of taxable entrepreneurs with an annual income of at least 17,500 euros.
Source: Turnover tax statistics 2011, Destatis 2013; employment statistics, Federal Employment Agency; own computations ZEW.

3. Digitization in the Culture and Creative Industries

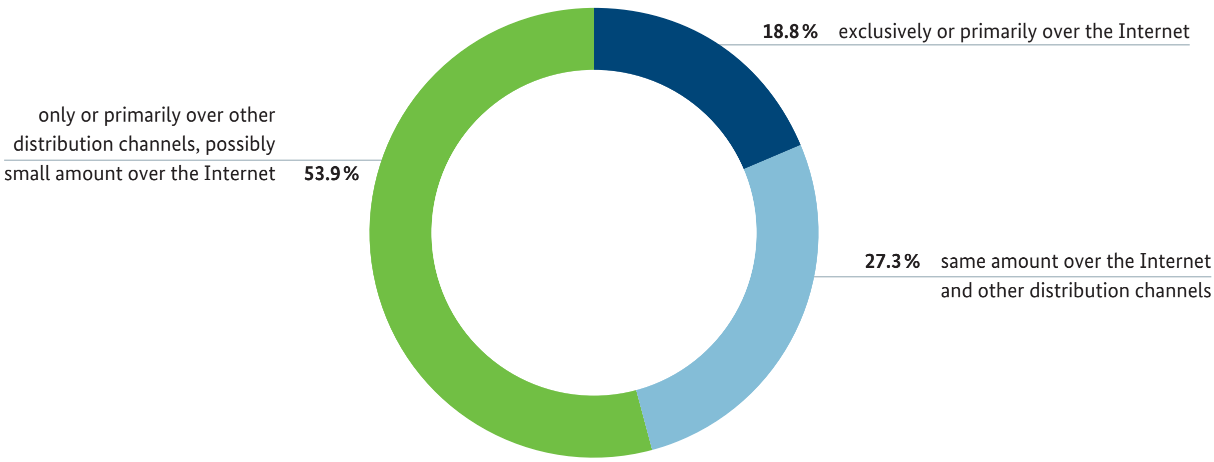
Progressive digitization has left numerous traces on the culture and creative industries. In the meantime, books are published digitally as e-books and a substantial part of advertising takes place on the Internet. Music and movies are available almost everywhere via the web. Digital products and distribution channels are superseding the traditional. This presents companies with the challenge to keep pace with new technologies in order to not lose customers and market shares. On the other hand, opportunities also arise, because the digital pathways make geographically remote markets easier to access. Customers can be targeted more accurately. Work and private life can also be arranged more easily with one another. If work is able to be carried out digitally, it therefore becomes more flexible in terms of time and location. Consequently, the Internet and digitization have lowered the costs of entering the market, especially for the self-employed and small businesses. However, it has also contributed to brisk competition. 18.8 percent of self-employed persons and small businesses used the Internet exclusively or primarily as their channel of distribution. Another 27.3 percent sell their products and services both over the Internet and through traditional distribution channels equally. Slightly more than half rely more on traditional distribution channels.

Cultural and creative businesses rely on social media

Among the digital technologies and services, cultural and creative businesses rely foremost on social media, such as profiles on social networks or their own corporate blogs. Two thirds of companies use it either sporadically or intensively. In second place, 62.7 percent of businesses make use of open content such as open software, free texts, pictures, music and films. Geographic independence is fostered by the use of mobile devices. 56 percent of cultural and creative businesses put them to use. However, new revenue and payment models like “mobile payment” and crowdfunding platforms play a small role in the financing of projects and products. Only 15 and nine percent of businesses, respectively, used these models. The majority preferred more traditional forms of payment and financing (see Figure 3.2).

Platforms for collaborating and cloud services were utilized by 46.2 and 41 percent of businesses, respectively. However, the use of these platforms was rather sporadic than intensive. Only nine and 13 percent of businesses, respectively, used platforms for collaboration intensively or resorted to cloud services frequently.

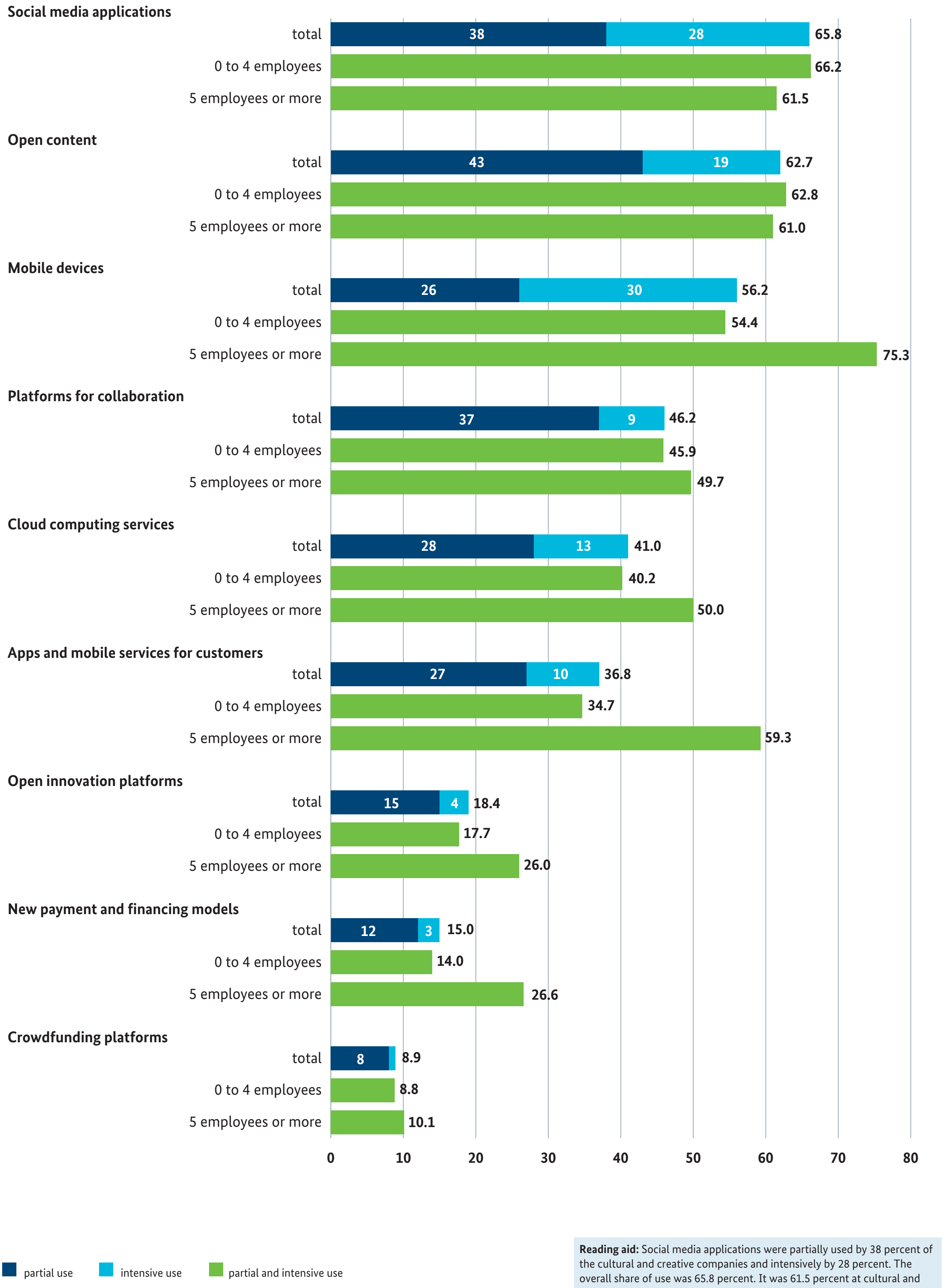
Figure 3.1: Channels of distribution for small cultural and creative companies



Note: Only self-employed persons and companies with less than five employees.
Source: ZEW company survey, 1st half-year 2013.

Reading aid: In total, 18.8 percent of self-employed persons and small companies in the culture and creative industries exlusively or primaliry used the Internet to distribute their products and services.

