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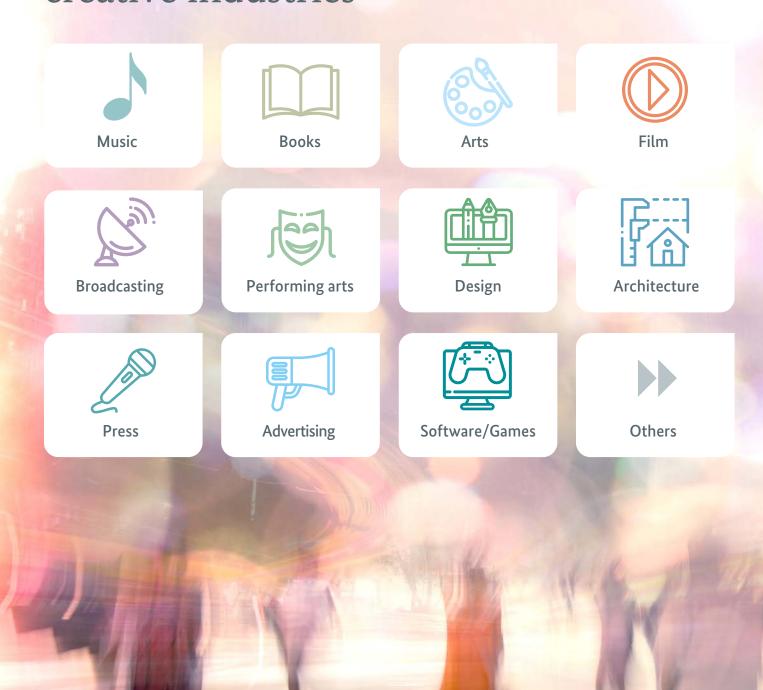
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# About the monitoring process

On behalf of the Federal Ministry for Economic Affairs and Energy, Goldmedia GmbH, Hamburg Media School (HMS) and Prof rer. oec. Rüdiger Wink (HTWK Leipzig) have assessed the key economic indicators of the cultural and creative industries for the purpose of compiling the 2020 Cultural and Creative Industries Monitoring Report.

The present study is an update of the annual monitoring report which looks at the state and the prospects of the cultural and creative industries in Germany each year. For reasons of continuity, the research community has relied on existing data and methods to ensure coherence with the studies of previous years. The present publication is the summary of the report and was published in October 2020. The unabridged version is to be released in November 2020.

# Submarkets of the cultural and creative industries



# Key facts for the cultural and creative industries in 2019

**€174.1**billion turnover

299,467
Persons in marginal employment

599,511
Persons in marginal (self-)employment

3.1%
Share in GDP

€106.4

billion

gross value added

**€140,872**Turnover

per core worker

1,235,767

1,835,278
Total workforce

€86,099
Gross value added
per core worker

4.78
Core workers per business

976,977
Employees subject to social security contributions

258,790
Rusinesses

300,044
Self-employed persons with mini-jobs

**€672,688**Turnover per business

Up to -24%
Turnover forecast 2020\*

20.9% Share of self-employed persons

(in core workforce)

••••

# Key data on the cultural and creative industries in 2019

Turnover, businesses, workforce, gross value added, 2020 forecast

Key economic data on the cultural and creative industries in 2019

Turnover broken down by submarket (in € billion, 2019)

50.2

Software/Games

**30.0** Press

29.6

Total turnover:

€174.1 BN

20.9
Design

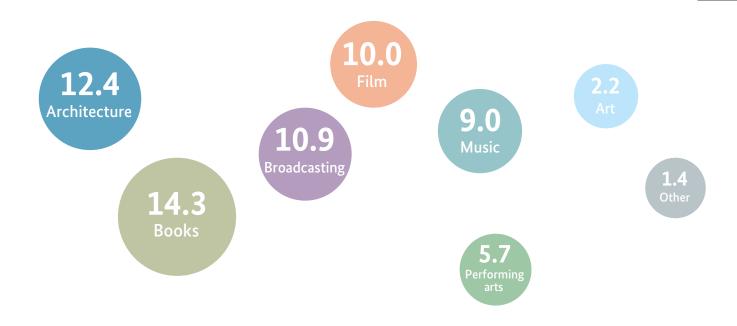
Gross value added:

€106.4 BN

Share in GDP:

3.1%

Source: In-house calculations by Goldmedia; based on: Destatis 2020a,c. Image by: Joyce McCown/Unsplash. Total numbers do not correspond to total of individual submarkets as these partly overlap.

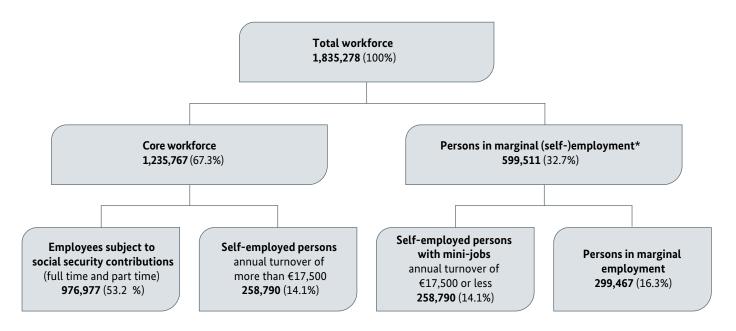


# Employment in the cultural and creative industries in 2019

Around 1.8 million people worked in Germany's cultural and creative industries in 2019. The majority were employees subject to social security contributions (53%), 14% worked as freelancers or were

self-employed (annual turnover of more than €17,500). 16% were persons in marginal employment or self-employed persons with mini-jobs (annual turnover of €17,500 or less).

### Cultural and creative industries workforce by type of employment in 2019



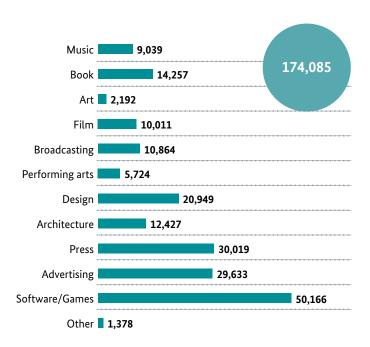
Source: Federal Employment Agency 2020; in-house calculations by Goldmedia, \*persons in marginal (self-)employment include persons in marginal employment and, in deviation from previous studies, self-employed persons with mini-jobs. The category of 'marginally self-employed persons', which is based on the Federal Statistical Office's microcensus, is no longer used. Discrepancies possible due to rounding.

# Cultural and creative industries submarkets in 2019: Key economic indicators

In terms of turnover, the software/games industry was by far the largest submarket of the German cultural and creative industries in 2019. It generated more than €50 billion – around one quarter of the turnover of the entire sector – and also had the highest gross value added. The press and advertising market came in second and third, with around €30 billion in turnover each.

At 60,000, the design industry has the highest number of businesses (including sole proprietorships), followed by the software/games industry and the architecture market. This corroborates the assumption that a large number of self-employed persons work in the design industry.

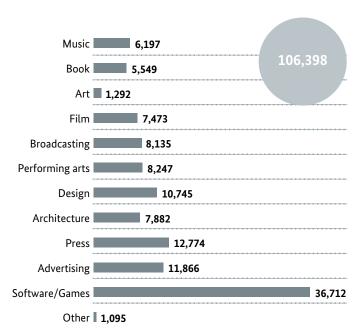
## Turnover (in € million)



# Number of businesses

### Music 14,670 258,790 Book 17,450 12,390 Art Film 19,975 Broadcasting 17,091 Performing arts 21,212 Design 60,481 Architecture 38,395 Press 31,082 Advertising 29,142 Software/Games 41,963 Other **8,197**

### Gross value added (in € million)

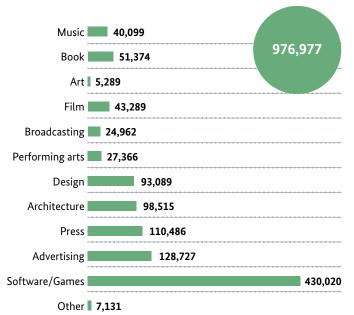


Source: In-house calculations by Goldmedia, based on: Destatis 2020 (Classification of Economic Activities, WZ 2008); Total numbers do not correspond to total of individual submarkets as these partly overlap.

# Cultural and creative industries submarkets in 2019: Employment

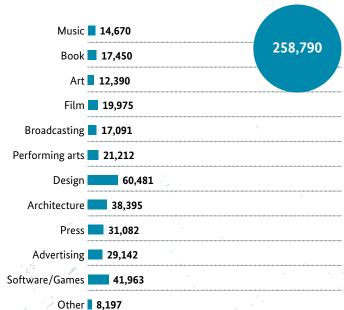
The software/games industry has by far the highest number of employees subject to social security contributions (430,020). Advertising has the highest number of persons in marginal employment (94,676).

Employees subject to social security contributions

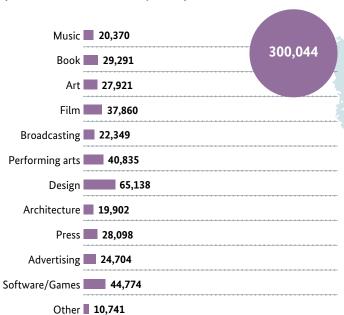


The design industry has the highest number of self-employed persons, both in the category of those earning more than €17,500 a year and those earning €17,500 or less (self-employed persons with mini-jobs).

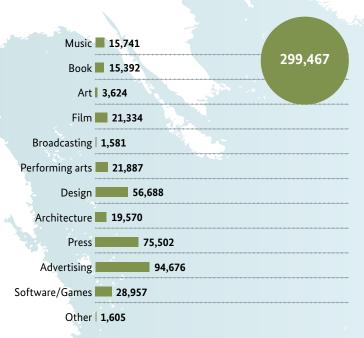
Self-employed persons (annual turnover >€17,500)



# Self-employed persons with mini-jobs (annual turnover ≤17,500€)



### Persons in marginal employment



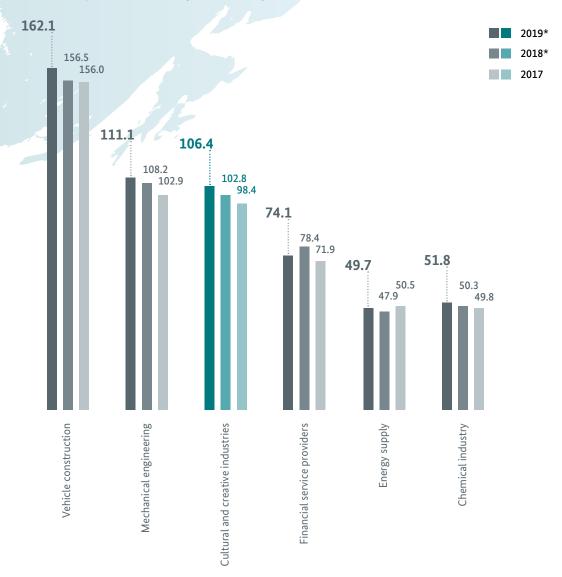
Source: Federal Employment Agency 2020; in-house calculations by Goldmedia, based on: Destatis 2020a,b (Classification of Economic Activities, WZ 2008); Total numbers do not correspond to total of individual submarkets as these partly overlap..

# The cultural and creative industries – industry benchmark

Gross value added (GVA) is the key indicator reflecting the value added by production and product and service creation. It is the total value of the goods and services produced, less the value of the inputs used.

In 2019, GVA in the creative industries was around €106.4 billion. It thus grew by around €3.6 billion or 3.5% compared with the previous year. The creative industries are thus roughly on a par with mechanical engineering and ahead of other sectors such as financial services, energy supply and the chemical industry.

Contribution of the cultural and creative industries to gross value added compared with other industries, 2017 – 2019\* (in € billion)



## Cultural and creative industries total turnover 2009 – 2020

Turnover in the cultural and creative industries grew by €40 billion in the last ten years, reaching a total of €174.1 billion in 2019. This corresponds to an average annual growth rate (CAGR) of 2.6%.

Due to the Covid-19 pandemic, this positive trend will not continue: significant revenue losses are

expected for 2020. According to a scenario analysis (source: Federal Government Centre of Excellence for the Cultural and Creative Industries), revenues could fall by around €23 bn (-13%) under the middle scenario\*\*, whilst under the severe scenario\*\* losses of more than €42 billion (-24%) are expected.

Cultural and creative industries total turnover 2009 – 2020\* (in € billion)



**Middle scenario:** "This scenario assumes that the severe restrictions imposed on business activities will continue until August and that, following this, the economy will slowly start to recover."

Severe scenario: "This scenario expects that the severe restrictions imposed on economic life will continue until the end of the year. This scenario could materialise if there is a new wave infection which results in another lockdown."

National Accounts, Destatis 2020d, VAT statistics, Destatis 2020a; in-house calculations by Goldmedia.

<sup>\*2019</sup> figures are estimates. Forecast for 2020 based on scenario analysis for 2020 by the Federal Government's Centre of Excellence for the Cultural and Creative Industries of 21 April 2020;

<sup>\*\*</sup> A more detailed description of the scenarios can be found in the methodological notes in the Annex, source; VAT statistics, Destatis2020a; in-house calculations by Goldmedia.

# Impact of the pandemic on turnover in 2020

The submarkets of the cultural and creative industries have been affected to varying degrees by the Covid-19 pandemic. Under the middle scenario, the industries are expected to lose between -6% and -36% of their turnover, whilst the severe sce-

nario predicts losses of -10% to -75%. Whilst particularly high losses are expected for the performing arts, film, arts and music, submarkets such as architecture, press and software/games are likely to be much more resilient.

Losses in turnover in the cultural and creative industries due to the Covid-19 pandemic in 2020 compared with 2019\* broken down by submarket (in € billion)



	Music	Book	Art	Film	Broad- casting	Per- forming arts	Design	Archi- tecture	Press	Adver- tising	Soft- ware/ games	Other
Turnover in 2019 in € billion*	9.0	14.3	2.2	1.0	10.9	5.7	20.9	12.4	30.0	29.6	50.2	1.4
Middle Scenario**	-29%	-19%	-31%	-33%	-10 %	-36%	-22%	-8 %	-9%	-10 %	-6%	-22%
Severe Scenario**	-59%	-34%	-64%	-72%	-17 %	-75%	-38%	-14 %	-14%	-15%	-10%	-43 %

Source: National Accounts, Destatis 2020d, VAT statistics, Destatis 2020a; in-house calculations by Goldmedia.

<sup>\*2019</sup> figures are estimates. Forecast for 2020 based on scenario analysis for 2020 by the Federal Government's Centre of Excellence for the Cultural and Creative Industries of 21 April 2020;

<sup>\*\*</sup> A more detailed description of the scenarios can be found in the methodological notes in the Annex, source: VAT statistics, Destatis2020a; in-house calculations by Goldmedia.

# Development of cultural and creative industries, part 1

# Development of cultural and creative industries in Germany 2009 – 2019\*

Key indicators for the cultural and creative industries (CCIs)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019*	Difference 2018/2019
Number of businesses (in thousands) <sup>1</sup>												
Cultural and creative industries	238.5	239.5	244.3	245.8	246.4	247.0	250.4	254.5	256.6	259.3	258.8	-0.22%
Contribution of CCIs to overall economy	7.61 %	7.57%	7.60%	7.56%	7.60%	7.62%	7.69%	7.79%	7.85%	7.91%	7.87%	
Turnover (in € billion)												
Cultural and creative industries	134.3	137.3	141.0	143.3	143.2	146.9	152.1	158.8	165.2	171.1	174.1	1.77%
Contribution of CCIs to overall economy	2.74%	2.62%	2.48%	2.49%	2.48%	2.50%	2.54%	2.61%	2.60%	2.58%	2.56%	
Employment Core workers (in thousands) <sup>2</sup>												
Cultural and creative industries	953.1	952.5	976.8	1.011.7	1.037.3	1.056.0	1.084.9	1.120.1	1.159.6	1.197.8	1.235.8	3.17%
Contribution of CCIs to overall economy	3.10%	3.06%	3.07%	3.11%	3.16%	3.16%	3.19%	3.23 %	3.27%	3.31%	3.37%	
Employees subject to social security contributions (in thousands) <sup>3</sup>												
Cultural and creative industries	714.6	713.0	732.5	765.9	790.9	809.1	834.5	865.6	903.0	938.4	977.0	4.11%
Contribution of CCIs to overall economy	2.59%	2.55%	2.56%	2.62 %	2.67 %	2.68 %	2.71%	2.75%	2.81%	2.85%	2.92%	
Self-employed persons (in thousands) <sup>4</sup>												
Cultural and creative industries	238.5	239.5	244.3	245.8	246.4	247.0	250.4	254.5	256.6	259.3	258.8	-0.22%
Contribution of CCIs to overall economy	7.61%	7.57%	7.60 %	7.56%	7.60 %	7.62 %	7.69%	7.79%	7.85 %	7.91%	7.87%	
Persons in marginal (self-) employment (in thousands) <sup>5</sup>												
Cultural and creative industries	633.1	636.5	626.9	626.6	621.5	621.1	585.3	595.6	601.2	599.9	599.5	-0.06 %
Contribution of CCIs to overall economy	6.51%	6.43 %	6.21%	6.12%	5.94%	5.88%	5.58%	5.63 %	5.65%	5.59%	5.56%	
Self-employed persons with mini-jobs (in thousands) <sup>6</sup>												
Cultural and creative industries	256.0	257.2	258.1	261.6	268.7	270.9	277.2	285.1	291.1	298.0	300.0	0.69 %
Contribution of CCIs to overall economy	10.84%	10.47%	10.09%	9.88%	9.80%	9.86%	9.93 %	10.14%	10.26%	10.41%	10.39%	
Employees in marginal employment (in thousands) <sup>7</sup>												
Cultural and creative industries	377.1	379.3	368.8	365.0	352.8	350.2	308.1	310.5	310.1	301.9	299.5	-0.80 %
Contribution of CCIs to overall economy	5.12%	5.09%	4.89%	4.81%	4.57 %	4.48 %	4.00%	4.00%	3.97%	3.83 %	3.80%	
Total workforce (in thousands) <sup>8</sup>												
Cultural and creative industries	1.586.2	1.589.0	1.603.7	1.638.3	1.658.8	1.677.1	1.670.2	1.715.7	1.760.8	1.797.7	1.835.3	2.09 %
Contribution of CCIs to overall economy	3.92%	3.87%	3.82%	3.83%	3.83%	3.81%	3.75%	3.79%	3.82%	3.83%	3.87%	
Gross value added (in € billion) <sup>9</sup>												
Cultural and creative industries	71.8	75.2	79.8	83.4	88.1	89.9	92.2	97.1	97.7	102.8	106.4	3.51%
Share of CCIs in GDP	2.94%	2.93 %	2.96%	3.04%	3.13 %	3.07 %	3.04 %	3.10 %	3.01%	3.07 %	3.10%	
Gross domestic product (GDP, nominal)	2,445.7	2,564.4	2,693.6	2,745.3	2,811.4	2,927.4	3,030.1	3,134.1	3,245.0	3,344.4	3,435.8	2.73 %





# Development of cultural and creative industries, part 2

### Development of cultural and creative industries in Germany 2009 – 2019\*

Additional key indicators for the cultural and creative industries	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019*	Difference 2018/2019
Average turnover per business (in € thousand)	563.3	573.3	577.1	583.1	581.1	594.8	607.2	624.1	643.8	659.5	672.7	1.99%
Turnover per employee subject to social security contributions(in € thousand)	188.0	192.6	192.5	187.1	181.0	181.6	182.2	183.5	182.9	182.3	178.2	-2.24%
Turnover per core worker (in € thousand)	140.9	144.2	144.3	141.7	138.0	139.1	140.2	141.8	142.4	142.8	140.9	-1.36%
No. of employees subject to social security contributions per business	3.00	2.98	3.00	3.12	3.21	3.28	3.33	3.40	3.52	3.62	3.78	4.33%
No. of core workers per business	4.00	3.98	4.00	4.12	4.21	4.28	4.33	4.40	4.52	4.62	4.78	3.40%
Gross value added per core worker (in € thousand)	75.4	79.0	81.7	82.4	84.9	85.1	84.9	86.7	84.2	85.8	86.1	0.32%
Proportion of core workers who are self-employed	25.0%	25.2%	25.0%	24.3%	23.8%	23.4%	23.1%	22.7%	22.1%	21.7%	20.9%	-3.28%

<sup>\*</sup> Data for 2019 based partly on in-house estimates and preliminary official figures. Estimates partly based on development rates of previous years. Discrepancies to figures in previous reports due to revisions of data in the underlying statistics.

