

Federal Ministry for Economic Affairs and Climate Action Minister of State for Culture and the Media



Cultural and Creative Industries Initiative of the Federal Government

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2021 Cultural and Creative Industries Monitoring Report

On behalf of the Federal Ministry for Economic Affairs and Climate Action

Imprint

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About the monitoring process

Goldmedia GmbH, Hamburg Media School (HMS) and Prof. rer. oec. Rüdiger Wink (HTWK Leipzig) studied the economic statistics for the cultural and creative industries (CCIs) on behalf of the Federal Ministry for Economic Affairs and Climate Action for the 2021 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. This publication contains the full version of the report.

Market analysis

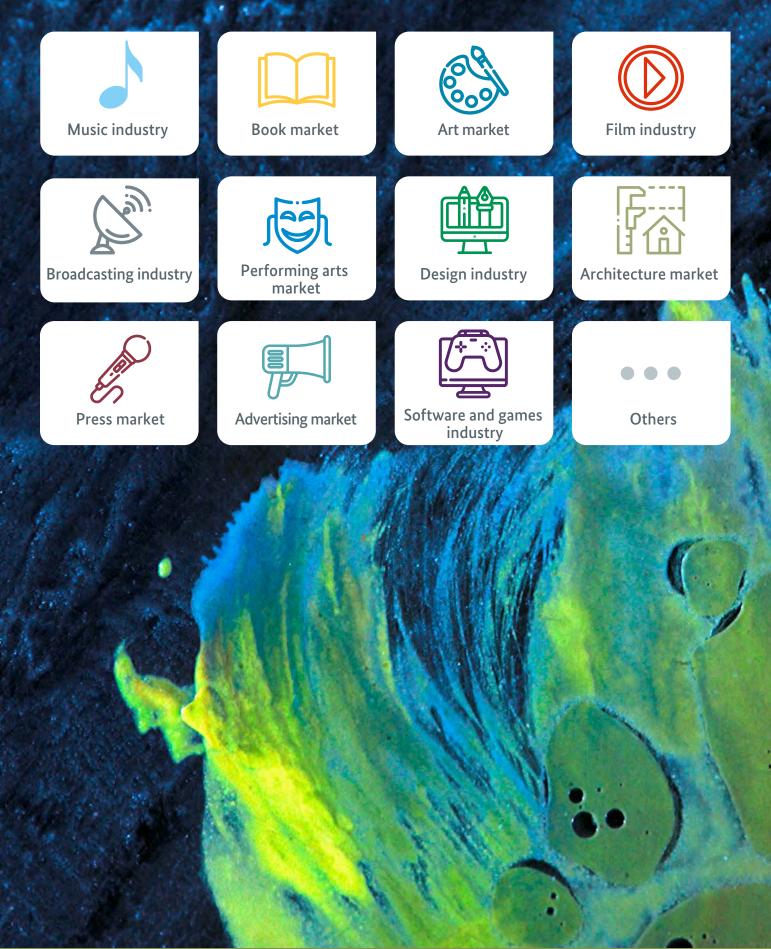
Markets covered	The following sectors of the cultural and creative industries have been included in the report: music, books, art, film, broadcasting, performing arts, design, architecture, press, advertising and the soft- ware/games industry.* The twelfth area entitled "other" includes industries which cannot be assigned to one of these eleven submar- kets of the cultural and creative industries (e.g. photography labs or freelance interpreters).
Sources	 The data underlying this study have been taken from the following and other official statistics: VAT statistics by the Federal Statistical Office (Destatis) (advance VAT returns up until 2019, VAT assessments up until 2016) National Accounts by the Federal Statistical Office (up until 2019) Employment statistics by the Federal Employment Agency (up until 2020) Assessments on trends and challenges and quotations regarding the current situation on a particular market were collected in the period from September to November 2021 in writing from a num-
	period from September to November 2021 in writing from a num- ber of selected industry associations for the individual submarkets.

Key indicators + forecasts

Key indicators 2010 – 2020	Turnover, number of companies, gross value added, core work- force, employees subject to social security contributions, persons in marginal employment, self-employed persons in mini-jobs
Forecast for 2020	The preliminary official results on key economic indicators for businesses and self-employed persons are based on the VAT sta- tistics and the National Accounts and are mostly available for the years up until 2019. Indicators for the employees (as of 30 June 2020) derive from the employment statistics. Turnover statistics for 2020 derive from the publications of the Federal Government Centre of Excellence for the Cultural and Creative Industries (2021). The other indicators (2020) were calculated separately on the basis of impact analyses for individual groups of economic activity.
Turnover	The turnover forecast for 2021 derives from the publications of the
forecast	Federal Government Centre of Excellence for the Cultural and Creative
for 2021	Industries (2021): "Betroffenheit der Kultur- und Kreativwirtschaft von der Corona-Pandemie. Ökonomische Auswirkungen 2021 & 2022 anhand einer Szenarioanalyse (Impact of the COVID-19 pandemic on the cultural and creative industries. Economic impact in 2021 and 2022 based on a scenario analysis)."

Source: Goldmedia, HMS, Prof. rer. oec. Rüdiger Wink (HTWK Leipzig); detailed explanatory notes on sources and methodology in the annex. *Definition of the Conference of Economic Affairs Ministers, 2009.

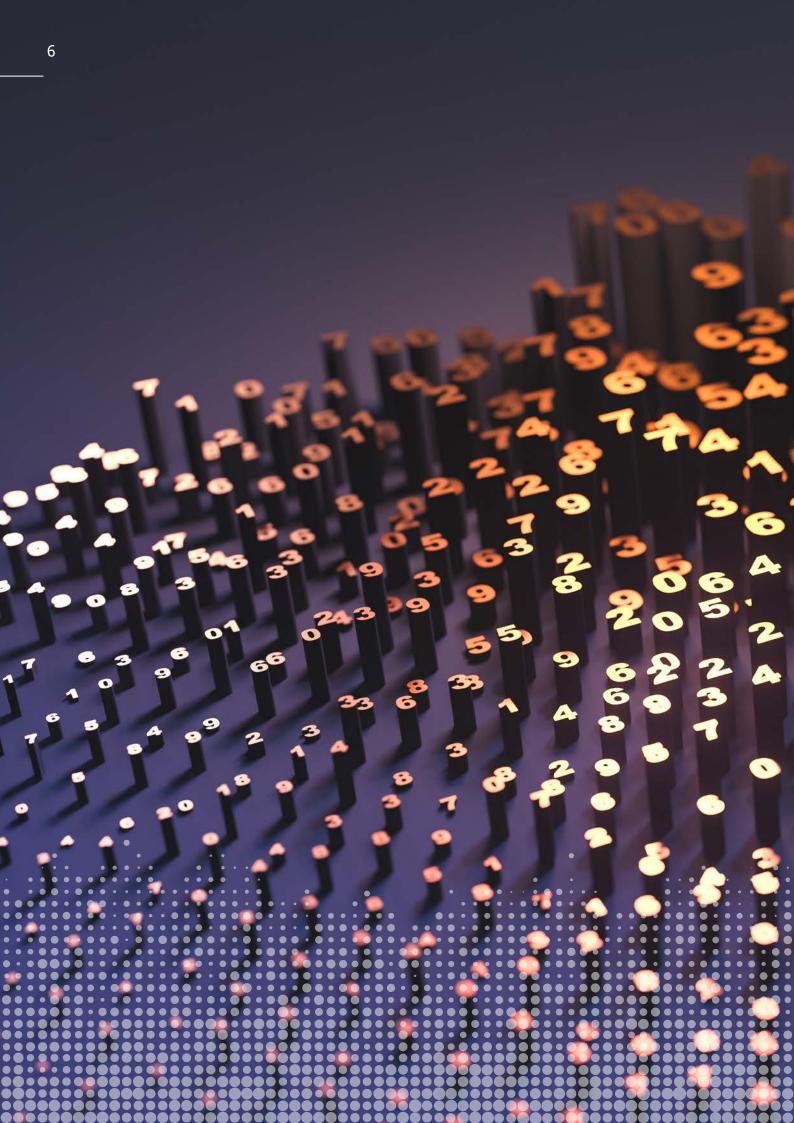
Submarkets of the cultural and creative industries



Key facts for the cultural and creative industries in 2020



*Growth/turnover in 2020 and forecast for 2021 based on Federal Government Centre of Excellence for the Cultural and Creative Industries (2021)Source: in-house calculations by Goldmedia based on Destatis 2021a,b,c and Federal Employment Agency 2021. Discrepancies possible due to rounding.



Key data on the cultural and creative industries in 2020

Turnover, businesses, workforce, gross value added, forecasts

Key facts: cultural and creative industries in Germany

#1 Slump in turnover in 2020 Due to the COVID-19 pandemic, the CCIs in Germany are forecast to have experienced a drop in turnover of more than €15 bn.*

#2 Impact on submarkets (2020 vs. 2019) The performing arts (-81%), music industry (-44%), film industry (-41%) and the art market (-39%) are most severely impacted by the pandemic.*

#4 CCIs forecast for 2022

For 2022, the forecast is either +5.1%, i.e.a cautious shift back towards the pre-crisis level (scenario 1), or flat sales figures of -0.3% (scenario 2).*

#5 Persons employed in the CCIs

Around 1.81 million people worked in Germany's cultural and creative industries in 2020 (down 1.3% from 2019). The number of people in marginal employment dropped by 11.2% during the pandemic.

#3 CCIs forecast for 2021 / submarkets The CCIs will only recover slightly (by 2.7%) in 2021. Only the submarkets books, architecture and software/games are above the pre-crisis level of 2019.*

#6 Number of companies

The positive trend seen in previous years came to a halt in 2020 (-0.4%). However, the economic assistance provided during the pandemic and the short-time work allowance means that there is hardly any rise in the number of insolvencies.

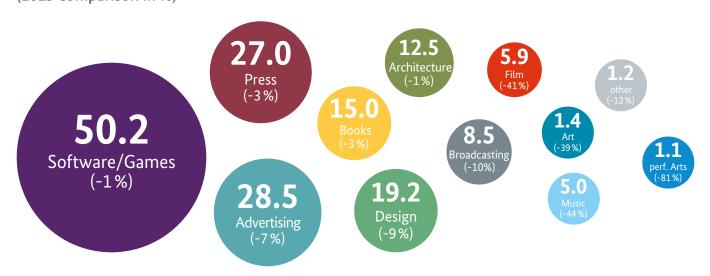
* Source: Federal Government Centre of Excellence for the Cultural and Creative Industries (2021)

Key economic data on the cultural and creative industries in 2020

Total turnover: €160.4 bn (-9% from 2019) Cross value added: €94.6 bn (-13% from 2019)

Source: Federal Government Centre of Excellence for the Cultural and Creative Industries (2021) (turnover/growth), in-house calculations by Goldmedia (GVA; basis: Destatis 2021a,c). Image: Joyce McCown/Unsplash. Total numbers do not correspond to total of individual submarkets as these partly overlap.

Turnover in €bn by submarket 2020 (2019 comparison in %)

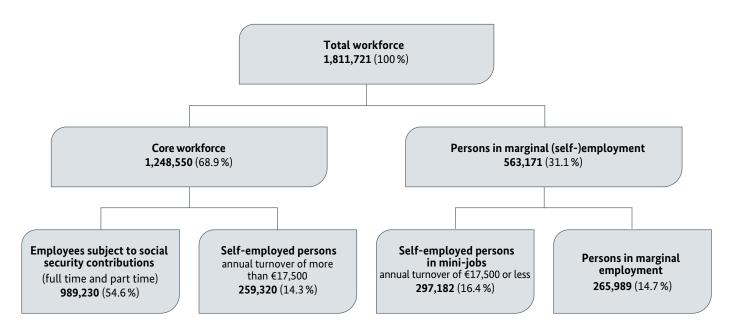


Source: Federal Government Centre of Excellence for the Cultural and Creative Industries (2021) (turnover/growth), in-house calculations by Goldmedia (GVA; basis: Destatis 2021a,c). Image: Joyce McCown/Unsplash. Total numbers do not correspond to total of individual submarkets as these partly overlap.

Employment in the cultural and creative industries in 2020

Around 1.81 million people worked in Germany's cultural and creative industries in 2020 (as of 30 June, down 1.3% from 2019). The majority (55%) were employees subject to social security contributions, 14% worked as freelancers or were self-employed (annual turnover of more than €17,500). 15% were persons in marginal employment and 16% were self-employed persons in mini-jobs (annual turnover of €17,500 or less).*

Cultural and Creative Industries workforce by type of employment in 2020



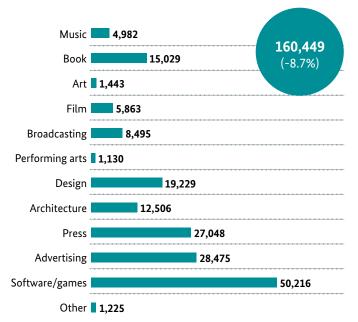
Source: Federal Employment Agency 2021; in-house calculations by Goldmedia. Discrepancies possible due to rounding. * Detailed explanatory notes on gainful employment, reference figures and sources of statistics in the annex on methodology. Overview of submarkets broken down by turnover, number of companies and gross value added, 2020 (comparison with 2019 in %)

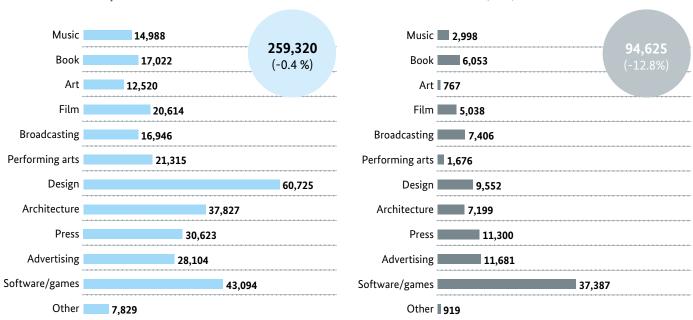
In terms of turnover, the software/games industry was by far the largest submarket of the German cultural and creative industries in 2020. It generated €50bn – around 26% of the turnover of the entire sector – and also had the highest gross value added. In year-on-year terms, all the submarkets saw a drop in turnover, gross value added and the number of companies in 2020 – the only exception to this was an estimated slight rise in the number of companies in the software/games industry.

At over 60,000, the design industry has the highest number of businesses (including sole proprietorships), reflecting the high number of self-employed persons in this submarket.



Gross value added (€m)





Number of companies

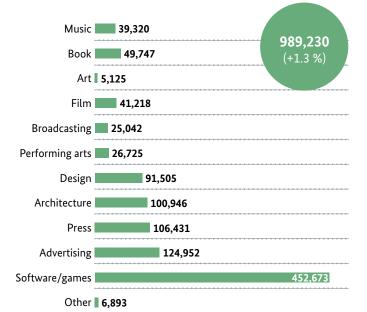
Source: Federal Government Centre of Excellence for the Cultural and Creative Industries (2021) (turnover/growth), in-house calculations by Goldmedia (no. of companies/GVA; basis: Destatis 2021 a,c). Total numbers do not correspond to total of individual submarkets as these partly overlap.

Submarkets – structure of employment in 2020 (comparison with 2019 in %)

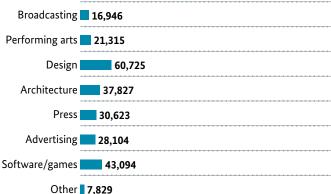
The software/games industry has by far the highest number of employees subject to social security contributions (452,673). Advertising has the highest number of persons in marginal employment (83,424). In total, the number of people in marginal employment fell by 11.2% – various reports and case studies showed that the workers were fired due to the pandemic or they moved into other sectors, some of them outside the CCIs. In a few cases, some people left self-employment to take a job subject to social security contributions.

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

Employees subject to social security contributions



Music 14,988 Book 17,022 Art 12,520 Film 20,614



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

Music 11,217 Music 20.054 265,989 297,182 (-11.2 %) Book 28,821 (-0.6 %) Book **14,061** Art 27,023 Art 3,120 Film 38.583 Film 17,665 Broadcasting 21,475 Broadcasting | 1,423 Performing arts 40,883 Performing arts **16,772** Design 50,077 Design 63,754 Architecture 20,062 Architecture 18,930 Press 26,891 Press 67,680 Advertising 83,424 Advertising 23,567 Software/games 28,016 Software/games 46,557 Other 10,347 Other | 1,455

Source: Federal Employment Agency 2021; in-house calculations by Goldmedia, based on: Destatis 2021a,b (Classification of Economic Activities, WZ 2008); total numbers do not correspond to total of individual submarkets as these partly overlap.

Persons in marginal employment

12 KEY DATA ON THE CULTURAL AND CREATIVE INDUSTRIES IN 2020

Cultural and creative industries in a sectoral comparison

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 2020, GVA in the creative industries was around €94.6bn. The creative industries are thus slightly ahead of mechanical engineering and higher than

other sectors such as financial services, energy supply and the chemical industry.

The pandemic resulted in a 12.8% year-on-year drop in the CCIs. This means that the CCIs were affected rather more than vehicle construction (-11.4%) and mechanical engineering (-10.2%).

Contribution of the CCIs to gross value added compared with other industries, 2018–2020* (in €bn)

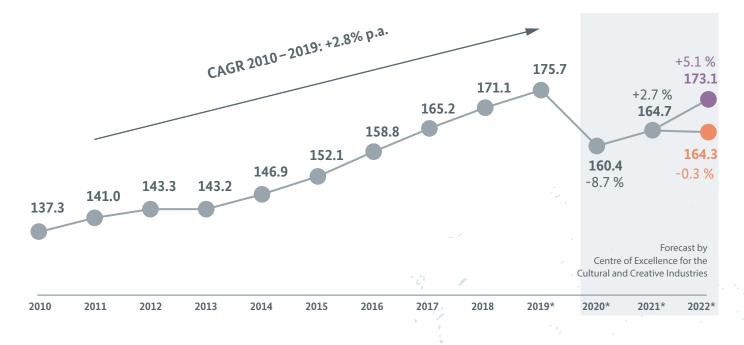


Source: National Accounts, Destatis 2021c, VAT statistics, Destatis 2021a; in-house calculations by Goldmedia. Gross value added based on National Accounts figures, calculated for the CCIs based on the distribution of turnover in the VAT statistics. *Some of the figures for 2020 are estimates.

Cultural and creative industries' total turnover 2010–2022

Due to the pandemic, the CCIs suffered drops in turnover of an estimated €15.3bn in 2020 (down 8.7% from 2019). According to a forecast by the Federal Government Centre of Excellence for the Cultural and Creative Industries, 2021 only saw a slight recovery of 2.7%. For 2022, assuming high rates of infection until the end of the first quarter (scenario 1), a cautious development towards the pre-crisis level is forecast; if infection rates remain high into the second quarter and there is a renewed wave in autumn/winter 2022 (scenario 2), there is a risk of stagnating sales.*

Cultural and creative industries' total turnover 2010–2022* (in €bn)



• Scenario 1: High infection figures until the end of the first quarter of 2022

"In this scenario, there are further restrictions on public life in January and February in order to curb the Omicron variant and the related infection rates. Since the measures have an impact, contact restrictions are relaxed in March." Scenario 2: High infection figures into the second quarter of 2022 (or renewed relapse in autumn/winter 2022)
 "In this scenario, the Omicron wave lasts much longer. This means that the uncertainty due to existing or tighter restrictions is extended into the second quarter of 2022."

*Figures for 2019/20 and forecast for 2021/22 based on Federal Government Centre of Excellence for the Cultural and Creative Industries 2021 (difference from the figures for 2010-2018: without WZ 18.14 book-binding etc.). Detailed explanations of the forecasts and basic assumptions of the Federal Government Centre of Excellence for the Cultural and Creative Industries in the annex on methodology.

Source: VAT statistics, Destatis 2021a; the Federal Government Centre of Excellence for the Cultural and Creative Industries 2021

Impact of the pandemic on turnover in 2021* (forecast)

Except for the music industry, the broadcasting market and the press market, all the CCI submarkets registered a recovery from the 2020 pandemic year, according to estimates by the Federal Government Centre of Excellence for the Cultural and Creative Industries. These suggest that the largest growth in turnover was achieved by the art market (+21%) – albeit starting from a low level due to the comparatively severe COVID-related slump. Drawing the comparison with 2019, it can be said that only the books, architecture and software/games submarkets exceeded the pre-crisis level of 2019 in 2021.

Estimated change in turnover of the CCIs in 2021* compared to 2019 and 2020*, by submarkets, in €bn



	Music	Book	Art	Film	Broad- casting	Perform- ing arts	Design	Architec- ture	Press	Advertis- ing	Soft- ware/ games	Other
Turnover in 2021 in €bn*	3.7	15.6	1.7	6.1	8.4	1.3	20.3	13.1	26.2	28.8	53.3	1.1
against 2019	-59 %	+1 %	-26 %	-39 %	-10 %	-78 %	-3 %	+4 %	-6 %	-3 %	+5 %	-19 %
against 2020	-26 %	+4 %	+21 %	+4 %	-1 %	+16 %	+6 %	+5 %	-3 %	+5 %	+6 %	-7 %

*2019/2020 figures and 2021 forecast from Federal Government Centre of Excellence for the Cultural and Creative Industries (2021). Source: Federal Government Centre of Excellence for the Cultural and Creative Industries (2021)

Key indicators for the Cultural and Creative Industries	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020*	Change 2019/2020
Number of companies (in thousands) ¹												
Cultural and creative industries (CCIs)	239.5	244.3	245.8	246.4	247.0	250.4	254.5	256.6	259.3	260.3	259.3	-0.38%
Contribution of CCIs to overall economy	7.57 %	7.60%	7.56%	7.60%	7.62%	7.69%	7.79%	7.85%	7.91%	7.92%	7.90%	
Turnover (in €bn)												
Cultural and creative industries (CCIs)	137.3	141.0	143.3	143.2	146.9	152.1	158.8	165.2	171.1	175.7**	160.4**	-8.70%
Contribution of CCIs to overall economy	2.62%	2.48%	2.49%	2.48%	2.50%	2.54%	2.61%	2.60%	2.58%	2.59%	2.48%	
Core workers (in thousands) ²												
Cultural and creative industries (CCIs)	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	1,237.3	1,248.6	0.91%
Contribution of CCIs to overall economy	3.06%	3.07%	3.11%	3.16%	3.16%	3.19%	3.23%	3.27%	3.31%	3.37%	3.41%	
Employees subject to social security co	ntribution	s (in thou	sands) ³									
Cultural and creative industries (CCIs)	713.0	732.5	765.9	790.9	809.1	834.5	865.6	903.0	938.4	977.0	989.2	1.25%
Contribution of CCIs to overall economy	2.55%	2.56%	2.62 %	2.67%	2.68%	2.71%	2.75%	2.81%	2.85%	2.92%	2.97%	
Self-employed persons (in thousands) ⁴												
Cultural and creative industries (CCIs)	239.5	244.3	245.8	246.4	247.0	250.4	254.5	256.6	259.3	260.3	259.3	-0.38%
Contribution of CCIs to overall economy	7.57%	7.60%	7.56%	7.60%	7.62%	7.69%	7.79%	7.85%	7.91%	7.92%	7.90%	
Persons in marginal (self-)employment (in thousa	nds)⁵										
Cultural and creative industries (CCIs)	636.5	626.9	626.6	621.5	621.1	585.3	596.3	599.6	597.4	598.6	563.2	-5.91%
Contribution of CCIs to overall economy	6.43%	6.21%	6.12%	5.94%	5.88%	5.58%	5.64%	5.63%	5.56%	5.56%	5.52%	
Self-employed persons in mini-jobs (in	thousand	s) ⁶										
Cultural and creative industries (CCIs)	257.2	258.1	261.6	268.7	270.9	277.2	285.8	289.5	295.5	299.1	297.2	-0.64 %
Contribution of CCIs to overall economy	10.47%	10.09%	9.88%	9.80%	9.86%	9.93%	10.17%	10.20%	10.32%	10.36%	10.32%	
Employees in marginal employment (in	thousand	ds)7										
Cultural and creative industries (CCIs)	379.3	368.8	365.0	352.8	350.2	308.1	310.5	310.1	301.9	299.5	266.0	-11.18%
Contribution of CCIs to overall economy	5.09%	4.89%	4.81%	4.57%	4.48%	4.00%	4.00%	3.97%	3.83%	3.80%	3.64%	
Total workforce (in thousands) ⁸												
Cultural and creative industries (CCIs)	1,589.0	1,603.7	1,638.3	1,658.8	1,677.1	1,670.2	1,716.4	1,759.2	1,795.2	1,835.8	1,811.7	-1.31%
Contribution of CCIs to overall economy	3.87%	3.82%	3.83%	3.83%	3.81%	3.75%	3.79%	3.82%	3.83%	3.87%	3.87%	
Gross value added (in €bn)9												
Cultural and creative industries (CCIs)	75.2	79.8	83.4	88.1	89.9	92.2	97.1	97.7	105.1	108.5	94.6	-12.80%
Share of CCIs in GDP	2.93%	2.96%	3.04%	3.13%	3.07%	3.05%	3.10%	2.99%	3.12%	3.12%	2.81%	
Gross domestic product (GDP, nominal)	2,564.4	2,693.6	2,745.3	2,811.4	2,927.4	3,026.2	3,134.7	3,267.2	3,367.9	3,473.4	3,367.6	-3.05 %

Development of the cultural and creative industries in Germany, 2010–2020*

1 Taxable entrepreneurs with an annual turnover of more than ${\ensuremath{\notin}17,\!500}.$

2 Core workers include taxable entrepreneurs with an annual turnover 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.

4 The number of self-employed persons corresponds to the number of taxable entrepreneurs with an annual income of more than €17,500.

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

6 Self-employed persons in 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 in mini-jobs are based on a special analysis of the Federal Statistical Office's VAT assessment statistics by turnover bracket. This explains discrepancies between the current figures and those of previous studies.

7 Definition of persons in marginal employment is based on the 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 in mini-jobs.

9 Gross value added based on National Accounts figures, calculated on basis of breakdown of revenues in VAT statistics.

Source: Destatis 2021a,b,c; Federal Employment Agency 2021; *some in-house calculations by Goldmedia; **from Federal Government Centre of Excellence for the Cultural and Creative Industries 2021 (turnover for 2019/2020 differs from the calculations for 2010–2018: without WZ 18.14 book-binding, etc.) Discrepancies possible due to rounding.

*Figures for 2020 based partly on in-house estimates and preliminary official figures. Estimates partly based on development rates of previous years and severity of impact of the pandemic. Basis for turnover calculations for 2020: Federal Government Centre of Excellence for the Cultural and Creative Industries (2021). Discrepancies with figures in previous reports due to revisions of data in the underlying statistics.

Turnover per company and turnover per employee subject to soc. sec. contributions Turnover and GVA per core worker in 2020 (comparison with 2019 in %)

Whilst turnover and gross value added of the CCIs saw a severe slump in 2020 due to the pandemic, there was only a slight change in the number of employees subject to social security contributions, self-employed persons and companies; this was thanks to government assistance and the shorttime work allowance. Correspondingly, the other statistics for the CCIs were down significantly; compared to 2019, the average turnover per company fell by 9%, turnover per employee subject to social security contributions and core workers both dropped by 10%, and gross value added per core worker fell by 14%



Source: Destatis 2021a,b,c; Federal Employment Agency 2021; in-house calculations by Goldmedia; Federal Government Centre of Excellence for the Cultural and Creative Industries 2021 (turnover 2020).

Development of the Cultural and Creative Industries, part 2

Development of the Cultural and Creative Industries in Germany, 2010-2020*

Additional key indicators for the cultural and creative industries	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020*	Change 2019/2020
Average turnover per business (in € thousand)	573.3	577.1	583.1	581.1	594.8	607.2	624.1	643.8	659.5	677.6	618.7	-8.69 %
Turnover per employee subject to social security contributions (in € thousand)	192.6	192.5	187.1	181.0	181.6	182.2	183.5	182.9	182.3	180.5	162.2	-10.16%
Turnover per core worker (in € thousand)	144.2	144.3	141.7	138.0	139.1	140.2	141.8	142.4	142.8	142.6	128.5	-9.85 %
No. of employees subject to social security contributions per business	2.98	3.00	3.12	3.21	3.28	3.33	3.40	3.52	3.62	3.75	3.81	1.64 %
No. of core workers per business	3.98	4.00	4.12	4.21	4.28	4.33	4.40	4.52	4.62	4.75	4.81	1.29%
Gross value added per core worker (in € thousand)	79.0	81.7	82.4	84.9	85.1	84.9	86.7	84.2	87.7	87.7	75.8	-13.58%
Proportion of core workers who are self-employed	25.2%	25.0%	24.3%	23.8%	23.4%	23.1%	22.7%	22.1%	21.7%	21.0%	20.8%	-1.28%

* Figures for 2020 based partly on in-house estimates and preliminary official figures. Estimates partly based on development rates of previous years and severity of impact of the pandemic. Basis for turnover calculations for 2020: Federal Government Centre of Excellence for the Cultural and Creative Industries (2021). Discrepancies with figures in previous reports due to revisions of data in the underlying statistics.

Source: Destatis 2021a,b,c; Federal Employment Agency 2021; in-house calculations by Goldmedia Centre of Excellence for the Cultural and Creative Industries 2021 (turnover 2020).