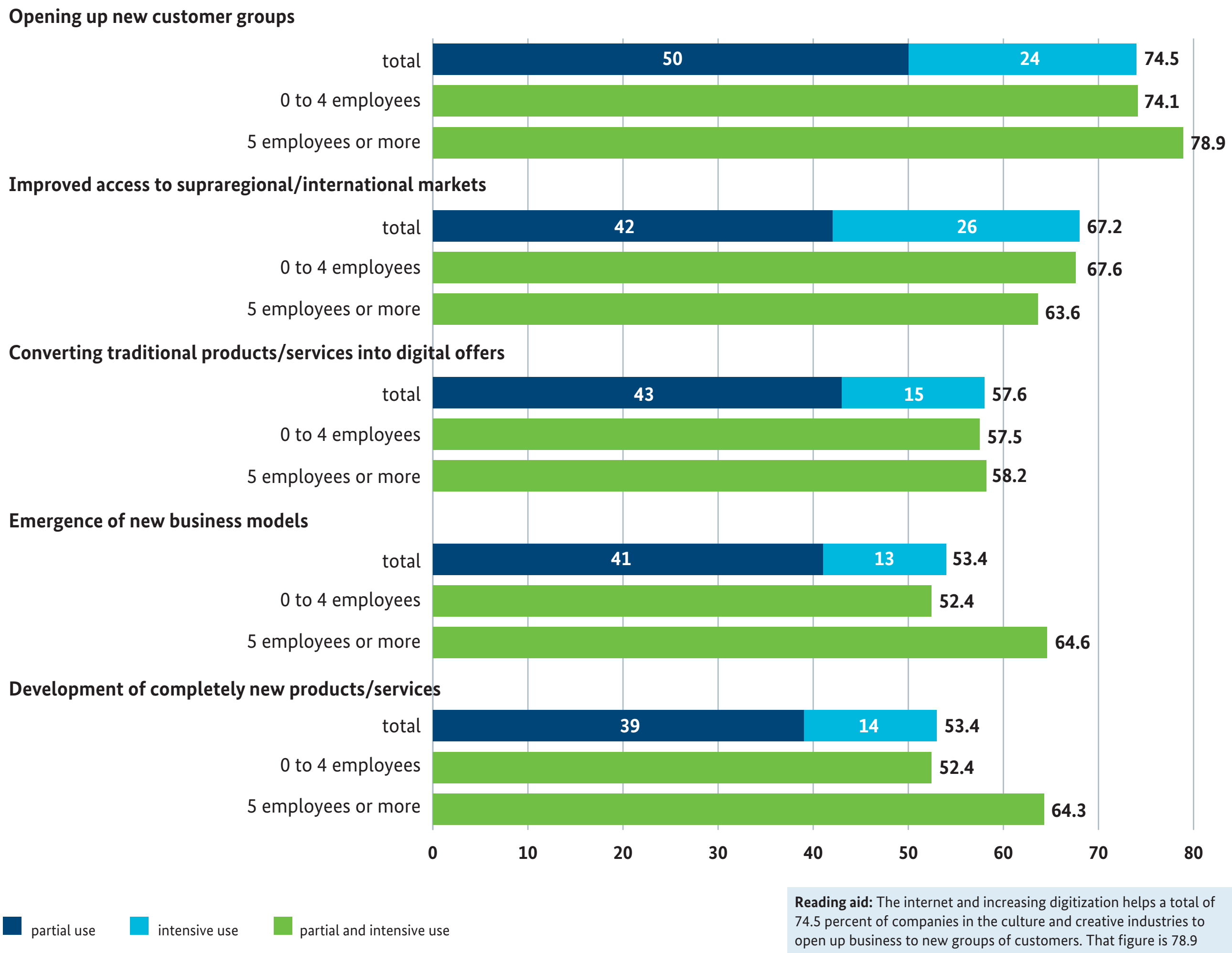
Figure 3.2: Use of digital services and technologies in the culture and creative industries
(share of companies in percentages)



Source: ZEW company survey, 1st half-year 2013.

Reading aid: Social media applications were partially used by 38 percent of the cultural and creative companies and intensively by 28 percent. The overall share of use was 65.8 percent. It was 61.5 percent at cultural and creative companies with more than five.

Figure 3.3: The Internet and the increasing digitization in the culture and creative industries
(share of companies in percentages)



Reading aid: The internet and increasing digitization helps a total of 74.5 percent of companies in the culture and creative industries to open up business to new groups of customers. That figure is 78.9 percent with companies with five or more employees.

Source: ZEW company survey, 1st half-year 2013.

In a few cases, there was a big difference in the use of digital services and technologies between microenterprises with up to four employees and companies with at least five employees. For example, larger companies had a significantly higher proportion of users of mobile devices at 75.3 percent as opposed to microenterprises that only had a proportion of 54.4 percent. The picture was similar with apps and mobile services for customers. These were only used in 34.7 percent of microenterprises, but 59.3 percent of companies with at least five employees made use of them.

The offer of apps and mobile services requires customized programming and design as well as the maintenance costs to keep them running. If none of the company's own personnel are qualified to carry out these tasks, then these services must be acquired externally. Larger companies are able to afford this more easily than businesses with a maximum of four employees.

The Internet and digitization open up new groups of customers

Above all, the Internet and digitization means access to new groups of customers for companies. Almost 75 percent of companies agreed with this statement, 50 percent partially and 24 percent fully. Customers can be targeted more accurately and over greater distances through digital distribution channels. This also allows for improved access to supraregional or international markets. 67.2 percent of companies saw this as an opportunity offered by digitization. The transferring of traditional products and services into digital offers, like e-books or the online editions offered by newspaper publishers for example, was seen as relevant by 57.6 percent of companies. The emergence of new business models and the development of completely new products and services as a result of the Internet and digitization were at the end of the list, both at 53.4 percent.

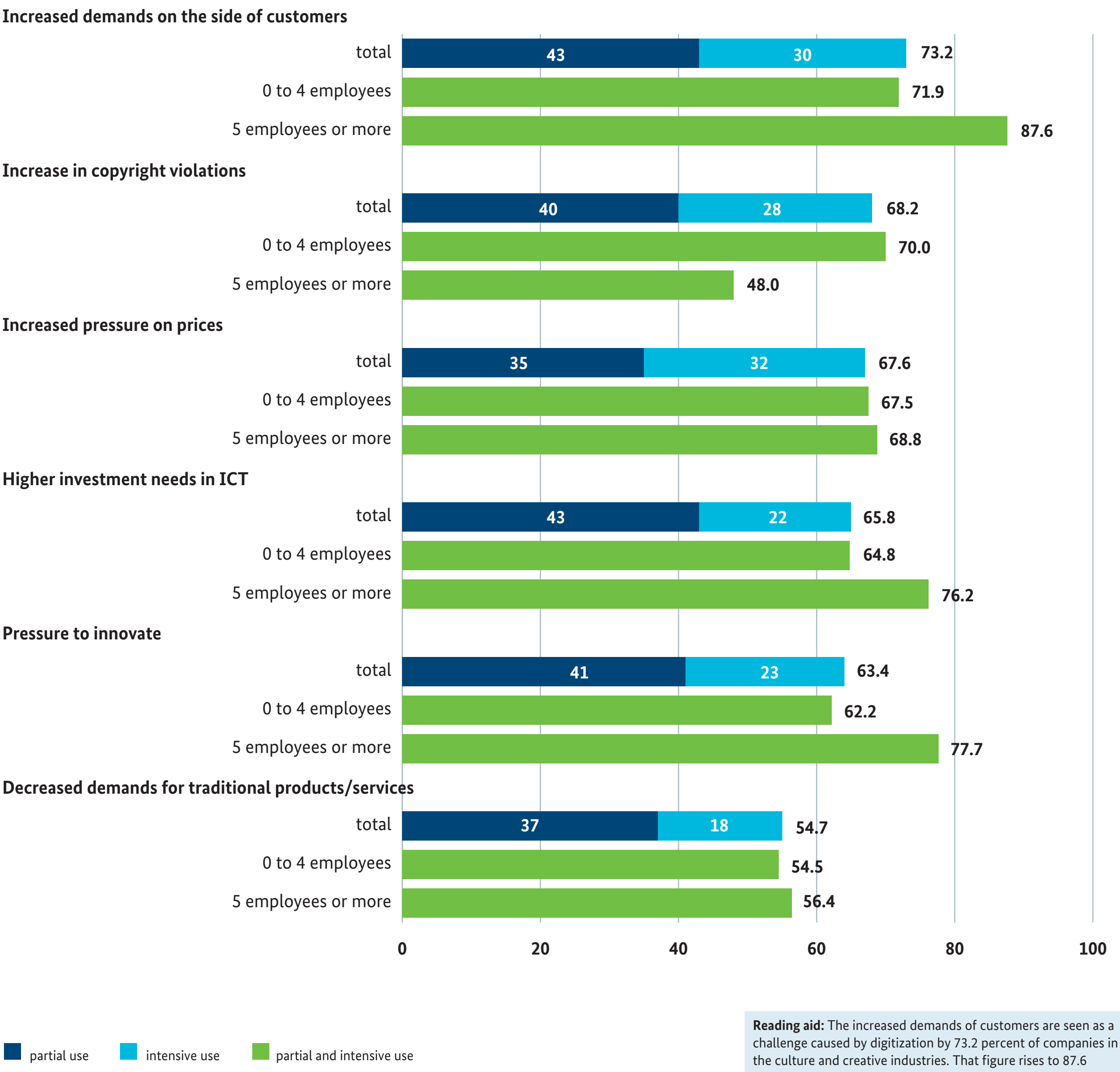
The biggest challenge of digitization is the higher demands on the part of customers

Cultural and creative companies viewed the greatest challenge of digitization as the increased demands on the part of the customer. In total, 73.2 percent of businesses agreed with this, 43 percent partly and 30 percent completely. As a result of digitization, customers are well informed. They compare alternative products and services and their prices on the Internet, and place high demands on the providers.

This implies an increase in pressure on prices (67.6 percent of companies) and a high pressure to innovate or to develop and improve digital offers (63.4 percent of companies).

The culture and creative industries sees an increase in the amount of copyright violations as a big problem with digitization and that the legal protection of intellectual property is insufficient (68.2 percent of companies). In total, 54.7 percent of companies lamented the decrease in demand for traditional products and services caused by digitization.

Figure 3.4: The challenges of digitization in the culture and creative industries
(share of companies in percentages)



Reading aid: The increased demands of customers are seen as a challenge caused by digitization by 73.2 percent of companies in the culture and creative industries. That figure rises to 87.6 percent at companies with five or more employees.

Source: ZEW company survey, 1st half-year 2013.

4. Summary

Since the 2009 crisis year, turnover volumes have shown positive development in the culture and creative industries. In the period of 2009 to 2012, turnover rose by an average of 2.1 percent per year in the culture and creative industries. In 2012, turnover rose by 1.3 percent in comparison to the previous year.