- 1 Taxable entrepreneurs with an annual turnover of more than €17,500.
- 2 Core workers include taxable entrepreneurs with an annual income of more than €17,500 and employees subject to social security contributions.
- 3 Employees subject to social security contributions in full and part-time employment but not persons in marginal employment
- The number of self-employed persons corresponds to the number of taxable entrepreneurs with an annual income of more than €17,500.
- In deviation from previous studies, persons in marginal (self-)employment include self-employed persons with mini-jobs and persons in marginal employment. The category of 'marginally self-employed persons', which is based on the Federal Statistical Office's microcensus, is no longer used.
- 6 Self-employed persons with mini-jobs include taxable entrepreneurs with an annual income of €17,500 or less. In deviation from previous studies, the data provided on self-employed persons with mini-jobs is based on a special analysis of the Federal Statistical Office's VAT assessment statistics by turn-over bracket. This explains discrepancies between the current figures and those of previous studies.
- Definition of persons in marginal employment is based on Federal Employment Agency's Employment statistics (annual cut-off date is 30 June).
- 8 Total workforce includes all self-employed and employed persons including persons in marginal employment and self-employed persons with mini-jobs.
- 9 Gross value added based on National Accounts figures, calculated on basis of breakdown of revenues in VAT statistics.

# Submarket factsheets

Key data, regional distribution of employees, turnover broken down by economic activity, challenges, trends and forecasts



# Music industry

Workforce in 2019:

90,879

Turnover in 2019:

€9.0 billion

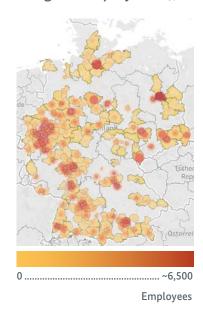
Turnover forecast for 2020:

**Up to -59%** 

# Music industry figures for 2019

The German music industry generated around €9.0 billion in turnover in 2019. That is 4.6% of the cultural and creative industries' total turnover. The largest share of turnover was generated by theatre and concert organisers (at €2.3 billion), followed by music publishers (at €1.8 billion). The music industry accounted for a total of 90,879 workers, with 54,769 core workers and 36,110 persons in marginal employment.

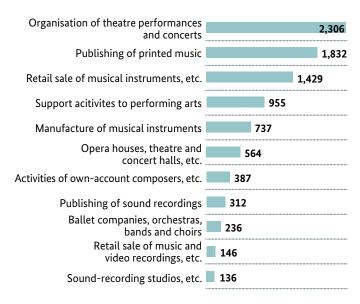
Regional distribution of employees (subject to social security contributions and in marginal employment), June 2019



# Key data on the music industry in Germany in 2019\*

Category	2019*	Contribution to CCIs
Number of businesses	14,670	4.7 %
Turnover (in € million)	9,039	4.6 %
Total workforce	90,879	4.3 %
Core workforce	54,769	4.0 %
Employees subject to social security contributions	40,099	3.8 %
Self-employed persons**	14,670	4.7 %
Persons in marginal (self-) employment	36,110	5.0%
Self-employed persons with mini-jobs***	20,370	5.5 %
Persons in marginal employment	15,741	4.4 %
Gross value added (in € million)	6,197	5.3 %

# Turnover broken down by economic activity (WZ groups) in 2019\* (in € million)



Source: Goldmedia, HMS, Prof. Wink; \*In-house calculations by Goldmedia, based on: Destatis 2020a,b,c; discrepancies possible due to rounding; percentage figures calculated based on cultural and creative industries as a whole, including double counts; \*\*self-employed persons = taxable entrepreneurs with an annual turnover of more than €17,500; \*\*\*self-employed persons with mini-jobs = taxable entrepreneurs with an annual turnover of €17,500 or less. Map: www.standortmonitor.net

# Music industry in 2020: Challenges, trends and forecasts

### Forecast 2020

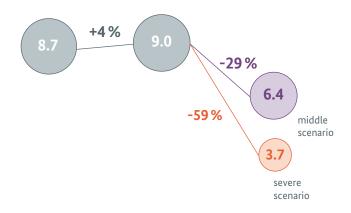
In light of a far-reaching ban on large-scale events until the end of the year, the severe scenario is likely to continue to apply to the music industry, with revenue losses of up to -59% expected.

### Trends and challenges

Audio streaming continues to be one of the main driving forces for growth in the German music industry. It grew by 21% during the Covid-19 pandemic (first half year of 2020). (Source: Bundesverband Musikindustrie (Federal Music Industry Association) 2020)

In contrast to this, the live music sector is facing severe risks. It is currently impossible to predict when and under what conditions live events can once again be held in 2021.

Turnover forecast for the music industry in 2020 (in € billion)



2018 2019\* 2020\*

Source: Goldmedia, HMS, Prof Wink; \*2019 figures are estimates. Forecast for 2020 based on scenario analysis for 2020 by the Federal Government's Centre of Excellence for the Cultural and Creative Industrie



"The entire club and live venue scene is on the verge of insolvency.
(...) In many cases, it will be impossible to revive closed-down music venues in the cities due to high costs, strict requirements for opening and a need for large investments."

LiveMusikKommission e.V. (LIVEKOMM) Source: Open letter by LIVEKOMM of 1 June 2020

"The crisis has not only highlighted the relevance but also the stability of the music industry's digital segment. This success is largely owed to the sector's comprehensive diversification and digitalisation strategy, which does not mean that we do not know how far we have come since the early 2000s or how fragile the value creation chain currently is"

Florian Drücke, Chairman of the Board at Bundesverband Musikindustrie (Federal Music Industry Association). Source: Goldmedia survey, September 2020



# Book market

Workforce in 2019:

113,507

Turnover in 2019:

€14.3 billion

Turnover forecast for 2020:

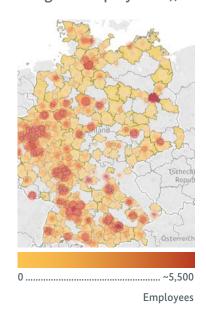
**Up to -34%** 

# Book market figures for 2019

The German book market generated around a€14.3 billion in turnover in 2019. That is around 7.2% of the cultural and creative industries' total turnover. Book publishing accounted for the largest share of book market turnover, generating €8.6 billion (60%), followed by retail sale of books (€3.8 billion), which contributed around a quarter (27%) to total turnover. 113,507 people worked in the book market in 2019.

These included 68,824 core workers and 44,683 persons in marginal (self-)employment.

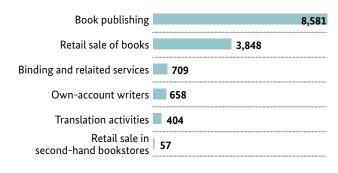
Regional distribution of employees (subject to social security contributions and in marginal employment), June 2019



# Key data on the book market in Germany in 2019\*

Category	2019*	Contribution to CCIs
Number of businesses	17,450	5.6%
Turnover (in € million)	14,257	7.2%
Total workforce	113,507	5.4%
Core workforce	68,824	5.0%
Employees subject to social security contributions	51,374	4.8 %
Self-employed persons**	17,450	5.6%
Persons in marginal (self-) employment	44,683	6.1%
Self-employed persons with mini-jobs***	29,291	7.9%
Persons in marginal employment	15,392	4.3 %
Gross value added (in € million)	5,549	4.7 %

# Turnover broken down by economic activity (WZ groups) in 2019\* (in € million)



# Book market in 2020: Challenges, trends and forecasts

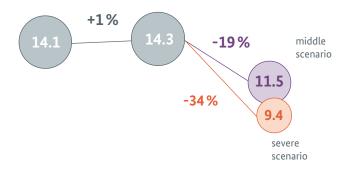
### Forecast 2020

Bookshops were able to offset part of the turnover lost during closure by selling books via online shops or setting up delivery services. For this industry, the middle scenario (-19%) is likely to apply.

## Trends and challenges

Digitalisation and the resulting structural change mean that the number of pedestrians and customers in city centres is declining. This development continues to put pressure on bricks-and-mortar bookstores. Another important aspect is ensuring and promoting reading comprehension among the population, particularly among children and young people.

# Turnover forecast for the book market in 2020 (in € billion)



2018 2019\* 2020\*

Source: Goldmedia, HMS, Prof Wink; \*2019 figures are estimates. Forecast for 2020 based on scenario analysis for 2020 by the Federal Government's Centre of Excellence for the Cultural and Creative Industries



"Physical bookshops have quickly set up and expanded delivery services, showing that they are **highly flexible**, **creative** and **customeroriented**. This often helped retain customers and to some extent at least mitigate revenue losses."

"In a situation where publishers could no longer present new books to the public they reacted by making changes to their programme planning. New releases were pushed back. Some books, most of them niche products or books of as yet unknown authors were eliminated from the programme altogether."

Alexander Skipis, Managing Director of the German Publishers and Booksellers Association Source: Goldmedia survey, September 2020



# Art market



Workforce in 2019:

49,224

Turnover in 2019:

€2.2 billion

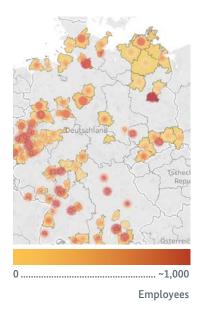
Turnover forecast for 2020:

**Up to -64%** 

# Art market figures for 2019

The German art market generated around €2.2 billion in total in 2019. Own-account visual artists account for the largest share of art market turnover, generating €860 million (around 39%), followed by retail sale of art (€643 million, around 29%) and museums activities (€419 million, around 19%). 49,224 people worked in the art market in 2019. These included 17,679 core workers and 31,545 persons in marginal (self-)employment, most of them persons with mini-jobs.

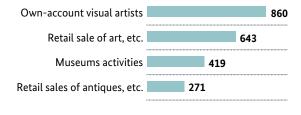
Regional distribution of employees (subject to social security contributions and in marginal employment), June 2019



# Key data on the art market in Germany in 2019\*

Category	2019*	Contribution to CCIs
Number of businesses	12,390	4.0 %
Turnover (in € million)	2,192	1.1%
Total workforce	49,224	2.3 %
Core workforce	17,679	1.3 %
Employees subject to social security contributions	5,289	0.5 %
Self-employed persons**	12,390	4.0 %
Persons in marginal (self-) employment	31,545	4.3 %
Self-employed persons with mini-jobs***	27,921	7.5 %
Persons in marginal employment	3,624	1.0 %
Gross value added (in € million)	1,292	1.1%

# Turnover broken down by economic activity (WZ groups) in 2019\* (in € million)



# Art market in 2020: Challenges, trends and forecasts

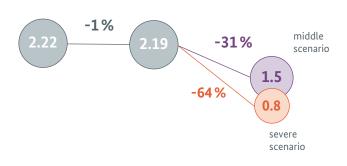
### Forecast 2020

Gallery closures, reduced opening hours, cancellations of art fairs and international visitors and buyers staying away will lead to revenue losses of up to 31% in the art market under the middle scenario. In case of another lockdown being imposed, the severe scenario (-64%) is expected to apply.

### Trends and challenges

Pandemic-related closures and reduced opening hours have led galleries to embrace digitalisation, with art increasingly being shown and marketed online. Auction houses had a rather strong online and social media presence already before the crisis.

# Turnover forecast for the art market in 2020 (in € billion)



2018 2019\* 2020\*



"As long as almost all large international art fairs are suspended, we are missing an important place for communication, networking, presenting our offers and attracting buyers."

Birgit Maria Sturm, Managing Director of the Association of German galleries and art dealers Source: Goldmedia survey, September 2020

Source: Goldmedia, HMS, Prof Wink;

<sup>\*2019</sup> figures are estimates. Forecast for 2020 based on scenario analysis for 2020 by the Federal Government's Centre of Excellence for the Cultural and Creative Industries

# PROD.NO. SCENE TAKE

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# Film industry



Workforce in 2019:

122,458

Turnover in 2019:

€10.0 billion

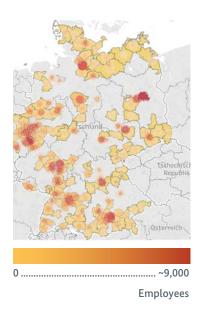
Turnover forecast for 2020:

**Up to -72%** 

# Film industry figures for 2019

The German film industry generated around €10 billion in 2019, contributing around 5% to total CCI turnover. Film and TV production companies account for more than half (52%) of total film industry turnover. A total of 122,458 people worked in the film industry in 2019 (that is 5.8% of the total CCI workforce). These include 63,264 core workers and 59,194 persons in marginal (self-) employment.

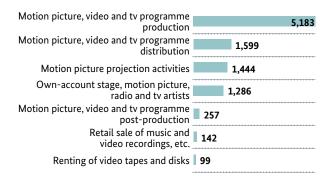
Regional distribution of employees (subject to social security contributions and in marginal employment), June 2019



# Key data on the film industry in Germany in 2019\*

Category	2019*	Contribution to CCIs
Number of businesses	19,975	6.4%
Turnover (in € million)	10,011	5.1%
Total workforce	122,458	5.8 %
Core workforce	63,264	4.6%
Employees subject to social security contributions	43,289	4.1%
Self-employed persons**	19,975	6.4 %
Persons in marginal (self-) employment	59,194	8.1%
Self-employed persons with mini-jobs***	37,860	10.2%
Persons in marginal employment	21,334	6.0 %
Gross value added (in € million)	7,473	6.3 %

# Turnover broken down by economic activity (WZ groups) in 2019\* (in € million)



# Film industry in 2020: Challenges, trends and forecasts

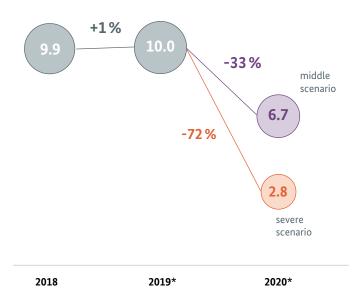
### Forecast 2020

The middle scenario assumes that due to the Covid-19 pandemic, film industry turnover will be one third less than in the previous year. The severe scenario even expects turnover losses of more than 70%.

### Trends and challenges

Whilst cinema operators are battling to simply survive, many other segments have been less hard hit by the crisis. Many production companies were able to relaunch operations this summer, with film and TV productions back in full swing. A new lockdown in autumn, however, could deliver another blow to the industry.

Turnover forecast for the film industry in 2020 (in € billion)



Source: Goldmedia, HMS, Prof Wink;



"The Covid-19 crisis is a double blow to the film industry. With cinemas having had to close their doors, the industry lost its most important source of income. And with all the shops closed down, Germany's important home entertainment market of blue-ray and DVDs also collapsed. On the production site, filmmaking has come to a halt due to legal uncertainty and rules banning film shootings. Despite all this, cinemas and studies continue to pay fixed costs."

Thomas Negele, President of SPIO e.V Source: Blickpunkt:Film, April 2020

"The coronavirus pandemic threatens the survival of the production sector. Many shoots had to be cancelled at high costs and many productions halted. This has made very clear the size of the impact the pandemic is having on the industry. Insurance companies do not cover the risk of having to suspend a shoot due to Covid-19. The introduction of protective shields and default funds therefore was very important. Without such measures, the viability of the German production industry will be put at risk and thus also the provision of programmes to customers."

> Alexander Thies, Chairman of the Executive Board at Produzentenallianz (German Producers Alliance) Source: Produzentenallianz, October 2020

<sup>\*2019</sup> figures are estimates. Forecast for 2020 based on scenario analysis for 2020 by the Federal Government's Centre of Excellence for the Cultural and Creative Industries

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# Broadcasting industry



Workforce in 2019:

65,983

Turnover in 2019:

€10.9 billion

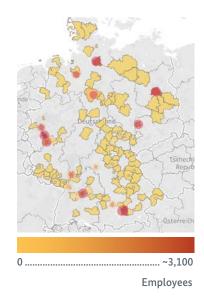
Turnover forecast for 2020:

**Up to -17%** 

#### Broadcasting industry figures for 2019

The broadcasting industry (public broadcasters not included) generated around €10.9 billion in total in 2019. Private-sector television broadcasters contributed by far the largest share of the industry's turnover (79%). Private-sector radio broadcasters and own-account journalists and press photographers form also part of this submarket. A total of 65,983 people work in broadcasting, 42,053 of whom are core workers and 23,930 persons in marginal (self-)employment.