Submarket factsheets

Core data, turnover by classification of economic activity Challenges, trends & forecasts Detailed analysis of the impactof the COVID-19 pandemic



Music industry

Workforce in 2020: **85,578**

Turnover in2020: €5.0 bn

Turnover forecast for 2021:

-26%

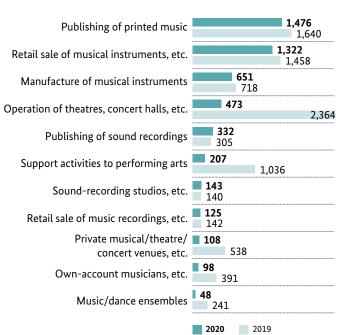
Music industry figures for 2020

The German music industry registered a drop in turnover of 44% in 2020 due to the pandemic. Before the pandemic, the submarket's turnover stood at around €9.0bn. The theatre and concert organisers recorded the greatest losses in sales. Sound recording publishers, in contrast, saw an increase in sales. The music industry accounted for a total of 85,578 workers, 6% down on 2019. The number of people in marginal employment dropped by 29% (as of 30 June 2020).

Key data on the music industry in Germany in 2020*

Category	2020*	Year-on-year comparison (%)
Number of companies	14,988	-0.7 %
Turnover (in €m)**	4,982	-44.5 %
Total workforce	85,578	-6.1%
Core workforce	54,308	-1.6 %
Employees subject to social security contributions	39,320	-1.9%
Self-employed persons***	14,988	-0.7 %
Persons in marginal (self-)employment	31,271	-13.0 %
Self-employed persons in mini-jobs****	20,054	-0.8 %
Persons in marginal employment	11,217	-28.7 %
Gross value added (in €m)	2,998	-53.2%

Turnover broken down by economic activity (WZ groups), 2019-2020 (in €m)



*Some in-house calculations by Goldmedia, based on: Destatis 2021a,b,c; discrepancies possible due to rounding; **Based on Centre of Excellence for the Cultural and Creative Industries 12/2021; ***Self-employed = liable to corporation tax with annual turnover >€17,500; ****Self-employed persons in mini-jobs = liable to corporation tax with annual turnover up to €17,500.

Music industry in 2021: challenges, trends & forecast

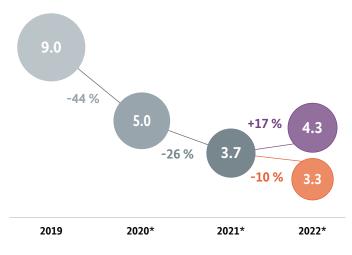
Turnover forecast

The market suffered from a further 26% fall in sales in 2021. Due to the ongoing pandemic, 2022 also has a risk of declining sales (up to -10%), but even if there is a recovery from the 2nd quarter, the music industry will still remain below the pre-crisis level according to forecasts by the Federal Government Centre of Excellence for the Cultural and Creative Industries.*

Trends/challenges

The dynamic growth in audio streaming continued in 2021: in the first half of 2021, this field expanded by around 20% and now accounts for around 71% of all music sales (Federal Association of the Music Industry 2021). In contrast, the live music sector continues to be severely impacted by the pandemic-related restrictions.

Turnover forecast for the music industry in 2021/2022 (in €bn)



Scenario 1: High infection figures until the end of the first quarter of 2022 Scenario 2: High infection figures into the second quarter of 2022 (or renewed relapse in autumn/winter 2022)

Source: Goldmedia, HMS, Professor Wink (HTWK Leipzig);

*2020 figures and 2021/22 forecast based on Federal Government Centre of Excellence for the Cultural and Creative Industries (2021). Detailed explanations of the forecasts and basic assumptions of the Federal Government Centre of Excellence for the Cultural and Creative Industries in the annex on methodology.

"In the twenty months of de-facto lockdown, the loss of turnover for the concert, tour and festival organisers alone amounted to around €3.5bn up to the end of last year. **By the end of 2021, the loss in turnover will amount to at least** €8.5bn. On top of this, there are the significant benefits to towns and cities, for example, due to musical tourism, and the losses in income of a large number of own-account workers dependent on the events industry."

Prof. Jens Michow, acting president of the Federal Association of the Concert and Event Industry Source: BDKV e.V., press release of 16 November 2021

Segments

Manufacture of musical instruments

Retail sale of musical instruments

Retail sale of music and video recordings, etc.

Sound-recording studios, etc.

Publishing of sound recordings

Publishing of printed music

Freelance musicians and music/ dance ensembles, etc.

Operation of opera houses, theatres and concert halls, etc

Detailed analysis of the music industry

Stock-take (2021)	A glimpse into the future (2022 onwards)
As restrictions on shop opening have been relaxed, there has been a slight increase in turnover from the manufacture of musical instruments. How- ever, the incipient recovery is jeopardised by the renewed deterioration in the pandemic situation.	The market for the manufacture of musical instruments will only see a slow revival from the ongoing COVID-19 crisis, and is dependent on the development of the submarket, and particularly of retail trade.
Despite the removal of restrictions on the retail trade and possibilities to shop on-site, the retail trade in musical instruments has seen a fall in sales. The continuation of the pandemic and on-site retail trade restrictions have encouraged the shift towards online trading.	Falling sales and closures of on-site retail outlets can continue to be expected in the wake of the pandemic and the trend towards digitalisation. The ease of shopping for musical instruments will remain relevant for amateur musicians in particular.
The sector is experiencing falling sales and a shift to online trading. This development is due not only to the pandemic, but also to the growing use of streaming. This offsets the reduced on-site sales and is generating turn-over growth of 12% (Federal Association of the Music Industry 2021).	The trend towards streaming music will continue irrespective of the pan- demic, and will foster the move away from on-site retail outlets towards digital services.
Greater use is being made of home recording and online recording studios. Ongoing uncertainty about future developments, and investment that has already been made in equipment, are currently resulting in declining book- ings of recording studio sessions.	Trends towards the use of home recording and digital recording studios are also becoming stronger in the long-term perspective. The recovery of on-site recording studios may take place going forward as the music indus- try revives and there is higher demand for professional productions.
The growth in digital trading in sound recordings is enabling publishers to enjoy rising turnover despite the situation. In many cases, however, the rev- enue from streaming does not offset the decline in sales of physical sound recordings. Smaller labels in particular are affected by this.	Going forward, the falling sales of physical sound recordings will impact the situation of the sound recording publishers. The ongoing trend towards digitalisation and the rising share of streaming-based turnover will affect the future development.
The sales of printed music have been much lower as a result of the restric- tions on live entertainment. Streamed productions, which currently account for the bulk of music sales, generate virtually no income for the publishers.	Revenue from the use of licences issued by publishers, and from royalties from GEMA, will only return to normal as the live entertainment sector recovers. This means that the situation of the publishers is greatly depend- ent on the development of the entire submarket and the live sector.
The improvement in the pandemic situation and hygiene and safety arrangements has enabled many events to take place. Restrictions on the live entertainment sector, cancelled concerts and ongoing consequences from the last year have nevertheless had a big impact on the artists' situa- tion and are again severely affecting them.	The effects of the ongoing pandemic will result in appreciable structural change in future. The situation will only improve for artists and ensembles as the possibilities for live perfomances expand. The extent of the changes and lasting consequences for the music industry is impossible to predict.
The live entertainment business continues to be severely affected by the repercussions of the last year and enduring restrictions. Organisers of events and operators of venues find it difficult to plan against the background of tighter rules and impending lockdowns. Concerts and performances are continuing to be postponed or cancelled, with far-reaching effects for the closely related music industry.	Hygiene and safety concepts will make it possible to put on delayed events in future. Creative ideas like live streams will remain part of the market. However, the pandemic will have a lasting impact on clubs, concert venues and organisers. It is impossible to predict whether and when the live per- formance business will return to normal, even in the near future.



Book market

Workforce in 2020: **109,651**

Turnover in 2020: €15.0bn

Turnover forecast for 2021:

+4%

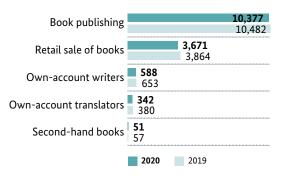
Book market figures for 2020

The German book market generated a total of around ≤ 15 bn in 2020. The greatest loss in turnover was suffered by the book publishers (-6%) and the book trade (-27%). The book market accounted for a total of 109,651 workers, 3% down on 2019. The number of people in marginal employment dropped by 9% (as of 30 June 2020).

Key data on the book market in Germany in 2020*

Category	2020*	Year-on-year comparison (%)
Number of companies	17,022	-2.0 %
Turnover (in €m)**	15,029	-2.6 %
Total workforce	109,651	-3.1%
Core workforce	66,769	-2.9%
Employees subject to social security contributions	49,747	-3.2%
Self-employed persons***	17,022	-2.0%
Persons in marginal (self-)employment	42,882	-3.5%
Self-employed persons in mini-jobs****	28,821	-0.8%
Persons in marginal employment	14,061	-8.6%
Gross value added (in €m)	6,053	-2.7%

Turnover broken down by economic activity (WZ groups), 2019-2020 (in €m)



*Some in-house calculations by Goldmedia, based on: Destatis 2020a,b,c; discrepancies possible due to rounding; ; **Based on Centre of Excellence for the Cultural and Creative Industries 12/2021 (without WZ 18.14 book-binding, etc.); ***Self-employed = liable to corporation tax with annual turnover >€17,500; ****Self-employed persons in mini-jobs = liable to corporation tax with annual turnover up to €17,500.

The book market in 2021: challenges, trends & forecast

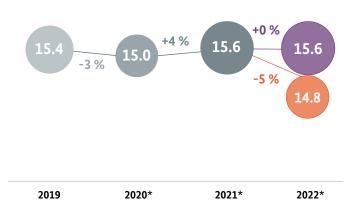
Turnover forecast

The reopening of on-site bookshops in particular enabled the book market to recover by a predicted 4% in 2021. Given high infection rates into the 2nd quarter and corresponding restrictions on access to retail outlets, sales could again drop by up to 5% in 2022.*

Trends and challenges

Investments by bookshops in the expansion of their online presence and delivery services have further accelerated the digitalisation of the sector and at least partially offset the loss in turnover caused by the pandemic. Smaller publishers and less well-known authors were greatly affected by the cautious programme planning. A lack of support for new, innovative voices is jeopardising the diversity and quality of the entire book market.

Turnover forecast for the book market in 2021/2022 (in €bn)



Scenario 1: High infection figures until the end of the first quarter of 2022 Scenario 2: High infection figures into the second quarter of 2022 (or renewed relapse in autumn/winter 2022)

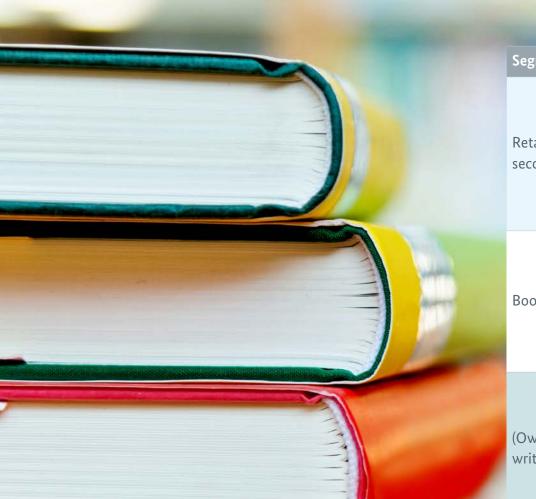
Source: Goldmedia, HMS, Prof Wink (HTWK Leipzig); *Based on Federal Government Centre of Excellence for the Cultural and Creative Industries (2021), excl. WZ 18.14 Book-binding, etc.

Detailed explanations of the forecasts and basic assumptions of the Federal Government Centre of Excellence for the Cultural and Creative Industries in the annex on methodology. "The book sector has adapted extremely quickly and comprehensively to the challenges posed by the crisis. Bookshops and publishers have prove d to be highly creative and customer-oriented. The sector has benefited from the fact that it has been well positioned online for many years."

"Almost every bookshop now has an online shop. Virtually overnight, bookshops set up delivery services and promoted their online shops in order to keep supplying their customers with books despite having to close their doors."

Thomas Koch,

Head of press and PR activities, German Publishers and Booksellers Association Source: Goldmedia survey, September 2021



Segments

Retail sale of books and second-hand books

Book publishing

(Own-account) translators and writers

Detailed analysis of the book market

Stock-take (2021)

Due to shop closures during the lockdown in spring 2021, there was a clear 23% fall in sales, particularly in retail bookshops, from the first half of 2019. However, if all the sales channels are considered (incl. online sales), turnover was only 3.7% down from the first half of 2019 (German Publishers and Booksellers Association 2021). Here, there has been a sharp rise in sales of e-books, mainly via the webshops of local bookshops, continuing the trend from 2020. Numerous bookshops have been able to substantially increase their online sales, but have had to shoulder considerable process costs.

The situation is still more difficult for small publishers than it is for larger groups, since many smaller publishers are reliant on sales in bookshops and at trade fairs and other events. At the Frankfurt Book Fair in 2021, there was for example only one central stage, meaning that smaller publishers had fewer opportunities to present themselves. They tend to be specialised. Also, many of them are active in those sectors most affected by the crisis (e.g. travel writing, diaries). In contrast, large groups were able to benefit from their diversification, larger catalogues and a higher number of best-sellers (Federation of European Publishers 2021).

Writers and translators are taking multiple hits from the crisis. In addition to the loss of fees due to the reduced number of new publications and lower visibility of publications, other revenue formats (e.g. readings, holding of workshops, participation in panel discussions) have been suspended. Some support programmes only reached own-account workers via third parties. Depending on the development of the pandemic, funding, e.g. for events, has not been deployed, and was therefore not passed on to the writers and translators. Own-account workers who are badly affected by the pandemic have been able to apply for Bridging Assistance or, since the beginning of 2021, for "New Start Assistance" and "New Start Assistance Plus" from the Federal Government (BMWi 2021, ver.di 2021).

A glimpse into the future (2022 onwards)

The development of the retail book market depends on a host of factors. These include the mobility of the (passing) customers, the trend towards a less diverse range of books on offer, and the demand for special interest literature which depends on the feasibility of certain activities (travel, cinema, sport, etc.). Even if the general situation returns to normal, the shift towards online sales is likely to continue. The particular qualities of second-hand books, many of which can only be usefully checked on-site, is creating special challenges and concerns for this segment. Since the online loan channel is popular when it comes to the expanding e-books sales market, it remains to be seen which licence models will become established (German Publishers and Booksellers Association 2021).

Even though more and more events and trade fairs are now taking place, they are smaller in scale. The organisers are more risk-averse. In combination with the general disappearance of international visitors, this development may continue to impact negatively on the revenues and visibility of smaller publishers in particular. New publications are still being delayed or dropped. Books by less well-known authors and niche genres in particular could fall victim to the economic uncertainties. This would impact not only the economic situation of the affected authors, editors and designers, but also the diversity of the book market as a whole (German Publishers and Booksellers Association 2021, Federation of European Publishers 2021).

As publishers are remaining cautious in their programming, it remains difficult for upcoming authors to gain a foothold on the market. This is impacting not only the financial situation of less well-known authors, but also the diversity. In the case of established authors, reduced book sales often only have a noticeable effect in the long term, since fees for follow-up projects are often negotiated on the basis of the success of previous publications. Should there be further cuts affecting the entire cultural sector, there will be fewer contracts for authors and translators. Even though some events and book fairs did take place in the second half of 2021, the programme of events and performances was scaled back. It is still impossible to predict whether alternative formats like live streamed readings will survive.

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Art market

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Workforce in 2020: **47,788**

Turnover in 2020: **€1.4 bn**

Turnover forecast for 2021:

+21%

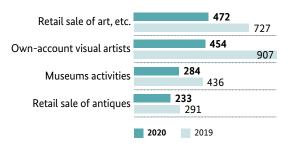
Art market figures for 2020

A total of approx. €1.4bn was generated by the German art market in 2020, or 39% less than in 2019. The greatest loss in turnover was suffered by own-account visual artists (-50%). A total of 47,788 people worked in the art market. These included 17,645 core workers and 30,143 persons in marginal (self-)employment, most of them persons with mini-jobs. The number of people in marginal employment dropped by 14% (as of 30 June 2020).

Key data on the art market in Germany in 2020*

Category	2020*	Year-on-year comparison (%)
Number of companies	12,520	-1.2 %
Turnover (in €m)**	1,443	-38.9%
Total workforce	47,788	-2.4 %
Core workforce	17,645	-1.8 %
Employees subject to social security contributions	5,125	-3.1%
Self-employed persons***	12,520	-1.2 %
Persons in marginal (self-)employment	30,143	-2.7 %
Self-employed persons in mini-jobs****	27,023	-1.2%
Persons in marginal employment	3,120	-13.9%
Gross value added (in €m)	767	-43.4%

Turnover broken down by economic activity (WZ groups), 2019–2020 (in €m)



*Some in-house calculations by Goldmedia, based on: Destatis 2021a,b,c; discrepancies possible due to rounding; **Based on Centre of Excellence for the Cultural and Creative Industries 12/2021; ***Self-employed = liable to corporation tax with annual turnover >€17,500; ****Self-employed persons in mini-jobs = liable to corporation tax with annual turnover up to €17,500.

Art market in 2021: challenges, trends & forecast

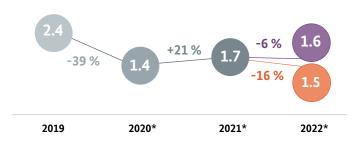
Turnover forecast

In 2021, the art market is expected to grow by 21% from the level in the pandemic year of 2020. However, the international travel restrictions are continuing to cause problems for the art market. No recovery is predicted for 2022; if infection rates remain high into the second quarter, there is a risk of turnover losses of up to 16%.*

Trends and challenges

The use of social media and tools for the online presentation and sale of art will continue in the sector. The effect of the pandemic on own-account artists will be seen after some delay in the coming years; many people are likely to give up their profession.

Turnover forecast for the art market in 2021/22 (in \in bn)



Scenario 1: High infection figures until the end of the first quarter of 2022 Scenario 2: High infection figures into the second quarter of 2022 (or renewed relapse in autumn/winter 2022)

Source: Goldmedia, HMS, Prof Wink (HTWK Leipzig);

*2020 figures and 2021/22 forecast based on Federal Government Centre of Excellence for the Cultural and Creative Industries (2021). Detailed explanations of the forecasts and basic assumptions of the Federal Government Centre of Excellence for the Cultural and Creative Industries in the annex on methodology.

"The bridging and other assistance which all companies with severe turnover shortfalls have been able to claim has been helpful. On the art market, the slump particularly affected galleries working with less well-known or less marketed artists. (...) Without this support, many galleries would barely have survived the crisis, or would have been severely damaged by it. As a result, the insolvencies predicted at the beginning of the pandemic have not taken place."

Kristian Jarmuschek and Birgit Maria Sturm, Association of German Galleries and Art Dealers Source: Politik & Kultur, 12/21

"The support and grants from the Federation and some of the Länder have helped the sector and many visual artists. However, many were not reached by the assistance."

> Dagmar Schmidt, Chair of the Federal Association of Visual Artists Source: Goldmedia survey, September 2021



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Retail sale of art and antiques, etc.

Own-account visual artists

Museums activities

Detailed analysis of the art market

shortfalls. The online presence of some museum shops has not been able to

offset this.

Stock-take (2021) A glimpse into the future (2022 onwards) Galleries and the art trade remained badly affected by the cancellation of Creative, digital technologies for the trade in art objects and antiques will national and international trade fairs into the second half of the year. This is become more important in the future. The use of social media and tools for the online presentation and sale of art will continue in the sector, irrecontinuing to result in large losses in turnover across the entire art market. Thanks to digital presentation channels and the use of social networks, spective of the pandemic. Here, the future of the art market depends not market players have been able at least to maintain virtual contacts with clijust on overcoming the effects of the pandemic, but also on the adaptability of the stakeholders. It does however seem likely that it will be several ents whilst museums and galleries have been closed. However, this has not been able to fully replace the art trade's analogue exhibition and meeting years before there is a return to pre-crisis sales and employment levels. spaces. In contrast to the retail trade, established auction houses have come relatively well through the pandemic. In many cases, they already had an online sales channel before the pandemic, and they were able to use and build on this during the crisis. As self-employed persons, artists are still severely affected by the pandemic. The threat to their livelihoods from the pandemic has created a lot of Despite immediate support and Bridging Assistance, many of them are uncertainty amongst many artists. Going forward, this will result in changes experiencing financial hardship or even having to opt for a new career path in the sector and to self-employment as visual artists. due to repeated and persistent restrictions. The turnover from museum activities depends on museums and cultural The operation of and thus the outlook for the shops depends on the possicentres being open. During the second half of the year, many of them were bility to visit museums. If visitor numbers and opportunities return to the able to reopen under strict conditions. Despite this, the restrictions on pre-crisis situation, the shops will be able to recover. operations and the low visitor numbers have resulted in ongoing revenue



Film industry



Workforce in 2020: **118,080**

Turnover in 2020: €5.9bn

Turnover forecast for 2021:

+5%

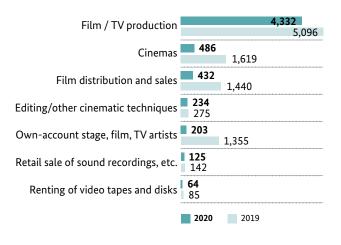
Film industry figures for 2020

The German film industry generated around €5.9bn in 2020, down by roughly 41%. The highest turnover losses due to the pandemic were suffered by freelance stage, film and TV actors (-85%) and cinemas and film distributors (both -70%). The film industry accounted for a total of 118,080 workers, roughly 5% down on the preceding year. The number of people in marginal employment dropped by 17% (as of 30 June 2020).

Key data on the film industry in Germany in 2020*

Category	2020*	Year-on-year comparison (%)
Number of companies	20,614	-0.2 %
Turnover (in €m)**	5,875	-41.3 %
Total workforce	118,080	-4.7 %
Core workforce	61,832	-3.3 %
Employees subject to social security contributions	41,218	-4.8 %
Self-employed persons***	20,614	-0.2 %
Persons in marginal (self-)employment	56,248	-6.2 %
Self-employed persons in mini-jobs****	38,583	-0.1%
Persons in marginal employment	17,665	-17.2 %
Gross value added (in €m)	5,040	-41.8%

Turnover broken down by economic activity (WZ groups), 2019-2020 (in €m)



*Some in-house calculations by Goldmedia, based on: Destatis 2021a,b,c; discrepancies possible due to rounding; **Based on Centre of Excellence for the Cultural and Creative Industries 12/2021; ***Self-employed = liable to corporation tax with annual turnover >€17,500; ****Self-employed persons in mini-jobs = liable to corporation tax with annual turnover up to €17,500.

The film industry in 2021: challenges, trends & forecast

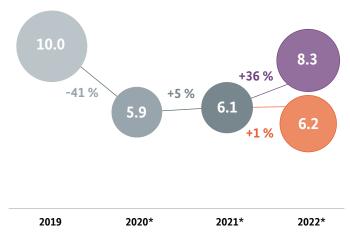
Turnover forecast

The film industry is only likely to see a slight recovery in 2021 (+5%). The situation of the cinemas and distributors in particular remains critical. However, significant growth (+36%) is possible if the high infection rates last until the end of the first quarter of 2022 and are followed by a recovery.*

Trends and challenges

The survival of cinema operators and distributors generating their income from cinemas is still under threat. In contrast, VOD providers benefited from the digital transformation and have grown appreciably. Production companies were less affected than feared. At the same time, the much higher hygiene costs have resulted in some cases in sharp profit falls.

Turnover forecast for the film industry in 2021/2022 (in €bn)



Scenario 1: High infection figures until the end of the first quarter of 2022 Scenario 2: High infection figures into the second quarter of 2022 (or renewed relapse in autumn/winter 2022)

Source: Goldmedia, HMS, Prof Wink (HTWK Leipzig);

*2020 figures and 2021/22 forecast based on Federal Government Centre of Excellence for the Cultural and Creative Industries (2021). Detailed explanations of the forecasts and basic assumptions of the Federal Government Centre of Excellence for the Cultural and Creative Industries in the annex on methodology.

"2021 continues to be dominated by the global pandemic. Even if the far-reaching hygiene measures have proved their worth, it has to be said that they have entailed higher costs and lengthened the time taken to shoot films. Productions in a pandemic continue to be a great *challenge*. At the same time, many further issues and key decisions are arising. Encouragingly, the recently presented coalition agreement takes up key issues, such as the responsibility for investment for ondemand services, tax incentives and legal certainty for the taxation of coproductions. The aim must be to finally get the pandemic under control so that we can concentrate on the forthcoming key challenges."

> Alexander Thies, Allianz Deutscher German Producers Alliance – Film and Television Source: Goldmedia survey, September 2021





Segments

Home video (includes WZ categories 'retail sale of music and video recordings' and 'renting of video tapes and discs')

Motion picture, video and television programme production activities

Editing and other cinematic techniques

Cinema

Film distribution (except 'renting of video tapes and disks')

Independent stage, film, radio and TV artists and other performing arts

Detailed analysis of the film industry

own-account stage performers.

Stock-take (2021)	A glimpse into the future (2022 onwards)
The home video market has grown in overall terms in 2020 and 2021. There are great disparities as a result of the digital transformation. Whilst DVD and Blu-Ray sales are declining, video-on-demand (VOD) revenues are ris- ing. The growth is being driven mainly by the subscription streamers (SVOD services), less by transaction-based VOD services.	The pandemic has meant that streaming and online video services have developed even more strongly on the market than predicted. Even if cer- tain streaming services did not expand as quickly as they had anticipated in 2021, the non-linear audiovisual services are becoming more and more popular.
Production companies had to suspend, push back or altogether cancel film- ing during and after the first lockdown. This resulted in revenue losses. However, these were less serious than feared, at around 5% in 2020 as a whole. At the same time, the much higher hygiene costs in filming work have resulted in sharp profit falls (German Producers Alliance – Film and Television 2020). The declines in turnover and profit vary between compa- nies and genres. Cinema productions have so far been worst affected.	The production volume is likely to return to pre-COVID levels when the pandemic is over, and the general market growth will continue. Shootings had to be reorganised and optimised as more extensive hygiene measures were imposed. This may benefit film productions in the future. The grow- ing staff shortage is an increasing challenge for the sector.
Turnover in the post-production industry reflects that of production com- panies two or three months earlier. Companies in this industry have been affected by the crisis to varying degrees.	The recovery phase will continue into 2022. The lessons learned from working from home are something the industry will continue to benefit from.
Cinemas have been dealt a considerable blow. Their turnover slumped by 68% in 2020 (Umbrella Organisation of the Film Industry 2021). The large cinema operators were affected more than the small ones. In 2021, the cinema industry will see a general recovery, albeit not to the pre-crisis level.	The pandemic has accelerated and intensified developments that were already underway: the period in which cinemas have the exclusive right to show films is under pressure. Some films are already been shown in paral- lel, in the cinema and online. More and more tickets are being sold online. Staff have emigrated to other sectors, and staff costs are rising.
The situation of distributors who generate income from distributing films to cinemas is somewhat similar to that of cinema operators. Where distribu- tors have generated income from selling TV, streaming or home video licences, revenue losses have been less high.	Since the distributors participate in the cinema revenues, they will not be able to subsequently offset the sales lost during the pandemic. A lasting recovery will likely not set in until the end of the pandemic. There is a risk that smaller indie distributors will encounter difficulties despite help from the state.
Filming, theatre performances and rehearsals and stage shows ceased for several months in 2020. Whilst shootings tended merely to be pushed back, many performances were cancelled altogether or pushed back at the expense of other performances. The renewed lockdown at the end of 2020/ beginning of 2021 exacerbated what was already a tense situation for	It will be almost impossible to offset the revenue lost during the pan- demic. Venues such as theatres, clubs and cabarets are faced with a risk of market consolidation, which is feared will lead to a crowding-out competi- tion at the expense of less well-known artists.



Broadcasting industry

43



Workforce in 2020: **64,886**

Turnover in: €8.5bn

Turnover forecast for 2021:

-1%

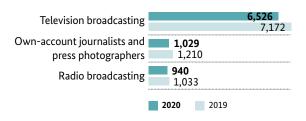
Key data on the broadcasting industry in Germany in 2020*

In 2020, private broadcasters had total sales of €8.5bn, down from €9.4bn in the preceding year. The worst falls in turnover were registered by own-account journalists and press photographers (-15%). A total of 64,886 people worked in broadcasting, 41,988 of whom are core workers and 22,898 persons in marginal (self-)employment. The number of people in marginal employment dropped by 10% (as of 30 June 2020).