Turnover growth in the culture and creative industries significantly less than overall economic growth

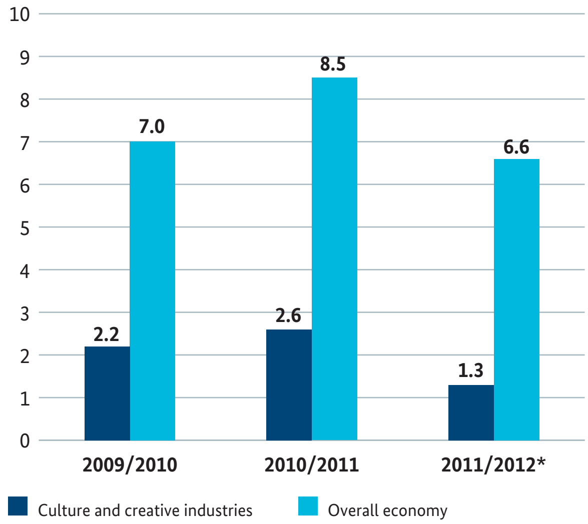
When comparing the culture and creative industries to the overall economy, there are clear differences in regards to the annual growth rates for turnover over the last three years (see Figure 4.1). Growth rates followed quite a similar trend with an increase in 2011 as compared to the previous year and a decrease in 2012 as compared to the previous year. However, turnover in the culture and creative industries experienced significantly weaker development than in the overall economy. Here it should be noted however that some industries, especially the export-oriented manufacturing industries, recorded a much more significant drop in demand and the gross value added than in the culture and creative industries. There was enormous catching up potential in the manufacturing industries up until 2011.

While turnover in the overall economy reached a rate of growth of 7.0 and 8.5 percent from 2009 until 2011, the corresponding rate of growth in the culture and creative industries remained significantly lower at 2.2 and 2.6 percent. After the recovery phase of 2010 to 2011, both the overall economy and the culture and creative economies grew at the slower rates of only 6.6 percent and 1.6 percent, respectively.

Positive turnover trends continued, but with large differences among the submarkets

Turnover developed quite differently in the individual submarkets. The software and games industry contributed primarily to the positive development in turnover. Its turnover rose by 7.4 percent a year in the time period between 2009 and 2012. Furthermore, the following sectors of the culture and creative industries contributed above average annual rates of growth to annual turnover: the performing arts market with an annual growth rate at 5.9 percent, the art market at 4.8 percent, the architecture market at 4.5 percent and the music industry at 3.2 percent. The submarkets of film and design had an annual turnover rate of growth of 2.2 percent, which was about the same as the average for the entire sector. However, the broadcasting industry, the advertising and book markets developed at a lower than average rate. These submarkets registered annual growth rates between minus 0.5 and minus 1.6 percent. While the press market stagnated with zero percent growth (see Figure 4.2).

Figure 4.1: Turnover development in the culture and creative industries compared to the overall economy
(change in percentages)

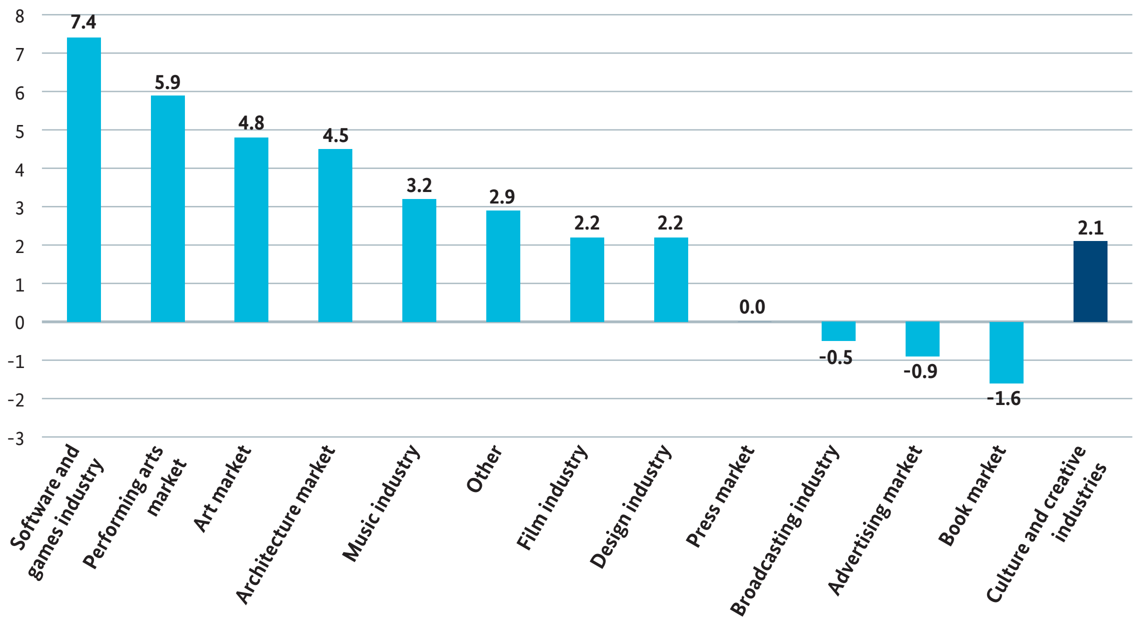


Reading aid: Turnover grew by seven percent in the overall economy between 2009 and 2010.

Note: *Data for 2012 is based on estimates.
Source: Turnover tax statistics, Destatis 2013, own computations ZEW.

The press market (31 billion euros in turnover) and the advertising market (25 billion euros) are two strong submarkets characterized by zero and negative annual growth rates, respectively, in the period between 2009 and 2012. Consequently, this was reflected strongly in the overall performance of the culture and creative industries. Apparently, these two submarkets have yet to recover from the restructuring and consolidation processes which took place in the last years. The software and games industry was the second strongest submarket with 30 billion euros and the design industry was the fourth strongest with 19 billion euros. These two submarkets were important drivers for the growth in turnover for the entire industry during the observation period.

Figure 4.2: Turnover development in the submarkets of the culture and creative industries from 2009 to 2012
(average annual change 2009-2012* in percentages)



Note: *Data for 2012 is based on estimates.
Source: Turnover tax statistics, Destatis 2013, own computations ZEW.

Reading aid: Turnover in the software and games industry grew by an annual rate of 7.4 percent in the period of 2009 to 2012.

Number of the culture and creative businesses increased moderately

There was less of a difference in the development of the number of enterprises. Here, the culture and creative industries were able to make somewhat stronger gains than the overall economy from 2010 to 2011 with a rate of growth of 2.0 percent in comparison to 1.6 percent. In the following period from 2011 to 2012, the overall economy developed again somewhat better than the culture and creative industries. However, the differences were not as high as in 2010 in comparison to 2009 (see Figure 4.4).

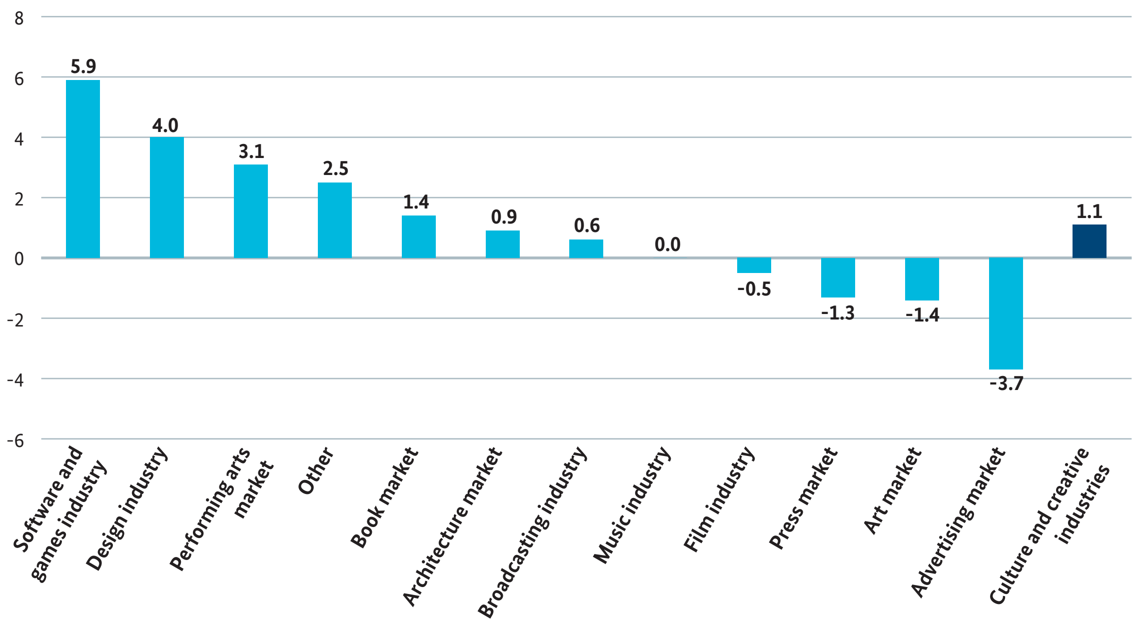
The number of companies in the cultural and creative grew by an average of 1.1 percent a year in the period of 2009 until 2012 (see Figure 4.3). The rate of increase was higher than average in the software and games industry at 5.9 percent per year, in the design industry at 4.0 percent, in the performing arts market at 3,1 percent and in the book market at 1,4 percent. However, the film industry, the press market, the art market and especially the advertising market were on a downward course with an annual growth rate of minus 3.7 percent.

Steady increase in employment

The positive economic development continued in the labor market as well in the culture and creative industries. The number of people employed in the culture and creative industries grew consistently in the observation period. With a growth rate of 2.7 percent in 2012 as compared to the previous year, employment grew significantly stronger than in the overall economy (see Figure 4.5).

The number of self-employed and workers liable to social insurance contributions increased on average at 1.9 percent per year in the period of 2009 to 2012. The growth rates were particularly high in the submarkets, which were able to register a comparatively strong growth in turnover (see Figure 4.8). Thus with an annual growth of 7.0 percent, employment in the software and games industry contributed more than the average to the growth of the entire culture and creative industries. As the fourth largest submarket, the design industry increased by 1.7 percent. The performing arts market (3.0 percent annually) and the architecture market (2.5 percent annually) were in front of the design industry. Another submarket with positive, albeit slower, rates of growth in employment was the broadcasting industry. The number of people employed in this industry grew by 0.7 percent annually from 2009 until 2012.