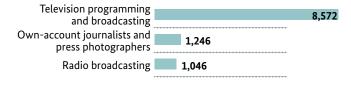
Regional distribution of employees (subject to social security contributions and in marginal employment), June 2019



## Key data on the broadcasting industry in Germany in 2019\*

Category	2019*	Contribution to CCIs
Number of businesses	17,091	5.5 %
Turnover (in € million)	10,864	5.5 %
Total workforce	65,983	3.1%
Core workforce	42,053	3.1%
Employees subject to social security contributions	24,962	2.4%
Self-employed persons**	17,091	5.5 %
Persons in marginal (self-) employment	23,930	3.3 %
Self-employed persons with mini-jobs***	22,349	6.0 %
Persons in marginal employment	1,581	0.4 %
Gross value added (in € million)	8,135	6.9 %

## Turnover broken down by economic activity (WZ groups) in 2019\* (in € million)



Source: Goldmedia, HMS, Prof. Wink; \*In-house calculations by Goldmedia, based on: Destatis 2020a,b,c; discrepancies possible due to rounding; percentage figures calculated based on cultural and creative industries as a whole, including double counts; \*\*self-employed persons = taxable entrepreneurs with an annual turnover of more than €17,500; \*\*\*self-employed persons with mini-jobs = taxable entrepreneurs with an annual turnover of €17,500 or less. Map: www.standortmonitor.net

#### Broadcasting industry in 2020: Challenges, trends and forecasts

#### Forecast 2020

ProSiebenSat.1 Media SE and Mediengruppe RTL Deutschland – the two largest private networks – reported turnover losses of between 12% and 17% for the first half year of 2020. (Source: ProSiebenSat.1 Media SE 2020; RTL Group 2020). For the broadcasting industry as a whole, turnover losses of between 10% and 17% are expected for 2020.

#### Trends and challenges

Even before the pandemic, there was considerable pressure on advertising-sponsored broadcasters, with advertising expenditure increasingly shifting towards online ads. This long-term trend has accelerated during the crisis. Whilst advertising expenditure for TV and radio saw a considerable decline, digital advertising increased by 3% (Source: Nielsen 2020).

Turnover forecast for the broadcasting industry in 2020 (in € billion)



2018 2019\* 2020\*

"Even though we are proud of our editing teams, programme planners and technical staff who throughout this crisis have provided millions of people in Germany with up-to-date and reliable information, entertainment and orientation around the clock, the Covid-19 pandemic marks a turning point for our industry."

Hans Demmel, Chairman of the Board at VAUNET (up until September 2020 Source: VAUNET, press release of 16 September 2020

"Given our experience from previous crises, we fear that the advertising market will not bounce back immediately after the coronavirus crisis is over but will take several years to attain pre-crisis levels. This is particularly unfortunate as the advertising and communication markets can and should make an important contribution to relaunching the economy after the crisis."

Frank Giersberg, Managing Director at VAUNET Source: Goldmedia survey, September 2020

Source: Goldmedia, HMS, Prof Wink;

<sup>\*2019</sup> figures are estimates. Forecast for 2020 based on scenario analysis for 2020 by the Federal Government's Centre of Excellence for the Cultural and Creative Industries



# Performing arts market



Workforce in 2019:

111,300

Turnover in 2019:

€5.7 billion

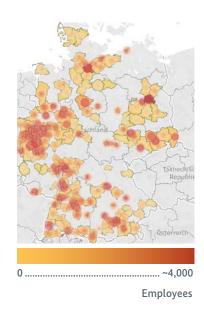
Turnover forecast for 2020:

**Up to -75%** 

#### Performing arts market figures for 2019

The performing arts market generated around €5.7bn in 2019. It has considerable overlaps with the music and film industry. Organisers of theatre performances and concerts accounted for the largest share of the market's turnover, generating €2.2 billion (40%), followed by own-account stage, motion picture and TV artists (€1.3 billion, 23%). A total of 111,300 people work in the performing arts sector, 48,578 of whom are core workers and 62,722 persons in marginal (self-)employment.

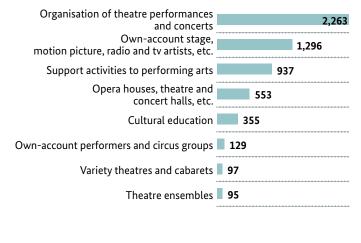
Regional distribution of employees (subject to social security contributions and in marginal employment), June 2019



## Key data on the performing arts market in Germany in 2019\*

Category	2019*	Contribution to CCIs
Number of businesses	21,212	6.8 %
Turnover (in € million)	5,724	2.9%
Total workforce	111,300	5.3 %
Core workforce	48,578	3.5 %
Employees subject to social security contributions	27,366	2.6%
Self-employed persons**	21,212	6.8 %
Persons in marginal (self-) employment	62,722	8.6%
Self-employed persons with mini-jobs***	40,835	11.0%
Persons in marginal employment	21,887	6.1%
Gross value added (in € million)	8,247	7.0%

## Turnover broken down by economic activity (WZ groups) in 2019\* (in € million)



Source: Goldmedia, HMS, Prof. Wink; \*In-house calculations by Goldmedia, based on: Destatis 2020a,b,c; discrepancies possible due to rounding; percentage figures calculated based on cultural and creative industries as a whole, including double counts; \*\*self-employed persons = taxable entrepreneurs with an annual turnover of more than €17,500; \*\*\*self-employed persons with mini-jobs = taxable entrepreneurs with an annual turnover of €17,500 or less. Map: www.standortmonitor.net

#### Performing arts market in 2020: Challenges, trends and forecasts

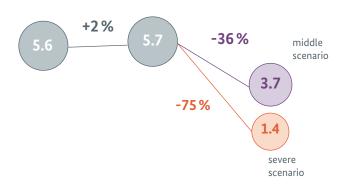
#### Forecast 2020

Both own-account artists and businesses have been hit hard by the cancellation of events. Some have lost all of their revenue. The introduction of social distancing rules, also on stages, and reduced capacities for audiences could lead to turnover losses of up to 75% under the severe scenario.

#### Trends and challenges

The pandemic will remain the main issue in the months to come. The restrictions on audiences in theatre and concert venues currently vary across the Länder, and opportunities to recover financially are thus not evenly distributed. Dependence on public funding is increasing across the industry.

## Turnover forecast for the performing arts market in 2020 (in € billion)



2018 2019\* 2020\*

Source: Goldmedia, HMS, Prof Wink;



"We expect dramatic revenue losses, the impact of which will be felt not only by privately-run theatres, but also many publicly-funded venues. Own-account performing artists and groups are currently particularly at risk."

Marc Grandmontagne, Managing Director at Deutscher Bühnenverein (German stage association)

Source: Deutsche Bühnenverein, press release of 12 March 2020

<sup>\*2019</sup> figures are estimates. Forecast for 2020 based on scenario analysis for 2020 by the Federal Government's Centre of Excellence for the Cultural and Creative Industries



# Design industry



Workforce in 2019:

275,395

Turnover in 2019:

€20.9 billion

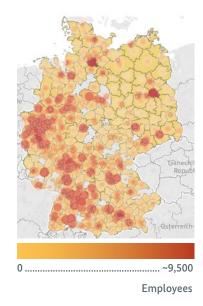
Turnover forecast for 2020:

**Up to -38%** 

#### Design industry figures for 2019

The German design industry generated a total of around €21 billion in 2019. In keeping with the Monitoring Report's definition, half the revenues of advertising agencies are counted towards the design industry. Advertising agencies generated the largest share by far of the design industry's turnover (62%). A total of 275,395 people worked in the design industry in 2019, 153,570 of whom were core workers and 121,826 persons in marginal (self-)employment.

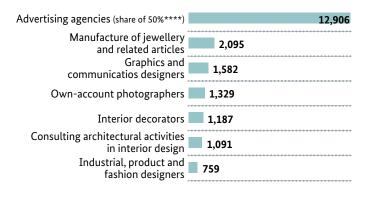
Regional distribution of employees (subject to social security contributions and in marginal employment), June 2019



## Key data on the design industry in Germany in 2019\*

Category	2019*	Contribution to CCIs
Number of businesses	60,481	19.4%
Turnover (in € million)	20,949	10.7%
Total workforce	275,395	13.1%
Core workforce	153,570	11.2%
Employees subject to social security contributions	93,089	8.8 %
Self-employed persons**	60,481	19.4%
Persons in marginal (self-) employment	121,826	16.7%
Self-employed persons with mini-jobs***	65,138	17.5%
Persons in marginal employment	56,688	15.9%
Gross value added (in € million)	10,745	9.1%

## Turnover broken down by economic activity (WZ groups) in 2019\* (in € million)



Source: Goldmedia, HMS, Prof. Wink; \*In-house calculations by Goldmedia, based on: Destatis 2020a,b,c; discrepancies possible due to rounding; percentage figures calculated based on cultural and creative industries as a whole, including double counts; \*\*self-employed persons = taxable entrepreneurs with an annual turnover of more than €17,500; \*\*\*self-employed persons with mini-jobs = taxable entrepreneurs with an annual turnover of €17,500 or less; \*\*\*\*According to the definition of the design industry used in this report, 50% of the turnover generated by advertising agencies (WZ 70.40.1) is counted towards the design industry. Map: www.standortmonitor.net

#### Design industry in 2020: Challenges, trends and forecasts

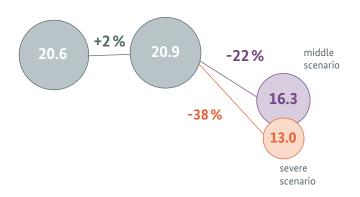
#### Forecast 2020

Own-account designers have been particularly hard hit by the pandemic as many public relations projects were reduced in size or cancelled altogether. Marketing budgets take long to recover, therefore the severe scenario, resulting in revenue losses of up to -38% is expected to apply.

#### Trends and challenges

The crisis has shown that the design industry is a key driving force for digitalisation. A number of regulatory issues remain, for example how intermediate inputs are to be taken into account in tendering procedures, how false self-employment can be prevented and how own-account workers can be helped to support themselves in old age.

Turnover forecast for the design industry in 2020 (in € billion)



2018 2019\* 2020\*

Source: Goldmedia, HMS, Prof Wink;



"The consequences of the pandemic will be felt throughout the next year. Experience has shown that the benefits of an economic recovery take three to six months to reach the design industry once companies start stepping up investment in marketing once again."

Claudia Siebenweiber, President at BDG – Berufsverband der Deutschen Kommunikationsdesigner e.V. (Association of German communication designers)

Source: Goldmedia survey, September 2020

"In the design industry in particular, it will take time before the entire force of the impact is felt—the crisis threatens the existence of an industry which in the last few years had become a key stakeholder in shaping innovation, regional economic policy and the future."

Boris Kochan,
President at Deutscher Designtag e.V.
(German Design Association).
Source: Goldmedia survey, September 2020

<sup>\*2019</sup> figures are estimates. Forecast for 2020 based on scenario analysis for 2020 by the Federal Government's Centre of Excellence for the Cultural and Creative Industries



## Architecture market



Workforce in 2019:

176,382

Turnover in 2019:

€12.4 billion

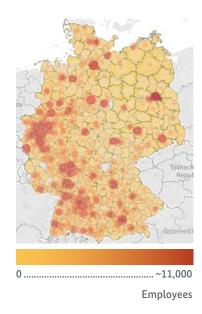
Turnover forecast for 2020:

**Up to -14%** 

#### Architecture market figures for 2019

The German architecture market generated a total of around €12.4 bn in 2019, contributing 6.3% to the CCIs as a whole. Consulting architectural activities in building construction accounted for two thirds of architecture market turnover (67%). A total of 176,382 people worked in architecture in 2019, 136,910 of whom were core workers and 39,472 persons in marginal employment or self-employment.

Regional distribution of employees (subject to social security contributions and in marginal employment), June 2019



## Key data on the architecture market in Germany in 2019\*

Category	2019*	Contribution to CCIs
Number of businesses	38,395	12.3%
Turnover (in € million)	12,427	6.3 %
Total workforce	176,382	8.4%
Core workforce	136,910	10.0%
Employees subject to social security contributions	98,515	9.3 %
Self-employed persons**	38,395	12.3%
Persons in marginal (self-) employment	39,472	5.4%
Self-employed persons with mini-jobs***	19,902	5.4 %
Persons in marginal employment	19,570	5.5 %
Gross value added (in € million)	7,882	6.7 %

## Turnover broken down by economic activity (WZ groups) in 2019\* (in € million)



#### Architecture market in 2020: Challenges, trends and forecasts

#### Forecast 2020

Several years of well-filled order books meant that the architecture market was less affected by the crisis and continued to work to capacity even after the pandemic hit. The middle scenario expects turnover losses of 8%.

#### Trends and challenges

In the medium and long term, the pandemic will increase the demand for new set-ups for offices and public spaces. In addition to this, the climate crisis presents architecture with new challenges such as planning and constructing urban spaces in a climate-friendly way.

## Turnover forecast for the architecture market in 2020 (in € billion)



2018 2019\* 2020\*

"Many architects will not be affected by the pandemic before 2021 when the impact from the smaller number of orders placed in 2020 will be felt."

Gerhard Zach,
President at the Verband Deutscher
Architekten VDA e.V.
(Association of German Architects)
Source: Goldmedia survey, September 2020

"Many years of inadequate staffing and a lack of technical equipment in planning and building construction departments combined with the impact of the Covid-19 pandemic has had an extremely negative impact on the industry and is weakening the signs of recovery."

> Dr Thomas Welter, Managing Director at the Bund Deutscher Architekten BDA (Federation of German Architects) Source: Goldmedia survey, September 2020



## Press market



Workforce in 2019:

245,168

Turnover in 2019:

€30.0 billion

Turnover forecast for 2020:

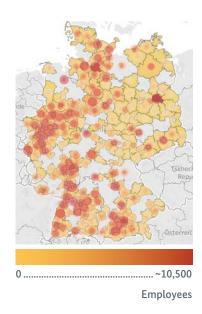
**Up to -14%** 

#### Press market figures for 2019

The German press market generated a total of around €30 bn in 2019. This corresponds to around 15.3% of total CCI turnover. Newspaper publishers accounted for around 35% of press market turnover (€10.5 bn), whilst publishers of journals and periodicals contributed 29% (€8.6 bn).

A total of 245,168 people worked in the press market, 141,568 of whom were core workers and 103,600 persons in marginal (self-)employment.

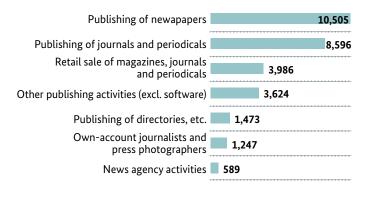
Regional distribution of employees (subject to social security contributions and in marginal employment), June 2019



## Key data on the press market in Germany in 2019\*

Category	2019*	Contribution to CCIs
Number of businesses	31,082	10.0%
Turnover (in € million)	30,019	15.3%
Total workforce	245,168	11.7%
Core workforce	141,568	10.3%
Employees subject to social security contributions	110,486	10.4%
Self-employed persons**	31,082	10.0%
Persons in marginal (self-) employment	103,600	14.2%
Self-employed persons with mini-jobs***	28,098	7.6%
Persons in marginal employment	75,502	21.2%
Gross value added (in € million)	12,774	10.8%

## Turnover broken down by economic activity (WZ groups) in 2019\* (in € million)



#### Press market in 2020: Challenges, trends and forecasts

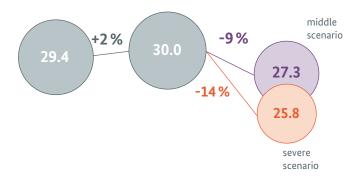
#### Forecast 2020

Whilst daily and weekly newspapers have benefitted from a strong demand for news, general interest magazines saw a considerable decline in sales due to lockdown. Turnover losses of between 9% and 14% are expected for the press market as a whole.

#### Trends and challenges

The press market had been under pressure already before the crisis due to a drop in circulation and the impact of the digital transformation. The impact on distribution could become more severe once short-term work benefits are withdrawn, leaving private households with less money to spend. The increase in minimum wages is driving up the cost of newspaper deliveries.

Turnover forecast for the press market in 2020 (in € billion)



2018 2019\* 2020\*

Source: Goldmedia, HMS, Prof Wink;

\*2019 figures are estimates. Forecast for 2020 based on scenario analysis for 2020 by the Federal Government's Centre of Excellence for the Cultural and Creative Industries



"Ad revenue across the industry dropped by up to 60% year-onyear, particularly in April 2020. In summer, some newspaper publishers once again generated almost as much ad revenue as in the previous vear." **Sales turnover** in 2020 should be almost the same as last year, as newspapers were able to attract **new customers**, both for print and digital newspaper subscriptions."

Christian Eggert, head of publishing at BDZV - Bundesverband Digitalpublisher und Zeitungsverleger e.V. (Federation of German Newspaper Publishers) Source: Goldmedia survey, September 2020

"Depending on the sector, ad revenue fell by between 20% and more than 80% in April and May; adfinanced specialist publications in certain areas of the industry are particularly affected by this. Some of the points of sale located at airports and railway stations have lost more than 50% of their sales. These points of sale often offer a large selection of newspapers and magazines, which is why special-interest publications have been particularly hart hit."

Stefan Scherzer. Managing Director at VDZ - Verband Deutscher Zeitschriftenverleger (Association of German Magazine Publishers) Source: medienpolitik.net, July 2020



# Advertising market



Workforce in 2019:

277,249

Turnover in 2019:

€29.6 billion

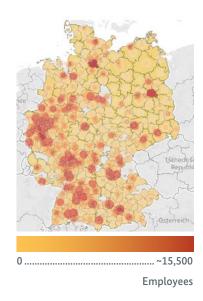
Turnover forecast for 2020:

**Up to -15%** 

#### Advertising market figures for 2019

The German advertising market generated a total of around €29.6 bn in 2019, contributing 15.1% to total CCI turnover. The market consists of only two sectors, with advertising agencies contributing around 85% (€25.1 bn). Another €4.5 bn is generated by media representation. A total of 277,249 people work in the press market, 157,869 of whom are core workers and 119,380 persons in marginal (self-)employment.