Key data on the broadcasting industry in Germany in 2020*

Category	2020*	Year-on-year comparison (%)
Number of companies	16,946	-1.0%
Turnover (in €m)**	8,495	-9.8 %
Total workforce	64,886	-0.9 %
Core workforce	41,988	-0.2 %
Employees subject to social security contributions	25,042	+0.3 %
Self-employed persons***	16,946	-1.0 %
Persons in marginal (self-)employment	22,898	-2.1%
Self-employed persons in mini-jobs****	21,475	-1.5 %
Persons in marginal employment	1,423	-10.0 %
Gross value added (in €m)	7,406	-9.8 %

Turnover broken down by economic activity (WZ groups), 2019–2020 (in €m)



*Some in-house calculations by Goldmedia, based on: Destatis 2021a,b,c; discrepancies possible due to rounding; **Based on Centre of Excellence for the Cultural and Creative Industries 12/2021; ***Self-employed = liable to corporation tax with annual turnover >€17,500; ****Self-employed persons in mini-jobs = liable to corporation tax with annual turnover up to €17,500.

Broadcasting industry in 2021: challenges, trends & forecast

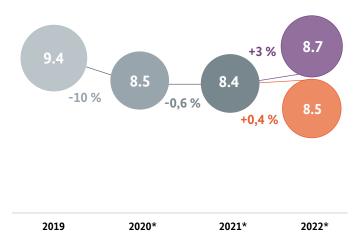
Turnover forecast

The largest private networks, ProSiebenSat.1 Media SE and Mediengruppe RTL Deutschland, reported turnover increases of 22% and 14% respectively for the first half of 2021 compared with the same period in the preceding year, which was affected by the pandemic. (Source: ProSiebenSat.1 Media SE 2021; RTL Group 2021). Despite this, the broadcasting sector will probably end 2021 with a slight drop in turnover. There are only signs of a moderate recovery for 2022.*

Trends and challenges

The shift in use from linear services to streaming and on-demand services has been encouraged further by the pandemic. Local and regional television and radio channels in particular risk losing further audience shares.

Turnover forecast for the broadcasting industry in 2021/2022 (in €bn)



Scenario 1: High infection figures until the end of the first quarter of 2022 Scenario 2: High infection figures into the second quarter of 2022 (or renewed relapse in autumn/winter 2022)

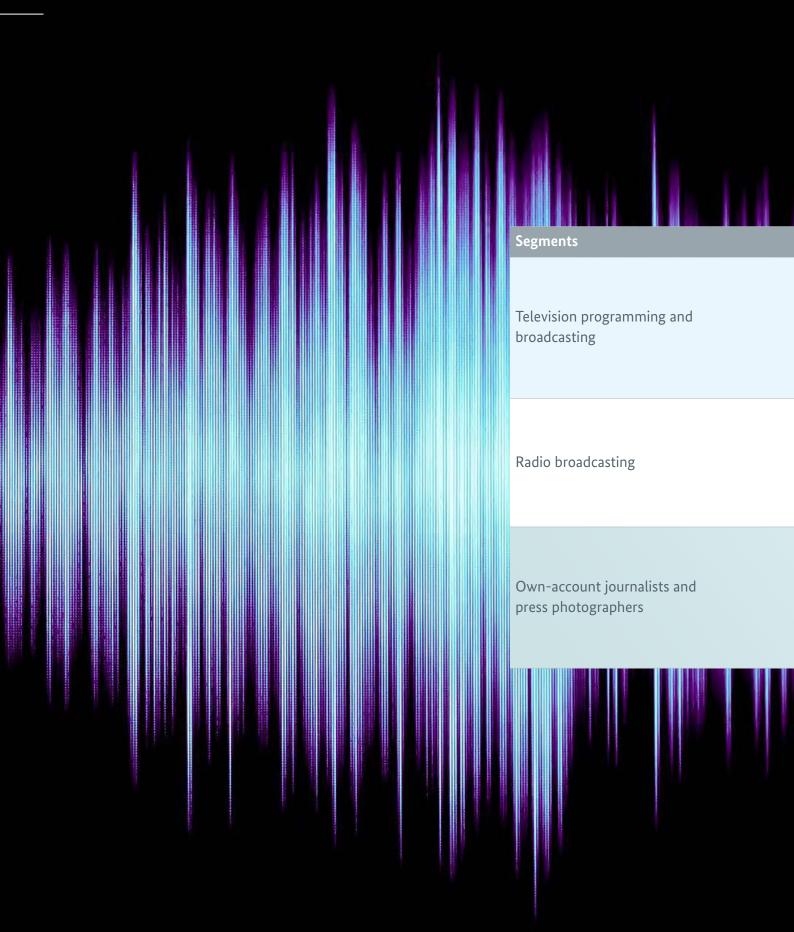
Source: Goldmedia, HMS, Prof Wink (HTWK Leipzig);

*2020 figures and 2021/22 forecast based on Federal Government Centre of Excellence for the Cultural and Creative Industries (2021). Detailed explanations of the forecasts and basic assumptions of the Federal Government Centre of Excellence for the Cultural and Creative Industries in the annex on methodology.

"All the companies in the broadcasting industry have been severely affected by the pandemic. This is particularly true of refinancing via advertising and the concert and events business. But the transmission, editing and production operations have also suffered from the COVID measures. The sector of local and regional advertising remains especially affected."

"Despite high and growing use of audiovisual media in the pandemic, the advertising revenues of private radio and television companies fell in overall terms during the crisis, whilst the global tech giants continued to record rising advertising revenues and public law broadcasting had high and stable income from the public's contributions. This lack of a level playing field is exacerbating the situation for private media in and beyond the pandemic."

> Frank Giersberg, Managing Director, German Media Association Source: Goldmedia survey, September 2021



Detailed analyses of the broadcasting industry

Stock-take (2021)	A glimpse into the future (2022 onwards)
The television companies are witnessing a general recovery in advertising revenues in 2021. According to a German Media Association forecast, traditional television advertising is to rise by 7%. Together with the strong growth in instream video advertising, moving-picture advertising might even exceed the pre-crisis level, with a forecast turnover of €5.3bn. However, the dynamic growth in the field of instream advertising is primarily due to international platforms like YouTube; hardly any of it is benefiting the German television channels. The pay TV market will probably stagnate and fail to make up the losses suffered in the preceding year (German Media Association 2021).	The turnover from traditional TV advertising marketing had already been declining before the crisis. Following the recovery in 2021, TV advertising is expected to decline again. Pressure on the German TV channels is coming not only from the advertising-financed international video platforms, but also from paid videos (Netflix, Amazon Prime Video, etc.). Whilst the nationwide providers are fighting for market shares with their own programmes, local TV providers are at great risk from the increasing levels of non-linear use.
In contrast to the television market, there is no sign of recovery on the radio market. On the contrary, following a 9% drop in turnover in 2020, the revenues from radio advertising are set to fall by a further 5% to ϵ 677m in 2021. On the other hand, instream audio advertising is expected to grow by 16% to ϵ 75m (German Media Association 2021). The online growth cannot, however, offset the loss in revenue for traditional radio stations, as once again international platforms (Spotify, etc.) are the greatest beneficiaries. At present, instream advertising only accounts for around 10% of total audio advertising.	Due to the large degree of dependence on local and regional advertising – which was comparatively badly affected by the pandemic – no rapid recov- ery is expected for the radio market. The advertising market may need sev- eral years to return to pre-crisis levels. Also, it is impossible to predict the extent to which local radio advertising customers are themselves at risk of going under. On top of this, there is the increasing use of non-linear audio services and the shift of advertising budgets to the digital world.
The pandemic has particularly affected own-account journalists and press photographers employed in local reporting or at events outside the editorial offices. Self-employed persons working in advertising-funded media or in public relations work have also suffered from a fall in orders. Almost a third of own-account journalists registered income losses of more than 50% in 2020; almost one in ten received no more contracts (German Federation of	The crisis is threatening the livelihoods of many self-employed persons and freelancers. However, the number of own-account journalists and press photographers in Germany has been falling since 2016. This trend is an expression of the structural crisis in journalism, where business models are under pressure from digitalisation. The pandemic has exacerbated the situation. So no quick recovery is in sight.

Journalists 2021). A similar situation can be assumed for spring 2021. The assistance for self-employed persons and freelancers has been extended until the end of 2021, but in many cases this is not claimed (German Feder-

ation of Journalists 2021).



Performing arts market



Workforce in 2020: **105,695**

Turnover in 2020: €1.1bn

Turnover forecast for 2021:



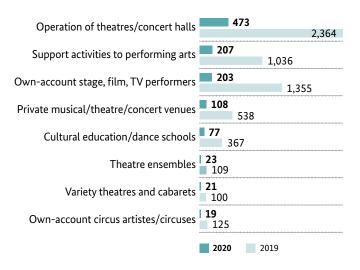
Performing arts market figures for 2020

The performing arts market is particularly severely affected by the pandemic, with turnover down by around 81%. In 2019, turnover stood at approx. €6.0bn. The market has considerable overlaps with the music and film industries. The market accounted for a total of 105,695 workers, roughly 6% down on the previous year. The number of people in marginal employment dropped by 23% (as of 30 June 2020).

Key data on the performing arts market in Germany in 2020*

Category	2020*	Year-on-year comparison (%)
Number of companies	21,315	-0.5%
Turnover (in €m)**	1,130	-81.1%
Total workforce	105,695	-5.6%
Core workforce	48,040	-1.5 %
Employees subject to social security contributions	26,725	-2.3 %
Self-employed persons***	21,315	-0.5 %
Persons in marginal (self-)employment	57,655	-8.7 %
Self-employed persons in mini-jobs****	40,883	-1.0 %
Persons in marginal employment	16,772	-23.4%
Gross value added (in €m)	1,676	-80.3 %

Turnover broken down by economic activity (WZ groups), 2019–2020 (in €m)



*Some in-house calculations by Goldmedia, based on: Destatis 2021a,b,c; discrepancies possible due to rounding; **Based on Centre of Excellence for the Cultural and Creative Industries 12/2021; ***Self-employed = liable to corporation tax with annual turnover >€17,500; ****Self-employed persons in mini-jobs = liable to corporation tax with annual turnover up to €17,500.

Performing arts market in 2021: challenges, trends & forecast

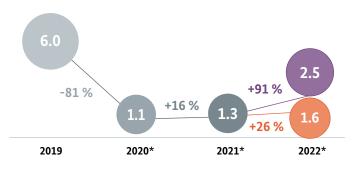
Turnover forecast

The performing arts were and continue to be the sector hardest hit by the cancellation of events due to the pandemic. The turnover forecast for 2021 is approx. €1.3bn (+16%), but this is well below the pre-crisis level. No full recovery of the market is expected in 2022 either.*

Trends and challenges

Even after two years of the pandemic, many places lack clear rules on the holding of events, making them difficult to plan. Investment in video and transmission technology for virtual or hybrid events remains necessary.

Turnover forecast for the performing arts market in 2021/2022 (in €bn)



Scenario 1: High infection figures until the end of the first quarter of 2022 Scenario 2: High infection figures into the second quarter of 2022 (or renewed relapse in autumn/winter 2022)

Source: Goldmedia, HMS, Prof Wink (HTWK Leipzig);

*2020 figures and 2021/22 forecast based on Federal Government Centre of Excellence for the Cultural and Creative Industries (2021). Detailed explanations of the forecasts and basic assumptions of the Federal Government Centre of Excellence for the Cultural and Creative Industries in the annex on methodology.

"Theatres build most of their sets themselves. However, their workshops rely on suppliers able to provide the special materials required. No investment will be taking place in ongoing needs when the market doesn't know when things will get going again."

"The closure of theatres has made it possible for many companies responsible for maintenance and safety checks to increase their turnover."

"Theatres are making more use of the potential of hybrid events (virtual performances with VR glasses) and are investing in video and transmission equipment."

> Wesko Rohde, Director of DTHG e.V. German Theatre Technical Society Source: Goldmedia survey, September 2021

Segments

Cultural education/dance schools

Theatre ensembles

Own-account circus artistes, circuses

Support activities to performing arts

Operation of opera houses, theatre and concert halls, etc.

Detailed analysis of the performing arts market

Stock-take (2021)	A glimpse into the future (2022 onwards)
Dance schools were able to open again in 2021, albeit with varying regional restrictions like vaccination requirements. Online and hybrid teaching formats were also offered. However, there was no significant pick-up in turnover in the sector in 2021. Many dancers cancelled their courses and it was difficult to recruit beginners. Furthermore, general restrictions on events also led to lower numbers at dance schools – fewer bridal couples, for example. Dance schools are also subject to the rules on sports facilities and catering, and this complicates matters. Young and smaller firms are particularly affected by the situation.	Interest in dance courses and cultural education is rising again. However, safety rules mean that only a certain number of people can be in the same room, and this is a challenge. Financial difficulties are also still affecting those schools that are open, and online/hybrid formats.
The lifting of COVID restrictions and the reopening of theatres enabled actors to get back together and perform live before audiences again in 2021. Many new events were announced, and theatre audiences picked up again until the outbreak of the fourth wave.	The next few years are expected to see a slow recovery in the sector. In view of ongoing COVID safety measures, however, visitor numbers are still much lower than before the pandemic, resulting in declining profitability and greater dependence on public funding.
Circuses were allowed to open again in 2021, but subject to certain safety measures like vaccination and testing rules. Circus tours were also able to take place throughout Germany, but at many fewer places and for shorter periods than usual. There was a great deal of interest in circus performances in 2021.	The sector is recovering as it is able to put on live shows once more. The circus companies are optimistic about the development of their sector in the near future. In some cases, however, shows have been cancelled due to financial uncertainty or postponed until 2022 or later.
The repeated imposition of restrictions on events and the risk of cancella- tions have resulted in less investment in light, sound and control technol- ogy. Some theatres have also started to build much of their scenery them- selves.	The gradual reopening of cultural events in the performing arts is boosting demand for various services. Hybrid formats are necessitating the use of new technology and services.
The costs in the sector have risen substantially due to economic changes and price increases on other markets. The closures enabled theatres to modernise and repair their facilities, e.g. stage floors. The rise in turnover did not improve in 2021 compared with 2020. The number of workers in the sector has risen slightly. Cultural event organisers have been eligible for financial assistance from special federal funds for cultural events.	It is expected that turnover will improve going into 2022, so that profits can be made again soon. The number of workers in the sector is also expected to rise. Hybrid events are becoming more common, with new for- mats like VR plays. However, this is creating a need for more investment in new video and transmission equipment.



Design industry



Workforce in 2020: **266,060**

Turnover in 2020: €19.2bn

Turnover forecast for 2021:

+6%

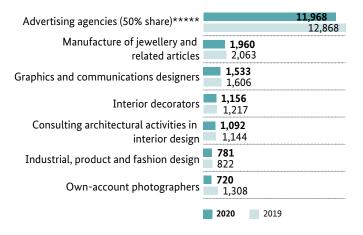
Design industry figures for 2020

The German design industry generated a total of around \in 19.2bn in 2020, approx. 9% down on the preceding year. In keeping with the Monitoring Report's definition, half the revenues of advertising agencies are counted towards the design industry. Advertising agencies generated \in 12.0bn, the largest share by far of the design industry's turnover (62%). The design industry accounted for a total of 266,060 workers (as of 30 June 2020), approx. 4% down on 2019.

Key data on the design industry in Germany in 2020*

Category	2020*	Year-on-year comparison (%)
Number of companies	60,725	-0.3 %
Turnover (in €m)**	19,229	-8.6%
Total workforce	266,060	-3.6%
Core workforce	152,230	-1.1%
Employees subject to social security contributions	91,505	-1.7 %
Self-employed persons***	60,725	-0.3 %
Persons in marginal (self-)employment	113,831	-6.7 %
Self-employed persons in mini-jobs****	63,754	-2.5 %
Persons in marginal employment	50,077	-11.7 %
Gross value added (in €m)	9,552	-9.6%

Turnover broken down by economic activity (WZ groups), 2019–2020 (in €m)



*Some in-house calculations by Goldmedia, based on: Destatis 2020a,b,c; discrepancies possible due to rounding; **Based on Centre of Excellence for the Cultural and Creative Industries 12/2021; ***Self-employed = liable to corporation tax with annual turnover > 17,500; ****Self-employed persons in mini-jobs = liable to corporation tax with annual turnover up to 17,500; ****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.

Design industry in 2021: challenges, trends & forecast

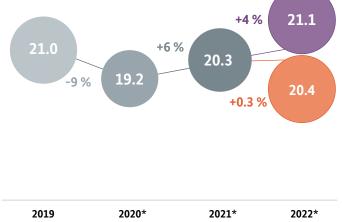
Turnover forecast

If infection rates remain high until the end of the first quarter and there is then a recovery, the design industry could return to pre-crisis levels. If the pandemic persists into the second quarter and there is a renewed relapse in the autumn/winter, the market is expected to stagnate throughout 2022.*

Trends and challenges

Supply bottlenecks and decisions against investing in new products are impeding the recovery, particularly of the industrial and product design sector. In contrast, communication designers who have positioned themselves with digital or advisory services can offer other companies strategic support as they refocus. These trends can result in lasting partnerships.





Scenario 1: High infection figures until the end of the first quarter of 2022 Scenario 2: High infection figures into the second quarter of 2022 (or renewed relapse in autumn/winter 2022)

Source: Goldmedia, HMS, Prof Wink (HTWK Leipzig);

*2020 figures and 2021/22 forecast based on Federal Government Centre of Excellence for the Cultural and Creative Industries (2021). Detailed explanations of the forecasts and basic assumptions of the Federal Government Centre of Excellence for the Cultural and Creative Industries in the annex on methodology.

"Stakeholders in communication design are significantly dependent on their clients. They get their orders through recommendations and experience, often in the same sector. If that sector encounters difficulties, refocusing and finding new clients takes quite some time."

Claudia Siebenweiber, President at BDG – Professional Association of German Communication Designers). Source: Goldmedia survey, September 2021

"The design sector is characterised by its small operations and its diversity. Many of the stakeholders are own-account workers. The assistance measures from government, which came far too late, showed that there is a lack of understanding of their status and the way they work."

> Boris Kochan, President, German Designers Association Source: Goldmedia survey, September 2021

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Industrial, product and fashion design

Graphics and communications designers

Interior decorators

Detailed analysis of the design industry

Stock-take (2021)

Industrial design in particular is seeing a recovery on its order books. Particularly in the fields of public design, trade fairs and industry, however, there are still some significant falls in turnover due to cancelled or postponed contracts. Also, turnover is shifting due to new fields of business and, more rarely, is improving due to innovative contracts. In the textiles industry in particular, the international recovery is bolstering the order books, but problems with the availability of raw and auxiliary materials and delivery issues are impeding the recovery. The expectation that highly skilled workers would emigrate to other parts of the economy did not materialise in 2021. Instead, there is such a tough "war for talents" in the design industry that agencies are holding on to their experts despite slumps in sales (Association of German Industrial Designers 2021).

In view of the dependence on the situation of clients, turnover trends are very much in line with general economic and sectoral trends. Companies in tourism, events, trade fairs, culture and catering are particularly affected by the pandemic. Many graphic and communications designers have focused their work on certain sectors. If this sector encounters difficulties, quite some time will be needed to find new clients and to reorient to different specialisations.

The negative economic consequences of the pandemic which were being felt by half of interior designers in the first quarter of 2020 have, contrary to fears, lessened since mid-2020. In April 2021, only around a quarter of offices were still experiencing negative economic consequences. Whilst the order situation has kept improving, supply bottlenecks have been some of the most frequently cited pandemic-related problems since mid-2020. Even though interior designers tend to be more affected by the negative effects than other architects' offices and more reliant on financial assistance, the proportion suffering from this has been declining. In view of the global recovery, companies with national and international customers have been more crisis-resilient (Federal Chamber of Engineers 2021).

A glimpse into the future (2022 onwards)

Should the previous order acquisition channels like trade fairs or direct customer contacts continue to be blocked, it will be necessary to find alternatives and take measures in response. Crisis mitigation strategies include, for example, the formation of networks in order to prevent business closures, and indirect support for the design sector via (state) support for projects which enable innovations to become marketable for companies via industrial design (Association of German Industrial Designers 2021). Many designers are increasingly diversifying their range of activities, e.g. towards UX design, where demand remains high, including in the field of industrial and product design. More intensive work for and cooperation with other specialist fields such as the medical and mobility sectors is also believed to be a promising avenue. Going forward, the benefits and usefulness of design will play a more prominent role.

The switch from print to digital, like for example the shift online of client and corporate communications, has been accelerated for the clients by the pandemic. This means that the pressure on designers who only offer print design has grown correspondingly, whilst those offering digital services like motion, UX or information design have been able to profit. In the short term, some costs will rise due to the pandemic, such as prices for programme licences for online tools. In the long term, the widespread transformation resulting from digitalisation will, however, give designers the opportunity to position themselves permanently as advisory and strategic partners.

The pandemic has particularly affected offices with mainly domestic clients in the field of hotels, trade fairs, etc. Interior designers find it more difficult to rapidly offset lost orders with new contracts as they are at the end of a long value chain. In contrast, offices focusing on specialisations like the office, health or private sector can benefit by addressing the challenges of the pandemic and the reorientations it is requiring. Opportunities for interior design also exist in the rededication of spaces in the wake of lifestyle changes (e.g. in shopping centres) and in the use of new technologies like VR (Federal Chamber of Engineers 2021).



Architecture market

Workforce in 2020: **177,765**

Turnover in 2020: €12.5bn

Turnover forecast for 2021:

+5%

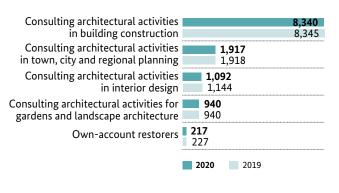
Architecture market figures for 2020

A total of approx. €12.5bn was earned on the German architecture market in 2020. Consulting architectural offices in building construction accounted for two thirds of architecture market turnover (67%). A total of 177,765 people worked in architecture, 138,773 of whom were core workers and 38,992 persons in marginal employment or self-employment. Despite the pandemic, the number of employees in jobs subject to social security contributions rose by 2.5% in year-on-year terms (as of 30 June 2020).

Key data on the architecture market in Germany in 2020*

Category	2020*	Year-on-year comparison (%)
Number of companies	37,827	-1.2 %
Turnover (in €m)**	12,506	-0.5 %
Total workforce	177,765	0.6%
Core workforce	138,773	1.4%
Employees subject to social security contributions	100,946	2.5 %
Self-employed persons***	37,827	-1.2 %
Persons in marginal (self-)employment	38,992	-2.4 %
Self-employed persons in mini-jobs****	20,062	-1.6%
Persons in marginal employment	18,930	-3.3 %
Gross value added (in €m)	7,199	-0.6 %

Turnover broken down by economic activity (WZ groups), 2019–2020 (in €m)



*Some in-house calculations by Goldmedia, based on: Destatis 2021a,b,c; discrepancies possible due to rounding; **Based on Centre of Excellence for the Cultural and Creative Industries 12/2021; ***Self-employed = liable to corporation tax with annual turnover >€17,500; ****Self-employed persons in mini-jobs = liable to corporation tax with annual turnover up to €17,500.

Architecture market in 2021: challenges, trends & forecast

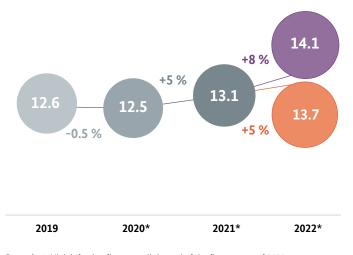
Turnover forecast

The architecture market is continuing to prove crisis-resilient. In 2021, the market is forecast to turn over more than €13bn, more than before the crisis. 2022 is expected to see growth of between 5% and 8%.*

Trends and challenges

The architecture market is less impacted by the pandemic. Supply shortages in the building sector are, however, causing delays and increased costs. As a result of the pandemic, demand for new space utilisation concepts for offices and the public arena will grow. Restorers are concerned that their economic situation will never fully recover as budgets for cultural activities shrink.

Turnover forecast for the architecture market in 2021/2022 (in \in bn)



Scenario 1: High infection figures until the end of the first quarter of 2022 Scenario 2: High infection figures into the second quarter of 2022 (or renewed relapse in autumn/winter 2022)

Source: Goldmedia, HMS, Prof Wink (HTWK Leipzig);

*2020 figures and 2021/22 forecast based on Federal Government Centre of Excellence for the Cultural and Creative Industries (2021). Detailed explanations of the forecasts and basic assumptions of the Federal Government Centre of Excellence for the Cultural and Creative Industries in the annex on methodology.

"The current figures give us grounds for cautious optimism that the economy will continue its recovery. We now need to tackle the big challenges for the coming decades intelligently, and to use the crisis to stimulate more housing space, more building culture - and more climate change mitigation. This is because the impending shortage of construction materials and the resulting price rises are reducing the propensity to invest, so that we are already facing the next challenge: to secure planning contracts for the medium term. If as many colleagues as possible are to be able to survive after the crisis, we will need improvements in the support programmes for small firms and own-account workers in particular."

Barbara Ettinger-Brinckmann, President of the Federal Chamber of Architects Source: Federal Chamber of Engineers 2021, press release of 18 May 2021 .



Segments

Consulting architectural activities in building construction

Consulting architectural activities in town, city and regional planning/gardens and landscape architecture

Own-account restorers

Detailed analysis of the architecture market

Stock-take (2021) A glimpse into the future (2022 onwards) According to a survey by the Federal Chamber of Architects, 60% of archi-In view of the good economic situation in building construction in the years tects' offices are still experiencing negative repercussions from the panprior to the pandemic, the submarket is in a better position than the overall construction industry despite economic losses. Nevertheless, declines in demic in 2021 (Federal Chamber of Engineers 2021). In comparison with 2020, architects' offices responsible for building construction have come turnover and equity capital are expected for the future – after a delay due through the pandemic relatively unscathed. Despite restrictions, most buildto the long planning cycles in the sector (Association of German Chambers ing sites were able to continue functioning. Ordering activity was generally of Commerce and Industry 2021). The pandemic is also revealing certain stable, and companies were rarely reliant on special support or affected by failures which had already existed before the crisis. In particular, long buildthe closure of premises. However, companies engaged in building construcing approval procedures, a lack of communication between companies and tion are experiencing the greatest delays on building sites due to staff authorities, and related project delays have been exacerbated by the panshortages in the companies undertaking the work and delays in approval demic. processes due to staff shortages in the public administration. Also, they are deriving the fewest benefits from the general push towards digitalisation in the architecture sector. Landscape architecture and urban planning offices are even less affected by The spaces in which people spend time and move around have changed the pandemic than the average architect's office in 2021. In particular, the during the pandemic: in their place of residence, their region and beyond. Due to the restrictions, for example, more use has been made of local leisector-wide supply and manpower shortages less of an issue for landscape architects and of virtually no consequence for urban planning. Fewer than sure and natural spaces. The importance of open and green urban spaces two-thirds of the landscape and urban planning offices are reliant on finanfor social co-existence became clear. There was an increased trend towards cial support or other COVID measures. As a result, few offices have been second homes outside urban areas or in holiday destinations. Should these closed due to the pandemic. Urban planners and landscape architects also trends continue, this will affect not only private residential space but also benefit more than other fields from the change driven by the pandemic. For the infrastructure and development of urban areas and regions in general. The phenomenon of dying inner city areas has also been exacerbated by example, they are seeing the largest move towards digitisation. (Federal Chamber of Architects 2021) The inadequacies that have been revealed by closures of businesses and curfews. The German Academy for Urban and Regional Planning believes its main tasks in future will be to promote the the pandemic and the fight against climate change will dominate the sector in the coming years (German Academy for Urban and Regional Spatial Planmultifunctionality of spaces and their uses (German Academy for Urban and ning 2021). Regional Spatial Planning 2021).

In April 2021, the proportion of restorers who said they were suffering from the crisis stood at 68%, the same as in the preceding year. The breakdown of the most pressing concerns of the restorers was similar to that of 2020: general hesitancy about placing orders, general uncertainty, postponement of orders from the public and (to a lesser extent) the private sector. Even though nearly one-fifth of confirmed orders were actually cancelled, there was a lesser degree of non-payments and delayed payments. Restorers are also affected by the loss of child care services and the tougher conditions for self-employed persons and freelancers applying for COVID assistance (Association of Restorers 2021). The fears of a lasting deterioration in ordering activity due to shrinking budgets for culture as a result of the crisis continue to exist beyond 2021 (Association of Restorers 2021).



Press market



Workforce in 2020: **231,625**

Turnover in 2020: €27.0bn

Turnover forecast for 2021:

-3%

Press market figures for 2020

The German press market generated a total of around \in 27 bn in 2020, 3% less than in the preceding year. The highest losses of turnover were suffered by freelance journalists and press photographers (-15%) and the retail trade (-5%). The press market accounted for a total of 231,625 workers, 3% down on the previous year. The number of people in marginal employment dropped by 10% (as of 30 June 2020).

Key data on the press market in Germany in 2020*

Turnover broken down by economic activity (WZ groups), 2019–2020 (in €m)

Category	2020*	Year-on-year comparison (%)
Number of companies	30,623	-1.3 %
Turnover (in €m)**	27,048	-3.2%
Total workforce	231,625	-5.2%
Core workforce	137,054	-3.2 %
Employees subject to social security contributions	106,431	-3.7 %
Self-employed persons***	30,623	-1.3 %
Persons in marginal (self-)employment	94,571	-8.0 %
Self-employed persons in mini-jobs****	26,891	-1.6%
Persons in marginal employment	67,680	-10.4 %
Gross value added (in €m)	11,300	-3.6%

Publishing of newspapers			9,932 10,166
Publishing of magazines			7,617 7,796
Retail sale of magazines and newspapers		3,715 3,911	
Other publishing activities		2,803	
(excl. software)		2,869	
Publication of directories	1,3		
Own-account journalists and	1,02	9	
press photographers	1,21		
News agency activities	584 595		
	2020	2019	

*Some in-house calculations by Goldmedia, based on: Destatis 2021a,b,c; discrepancies possible due to rounding; **Based on Centre of Excellence for the Cultural and Creative Industries 12/2021; ***Self-employed = liable to corporation tax with annual turnover >€17,500; ****Self-employed persons in mini-jobs = liable to corporation tax with annual turnover up to €17,500.