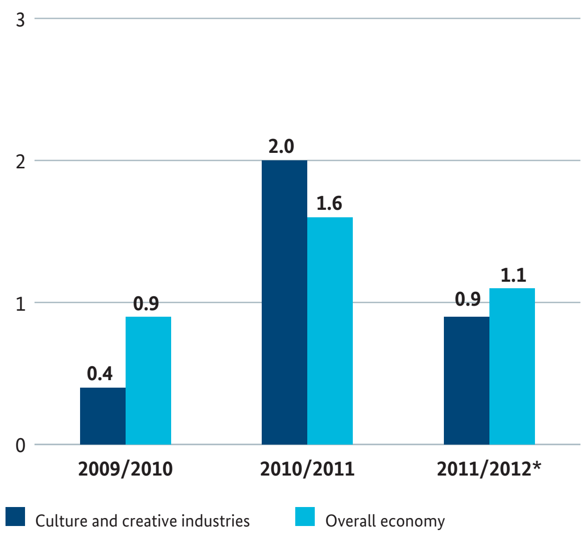
Figure 4.3: Development of companies in the submarkets of the culture and creative industries from 2009 to 2012
(average annual change 2009–2012* in percentages)



Note: *Data for 2012 is based on estimates.
Source: Turnover tax statistics, Destatis 2013, own computations ZEW.

Reading aid: The number of companies in the book market submarket increased by 1.4 percent between 2009 and 2012.

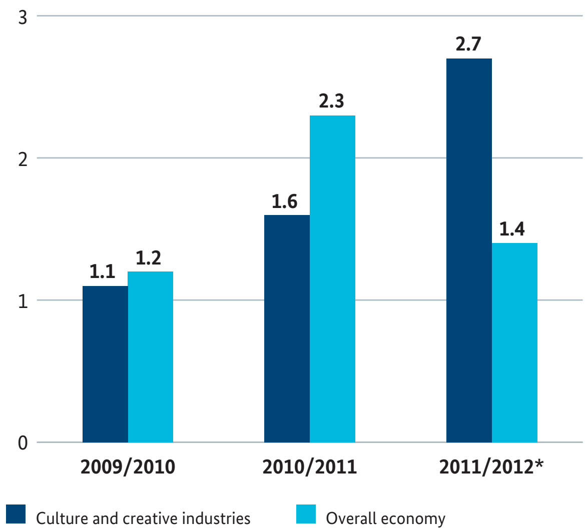
Figure 4.4: Development of number of companies in the culture and creative industries compared to the overall economy
(change in percentages)



Reading aid: The number of companies in the CCI increased by two percent between 2010 and 2011.

Note: *Data for 2012 is based on estimates.
Source: Turnover tax statistics, Destatis 2013, own computations ZEW.

Figure 4.5: Development of total employment in the culture and creative industries compared to the overall economy
(change in percentages)



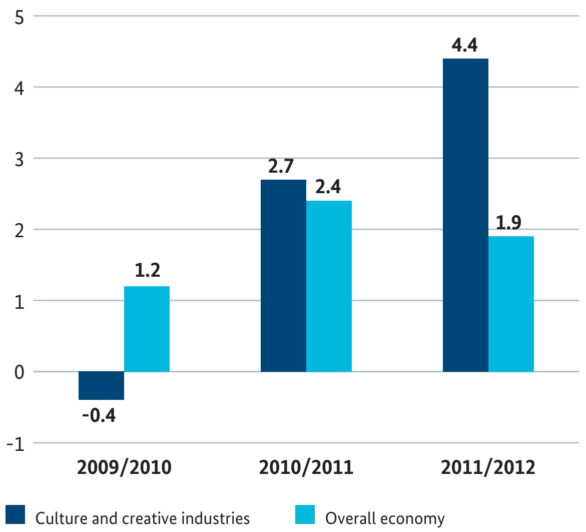
Reading aid: The number of employees in the overall economy rose by 1.4 percent between 2011 and 2012.

Note: *Data for 2012 is based partially on estimates.
Source: Turnover tax statistics, Destatis 2013; employment statistics, Federal Employment Agency 2013; own computations ZEW.

Submarkets which displayed negative growth in turnover as well as a negative development in employment included the following submarkets: the book, advertising and press markets. The strongest decrease in employment was in the press market, the largest submarket of the culture and creative industries. It had an average annual growth rate of minus 2.0 percent. In the advertising market, employment decreased by an average of 0.3 percent a year and stagnated at 0 percent in the book market.

The positive development in employment was reflected in the increase of persons in dependent employment and employees liable to social insurance contributions. Here, the culture and creative industries were able to achieve clearly higher growth rates than in the overall economy. Particularly in 2012, the rate of increase was 4.4 percent as compared to the previous year, in contrast to 1.9 percent in the overall economy (see Figure 4.6).

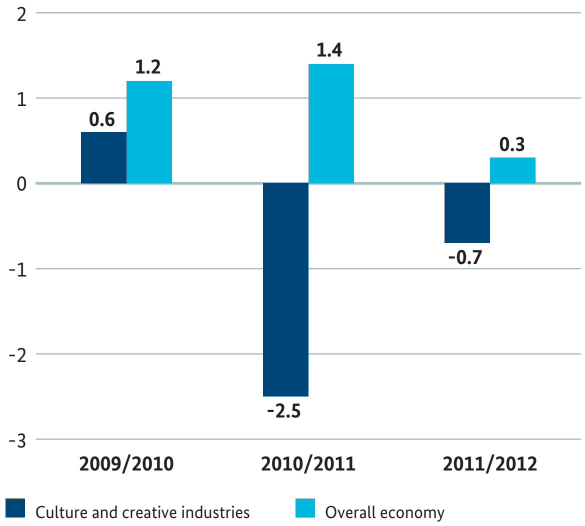
Figure 4.6: Development of number of employees liable to social insurance contributions in the culture and creative industries compared to the overall economy
(change in percentages)



Reading aid: The number of workers liable to social insurance rose by 4.4 percent between 2011 and 2012.

Source: Employment statistics, Federal Employment Agency 2013; own computations ZEW.

Figure 4.7: Development of marginal employment in the culture and creative industries compared to the overall economy
(change in percentages)



Reading aid: The number of marginal employees in the CCI sank by 0.7 percent between 2011 and 2012.

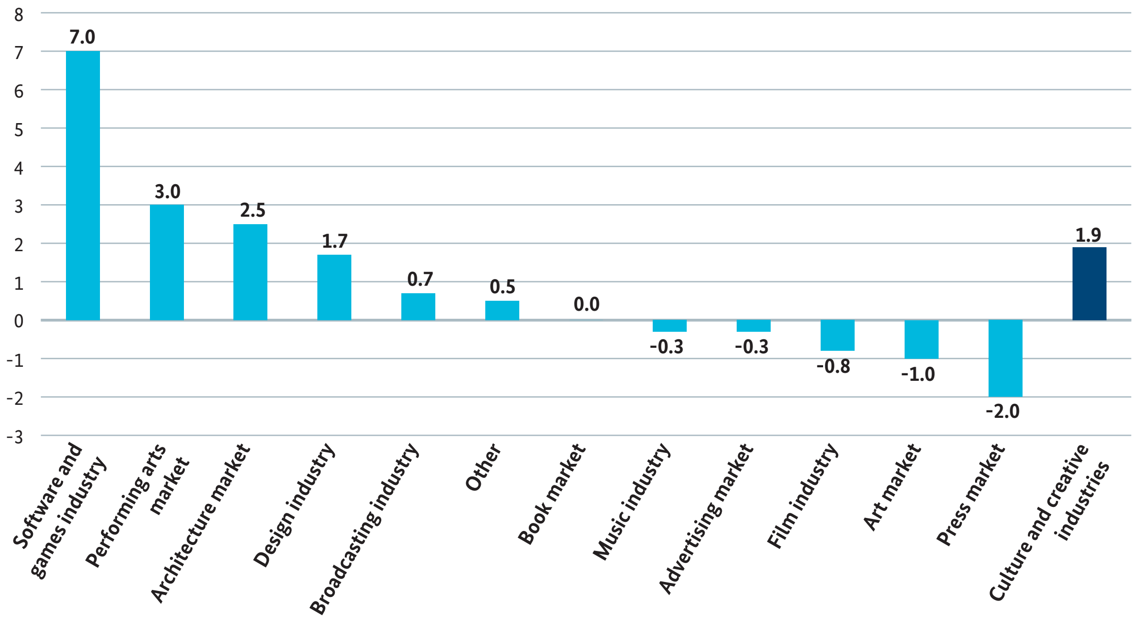
Source: Employment statistics, Federal Employment Agency 2013; own computations ZEW.

Decrease in marginal employment

Even though there was an increase in marginal employment in the overall economy in the period of observation, there was a 2.5 percent decrease in marginal employment as compared to the previous year in the culture and creative industries. In 2012, there was another decrease of 0.7 percent in comparison to the previous year (see Figure 4.7). However, it should be taken into consideration that the proportion of the marginally employed to the dependently employed is significantly higher in the culture and creative industries than in the overal economy. For every marginally employed person, there were 2.1 people in dependent employment. However, there were 3.7 dependently employed people for every one marginally employed persons in the overall economy. The decrease in marginal employment could also mean that a change from marginal to dependent employment is taking place. This is consistent with the positive trend of workers liable to social insurance contributions.

Even though the growth of turnover in the culture and creative industries remained below that of the overall economy during the observation period of 2009 to 2012, the trend in the number of companies kept moving forward at a good pace. Ultimately, there were even higher rates of growth in employment than were even recorded in the overall economy, which was particularly seen in the increase of workers liable to social insurance contributions. However, the large heterogeneity in the cultural and creative industries was reflected in all of the economic indicators. In particular, the

Figure 4.8: Development of employment (self-employed and workers liable to social insurance contributions) in the submarkets of the culture and creative industries from 2009 to 2012
(average annual change 2009–2012* in percentages)



Note: *Values for 2012 are partly based (concerning the turnover tax statistics) on estimations.
Source: Turnover tax statistics, Destatis 2013; Employment statistics, Federal Employment Agency 2013; own computations ZEW.