Regional distribution of employees (subject to social security contributions and in marginal employment), June 2019



## Key data on the advertising market in Germany in 2019\*

Category	2019*	Contribution to CCIs
Number of businesses	29,142	9.3 %
Turnover (in € million)	29,633	15.1%
Total workforce	277,249	13.2%
Core workforce	157,869	11.5 %
Employees subject to social security contributions	128,727	12.1%
Self-employed persons**	29,142	9.3 %
Persons in marginal (self-) employment	119,380	16.4%
Self-employed persons with mini-jobs***	24,704	6.6 %
Persons in marginal employment	94,676	26.6%
Gross value added (in € million)	11,866	10.1%

## Turnover broken down by economic activity (WZ groups) in 2019\* (in € million)

Advertising agencies	25,098
Media presentation	4,535

#### Advertising market in 2020: Challenges, trends and forecasts

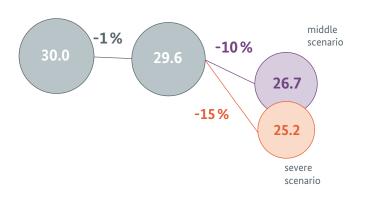
#### Forecast 2020

Advertising vehicles such as cinemas, sponsors, and the trade fair, conference and event industry at times came to a complete halt during the pandemic. The advertising market as a whole is highly dependent on the macro-economic situation. As a result, the market is expected to lose 10% to 15% of its turnvoer this year.

#### Trends and challenges

In 2019, online ads replaced print ads as Germany's most important advertising vehicle (Source: ZAW 2020). This trend will pick up speed during the crisis and puts increasing pressure on traditional advertising vehicles such as radio and TV. The high level of concentration in the digital advertising market is creating ever more challenges for the industry.

## Turnover forecast for the advertising market in 2020 (in € billion)



2018 2019\* 2020\*

Source: Goldmedia, HMS, Prof Wink;

\*2019 figures are estimates. Forecast for 2020 based on scenario analysis for 2020 by the Federal Government's Centre of Excellence for the Cultural and Creative Industries



"Digital advertising has fared relatively well during the crisis. However, the pandemic is accelerating the shift towards online mega platforms which are already dominating the market."

Andreas F. Schubert, President at ZAW e.V. Zentralverband der deutschen Werbewirtschaft (German Advertising Federation) Source: Goldmedia survey, September 2020

"Some advertising agencies have already been severely affected by the Covid-19 pandemic. The situation of individual agencies varies considerably and depends on the business model used and the services offered."

Thomas Eickhoff,
Vice President at GWA e.V. Gesamtverband
Kommunikationsagenturen
(Association of Communications Agencies)
Source: GWA, press release of 13 March 2020



# Software/games industry



Workforce in 2019:

545,714

Turnover in 2019:

€50.2 billion

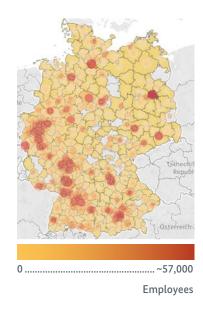
Turnover forecast for 2020:

**Up to -10%** 

#### Software/games industry figures for 2019

According to the CCI Monitoring Report's present definition (cf. explanations in outlook section), the software/games industry is the largest submarket of the German cultural and creative industries. It generated €50.2 bn in 2019 − that is around one quarter (25.5%) of total CCI turnover. 'Other software development' accounts for the largest share of software/games industry turnover (79%, around €39.5 bn). 545,714 people worked in the software/games industry in 2019, 471,983 of whom were core workers and 73,731persons in marginal (self-) employment.

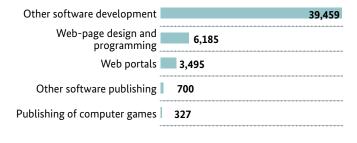
Regional distribution of employees (subject to social security contributions and in marginal employment), June 2019



## Key data on the software/games industry in Germany in 2019\*

Category	2019*	Contribution to CCIs
Number of businesses	41,963	13.4%
Turnover (in € million)	50,166	25.5 %
Total workforce	545,714	26.0%
Core workforce	471,983	34.4%
Employees subject to social security contributions	430,020	40.6%
Self-employed persons**	41,963	13.4%
Persons in marginal (self-) employment	73,731	10.1%
Self-employed persons with mini-jobs***	44,774	12.0%
Persons in marginal employment	28,957	8.1%
Gross value added (in € million)	36,712	31.1%

## Turnover broken down by economic activity (WZ groups) in 2019\*(in € million)



#### Software/games industry in 2020: Challenges, trends and forecasts

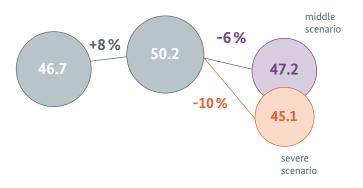
#### Forecast 2020

The software/games industry has been hit less hard by the crisis than other sectors. Some businesses even saw demand for their services increase as part of a pandemic-driven move towards digitalisation. This said, the software/games submarket as a whole is expected to lose 6% to 10% of its turnover.

#### Trends and challenges

The German games market is becoming ever more important. The Federal Government is planning to provide €250 million in funding for games development between 2020 and 2023 (Source: Federal Ministry of Transport and Digital Infrastructure 2020). Investment in grid infrastructure, access to capital and the availability of skilled workers are key for the market to continue to grow.

Turnover forecast for the software/games industry in 2020 (in € billion)



2018 2019\* 2020\*

by the Federal Government's Centre of Excellence for the Cultural and Creative Industries

Source: Goldmedia, HMS, Prof Wink; \*2019 figures are estimates. Forecast for 2020 based on scenario analysis for 2020

"The Covid-19 crisis has driven forward digitalisation across the economy, government and society as a whole."

Bastian Pauly, spokesperson for Bitkom e.V. Source: Goldmedia survey, September 2020

"The Covid-19 pandemic has both upsides and downsides for the games industry. In the months of lockdown, the number of people playing games reached a new record. However, the situation for service providers, event organisers and e-sports companies continues to be challenging. Games developers have also been affected by the pandemic. Small studios in particular find it more difficult to find sponsors for upcoming projects. Large game productions could be pushed back as not all production steps can be completed whilst people are working from home."

Felix Falk, Managing Director at game – Verband der deutschen Games-Branche (Association of the German games industry) Source: Goldmedia survey, September 2020



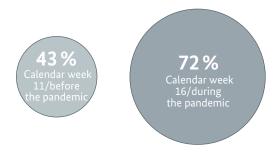


#### Resilient markets: Video streaming (SVOD)

Subscription video on demand (SVOD\*) registered a considerable increase in usage in 2020, making it one of the winners of the pandemic. Average weekly streaming usage at times reached more than 70% (assessment base: online users with access to SVOD services). Around 26% of the total population over the age of 14 makes daily use of SVOD (1st half year 2020) (Source: Goldmedia VOD-Ratings.com)Streaming providers generated around €1.97 bn in turnover in Germany in 2019.

The SVOD market is expected to grow by another 18% in 2020, reaching €2.33 bn in turnover. Amazon Prime Video (33%) and Netflix (23%) were the two most important providers by far on the German market in the second quarter of 2020 in terms of SVOD subscribers. (Source: Goldmedia VOD-Ratings.com).

### Weekly streaming usage (SVOD\*) in Germany, 2020

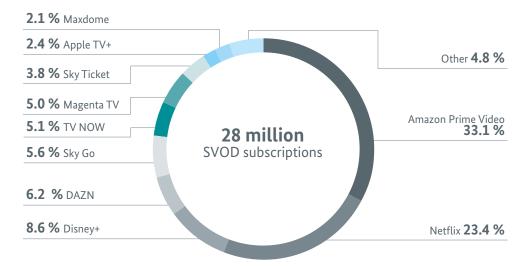


Assessment base: Online users over the age of 14 with access to SVOD services

## Video streaming (SVOD) turnover in Germany, 2019/20 (in € billion)



#### Market share of SVOD subscriptions in Germany, Q2/2020

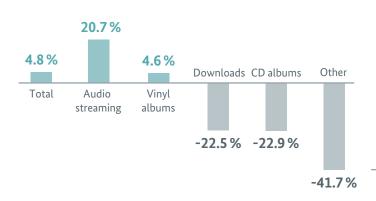


#### Resilient markets: Audio Streaming

Despite the coronavirus crisis, turnover in the music industry increased in the first half year of 2020. Music streaming and the sale of sound recordings generated €784 million – a plus of 4.8% over the previous year.

The decline in CD album sales (-22.9%) was further accelerated by the crisis, whilst music downloads also fell (-22.5%). However, these turnover losses were offset by the audio streaming market, which continues to grow fast (+20.7%). At around €515 million, audio streaming now accounts for two thirds of total music market turnover (Source: Bundesverband Musikindustrie e. V.).

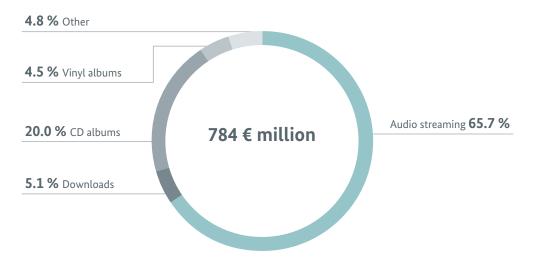
Growth in the German music industry in 1st half year 2020 vs. 1st half year 2019



Audio streaming turnover in Germany 1st half year 2019/2020 (in € million)



Distribution of turnover across the German music industry in 1st half year 2020



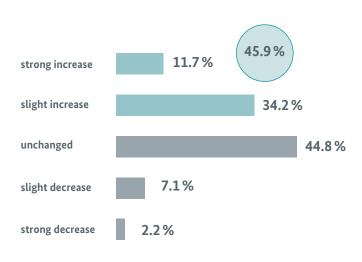
#### Resilient markets: Podcasts

Around 15% of the total German-speaking population over the age of 14 listens to audio podcasts. Podcast usage is growing fast. More than half of the podcast listeners (55%) surveyed in July 2020 said they had made greater use of podcasts in the previous 12 months than in the time before. 46% stated that their use of podcasts had increased slightly or strongly compared with the pre-Covid period. (Source: Goldmedia POD-Ratings.com 2020).

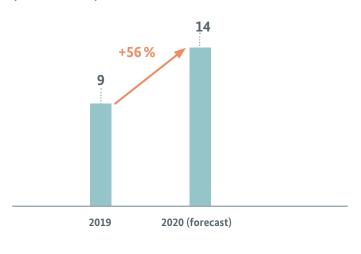
The economic importance of podcasts is also increasing, albeit at a relatively low level. According to the German Association for the Digital Economy (BVDW), podcast ad revenue will reach €14 million in 2020 despite the crisis – that is 56% more than in the previous year (Source: BVDW 2020).

## Change in podcast usage in Germany since the beginning of Covid-19 pandemic (in %)

last update: July 2020, assessment base: podcast users



### Podcast ad revenue in Germany in 2019/2020, (in € million)



#### Resilient markets: Games

Almost 1 in 2 Germans (46%) play digital games at least occasionally. This means that this share has grown compared with the previous year. More than every second user stated that they had played more games than before the Covid-19 pandemic (55%). Gaming time also increased considerably, with users playing on average seven hours more per week (Source: BITKOM 2020). Gaming is helping millions of people to better cope with the crisis (Source: game 2020a).

Greater use, higher revenues: turnover generated from games (incl. hardware) increased by 27% in the first half year of 2020 compared with the previ-

ous year, exceeding €3.7 billion (Source: game 2020). The games industry is therefore optimistic for the future and expects total turnover to increase in 2020. A number of games companies even expect to generate more revenue than ever before (Source: Gameswirtschaft 2020, Gamesmarkt 2020).

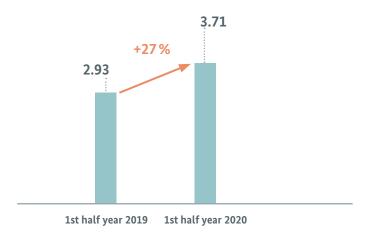
And growth is also pointing upwards for the games industry as a whole. The industry is expected to grow at around 6% each year by 2024 (Source: PWC 2020).

## Share of users in Germany in 2019/2020 who play online games at least occasionally

assessment base: persons over the age of 16



#### Development of games turnover in Germany, 1st half year 2019/2020 (in € billion)





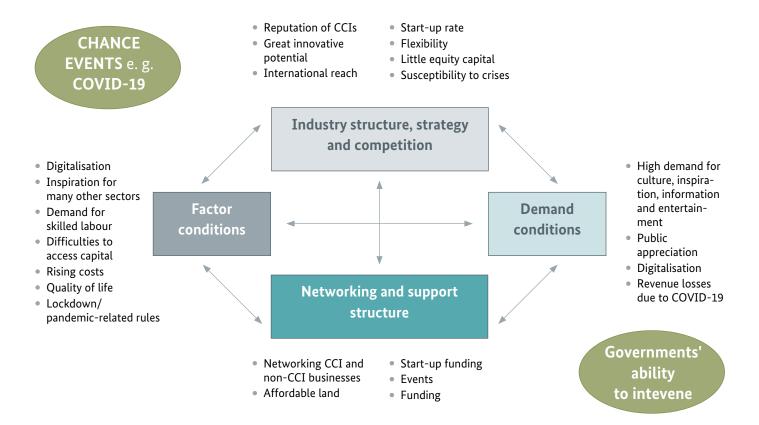


#### Business environment for the cultural and creative industries in Germany

Regional business environments for Germany's cultural and creative industries and the emergence of regional clusters depend on internal structures, strategies and the playing field. They are also shaped by networking and support structures. Factor conditions such as knowledge resources, the

availability of skilled labour and demand conditions also play an important role. Furthermore, 'chance events' such as the emergence of Covid-19 and governments' ability to intervene are important factors for understanding the situation of the CCIs.

#### Business environment for the cultural and creative industries in Germany in 2020

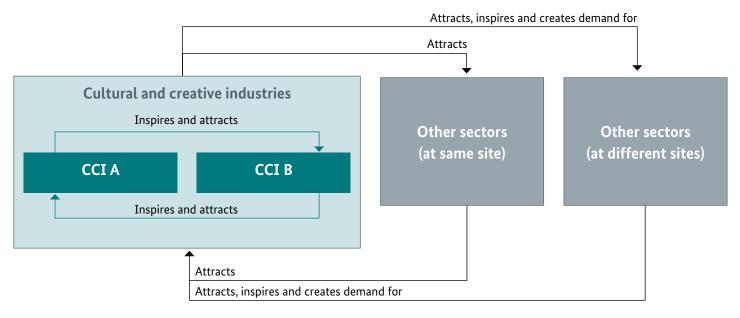


#### The cultural and creative industries as a magnet for other sectors

The cultural and creative industries as a cluster not only attract other CCI businesses, their services are also particularly attractive to businesses from other sectors. This means that the CCIs play a **cross-sectoral role** that makes a region more attractive overall. In a time where workplaces are increas-

ingly moving to the digital and virtual worlds, the question where you work is no longer relevant. As a result, places with an extensive and inspiring cultural offer are becoming more attractive. The CCIs act as a **magnet** for all cluster and regional business promotion activities.

# Model of the CCIs as a cross-sectoral enabler and magnet for other industry clusters at a particular site

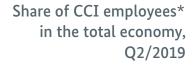


#### Regional employment share

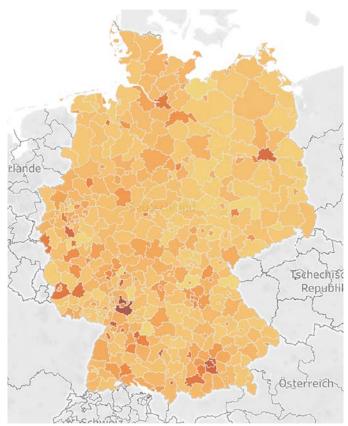
The distribution of the cultural and creative industries in Germany varies greatly between regions. The Monitoring Report has looked at the number of employees working in the cultural and creative industries across all 294 German districts and 107 independent towns and cities. The creative industries account for up to 10% of total employment, the average being around 2%.

In relation to total employment, the Rhein-Neckar district has the highest proportion of CCI employees (9.8%). Software firm SAP is headquartered here. The Rhein-Neckar district is followed by the cities of Munich, Ulm, Karlsruhe and the district around the city of Munich, with a share of just under 8% each.

	District/town or city	Share of CCI employees in Q2/2019
1	Rhine-Neckar-district	9.8%
2	Munich	7.8%
3	Ulm	7.8%
4	Karlsruhe	7.6%
5	District around Munich	7.6%
6	Darmstadt	7.5 %
7	Cologne	7.0 %
8	Offenbach am Main	6.9 %
9	Kempten (Allgäu)	6.8 %
10	Berlin	6.8 %







#### Assessment of growth in proportion of employment provided by CCIs

	District/town or city	CAGR** of the share of CCI employees in Q2/2019
1	Cochem-Zell	19.3 %
2	Trier-Saarburg	18.3 %
3	Vogelsbergkreis	12.1%
4	Peine	10.6%
5	Weilheim-Schongau	9.3 %
6	Nürnberger Land	9.2%
7	Germersheim	9.1%
8	Freising	8.6%
9	Westerwaldkreis	7.6%
10	Frankenthal (Pfalz)	7.0%

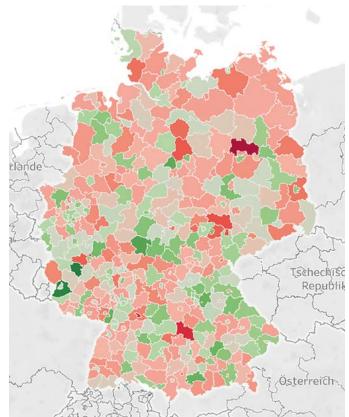
The cultural and creative industries are also growing fast in places that are located far away from the big cities and urban centres. This becomes clear when looking at the development of employment. The share of CCI employees\* in the overall economy in some districts increased at a compound annual growth rate (CAGR\*\*) of up to 19% between 2009 and 2019.