Press market in 2021: challenges, trends & forecast

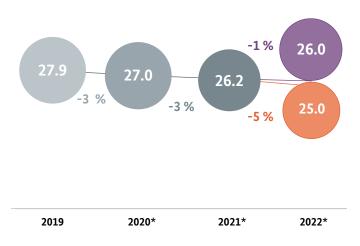
Turnover forecast

The press market is undergoing structural change and will have to cope with a further 3% drop in sales in 2021. The decline in sales in 2022 is expected to be between 1% and 5%.*

Trends and challenges

In view of the declining print-runs, the newspaper and magazine publishers are turning more to digital products, and particularly to paid content. Algorithms, data and artificial intelligence are of great relevance to the sector and necessitate further investment in technology and cooperation.

Turnover forecast for the press market in 2021/22 (in \in bn)



Scenario 1: High infection figures until the end of the first quarter of 2022 Scenario 2: High infection figures into the second quarter of 2022 (or renewed relapse in autumn/winter 2022)

Source: Goldmedia, HMS, Prof Wink (HTWK Leipzig);

*2020 figures and 2021/22 forecast based on Federal Government Centre of Excellence for the Cultural and Creative Industries (2021). Detailed explanations of the forecasts and basic assumptions of the Federal Government Centre of Excellence for the Cultural and Creative Industries in the annex on methodology.

"We are currently experiencing a perfect storm: the prices for paper, and also for fuel, energy, delivery and logistics, are going through the roof, hitting the refinancing of the printed press, and at the same time the global monopolist platforms are using their market dominance to skim off more than 70% of digital advertising revenue – and things are getting worse. This outweighs the slight signs of a recovery on the advertising market and stable reader demand for printed and digital newspapers and magazines in physical and online form. We urgently need non-discriminatory funding for the periodical press. At the same time, the legislature needs to ensure that press media get back to fair competition conditions online and are not encumbered by new prohibitions and overregulation across the board of their activities. Otherwise. we can expect the coming three years to see the discontinuation of many magazines."

> Stefan Scherzer, Association of German Magazine Publishers Source: Goldmedia survey, September 2021

Segments

Retail sale of magazines and newspapers

Publishing of directories, etc.

Publishing of newspapers

Publishing of magazines

Other publishing activities (excluding software)

Own-account journalists and press photographers

Detailed analysis of the press market

Stock-take (2021)	A glimpse into the future (2022 onwards)
The retail sales market continued its slight downward trend in 2021. How- ever, the development in sales growth was much more positive in 2021 than in 2020. This may be due to the lifting of travel restrictions, since the retail trade is concentrated at railway stations and airports.	In view of the ongoing pandemic and an increasing use of digital formats, the retail trade in newspapers and mazagines will only see a slow recovery from the slump in sales.
The recovery of the local and regional economies has meant that directory publishers have received more advertising bookings and developed more positively than in 2020.	In view of falling turnover, a structural decline has been observed for sev- eral years, significantly exacerbated by the COVID-19 pandemic.
The newspaper publishers have maintained their operations during the pan- demic. Overall, the sector's sales remained very stable, with a slight increase in 2021, both online and in print. The stability of the sector is due to a growing readership – with more than three million new newspaper readers since the onset of the pandemic (German Newspaper Publishers and Digital Publishers Association BDZV 2021). Whilst the numbers of subscribers and the advertising revenues for printed newspapers went down in 2021 due to the ongoing pandemic, there were sharp increases in the digital business (BDZV 2021).	There are no expectations of a rapid recovery in the advertising market for printed newspapers in the short term. Also, the positive effects of the pan- demic on sales will not continue. The renewed fall-off in subscribers to printed media can initially be offset by price rises. Whilst the digital busi- ness is growing strongly, around 40% of publishers expect that, by as early as 2026, the digital business will no longer be able to compensate for the declines in the printed newspapers (BDZV 2021).
Following the rise in magazine sales in 2020, there were diverse sales trends in 2021. General magazines saw a negative development, but specialist magazines picked up sales. The event and conference business of the news- paper publishers continued to be badly affected by the pandemic. The tradi- tional advertising business saw a continuation of the negative trend in 2021.	The pandemic has permanently exacerbated what was already a tense situ- ation for the newspaper publishers. The rising costs of production and freight transport mean that the existing production constraints and deliv- ery issues could persist into 2022. On top of this, there are costs for the digitisation of the internal working processes and for health and safety at work. The profitability and investment opportunities are also affected neg- atively by the ongoing rise in delivery costs, which has been happening for years. The digital economy is developing positively, but cannot offset the decline in other submarkets, even in the short term.
The growth of tourism and the recovery of the advertising market in 2021 have had positive effects on output and the demand for postcards and flyers, brochures and catalogues for advertising purposes.	Publishing companies which have specialised in advertising material are particularly benefiting from the possibility for events and trade fairs to take place again. As the overall economy recovers, the business with greetings cards, posters, etc. will improve. The digitalisation of the sector has cut printing costs in recent years, but production constraints and rising com- modity prices are likely to cause them to increase again appreciably.
The slow recovery of fields like the hotel, restaurant and catering industry, travel, trade fairs and events, which were very badly hit by the pandemic, is continuing to negatively impact the work of freelance journalists and press photographers in these areas.	It is already the case that many self-employed persons are working close to or even below the minimum wage. The situation will continue to worsen thanks to digitisation and negative developments across the press market, irrespective of the pandemic.



Advertising market



Workforce in 2020: **260,046**

Turnover in 2020: €28.5bn

Turnover forecast for 2021:

+5%

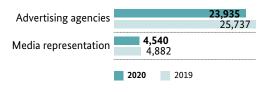
Advertising market figures for 2020

In 2020, the German advertising market recorded a slump in sales of 7% due to the pandemic. The market consists of only two sectors, with advertising agencies contributing around 84% (€23.9 bn). In total, around 17,000 fewer people were working in advertising in 2020. The number of people in marginal employment dropped by 12% (as of 30 June 2020).

Key data on the advertising market in Germany in 2020*

Category	2020*	Year-on-year comparison (%)	
Number of companies	28,104	-2.8 %	
Turnover (in €m)**	28,475	-7.0%	
Total workforce	260,046	-5.9%	
Core workforce	153,056	-2.9 %	
Employees subject to social security contributions	124,952	-2.9 %	
Self-employed persons***	28,104	-2.8 %	
Persons in marginal (self-)employment	106,991	-9.9 %	
Self-employed persons in mini-jobs****	23,567	-2.1%	
Persons in marginal employment	83,424	-11.9%	
Gross value added (in €m)	11,681	-7.0 %	

Turnover broken down by economic activity (WZ groups), 2019–2020 (in €m)



*Some in-house calculations by Goldmedia, based on: Destatis 2021a,b,c; discrepancies possible due to rounding; **Based on Centre of Excellence for the Cultural and Creative Industries 12/2021; ***Self-employed = liable to corporation tax with annual turnover >€17,500; ****Self-employed persons in mini-jobs = liable to corporation tax with annual turnover up to €17,500.

Advertising market in 2021: challenges, trends & forecast

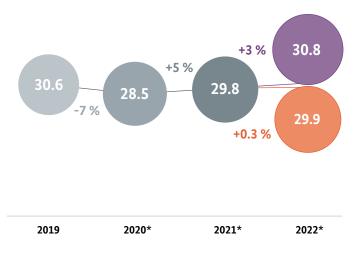
Turnover forecast

Due to the strong rise in digital growth, the advertising market will generate an increase of 5% in 2021. Further growth of up to 3% is forecast for 2022.*

Trends and challenges

The increase in turnover in digital advertising clearly offset the fall-off affecting other advertising media. The pandemic has thus accelerated the structural change from print to digital. The need for rapid digitisation and the necessary staff – against the background of a general skills shortage in the sector – is, however, resulting in higher costs and flagging up the need for training.

Turnover forecast for the advertising market in 2021/2022 (in €bn)



Scenario 1: High infection figures until the end of the first quarter of 2022 Scenario 2: High infection figures into the second quarter of 2022 (or renewed relapse in autumn/winter 2022)

Source: Goldmedia, HMS, Prof Wink (HTWK Leipzig);

*2020 figures and 2021/22 forecast based on Federal Government Centre of Excellence for the Cultural and Creative Industries (2021). Detailed explanations of the forecasts and basic assumptions of the Federal Government Centre of Excellence for the Cultural and Creative Industries in the annex on methodology.

"Parts of the advertising market have been recovering since April; in other words, digital ads are going well as before, TV ads are recovering, as are out-of-home. All the other advertising media are finding life difficult. The pandemic has boosted the structural change in the media, advertising budgets are continuing to shift to digital, and particularly to the mega-platforms. Google, Facebook and Amazon now account for nearly one-third of the German advertising market. Fundamental competition policy responses are required to maintain competition on the digital advertising market after the pandemic."

> Andreas F. Schubert, President, German Advertising Federation Source: Goldmedia survey, September 2021

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Advertising industry in general

Advertising agencies

Media representation





Detailed analysis of the advertising market

Stock-take (2021)	A glimpse into the future (2022 onwards)
The overall advertising market is registering slight rises in turnover again in 2021 compared with the preceding year, and the net advertising revenue of the media is also improving. The pandemic is stimulating more structural change in the media. Advertising budgets continue to be shifted towards the digital mega-platforms, whose market leverage is growing disproportionately. The turnover from out-of-home advertising has also grown further in 2021 (German Advertising Federation 2021).	Turnover in the advertising sector depends directly on the macroeconomic development. The pandemic has hit a lot of sectors, and particularly the services sector, which is so important for the advertising industry, and parts of the retail sector. Even once the market recovers, the trends of the preceding years will continue: online and out-of-home advertising will pick up further, but advertising on linear television and in the press will slowly decline further. Spending on training and IT costs will rise as the sector copes with the shift to the digital world. The skills shortage and the related rise in staff costs will persist (Association of Communications Agencies 2021).
Contrary to initial fears, the drop in turnover of the advertising agencies in the Association of Communications Agencies was only 1.3% in 2020. The majority of the agencies are expecting 2021 to bring an improvement in turnover, growing certainty for planning, and thus a relatively rapid market recovery in 2021/22. The growth is to be driven by the fields of online com- munications and the drawing up of comprehensive concepts for companies. In general, the weak economy and the skills shortage are cited as the larg- est impediments to growth at present (Association of Communications Agencies 2021).	The future prospects depend on the general economic outlook and the extent of structural change towards more online and out-of-home adver- tising. In terms of the development in turnover, almost half of the agencies in the Association of Communications Agencies expected to see growth in the coming years. However, the vast majority are not expecting to take on more staff, but rather to maintain current staff levels or even to shed jobs (Association of Communications Agencies 2021).
The trends and the forecasts from the second half of 2020 have firmed up: spending on advertising is rising again, and cinema advertising – which took a severe hit in 2020 – and out-of-home advertising are leading the way here. The spending on out-of-home advertising has risen not only clearly against the same period in the previous year, but also against 2019 – nearly reaching double-digit growth (Out-of-Home Advertising Association 2021). As in 2020, turnover has continued to fall in linear radio and television advertising, whilst in-stream advertising / advertising in some streaming services has continued to grow (German Advertising Federation 2021).	As the economy picks up speed, the medium-term and long-term pros- pects for the marketing of advertising are good. However, the structural change described above will continue, i.e. small and regional media are more affected by drops in spending on advertising and derive little benefit from the economic support (German Advertising Federation 2021).



Software/games industry



Workforce in 2020: **570,340**

Turnover in 2020: €50.2bn

Turnover forecast for 2021:



Software/games industry figures for 2020

The software/games industry generated turnover of around €50bn in 2020, making it the largest submarket of the German cultural and creative industries. As the sector was not greatly affected by the pandemic, the share of this submarket has grown further (29% of all turnover in the CCIs). In 2020, 570,340 people were working in the software/ games industry (as of 30 June 2020), roughly 5% more than in the preceding year.

Key data on the software/games industry in Germany in 2020*

Year-on-year comparison (%) 2020* Number of companies 43,094 3.1% Turnover (in €m)** 50,216 -0.9% Total workforce 570,340 4.5% Core workforce 495,767 5.1% 452,673 Employees subject to social 5.3% security contributions 43,094 3.1% Self-employed persons*** Persons in marginal 74,573 1.2% (self-)employment Self-employed persons in 46,557 4.0% mini-jobs**** Persons in marginal employment 28,016 -3.2% 37,387 Gross value added (in €m) -0.9%

Turnover broken down by economic activity (WZ groups), 2019–2020 (in €m)

Other software development	39,099
o the software development	39,494
Web-page design and programming	6,395
web page design and programming	6,459
Web portals	3,653
web portais	3,690
Other seftware publishing	719
Other software publishing	727
	350
Publishing of computer games	280
	2020 2019

*Some in-house calculations by Goldmedia, based on: Destatis 2021a,b,c; discrepancies possible due to rounding; **Based on Centre of Excellence for the Cultural and Creative Industries 12/2021; ***Self-employed = liable to corporation tax with annual turnover >€17,500; ****Self-employed persons in mini-jobs = liable to corporation tax with annual turnover up to €17,500.

Software/games industry in 2021: challenges, trends & forecast

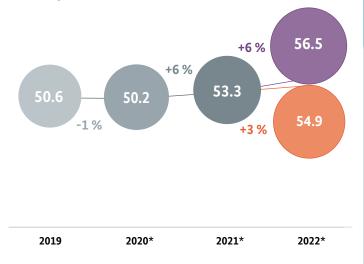
Turnover forecast

Following the slight drop in turnover, the software and games industry is growing again: in 2021 it is set to expand by 6%, and growth of between 6% and 3% is forecast for 2022.*

Trends and challenges

The pandemic has triggered a real surge in digitisation, and this has generally had a positive impact on the software and games industry. Growth in turnover was registered in all parts of the industry, and this will continue if it proves possible to overcome barriers like the drop-off in the rollout of broadband and the worsening skills shortage.

Turnover forecast for the software/games industry in 2021/2022 (in €bn)



Scenario 1: High infection figures until the end of the first quarter of 2022 Scenario 2: High infection figures into the second quarter of 2022 (or renewed relapse in autumn/winter 2022)

Source: Goldmedia, HMS, Prof Wink (HTWK Leipzig);

*2020 figures and 2021/22 forecast based on Federal Government Centre of Excellence for the Cultural and Creative Industries (2021). Detailed explanations of the forecasts and basic assumptions of the Federal Government Centre of Excellence for the Cultural and Creative Industries in the annex on methodology.

"Growth at the heart of **the digital** economy is the strongest it has been for 20 years, and turnover is well above the pre-pandemic level. The signs are pointing to continued growth for the coming year."

> Achim Berg, President of Bitkom e.V. Source: Goldmedia survey, September 2021

"Games have helped millions of people to cope with the pandemic and to stay in contact with family and friends and have fun together. They have even been recommended by the WHO for this purpose. Both the number of players and the games market have **grown appreciably, not least as a result of COVID**."

> Felix Falk, Managing Director of game Source: Goldmedia survey, September 2021

82 SOFTWARE/GAMES INDUSTRY

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Segments

Internet economy (development and programming of internet presentations and web portals)

Development and publishing of video games

Other software development

PLAY EVERYWHERE

Detailed analysis of the software/games industry

Stock-take (2021)	A glimpse into the future (2022 onwards)
The pandemic has triggered a real surge in digitisation. The majority of the population values digitisation as a resource-conserving and efficient tech- nology. However, there is no holistic approach at present (eco 2021).	The societal importance of the internet economy will grow substantially in the coming years. The field of eCommerce in particular offers massive potential for growth. However, this will require a corresponding policy framework like the nationwide broadband rollout (eco 2020).
The pandemic has proven to be a major opportunity for the sector, and good financial advantages have accrued from this. The German games industry achieved large growth in turnover in all its segments in 2021. The field of mobile gaming in particular has expanded rapidly, and in-game pur- chases are resulting in significant increases in sales. The large games devel- opers and publishers are not the only beneficiaries from this. Indie games are also seeing growing demand (game 2021).	The mobile sector will grow further in the coming years and aim more at attracting older target groups as consumers. This will also take place via new channels like Netflix, which integrated mobile games into its content catalogue in November 2021. Boosted by the pandemic, cloud gaming has also grown significantly in relevance. This development will continue in the coming years. Turnover of approximately €1bn is expected as early as 2025. This compares with turnover of around €100m in 2020 (PwC 2021).
After the sector stagnated in 2020, significant profits were earned again in 2021 (Bitkom 2021). The software industry is currently expanding more quickly than the gross domestic product. However, Germany's software industry is in a weak position on a global scale. Overall, more software is currently being imported than exported. We are also seeing that Germany is investing too little in startups compared with other countries. One consequence of this is that Germany lacks global players with innovative ideas. Instead, the market is dominated by a large number of small businesses. The low propensity to invest is partly due to the attitude to software, which is often understood only as a necessary aid, but not as an instrument to generate value (Fraunhofer 2021).	The shortage of skilled workers was briefly alleviated by the pandemic, but will become more and more of a challenge for the sector (Bitkom 2021). In the coming years, many new jobs will be created, and the scale of produc- tion will increase, as will turnover. According to forecasts, the software and IT services sector will overtake the mechanical engineering and vehicle manufacturing sector in terms of gross value added by 2030 at the latest (Fraunhofer 2021).

Update: games market



Key facts of the games market

#1 A growing sector

The German games sector has proven to be an extremely resilient market in the pandemic and is continuing to grow.

#2 Rise in corporate turnover

Corporate turnover in the sector in 2020 totalled around €3.6bn, the bulk of which was achieved by subsidiaries of foreign companies.

#3 Turnover from end-users also growing Overall, the games market expanded by 22% in year-on-year terms in 2021. In-game and in-app purchases are seeing the largest growth rates.

#4 Number of companies increasing

There has also been a significant rise in the number of companies in recent years. Around 730 companies are active on the games market.

#5 Use of games increasing substantially The average time played has doubled during the pandemic. No post-pandemic decline in use is expected.

#6 Live streaming more and more relevant The live streaming of games is a growing submarket: in cumulative terms over a year, the audience reach can match that of traditional television programmes.

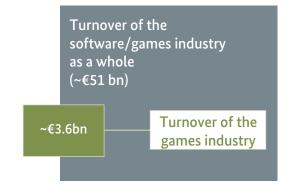
Games: turnover of the German games market

In the CCI monitoring reports, the games market forms part of the "Software and games industry" submarket, which includes not only computer games distribution but also the development and distribution of software and internet presentations, and the operation of web portals. The sales and employment figures for this submarket, based on data from the Federal Statistical Office, are correspondingly large.

No more detailed breakdown is possible on the basis of official statistics, however, so this focus on games makes use of other sources and surveys in order to permit a realistic reflection of the fast-growing games market.

The total corporate turnover of the German games market stood at around \in 3.6bn in 2020, appreciably higher than in the last CCI monitoring report (~ \in 3bn for 2018). The sector is dominated by a large number of small companies. In contrast, the bulk of the sales are made by a few large firms, most of which belong to international companies, and are generated by publishing activities.

Software/games industry turnover vs. games industry turnover (2020)



Source: In-house assessment by HMS. Extrapolation of the games turnover in 2018 on the basis of growth rates for Germany (HMS 2020, game 2021b, PWC 2021).

Games: representation of the games industry in official statistics

The games industry – its main segments being (1) development/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 subgroups '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' WZ 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 approx. €4bn in 2009 to around €300m in 2018, without any explanation given (Destatis 2020a). These figures contradict the data known to us showing that the turnover of games publishers increased over this time period both globally and in Germany (cf. Appendix on methodology in HMS 2020). If one wishes to accurately map the games sector in the official statistics, the definition of the categories of economic activity (WZ groups) needs to be altered. Work is currently being done on this at international level. It therefore seems possible that there may be subclasses of economic activity at UN and EU level in 2023, and at national level in 2024, which reflect games development and publishing.

Until then, it is necessary to use unofficial data from previous studies carried out within the games sector at company and consumer level.

Selected subgroups of the 'manufacture of games and toys' under WZ 32.40.0

- Manufacture of toys
- Manufacture of toy musical instruments

(Classification of Economic Activities)

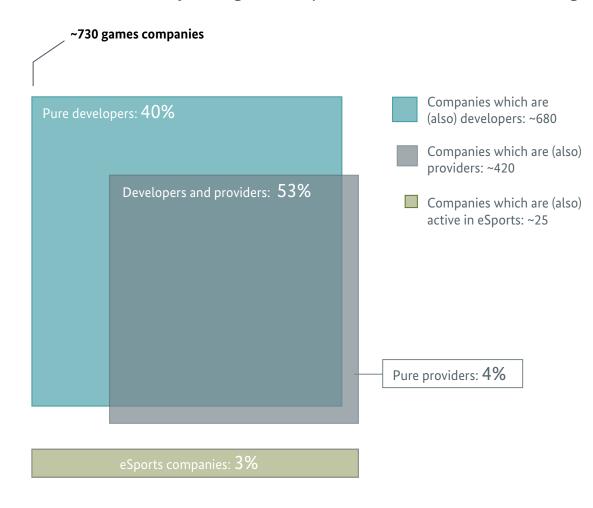
- Manufacture of board games and similar games
- Manufacture of electronic games: chess, etc.
- Manufacture of pinball machines, slot machines, billiards, special tables for casino games, etc.
- Manufacture of parlour games
- Manufacture of wheeled toys including plastic bicycles and tricycles

Source: Destatis 2008

Games: number and fields of activity of the companies

Just as the total corporate turnover in the games sector has increased, there has also been a sharp rise in the number of companies in recent years.

At present, there are around 730 companies in the "core games market". The core market includes games developers, games providers (i.e. publishers and platform providers) and/or companies which are (also) active in the field of eSports. 93% of the companies are (also) active in the field of development. Somewhat over half of all companies (57%) (also) sell their own or third-party games. There are hardly any providers which only sell games (4%). The figures now also cover eSports companies, which account for 3% of the core market.



Number and fields of activity of the games companies in 2021, in % and in absolute figures

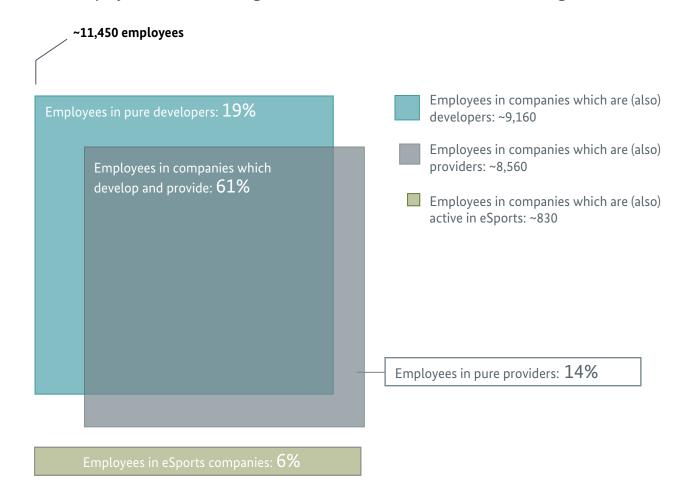
Source: HMS on the basis of the gamesmap (game 2021c). In comparison to the 2020 CCI Monitoring Report, which mapped the extended core market, the methodology has been adapted. Unlike in the extended core market, the core market does not include pure service providers. The field of eSports has been included in this report for the first time. For ease of understanding, overlaps between eSports and other categories (affects 3 companies) are omitted.

Games: employees - number and structure

Around 11,450 people are employed in the core games market plus eSports.

Even though there are many more pure developer firms than provider firms, the numbers of employees are similar. This is primarily due to the many small (newly established) developer studios, which have higher numbers of employees than the few pure providers. 6% of all the employees work in eSports.

More than 80% of the employees are in jobs subject to social security contributions. Of these, the vast majority are on permanent contracts.



Structure of employees in the German games sector in 2021, in % and in absolute figures

Source: HMS on the basis of the gamesmap (game 2021c). Data on nature of employment relationship based on HMS 2020. In comparison to the 2020 CCI Monitoring Report, which mapped the extended core market, the methodology has been adapted. Unlike in the extended core market, the core market does not include pure service providers. The field of eSports has been included in this report for the first time. For ease of understanding, overlaps between eSports and other categories are omitted.

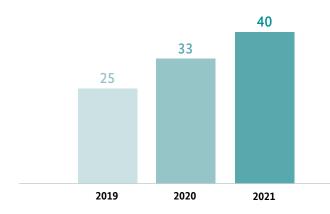
Games: rise in use and turnover

During the pandemic, the average duration of play per week has doubled from 5 to 10 hours, and will not drop back to the pre-pandemic level (Bitkom 2021b).

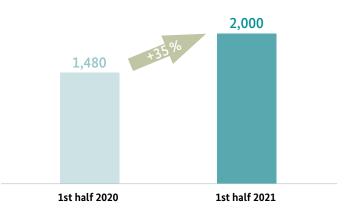
In the 50+ age cohort in particular, a steady increase in the number of people who at least play occasionally can be observed. Gender does not play a role here. The German games market is continuing its rise in turnover. The largest growth rates are in in-game and in-app purchases. In the first half of 2021, they achieved turnover of ≤ 2 bn, ≤ 0.6 bn more than in the preceding year (≤ 1.4 bn in the first half of 2020). The field of games hardware also recorded clear rises in sales, from ≤ 1.4 bn to ≤ 1.7 bn. The only decline in sales is in purchased software.

Overall, the games market grew by 22% in year-onyear terms (game 2021d).

Proportion of at least occasional users of digital games aged between 50 and 64, in %



Development of turnover in in-game and in-app sales, in €m



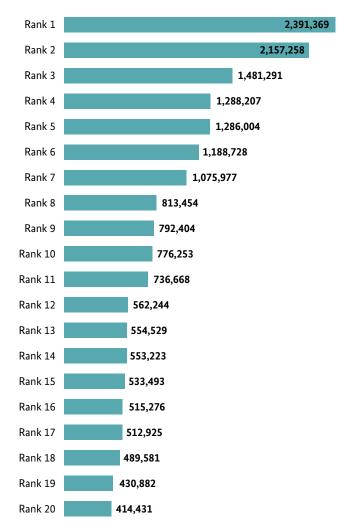
Games: live streaming

The live streaming of digital games is another lucrative submarket of the games market. eSports events like The International – Dota 2 Championship, and in particular Let's Play videos, are streamed. The players are watched by the public as they play a video game. The idea is not simply to "play through" a game to show how it works, but also for the "Let's Player", who can usually be seen to the side of the game, to keep up an amusing commentary. There are videos of thousands of games documenting the game experience in this way.

The main platforms on which games are live streamed are Twitch (owned by Amazon) with a 63% market share (as of October 2021) ahead of YouTube (22%) and Facebook (14%), in terms of viewed hours (Streamlabs 2020).

The audience reach of Let's Players can, over a year, amount to that of traditional TV programmes. Successful German Let's Players achieve more than a billion clicks by viewers. Their income comes mainly from shares in advertising revenue, affiliate link commissions and product placement. The gross turnover of the most successful German Let's Players exceeds €1m a year. A list – anonymised here – shows that the revenues from the German top 20 Let's Players on the leading platform (share of Twitch advertising revenues) are in the hundreds of thousands or millions over a period of 27 months (Ingame 2021).

Gross income of the top 20 twitch streamers in Germany, 08/2019-10/2021, in U.S. dollars





Focus on: own-account workers

Own-account workers in the CCIs in Germany on the basis of the Microcensus

Own-account workers are defined as self-employed workers without dependent employees. There is a great variety of own-account workers in the CCIs, ranging from designers to camera operators and musicians, from visual artists to editors and journalists. Roughly half of them are insured by the Artists' Social Fund (KSK). The KSK covers the health, pension and social care insurance of freelancers in the arts and journalism. Own-account workers in the CCIs tended to be particularly badly affected by the pandemic.

Key facts: own-account workers in the cultural and creative industries

#1 Definition

Own-account workers are defined as self-employed workers without dependent employees.

#2 Number of own-account workers In 2019, approximately 376,000 people in the CCIs were own-account workers. The figure for 2018 was around 2% higher.

#3 Own-account workers by submarket

The largest numbers of own-account workers in 2019 were in the design (82,000), press (51,000) and performing arts (48,000) submarkets – the fewest were in the architecture submarket (21,000).

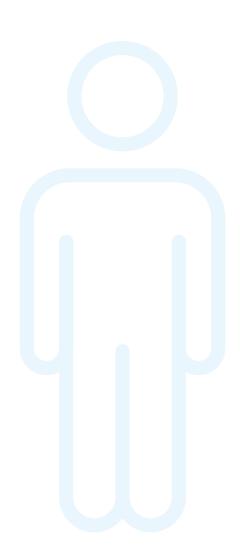
#4 Proportion of own-account workers Overall, 80% of all self-employed persons in the CCIs are own-account workers. The proportion is particularly high in the broadcasting and performing arts submarkets.