Reading aid: Employment in the design industry submarket increased by 1.7 percent per year in the period from 2009 to 2012.

software and games, design and performing arts submarkets exhibited above average key figures while other submarkets, like the press, advertising and book markets, still have not completely recovered from the financial crisis and restructuring within the submarkets.

High rates of business start-ups, increases in employment

The rate of new business start-ups (number of new companies as a percentage of existing companies) in the culture and creative industries was 6.1 percent in 2012, much higher than in comparable sectors. The software and games, design and advertising submarkets especially contributed to the start-up activities in the creative and culture industries in 2012.

The Internet gains more importance as a distribution channel for the self-employed and microenterprises

The Internet offers an affordable way to enter the market especially for the self-employed and microenterprises. 19 percent of self-employed persons and microenterprises use the internet exclusively or primarily as their distribution channel. Another 27.3 percent sell their products and services both over the Internet and through traditional channels of distribution. Slightly more than half rely more on traditional distribution channels.

New customer groups and markets open up because of digitization

Above all, the companies of the culture and creative industries see the prospects offered by the Internet and increasing digitization as a way to reach new customer groups (75 percent of companies) and to have easier access to supraregional and international markets (67 percent). Digitization has made it possible for a high degree of mobility and flexibility (86 percent), which allows for the frequent practice of working from home.

Cultural and creative companies primarily rely on social media and open content

Among all of the digital technologies and services, two thirds of cultural and creative businesses rely on social media such as profiles on social networks or their own corporate blogs. In second place, 63 percent of businesses make use of open content such as open software, free texts, pictures, music and films. Geographic independence is fostered by the use of mobile devices. 56 percent of cultural and creative businesses put them to use. However, new revenue and payment models like "mobile payment" and crowdfunding platforms play a small role in the financing of projects and products. Currently, only 15 and nine percent of companies, respectively, made use of these services.

Increased demands on the part of customers and copyright violations are biggest challenges

The companies and self-employed people in the culture and creative industries view the biggest challenge posed by digitization in the increased demands of customers (73 percent), who are well informed about alternative products and services and their prices. Besides this, they see increased copyright violations as a big challenge. Accordingly, companies see a need for improvement to the legal protection of intellectual property in particular and to fiscal environment as well.

Based on the current general economic situation, the assumption can be made that the positive trend in the culture and creative industries will continue in the future. However, the culture and creative industries with its eleven submarkets appears to be a very heterogeneous sector, which is home to both the near industrial manufacturing of software as well as artistic productions. Furthermore, it is characterized by a large number of self-employed people and microenterprises with less than five employees. They face different challenges and their needs are different than those of larger companies. In this respect, the measures taken to support the culture and creative industries should be very differentiated and tailored to the respective submarkets.

Possible economic policy approaches for the promotion of cultural and creative businesses are:

- To facilitate access to financing for young companies, especially if they are experiencing phases of growth.

- To improve the fiscal environment, for example in the form of fiscal research and development funding. This would accommodate the increasing pressure to innovate caused by digitization.

- To strengthen legal protection of intellectual property, because numerous self-employed persons and microenterprises consider this to be the biggest challenge of all.

- To support in particular small businesses and the self-employed with internationalization. Up until now, they have mainly served regional markets and could benefit more from the potential offered by digitization to enter into new markets.

5. Appendix

5.1 Detailed Tables

Table 5.1: Key data on the culture and creative industries in Germany from 2009 to 2012

Category	2009	2010	2011	2012*	Change 2012/2011
No. of companies (in thousands)[1]					
Culture and creative industries (CCI)	238,5	239,5	244,3	246,6	0.94 %
Share of CCI in overall economy	7.61 %	7.57 %	7.60 %	7.58 %	
Turnover (in billion euro)					
Culture and creative industries (CCI)	134,3	137,3	141,0	142,8	1.32 %
Share of CCI in overall economy	2.74 %	2.62 %	2.48 %	2.51 %	
Employment					
No. of employees (in thousands)[2]					
Culture and creative industries (CCI)	961,8	959,9	984,1	1018,8	3.52 %
Share of CCI in overall economy	3.15 %	3.11 %	3.11 %	3.17 %	
No. of employees liable subject to social insurance (in thousands)[3]					
Culture and creative industries (CCI)	723,3	720,4	739,8	772,2	4.37 %
Share of CCI in overall economy	2.64 %	2.60 %	2.61 %	2.67 %	
Self-employed (in thousands)[4]					
Culture and creative industries (CCI)	238,5	239,5	244,3	246,6	0.94 %
Share of CCI in overall economy	7.61 %	7.57 %	7.60 %	7.58 %	
No. of persons in marginal employment (in thousands)[5]					
Culture and creative industries (CCI)	582,1	601,3	602,5	610,0	1.23 %
Share of CCI in overall economy	6.71 %	6.85 %	6.71 %	6.80 %	
No. of marginally self-employed persons (in thousands)[6]					
Culture and creative industries (CCI)	197,1	214,0	224,8	235,0	4.55 %
Share of CCI in overall economy	18.26 %	19.57 %	18.90 %	20.38 %	
No. of marginally employed persons (in thousands)[7]					
Culture and creative industries (CCI)	385,0	387,3	377,8	374,9	-0.74 %
Share of CCI in overall economy	5.07 %	5.04 %	4.85 %	4.80 %	
No. of employed persons in total (in thousands)[2]					
Culture and creative industries (CCI)	1,543,8	1,561,3	1,586,7	1,628,7	2.65 %
Share of CCI in overall economy	3.94 %	3.94 %	3.91 %	3.96 %	
Gross value added (in billions euro)[9]					
Culture and creative industries (CCI)	61,8	62,3	62,4	62,8	0.58%
Share of CCI in GDP	2.60 %	2.49 %	2.39 %	2.35 %	
Gross Domestic Product (GDP)	2,374,2	2,495,0	2,609.9	2,666,4	2.16 %

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Table 5.1: Key data on the culture and creative industries in Germany from 2009 to 2012

Category	2009	2010	2011	2012*	Change 2012/2011
Additional key figures for the culture and creative industries					
Turnover per company (in thousand euro)	563,3	573,3	577,1	579,3	0.38 %
Turnover per worker liable to social insurance (in thousands euro)	185,7	190,6	190,5	185,0	-2.92 %
Turnover per employee (in thousand euro)	139,7	143,1	143,2	140,2	-2.12 %
Workers liable to social insurance per company	3,03	3,01	3,03	3,13	3.40 %
Employees per company	4,03	4,01	4,03	4,13	2.56 %
Gross value added per worker (in thousand euro)	64,2	64,8	63,4	61,6	-2.84 %
Portion of self-employed to employed persons	24.80 %	24.95 %	24.82 %	24.20 %	

Note: *Data for 2012 is based partly on own estimations and preliminary official results. Estimates take the development rates for the previous years, the economic statistics within service sector for 2012 and employment statistics for 2012 into consideration.

1 Taxable entrepreneurs with an annual income of at least 17,500 euros.

2 Employees including taxable entrepreneur with an annual income of at least 17,500 euros and employees liable to social insurance contributions.

3 Employees liable to social insurance contributions in full and part time employment, but not marginally employed persons.

4 The number of self-employed people corresponds to the number of taxable entrepreneurs with an annual income of at least 17,500 euros.

5 Marginally employment includes the marginally self-employed and persons in marginal employment.

6 Marginal self-employment includes freelancers and self-employed persons with less than 17,500 euros annual income based on the microcensus.

7 Marginally employed persons (persons in marginal low income and temporary employment) is based on employment statistics from the Federal Employment Agency (cut-off date: 30.06.).

8 Total employment includes all self-employed and dependently employed persons including marginally employed and marginally self-employed persons. Differences with last year's monitoring reports could arise because of variations in the delimitation and definition of the various employment groups.

9 Gross value added based on reports of the national accounts and includes the WZ-2008 2-digit selections: 58, 59-60, 73, 90-92. Data for 2012 estimated.

Source: Destatis 2013; Federal Employment Agency 2013; own computations ZEW.

Table 5.2: Structure of total employment in the culture and creative industries from 2009 to 2012

	2009		2010		2011		2012*	
Category	Number	Share (in %)	Number	Share (in %)	Number	Share (in %)	Number	Share (in %)
Type of employment								
I) Freelancers and self-employed[1] (with annual income of at least 17.500 euros)	238,479	15.4	239,534	15.3	244,290	15.4	246,578	15.1
II) Dependent employment[2] (liable to social insurance)	723,289	46.8	720,402	46.1	739,841	46.6	772,191	47.4
Employees not including marginal employment	**961,768**	**62.3**	**959,936**	**61.5**	**984,131**	**62.0**	**1,018,769**	**62.5**
Additionally: marginal employment								
III) Marginally self-employed persons[3]	197,081	12.8	214,042	13.7	224,790	14.2	235,011	14.4
IV) Marginally employed persons[4]	384,991	24.9	387,295	24.8	377,759	23.8	374,950	23.0
Marginal employment in total	**582,072**	**37.7**	**601,337**	**38.5**	**602,550**	**38.0**	**609,961**	**37.5**
Employment in total	**1,543,841**	**100.0**	**1,561,273**	**100.0**	**1,586,681**	**100.0**	**1,628,730**	**100.0**

Note: *Data for 2012 is based partly on own estimations and preliminary official results.

1 Taxable entrepreneurs with an annual income of at least 17.500 euros.

2 Employees liable to social insurance contributions in full and part time employment. but not marginally employed persons.

3 Marginal self-employment includes freelancers and self-employed persons with an annual income of less than 17.500 euros based on the microcensus.

4 Marginally employed persons (marginal low-paid and temporary employment) based on employment statistics from the Federal Employment Agency (cut-off date: 30.06.).

Source: Destatis 2013; Federal Employment Agency 2013; own computations ZEW.