The districts showing the fastest proportional growth in the employment share between 2009 and 2009 were the districts of Cochem-Zell, Trier-Saarburg (both located in the Rhineland-Palatinate), Vogelsbergkreis (Hesse) and Peine (Lower Saxony).





CAGR\*\* 2009-2019: CCI employment share in the overall economy



Source: Goldmedia, HMS, Prof. Wink; www.standortmonitor.net

<sup>\*</sup>employees subject to social security contributions and persons in marginal employment

<sup>\*\*</sup> CAGR = Compound Annual Growth Rate.

# Outlook to the unabridged version of the report

Detailed analysis of the impact of Covid-19 on the individual submarkets of the cultural and creative industries

A close look at the games market

Analysis of the role of creativity in Germany's creative economy

Analysis of best practices in funding non-technical innovation

# Detailed analysis of the impact of Covid-19 on the film industry

The unabridged version of the Cultural and Creative Industries Monitoring Report will include a detailed analysis for each submarket.

Segments	Temporary impact of Covid-19	Duration of recovery	Long-term prospects/ Systemic effect
Home video (includes WZ categories 'retail sale of music and video recordings' and 'renting of video tapes and disks')	Even though physical stores temporarily closed, the boom in streaming services, online mail order services and downloads (electronics sell through) of films led to an increase in turnover in the first six months of 2020.	The longer the pandemic and restrictions on movement last, the more attractive it will be to watch films at home.	The pandemic has meant that streaming and online video services have developed even more strongly on the market than predicted.
Motion picture, video and television programme production activities	Production companies had to suspend, push back or alltogether cancel filming during and after lockdown, resulting in revenue losses of around 20% on average per year depending on the company and genre. Movie productions were particularly hard hit.	The recovery phase already started in June 2020. The production volume is likely to return to pre-Covid levels when the pandemic is over. However, only part of the revenue that was lost in 2020/21 will be recovered.	Shootings had to be reorganised and optimised as more extensive hygiene measures were imposed. This may benefit film productions in the future.
Editing and other cinematic techniques	Turnover in the post-production industry reflects that of production companies two or three months earlier. Companies in this industry have been affected by the crisis by varying degrees.	The recovery phase started in August 2020 and will continue until next year.	The lessons learned from working from home are something the industry will continue to benefit from.
Cinema	Cinemas have been dealt a considerable blow. Their revenues fell by more than half in the first half year.	The recovery phase started the moment cinemas were allowed to reopen. With restrictions still in force, cinema-goers afraid of infection and release dates having been pushed back, mainstream films will continue to suffer considerable revenue losses until the pandemic is over.	Even though government assistance programmes have been made available, there remains a risk of market consolidation.
Film distribution (except 'renting of video tapes and disks')	The situation of distributors who generate income from distributing films to cinemas is somewhat similar to that of cinema operators. For distributors who generate income from selling TV, streaming or home video licences, revenue losses have been less high.	Just like cinemas, distributors will not be able to offset the revenue lost during the pandemic at a later point in time, at least as far as their share in cinemas' receipts is concerned. Recovery will take until the pandemic is over.	Small independent distributors could face insolvency despite government assistance
Independent stage, film, radio and TV artists and other performing arts	All shooting activities, theatre performances or rehearsals and stage performances were suspended between the middle of March and the beginning of June 2020 or, in some cases, even later. Whilst shootings were in most cases only pushed back, performances were very often cancelled altogether or pushed back at the expense of other performances.	Film actors started to recover in June 2020, however, the recovery of theatres and cabarets was rather slow and did not start before July. It will be almost impossible to offset the revenue lost during the pandemic.	Venues such as theatres, clubs and cabarets are faced with a risk of market consolidation, which is feared will lead to a crowding-out competition at the expense of less well-known artists.

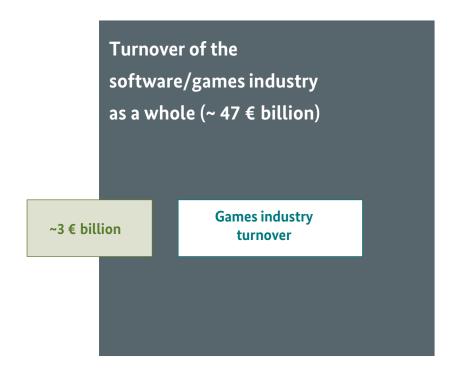
#### A close look at games - representation of the German games market

The Cultural and Creative Industries Monitoring Report looks at the games industry as a part of the software/games industry. This important CCI submarket not only includes computer games distribution but also the development and distribution of software, websites and the operation of web portals. This explains why the turnover and employment figures set out in the official statistics for this sector are rather high.

The creative industries statistics of other countries such as the UK also combine the games industry with parts of the software and internet sector (Howkins 2001). However, the interactive software industry – which is in large parts identical to the games industry – is grouped in a different category (DCMS 2001, DCMS 2013).

Official data does not allow for such a nuanced assessment.

#### Software/games industry turnover vs. games industry turnover (2018)





#### A close look at games – representation of the games industry in official statistics

The games industry – its main segments being (1) production (games development) and (2) distribution (games publishing) – is represented in the official statistics either inadequately or not at all.

Games development is not included in any of the economic activity categories (WZ groups) used in the official statistics but 'tucked away' to an unknown extent in WZ subgroup 'Manufacture of games and toys' and 'Other software development'. The first of these subgroups has up to now not been included in the definition of the software/ games industry used by the Monitoring Report. Games publishing could be reflected by the 'Publishing of computer games' group, however, the validity of the official data provided on WZ group 'Publishing of computer games' seems questionable. For example, according to the official statistics, the turnover of games publishers decreased in the last decade, falling from €4 billion in 2009 to around €300 million in 2018, without any explanation given. (Destatis 2020a).

These figures contradict all known data showing that the turnover of games publishers increased over this time period both globally and in Germany (cf. Appendix on methodology in Castendyk/Müller/Schwarz 2020).

In order for the games segment to be represented accurately, it is therefore necessary to include non-official data from existing studies. To that end, the Monitoring Report will use the latest empirical data available on the German games market. This data is based on a collection of quantitative primary data from games industry businesses.

Selected parts of the 'manufacture of games and toys' under WZ 32.40.0 (Classification of Economic Activities)

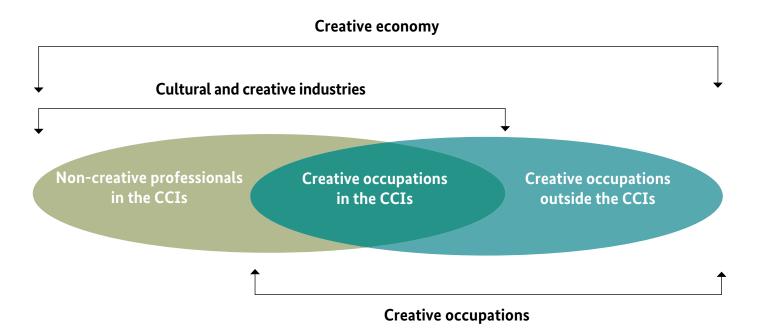
- Manufacture of toys
- Manufacture of musical instruments
- Manufacture of board games and similar games
- Manufacture of electronic games: chess etc.
- Manufacture of pinball machines, slot machines, billiards, special tables for casino games etc.
- Manufacture of parlour games
- Manufacture of wheeled toys including plastic bicycles and tricycles

Source: Destatis 2008

#### Germany's creative economy

Numerous creative occupations exist beyond the cultural and creative industries (for example designers working in the automotive industry). We will estimate how many creative occupations exist outside the CCIs and in what sectors. By doing so,

we will for the first time provide an assessment of Germany's creative economy workforce that goes far beyond the submarkets that have been taken into account until now.



Source: Goldmedia, HMS, Prof Wink; based on Creative Economy Switzerland

# Fostering non-technical innovation

The innovation programme for business models and pioneering solutions (IGP) was launched by the Federal Ministry for Economic Affairs and Energy in 2019 and fosters non-technical innovations that are close to the market, particularly from the cultural and creative industries. Prior to this, the

funding priority was on technology. The CCIs Monitoring Report has compiled a list of international best practices that foster non-technical innovations both at the company level and as part of regional and urban planning initiatives.

#### List of selected international examples for fostering non-technical innovation

Country	Name	Brief description					
National							
Korea	Flagship Project Support Program (FPSP)	Provision of funding for open platform models and development of new business models, for example in the areas of smart cars, the internet of things and VR. The programme is to help SMEs overcome market barriers and promote innovation.					
Austria	evolve/services initiative by the Austrian Research Promotion Agency (FFG)	evolve merges individual funding programmes for the creative industries into one holistic plan. The initiative includes project financing, straightforward promotion of cooperation between the creative industries and traditional industries, and the provision of advice/coaching. Under the FFG's services initiative, funding is being provided for innovative services projects that are conducted as part of existing R&D programmes.					
Sweden	Generator Sverige	Generator Sverige is the Swedish initiative for the promotion of the CCIs. Several Swedish regions are members. The initiative's goal is to raise awareness of the CCIs and regional stakeholders, link up developers and companies and individual regions and the government, identify best practices and translate these into political recommendations.					
UK	Creative Industries Clusters Programme	Takes a targeted approach to linking up the CCIs with other sectors, provides funding for 9 R&D partnerships in the UK, 5-year programme with a funding volume of GBP 80 million.					
U.S.	Advanced Manufacturing	Helps SMEs develop new business models and provides tax relief.					
Local and regional focus							
Netherlands (Eindhoven, Amsterdam)	Living Labs, smart/ sharing approach	Local approaches bringing together creative and technology businesses.					
<b>UK</b> (Leeds, Luton, Somerset/ Taunton, Warwick and others)	Creative Places	A wide range of local initiatives and strategies for funding local CCI clusters.					
Creative industries ideas applied	d to specific industry						
EU-wide	Cross4Health	Networking the CCIs with the healthcare industry, for example in t areas of VR/AR and gaming. The EU's Cross4Health funding programme has a budget of €5 million and a duration of three years. It ends in June 2020.					

# Annex

Key indicators for the cultural and creative industries

Methodological notes

Bibliography

# Key economic indicators for the cultural and creative industries Key economic indicators for the cultural and creative industries in 2019 by submarket

Segments	Number of businesses	Turnover (in € million)	Gross value added (in € million)	Core work- force	Employees subject to social security con- tributions	Employees in marginal employment	Self-em- ployed persons with mini-jobs
Cultural and creative industries (excluding double counts)	258,790	174,085	106,398	1,235,767	976,977	299,467	300,044
Overall economy	3,286,310	6,809,420	3,092,489	36,693,572	33,407,262	7,886,579	2,888,356
Contribution of CCIs to overall economy	7.87%	2.56%	3.44%	3.37%	2.92%	3.80%	10.39%
Breakdown by submarket, absol	ute and percer	tage figures					
1. Music industry	14,670	9,039	6,197	54,769	40,099	15,741	20,370
	4.70%	4.60 %	5.25 %	3.99%	3.78%	4.41%	5.48%
2. Book market	17,450	14,257	5,549	68,824	51,374	15,392	29,291
	5.59%	7.25 %	4.70%	5.01%	4.85%	4.32%	7.87 %
3. Art market	12,390	2,192	1,292	17,679	5,289	3,624	27,921
	3.97%	1.11%	1.09%	1.29 %	0.50%	1.02%	7.51%
4. Film industry	19,975	10,011	7,473	63,264	43,289	21,334	37,860
	6.40%	5.09%	6.33%	4.61%	4.08%	5.98%	10.18%
5. Broadcasting industry	17,091	10,864	8,135	42,053	24,962	1,581	22,349
	5.48%	5.52%	6.90%	3.06%	2.35 %	0.44%	6.01%
6. Performing arts market	21,212	5,724	8,247	48,578	27,366	21,887	40,835
	6.80%	2.91%	6.99%	3.54%	2.58%	6.14%	10.98%
7. Design industry	60,481	20,949	10,745	153,57	93,089	56,688	65,138
	19.38%	10.65 %	9.11%	11.19%	8.78%	15.90%	17.51%
8. Architecture market	38,395	12,427	7,882	136,910	98,515	19,570	19,902
	12.30%	6.32%	6.68 %	9.98%	9.29%	5.49%	5.35%
9. Press market	31,082	30,019	12,774	141,568	110,486	75,502	28,098
	9.96%	15.26%	10.83%	10.32%	10.42%	21.18%	7.55 %
10. Advertising market	29,142	29,633	11,866	157,869	128,727	94,676	24,704
	9.34%	15.07%	10.06%	11.50%	12.14%	26.55%	6.64 %
11. Software/games industry	41,963	50,166	36,712	471,983	430,020	28,957	44,774
	13.45%	25.51%	31.12%	34.39%	40.55%	8.12%	12.04%
12. Other	8,197	1,378	1,095	15,328	7,131	1,605	10,741
	2.63 %	0.70%	0.93%	1.12%	0.67%	0.45%	2.89%
Cultural and creative industries (including double counts)	312,048	196,661	117,965	1,372,394	1,060,346	356,557	371,982

# Number of businesses CCIs by submarket: number of businesses, 2009 – 2019\*

Submarket	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019*
1. Music industry	13,862	13,723	13,894	13,796	13,811	13,759	14,057	14,430	14,677	14,881	14,670
2. Book market	16,232	16,481	16,702	16,828	16,811	16,798	17,079	17,268	17,390	17,531	17,450
3. Art market	13,763	13,464	13,422	13,203	13,153	12,794	12,752	12,874	12,752	12,649	12,390
4. Film industry	18,312	17,956	18,199	18,282	18,440	18,267	18,624	19,075	19,639	20,218	19,975
5. Broadcasting industry	17,853	17,751	18,128	18,154	18,159	18,074	18,179	17,880	17,492	17,339	17,091
6. Performing arts market	14,993	15,402	15,982	16,497	17,004	17,473	18,249	19,080	19,929	20,786	21,212
7. Design industry	48,332	50,111	52,439	53,676	54,454	55,624	57,127	58,431	59,323	60,307	60,481
8. Architecture market	39,956	40,159	40,702	40,762	40,205	40,040	39,849	39,691	39,144	38,723	38,395
9. Press market	34,317	33,564	33,498	33,131	32,557	32,119	32,341	32,241	31,828	31,590	31,082
10. Advertising market	37,082	35,330	34,577	33,448	32,107	30,855	30,221	30,220	29,892	29,562	29,142
11. Software/games industry	27,018	28,527	30,413	31,915	33,365	34,725	35,933	37,375	38,803	40,561	41,963
12. Other	7,353	7,506	7,736	7,751	7,812	7,775	7,887	8,249	8,254	8,140	8,197
Total, including double counts	289,073	289,974	295,692	297,442	297,877	298,302	302,298	306,813	309,122	312,287	312,048
Double counts	50,594	50,440	51,402	51,627	51,525	51,336	51,859	52,330	52,523	52,938	53,258
CCIs (excluding double counts)	238,479	239,534	244,290	245,816	246,353	246,967	250,439	254,484	256,600	259,349	258,790
Overall economy	3,135,542	3,165,286	3,215,095	3,250,319	3,243,538	3,240,221	3,255,537	3,266,429	3,266,806	3,279,136	3,286,310
Contribution of CCIs to overall economy	7.61%	7.57%	7.60%	7.56%	7.60%	7.62 %	7.69%	7.79%	7.85 %	7.91%	7.87%

Please note: \*Data for 2019 are estimates. Source: VAT statistics, Destatis 2020a; in-house calculations by Goldmedia.

Turnover CCIs by submarket: turnover (in € million), 2009 – 2019\*

Submarket	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019*
1. Music industry	6,307	6,270	6,639	7,099	7,674	7,896	8,178	8,139	8,440	8,685	9,039
2. Book market	14,848	14,182	14,255	14,032	13,737	13,686	13,657	14,024	13,910	14,077	14,257
3. Art market	2,146	2,332	2,341	2,316	2,292	2,091	2,170	2,249	2,252	2,223	2,192
4. Film industry	8,734	8,925	9,283	9,228	9,060	9,328	9,844	9,572	9,987	9,874	10,011
5. Broadcasting industry	7,445	7,671	7,905	8,327	8,942	9,378	9,578	9,892	10,334	10,657	10,864
6. Performing arts market	3,316	3,478	3,742	3,909	3,971	4,262	4,502	4,770	5,244	5,604	5,724
7. Design industry	17,595	18,243	18,353	18,535	18,338	18,566	19,078	19,764	20,321	20,604	20,949
8. Architecture market	7,967	8,031	8,708	8,813	9,130	9,554	10,236	10,700	11,348	11,943	12,427
9. Press market	31,341	31,398	31,711	31,931	31,065	30,657	30,133	30,054	29,820	29,416	30,019
10. Advertising market	25,508	25,714	24,929	24,965	25,175	26,130	27,033	29,405	30,078	29,975	29,633
11. Software/games industry	24,296	26,496	28,442	29,642	29,418	31,619	34,362	37,727	41,632	46,655	50,166
12. Other	1,578	1,588	1,652	1,587	1,531	1,418	1,381	1,425	1,454	1,411	1,378
Total, including double counts	151,080	154,327	157,960	160,385	160,332	164,586	170,151	177,720	184,820	191,123	196,661
Double counts	16,751	16,993	16,990	17,047	17,178	17,691	18,084	18,906	19,633	20,072	22,576
CCIs (excluding double counts)	134,329	137,333	140,970	143,338	143,155	146,895	152,067	158,814	165,187	171,051	174,085
Overall economy	4,897,938	5,240,997	5,687,179	5,752,249	5,765,567	5,870,875	5,989,743	6,088,287	6,360,802	6,622,777	6,809,420
Contribution of CCIs to overall economy	2.74%	2.62%	2.48%	2.49%	2.48 %	2.50%	2.54%	2.61%	2.60%	2.58%	2.56%

Please note: \*Data for 2019 are estimates. Source: VAT statistics, Destatis 2020a; in-house calculations by Goldmedia.