#5 Share of total workforce

In total, 21% of the workforce (self-employed persons, employees subject to social security contributions and persons in marginal employment) are own-account workers.

#6 Share by region

The largest proportion of own-account workers in terms of the total workforce is in Berlin (33%), the smallest in Bremen (14%).



Overview of initial data

The official VAT statistics (assessments and advance returns) do not currently contain information on the number of own-account workers (self-employed persons without staff) in Germany. Official data on their number are currently only collected via the annual representative survey of households, the Microcensus, which surveys roughly 830,000 people. However, data from this survey are only available at federal level and down to the 3-digit level of the classification of economic activity.

Data basis to determine the number of own-account workers

Data source (Destatis)	Relevant indicator	Availab	le years	Available regional levels	Available WZ levels
Microcensus	✓ Number of own- account workers	2008 •	2017 2019	Federation × Länder	1 2 3 4 5
VAT statistics (advance returns)	✓ Number of companie (annual turnover of more than €17,500)	2008 2008 e	→ 2021 2019	 Federation Länder 	1 2 3 4 5
VAT statistics (assessments)	✓ Number of small businesses (annual turnover of less than €17,500)	2008 2008 •	• 2021 2016	Federation	1 2 3 4 5

Methodological approach

In order to determine the number of own-account workers in the CCIs, Goldmedia used the available time-series of the Microcensus and combined these with an in-house distribution key based on VAT statistics.

- In order to estimate the number of own-account workers in sufficient detail (down to the 5-digit WZ level), the percentage share of companies and self-employed persons in mini-jobs in the WZ (sub)classes was first determined in terms of the corresponding WZ groups*.
- 2. Subsequently, the number of own-account workers was approximated at 5-digit level by means of the proportions calculated for all the CCI-related categories of economic activity.
- 3. Finally, the number of own-account workers in the CCI submarkets was estimated on the basis of the calculated figures in line with the guide-lines for the compilation of statistical data on the CCIs.

Schematic depiction of the process to determine the number of own-account workers

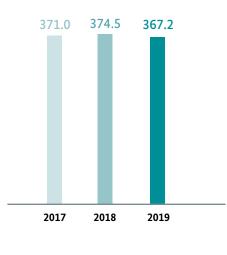
Indicator	Data source	WZ levels
 Number of companies Number of self-employed persons in mini-jobs 	⇒ VAT statistics	1 2 3 4 5
Indicator	Data source	WZ levels
✓ Own-account workers	⇒ Microcensus	1 2 3 4 5

* In some cases, the shares had to be estimated due to inadequate data in the Microcensus of the respective WZ definitions. Source: Goldmedia 2021

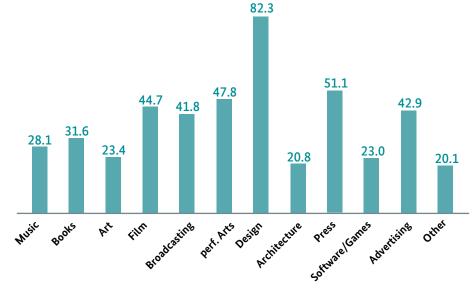
Number of own-account workers in the CCIs

Latest figures show something of a decline in the number of own-account workers in the CCIs in Germany: in 2019, approx. 376,000 people were self-employed without any staff of their own in the CCIs. The figure for 2018 was around 2% higher.

Number of own-account workers in the CCIs in Germany 2017–2019, by submarket, in 1,000

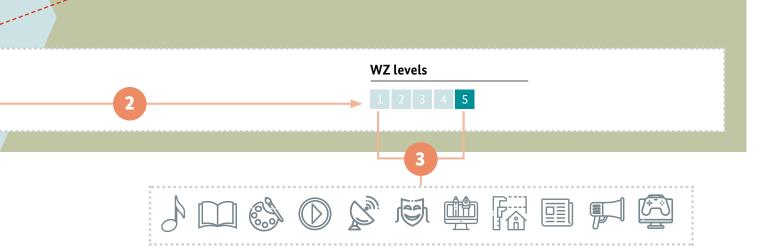


Number of own-account workers in the CCIs in Germany in 2019, by submarket, in 1,000



Source: in-house calculations Goldmedia 2021

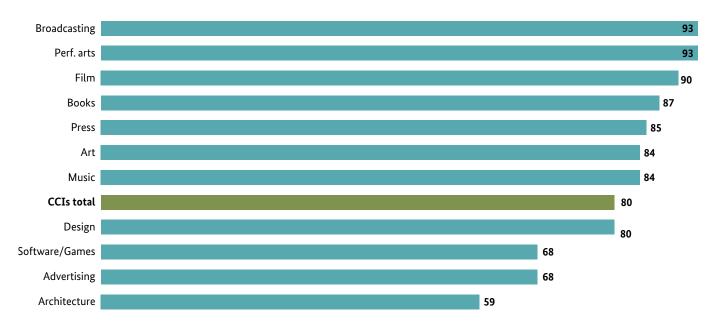
 Σ Number of companies + self-empl. in mini-jobs in WZ (sub) class (5 digit) Σ Number of companies + self-empl. in mini-jobs in WZ group (3-digit)*



Proportion of self-employed persons who are own-account workers in 2019, by submarket, in %

Many people in the CCIs are own-account workers: a total of 80% of all self-employed persons work on their own and do not employ any staff. The proportion of own-account workers is particularly high in the broadcasting industry, the performing arts market and the film industry. Measured against the total number of self-employed persons, the fewest own-account workers work in the architecture market.

Proportion of self-employed persons who are own-account workers in 2019, by submarket, in %

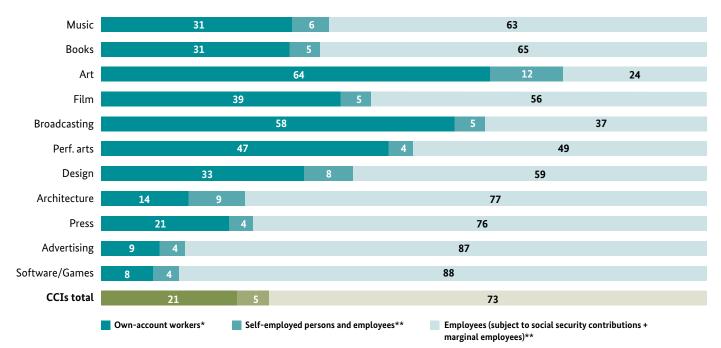


Source: In-house calculations by Goldmedia based on Microcensus. Different calculation basis, therefore not comparable with number of self-employed persons in the rest of the Monitoring Report (e.g. on p. 14).

Proportion of own-account workers in total workforce in the CCIs in 2019

In comparison with the total workforce, the proportion of own-account workers is particularly high in the art market (visual artists) and in broadcasting (journalists and press photographers). The smallest proportion of own-account workers is to be found in the advertising market and the software/games industry. In total, 21% of people working in the CCIs are own-account workers.

Proportion of own-account workers, self-employed persons and employees (subject to social security contributions/marginal employees) in the CCIs, by submarket, in 2019

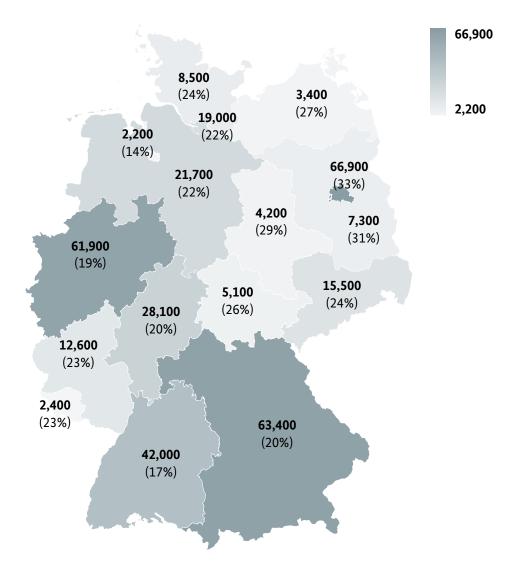


Source: Employment statistics, Federal Employment Agency 2021; in-house calculations by Goldmedia. *Self-employed persons = calculation based on microcensus. Different calculation basis, therefore not comparable with number of self-employed persons in the rest of the Monitoring Report (e.g. on p. 14). ** Employees subject to social security contributions and marginal employees according to employment statistics (as of 30 June 2019)

Number of own-account workers by Land

The largest number of own-account workers in the CCIs are based in Berlin, followed by Bavaria and North Rhine-Westphalia. The largest proportion of own-account workers in terms of the total workforce is also in Berlin (33%), the smallest in Bremen (14%).

Number of own-account workers in the CCIs by region, 2019 (in brackets: proportion of own-account workers in total workforce*)



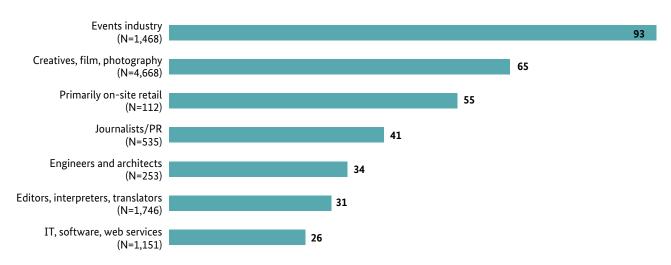
Source: Employment statistics, Federal Employment Agency 2021; in-house calculations by Goldmedia.

* Employees subject to social security contributions and marginal employees according to employment statistics (as of 30 June 2019) + self-employed persons (in-house calculation based on Microcensus. Different calculation basis, data therefore not comparable with number of self-employed persons in the rest of the Monitoring Report (e.g. on p. 14).

Impact of pandemic on own-account workers

According to a survey from April/May 2020*, 93% of the surveyed own-account workers in the events industry said that their monthly turnover had dropped by more than 75% due to the pandemic (at the time of the survey). This was stated by around two-thirds of own-account workers in the culture, film and photography sector.

Fall in monthly turnover of >75% due to pandemic in case of own-account workers in selected sectors, April/May 2020





Cross-innovative potential

Cross-innovation is an innovation which arises from the creative combination of expertise from different sectors. The effects of cross-innovation cannot be determined using conventional innovation indicators.

Key facts: cross-innovative potential

#1 Potential

Almost all current innovation trends require technical, methodological or substantive contributions from the CCIs.

#2 Forms

Cross-innovations are based on input from the CCIs for othersectors or joint projects of companies from the CCIs and other sectors.

#3 Scope

There is a lack of data about the scope of cross-innovation in and from the CCIs.

#4 Reasons for the lack of data Few CCI innovations are based on formal research, and there is no explicit recording of cross-innovations.

#5 Developing the data base

It may be possible to roughly survey cross-innovation in future via panel surveys and evaluations of input/output and occupational data.

#6 Funding

State funding generally targets the networking between the sectors and financial support for cross-sectoral projects.

Potential for cross-industry innovations from the CCIs

The cross-sectoral cooperation with the CCIs is becoming indispensable for more and more innovations with a broad spectrum of applications. Potential derives from technical, methodological and substantive contributions from the CCIs.

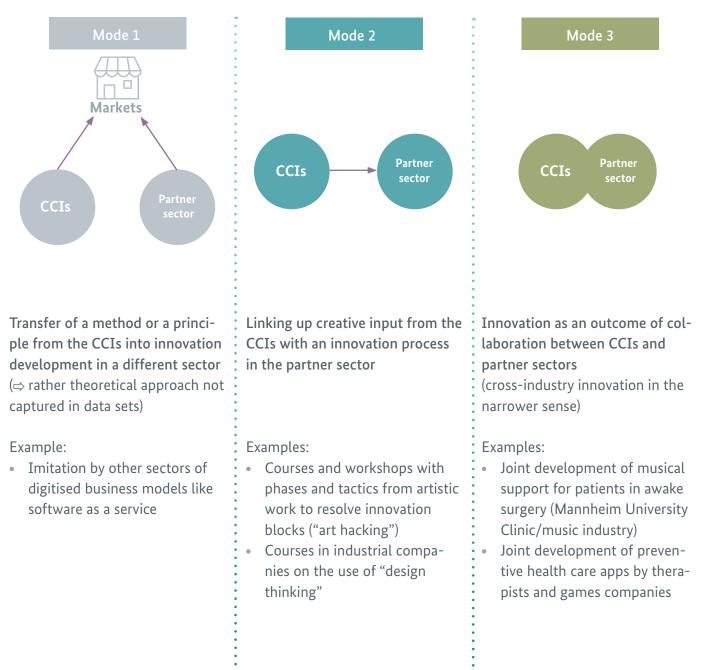


Technical contributions e.g. programming services for the use of machine learning Methodological contributions e.g. advisory services in the field of design thinking or creativity techniques



Substantive contributions e.g. development of various media content for the use of and for improving the experience with technical innovations

Cross(-industry) innovations in the CCIs



Three forms of a cross innovation in the CCIs

Use case: cross-innovation in the CCIs (Mode 3)

Cooperation between music industry and medical technology on awake surgery



"The basic concept behind the formation of the team was to use music to distract patients from the background noise in the operating theatre and to calm them, and also to separate the conversations between the speech therapist and the patient, and the speech therapist and the surgeon. This required a lot of technology, which needed to be built into the surgical procedures."

"This team consists of various specialists from Mannheim University Clinic and also from the Fraunhofer Institute IPA, Startup Mannheim and external partners like SPL, Session pro and Inear."

Quoted from: Kirchberg/Die Rheinpfalz 2019

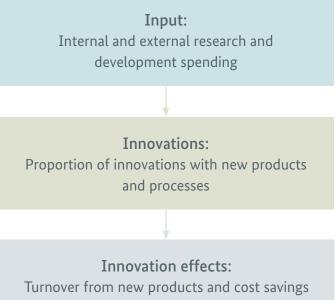
Conventional innovation indicators

Understanding of innovation in conventional indicator systems

- Innovation created (almost) entirely in-house
- Innovation development as a specific task for departments in company
- Repeatability and scalability of the innovation
- Sectoral categorisation of the innovation

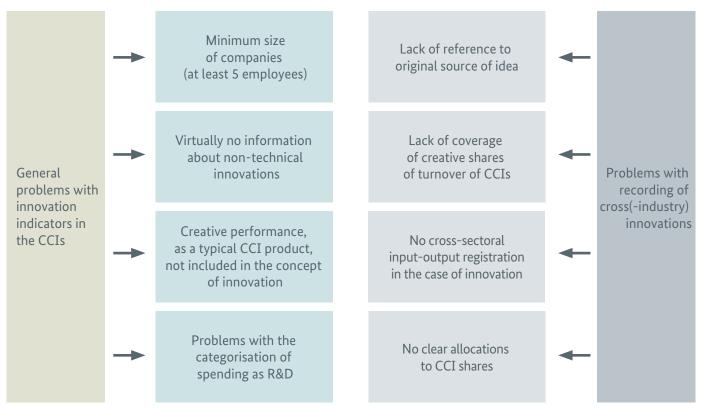
Consequences

- Little indication of innovations from CCI companies
- No explicit indication of cross-innovation
- No message about effects between subbranches of CCIs or between CCIs and other sectors



from new processes

Problem: lack of appropriate indicators for cross-innovation



Source: Prof. rer. oec. Rüdiger Wink (HTWK Leipzig), 2021

Support for cross(-industry) innovations

Selected examples of support for cross(-industry) innovations

Programme	Approach
National approaches	
Cross Innovation Hub Hamburg	Networking of the creative industries with other sectors via various formats using creative methods
Lichtwerk Jena Thuringia (Research Ministry funding)	Provision of a maker space for the fields of light and optics and event formats to network makers with compa- nies
Design Transfer Bonus Berlin	Financial support for the inclusion of design expertise in the development of products and processes of small and medium-sized enterprises and social economy enterprises; funding of up to 70% of the eligible expenses
Cross Innovation Networks Saxony-Anhalt	Promotion of networking to improve market access involving at least five companies from the creative industries and creative skilled crafts with other sectors via grants covering 90% of the material and staff costs
Cross Innovation Lab Niederrhein XI Lab North Rhine-West- phalia (NRW)	Networking of regional stakeholders to implement cross-sectoral opportunities of digitisation, coordinated by Rhein-Waal University of Applied Sciences
The Federal Government Centre of Excellence for the Cultural and Creative Industries	Promotion of innovations via innovation camps and creative labs. Networking of the creative industries with other sectors via a raft of projects and events, e.g. digital congresses, digital learning journeys, roadshows, etc.
International approaches	
Cross Motion EU Interreg (DK, SWE, D, EST, LV, LT, FIN)	Networking of the audiovisual sector with education, health and tourism sectors via events and developments of joint prototypes and development methods
Lisbon Creative Brokers City of Lisbon (Portugal)	Establishment of a networking platform between the creative industries and other sectors, and targeted infor- mation on cross-innovation potential via mediators
Cultural Sector Innovation Fund Neuseeland	Financial support for innovative cross-sectoral projects to link up the use of digital technologies with cultural content to develop innovative business models, social inclusion and/or education
VERBUND X Accelerator	Holding of cross-industry innovation camps with a reference to the energy sector and i ntensive support for the implementation of cross-industry innovations
Creative Innovation Lab Creative Europe	Networking of the audiovisual sector with stakeholders from at least one other sector of the creative indus- tries with a focus on cross-industry innovations to improve ecology and education

Core findings: cross-innovative potential

Methods to register cross-industry innovations

- Panel surveys of companies on innovation via collaboration, including own-account workers and micro-enterprises
- Measurement of the cross-industry potential from the input of the creative industries based on the proportions of employees from creative occupations

Promotion of cross-industry innovation based on three core elements

- Networking platforms and events
- Provision of physical networking spaces (maker spaces)
- Provision of financial support to trial novel types of collaboration



Key indicators for thecultural and creative industries Methodological notes Sources

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Scope of the cultural and creative industries by submarket

According to the recommendations given by the Conference of Economic Affairs Ministers, the core of the cultural and creative industries consists of eleven submarkets which each 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 directly 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 also 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). These double countings are deducted from the total figures.

Submarket/ WZ 2008	Economic activity	Percentage of companies and turnover	Percentage of employees
1. Music industry			
32.20	Manufacture of musical instruments	100	100
47.59.3	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	Own-account musicians, 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			
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	Own-account translators	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 ind	ustry		
60.10	Radio broadcasting	100	40
60.20	Television programming and broadcasting	100	40
90.03.5	Own-account journalists and press photographers*	100	100

Submarket/	Economic activity	Percentage of	Percentage of
WZ 2008 6. Performing arts n	narket	companies and turnover	employees
85.52	Cultural education	100	100
85.52 90.01.1	Theatre ensembles	100 100	100 10
90.01.3	Own-account performers and circus groups	100	100
90.01.4	Own-account stage, motion picture, radio and TV artists, etc.	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	Own-account photographers	100	100
8. Architecture mar	ket		
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
53.91	News agency activities	100	100
90.03.5	Own-account journalists and press photographers*	100	100
LO. Advertising mar			
73.11	Advertising agencies/advertising design*	100	100
73.12	Media representation	100	100
11. Software and ga		100	100
58.21	Publishing of computer games	100	100
58.29	Other software publishing	100	100
52.01.1	Web-page design and programming	100	100
52.01.1			
	Other software development	100	100
53.12	Web portals	100	100
2. Other		100	100
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	Own-account interpreters	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

Key economic indicators for the cultural and creative industries Key economic indicators for the cultural and creative industries in 2020 by submarket

Segments	Number of Businesses	Turnover* (in €m)	Gross value added (in €m)	Core workforce	Employees subject to social security contributions	Employees in marginal employment	Self-employed personswith mini-jobs
Cultural and Creative Industries (excluding double counts)	259,320	160,449	94,627	1,248,550	989,230	265,989	297,182
Overall economy	3,284,426	6,459,367	3,050,322	36,607,378	33,322,952	7,315,836	2,879,578
Contribution of CCIs to overall economy	7.90%	2.48 %	3.10%	3.41%	2.97%	3.64%	10.32%
Breakdown by submarket, absolute	and percentage f	igures					
1. Music industry	14,988	4,982	2,998	54,308	39,320	11,217	20,054
	4.81%	2.84%	2.94%	3.93 %	3.67%	3.57%	5.45%
2. Book market	17.022	15.029	6.053	66.769	49.747	14.061	28.821
	5.46%	8.56%	5.94%	4.83%	4.65 %	4.48%	7.83%
3. Art market	12,520	1,443	767	17,645	5,125	3,120	27,023
	4.02 %	0.82%	0.75%	1.28%	0.48%	0.99%	7.34%
4. Film industry	20,614	5,875	5,040	61,832	41,218	17,665	38,583
	6.62%	3.34%	4.94%	4.47 %	3.85 %	5.63%	10.48%
5. Broadcasting industry	16,946	8,495	7,406	41,988	25,042	1,423	21,475
	5.44%	4.84%	7.26%	3.04 %	2.34%	0.45%	5.84%
6. Performing arts market	21,315	1,130	1,676	48,040	26,725	16,772	40,883
	6.84%	0.64 %	1.64%	3.48%	2.50%	5.34%	11.11%
7. Design industry	60,725	19,229	9,552	152,230	91,505	50,077	63,754
	19.49%	10.95 %	9.37%	11.01%	8.55%	15.96%	17.32%
8. Architecture market	37,827	12,506	7,199	138,773	100,946	18,930	20,062
	12.14%	7.12%	7.06%	10.04 %	9.43%	6.03%	5.45%
9. Press market	30,623	27,048	11,300	137,054	106,431	67,680	26,891
	9.83 %	15.40%	11.08 %	9.92 %	9.94%	21.57%	7.31%
10. Advertising market	28,104	28,475	11,681	153,056	124,952	83,424	23,567
	9.02 %	16.21%	11.45 %	11.07 %	11.67 %	26.58%	6.40%
11. Software and games industry	43,094	50,216	37,387	495,767	452,673	28,016	46,557
	13.83%	28.59%	36.66%	35.87%	42.28%	8.93%	12.65%
12. Other	7,829	1,225	919	14,722	6,893	1,455	10,347
	2.51%	0.70%	0.90%	1.07 %	0.64%	0.46%	2.81%
Cultural and creative industries (including double counts)	311,606	175,653	101,978	1,382,183	1,070,577	313,840	368,016

Note: Figures (partly) based on estimates. Percentage figures calculated based on cultural and creative industries as a whole, including double counts. *2020 turnover according to the Federal Government Centre of Excellence for the Cultural and Creative Industries 12/2021. Source: Destatis 2021a,b,c; Federal Employment Agency 2021; in-house calculations by Goldmedia

Number of companies

Cultural and creative industries by submarket: number of companies, 2010-2020*

Submarket	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020*
1. Music industry	13,723	13,894	13,796	13,811	13,759	14,057	14,430	14,677	14,881	15,095	14,988
2. Book market	16,481	16,702	16,828	16,811	16,798	17,079	17,268	17,390	17,531	17,368	17,022
3. Art market	13,464	13,422	13,203	13,153	12,794	12,752	12,874	12,752	12,649	12,672	12,520
4. Film industry	17,956	18,199	18,282	18,440	18,267	18,624	19,075	19,639	20,218	20,656	20,614
5. Broadcasting industry	17,751	18,128	18,154	18,159	18,074	18,179	17,880	17,492	17,339	17,123	16,946
6. Performing arts market	15,402	15,982	16,497	17,004	17,473	18,249	19,080	19,929	20,786	21,427	21,315
7. Design industry	50,111	52,439	53,676	54,454	55,624	57,127	58,431	59,323	60,307	60,890	60,725
8. Architecture market	40,159	40,702	40,762	40,205	40,040	39,849	39,691	39,144	38,723	38,297	37,827
9. Press market	33,564	33,498	33,131	32,557	32,119	32,341	32,241	31,828	31,590	31,034	30,623
10. Advertising market	35,330	34,577	33,448	32,107	30,855	30,221	30,220	29,892	29,562	28,924	28,104
11. Software and games industry	28,527	30,413	31,915	33,365	34,725	35,933	37,375	38,803	40,561	41,794	43,094
12. Other	7,506	7,736	7,751	7,812	7,775	7,887	8,249	8,254	8,140	7,950	7,829
Total, including double counts	289,974	295,692	297,442	297,877	298,302	302,298	306,813	309,122	312,287	313,230	311,606
Double counts	50,440	51,402	51,627	51,525	51,336	51,859	52,330	52,523	52,938	52,931	52,286
Cultural and creative industries (excluding double counts)	239,534	244,290	245,816	246,353	246,967	250,439	254,484	256,600	259,349	260,299	259,320
Overall economy	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	3,288,306	3,284,426
Contribution of CCIs to overall economy	7.57%	7.60%	7.56%	7.60%	7.62%	7.69%	7.79%	7.85%	7.91%	7.92%	7.90%

Note: *Figures for 2020 are estimates. Source: VAT statistics, Destatis 2021a; in-house calculations by Goldmedia

Turnover

Cultural and creative industries by submarket: turnover (in €m), 2010 to 2020*

			·			` '	·				
Submarket	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020*
1. Music industry	6,270	6,639	7,099	7,674	7,896	8,178	8,139	8,440	8,685	8,971	4,982
2. Book market	14,182	14,255	14,032	13,737	13,686	13,657	14,024	13,910	14,077	16,072	15,029
3. Art market	2,332	2,341	2,316	2,292	2,091	2,170	2,249	2,252	2,223	2,362	1,443
4. Film industry	8,925	9,283	9,228	9,060	9,328	9,844	9,572	9,987	9,874	10,011	5,875
5. Broadcasting industry	7,671	7,905	8,327	8,942	9,378	9,578	9,892	10,334	10,657	9,415	8,495
6. Performing arts market	3,478	3,742	3,909	3,971	4,262	4,502	4,770	5,244	5,604	5,993	1,130
7. Design industry	18,243	18,353	18,535	18,338	18,566	19,078	19,764	20,321	20,604	21,028	19,229
8. Architecture market	8,031	8,708	8,813	9,130	9,554	10,236	10,700	11,348	11,943	12,575	12,506
9. Press market	31,398	31,711	31,931	31,065	30,657	30,133	30,054	29,820	29,416	27,946	27,048
10. Advertising market	25,714	24,929	24,965	25,175	26,130	27,033	29,405	30,078	29,975	30,619	28,475
11. Software and games industry	26,496	28,442	29,642	29,418	31,619	34,362	37,727	41,632	46,655	50,650	50,216
12. Other	1,588	1,652	1,587	1,531	1,418	1,381	1,425	1,454	1,411	1,396	1,225
Total, including double counts	154,327	157,960	160,385	160,332	164,586	170,151	177,720	184,820	191,123	197,036	175,653
Double counts	16,993	16,990	17,047	17,178	17,691	18,084	18,906	19,633	20,072	20,656	15,204
Cultural and creative industries (excluding double counts)	137,333	140,970	143,338	143,155	146,895	152,067	158,814	165,187	171,051	176,380	160,449
Overall economy	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	6,770,825	6,459,367
Contribution of CCIs to overall economy	2.62%	2.48%	2.49%	2.48%	2.50%	2.54%	2.61%	2.60%	2.58%	2.61%	2.48%

Note: *Figures for 2020 based on Federal Government Centre of Excellence for the Cultural and Creative Industries 12/2021 (difference from the figures for 2010-2019: without WZ 18.14 book-binding etc.). Source: VAT statistics, Destatis 2021a; in-house calculations by Goldmedia

Core workforce

Cultural and creative industries by submarket: number of core workers, 2010 - 2020*

Submarket	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020*
1. Music industry	46,698	46,627	46,533	47,493	47,941	48,496	50,533	52,147	54,001	55,194	54,308
2. Book market	76,860	79,504	78,846	78,157	75,917	73,048	71,836	71,031	69,111	68,742	66,769
3. Art market	19,161	18,945	18,912	18,793	18,249	18,177	18,292	18,132	17,925	17,961	17,645
4. Film industry	57,313	57,772	57,633	57,090	57,429	58,866	59,712	61,615	62,155	63,945	61,832
5. Broadcasting industry	38,881	39,694	39,865	41,353	41,688	42,477	42,420	42,351	42,293	42,085	41,988
6. Performing arts market	33,225	34,112	35,389	37,886	38,805	40,278	42,158	44,189	46,846	48,793	48,040
7. Design industry	125,878	128,427	131,767	134,274	137,262	141,297	145,593	149,893	152,551	153,979	152,230
8. Architecture market	101,897	105,087	107,750	110,169	112,775	116,695	121,688	126,950	132,031	136,812	138,773
9. Press market	163,305	161,101	158,860	156,097	152,409	150,380	148,641	147,021	143,863	141,520	137,054
10. Advertising market	137,006	138,881	140,431	140,562	142,978	145,863	150,715	154,170	156,535	157,651	153,056
11. Software and games industry	251,708	268,456	299,427	321,092	337,923	358,800	381,364	408,169	439,474	471,814	495,767
12. Other	14,991	15,182	15,436	15,548	15,104	15,140	15,376	15,433	15,388	15,081	14,722
Total, including double counts	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	1,373,576	1,382,183
Double counts	114,403	117,016	119,119	121,245	122,442	124,589	128,246	131,474	134,414	136,299	133,633
Cultural and creative industries (excluding double counts)	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	1,237,276	1,248,550
Overall economy	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	36,695,568	36,607,378
Contribution of CCIs to overall economy	3.06%	3.07%	3.11%	3.16%	3.16%	3.19%	3.23%	3.27%	3.31%	3.37%	3.41%

Note: *2019 figures concerning the number of self-employed persons have been estimated (based on the number of companies).