Table 5.3: Culture and creative industries (CCI) according to its submarkets: no. of companies, turnover, employees and dependent and marginal employees 2009 to 2012

Submarket	Category	2009	2010	2011	2012*
1. Music industry	companies	13,862	13,723	13,894	13,858
2. Book market	companies	16,232	16,481	16,702	16,942
3. Art market	companies	13,763	13,464	13,422	13,208
4. Film industry	companies	18,312	17,956	18,199	18,043
5. Broadcasting industry	companies	17,853	17,751	18,128	18,186
6. Performing arts market	companies	14,993	15,402	15,982	16,448
7. Design industry	companies	48,332	50,111	52,439	54,401
8. Architecture market	companies	39,956	40,159	40,702	41,018
9. Press market	companies	34,317	33,564	33,498	32,974
10. Advertising market	companies	37,082	35,330	34,577	33,158
11. Software and games industry	companies	27,018	28,527	30,413	32,048
12. Other	companies	7,353	7,506	7,736	7,915
With double counting	companies	289,073	289,974	295,692	298,198
Double WZ	companies	50,594	50,440	51,402	51,620
CCI in total	companies	238,479	239,534	244,290	246,578
Overall economy	companies	3,135,542	3,165,286	3.,215,095	3,251,527
Share of CCI in overall economy		*7.61 %*	*7.57 %*	*7.60 %*	*7.58 %*
1. Music industry	turnover in million euro	6,307	6,270	6,639	6,931
2. Book market	turnover in million euro	14,848	14,182	14,255	14,148
3. Art market	turnover in million euro	2,146	2,332	2,341	2,468
4. Film industry	turnover in million euro	8,734	8,925	9,283	9,334
5. Broadcasting industry	turnover in million euro	7,445	7,671	7,905	7,341
6. Performing arts market	turnover in million euro	3,316	3,478	3,742	3,938
7. Design industry	turnover in million euro	17,595	18,243	18,353	18,767
8. Architecture market	turnover in million euro	7,967	8,031	8,708	9,092
9. Press market	turnover in million euro	31,341	31,398	31,711	31,315
10. Advertising market	turnover in million euro	25,508	25,714	24,929	24,855
11. Software and games industry	turnover in million euro	24,296	26,496	28,442	30,124
12. Other	turnover in million euro	1,578	1,588	1,652	1,718
With double counting	turnover in million euro	151,080	154,327	157,960	160,031
Double WZ	turnover in million euro	16,751	16,993	16,990	17,198
CCI in total	turnover in million euro	134,329	137,333	140,970	142,833
Overall economy	turnover in million euro	4,897,938	5,240,997	5,687,179	6,064,612
Share of CCI in overall economy		*2.74 %*	*2.62 %*	*2.48 %*	*2.36 %*
1. Music industry	employees	47,036	46,771	46,841	46,606
2. Book market	employees	79,379	77,405	79,966	79,290
3. Art market	employees	19,515	19,243	18,994	18,958
4. Film industry	employees	61,753	60,392	60,804	60,348
5. Broadcasting industry	employees	39,537	39,444	40,288	40,433
6. Performing arts market	employees	32,416	33,282	34,210	35,438
7. Design industry	employees	126,101	126,285	128,834	132,829
8. Architecture market	employees	100,425	102,213	105,324	108,151

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Table 5.3: Culture and creative industries (CCI) according to its submarkets: no. of companies, turnover, employees and dependent and marginal employees 2009 to 2012

Submarket	Category	2009	2010	2011	2012*
9. Press market	employees	169,841	164,615	162,284	160,035
10. Advertising market	employees	142,077	137,700	139,587	140,665
11. Software and games industry	employees	244,615	252,382	269,294	299,933
12. Other	employees	15,370	15,023	15,196	15,579
With double counting	employees	1,078,065	1,074,755	1,101,620	1,138,264
Double WZ	employees	116,297	114,819	117,489	119,495
CCI in total	employees	961,768	959,936	984,131	1,018,769
Overall economy	employees	30,515,638	30,875,773	31,596,438	32,172,115
Share of CCI in overall economy		3.15 %	3.11 %	3.11 %	3.17 %
1. Music industry	dependent employees	33,174	33,048	32,947	32,748
2. Book market	dependent employees	63,147	60,924	63,264	62,348
3. Art market	dependent employees	5,752	5,779	5,572	5,750
4. Film industry	dependent employees	43,441	42,436	42,605	42,305
5. Broadcasting industry	dependent employees	21,684	21,693	22,160	22,247
6. Performing arts market	dependent employees	17,423	17,880	18,228	18,990
7. Design industry	dependent employees	77,769	76,174	76,395	78,428
8. Architecture market	dependent employees	60,469	62,054	64,622	67,133
9. Press market	dependent employees	135,524	131,051	128,786	127,061
10. Advertising market	dependent employees	104,995	102,370	105,010	107,507
11. Software and games industry	dependent employees	217,597	223,855	238,881	267,885
12. Other	dependent employees	8,017	7,517	7,460	7,664
With double counting	dependent employees	788,992	784,781	805,928	840,066
Double WZ	dependent employees	65,703	64,379	66,087	67,875
CCI in total	dependent employees	723,289	720,402	739,841	772,191
Overall economy	dependent employees	27,380,096	27,710,487	28,381,343	28,920,588
Share of CCI in overall economy		2.64 %	2.60 %	2.61 %	2.67 %
1. Music industry	marginal employees	12,203	12,165	12,209	12,622
2. Book market	marginal employees	21,594	21,350	21,324	20,634
3. Art market	marginal employees	4,704	4,595	4,466	4,448
4. Film industry	marginal employees	29,345	28,247	26,789	26,452
5. Broadcasting industry	marginal employees	2,869	2,921	2,564	2,446
6. Performing arts market	marginal employees	12,952	13,249	13,696	14,550
7. Design industry	marginal employees	67,405	69,414	66,470	64,747
8. Architecture market	marginal employees	18,466	18,420	18,708	18,713
9. Press market	marginal employees	134,682	132,900	131,123	131,143
10. Advertising market	marginal employees	123,524	128,346	120,401	116,099
11. Software and games industry	marginal employees	22,154	22,532	23,881	25,454
12. Other	marginal employees	1,945	1,890	1,900	1,786
With double counting	marginal employees	451,843	456,030	443,531	439,094
Double WZ	marginal employees	66,851	68,735	65,772	64,144
CCI in total	marginal employees	384,991	387,295	377,759	374,950
Overall economy	marginal employees	7,590,383	7,683,964	7,789,639	7,813,502
Share of CCI in overall economy		5.07 %	5,04 %	4.85 %	4.80 %

Note: *Estimates concerning the number of companies and turnover, as well as the number of self-employed persons in declared employment (corresponds to the number of companies). The marginally self-employed cannot be identified separately for each of the submarkets.

Source: Turnover Tax Statistics, Destatis 2013; employment statistics, Federal Employment Agency 2013; own computations ZEW.

Table 5.4: Number of companies in the culture and creative industries according to the submarkets and industry subsectors from 2009 to 2012

Submarket / WZ-2008	Industry Subsector	2009	2010	2011	2012*
1. Music industry					
90.03.1	Own-account composers, etc.	2,656	2,643	2,683	2,688
90.01.2	Ballet companies, orchestras, bands and choirs	1,828	1,661	1,666	1,556
59.20.1	Sound-recording studios, etc.	479	539	583	638
59.20.2	Publishing of sound recordings	395	390	383	377
59.20.3	Publishing of printed music	1,200	1,149	1,134	1,095
90.04.1	Organization of theater performances and concerts	1,414	1,400	1,378	1,361
90.04.2	Operation of opera houses, theater and concert halls, etc.	228	228	228	228
90.02	Support activities to performing arts	2,024	2,109	2,249	2,352
47.59.3	Retail sale of musical instruments, etc.	2,235	2,142	2,087	2,007
47.63	Retail sale of music and video recordings, etc.	238	282	306	343
32.20	Manufacture of musical instruments	1,165	1,180	1,197	1,213
	Submarket total	**13,862**	**13,723**	**13,894**	**13,858**
2. Book market					
90.03.2	Own-account writers	6,616	6,941	7,146	7,431
74.30.1	Translation activities	1,584	1,625	1,718	1,776
58.11	Book publishing	2,193	2,220	2,243	2,269
47.61.	Retail sale of books	4,290	4,195	4,137	4,054
47.79.2	Retail sale in second-hand bookstores	479	459	448	431
18.14	Binding and related services	1,070	1,041	1,010	980
	Submarket total	**16,232**	**16,481**	**16,702**	**16,942**
3. Art market					
90.03.3	Own-account visual artists	8,883	8,814	8,932	8,925
47.78.3	Retail sale of art, etc.	1,797	1,712	1,685	1,619
91.02	Museums activities	890	823	764	700
47.79.1	Retail sale of antiques. etc.	2,193	2,115	2,041	1,964
	Submarket total	**13,763**	**13,464**	**13,422**	**13,208**
4. Film industry					
90.01.4	Own-account stage, motion picture, radio and TV artists, etc.	8,455	8,710	9,180	9,507
59.11	Motion picture, video and TV program production activities	5,785	5,253	5,118	4,718
59.12	Motion picture, video and TV program post-production	696	767	851	926
59.13	Motion picture, video and TV program distribution	929	865	792	725
59.14	Motion picture projection	888	878	865	854
47.63	Retail sale of music and video recordings, etc.	238	282	306	343
77.22	Renting of video tapes and disks	1,321	1,201	1,087	969
	Submarket total	**18,312**	**17,956**	**18,199**	**18,043**
5. Broadcasting industry					
90.03.5	Own-account journalists and press photographers	17,500	17,401	17,782	17,843
60.10	Radio broadcasting	266	262	255	250
60.20	Television programming and broadcasting	87	88	91	93
	Submarket total	**17,853**	**17,751**	**18,128**	**18,186**

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Table 5.4: Number of companies in the culture and creative industries according to the submarkets and industry subsectors from 2009 to 2012