# Core workforce

CCIs by submarket: core workforce 2009 - 2019\*

Submarket	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019*
1. Music industry	46,827	46,698	46,627	46,533	47,493	47,941	48,496	50,533	52,147	54,001	54,769
2. Book market	78,846	76,860	79,504	78,846	78,157	75,917	73,048	71,836	71,031	69,111	68,824
3. Art market	19,424	19,161	18,945	18,912	18,793	18,249	18,177	18,292	18,132	17,925	17,679
4. Film industry	58,503	57,313	57,772	57,633	57,090	57,429	58,866	59,712	61,615	62,155	63,264
5. Broadcasting industry	38,890	38,881	39,694	39,865	41,353	41,688	42,477	42,420	42,351	42,293	42,053
6. Performing arts market	32,298	33,225	34,112	35,389	37,886	38,805	40,278	42,158	44,189	46,846	48,578
7. Design industry	125,452	125,878	128,427	131,767	134,274	137,262	141,297	145,593	149,893	152,551	153,570
8. Architecture market	100,082	101,897	105,087	107,750	110,169	112,775	116,695	121,688	126,950	132,031	136,910
9. Press market	168,312	163,305	161,101	158,860	156,097	152,409	150,380	148,641	147,021	143,863	141,568
10. Advertising market	140,958	137,006	138,881	140,431	140,562	142,978	145,863	150,715	154,170	156,535	157,869
11. Software/games industry	243,807	251,708	268,456	299,427	321,092	337,923	358,800	381,364	408,169	439,474	471,983
12. Other	15,346	14,991	15,182	15,436	15,548	15,104	15,140	15,376	15,433	15,388	15,328
Total, including double counts	1,068,745	1,066,923	1,093,788	1,130,848	1,158,513	1,178,480	1,209,516	1,248,326	1,291,100	1,332,174	1,372,394
Double counts	115,637	114,403	117,016	119,119	121,245	122,442	124,589	128,246	131,474	134,414	136,626
CCIs (excluding double counts)	953,108	952,520	976,772	1,011,729	1,037,268	1,056,038	1,084,927	1,120,080	1,159,626	1,197,760	1,235,767
Overall economy	30,738,823	31,131,887	31,858,678	32,530,353	32,859,218	33,414,726	34,026,834	34,709,747	35,431,779	36,149,364	36,693,572
Contribution of CCIs to overall economy	3.10%	3.06%	3.07%	3.11%	3.16%	3.16%	3.19%	3.23 %	3.27%	3.31%	3.37%

Please note: \*2019 figures concerning the number of self-employed persons have been estimated (based on the number of businesses). Source: VAT statistics, Destatis, 2020a, Employment Statistics, Federal Employment Agency 2020; in-house calculations by Goldmedia.

#### Employees subject to social security contributions CCIs by submarket: employees subject to social security contributions, 2009 – 2019

Submarket	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
1. Music industry	32,965	32,975	32,733	32,737	33,682	34,182	34,439	36,103	37,470	39,120	40,099
2. Book market	62,614	60,379	62,802	62,018	61,346	59,119	55,969	54,568	53,641	51,580	51,374
3. Art market	5,661	5,697	5,523	5,709	5,641	5,455	5,425	5,419	5,380	5,276	5,289
4. Film industry	40,191	39,357	39,573	39,351	38,650	39,162	40,242	40,637	41,976	41,937	43,289
5. Broadcasting industry	21,037	21,130	21,566	21,711	23,194	23,614	24,298	24,540	24,859	24,954	24,962
6. Performing arts market	17,305	17,823	18,130	18,892	20,882	21,332	22,029	23,078	24,260	26,060	27,366
7. Design industry	77,120	75,767	75,988	78,091	79,820	81,639	84,170	87,162	90,570	92,244	93,089
8. Architecture market	60,126	61,738	64,385	66,988	69,964	72,735	76,846	81,997	87,806	93,308	98,515
9. Press market	133,995	129,741	127,603	125,729	123,540	120,290	118,039	116,400	115,193	112,273	110,486
10. Advertising market	103,876	101,676	104,304	106,983	108,455	112,123	115,642	120,495	124,278	126,973	128,727
11. Software/games industry	216,789	223,181	238,043	267,512	287,727	303,198	322,867	343,989	369,366	398,913	430,020
12. Other	7,993	7,485	7,446	7,685	7,736	7,329	7,253	7,127	7,179	7,248	7,131
Total, including double counts	779,672	776,949	798,096	833,406	860,636	880,178	907,218	941,513	981,978	1,019,887	1,060,346
Double counts	65,043	63,963	65,614	67,492	69,721	71,107	72,731	75,917	78,952	81,476	83,368
CCIs (excluding double counts)	714,629	712,986	732,483	765,913	790,915	809,071	834,488	865,597	903,026	938,411	976,977
Overall economy	27,603,281	27,966,601	28,643,583	29,280,034	29,615,680	30,174,505	30,771,297	31,443,318	32,164,973	32,870,228	33,407,262
Contribution of CCIs to overall economy	2.59%	2.55%	2.56%	2.62%	2.67%	2.68%	2.71%	2.75 %	2.81%	2.85 %	2.92%

Source: Employment Statistics, Federal Employment Agency 2020; in-house calculations by Goldmedia.

## Persons in marginal employment CCIs by submarket: persons in marginal employment, 2009 – 2019

Submarket	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
1. Music industry	11,857	11,916	12,128	12,671	12,902	13,213	13,423	13,863	14,675	15,415	15,741
2. Book market	21,288	20,920	20,374	19,766	18,959	18,320	17,610	17,188	16,471	15,804	15,392
3. Art market	4,591	4,472	4,395	4,355	4,290	4,178	4,046	3,999	3,882	3,763	3,624
4. Film industry	29,179	28,317	26,928	26,368	25,994	24,920	24,185	23,332	22,955	21,896	21,334
5. Broadcasting industry	2,142	2,045	1,750	1,723	1,841	1,842	1,752	1,785	1,766	1,644	1,581
6. Performing arts market	12,804	13,011	13,715	14,754	15,806	16,450	17,084	17,998	19,476	20,741	21,887
7. Design industry	65,288	66,974	63,977	62,114	61,783	65,410	56,513	60,399	60,779	58,512	56,688
8. Architecture market	18,116	18,080	18,391	18,462	19,109	19,369	18,892	18,989	19,279	19,483	19,570
9. Press market	134,817	133,704	131,207	130,370	123,373	113,233	89,870	84,448	81,751	78,005	75,502
10. Advertising market	119,006	123,173	115,272	110,736	104,008	111,445	95,069	101,754	102,467	98,142	94,676
11. Software/games industry	20,715	21,196	22,373	23,732	24,841	25,900	25,507	26,961	27,863	28,507	28,957
12. Other	1,914	1,773	1,754	1,682	1,652	1,614	1,576	1,634	1,698	1,614	1,605
Total, including double counts	441,717	445,581	432,264	426,733	414,558	415,894	365,526	372,349	373,063	363,525	356,557
Double counts	64,647	66,253	63,461	61,777	61,739	65,737	57,475	61,850	63,012	61,631	57,090
CCIs (excluding double counts)	377,070	379,328	368,803	364,956	352,819	350,158	308,051	310,499	310,051	301,894	299,467
Overall economy	7,359,609	7,450,194	7,536,790	7,591,384	7,716,104	7,811,376	7,704,750	7,763,218	7,806,047	7,878,276	7,886,579
Contribution of CCIs to overall economy	5.12%	5.09%	4.89%	4.81%	4.57%	4.48%	4.00%	4.00%	3.97%	3.83 %	3.80 %

Source: Employment Statistics, Federal Employment Agency 2020; in-house calculations by Goldmedia.

## Self-employed persons with mini-jobs CCIs by submarket: self-employed persons with mini-jobs, 2009 – 2019\*

Submarket	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019*
1. Music industry	16,780	16,844	16,949	16,967	17,215	17,344	17,792	18,857	19,581	20,363	20,370
2. Book market	21,065	21,712	22,475	23,217	24,365	24,837	25,910	26,876	27,935	29,023	29,291
3. Art market	27,167	26,755	26,462	26,631	26,915	26,795	26,826	27,586	27,834	28,081	27,921
4. Film industry	29,008	29,407	29,993	30,979	32,016	32,384	33,206	34,915	36,525	38,214	37,860
5. Broadcasting industry	21,526	21,857	21,924	21,998	22,277	22,533	22,713	22,665	22,408	22,439	22,349
6. Performing arts market	27,333	28,007	29,049	30,647	32,199	32,871	34,350	36,271	38,076	39,977	40,835
7. Design industry	49,796	51,249	52,324	53,946	56,827	57,694	59,634	61,619	63,088	64,735	65,138
8. Architecture market	26,160	25,304	24,459	23,601	23,321	22,578	21,971	21,633	21,006	20,436	19,902
9. Press market	28,303	28,615	28,363	28,158	28,182	28,315	28,593	28,554	28,275	28,272	28,098
10. Advertising market	34,036	31,639	29,639	28,166	27,101	25,783	25,372	25,421	25,212	25,003	24,704
11. Software/games industry	29,424	30,643	31,527	32,937	34,754	36,445	38,478	39,616	41,251	43,226	44,774
12. Other	9,988	9,849	9,700	9,813	9,996	9,988	10,179	10,699	10,729	10,637	10,741
Total, including double counts	320,586	321,881	322,864	327,060	335,168	337,567	345,024	354,711	361,922	370,407	371,982
Double counts	64,635	64,668	64,787	65,420	66,500	66,650	67,805	69,610	70,828	72,408	71,937
CCIs (excluding double counts)	255,951	257,213	258,077	261,640	268,668	270,917	277,219	285,101	291,094	297,999	300,044
Overall economy	2,362,033	2,455,896	2,557,554	2,648,333	2,740,942	2,747,405	2,792,210	2,811,454	2,837,088	2,862,722	2,888,356
Contribution of CCIs to overall economy	10.84%	10.47%	10.09%	9.88%	9.80%	9.86%	9.93%	10.14%	10.26%	10.41%	10.39%

Please note: \*Data is based on estimates. In deviation from previous studies, the data provided on self-employed persons with mini-jobs is based on a special analysis of the Federal Statistical.

Source: VAT assessment statistics, Destatis 2020b; in-house calculations by Goldmedia.

# Gross value added

CCIs by submarket: gross value added (in € million), 2009 – 2019\*

Submarket	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	20104
1 Maraia in decators				2012	2013	2014	2013	2010	2017	2019	2019*
1. Music industry	4,460	4,290	4,496	4,911	5,424	5,514	5,635	5,680	5,734	5,954	6,197
2. Book market	4,692	4,686	4,978	4,962	4,980	5,040	5,055	5,338	5,394	5,479	5,549
3. Art market	1,234	1,328	1,216	1,255	1,219	1,163	1,220	1,279	1,302	1,310	1,292
4. Film industry	7,358	7,317	7,496	7,556	7,685	7,694	7,834	8,183	7,518	7,370	7,473
5. Broadcasting industry	6,318	6,357	6,463	6,907	7,650	7,776	7,664	8,482	7,741	7,980	8,135
6. Performing arts market	5,475	6,182	6,325	6,625	6,549	6,625	6,937	6,917	7,704	8,075	8,247
7. Design industry	9,034	9,404	9,502	9,738	10,268	9,826	9,948	10,686	10,307	10,570	10,745
8. Architecture market	4,682	4,723	4,927	5,241	5,723	5,967	6,607	6,544	7,197	7,574	7,882
9. Press market	10,359	10,983	11,993	12,274	12,274	12,505	12,493	12,497	12,699	12,517	12,774
10. Advertising market	10,653	11,053	10,894	10,746	11,867	11,651	11,508	11,956	12,044	12,002	11,866
11. Software/games industry	15,287	16,973	19,758	21,509	23,263	25,163	26,382	28,616	30,496	34,142	36,712
12. Other	1,435	1,353	1,322	1,332	1,272	1,113	1,109	1,260	1,154	1,121	1,095
Total, including double counts	80,987	84,647	89,368	93,056	98,173	100,036	102,392	107,438	109,289	114,093	117,965
Double counts	9,157	9,416	9,548	9,663	10,110	10,154	10,227	10,356	10,916	11,299	11,567
CCIs (excluding double counts)	71,830	75,232	79,820	83,393	88,063	89,882	92,164	97,082	98,373	102,794	106,398
Overall economy 2	2,192,834	2,305,684	2,418,099	2,465,800	2,527,883	2,635,393	2,725,924	2,821,803	2,922,328	3,012,310	3,092,489
Contribution of CCIs to overall economy	3.28%	3.26%	3.30%	3.38%	3.48%	3.41%	3.38%	3.44%	3.37%	3.41%	3.44%

Please note: \*Data for 2019 are estimates.

Source: VAT statistics, Destatis 2020a, National Accounts, Destatis 2020c; in-house calculations by Goldmedia.

# Turnover per core worker

CCIs by submarket: turnover per core worker (in €), 2009 – 2019\*

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Submarket	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019*
1. Music industry	134,690	134,258	142,386	152,557	161,580	164,709	168,642	161,057	161,851	160,823	165,041
2. Book market	188,312	184,514	179,300	177,966	175,759	180,280	186,961	195,216	195,826	203,691	207,154
3. Art market	110,473	121,694	123,554	122,463	121,940	114,567	119,355	122,925	124,221	124,004	123,999
4. Film industry	149,289	155,728	160,688	160,109	158,692	162,427	167,220	160,307	162,092	158,859	158,243
5. Broadcasting industry	191,438	197,287	199,160	208,883	216,232	224,954	225,485	233,199	243,997	251,977	258,333
6. Performing arts market	102,670	104,668	109,700	110,469	104,819	109,833	111,763	113,157	118,668	119,625	117,827
7. Design industry	140,251	144,924	142,904	140,668	136,572	135,261	135,024	135,748	135,574	135,066	136,414
8. Architecture market	79,602	78,819	82,864	81,795	82,875	84,718	87,720	87,932	89,387	90,454	90,771
9. Press market	186,208	192,266	196,838	200,999	199,014	201,149	200,381	202,189	202,825	225,651	233,626
10. Advertising market	180,960	187,687	179,501	177,777	179,102	182,758	185,329	195,101	195,099	191,488	187,709
11. Software/games industry	99,652	105,265	105,947	98,996	91,618	93,570	95,768	98,927	101,997	106,161	106,289
12. Other	102,856	105,903	108,788	102,846	98,452	93,862	91,211	92,672	94,238	91,673	89,916
CCIs (excluding double counts)	140.938	144.179	144.323	141.677	138.011	139.100	140.164	141.788	142.449	142.896	140.871
Overall economy	159.340	168.348	178.513	176.827	175.463	175.697	176.030	175.406	179.523	183.206	185.575
Contribution of CCIs to overall economy	-13.06%	-16.76%	-23.69%	-24.81%	-27.14%	-26.31%	-25.59%	-23.71%	-26.03%	-28.21%	-31.73%

Please note: \*Data for 2019 are estimates.

Source: VAT statistics, Destatis, 2020a, Employment Statistics, Federal Employment Agency 2020; in-house calculations by Goldmedia.

#### Scope of the cultural and creative industries by submarket

According to the recommendations given by the Conference of Economic Affairs Ministers, the cultural and creative industries consist of eleven submarkets which span a varying number of economic activities (WZ groups). The twelfth group entitled 'Other' consists of those CCI-related economic activities which do not fit into any of the eleven submarkets.

The economic activities (WZ groups) are taken into account in the calculation of economic indicators and employment figures either fully (100%) or to a pre-determined percentage. There are some overlaps between the submarkets (for example the organisation of theatre performances and concerts is partly counted towards the music industry and partly to the performing arts market).