Source: VAT statistics, Destatis, 2021a, Employment Statistics, Federal Employment Agency 2021; in-house calculations by Goldmedia

Employees subject to social security contributions

Cultural and creative industries by submarket: employees subject to social security contributions, 2010 – 2020

Submarket	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1. Music industry	32,975	32,733	32,737	33,682	34,182	34,439	36,103	37,470	39,120	40,099	39,320
2. Book market	60,379	62,802	62,018	61,346	59,119	55,969	54,568	53,641	51,580	51,374	49,747
3. Art market	5,697	5,523	5,709	5,641	5,455	5,425	5,419	5,380	5,276	5,289	5,125
4. Film industry	39,357	39,573	39,351	38,650	39,162	40,242	40,637	41,976	41,937	43,289	41,218
5. Broadcasting industry	21,130	21,566	21,711	23,194	23,614	24,298	24,540	24,859	24,954	24,962	25,042
6. Performing arts market	17,823	18,130	18,892	20,882	21,332	22,029	23,078	24,260	26,060	27,366	26,725
7. Design industry	75,767	75,988	78,091	79,820	81,639	84,170	87,162	90,570	92,244	93,089	91,505
8. Architecture market	61,738	64,385	66,988	69,964	72,735	76,846	81,997	87,806	93,308	98,515	100,946
9. Press market	129,741	127,603	125,729	123,540	120,290	118,039	116,400	115,193	112,273	110,486	106,431
10. Advertising market	101,676	104,304	106,983	108,455	112,123	115,642	120,495	124,278	126,973	128,727	124,952
11. Software and games industry	223,181	238,043	267,512	287,727	303,198	322,867	343,989	369,366	398,913	430,020	452,673
12. Other	7,485	7,446	7,685	7,736	7,329	7,253	7,127	7,179	7,248	7,131	6,893
Total, including double counts	776,949	798,096	833,406	860,636	880,178	907,218	941,513	981,978	1,019,887	1,060,346	1,070,577
Double counts	63,963	65,614	67,492	69,721	71,107	72,731	75,917	78,952	81,476	83,368	81,347
Cultural and creative industries (excluding double counts)	712,986	732,483	765,913	790,915	809,071	834,488	865,597	903,026	938,411	976,977	989,230
Overall economy	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	33,322,952
Contribution of CCIs to overall economy	2.55%	2.56%	2.62%	2.67%	2.68%	2.71%	2.75%	2.81%	2.85%	2.92%	2.97%

Source: Employment Statistics, Federal Employment Agency 2021; in-house calculations by Goldmedia

Persons in marginal employment

Cultural and creative industries by submarket: persons in marginal employment, 2010-2020

Submarket	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1. Music industry	11,916	12,128	12,671	12,902	13,213	13,423	13,863	14,675	15,415	15,741	11,217
2. Book market	20,920	20,374	19,766	18,959	18,320	17,610	17,188	16,471	15,804	15,392	14,061
3. Art market	4,472	4,395	4,355	4,290	4,178	4,046	3,999	3,882	3,763	3,624	3,120
4. Film industry	28,317	26,928	26,368	25,994	24,920	24,185	23,332	22,955	21,896	21,334	17,665
5. Broadcasting industry	2,045	1,750	1,723	1,841	1,842	1,752	1,785	1,766	1,644	1,581	1,423
6. Performing arts market	13,011	13,715	14,754	15,806	16,450	17,084	17,998	19,476	20,741	21,887	16,772
7. Design industry	66,974	63,977	62,114	61,783	65,410	56,513	60,399	60,779	58,512	56,688	50,077
8. Architecture market	18,080	18,391	18,462	19,109	19,369	18,892	18,989	19,279	19,483	19,570	18,930
9. Press market	133,704	131,207	130,370	123,373	113,233	89,870	84,448	81,751	78,005	75,502	67,680
10. Advertising market	123,173	115,272	110,736	104,008	111,445	95,069	101,754	102,467	98,142	94,676	83,424
11. Software and games industry	21,196	22,373	23,732	24,841	25,900	25,507	26,961	27,863	28,507	28,957	28,016
12. Other	1,773	1,754	1,682	1,652	1,614	1,576	1,634	1,698	1,614	1,605	1,455
Total, including double counts	445,581	432,264	426,733	414,558	415,894	365,526	372,349	373,063	363,525	356,557	313,840
Double counts	66,253	63,461	61,777	61,739	65,737	57,475	61,850	63,012	61,631	57,090	47,851
Cultural and creative industries (excluding double counts)	379,328	368,803	364,956	352,819	350,158	308,051	310,499	310,051	301,894	299,467	265,989
Overall economy	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	7,315,836
Contribution of CCIs to overall economy	5.09%	4.89%	4.81%	4.57%	4.48%	4.00%	4.00%	3.97%	3.83%	3.80%	3.64%

Source: Employment Statistics, Federal Employment Agency 2021; in-house calculations by Goldmedia

Self-employed persons in mini-jobs

Cultural and creative industries by submarket: number of self-employed with mini-jobs, 2010-2020*

Submarket	2010	2011	2012	2013	2014	2015	2016	2017*	2018*	2019*	2020*
1. Music industry	16,844	16,949	16,967	17,215	17,344	17,792	18,713	19,069	19,670	20,221	20,054
2. Book market	21,712	22,475	23,217	24,365	24,837	25,910	26,839	27,802	28,776	29,041	28,821
3. Art market	26,755	26,462	26,631	26,915	26,795	26,826	26,813	27,105	27,103	27,359	27,023
4. Film industry	29,407	29,993	30,979	32,016	32,384	33,206	34,660	36,014	37,566	38,608	38,583
5. Broadcasting industry	21,857	21,924	21,998	22,277	22,533	22,713	23,141	22,146	22,015	21,807	21,475
6. Performing arts market	28,007	29,049	30,647	32,199	32,871	34,350	36,210	37,963	39,884	41,278	40,883
7. Design industry	51,249	52,324	53,946	56,827	57,694	59,634	62,230	62,900	64,361	65,364	63,754
8. Architecture market	25,304	24,459	23,601	23,321	22,578	21,971	21,371	21,203	20,785	20,384	20,062
9. Press market	28,615	28,363	28,158	28,182	28,315	28,593	29,007	27,919	27,700	27,328	26,891
10. Advertising market	31,639	29,639	28,166	27,101	25,783	25,372	25,395	24,952	24,637	24,071	23,567
11. Software and games industry	30,643	31,527	32,937	34,754	36,445	38,478	40,554	41,613	43,514	44,755	46,557
12. Other	9,849	9,700	9,813	9,996	9,988	10,179	10,607	10,791	10,730	10,574	10,347
Total, including double counts	321,881	322,864	327,060	335,168	337,567	345,024	355,540	359,477	366,741	370,790	368,016
Double counts	64,668	64,787	65,420	66,500	66,650	67,805	69,699	69,957	71,210	71,699	70,834
Cultural and creative industries (excluding double counts)	257,213	258,077	261,640	268,668	270,917	277,219	285,841	289,520	295,531	299,091	297,182
Overall economy	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	2,879,578
Contribution of CCIs to overall economy	10.47%	10.09%	9.88%	9.80%	9.86%	9.93%	10.17%	10.20%	10.32%	10.36%	10.32%

Note: *Figures are based on estimates. Source: VAT assessment statistics, Destatis 2021b; in-house calculations by Goldmedia

Gross value added

Cultural and creative industries by submarket: gross value added (in €m), 2010 to 2020*

Submarket	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020*
1. Music industry	4,290	4,495	4,910	5,423	5,513	5,608	5,654	5,867	6,045	6,403	2,998
2. Book market	4,686	4,977	4,962	4,981	5,040	5,042	5,332	5,391	5,531	6,221	6,053
3. Art market	1,328	1,216	1,255	1,219	1,163	1,214	1,272	1,286	1,289	1,356	767
4. Film industry	7,317	7,495	7,557	7,684	7,694	7,806	8,162	8,194	8,047	8,655	5,040
5. Broadcasting industry	6,357	6,463	6,907	7,649	7,775	7,637	8,458	8,487	8,745	8,210	7,406
6. Performing arts market	5,672	5,916	6,317	6,334	6,538	6,910	7,017	7,624	7,985	8,526	1,676
7. Design industry	9,403	9,501	9,738	10,268	9,826	9,989	10,746	10,347	10,520	10,570	9,552
8. Architecture market	4,722	4,926	5,241	5,723	5,967	6,567	6,549	7,236	7,176	7,241	7,199
9. Press market	10,983	11,993	12,273	12,273	12,505	12,454	12,467	12,672	12,640	11,721	11,300
10. Advertising market	11,053	10,894	10,746	11,867	11,651	11,533	11,989	12,093	11,587	12,560	11,681
11. Software and games industry	16,973	19,758	21,509	23,263	25,163	26,312	28,535	30,501	35,331	37,733	37,387
12. Other	1,353	1,323	1,332	1,272	1,114	1,114	1,267	1,150	1,142	1,064	919
Total, including double counts	84,138	88,957	92,747	97,956	99,949	102,186	107,448	110,848	116,040	120,259	101,978
Double counts	9,416	9,548	9,663	10,109	10,154	10,206	10,339	10,853	10,964	11,748	7,351
Cultural and creative industries (excluding double counts)	74,722	79,410	83,083	87,847	89,795	91,980	97,109	99,995	105,075	108,511	94,627
Overall economy	2,305,684	2,418,099	2,465,800	2,527,883	2,635,393	2,722,020	2,822,443	2,944,074	3,035,165	3,130,661	3,050,322
Contribution of CCIs to overall economy	3.24%	3.28%	3.37%	3.48%	3.41%	3.38%	3.44%	3.40%	3.46%	3.47%	3.10%

Note: *Figures for 2020 are estimates.

Source: VAT statistics, Destatis 2021a, National Accounts, Destatis 2021c; in-house calculations by Goldmedia

Turnover per core worker Cultural and creative industries by submarket: turnover per core worker (in €), 2010–2020*

Submarket	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020*
1. Music industry	134,258	142,386	152,557	161,580	164,709	168,642	161,057	161,851	160,823	162,539	91,743
2. Book market	184,514	179,300	177,966	175,759	180,280	186,961	195,216	195,826	203,691	233,794	225,096
3. Art market	121,694	123,554	122,463	121,940	114,567	119,355	122,925	124,221	124,004	131,498	81,767
4. Film industry	155,728	160,688	160,109	158,692	162,427	167,220	160,307	162,092	158,859	156,554	94,824
5. Broadcasting industry	197,287	199,160	208,883	216,232	224,954	225,485	233,199	243,997	251,977	223,701	202,310
6. Performing arts market	104,668	109,700	110,469	104,819	109,833	111,763	113,157	118,668	119,625	122,829	23,530
7. Design industry	144,924	142,904	140,668	136,572	135,261	135,024	135,748	135,574	135,066	136,565	126,313
8. Architecture market	78,819	82,864	81,795	82,875	84,718	87,720	87,932	89,387	90,454	91,911	90,119
9. Press market	192,266	196,838	200,999	199,014	201,149	200,381	202,189	202,825	204,471	197,473	197,351
10. Advertising market	187,687	179,501	177,777	179,102	182,758	185,329	195,101	195,099	191,488	194,218	186,045
11. Software and games industry	105,265	105,947	98,996	91,618	93,570	95,768	98,927	101,997	106,161	107,351	101,290
12. Other	105,903	108,788	102,846	98,452	93,862	91,211	92,672	94,238	91,673	92,572	83,177
Cultural and creative industries (excluding double counts)	144,179	144,323	141,677	138,011	139,100	140,164	141,788	142,449	142,809	142,555	128,508
Overall economy	168,348	178,513	176,827	175,463	175,697	176,030	175,406	179,523	183,206	184,513	176,450
Percentage difference to overall economy	-16.76%	-23.69%	-24.81%	-27.14%	-26.31%	-25.59%	-23.71%	-26.03%	-28.29%	-29.43%	-37.31%

Note: *Figures for 2020 based on Federal Government Centre of Excellence for the Cultural and Creative Industries 12/2021 (difference from the calculations for 2010-2019: without WZ 18.14 book-binding, etc.)

Source: VAT statistics, Destatis, 2021a, Employment Statistics, Federal Employment Agency 2021; in-house calculations by Goldmedia.

Submarket/ WZ 2008	Economic activity	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020*
1. Music industry	itry											
32.20	Manufacture of musical instruments	1,180	1,197	1,204	1,218	1,216	1,265	1,291	1,289	1,297	1,291	1,287
47.59.3	Retail sale of musical instruments, etc.	2,142	2,087	1,998	1,922	1,858	1,809	1,742	1,713	1,635	1,583	1,553
47.63	Retail sale of music and video recordings, etc.	282	306	319	333	353	387	389	398	372	383	373
59.20.1	Sound-recording studios, etc.	539	583	610	634	629	629	700	720	713	741	732
59.20.2	Publishing of sound recordings	390	383	366	376	380	388	403	392	386	388	383
59.20.3	Publishing of printed music	1,149	1,134	1,095	1,062	1,075	1,055	1,072	1,066	1,049	1,078	1,077
90.01.2	Ballet companies, orchestras, bands and choirs	1,661	1,666	1,560	1,510	1,472	1,505	1,556	1,547	1,568	1,582	1,570
90.02	Support activities to performing arts	2,109	2,249	2,395	2,471	2,429	2,547	2,720	2,869	3,012	3,111	3,104
90.03.1	Own-account musicians, etc.	2,643	2,683	2,695	2,752	2,776	2,924	3,016	3,166	3,373	3,488	3,475
90.04.1	Organisation of theatre performances and concerts	1,400	1,378	1,337	1,325	1,335	1,316	1,332	1,307	1,269	1,246	1,228
90.04.2	Operation of opera houses, theatre and concert halls, etc.	228	228	217	208	206	202	209	210	207	204	204
	Submarket total	13,723	13,894	13,796	13,811	13,759	14,057	14,430	14,677	14,881	15,095	14,988
2. Book market	tt											
18.14	Binding and related services	1,041	1,010	993	961	606	896	855	819	792	750	712
47.61	Retail sale of books	4,195	4,137	4,038	3,896	3,803	3,716	3,682	3,536	3,395	3,311	3,197
47.79.2	Retail sale in second-hand bookstores	459	448	429	428	414	407	391	369	365	337	331
58.11	Book publishing	2,220	2,243	2,209	2,170	2,117	2,075	2,034	1,982	1,918	1,845	1,766
74.30.1	Own-account translators	1,625	1,718	1,811	1,884	1,974	2,088	2,244	2,411	2,555	2,561	2,516
90.03.2	Own-account writers	6,941	7,146	7,348	7,472	7,581	7,897	8,062	8,273	8,506	8,564	8,500
	Submarket total	16,481	16,702	16,828	16,811	16,798	17,079	17,268	17,390	17,531	17,368	17,022
3. Art market												
47.78.3	Retail sale of art, etc.	1,712	1,685	1,632	1,560	1,469	1,425	1,395	1,336	1,291	1,239	1,192
47.79.1	Retail sale of antiques, etc.	2,115	2,041	2,007	1,949	1,853	1,786	1,752	1,649	1,591	1,525	1,432
90.03.3	Own-account visual artists	8,814	8,932	8,892	9,010	8,870	8,949	9,127	9,192	9,223	9,379	9,369
91.02	Museums activities	823	764	672	634	602	592	600	575	544	529	527
	Submarket total	13,464	13,422	13,203	13,153	12,794	12,752	12,874	12,752	12,649	12,672	12,520
4. Film industry	ry											
47.63	Retail sale of music and video recordings, etc.	282	306	319	333	353	387	389	398	372	383	373
59.11	Motion picture, video and TV programme production	5,253	5,118	4,988	4,894	4,567	4,400	4,409	4,521	4,556	4,633	4,769
59.12	Motion picture, video and TV programme post-production	767	851	861	856	774	833	852	865	910	906	606
59.13	Motion picture, video and TV programme distribution	865	792	711	654	576	556	518	475	439	419	395
59.14	Motion picture projection activities	878	865	843	849	834	841	822	823	822	824	817
77.22	Renting of video tapes and disks	1,201	1,087	696	864	753	653	553	428	327	281	219
90.01.4	Own-account stage, motion picture, radio and TV artists, etc.	8,710	9,180	9,591	066'6	10,410	10,954	11,532	12,129	12,792	13,210	13,132
	Submarket total	17,956	18,199	18,282	18,440	18,267	18,624	19,075	19,639	20,218	20,656	20,614

Number of companies by submarket and category of economic activity (WZ). 2010–2020*

Number of companies by category of economic activity (1)

Note: *Figures for 2020 are estimates. Source: VAT statistics, Destatis 2021a; in-house calculations by Goldmedia

Number o	Number of companies by submarket and category of economic activity (WZ), 2010–2020 *	f econo	mic acti	vity (W	Z), 2010)-2020	*					
Submarket/ WZ 2008	Economic activity	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020*
5. Broadcasting industry	g industry											
60.10	Radio broadcasting	262	255	255	262	262	254	252	247	255	252	251
60.20	Television programming and broadcasting	88	91	89	94	89	87	79	79	79	82	81
90.03.5	Own-account journalists and press photographers	17,401	17,782	17,810	17,803	17,723	17,838	17,549	17,166	17,005	16,789	16,614
	Submarket total	17,751	18,128	18,154	18,159	18,074	18,179	17,880	17,492	17,339	17,123	16,946
6. Performing arts market	arts market											
85.52	Cultural education	2,080	2,105	2,111	2,147	2,204	2,269	2,310	2,366	2,471	2,561	2,557
90.01.1	Theatre ensembles	124	128	131	133	142	166	157	171	176	191	188
90.01.3	Own-account performers and circus groups	573	546	550	584	588	642	665	724	714	757	756
90.01.4	Own-account stage, motion picture, radio and TV artists, etc.	8,710	9,180	9,591	066'6	10,410	10,954	11,532	12,129	12,792	13,210	13,132
90.02	Support activities to performing arts	2,109	2,249	2,395	2,471	2,429	2,547	2,720	2,869	3,012	3,111	3,104
90.04.1	Organisation of theatre performances and concerts	1,400	1,378	1,337	1,325	1,335	1,316	1,332	1,307	1,269	1,246	1,228
90.04.2	Operation of opera houses, theatre and concert halls, etc.	228	228	217	208	206	202	209	210	207	204	204
90.04.3	Operation of variety theatres and cabarets	178	168	165	146	159	153	155	153	145	147	146
	Submarket total	15,402	15,982	16,497	17,004	17,473	18,249	19,080	19,929	20,786	21,427	21,315
7. Design industry	stry											
32.12	Manufacture of jewellery and related articles	3,706	3,661	3,603	3,477	3,424	3,314	3,308	3,224	3,151	3,105	3,031
71.11.2	Consulting architectural activities in interior design	3,185	3,577	3,862	3,987	4,119	4,189	4,216	4,247	4,272	4,323	4,378
73.11	Advertising agencies (50% share)	17,125	16,702	16,096	15,408	14,761	14,426	14,383	14,197	14,009	13,665	13,253
74.10.1	Industrial, product and fashion designers	2,164	2,586	2,975	3,372	3,590	3,792	3,987	4,122	4,340	4,444	4,420
74.10.2	Graphics and communications designers	7,269	8,725	10,054	11,100	12,425	13,598	14,419	15,094	15,740	16,302	16,337
74.10.3	Interior decorators	7,679	7,773	7,303	6,898	6,661	6,588	6,512	6,444	6,339	6,174	6,048
74.20.1	Own-account photographers	8,983	9,415	9,783	10,212	10,644	11,220	11,606	11,995	12,456	12,877	13,258
	Submarket total	50,111	52,439	53,676	54,454	55,624	57,127	58,431	59,323	60,307	60,890	60,725
8. Architecture market	e market											
1.11.17	Consulting architectural activities in building construction	27,587	27,554	27,137	26,465	26,084	25,772	25,490	24,900	24,490	23,964	23,475
71.11.2	Consulting architectural activities in interior design	3,185	3,577	3,862	3,987	4,119	4,189	4,216	4,247	4,272	4,323	4,378
71.11.3	Consulting architectural activities in town, city and regional planning	4,828	4,990	5,088	5,050	5,083	5,115	5,185	5,135	5,075	5,039	4,956
71.11.4	Consulting architectural activities in landscape architecture	3,088	3,108	3,156	3,168	3,179	3,198	3,193	3,219	3,257	3,327	3,371
90.03.4	Own-account restorers	1,471	1,473	1,519	1,535	1,575	1,575	1,607	1,643	1,629	1,644	1,647
	Submarket total	40,159	40,702	40,762	40,205	40,040	39,849	39,691	39,144	38,723	38,297	37,827

Number of companies by category of economic activity (2)

Note: *Figures for 2020 are estimates. Source: VAT statistics, Destatis 2021a; in-house calculations by Goldmedia

Number of companies by submarket and category of economic activity (WZ), 2010–2020*

	Number of companies of submarker and category (CONDINC ACHIVILY (VYZ), ZUTU		L), LUTU	2020						
Submarket/ WZ 2008	Economic activity	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020*
9. Press market	ų											
47.62	Retail sale of magazines, journals and periodicals	9,219	8,891	8,563	8,208	8,000	8,256	8,604	8,749	8,853	8,748	8,730
58.12	Publishing of directories, etc.	200	217	211	212	214	203	198	191	189	181	169
58.13	Publishing of newspapers	829	826	845	849	835	812	808	790	760	713	672
58.14	Publishing of journals and periodicals	1,782	1,741	1,722	1,689	1,643	1,621	1,568	1,531	1,481	1,410	1,345
58.19	Other publishing activities (excluding software)	3,144	3,053	3,002	2,906	2,866	2,799	2,739	2,650	2,552	2,468	2,390
63.91	News agency activities	986	988	978	890	838	812	775	751	750	725	701
90.03.5	Own-account journalists and press photographers	17,401	17,782	17,810	17,803	17,723	17,838	17,549	17,166	17,005	16,789	16,614
	Submarket total	33,564	33,498	33,131	32,557	32,119	32,341	32,241	31,828	31,590	31,034	30,623
10. Advertising market	; market											
73.11	Advertising agencies	34,250	33,404	32,191	30,815	29,521	28,851	28,765	28,393	28,017	27,331	26,507
73.12	Media representation	1,080	1,173	1,257	1,292	1,334	1,370	1,455	1,499	1,545	1,593	1,596
	Submarket total	35,330	34,577	33,448	32,107	30,855	30,221	30,220	29,892	29,562	28,924	28,104
11. Software/§	11. Software/games industry											
58.21	Publishing of computer games	354	336	326	295	283	279	273	263	267	263	265
58.29	Other software publishing	474	534	529	543	544	532	563	611	634	637	629
62.01.1	Web-page design and programming	8,256	9,037	9,603	10,073	10,611	11,106	11,559	11,882	12,385	12,570	12,756
62.01.9	Other software development	19,172	20,165	21,042	21,919	22,638	23,300	24,182	25,115	26,245	27,205	28,254
63.12	Web portals	271	341	415	535	649	716	798	932	1,030	1,119	1,190
	Submarket total	28,527	30,413	31,915	33,365	34,725	35,933	37,375	38,803	40,561	41,794	43,094
12. Other												
32.11	Striking of coins	54	54	53	50	45	43	41	41	41	39	37
32.13	Manufacture of imitation jewellery and related articles	289	304	303	305	318	327	328	324	339	344	342
74.20.2	Photographic laboratories	466	466	428	413	378	354	338	319	313	278	270
74.30.2	Own-account interpreters	6,237	6,456	6,547	6,637	6,638	6,791	7,173	7,188	7,073	6,916	6,806
91.01	Libraries and archives	100	101	81	80	79	73	64	99	62	60	57
91.03	Operation of historical sites and buildings and similar visitor attractions	95	95	92	87	06	92	85	88	85	88	06
91.04	Botanical and zoological gardens and nature reserves	265	260	247	240	227	207	220	228	227	225	227
	Submarket total	7,506	7,736	7,751	7,812	7,775	7,887	8,249	8,254	8,140	7,950	7,829
	Total, including double counts	289,974	295,692	297,442	297,877	298,302	302,298	306,813	309,122	312,287	313,230	311,606
	Double counts	50,440	51,402	51,627	51,525	51,336	51,859	52,330	52,523	52,938	52,931	52,286
Cultural and c	Cultural and creative industries (excluding double counts)	239,534	244,290	245,816	246,353	246,967	250,439	254,484	256,600	259,349	260,299	259,320
Contribution o,	Contribution of CCIs to overall economy	7.57%	7.60%	7.56%	7.60%	7.62%	7.69%	7.79%	7.85%	7.91%	7.92%	7.90%
Note: *Figures for	Note: *Figures for 2020 are estimates. Source: VAT statistics. Destatis 2021a: in-house calculations by Goldmedia	llations by Gol	dmedia									

Number of companies by category of economic activity (3)

Iniliovel	iuiiiovei (iii Eiii) uy suuiiiaiket aiiu categoiy oi ecoi	ברטווטווור פרוועורץ (מעבן, בטבט – בטבט	rivity (v	VZ), ZU.	T0 – 707							
Submarket/ WZ 2008	Economic activity	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020*
1. Music industry	stry											
32.20	Manufacture of musical instruments	551	579	592	616	611	628	640	660	708	718	651
47.59.3	Retail sale of musical instruments, etc.	1,175	1,207	1,245	1,187	1,227	1,279	1,345	1,358	1,373	1,458	1,322
47.63	Retail sale of music and video recordings, etc.	126	140	158	155	154	186	169	174	140	142	125
59.20.1	Sound-recording studios, etc.	109	125	134	126	119	120	130	132	131	140	143
59.20.2	Publishing of sound recordings	686	1,016	983	866	829	793	541	335	299	305	332
59.20.3	Publishing of printed music	549	571	918	1,675	1,666	1,749	1,698	1,786	1,760	1,640	1,476
90.01.2	Ballet companies, orchestras, bands and choirs	210	239	233	228	209	224	231	224	227	241	48
90.02	Support activities to performing arts	402	440	461	501	550	597	700	864	917	1,036	207
90.03.1	Own-account musicians, etc.	261	274	283	275	308	316	313	326	372	391	98
90.04.1	Organisation of theatre performances and concerts	1,509	1,644	1,639	1,597	1,766	1,795	1,897	2,079	2,216	2,364	473
90.04.2	Operation of opera houses, theatre and concert halls, etc.	389	403	453	447	456	491	475	501	542	538	108
	Submarket total	6,270	6,639	7,099	7,674	7,896	8,178	8,139	8,440	8,685	8,971	4,982
2. Book market	tt											
18.14	Binding and related services	836	871	805	786	733	969	691	710	700	635	623**
47.61	Retail sale of books	3,600	3,506	3,551	3,451	3,558	3,866	3,831	3,729	3,800	3,864	3,671
47.79.2	Retail sale in second-hand bookstores	72	70	65	63	56	61	61	60	57	57	51
58.11	Book publishing	8,848	8,945	8,754	8,581	8,480	8,133	8,457	8,430	8,473	10,482	10,377
74.30.1	Own-account translators	274	295	287	278	293	315	374	374	399	380	342
90.03.2	Own-account writers	552	568	570	578	566	585	611	607	649	653	588
	Submarket total	14,182	14,255	14,032	13,737	13,686	13,657	14,024	13,910	14,077	16,072	15,029***
3. Art market												
47.78.3	Retail sale of art, etc.	660	742	707	729	619	679	667	685	652	727	472
47.79.1	Retail sale of antiques, etc.	404	432	416	381	324	302	301	288	275	291	233
90.03.3	Own-account visual artists	750	753	765	766	770	784	874	839	872	907	454
91.02	Museums activities	518	414	428	416	378	405	407	440	425	436	284
	Submarket total	2,332	2,341	2,316	2,292	2,091	2,170	2,249	2,252	2,223	2,362	1,443
4. Film industry	ry											
47.63	Retail sale of music and video recordings, etc.	126	140	158	155	154	186	169	174	140	142	125
59.11	Motion picture, video and TV programme production	4,489	4,458	4,444	4,418	4,664	4,674	4,676	4,901	5,112	5,096	4,332
59.12	Motion picture, video and TV programme post-production	153	164	181	240	210	234	211	230	254	275	234
59.13	Motion picture, video and TV programme distribution	1,815	1,993	1,752	1,569	1,572	1,630	1,528	1,527	1,577	1,440	432
59.14	Motion picture projection activities	1,276	1,419	1,527	1,524	1,488	1,761	1,535	1,608	1,424	1,619	486
77.22	Renting of video tapes and disks	315	302	296	261	277	309	353	383	97	85	64
90.01.4	Own-account stage, motion picture, radio and TV artists, etc.	752	806	870	892	964	1,049	1,102	1,165	1,268	1,355	203
	Submarket total	8,925	9,283	9,228	9,060	9,328	9,844	9,572	9,987	9,874	10,011	5,875
Note: *Figures fc Government Cen	Note: *Figures for 2020 based on Federal Government Centre of Excellence for the Cultural and Creative Industries 12/2021. **2020 figures for WZ 18.14 in-house calculations by Goldmedia. ***Book market total based on Federal Government Centre of Excellence for the Cultural and Creative Industries 2021 (excl: WZ 18.14). Discrepancies possible due to rounding. Source: VAT statistics, Destatis 2021a	and Creative Ir 14). Discrepano	dustries 12/2 cies possible d	021. **2020 f lue to roundir	igures for WZ ng. Source: VA	Z 18.14 in-hou VT statistics, D	se calculation estatis 2021a	s by Goldmed	ia. ***Book r	market total ba	ised on Feder	le:
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Turnover (in €m) by submarket and category of economic activity (WZ). 2010 – 2020*