Submarket / WZ-2008	Industry Subsector	2009	2010	2011	2012*
6. Performing arts market					
90.01.4	Own-account stage, motion picture, radio and TV artists, etc.	8,455	8,710	9,180	9,507
90.01.3	Own-account performers and circus groups	564	573	546	543
90.01.1	Theater ensembles	126	124	128	128
90.04.1	Organization of theater performances and concerts	1,414	1,400	1,378	1,361
90.04.2	Operation of opera houses, theater and concert halls, etc.	228	228	228	228
90.04.3	Operation of variety theaters and cabarets	196	178	168	153
90.02	Support activities to performing arts	2,024	2,109	2,249	2,352
85.52	Cultural education	1,986	2,080	2,105	2,176
	Submarket total	**14,993**	**15,402**	**15,982**	**16,448**
7. Design industry					
74.10.1	Industrial, product and fashion designers	1,606	2,164	2,586	3,099
74.10.2	Graphics and communications designers	5,506	7,269	8,725	10,386
74.10.3	Interior decorators	8,017	7,679	7,773	7,579
71.11.2	Consulting architectural activities in interior design	2,675	3,185	3,577	4,048
73.11	Advertising agencies (50 % share)	18,060	17,125	16,702	15,938
32.12	Manufacture of jewelry and related articles	3,777	3,706	3,661	3,599
74.20.1	Photographers	8,691	8,983	9,415	9,754
	Submarket total	**48,332**	**50,111**	**52,439**	**54,401**
8. Architecture market					
71.11.1	Consulting architectural activities in building construction	28,140	27,587	27,554	27,174
71.11.2	Consulting architectural activities in interior design	2,675	3,185	3,577	4,048
71.11.3	Consulting architectural activities in town, city and regional planning	4,664	4,828	4,990	5,153
71.11.4	Consulting architectural activities in landscape architecture	3,072	3,088	3,108	3,125
90.03.4	Own-account restorers	1,405	1,471	1,473	1,518
	Submarket total	**39,956**	**40,159**	**40,702**	**41,018**
9. Press market					
90.03.5	Own-account journalists and press photographers	17,500	17,401	17,782	17,843
63.91	News agency activities	995	989	988	984
58.12	Publishing of directories and mailing lists	211	200	217	215
58.13	Publishing of newspapers	831	829	826	824
58.14	Publishing of journals and periodicals	1,848	1,782	1,741	1,683
58.19	Other publishing activities (without software)	3,396	3,144	3,053	2,855
47.62	Retail sale of newspapers and stationery	9,536	9,219	8,891	8,570
	Submarket total	**34,317**	**33,564**	**33,498**	**32,974**
10. Advertising market					
73.11	Advertising agencies	36,120	34,250	33,404	31,875
73.12	Media representation	962	1,080	1,173	1,283
	Submarket total	**37,082**	**35,330**	**34,577**	**33,158**

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Table 5.4: Number of companies in the culture and creative industries according to the submarkets and industry subsectors from 2009 to 2012

Submarket / WZ-2008	Industry Subsector	2009	2010	2011	2012*
11. Software and games industry					
58.21	Publishing of computer games	392	354	336	305
63.12	Web portals	190	271	341	418
62.01.1	Web-page design and programming	7,457	8,256	9,037	9,830
62.01.9	Other software development	18,625	19,172	20,165	20,861
58.29	Other software publishing	354	474	534	634
	Submarket total	**27,018**	**28,527**	**30,413**	**32,048**
12. Other					
91.01	Libraries and archives	111	100	101	94
91.03	Operation of historical sites and buildings and similar visitor attractions	104	95	95	89
91.04	Botanical and zoological gardens and nature reserves	262	265	260	260
74.30.2	Interpretation activities	6,006	6,237	6,456	6,683
74.20.2	Photographic laboratories	518	466	466	431
32.11	Striking of coins	49	54	54	57
32.13	Manufacture of imitation jewellery	303	289	304	300
	Other total	**7,353**	**7,506**	**7,736**	**7,915**
	With double counting	289,073	289,974	295,692	298,198
	Double WZ	50,594	50,440	51,402	51,620
Culture and creative industries no. 1–12 (without double counting)		**238,479**	**239,534**	**244,290**	**246,578**
Share of submarkets in the culture and creative industries		7.61 %	7.57 %	7.60 %	7.58 %

Note: *Data for 2012 estimated, based on previous year's development and economic statistics.

Source: Turnover tax statistics, Destatis 2013, own computations ZEW.

Table 5.5: Turnover (in million euro) in the culture and creative industries according to the submarkets and industry subsectors from 2009 to 2012

Submarket/WZ-2008	Industry Subsector	2009	2010	2011	2012*
1. Music industry					
90.03.1	Own-account composers, etc.	261	261	274	279
90.01.2	Ballet companies, orchestras, bands and choirs	225	210	239	239
59.20.1	Sound-recording studios , etc.	93	109	125	128
59.20.2	Publishing of sound recordings	1,215	989	1,016	1,045
59.20.3	Publishing of printed music	587	549	571	587
90.04.1	Organization of theater performances and concerts	1,437	1,509	1,644	1,738
90.04.2	Operation of opera houses, theater and concert halls, etc.	361	389	403	427
90.02	Support activities to performing arts	379	402	440	468
47.59.3	Retail sale of musical instruments, etc.	1,105	1,175	1,207	1,265
47.63	Retail sale of music and video recordings, etc.	113	126	140	154
32.20	Manufacture of musical instruments	532	551	579	601
	Submarket total	**6,307**	**6,270**	**6,639**	**6,931**

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Table 5.5: Turnover (in million euro) in the culture and creative industries according to the submarkets and industry subsectors from 2009 to 2012

Submarket/WZ-2008	Industry Subsector	2009	2010	2011	2012*
2. Book market					
90.03.2	Own-account writers	522	552	568	593
74.30.1	Translation activities	271	274	295	316
58.11	Book publishing	9,590	8,848	8,945	8,784
47.61.	Retail sale of books	3,667	3,600	3,506	3,430
47.79.2	Retail sale in second-hand bookstores	66	72	70	74
18.14	Binding and related services	732	836	871	952
	Submarket total	**14,848**	**14,182**	**14,255**	**14,148**
3. Art market					
90.03.3	Own-account visual artists	730	750	753	767
47.78.3	Retail sale of art, etc.	594	660	742	813
91.02	Museums activities	412	518	414	450
47.79.1	Retail sale of antiques. etc.	409	404	432	439
	Submarket total	**2,146**	**2,332**	**2,341**	**2,468**
4. Film industry					
90.01.4	Own-account stage, motion picture, radio and TV artists, etc.	720	752	806	846
59.11	Motion picture, video and TV program production	4,447	4,489	4,458	4,472
59.12	Motion picture, video and TV program post-production	124	153	164	165
59.13	Motion picture, video and TV program distribution	1,667	1,815	1,993	1,999
59.14	Motion picture projection	1,315	1,276	1,419	1,424
47.63	Retail sale of music and video recordings, etc.	113	126	140	154
77.22	Renting of video tapes and disks	348	315	302	276
	Submarket total	**8,734**	**8,925**	**9,283**	**9,334**
5. Broadcasting industry					
90.03.5	Own-account journalists and press photographers	1,208	1,219	1,258	1,278
60.10	Radio broadcasting	1,004	965	962	924
60.20	Television programming and broadcasting	5,233	5,487	5,686	5,140
	Submarket total	**7,445**	**7,671**	**7,905**	**7,341**
6. Performing arts market					
90.01.4	Own-account stage, motion picture, radio and TV artists, etc.	720	752	806	846
90.01.3	Own-account performers and circus groups	51	55	60	64
90.01.1	Theater ensembles	53	54	55	56
90.04.1	Organization of theater performances and concerts	1,437	1,509	1,644	1,738
90.04.2	Operation of opera houses, theater and concert halls, etc.	361	389	403	427
90.04.3	Operation of variety theaters and cabarets	81	78	82	82
90.02	Support activities to performing arts	379	402	440	468
85.52	Cultural education	235	239	252	259
	Submarket total	**3,316**	**3,478**	**3,742**	**3,938**

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Table 5.5: Turnover (in million euro) in the culture and creative industries according to the submarkets and industry subsectors from 2009 to 2012

Submarket/WZ-2008	Industry Subsector	2009	2010	2011	2012*
7. Design industry					
74.10.1	Industrial, product and fashion designers	237	327	419	449
74.10.2	Graphics and communications designers	495	627	749	803
74.10.3	Interior decorators	1,012	981	1,040	1,115
71.11.2	Consulting architectural activities in interior design	401	485	594	620
73.11	Advertising agencies (50% share)	12,132	12,112	11,704	11,668
32.12	Manufacture of jewelry and related articles	2,216	2,531	2,686	2,948
74.20.1	Photographers	1,102	1,179	1,160	1,163
	Submarket total	**17,595**	**18,243**	**18,353**	**18,767**
8. Architecture market					
71.11.1	Consulting architectural activities in building construction	5,821	5,765	6,126	6,390
71.11.2	Consulting architectural activities in interior design	401	485	594	620
71.11.3	Consulting architectural activities in town, city and regional planning	1,022	1,066	1,239	1,292
71.11.4	Consulting architectural activities in landscape architecture	571	543	565	589
90.03.4	Own-account restorers	151	171	183	201
	Submarket total	**7,967**	**8,031**	**8,708**	**9,092**
9. Press market					
90.03.5	Own-account journalists and press photographers	1,208	1,219	1,258	1,278
63.91	Publishing of directories and mailing lists	516	513	522	609
58.12	Publishing of directories and mailing lists	1,369	1,415	1,762	1,730
58.13	Publishing of newspapers	10,930	11,183	11,501	11,294
58.14	Publishing of journals and periodicals	9,918	9,933	9,829	9,652
58.19	Other publishing activities (without software)	3,996	3,785	3,458	3,396
47.62	Retail sale of newspapers and stationery	3,403	3,351	3,381	3,356
	Submarket total	**31,341**	**31,398**	**31,711**	**31,315**
10. Advertising market					
73.11	Advertising agencies	24,264	24,223	23,407	23,337
73.12	Media representation	1,244	1,491	1,522	1,518
	Submarket total	**25,508**	**25,714**	**24,929**	**24,855**
11. Software and games industry					
58.21	Publishing of computer games	4,135	3,040	2,327	2,276
63.12	Web portals	324	477	559	575
62.01.1	Web-page design and programming	2,530	2,732	3,055	3,266
62.01.9	Other software development	17,034	19,818	21,997	23,515
58.29	Other software publishing	272	429	504	493
	Submarket total	**24,296**	**26,496**	**28,442**	**30,124**