1. Music industry           32.20         Manfacture of musical instruments         100         100           47.59.31         Retail sale of musical instruments, etc.         100         100           47.63         Retail sale of music and video recordings, etc.*         100         100           59.20.1         Sound-recording studios, etc.         100         100           59.20.2         Publishing of sound recordings         100         100           59.20.3         Publishing of printed music         100         100           90.01.2         Ballet companies, orchestras, bands and choirs         100         100           90.02.         Support activities to performing arts*         100         100           90.03.1         Activities of own-account composers, etc.         100         100           90.04.1         Organisation of theatre performances and concerts*         100         100           90.04.2         Operation of opera houses, theatre and concert halls, etc.*         100         100           8.14.1         Binding and related services         100         100           47.79.2         Retail sale in second-hand bookstores         100         100           8.11.1         Book publishing         100         100 <t< th=""><th>Submarket WZ 2018</th><th>Economic activity</th><th>Percentage of com- panies and turnover</th><th>Percentage of employees</th></t<>	Submarket WZ 2018	Economic activity	Percentage of com- panies and turnover	Percentage of employees
47.59.3         Retail sale of music and video recordings, etc.*         100         100           47.63         Retail sale of music and video recordings, etc.*         100         100           59.20.1         Sound-recording studios, etc.         100         100           59.20.2         Publishing of sound recordings         100         100           59.20.3         Publishing of printed music         100         100           90.01.2         Ballet companies, orchestras, bands and choirs         100         100           90.02         Support activities to performing arts*         100         100           90.03.1         Activities of own-account composers, etc.         100         100           90.04.1         Organisation of theatre performances and concerts *         100         100           90.04.2         Operation of opera houses, theatre and concert halls, etc.*         100         100           8.06.4         Binding and related services         100         100           47.61.         Retail sale of books         100         100           47.79.2         Retail sale is second-hand bookstores         100         100           58.11         Book publishing         100         100           47.30.1         Translation activities	1. Music industry			
47.63         Retail sale of music and video recordings, etc.*         100         100           59.20.1         Sound-recording studios, etc.         100         100           59.20.2         Publishing of sound recordings         100         100           59.20.3         Publishing of printed music         100         100           90.01.2         Ballet companies, orchestras, bands and choirs         100         100           90.02         Support activities to performing arts*         100         100           90.03.1         Activities of own-account composers, etc.         100         100           90.04.2         Operation of pear houses, theatre and concerts *         100         100           90.04.2         Operation of opera houses, theatre and concert halls, etc.*         100         100           90.04.2         Operation of opera houses, theatre and concert halls, etc.*         100         100           47.61.         Retail sale of books         100         100           47.79.1         Retail sale of books         100         100           47.79.2         Retail sale in second-hand bookstores         100         100           58.11         Book publishing         100         100           74.79.1         Retail sale of art, etc.	32.20	Manufacture of musical instruments	100	100
59.20.1         Sound-recording studios, etc.         100         100           59.20.2         Publishing of sound recordings         100         100           59.20.3         Publishing of printed music         100         100           90.01.2         Ballet companies, orchestras, bands and choirs         100         100           90.02         Support activities to performing arts*         100         100           90.03.1         Activities of own-account composers, etc.         100         100           90.04.2         Ogeration of theatre performances and concerts*         100         100           90.04.2         Operation of opera houses, theatre and concert halls, etc.*         100         100           90.04.2         Operation of opera houses, theatre and concert halls, etc.*         100         100           47.61.         Retail sale of books         100         100           47.79.1         Retail sale of books         100         100           47.79.2         Retail sale in second-hand bookstores         100         100           58.11         Book publishing         100         100           47.79.1         Retail sale of art, etc.         20         20           47.79.1         Retail sale of antiques, etc.         100	47.59.3	Retail sale of musical instruments, etc.	100	100
59.20.2         Publishing of sound recordings         100         100           59.20.3         Publishing of printed music         100         100           90.012         Ballet companies, orchestras, bands and choirs         100         100           90.02         Support activities to performing arts*         100         100           90.03.1         Activities of own-account composers, etc.         100         100           90.04.1         Organisation of theatre performances and concerts*         100         100           90.04.2         Operation of opera houses, theatre and concert halls, etc.*         100         10           8.04         Blidding and related services         100         100           47.61.         Retail sale of books         100         100           47.79.2         Retail sale in second-hand bookstores         100         100           58.11         Book publishing         100         100           90.32         Own-account writers         100         100           90.32         Own-account writers         20         20           47.79.1         Retail sale of art, etc.         20         20           47.79.1         Retail sale of mr., etc.         100         100           90.	47.63	Retail sale of music and video recordings, etc.*	100	100
59.20.3         Publishing of printed music         100         100           90.01.2         Ballet companies, orchestras, bands and choirs         100         100           90.02         Support activities to performing arts*         100         100           90.03.1         Activities of own-account composers, etc.         100         100           90.04.1         Organisation of theatre performances and concerts*         100         10           90.04.2         Operation of opera houses, theatre and concert halls, etc.*         100         10           2. Book market         1         100         100           47.61.         Retail sale of books         100         100           47.79.2         Retail sale is second-hand bookstores         100         100           58.11         Book publishing         100         100           90.03.2         Own-account writers         100         100           47.79.1         Retail sale of art, etc.         20         20           47.79.1         Retail sale of antiques, etc.         100         100           47.79.1         Retail sale of music and video recordings, etc.*         100         100           90.03.3         Own-account visual artists         100         100 <t< td=""><td>59.20.1</td><td>Sound-recording studios, etc.</td><td>100</td><td>100</td></t<>	59.20.1	Sound-recording studios, etc.	100	100
90.0.1.2         Ballet companies, orchestras, bands and choirs         100         100           90.02         Support activities to performing arts*         100         100           90.03.1         Activities of own-account composers, etc.         100         100           90.04.1         Organisation of theatre performances and concerts*         100         10           90.04.2         Operation of opera houses, theatre and concert halls, etc.*         100         10           2. Book market         100         100         100           47.61.         Retail sale of books         100         100           47.79.2         Retail sale in second-hand bookstores         100         100           58.11         Book publishing         100         100           74.30.1         Translation activities         100         100           90.03.2         Own-account writers         20         20           47.79.1         Retail sale of art, etc.         20         20           47.79.1         Retail sale of art, etc.         20         20           47.79.1         Retail sale of mutjues, etc.         100         100           90.03.3         Own-account visual artists         100         100           91.0	59.20.2	Publishing of sound recordings	100	100
90.02         Support activities to performing arts*         100         100           90.03.1         Activities of own-account composers, etc.         100         100           90.04.1         Organisation of theatre performances and concerts*         100         100           90.04.2         Operation of opera houses, theatre and concert halls, etc.*         100         10           2. Book market         ***********************************	59.20.3	Publishing of printed music	100	100
90.03.1       Activities of own-account composers, etc.       100       100         90.04.1       Organisation of theatre performances and concerts*       100       100         90.04.2       Operation of opera houses, theatre and concert halls, etc.*       100       10         2. Book market       The special sale of books       100       100         47.61.       Retail sale of books       100       100         47.79.2       Retail sale in second-hand bookstores       100       100         58.11       Book publishing       100       100         74.30.1       Translation activities       100       100         90.03.2       Own-account writers       100       100         47.78.3       Retail sale of art, etc.       20       20         47.79.1       Retail sale of antiques, etc.       100       100         90.03.3       Own-account visual artists       100       100         90.02       Museums activities       100       8         4. Film industry       47.63       Retail sale of music and video recordings, etc.*       100       100         59.12       Motion picture, video and TV programme poduction       100       100         59.13       Motion picture, video and TV program	90.01.2	Ballet companies, orchestras, bands and choirs	100	100
90.04.1       Organisation of theatre performances and concerts*       100       100         90.04.2       Operation of opera houses, theatre and concert halls, etc.*       100       10         2. Book market         18.14       Binding and related services       100       100         47.61.       Retail sale of books       100       100         47.79.2       Retail sale in second-hand bookstores       100       100         58.11       Book publishing       100       100         74.30.1       Translation activities       100       100         90.03.2       Own-account writers       100       100         3. Art market       20       20       20         47.79.1       Retail sale of art, etc.       20       20         47.79.1       Retail sale of antiques, etc.       100       100         90.03.3       Own-account visual artists       100       8         91.02       Museums activities       100       8         4. Film industry       47.63       Retail sale of music and video recordings, etc.*       100       100         59.12       Motion picture, video and TV programme production       100       100         59.13       Motion picture, video and TV programme je	90.02	Support activities to performing arts*	100	100
90.04.2       Operation of opera houses, theatre and concert halls, etc.*       100       100         2. Book market         18.14       Binding and related services       100       100         47.61.       Retail sale of books       100       100         47.79.2       Retail sale in second-hand bookstores       100       100         58.11       Book publishing       100       100         74.30.1       Translation activities       100       100         90.03.2       Own-account writers       100       100         3. Art market       20       20         47.79.1       Retail sale of art, etc.       20       20         47.79.1       Retail sale of antiques, etc.       100       100         90.03.3       Own-account visual artists       100       100         91.02       Museums activities       100       100         4.Film industry       47.63       Retail sale of music and video recordings, etc.*       100       100         59.11       Motion picture, video and TV programme production       100       100         59.12       Motion picture, video and TV programme distribution       100       100         59.14	90.03.1	Activities of own-account composers, etc.	100	100
2. Book market         18.14       Binding and related services       100       100         47.61.       Retail sale of books       100       100         47.79.2       Retail sale in second-hand bookstores       100       100         58.11       Book publishing       100       100         74.30.1       Translation activities       100       100         90.03.2       Own-account writers       100       100         8-Art market       47.78.3       Retail sale of art, etc.       20       20         47.79.1       Retail sale of antiques, etc.       100       100         90.03.3       Own-account visual artists       100       100         91.02       Museums activities       100       100         91.03       Retail sale of music and video recordings, etc.*       100       100         95.11       Motion picture, video and TV programme production       100       100         59.12       Motion picture, video and TV programme post-production       100       100         59.13       Motion picture, video and TV programme distribution       100       100         59.14       Motion picture, video and TV programme post-production       100       100         77.22	90.04.1	Organisation of theatre performances and concerts*	100	100
18.14       Binding and related services       100       100         47.61.       Retail sale of books       100       100         47.79.2       Retail sale in second-hand bookstores       100       100         58.11       Book publishing       100       100         74.30.1       Translation activities       100       100         90.03.2       Own-account writers       100       100         3.Art market         47.78.3       Retail sale of art, etc.       20       20         47.79.1       Retail sale of antiques, etc.       100       100         90.03.3       Own-account visual artists       100       100         91.02       Museums activities       100       100         91.02       Museums activities       100       100         95.11       Motion picture, video and TV programme production       100       100         59.12       Motion picture, video and TV programme post-production       100       100         59.13       Motion picture, video and TV programme distribution       100       100         59.14       Motion picture projection activities       100       100         59.14       Motion picture, video and TV programme distribution       1	90.04.2	Operation of opera houses, theatre and concert halls, etc.*	100	10
47.61.       Retail sale of books       100       100         47.79.2       Retail sale in second-hand bookstores       100       100         58.11       Book publishing       100       100         74.30.1       Translation activities       100       100         90.03.2       Own-account writers       100       100         3.Art market       47.78.3       Retail sale of art, etc.       20       20         47.79.1       Retail sale of antiques, etc.       100       100         90.03.3       Own-account visual artists       100       100         91.02       Museums activities       100       8         4.Film industry       47.63       Retail sale of music and video recordings, etc.*       100       100         59.11       Motion picture, video and TV programme production       100       100         59.12       Motion picture, video and TV programme post-production       100       100         59.13       Motion picture, video and TV programme distribution       100       100         59.14       Motion picture projection activities       100       100         77.22       Renting of video tapes and disks       100       100         90.01.4       Own-account stage, motion picture,	2. Book market			
47.79.2       Retail sale in second-hand bookstores       100       100         58.11       Book publishing       100       100         74.30.1       Translation activities       100       100         90.03.2       Own-account writers       100       100         3.Art market         47.78.3       Retail sale of art, etc.       20       20         47.79.1       Retail sale of antiques, etc.       100       100         90.03.3       Own-account visual artists       100       100         91.02       Museums activities       100       8         4.Film industry         47.63       Retail sale of music and video recordings, etc.*       100       100         59.11       Motion picture, video and TV programme production       100       100         59.12       Motion picture, video and TV programme post-production       100       100         59.13       Motion picture, video and TV programme distribution       100       100         59.14       Motion picture projection activities       100       100         77.22       Renting of video tapes and disks       100       100         90.01.4       Own-account stage, motion picture, radio and television artists*       100	18.14	Binding and related services	100	100
58.11         Book publishing         100         100           74.30.1         Translation activities         100         100           90.03.2         Own-account writers         100         100           3.Art market         47.78.3         Retail sale of art, etc.         20         20           47.79.1         Retail sale of antiques, etc.         100         100           90.03.3         Own-account visual artists         100         100           91.02         Museums activities         100         8           4. Film industry         47.63         Retail sale of music and video recordings, etc.*         100         100           59.11         Motion picture, video and TV programme production         100         100           59.12         Motion picture, video and TV programme post-production         100         100           59.13         Motion picture, video and TV programme distribution         100         100           59.14         Motion picture projection activities         100         100           77.22         Renting of video tapes and disks         100         100           90.01.4         Own-account stage, motion picture, radio and television artists*         100         100           5. Broadcasting industry	47.61.	Retail sale of books	100	100
74.30.1       Translation activities       100       100         90.03.2       Own-account writers       100       100         3.Art market       47.78.3       Retail sale of art, etc.       20       20         47.79.1       Retail sale of antiques, etc.       100       100         90.03.3       Own-account visual artists       100       100         91.02       Museums activities       100       8         4. Film industry       47.63       Retail sale of music and video recordings, etc.*       100       100         59.11       Motion picture, video and TV programme production       100       100         59.12       Motion picture, video and TV programme post-production       100       100         59.13       Motion picture, video and TV programme distribution       100       100         59.14       Motion picture projection activities       100       100         77.22       Renting of video tapes and disks       100       100         90.01.4       Own-account stage, motion picture, radio and television artists*       100       100         5. Broadcasting industry         60.10       Radio broadcasting       100       40         60.20       Television programming and	47.79.2	Retail sale in second-hand bookstores	100	100
90.03.2       Own-account writers       100       100         3. Art market         47.78.3       Retail sale of art, etc.       20       20         47.79.1       Retail sale of antiques, etc.       100       100         90.03.3       Own-account visual artists       100       100         91.02       Museums activities       100       8         4. Film industry       4. Film industry       4. Film industry       100       100         59.11       Motion picture, video and TV programme production       100       100         59.12       Motion picture, video and TV programme post-production       100       100         59.13       Motion picture, video and TV programme distribution       100       100         59.14       Motion picture projection activities       100       100         77.22       Renting of video tapes and disks       100       100         90.01.4       Own-account stage, motion picture, radio and television artists*       100       100         5. Broadcasting industry         60.10       Radio broadcasting       100       40         60.10       Television programming and broadcasting       100       40	58.11	Book publishing	100	100
3. Art market         47.78.3       Retail sale of art, etc.       20       20         47.79.1       Retail sale of antiques, etc.       100       100         90.03.3       Own-account visual artists       100       8         4. Film industry       4. Film industry         47.63       Retail sale of music and video recordings, etc.*       100       100         59.11       Motion picture, video and TV programme production       100       100         59.12       Motion picture, video and TV programme distribution       100       100         59.13       Motion picture, video and TV programme distribution       100       100         59.14       Motion picture projection activities       100       100         77.22       Renting of video tapes and disks       100       100         90.01.4       Own-account stage, motion picture, radio and television artists*       100       100         5. Broadcasting industry         60.10       Radio broadcasting       100       40         60.20       Television programming and broadcasting       100       40	74.30.1	Translation activities	100	100
47.78.3       Retail sale of art, etc.       20       20         47.79.1       Retail sale of antiques, etc.       100       100         90.03.3       Own-account visual artists       100       100         91.02       Museums activities       100       8         4. Film industry         47.63       Retail sale of music and video recordings, etc.*       100       100         59.11       Motion picture, video and TV programme production       100       100         59.12       Motion picture, video and TV programme post-production       100       100         59.13       Motion picture, video and TV programme distribution       100       100         59.14       Motion picture projection activities       100       100         77.22       Renting of video tapes and disks       100       100         90.01.4       Own-account stage, motion picture, radio and television artists*       100       100         5. Broadcasting industry         60.10       Radio broadcasting       100       40         60.20       Television programming and broadcasting       100       40	90.03.2	Own-account writers	100	100
47.79.1Retail sale of antiques, etc.10010090.03.3Own-account visual artists10010091.02Museums activities10084. Film industry47.63Retail sale of music and video recordings, etc.*10010059.11Motion picture, video and TV programme production10010059.12Motion picture, video and TV programme post-production10010059.13Motion picture, video and TV programme distribution10010059.14Motion picture projection activities10010077.22Renting of video tapes and disks10010090.01.4Own-account stage, motion picture, radio and television artists*1001005. Broadcasting industry60.10Radio broadcasting1004060.20Television programming and broadcasting10040	3. Art market			
90.03.3 Own-account visual artists 100 100 91.02 Museums activities 100 8 4. Film industry  47.63 Retail sale of music and video recordings, etc.* 100 100 59.11 Motion picture, video and TV programme production 100 100 59.12 Motion picture, video and TV programme post-production 100 100 59.13 Motion picture, video and TV programme distribution 100 100 59.14 Motion picture projection activities 100 100 77.22 Renting of video tapes and disks 100 100 90.01.4 Own-account stage, motion picture, radio and television artists* 100 100 5. Broadcasting industry 60.10 Radio broadcasting 100 40 60.20 Television programming and broadcasting	47.78.3	Retail sale of art, etc.	20	20
91.02 Museums activities 100 8  4. Film industry  47.63 Retail sale of music and video recordings, etc.* 100 100  59.11 Motion picture, video and TV programme production 100 100  59.12 Motion picture, video and TV programme post-production 100 100  59.13 Motion picture, video and TV programme distribution 100 100  59.14 Motion picture projection activities 100 100  77.22 Renting of video tapes and disks 100 100  90.01.4 Own-account stage, motion picture, radio and television artists* 100 100  5. Broadcasting industry  60.10 Radio broadcasting 100 40  60.20 Television programming and broadcasting 100 40	47.79.1	Retail sale of antiques, etc.	100	100
4. Film industry  47.63 Retail sale of music and video recordings, etc.* 100 100  59.11 Motion picture, video and TV programme production 100 100  59.12 Motion picture, video and TV programme post-production 100 100  59.13 Motion picture, video and TV programme distribution 100 100  59.14 Motion picture projection activities 100 100  77.22 Renting of video tapes and disks 100 100  90.01.4 Own-account stage, motion picture, radio and television artists* 100 100  5. Broadcasting industry  60.10 Radio broadcasting 100 40  60.20 Television programming and broadcasting 100 40	90.03.3	Own-account visual artists	100	100
47.63Retail sale of music and video recordings, etc.*10010059.11Motion picture, video and TV programme production10010059.12Motion picture, video and TV programme post-production10010059.13Motion picture, video and TV programme distribution10010059.14Motion picture projection activities10010077.22Renting of video tapes and disks10010090.01.4Own-account stage, motion picture, radio and television artists*1001005. Broadcasting industry60.10Radio broadcasting1004060.20Television programming and broadcasting10040	91.02	Museums activities	100	8
59.11Motion picture, video and TV programme production10010059.12Motion picture, video and TV programme post-production10010059.13Motion picture, video and TV programme distribution10010059.14Motion picture projection activities10010077.22Renting of video tapes and disks10010090.01.4Own-account stage, motion picture, radio and television artists*1001005. Broadcasting industry60.10Radio broadcasting1004060.20Television programming and broadcasting10040	4. Film industry			
59.12Motion picture, video and TV programme post-production10010059.13Motion picture, video and TV programme distribution10010059.14Motion picture projection activities10010077.22Renting of video tapes and disks10010090.01.4Own-account stage, motion picture, radio and television artists*1001005. Broadcasting industry60.10Radio broadcasting1004060.20Television programming and broadcasting10040	47.63	Retail sale of music and video recordings, etc.*	100	100
59.13Motion picture, video and TV programme distribution10010059.14Motion picture projection activities10010077.22Renting of video tapes and disks10010090.01.4Own-account stage, motion picture, radio and television artists*1001005. Broadcasting industry60.10Radio broadcasting1004060.20Television programming and broadcasting10040	59.11	Motion picture, video and TV programme production	100	100
59.14Motion picture projection activities10010077.22Renting of video tapes and disks10010090.01.4Own-account stage, motion picture, radio and television artists*1001005. Broadcasting industry60.10Radio broadcasting1004060.20Television programming and broadcasting10040	59.12	Motion picture, video and TV programme post-production	100	100
77.22 Renting of video tapes and disks 100 100 90.01.4 Own-account stage, motion picture, radio and television artists* 100 100  5. Broadcasting industry 60.10 Radio broadcasting 100 40 60.20 Television programming and broadcasting 100 40	59.13	Motion picture, video and TV programme distribution	100	100
90.01.4 Own-account stage, motion picture, radio and television artists* 100 100  5. Broadcasting industry  60.10 Radio broadcasting 100 40  60.20 Television programming and broadcasting 100 40	59.14	Motion picture projection activities	100	100
5. Broadcasting industry60.10Radio broadcasting1004060.20Television programming and broadcasting10040	77.22	Renting of video tapes and disks	100	100
60.10 Radio broadcasting 100 40 60.20 Television programming and broadcasting 100 40	90.01.4	Own-account stage, motion picture, radio and television artists*	100	100
60.20 Television programming and broadcasting 100 40	5. Broadcasting in	ndustry		
	60.10	Radio broadcasting	100	40
90.03.5 Own-account journalists and press photographers* 100 100	60.20	Television programming and broadcasting	100	40
	90.03.5	Own-account journalists and press photographers*	100	100