Turnover by category of economic activity (1)

Infinover	ιαιπονει (πι €πι) υγ submarket and category or econ		ECONOMINC ACHIVILY (WZ), ZUTU	VZ), ZUJ	-0 - 2020	:						
Submarket/ WZ 2008	Economic activity	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020*
5. Broadcasting industry	ß industry											
60.10	Radio broadcasting	965	962	696	981	933	942	1,034	1,007	1,026	1,033	940
60.20	Television programming and broadcasting	5,487	5,686	6,135	6,747	7,238	7,423	7,641	8,123	8,409	7,172	6,526
90.03.5	Own-account journalists and press photographers	1,219	1,258	1,223	1,213	1,206	1,212	1,218	1,204	1,222	1,210	1,029
	Submarket total	7,671	7,905	8,327	8,942	9,378	9,578	9,892	10,334	10,657	9,415	8,495
6. Performing arts market	arts market											
85.52	Cultural education	239	252	265	272	275	290	305	328	347	367	77
90.01.1	Theatre ensembles	54	55	81	91	93	101	103	108	93	109	23
90.01.3	Own-account performers and circus groups	55	60	57	79	72	89	97	107	126	125	19
90.01.4	Own-account stage, motion picture, radio and TV artists, etc.	752	806	870	892	964	1,049	1,102	1,165	1,268	1,355	203
90.02	Support activities to performing arts	402	440	461	501	550	597	700	864	917	1,036	207
90.04.1	Organisation of theatre performances and concerts	1,509	1,644	1,639	1,597	1,766	1,795	1,897	2,079	2,216	2,364	473
90.04.2	Operation of opera houses, theatre and concert halls, etc.	389	403	453	447	456	491	475	501	542	538	108
90.04.3	Operation of variety theatres and cabarets	78	82	84	91	86	89	92	92	95	100	21
	Submarket total	3,478	3,742	3,909	3,971	4,262	4,502	4,770	5,244	5,604	5,993	1,130
7. Design industry	istry											
32.12	Manufacture of jewellery and related articles	2,531	2,686	2,780	2,336	2,181	2,219	2,110	2,183	2,060	2,063	1,960
71.11.2	Consulting architectural activities in interior design	485	594	634	699	727	768	873	963	1,073	1,144	1,092
73.11	Advertising agencies (50% share)	12,112	11,704	11,609	11,703	11,868	11,984	12,473	12,684	12,694	12,868	11,968
74.10.1	Industrial, product and fashion designers	327	419	475	544	599	625	664	685	747	822	781
74.10.2	Graphics and communications designers	627	749	856	954	1,078	1,210	1,331	1,463	1,556	1,606	1,553
74.10.3	Interior decorators	981	1,040	972	922	922	1,028	1,076	1,095	1,168	1,217	1,156
74.20.1	Own-account photographers	1,179	1,160	1,209	1,210	1,191	1,244	1,237	1,248	1,308	1,308	720
	Submarket total	18,243	18,353	18,535	18,338	18,566	19,078	19,764	20,321	20,604	21,028	19,229
8. Architecture market	e market											
71.11.1	Consulting architectural activities in building construction	5,765	6,126	6,117	6,316	6,569	7,080	7,290	7,689	7,951	8,345	8,340
71.11.2	Consulting architectural activities in interior design	485	594	634	699	727	768	873	963	1,073	1,144	1,092
71.11.3	Consulting architectural activities in town, city and regional planning	1,066	1,239	1,288	1,347	1,389	1,486	1,599	1,698	1,831	1,918	1,917
71.11.4	Consulting architectural activities in landscape architecture	543	565	586	603	658	700	737	792	875	940	940
90.03.4	Own-account restorers	171	183	188	196	211	203	202	206	213	227	217
	Submarket total	8,031	8,708	8,813	9,130	9,554	10,236	10,700	11,348	11,943	12,575	12,506

Turnover by category of economic activity (2)

Turnover (in €m) by submarket and category of economic activity (WZ), 2010 – 2020*

Note: *2020 figures derived from Federal Government Centre of Excellence for the Cultural and Creative Industries 2021. Discrepancies possible due to rounding. Source: VAT statistics, Destatis 2021a

lurnover	lurnover (in €m) by submarket and category of ecor	economic activity (WZ), 2010–2020*	CTIVITY (WZ), 20	707 – 0T	ŝ						
Submarket/ WZ 2008	Economic activity	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020*
9. Press market	t											
47.62	Retail sale of magazines, journals and periodicals	3,351	3,381	3,422	3,303	3,275	3,344	3,458	3,832	3,905	3,911	3,715
58.12	Publishing of directories, etc.	1,415	1,762	1,875	1,825	1,706	1,599	1,516	1,505	1,443	1,399	1,367
58.13	Publishing of newspapers	11,183	11,501	11,781	11,396	10,595	10,112	10,094	10,291	10,294	10,166	9,932
58.14	Publishing of journals and periodicals	9,933	9,829	9,934	9,742	9,768	9,708	9,473	9,265	8,424	7,796	7,617
58.19	Other publishing activities (excluding software)	3,785	3,458	3,197	3,120	3,622	3,643	3,733	3,166	3,551	2,869	2,803
63.91	News agency activities	513	522	497	466	485	515	561	556	577	595	584
90.03.5	Own-account journalists and press photographers	1,219	1,258	1,223	1,213	1,206	1,212	1,218	1,204	1,222	1,210	1,029
	Submarket total	31,398	31,711	31,931	31,065	30,657	30,133	30,054	29,820	29,416	27,946	27,048
10. Advertising market	g market											
73.11	Advertising agencies	24,223	23,407	23,217	23,406	23,737	23,969	24,946	25,367	25,387	25,737	23,935
73.12	Media representation	1,491	1,522	1,748	1,769	2,394	3,064	4,459	4,711	4,588	4,882	4,540
	Submarket total	25,714	24,929	24,965	25,175	26,130	27,033	29,405	30,078	29,975	30,619	28,475
11. Software/games industry	games industry											
58.21	Publishing of computer games	3,040	2,327	1,743	1,395	336	269	304	247	304	280	350
58.29	Other software publishing	429	504	396	425	424	400	442	508	651	727	719
62.01.1	Web-page design and programming	2,732	3,055	3,179	3,208	3,523	3,955	4,670	5,057	5,752	6,459	6,395
62.01.9	Other software development	19,818	21,997	23,663	23,509	26,489	28,070	30,298	33,313	36,697	39,494	39,099
63.12	Web portals	477	559	661	881	847	1,667	2,013	2,507	3,251	3,690	3,653
	Submarket total	26,496	28,442	29,642	29,418	31,619	34,362	37,727	41,632	46,655	50,650	50,216
12. Other												
32.11	Striking of coins	118	159	147	160	109	105	117	125	118	119	119
32.13	Manufacture of imitation jewellery and related articles	125	128	117	124	131	75	68	70	69	68	65
74.20.2	Photographic laboratories	518	503	449	372	235	232	225	198	186	168	168
74.30.2	Own-account interpreters	462	495	509	520	536	559	642	630	609	592	533
91.01	Libraries and archives	66	48	43	44	49	55	30	34	34	34	29
91.03	Operation of historical sites and buildings and similar visitor attractions	32	36	35	34	36	36	36	37	41	39	29
91.04	Botanical and zoological gardens and nature reserves	267	283	288	277	323	319	306	360	353	376	282
	Submarket total	1,588	1,652	1,587	1,531	1,418	1,381	1,425	1,454	1,411	1,396	1,225
	Total, including double counts	154,327	157,960	160,385	160,332	164,586	170,151	177,720	184,820	191,123	197,036 1	175,653**
	Double counts	16,993	16,990	17,047	17,178	17,691	18,084	18,906	19,633	20,072	20,656	15,204
Cultural and c	Cultural and creative industries (excluding double counts)	137,333	140,970	143,338	143,155	146,895	152,067	158,814	165,187	171,051	176,380	160,449**
Contribution of	f CCIs to overall economy	7.57%	7.60%	7.56%	7.60%	7.62%	7.69%	7.79%	7.85%	2.58%	2.61%	2.48%
Note: *2020 figure	Note: *2020 figures derived from Federal Government Centre of Excellence for the Cultural and Creative Industries. **2020 total based on Federal Government Centre of Excellence for the Cultural and Creative Industries 2021 (excl: WZ	nd Creative I	ndustries . **2	2020 total base	ed on Federal	Government	Centre of Exce	ellence for th	e Cultural and	Creative Indu	stries 2021 (e	excl: WZ

Turnover (in \notin m) by submarket and category of economic activity (WZ) 2010–2020*

18.14). Discrepancies possible due to rounding. Source: VAT statistics, Destatis 2021a; the Federal Government Centre of Excellence for the Cultural and Creative Industries 12/2021

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Turnover by category of economic activity (3)

Core work	Core workers by submarket and category of econom	iic activ	ity (WZ)	nomic activity (WZ), 2010–2020*	2020*							
Submarket/ WZ 2008	Economic activity	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020*
1. Music industry	try											
32.20	Manufacture of musical instruments	6,396	6,300	6,376	6,339	6,413	6,352	6,385	6,383	6,519	6,680	6,632
47.59.3	Retail sale of musical instruments, etc.	6,169	6,232	6,292	6,241	6,105	6,081	6,015	6,074	6,052	5,743	5,750
47.63	Retail sale of music and video recordings, etc.	1,662	1,626	1,589	1,328	1,265	1,246	1,229	1,228	1,189	1,148	1,078
59.20.1	Sound-recording studios, etc.	1,403	1,449	1,513	1,552	1,556	1,549	1,608	1,683	1,757	1,776	1,812
59.20.2	Publishing of sound recordings	2,550	2,666	2,584	1,891	1,776	1,835	1,598	1,656	1,602	1,538	1,697
59.20.3	Publishing of printed music	3,199	3,095	2,697	2,716	3,224	3,253	3,436	3,560	3,698	3,871	3,933
90.01.2	Ballet companies, orchestras, bands and choirs	6,812	6,312	5,788	5,786	5,815	5,750	6,929	7,062	7,082	7,192	6,945
90.02	Support activities to performing arts	5,832	6,144	6,622	6,721	6,951	7,570	8,313	8,984	9,968	10,621	10,415
90.03.1	Own-account musicians, etc.	2,819	2,865	2,882	2,935	2,944	3,130	3,232	3,370	3,580	3,684	3,676
90.04.1	Organisation of theatre performances and concerts	6,365	6,386	6,593	8,419	8,261	8,105	8,327	8,671	9,021	9,335	8,839
90.04.2	Operation of opera houses, theatre and concert halls, etc.	3,491	3,552	3,597	3,565	3,631	3,625	3,461	3,476	3,533	3,606	3,529
	Submarket total	46.698	46.627	46.533	47.493	47.941	48.496	50.533	52.147	54.001	55.194	54.308
2. Book market												
18.14	Binding and related services	11,366	10,895	10,791	10,114	9,923	9,551	8,584	8,326	7,975	7,407	6,982
47.61	Retail sale of books	27,926	29,942	29,148	28,522	26,559	23,634	22,155	21,233	19,408	19,587	19,148
47.79.2	Retail sale in second-hand bookstores	776	765	752	767	741	719	721	663	678	627	627
58.11	Book publishing	24,804	25,419	25,260	25,423	24,893	24,619	25,221	25,062	24,694	24,691	24,208
74.30.1	Own-account translators	4,692	4,961	5,160	5,419	5,708	6,027	6,395	6,726	7,002	7,067	6,546
90.03.2	Own-account writers	7,296	7,522	7,735	7,912	8,093	8,498	8,760	9,021	9,354	9,363	9,258
	Submarket total	76,860	79,504	78,846	78,157	75,917	73,048	71,836	71,031	69,111	68,742	66,769
3. Art market												
47.78.3	Retail sale of art, etc.	3,539	3,310	3,290	3,182	3,067	3,100	3,099	3,049	2,969	2,881	2,756
47.79.1	Retail sale of antiques, etc.	3,438	3,400	3,422	3,363	3,174	3,015	2,927	2,783	2,718	2,640	2,508
90.03.3	Own-account visual artists	10,160	10,265	10,256	10,361	10,129	10,183	10,367	10,473	10,483	10,670	10,617
91.02	Museums activities	2,024	1,970	1,944	1,888	1,879	1,879	1,899	1,827	1,755	1,770	1,764
	Submarket total	19,161	18,945	18,912	18,793	18,249	18,177	18,292	18,132	17,925	17,961	17,645
4. Film industry	y											
47.63	Retail sale of music and video recordings, etc.	1,662	1,626	1,589	1,328	1,265	1,246	1,229	1,228	1,189	1,148	1,078
59.11	Motion picture, video and TV programme production	25,524	25,525	26,109	25,764	26,286	26,492	27,190	28,252	28,785	30,080	29,409
59.12	Motion picture, video and TV programme post-production	5,384	5,580	5,004	4,900	4,917	4,977	4,858	5,116	5,041	5,029	5,229
59.13	Motion picture, video and TV programme distribution	3,291	3,182	2,945	2,956	2,895	2,716	2,700	2,734	2,696	2,596	2,349
59.14	Motion picture projection activities	8,581	8,697	8,696	8,816	8,596	9,582	9,592	9,940	9,811	10,201	9,042
77.22	Renting of video tapes and disks	3,608	3,444	3,117	2,744	2,426	2,206	1,824	1,423	1,013	849	782
90.01.4	Own-account stage, motion picture, radio and TV artists, etc.	9,263	9,718	10,173	10,582	11,044	11,647	12,319	12,922	13,620	14,042	13,943
	Submarket total	57,313	57,772	57,633	57,090	57,429	58,866	59,712	61,615	62,155	63,945	61,832
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Core workers by category of economic activity (1)

Note: *Some figures for 2020 estimated. Discrepancies possible due to rounding. Source: VAT statistics, Destatis, 2021a, Employment Statistics, Federal Employment Agency 2021; in-house calculations by Goldmedia

Core wor	Core workers by submarket and category of economic activity (WZ), 2010–2020 *	nic activ	ity (WZ)), 2010-	- 2020*							
Submarket/ WZ 2008	Economic activity	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020*
5. Broadcasting industry	ng industry											
60.10	Radio broadcasting	13,601	13,745	13,437	14,030	14,230	15,067	15,093	14,674	14,779	14,760	14,703
60.20	Television programming and broadcasting	7,007	7,304	7,715	8,659	8,879	8,710	8,775	9,434	9,433	9,520	9,642
90.03.5	Own-account journalists and press photographers	18,273	18,645	18,713	18,663	18,579	18,700	18,552	18,243	18,081	17,806	17,642
	Submarket total	38,881	39,694	39,865	41,353	41,688	42,477	42,420	42,351	42,293	42,085	41,988
6. Performing arts market	arts market											
85.52	Cultural education	4,708	4,914	5,157	5,385	5,592	5,922	6,184	6,516	7,018	7,332	7,829
90.01.1	Theatre ensembles	1,340	1,214	1,214	1,056	1,056	1,080	1,121	1,146	1,130	1,129	1,100
90.01.3	Own-account performers and circus groups	1,286	1,262	1,107	1,194	1,222	1,275	1,389	1,359	1,427	1,561	1,214
90.01.4	Own-account stage, motion picture, radio and TV artists, etc.	9,263	9,718	1,173	10,582	11,044	11,647	12,319	12,922	13,620	14,042	13,943
90.02	Support activities to performing arts	5,832	6,144	6,622	6,721	6,951	7,570	8,313	8,984	9,968	10,621	10,415
90.04.1	Organisation of theatre performances and concerts	6,365	6,386	6,593	8,419	8,261	8,105	8,327	8,671	9,021	9,335	8,839
90.04.2	Operation of opera houses, theatre and concert halls, etc.	3,491	3,552	3,597	3,565	3,631	3,625	3,461	3,476	3,533	3,606	3,529
90.04.3	Operation of variety theatres and cabarets	940	923	926	965	1,048	1,054	1,044	1,115	1,129	1,167	1,170
	Submarket total	33,225	34,112	35,389	37,886	38,805	40,278	42,158	44,189	46,846	48,793	48,040
7. Design industry	stry											
32.12	Manufacture of jewellery and related articles	13,847	11,725	11,592	11,396	11,323	11,203	11,202	10,971	10,963	10,852	10,579
71.11.2	Consulting architectural activities in interior design	4,743	5,399	5,857	6,379	6,595	6,821	7,164	7,484	7,804	8,094	8,397
73.11	Advertising agencies (50% share)	64,774	65,546	65,975	65,589	66,116	66,876	68,882	70,467	71,198	71,648	69,790
74.10.1	Industrial, product and fashion designers	4,247	4,871	5,643	6,550	7,134	7,989	8,386	9,555	10,076	9,977	10,128
74.10.2	Graphics and communications designers	10,338	12,261	14,245	15,856	17,567	19,140	20,357	21,428	22,328	23,314	23,573
74.10.3	Interior decorators	10,482	10,669	10,152	9,829	9,606	9,695	9,911	9,873	9,718	9,546	9,241
74.20.1	Own-account photographers	17,447	17,956	18,303	18,675	18,921	19,573	19,691	20,115	20,464	20,548	20,522
	Submarket total	125,878	128,427	131,767	134,274	137,262	141,297	145,593	149,893	152,551	153,979	152,230
8. Architecture market	e market											
71.11.1	Consulting architectural activities in building construction	75,306	77,334	79,473	81,311	83,467	86,553	90,265	94,577	98,347	101,510	102,484
71.11.2	Consulting architectural activities in interior design	4,743	5,399	5,857	6,379	6,595	6,821	7,164	7,484	7,804	8,094	8,397
71.11.3	Consulting architectural activities in town, city and regional planning	11,600	12,029	11,803	11,721	11,649	11,972	12,369	12,410	12,825	13,498	13,816
71.11.4	Consulting architectural activities in landscape architecture	7,314	7,393	7,617	7,822	8,031	8,323	8,778	9,237	9,787	10,420	10,792
90.03.4	Own-account restorers	2,934	2,932	3,000	2,936	3,033	3,026	3,112	3,242	3,268	3,290	3,284
	Submarket total	101,897	105,087	107,750	110,169	112,775	116,695	121,688	126,950	132,031	136,812	138,773
Note: *Come fig	*Some figures for 2020 estimated. Discrenancies possible due to rounding											

Note: *Some figures for 2020 estimated. Discrepancies possible due to rounding. Source: VAT statistics, Destatis, 2021a, Employment Statistics, Federal Employment Agency 2021; in-house calculations by Goldmedia

Core workers by category of economic activity (2)

Core workers by submarket and category of economic activity (WZ), 2010 – 2020*

	oue woiners by subminarized and category of economic activity (MZ), 2010	ווור מרנו	VILY (VV2	L), LVLV	7070							
Submarket/ WZ 2008	Economic activity	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020*
9. Press market	t											
47.62	Retail sale of magazines, journals and periodicals	29,032	28,806	28,622	27,788	27,435	27,650	27,796	27,305	26,942	26,300	25,434
58.12	Publishing of directories, etc.	5,049	4,352	4,283	4,074	3,832	3,641	3,540	3,131	2,961	2,863	2,725
58.13	Publishing of newspapers	49,515	47,744	47,619	47,020	45,916	44,713	43,885	42,584	41,389	41,166	39,685
58.14	Publishing of journals and periodicals	41,341	40,655	38,777	38,111	36,212	34,838	33,464	32,873	32,333	32,014	30,812
58.19	Other publishing activities (excluding software)	11,264	11,551	11,188	11,059	10,767	10,081	9,635	9,508	8,997	8,680	8,345
63.91	News agency activities	8,831	9,348	9,658	9,382	9,668	10,757	11,769	13,377	13,160	12,691	12,409
90.03.5	Own-account journalists and press photographers	18,273	18,645	18,713	18,663	18,579	18,700	18,552	18,243	18,081	17,806	17,642
	Submarket total	163,305	161,101	158,860	156,097	152,409	150,380	148,641	147,021	143,863	141,520	137,054
10. Advertising market	g market											
73.11	Advertising agencies	129,548	131,092	131,949	131,177	132,232	133,751	137,763	140,933	142,395	143,296	139,581
73.12	Media representation	7,458	7,789	8,482	9,385	10,746	12,112	12,952	13,237	14,140	14,355	13,474
	Submarket total	137,006	138,881	140,431	140,562	142,978	145,863	150,715	154,170	156,535	157,651	153,056
11. Software/	11. Software/games industry											
58.21	Publishing of computer games	1,517	1,826	1,961	1,583	1,701	1,763	2,080	1,841	1,828	1,816	1,777
58.29	Other software publishing	15,417	17,932	20,664	22,028	23,144	25,401	28,690	32,407	32,574	33,306	34,150
62.01.1	Web-page design and programming	29,477	34,557	38,343	40,190	41,645	45,011	48,173	51,169	55,449	58,253	59,652
62.01.9	Other software development	201,743	208,997	231,515	248,469	260,525	272,735	284,698	301,336	324,442	350,162	369,934
63.12	Web portals	3,554	5,144	6,944	8,822	10,908	13,890	17,723	21,416	25,181	28,277	30,254
	Submarket total	251,708	268,456	299,427	321,092	337,923	358,800	381,364	408,169	439,474	471,814	495,767
12. Other												
32.11	Striking of coins	468	482	511	518	489	538	559	592	604	627	634
32.13	Manufacture of imitation jewellery and related articles	857	903	891	876	762	754	738	717	740	743	722
74.20.2	Photographic laboratories	5,045	4,862	4,945	5,008	4,704	4,587	4,217	4,003	4,010	3,828	3,654
74.30.2	Own-account interpreters	6,645	6,930	7,127	7,232	7,200	7,325	7,905	8,005	7,907	7,715	7,532
91.01	Libraries and archives	991	991	927	895	931	927	945	1,079	1,070	1,090	1,086
91.03	Operation of historical sites and buildings and similar visitor attractions	210	223	226	223	223	225	205	209	216	229	235
91.04	Botanical and zoological gardens and nature reserves	774	792	808	795	795	783	807	827	841	849	857
	Submarket total	14,991	15,182	15,436	15,548	15,104	15,140	15,376	15,433	15,388	15,081	14,722
	Total, including double counts	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	1,373,576	1,382,183
	Double counts	114,403	117,016	119,119	121,245	122,442	124,589	128,246	131,474	134,414	136,299	133,633
Cultural and c	Cultural and creative industries (excluding double counts)	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	1,237,276	1,248,550
Contribution o	Contribution of CCIs to overall economy	3.06%	3.07%	3.11%	3.16%	3.16%	3.19%	3.23%	3.27%	3.31%	3.37%	3.41%
Note: *Some figu	Note: *Some figures for 2020 estimated. Discrepancies possible due to rounding.											

Note: *Some figures for 2020 estimated. Discrepancies possible due to rounding. Source: VAT statistics, Destatis, 2021a, Employment Statistics, Federal Employment Agency 2021; in-house calculations by Goldmedia

Core workers by category of economic activity (3)

Self-empl	Self-employed persons in mini-jobs by submarket and category of economic activity (WZ), 2010–2020*	nd cate	gory of	econom	iic activ	ity (WZ)	, 2010–	2020*				
Submarket/ WZ 2008	Economic activity	2010	2011	2012	2013	2014	2015	2016	2017*	2018*	2019*	2020*
1. Music industry	try											
32.20	Manufacture of musical instruments	439	426	416	452	492	471	505	488	493	494	490
47.59.3	Retail sale of musical instruments, etc.	1,075	1,005	978	952	940	934	933	006	863	840	821
47.63	Retail sale of music and video recordings, etc.	267	272	312	350	369	387	402	418	395	411	402
59.20.1	Sound-recording studios, etc.	069	770	832	843	883	931	964	1,006	1,001	1,046	1,037
59.20.2	Publishing of sound recordings	538	549	577	554	574	568	578	573	564	566	563
59.20.3	Publishing of printed music	1,649	1,602	1,568	1,598	1,594	1,594	1,578	1,608	1,588	1,637	1,622
90.01.2	Ballet companies, orchestras, bands and choirs	3,602	3,493	3,414	3,408	3,396	3,352	3,443	3,518	3,600	3,667	3,628
90.02	Support activities to performing arts	2,852	3,016	3,034	3,047	3,077	3,153	3,340	3,482	3,627	3,718	3,670
90.03.1	Own-account musicians, etc.	4,622	4,754	4,804	5,034	5,094	5,449	6,037	6,145	6,641	6,966	6,956
90.04.1	Organisation of theatre performances and concerts	1,008	980	953	904	859	878	863	855	824	803	793
90.04.2	Operation of opera houses, theatre and concert halls, etc.	102	82	79	73	66	75	70	76	74	73	72
	Submarket total	16,844	16,949	16,967	17,215	17,344	17,792	18,713	19,069	19,670	20,221	20,054
2. Book market	Ţ											
18.14	Binding and related services	437	423	409	393	390	380	372	349	338	320	308
47.61	Retail sale of books	1,667	1,680	1,646	1,625	1,572	1,554	1,467	1,467	1,409	1,374	1,305
47.79.2	Retail sale in second-hand bookstores	328	319	302	273	298	308	317	279	277	257	248
58.11	Book publishing	2,348	2,420	2,462	2,489	2,454	2,424	2,334	2,350	2,295	2,228	2,131
74.30.1	Own-account translators	2,880	3,065	3,332	3,729	4,028	4,571	5,124	5,619	6,139	6,337	6,351
90.03.2	Own-account writers	14,052	14,568	15,066	15,856	16,095	16,673	17,225	17,738	18,318	18,525	18,478
	Submarket total	21,712	22,475	23,217	24,365	24,837	25,910	26,839	27,802	28,776	29,041	28,821
3. Art market												
47.78.3	Retail sale of art, etc.	6,409	6,055	5,885	5,734	5,614	5,456	5,312	5,143	4,990	4,809	4,647
47.79.1	Retail sale of antiques, etc.	1,458	1,416	1,380	1,333	1,299	1,267	1,230	1,161	1,118	1,069	1,024
90.03.3	Own-account visual artists	18,260	18,458	18,862	19,408	19,450	19,704	19,890	20,428	20,647	21,148	21,026
91.02	Museums activities	628	533	504	440	432	399	381	373	348	333	326
	Submarket total	26,755	26,462	26,631	26,915	26,795	26,826	26,813	27,105	27,103	27,359	27,023
4. Film industry	У											
47.63	Retail sale of music and video recordings, etc.	267	272	312	350	369	387	402	418	395	411	402
59.11	Motion picture, video and TV programme production	5,931	5,804	5,625	5,461	5,318	5,206	5,331	5,405	5,489	5,625	5,809
59.12	Motion picture, video and TV programme post-production	774	837	847	882	945	971	1,023	1,066	1,149	1,172	1,196
59.13	Motion picture, video and TV programme distribution	563	504	481	450	456	417	403	370	347	337	334
59.14	Motion picture projection activities	217	207	198	192	176	170	162	165	163	162	161
77.22	Renting of video tapes and disks	603	543	493	433	362	286	263	188	143	122	93
90.01.4	Own-account stage, motion picture, radio and TV artists, etc.	21,052	21,826	23,023	24,248	24,758	25,769	27,076	28,402	29,880	30,779	30,589
	Submarket total	29,407	29,993	30,979	32,016	32,384	33,206	34,660	36,014	37,566	38,608	38,583