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Table 5.5: Turnover (in million euro) in the culture and creative industries according to the submarkets and industry subsectors from 2009 to 2012

Submarket/WZ-2008	Industry Subsector	2009	2010	2011	2012*
12. Other					
91.01	Libraries and archives	63	66	48	44
91.03	Operation of historical sites and buildings and similar visitor attractions	39	32	36	33
91.04	Botanical and zoological gardens and nature reserves	244	267	283	303
74.30.2	Interpretation activities	428	462	495	529
74.20.2	Photographic laboratories	567	518	503	504
32.11	Striking of coins	128	118	159	167
32.13	Manufacture of imitation jewelry	110	125	128	139
	Other total	**1,578**	**1,588**	**1,652**	**1,718**
	With double counting	151,080	154,327	157,960	160,031
	Double WZ	16,751	16,993	16,990	17,198
Culture and creative industries No. 1.–12. (without double counting)		**134,329**	**137,333**	**140,970**	**142,833**
Share of submarkets in the culture and creative industries		2.74 %	2.62 %	2.48 %	2.36 %

Note: *Data for 2012 estimated, based on previous year's development and economic statistics.
Source: Turnover tax statistics, Destatis 2013, own computations ZEW.

Table 5.6: Number of employees in the culture and creative industries according to the submarkets and industry subsectors from 2009 to 2012

Submarket/WZ-2008	Industry Subsector	2009	2010	2011	2012*
1. Music industry					
90.03.1	Own-account composers, etc.	2,839	2,818	2,863	2,873
90.01.2	Ballet companies, orchestras, bands and choirs	7,352	6,869	6,379	5,692
59.20.1	Sound-recording studios , etc.	1,392	1,408	1,466	1,555
59.20.2	Publishing of sound recordings	2,680	2,543	2,670	2,593
59.20.3	Publishing of printed music	2,937	3,202	3,093	2,689
90.04.1	Organization of theater performances and concerts	6,388	6,392	6,422	6,648
90.04.2	Operation of opera houses, theater and concert halls, etc.	3,499	3,546	3,605	3,657
90.02	Support activities to performing arts	5,543	5,824	6,166	6,609
47.59.3	Retail sale of musical instruments, etc.	6,127	6,168	6,239	6,287
47.63	Retail sale of music and video recordings, etc.	1,647	1,678	1,636	1,632
32.20	Manufacture of musical instruments	6,632	6,323	6,302	6,371
	Submarket total	**47,036**	**46,771**	**46,841**	**46,606**
2. Book market					
90.03.2	Own-account writers	6,967	7,296	7,519	7,808
74.30.1	Translation activities	4,704	4,711	4,978	5,136
58.11	Book publishing	26,017	24,951	25,533	25,344
47.61.	Retail sale of books	28,822	28,264	30,353	29,563
47.79.2	Retail sale in second-hand bookstores	817	780	766	756
18.14	Binding and related services	12,052	11,403	10,817	10,682
	Submarket total	**79,379**	**77,405**	**79,966**	**79,290**

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Table 5.6: Number of employees in the culture and creative industries according to the submarkets and industry subsectors from 2009 to 2012

Submarket/WZ-2008	Industry Subsector	2009	2010	2011	2012*
3. Art market					
90.03.3	Own-account visual artists	10,214	10,158	10,256	10,291
47.78.3	Retail sale of art, etc.	3,609	3,599	3,355	3,319
91.02	Museums activities	2,100	2,029	1,970	1,963
47.79.1	Retail sale of antiques. etc.	3,592	3,457	3,413	3,384
	Submarket total	**19,515**	**19,243**	**18,994**	**18,958**
4. Film industry					
90.01.4	Own-account stage, motion picture, radio and TV artists, etc.	8,988	9,268	9,721	10,097
59.11	Motion picture, video and TV program production	28,571	27,783	27,868	27,990
59.12	Motion picture, video and TV program post-production	5,951	5,708	5,926	5,486
59.13	Motion picture, video and TV program distribution	3,439	3,316	3,189	2,959
59.14	Motion picture projection	9,174	8,961	8,977	9,000
47.63	Retail sale of music and video recordings, etc.	1,647	1,678	1,636	1,632
77.22	Renting of video tapes and disks	3,983	3,678	3,487	3,183
	Submarket total	**61,753**	**60,392**	**60,804**	**60,348**
5. Broadcasting industry					
90.03.5	Own-account journalists and press photographers	18,455	18,273	18,646	18,742
60.10	Radio broadcasting	13,776	13,782	13,937	13,464
60.20	Television programming and broadcasting	7,307	7,388	7,705	8,227
	Submarket total	**39,537**	**39,444**	**40,288**	**40,433**
6. Performing arts market					
90.01.4	Own-account stage, motion picture, radio and TV artists, etc.	8,988	9,268	9,721	10,097
90.01.3	Own-account performers and circus groups	1,294	1,283	1,271	1,097
90.01.1	Theater ensembles	1,243	1,331	1,217	1,205
90.04.1	Organization of theater performances and concerts	6,388	6,392	6,422	6,648
90.04.2	Operation of opera houses, theater and concert halls, etc.	3,499	3,546	3,605	3,657
90.04.3	Operation of variety theaters and cabarets	932	943	927	921
90.02	Support activities to performing arts	5,543	5,824	6,166	6,609
85.52	Cultural education	4,529	4,695	4,881	5,204
	Submarket total	**32,416**	**33,282**	**34,210**	**35,438**
7. Design industry					
74.10.1	Industrial, product and fashion designers	3,341	4,248	4,886	5,776
74.10.2	Graphics and communications designers	8,360	10,356	12,270	14,600
74.10.3	Interior decorators	10,599	10,476	10,697	10,459
71.11.2	Consulting architectural activities in interior design	4,154	4,754	5,414	6,049
73.11	Advertising agencies (50% share)	67,623	65,084	65,880	66,061
32.12	Manufacture of jewelry and related articles	14,858	13,849	11,676	11,573
74.20.1	Photographers	17,166	17,518	18,011	18,313
	Submarket total	**126,101**	**126,285**	**128,834**	**132,829**

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Table 5.6: Number of employees in the culture and creative industries according to the submarkets and industry subsectors from 2009 to 2012

Submarket/WZ-2008	Industry Subsector	2009	2010	2011	2012*
8. Architecture market					
71.11.1	Consulting architectural activities in building construction	74,905	75,523	77,504	79,639
71.11.2	Consulting architectural activities in interior design	4,154	4,754	5,414	6,049
71.11.3	Consulting architectural activities in town, city and regional planning	11,405	11,653	12,058	11,886
71.11.4	Consulting architectural activities in landscape architecture	7,056	7,338	7,404	7,582
90.03.4	Own-account restorers	2,905	2,945	2,944	2,995
	Submarket total	**100,425**	**102,213**	**105,324**	**108,151**
9. Press market					
90.03.5	Own-account journalists and press photographers	18,455	18,273	18,646	18,742
63.91	Publishing of directories and mailing lists	9,131	8,917	9,468	9,724
58.12	Publishing of directories and mailing lists	5,102	5,071	4,359	4,295
58.13	Publishing of newspapers	52,485	50,322	48,388	48,264
58.14	Publishing of journals and periodicals	43,704	41,483	40,835	38,853
58.19	Other publishing activities (without software)	11,619	11,319	11,618	11,308
47.62	Retail sale of newspapers and stationery	29,345	29,230	28,970	28,849
	Submarket total	**169,841**	**164,615**	**162,284**	**160,035**
10. Advertising market					
73.11	Advertising agencies	135,245	130,168	131,759	132,121
73.12	Media representation	6,832	7,532	7,828	8,544
	Submarket total	**142,077**	**137,700**	**139,587**	**140,665**
11. Software and games industry					
58.21	Publishing of computer games	1,194	1,520	1,838	1,944
63.12	Web portals	2,309	3,578	5,176	6,999
62.01.1	Web-page design and programming	25,588	29,573	34,664	38,655
62.01.9	Other software development	202,997	202,298	209,664	231,540
58.29	Other software publishing	12,527	15,413	17,952	20,795
	Submarket total	**244,615**	**252,382**	**269,294**	**299,933**
12. Other					
91.01	Libraries and archives	1,032	995	993	937
91.03	Operation of historical sites and buildings and similar visitor attractions	221	210	222	222
91.04	Botanical and zoological gardens and nature reserves	773	775	792	816
74.30.2	Interpretation activities	6,421	6,651	6,933	7,265
74.20.2	Photographic laboratories	5,622	5,070	4,880	4,936
32.11	Striking of coins	465	467	482	515
32.13	Manufacture of imitation jewelry	836	856	893	888
	Other total	**15,370**	**15,023**	**15,196**	**15,579**
	With double counting	1,078,065	1,074,755	1,101,620	1,138,264
	Double WZ	116,297	114,819	117,489	119,495
Culture and creative industries no. 1–12 (without double counting)		**961,768**	**959,936**	**984,131**	**1,018,769**
Share of submarkets in the culture and creative industries		3.15 %	3.11 %	3.11 %	3.17 %

Note: *Data for 2012 estimated (number of self-employed), based on the previous year's developmental and economic statistics.

Source: Turnover tax statistics, Destatis 2013; employment statistics, Federal Employment Agency 2013, own calculations ZEW.

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