<sup>\*</sup> economic activity double counts

# Scope of the cultural and creative industries by submarket

Submarket WZ 2018	Economic activity	Percentage of com- panies and turnover	Percentage of employees				
6. Performing arts market							
85.52	Cultural education	100	100				
90.01.1	Theatre ensembles	100	10				
90.01.3	Own-account performers and circus groups	100	100				
90.01.4	Own-account stage, motion picture, radio and television artists*	100	100				
90.02	Support activities to performing arts*	100	100				
90.04.1	Organisation of theatre performances and concerts*	100	100				
90.04.2	Operation of opera houses, theatre and concert halls, etc.*	100	10				
90.04.3	Operation of variety theatres and cabarets	100	100				
7. Design industry							
32.12	Manufacture of jewellery and related articles	100	100				
71.11.2	Consulting architectural activities in interior design*	100	100				
73.11	Advertising agencies*	50	50				
74.10.1	Industrial, product and fashion designers	100	100				
74.10.2	Graphics and communications designers	100	100				
74.10.3	Interior decorators	100	100				
74.20.1	Photographers	100	100				
8. Architecture ma	rket						
71.11.1	Consulting architectural activities in building construction	100	100				
71.11.2	Consulting architectural activities in interior design*	100	100				
71.11.3	Consulting architectural activities in town, city and regional planning	100	100				
71.11.4	Consulting architectural activities in landscape architecture	100	100				
90.03.4	Own-account restorers	100	100				
9. Press market							
47.62	Retail sale of magazines, journals and periodicals	100	100				
58.12	Publishing of directories, etc.	100	100				
58.13	Publishing of newspapers	100	100				
58.14	Publishing of journals and periodicals	100	100				
58.19	Other publishing activities (excluding software)	100	100				
63.91	News agency activities	100	100				
90.03.5	Own-account journalists and press photographers*	100	100				
10. Advertising ma							
73.11	Advertising agencies/Advertising design*	100	100				
73.12	Media representation	100	100				
11. Software/gam	·						
58.21	Publishing of computer games	100	100				
58.29	Other software publishing	100	100				
62.01.1	Web-page design and programming	100	100				
62.01.9	Other software development	100	100				
63.12	Web portals	100	100				
12. Other							
32.11	Striking of coins	100	100				
32.13	Manufacture of imitation jewellery	100	100				
74.20.2	Photographic laboratories	100	100				
74.30.2	Interpretation activities	100	100				
91.01	Libraries and archives	100	8				
91.03	Operation of historical sites and buildings and similar visitor attractions	100	8				
91.04	Botanical and zoological gardens and nature reserves	100	8				
J1.07	Dotained and 20010616at galuens and nature reserves	100	U				

#### Parameters and statistical references

#### Number of businesses

The figures provided on the number of businesses have been taken from the VAT statistics published by the Federal Statistical Office (Destatis), which since 2009 have been based on the latest Classification of German Economic Activities (WZ 2008). The VAT statistics (based on advance returns) define 'business' as any legally independent entity generating more than €17,500 in turnover per year. This includes all forms of businesses including freelancers who have their own office, all self-employed persons – whether they employ people or not – and all businesses running commercial activities. This means that the term 'business' as it is used here goes beyond its colloquial meaning and is extended to sole proprietorships, one-person companies, micro and small and medium-sized enterprises all the way to large companies. Understanding this range of different types of businesses is of fundamental importance, not least for the cultural and creative industries, where micro and small enterprises account for a significant proportion of economic and employment activities.

**Turnover** 

Turnover is determined also based on the Federal Statistical Office's VAT statistics. The term 'turnover' as used in the VAT statistics refers to the part of turnover comprising the taxable products and services sold by an entrepreneur, by which is meant all businesses and self-employed persons earning more than €17,500 a year.

As the VAT statistics also provide turnover figures for each economic activity by turnover bracket (eight categories ranging from €17,501 in the lowest bracket to 50 million in the highest), the cultural and creative industries can also be assessed from the angle of size. Using the EU definition of SMEs as a basis, four types of businesses are distin-

guished. Micro-enterprises (turnover of €2 million or less), small enterprises (turnover of between €2 and €10 million), medium-sized enterprises (turnover of €10 and €50 million) and large enterprises (turnover of more than €50 million). Data privacy rules stipulate that data for individual categories must not be published in cases where these include only a very small number of businesses. As a result of this, some businesses could not be allocated to one of the four business size categories. These usually are, in terms of turnover, medium-sized and large enterprises.

#### Gross value added

Data on gross value added is published by the Federal Statistical Office in its National Accounts. Data on gross value added is provided for the economic sector level (2-digit numbers) rather than for individual submarkets and can therefore not be used directly for defining the scope of the cultural and creative industries' submarkets and subgroups.

The calculation method uses the gross value added figures from the National Accounts (cf. above). The figures are then weighted based on the breakdown of turnover according to the VAT statistics in order to assign individual value added figures to the various economic activities which form part of the cultural and creative industries. The figures for benchmark sectors, such as mechanical engineering, are also taken from the National Accounts. These figures do not need to be weighted on the basis of the VAT statistics as – in contrast to the cultural and creative industries – these are homogeneous sectors whose gross value added figures are directly available in the National Accounts.

#### Workforce

This parameter reflects the cultural and creative industries' contribution to the employment market by giving particular consideration to the fact that many workers in the CCIs are self-employed or one-person companies. The term 'workforce' comprises both self-employed persons and employees. The number of self-employed persons is determined based on the VAT statistics. In the VAT statistics, self-employed persons are defined as generating more than €17,500 in turnover. Entrepreneurs generating €17,500 in turnover or less are considered self-employed persons with mini-jobs.

Persons in marginal (self-)employment include persons in marginal employment and, in deviation from previous studies, self-employed persons with mini-jobs. The category of 'marginally self-employed persons', which is based on the Federal Statistical Office's microcensus, is no longer used.

The Federal Employment Agency's Employment Statistics also cover all economic sectors. They are based on the German Classification of Economic Activities (WZ groups) and provide data down to the level of economic sub-groups (5-digit numbers). The Employment Statistics allow conclusions to be drawn on employees subject to social security contributions and persons in marginal employment.

#### Self-employed persons with mini-jobs

For the purpose of this Report, self-employed persons with mini-jobs are considered to be entrepreneurs generating €17,500 in turnover or less.

The number of self-employed persons with minijobs is determined based on the VAT statistics that are based on annual VAT returns (VAT assessments). In contrast to the VAT statistics that are based on VAT advance returns, these statistics also include businesses with an annual turnover of €17,500 or less. However, it takes around 3 ¾ years from the end of the reporting period until the results of the VAT statistics become available.

This is why in the present report all figures from 2016 onwards are estimates.

In deviation from previous studies, the data provided on self-employed persons with mini-jobs is based on a special analysis of the Federal Statistical Office's VAT assessment statistics by turnover bracket. This explains deviations between the present and previous studies.

#### 2019/2020 forecasts

#### 2019 forecast and before

The preliminary official results on economic indicators for businesses and the self-employed workforce are based on the VAT statistics and the National Accounts and are available

- up until 2018 for turnover, number of companies, and number of self-employed persons
- up until 2017 for gross value added figures from the National Accounts
- up until 2015 for self-employed persons with mini-jobs

For the extrapolation of data up until 2019, we conducted our own forecast, which is based on previous growth rates.

#### Turnover forecast for 2020

A turnover forecast for 2020 was conducted for each submarket of the cultural and creative industries. This forecast is based on the scenarios developed by the Federal Government's Centre of Excellence for the Cultural and Creative Industries in its publication entitled "Betroffenheit der Kultur- und Kreativwirtschaft von der Corona-Pandemie" (Impact of the Covid-19 pandemic on the cultural and creative industries) of 21 April 2020.

It states that "the middle scenario continues to assume that if the industry is severely affected by Covid-19, some submarkets will lose 30% to 40% of their turnover due to a loss of income. If the industry is moderately affected, this will mean turnover losses of 20% to 30%, if it is little affected losses of

10% to 20%. These scenarios assume that the severe restrictions imposed on business activities will continue until August and that, following this, the economy will slowly start to recover.

The severe scenario assumes that if the industry is severely affected, this will mean turnvoer losses of 70% to 80%, if it is moderately affected 50%, and if it is little affected 20% to 30%. This scenario expects that the severe restrictions imposed on economic life will continue until the end of the year. This scenario could materialise if there is a new wave infection which results in another lockdown."

Turnover for 2020 was calculated based on the projections (in per cent) provided by the Federal Government's Centre of Excellence for the Cultural and Creative Industries. This was done by extrapolating turnover figures from 2019 using these percentage rates.

#### Bibliography

**BITKOM 2020:** Ein Leben ohne Videospiele ist für jeden dritten Nutzer undenkbar. (One in three users cannot live without video games, in German only). Online at: <a href="www.bitkom.org/Presse/">www.bitkom.org/Presse/</a>
Presseinformation/Ein-Leben-ohne-Videospiele-ist-fuer-jeden-dritten-Nutzer-undenkbar [14.09.2020].

BIU – Bundesverband Interaktive Unterhaltungssoftware e.V. (German Association of Interactive Entertainment Software) (2016a): Jahresreport der Computer- und Videospielbranche in Deutschland 2016. (Annual report by the German computer and video games industry, in German only).

**Bundesverband Musikindustrie** (Federal Music Industry Association) (2020): BVMI-Halbjahresbilanz, PM vom 20.08.2020 (Half year report by the BVMI, press release of 20 August 2020, in German only). Online at: www.musikindustrie.de/presse/presseinformationen/bvmi-halbjahresbilanz [01.09.2020].

BVDW (German Association for the Digital Economy) 2020: Podcast-Umsätze steigen 2020 von neun auf 14 Millionen Euro, PM vom 28.07.2020. (Podcast revenue rises from 9 to 14 million euros in 2020, press release of 28 July 2020, in German only). Online at: <a href="www.bvdw.org/der-bvdw/news/detail/artikel/online-audio-umsaetze-in-deutschland-verdoppeln-sich-innerhalb-von-nur-drei-jahren-podcast-umsaetze">www.bvdw.org/der-bvdw/news/detail/artikel/online-audio-umsaetze-in-deutschland-verdoppeln-sich-innerhalb-von-nur-drei-jahren-podcast-umsaetze">www.bvdw.org/der-bvdw/news/detail/artikel/online-audio-umsaetze-in-deutschland-verdoppeln-sich-innerhalb-von-nur-drei-jahren-podcast-umsaetze [01.09.2020]</a>.

Castendyk, Oliver / Müller, Juliane / Schwarz, Manuel (2020): Die Games-Industrie in Deutschland 2018/2019. [Vorläufiger Titel] (The games industry in Germany in 2018/2019 [Working title], in German only).

DCMS – Department for Culture, Media & Sport (2001): Creative Industries Mapping Documents. Online at: www.gov.uk/government/publications/creative-industries-mapping-documents-2001 [18.09.2020].

DCMS – Department for Culture, Media & Sport (2013): Classifying and Measuring the Creative Industries. Online at: <a href="https://www.gov.uk/government/consultations/classifying-and-measuring-the-creative-industries-consultation-on-proposed-changes">www.gov.uk/government/consultations/classifying-and-measuring-the-creative-industries-consultation-on-proposed-changes</a> [18.09.2020].

Destatis - Federal Statistical Office (2008): Classification of Economic Activities (WZ 2008).

**Destatis – Federal Statistical Office (2020a):** VAT statistics (advance returns). Times series data on reporting years 2009 – 2018 (in German only).

**Destatis – Federal Statistical Office (2020b):** VAT statistics (assessments). Times series data on reporting years 2009 – 2015 (in German only).

**Destatis – Federal Statistical Office (2020c):** National Accounts. Time series data for reporting years, in most cases until 2017.

**Federal Employment Agency (2020):** Employment Statistics, time series data on reporting years 2009 – 2019 (in German only).

Federal Government Centre of Excellence for the Cultural and Creative Industries (2020): Betroffenheit der Kultur- und Kreativwirtschaft von der Corona-Pandemie. (Impact of the Covid-19 pandemic on the cultural and creative industries, in German only). Online at: <a href="https://kreativ-bund.de/wp-content/uploads/2020/04/200417\_Kurzpaper\_1.2\_Betroffenheit\_KKW1.pdf">https://kreativ-bund.de/wp-content/uploads/2020/04/200417\_Kurzpaper\_1.2\_Betroffenheit\_KKW1.pdf</a> [01.09.2020].

**Federal Ministry of Transport and Digital Infrastructure 2020:** Computerspieleförderung des Bundes. (Federal Government funding programme for computer games, in German only). Online at: <a href="www.bmvi.de/DE/Themen/Digitales/Computerspielefoerderung/computerspielefoerderung.html">www.bmvi.de/DE/Themen/Digitales/Computerspielefoerderung/computerspielefoerderung.html</a> [12.10.2020]

game (2020a): Games während der Corona-Pandemie. (Playing games during the Covid-19 pandemic, in German only). Online at: <a href="www.game.de/marktdaten/games-waehrend-der-corona-pandemie/">www.game.de/marktdaten/games-waehrend-der-corona-pandemie/</a> [14.09.2020].

game (2020b): Umsatz mit Spiele-Apps wächst im ersten Halbjahr um 23 Prozent. (Revenue from games apps grows by 23 per cent in first half year, in German only). Online at: <a href="www.game.de/umsatz-mit-spiele-apps-waechst-im-ersten-halbjahr-um-23-prozent/">www.game.de/umsatz-mit-spiele-apps-waechst-im-ersten-halbjahr-um-23-prozent/</a> [14.09.2020].

**Gamesmarkt (2020):** EA verzeichnet bestes Quartal seiner Geschichte. (EA reports best quarter in its history, in German only). Online at: beta.gamesmarkt.de/details/452640 [14.09.2020].

**Gameswirtschaft (2020): Corona-Serie:** "Zusätzliches Jahresgehalt für jeden Mitarbeiter". (Extra annual income for employees, in German only). Online at: <a href="www.gameswirtschaft.de/wirtschaft/corona-serie-vol2-erwartungen-2020/">www.gameswirtschaft.de/wirtschaft/corona-serie-vol2-erwartungen-2020/</a> [14.09.2020].

Howkins, John (2001): The Creative Economy: How People Make Money From Ideas. London.

**Komorowski, Marlen/Ranaivoson, Heritiana Renaud (2018)**: To be or not to be the media industry – Delineation to a fuzzy concept. Observatorio (OBS) Journal, p. 1–22.

Nielsen (2020): Entwicklung der Bruttowerbespendings in den einzelnen Mediengattungen in Deutschland von Januar bis August 2020 (gegenüber dem Vorjahr). (Development of gross advertising expenditure in different media in Germany between January and August 2020 compared with 2019, in German only). In: Statista. Online at: <a href="https://de.statista.com/statistik/daten/studie/160579/umfrage/bruttowerbespendings-in-den-mediengattungen-gegenueber-vorjahr">https://de.statista.com/statistik/daten/studie/160579/umfrage/bruttowerbespendings-in-den-mediengattungen-gegenueber-vorjahr</a> [01.09.2020].

**ProSiebenSat.1 Media SE (2020):** Halbjahresfinanzbericht 2020. (Financial report for first half year of 2020, in German only). Online at: <a href="https://www.prosiebensat1.com/uploads/2020/07/30/P7S1\_Q2\_2020\_DE.pdf">https://www.prosiebensat1.com/uploads/2020/07/30/P7S1\_Q2\_2020\_DE.pdf</a> [29.09.2020].

**PWC (2020):** Global Entertainment & Media Outlook 2020–2024. Online at: <a href="www.pwc.com/gx/en/industries/tmt/media/outlook.html">www.pwc.com/gx/en/industries/tmt/media/outlook.html</a> [14.09.2020].

RTL Group (2020): Interim report January to June 2020. Online at: <a href="https://www.rtlgroup.com/files/pdf3/2020.08.10-rtl-group-interim-report-january-to-june-2020-final.pdf">https://www.rtlgroup.com/files/pdf3/2020.08.10-rtl-group-interim-report-january-to-june-2020-final.pdf</a> [29.09.2020].

Söndermann, Michael (2012): Kurzanleitung zur Erstellung einer statistischen Datengrundlage für die Kulturwirtschaft. Statistische Anpassung der Kultur- und Kreativwirtschaft in Deutschland. 2. Empfehlung der Wirtschaftsministerkonferenz 2011. 1. Empfehlung der Wirtschaftsministerkonferenz 2009. (Brief instruction on creating a statistical database for the creative industries. Revised statistics for the cultural and creative industries in Germany. 2nd recommendation by the Conference of Economic Affairs Ministers, 2001. 1st recommendation by the Conference of Economic Affairs Ministers, 2009, in German only).

ZAW (2020) (German Advertising Federation): Netto-Werbeeinnahmen der Medien 2019. (Net advertising revenue generated by the media in 2019). Online at: <a href="https://zaw.de/branchendaten/netto-werbeeinnahmen-der-medien">https://zaw.de/branchendaten/netto-werbeeinnahmen-der-medien</a> [01.09.2020].

**ZEW/Fraunhofer ISI (2019):** 2019 Cultural and Creative Industries Monitoring Report conducted on behalf of the Federal Ministry for Economic Affairs and Energy (BMWi).