Self-employed persons in mini-jobs by category of economic activity (1)

seir-emp	seit-employed persons in mini-Jobs by submarket and category of	nd categ	gory or (economic activity (WZ), 2010	IIC activ	Ity (WZ)), 2010 –	~0707 -				
Submarket/ WZ 2008	Economic activity	2010	2011	2012	2013	2014	2015	2016	2017*	2018*	2019*	2020*
5. Broadcasting industry	g industry											
60.10	Radio broadcasting	190	194	177	167	164	154	147	142	144	139	136
60.20	Television programming and broadcasting	59	61	53	56	59	99	67	65	67	71	74
90.03.5	Own-account journalists and press photographers	21,608	21,669	21,768	22,054	22,310	22,493	22,927	21,939	21,804	21,597	21,265
	Submarket total	21,857	21,924	21,998	22,277	22,533	22,713	23,141	22,146	22,015	21,807	21,475
6. Performing arts market	arts market											
85.52	Cultural education	1,898	2,036	2,390	2,669	2,824	3,141	3,495	3,647	3,985	4,314	4,242
90.01.1	Theatre ensembles	182	176	207	244	259	272	288	317	333	369	368
90.01.3	Own-account performers and circus groups	755	785	829	877	892	940	955	1,066	1,050	1,111	1,046
90.01.4	Own-account stage, motion picture, radio and TV artists, etc.	21,052	21,826	23,023	24,248	24,758	25,769	27,076	28,402	29,880	30,779	30,589
90.02	Support activities to performing arts	2,852	3,016	3,034	3,047	3,077	3,153	3,340	3,482	3,627	3,718	3,670
90.04.1	Organisation of theatre performances and concerts	1,008	980	953	904	859	878	863	855	824	803	793
90.04.2	Operation of opera houses, theatre and concert halls, etc.	102	82	79	73	99	75	70	76	74	73	72
90.04.3	Operation of variety theatres and cabarets	158	148	132	137	136	122	123	118	111	111	103
	Submarket total	28,007	29,049	30,647	32,199	32,871	34,350	36,210	37,963	39,884	41,278	40,883
7. Design industry	istry											
32.12	Manufacture of jewellery and related articles	1,935	1,942	1,942	1,991	1,997	1,989	1,971	1,957	1,930	1,918	1,896
71.11.2	Consulting architectural activities in interior design	2,519	2,730	2,780	2,902	2,955	3,061	3,083	3,072	3,076	3,098	3,078
73.11	Advertising agencies (50% share)	15,260	14,212	13,471	12,922	12,256	11,989	11,938	11,713	11,530	11,220	10,965
74.10.1	Industrial, product and fashion designers	3,051	3,682	4,224	4,736	4,998	5,360	5,849	5,866	6,178	6,327	6,135
74.10.2	Graphics and communications designers	9,191	10,756	12,307	14,252	15,302	16,576	17,847	18,436	19,180	19,818	19,086
74.10.3	Interior decorators	9,449	8,491	7,885	7,439	6,926	6,649	6,475	6,368	6,190	5,956	5,875
74.20.1	Own-account photographers	9,844	10,511	11,337	12,585	13,260	14,010	15,067	15,488	16,277	17,027	16,719
	Submarket total	51,249	52,324	53,946	56,827	57,694	59,634	62,230	62,900	64,361	65,364	63,754
8. Architecture	e market											
71.11.1	Consulting architectural activities in building construction	16,626	15,639	14,928	14,489	13,827	13,182	12,665	12,464	12,122	11,727	11,475
71.11.2	Consulting architectural activities in interior design	2,519	2,730	2,780	2,902	2,955	3,061	3,083	3,072	3,076	3,098	3,078
71.11.3	Consulting architectural activities in town, city and regional planning	3,029	2,980	2,857	2,841	2,815	2,783	2,665	2,713	2,650	2,600	2,557
71.11.4	Consulting architectural activities in landscape architecture	2,031	1,935	1,872	1,867	1,741	1,701	1,692	1,665	1,659	1,669	1,675
90.03.4	Own-account restorers	1,099	1,175	1,164	1,222	1,240	1,244	1,266	1,289	1,278	1,290	1,278
	Submarket total	25,304	24,459	23,601	23,321	22,578	21,971	21,371	21,203	20,785	20,384	20,062

Self-employed persons in mini-jobs by category of economic activity (2)

economic activity (W7) 2010-2020* Salf-amuloved nercons in mini-inhs hv suhmarket and rateonry of

Note: *Figures based on estimates Source: VAT statistics, Destatis 2021b; in-house calculations by Goldmedia

ANNEX 127

Self-empl	Self-employed persons in mini-jobs by submarket a	nd cate	ket and category of economic activity (WZ), 2010–2020*	econom	iic activ	ity (WZ)), 2010–	- 2020*				
Submarket/ WZ 2008	Economic activity	2010	2011	2012	2013	2014	2015	2016	2017*	2018*	2019*	2020*
9. Press market												
47.62	Retail sale of magazines, journals and periodicals	2,361	2,208	2,094	2,051	2,067	2,113	2,146	2,231	2,256	2,228	2,222
58.12	Publishing of directories, etc.	74	70	75	71	61	99	68	62	62	60	51
58.13	Publishing of newspapers	226	247	251	229	238	240	235	232	224	210	209
58.14	Publishing of journals and periodicals	694	209	069	676	671	673	661	641	621	593	562
58.19	Other publishing activities (excluding software)	2,569	2,392	2,310	2,225	2,164	2,206	2,146	2,072	1,993	1,926	1,893
63.91	News agency activities	1,083	1,068	970	876	804	802	824	742	740	714	690
90.03.5	Own-account journalists and press photographers	21,608	21,669	21,768	22,054	22,310	22,493	22,927	21,939	21,804	21,597	21,265
	Submarket total	28,615	28,363	28,158	28,182	28,315	28,593	29,007	27,919	27,700	27,328	26,891
10. Advertising market	market											
73.11	Advertising agencies	30,520	28,423	26,941	25,844	24,512	23,978	23,876	23,426	23,060	22,441	21,932
73.12	Media representation	1,119	1,216	1,225	1,257	1,271	1,394	1,519	1,526	1,577	1,630	1,635
	Submarket total	31,639	29,639	28,166	27,101	25,783	25,372	25,395	24,952	24,637	24,071	23,567
11. Software/games industry	ames industry											
58.21	Publishing of computer games	362	338	305	282	285	293	290	280	288	287	295
58.29	Other software publishing	475	538	563	560	572	562	628	662	694	705	708
62.01.1	Web-page design and programming	13,429	13,815	14,216	15,036	15,581	16,169	16,659	17,030	17,619	17,747	18,155
62.01.9	Other software development	15,620	15,848	16,659	17,538	18,587	19,880	21,129	21,728	22,899	23,936	25,264
63.12	Web portals	757	988	1,194	1,338	1,420	1,574	1,848	1,913	2,014	2,080	2,135
	Submarket total	30,643	31,527	32,937	34,754	36,445	38,478	40,554	41,613	43,514	44,755	46,557
12. Other												
32.11	Striking of coins	22	21	18	15	16	19	16	17	17	17	17
32.13	Manufacture of imitation jewellery and related articles	480	540	625	708	747	796	881	876	952	1,003	066
74.20.2	Photographic laboratories	385	352	348	326	282	283	270	254	250	223	209
74.30.2	Own-account interpreters	8,566	8,434	8,523	8,658	8,674	8,820	9,172	9,381	9,254	9,072	8,867
91.01	Libraries and archives	140	129	119	104	91	93	92	88	84	82	80
91.03	Operation of historical sites and buildings and similar visitor attractions	91	79	72	77	80	80	83	83	83	88	93
91.04	Botanical and zoological gardens and nature reserves	165	145	108	108	98	88	93	92	06	89	91
	Submarket total	9,849	9,700	9,813	9,996	9,988	10,179	10,607	10,791	10,730	10,574	10,347
	Total, including double counts	321,881	322,864	327,060	335,168	337,567	345,024	355,540	359,477	366,741	370,790	368,016
	Double counts	64,668	64,787	65,420	66,500	66,650	67,805	669'69	69,957	71,210	71,699	70,834
Cultural and cr	Cultural and creative industries (excluding double counts)	257,213	258,077	261,640	268,668	270,917	277,219	285,841	289,520	295,531	299,091	297,182
Contribution of	Contribution of CCIs to overall economy	10.47%	10.09%	9.88%	9.80%	9.86%	9.93%	10.17%	10.20%	10.32%	10.36%	10.32%

Self-employed persons in mini-jobs by category of economic activity (3)

Turnover classed by size (1) Turnover classed by size of the CCIs by submarket, 2019

Submarket	Company type	Size class	Comp	pany	Turno	over
			Number	Share (in %)	in €m	Share (in %)
1. Music industry						
	Microenterprises	up to €2m	14,555	96.4%	2,443,980	27.2%
	Small enterprises	from €2m to €10m	377	2.5%	1,551,477	17.3%
	Medium-sized enterprises	over €10m to €50m	67	0.4%	1,160,516	12.9%
	Large enterprises	more than €50m	0	0.0%	0	0.0%
	unassigned		96	0.6%	3,815,158	42.5%
	All types of companies	Total	15,095	100.0%	8,971,131	100.0%
2. Book market						
	Microenterprises	up to €2m	16,910	97.4%	2,744,775	17.1%
	Small enterprises	from €2m to €10m	322	1.9%	1,315,050	8.2%
	Medium-sized enterprises	over €10m to €50m	47	0.3%	704,478	4.4%
	Large enterprises	more than €50m	10	0.1%	1,716,748	10.7%
	unassigned		79	0.5%	9,590,449	59.7%
	All types of companies	Total	17,368	100.0%	16,071,500	100.0%
3. Art market						
	Microenterprises	up to €2m	12,525	98.8%	1,294,637	54.8%
	Small enterprises	from €2m to €10m	99	0.8%	349,949	14.8%
	Medium-sized enterprises	over €10m to €50m	15	0.1%	221,490	9.4%
	Large enterprises	more than €50m	0	0.0%	0	0.0%
	unassigned		34	0.3%	495,725	21.0%
	All types of companies	Total	12,672	100.0%	2,361,802	100.0%
4. Film industry						
	Microenterprises	up to €2m	20,029	97.0%	2,965,583	29.6%
	Small enterprises	from €2m to €10m	446	2.2%	1,742,185	17.4%
	Medium-sized enterprises	over €10m to €50m	94	0.5%	1,661,750	16.6%
	Large enterprises	more than €50m	13	0.1%	1,649,058	16.5%
	unassigned		74	0.4%	1,992,302	19.9%
	All types of companies	Total	20,656	100.0%	10,010,877	100.0%
5. Broadcasting industry						
	Microenterprises	up to €2m	16,993	99.2%	1,328,839	14.1%
	Small enterprises	from €2m to €10m	80	0.5%	322,002	3.4%
	Medium-sized enterprises	over €10m to €50m	19	0.1%	313,714	3.3%
	Large enterprises	more than €50m	0	0.0%	0	0.0%
	unassigned		31	0.2%	7,449,949	79.1%
	All types of companies	Total	17,123	100.0%	9,414,504	100.0%
6. Performing arts market						
	Microenterprises	up to €2m	21,031	98.2%	2,530,492	42.2%
	Small enterprises	from €2m to €10m	311	1.5%	1,251,367	20.9%
	Medium-sized enterprises	over €10m to €50m	51	0.2%	815,442	13.6%
	Large enterprises	more than €50m	0	0.0%	0	0.0%
	unassigned		34	0.2%	1,395,841	23.3%
	All types of companies	Total	21,427	100.0%	5,993,141	100.0%
7. Design industry			,/	_00.070	0,000,111	200.070
	Microenterprises	up to €2m	59,784	98.2%	8,015,564	38.1%
	Small enterprises	from €2m to €10m	891	1.5%	3,545,988	16.9%
	Medium-sized enterprises	over €10m to €50m	154	0.3%	3,061,248	14.6%
	medium sized enterprises		104	0.570	3,001,270	14.070
	Large enternrises	more than $ f 50m $	2/	0.1%	6 116 972	20.1%
	Large enterprises unassigned	more than €50m	34 29	0.1% 0.0%	6,116,973 288,275	29.1% 1.4%

Turnover classed by size (2) Turnover classed by size of the CCIs by submarket, 2019

Submarket	Company type	Size class	Comp	bany	Turn	over
			Number	Share (in %)	in €m	Share (in %)
8. Architecture market						
	Microenterprises	up to €2m	37,401	97.7%	8,050,872	64.0%
	Small enterprises	from €2m to €10m	791	2.1%	2,756,907	21.9%
	Medium-sized enterprises	over €10m to €50m	46	0.1%	658,450	5.2%
	Large enterprises	more than €50m	0	0.0%	0	0.0%
	unassigned		59	0.2%	1,108,343	8.8%
	All types of companies	Total	38,297	100.0%	12,574,572	100.0%
9. Press market						
	Microenterprises	up to €2m	29,913	96.4%	4,972,880	17.8%
	Small enterprises	from €2m to €10m	790	2.5%	3,334,022	11.9%
	Medium-sized enterprises	over €10m to €50m	211	0.7%	4,826,190	17.3%
	Large enterprises	more than €50m	92	0.3%	14,324,607	51.3%
	unassigned		28	0.1%	488,616	1.7%
	All types of companies	Total	31,034	100.0%	27,946,316	100.0%
10. Advertising market						
	Microenterprises	up to €2m	27,417	94.8%	6,144,528	20.1%
	Small enterprises	from €2m to €10m	1,197	4.1%	4,794,143	15.7%
	Medium-sized enterprises	over €10m to €50m	230	0.8%	4,764,539	15.6%
	Large enterprises	more than €50m	80	0.3%	14,915,383	48.7%
	unassigned		0	0.0%	0	0.0%
	All types of companies	Total	28,924	100.0%	30,618,592	100.0%
11. Software and games industry						
	Microenterprises	up to €2m	39,025	93.4%	8,875,409	17.5%
	Small enterprises	from €2m to €10m	2,113	5.1%	9,034,221	17.8%
	Medium-sized enterprises	over €10m to €50m	547	1.3%	10,983,565	21.7%
	Large enterprises	more than €50m	94	0.2%	21,379,275	42.2%
	unassigned		15	0.0%	377,390	0.7%
	All types of companies	Total	41,794	100.0%	50,649,860	100.0%
12. Other						
	Microenterprises	up to €2m	7,861	98.9%	746,415	53.5%
	Small enterprises	from €2m to €10m	36	0.5%	151,639	10.9%
	Medium-sized enterprises	over €10m to €50m	10	0.1%	153,899	11.0%
	Large enterprises	more than €50m	0	0.0%	0	0.0%
	unassigned		43	0.5%	344,126	24.6%
	All types of companies	Total	7,950	100.0%	1,396,078	100.0%

Note: The "unassigned" group is due to data-protection-related confidentiality in the VAT statistics by size classes. Source: Turnover tax statistics, Destatis 2021; in-house calculations by Goldmedia

Submarket/ WZ 2008 1. Music industry 32.20 47.59.3	~ ~ ~											
1. Music industr 32.20 47.59.3	Economic activity	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
32.20 47.59.3	У											
47.59.3	Manufacture of musical instruments	29.4	29.6	30.0	29.9	30.0	30.6	31.1	31.2	31.7	32.2	32.4
	Retail sale of musical instruments, etc.	32.5	32.3	31.0	30.9	30.3	30.4	30.4	30.6	30.1	31.1	31.5
47.63	Retail sale of music and video recordings, etc.	32.9	31.9	33.0	32.7	33.7	33.5	32.0	31.8	32.4	30.1	31.1
59.20.1	Sound-recording studios, etc.	35.9	36.5	37.8	39.9	38.2	38.3	37.7	37.5	35.5	35.2	33.2
59.20.2	Publishing of sound recordings	38.9	39.9	39.1	51.9	51.8	51.5	48.5	48.8	51.0	53.0	53.6
59.20.3	Publishing of printed music	57.4	56.7	56.2	56.0	53.8	53.5	52.4	52.3	52.3	51.7	51.3
90.01.2	Ballet companies, orchestras, bands and choirs	40.6	40.6	41.6	41.7	42.4	42.4	43.3	44.2	44.5	44.6	45.1
90.02	Support activities to performing arts	31.5	30.6	30.0	31.0	30.0	29.4	28.4	28.5	27.9	27.0	27.7
90.03.1	Own-account musicians, etc.	60.8	58.8	56.7	55.7	56.0	54.4	51.4	52.5	53.1	51.5	51.7
90.04.1	Organisation of theatre performances and concerts	52.9	52.2	50.6	50.0	51.1	51.8	51.3	51.4	51.0	51.6	51.9
90.04.2	Operation of opera houses, theatre and concert halls, etc.	43.1	43.4	43.7	43.8	44.3	44.6	44.7	45.0	45.4	45.8	46.0
	Submarket total	39.5	39.3	38.7	40.1	40.1	40.2	39.8	40.1	39.9	40.0	40.3
2. Book market												
18.14	Binding and related services	39.9	40.0	40.1	39.7	40.8	42.0	42.3	42.6	42.6	43.2	43.1
47.61	Retail sale of books	78.3	75.8	76.0	75.5	75.3	80.0	80.0	79.8	80.4	80.4	80.1
47.79.2	Retail sale in second-hand bookstores	61.2	61.8	59.1	61.4	60.6	59.0	60.0	55.8	55.9	59.0	55.7
58.11	Book publishing	64.7	65.6	65.7	66.0	67.0	67.1	67.4	67.5	67.8	67.8	67.5
74.30.1	Own-account translators	68.0	67.9	68.9	68.5	67.9	68.4	68.0	67.9	66.3	66.0	67.1
90.03.2	Own-account writers	73.8	7.77	77.3	76.4	71.1	66.6	59.2	61.2	59.3	62.5	61.1
	Submarket total	66.0	66.0	66.0	66.1	66.3	67.9	68.0	68.0	67.9	68.3	68.3
3. Art market												
47.78.3	Retail sale of art, etc.	74.8	73.8	74.0	72.7	72.6	72.5	72.5	71.4	71.0	70.5	70.0
47.79.1	Retail sale of antiques, etc.	47.8	47.8	47.1	47.7	48.0	48.0	47.2	47.3	46.7	45.1	45.3
90.03.3	Own-account visual artists	49.0	47.7	47.0	49.7	50.2	49.0	49.7	49.9	49.6	50.3	49.6
91.02	Museums activities	58.4	59.0	59.0	59.3	58.9	59.3	59.4	59.7	59.6	60.1	60.0
	Submarket total	59.0	57.8	57.5	58.0	58.3	58.5	58.6	58.5	58.1	57.8	57.4
4. Film industry												
47.63	Retail sale of music and video recordings, etc.	32.9	31.9	33.0	32.7	33.7	33.5	32.0	31.8	32.4	30.1	31.1
59.11	Motion picture, video and TV programme production	45.9	45.8	45.9	45.8	45.5	45.3	45.2	45.3	45.3	46.0	45.7
59.12	Motion picture, video and TV programme post-production	40.4	41.5	41.6	41.8	41.5	42.7	40.9	42.4	43.3	42.8	43.4
59.13	Motion picture, video and TV programme distribution	52.6	52.1	52.4	51.7	51.6	53.2	53.0	53.2	53.4	54.4	54.5
59.14	Motion picture projection activities	45.3	45.5	46.2	46.4	48.0	48.6	49.2	49.0	48.2	48.4	47.7
77.22	Renting of video tapes and disks	53.7	54.1	54.0	53.1	53.1	52.1	51.5	50.1	49.7	47.9	47.4
90.01.4	Own-account stage, motion picture, radio and TV artists, etc.	64.9	63.8	63.1	65.2	64.5	64.9	64.2	62.8	60.5	62.0	60.2
	Submarket total	45.8	45.9	46.1	46.2	46.3	46.5	46.3	46.4	46.3	46.7	46.4

Proportion of employees subject to social security contributions who are female by submarket and category of economic activity (WZ),

Proportion of women by category of economic activity (1)

Source: Employment Statistics, Federal Employment Agency 2021; in-house calculations by Goldmedia

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2010-2020 (IN %)	20 (IN %)											
Submarket/ WZ 2008	Economic activity	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
5. Broadcasting industry	g industry											
60.10	Radio broadcasting	48.4	48.6	48.7	48.8	48.9	49.6	49.4	49.5	49.5	50.0	50.2
60.20	Television programming and broadcasting	48.2	48.1	48.0	48.2	48.9	49.1	48.5	49.0	49.2	49.6	49.9
90.03.5	Own-account journalists and press photographers	66.6	66.4	66.1	68.6	68.7	67.9	63.6	61.9	60.3	61.1	62.1
	Submarket total	49.1	49.1	49.2	49.4	49.6	50.0	49.7	49.8	49.9	50.3	50.6
6. Performing arts market	arts market											
85.52	Cultural education	66.2	65.6	65.9	66.6	67.2	67.2	66.8	6.99	66.2	66.6	67.0
90.01.1	Theatre ensembles	46.1	46.2	46.3	46.7	46.7	46.8	46.7	46.4	47.0	47.4	47.8
90.01.3	Own-account performers and circus groups	26.9	27.4	28.5	28.7	27.0	27.6	28.2	30.2	36.6	39.9	41.5
90.01.4	Own-account stage, motion picture, radio and TV artists, etc.	64.9	63.8	63.1	65.2	64.5	64.9	64.2	62.8	60.5	62.0	60.2
90.02	Support activities to performing arts	31.5	30.6	30.0	31.0	30.0	29.4	28.4	28.5	27.9	27.0	27.7
90.04.1	Organisation of theatre performances and concerts	52.9	52.2	50.6	50.0	51.1	51.8	51.3	51.4	51.0	51.6	51.9
90.04.2	Operation of opera houses, theatre and concert halls, etc.	43.1	43.4	43.7	43.8	44.3	44.6	44.7	45.0	45.4	45.8	46.0
90.04.3	Operation of variety theatres and cabarets	49.3	50.9	52.0	53.7	50.7	51.7	50.8	50.3	50.6	49.1	51.4
	Submarket total	47.3	47.0	46.8	47.5	47.6	47.6	46.9	47.0	46.5	46.5	47.4
7. Design industry	stry											
32.12	Manufacture of jewellery and related articles	52.6	60.8	61.8	61.9	61.7	62.0	62.2	62.7	63.0	63.1	63.1
71.11.2	Consulting architectural activities in interior design	61.6	61.6	62.2	61.3	61.6	62.5	61.8	61.8	60.4	61.6	59.9
73.11	Advertising agencies (50% share)	55.1	54.9	55.0	55.0	54.8	54.9	54.6	54.4	54.5	54.5	54.1
74.10.1	Industrial, product and fashion designers	54.8	54.5	53.3	54.8	54.2	50.6	49.7	51.3	51.0	50.9	50.8
74.10.2	Graphics and communications designers	56.5	56.7	56.7	55.7	54.4	54.5	54.8	54.2	54.6	54.3	53.9
74.10.3	Interior decorators	50.8	50.7	51.2	50.4	50.4	51.1	50.0	50.2	50.5	49.6	49.8
74.20.1	Own-account photographers	67.7	68.6	68.9	69.1	9.69	69.1	68.6	68.2	67.4	66.0	65.1
	Submarket total	56.2	57.1	57.3	57.2	57.0	56.8	56.4	56.3	56.2	56.0	55.6
8. Architecture market	e market											
71.11.1	Consulting architectural activities in building construction	55.1	55.3	55.8	55.9	56.3	56.2	56.5	56.3	56.3	56.1	55.8
71.11.2	Consulting architectural activities in interior design	61.6	61.6	62.2	61.3	61.6	62.5	61.8	61.8	60.4	61.6	59.9
71.11.3	Consulting architectural activities in town, city and regional planning	51.6	51.3	52.1	52.8	53.2	53.2	53.8	53.5	54.2	55.1	54.7
71.11.4	Consulting architectural activities in landscape architecture	54.9	57.6	58.3	58.8	58.4	59.0	59.2	59.1	59.5	59.7	59.8
90.03.4	Own-account restorers	40.5	40.3	38.8	39.9	39.2	39.9	39.1	40.2	41.1	40.0	40.6
	Submarket total	54.5	54.8	55.4	55.7	56.0	56.1	56.3	56.1	56.2	56.2	55.9
-		:										

Proportion of women by category of economic activity (2)

Source: Employment Statistics, Federal Employment Agency 2021; in-house calculations by Goldmedia

Proportion of employees subject to social security contributions who are female by submarket and category of economic activity (WZ), 2010-2020 (in %)

7070–7020 (IU %)	() (IN %)											
Submarket/ WZ 2008	Economic activity	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
9. Press market												
47.62	Retail sale of magazines, journals and periodicals	69.4	69.4	6.9	69.6	70.3	70.8	71.0	70.9	70.4	70.0	69.7
58.12	Publishing of directories, etc.	68.9	67.7	67.8	67.7	66.7	66.1	66.0	64.1	63.5	64.3	62.7
58.13	Publishing of newspapers	50.9	51.1	51.3	51.6	51.7	51.4	52.0	52.1	52.4	52.5	52.8
58.14	Publishing of journals and periodicals	59.3	59.4	59.9	59.9	60.5	60.8	61.0	60.7	60.8	61.1	61.2
58.19	Other publishing activities (excluding software)	56.5	56.2	56.9	57.1	57.3	57.6	57.4	57.9	58.4	58.6	58.8
63.91	News agency activities	50.1	49.8	50.3	50.2	50.8	50.1	50.0	48.9	49.0	49.1	48.9
90.03.5	Own-account journalists and press photographers	66.6	66.4	66.1	68.6	68.7	67.9	63.6	61.9	60.3	61.1	62.1
	Submarket total	57.4	57.4	57.8	57.8	58.1	58.1	58.2	57.9	57.9	58.0	58.0
10. Advertising market	market											
73.11	Advertising agencies	55.1	54.9	55.0	55.0	54.8	54.9	54.6	54.4	54.5	54.5	54.1
73.12	Media representation	54.6	53.0	53.6	53.5	53.3	54.1	54.4	54.3	54.2	53.5	52.5
	Submarket total	55.1	54.8	54.9	54.9	54.7	54.8	54.6	54.4	54.5	54.4	54.0
11. Software/games industry	ames industry											
58.21	Publishing of computer games	30.0	29.5	29.0	24.6	25.3	24.9	25.8	25.0	25.3	27.4	25.7
58.29	Other software publishing	25.3	25.8	26.0	26.3	26.6	26.2	26.4	26.6	27.6	28.3	28.9
62.01.1	Web-page design and programming	31.2	31.0	31.2	32.1	32.1	32.2	33.7	34.5	34.9	35.6	35.9
62.01.9	Other software development	25.6	25.4	25.3	25.5	25.3	25.4	25.6	25.7	26.0	26.5	26.8
63.12	Web portals	42.1	41.9	42.1	41.2	41.5	42.9	42.7	42.4	43.8	43.5	43.8
	Submarket total	26.4	26.4	26.4	26.7	26.6	26.9	27.4	27.7	28.2	28.7	29.0
12. Other												
32.11	Striking of coins	40.6	41.4	40.4	40.2	41.9	40.4	41.1	41.7	41.9	43.0	42.0
32.13	Manufacture of imitation jewellery and related articles	60.7	59.4	59.0	57.1	58.6	60.9	61.0	58.8	58.9	58.1	58.7
74.20.2	Photographic laboratories	56.5	55.8	54.6	54.2	53.3	52.8	54.1	53.6	53.0	51.9	51.1
74.30.2	Own-account interpreters	74.3	70.5	64.5	67.4	69.8	73.4	63.1	64.0	64.6	68.8	69.0
91.01	Libraries and archives	71.1	71.6	71.2	70.5	70.1	69.7	69.8	68.3	68.1	68.2	67.8
91.03	Operation of historical sites and buildings and similar visitor attractions	46.3	48.0	48.9	49.5	49.9	51.4	51.2	49.3	50.2	48.6	49.0
91.04	Botanical and zoological gardens and nature reserves	45.5	46.2	46.2	46.5	47.2	47.8	47.9	48.5	49.3	50.3	50.5
	Submarket total	57.7	57.2	56.0	55.6	55.6	55.5	55.9	55.7	55.5	55.5	55.0
Cultural and cr	Cultural and creative industries (excluding double counts)	46.2	45.9	45.4	45.1	44.7	44.6	44.3	44.0	43.7	43.6	43.2
Contribution to	Contribution to overall economy	45.8	45.8	45.9	46.1	46.2	46.4	46.4	46.3	46.2	46.2	46.3
Courses Family	art Ctatiotics Fadard Frankarmant Arman, 2001. in harres of articles her Co											

Proportion of women by category of economic activity (3)

standard (27.303)			מות ומו	WIND ALE TEILIALE US SUDITIATED ATTU CALESULY OF ECOTIONITIC ACTIVITY, 2010 TO 2020 (III 10)			Larcgu.			מרנו עו ראי			/0/
interter interter duraci ditaturante, sec., and a sec.	Submarket/ WZ 2008	Economic activity	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Monutature of musical instruments 950 973 <t< th=""><th>1. Music indu</th><th>try</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>	1. Music indu	try											
Interfactor Sign	32.20	Manufacture of musical instruments	59.6	59.0	57.8	59.3	57.9	55.3	55.1	56.6	56.6	53.3	54.3
Final and muci and vidore conding, etc.(a)(a)(a)(a)(a)(a)(a)Pointing of numer and vidore conding, etc.(a)(a)(a)(a)(a)(a)(a)(a)Pointing of numer and vidore conding, etc.(a)(a)(a)(a)(a)(a)(a)(a)(a)Pointing of numer and reconding,(a)(a)(a)(a)(a)(a)(a)(a)(a)(a)(a)Support and victoring, and victor	47.59.3	Retail sale of musical instruments, etc.	56.5	56.1	55.7	53.3	55.4	52.4	52.9	51.2	51.2	50.8	50.2
Sound-recording studic etc. 951 920<	47.63	Retail sale of music and video recordings, etc.	48.3	53.0	50.2	48.4	53.9	50.2	46.7	44.4	44.2	44.7	40.8
Publishing of cound recording.663613 <th< th=""><th>59.20.1</th><th>Sound-recording studios, etc.</th><th>59.7</th><th>58.2</th><th>56.8</th><th>59.7</th><th>58.6</th><th>57.0</th><th>59.2</th><th>59.9</th><th>59.9</th><th>60.8</th><th>59.5</th></th<>	59.20.1	Sound-recording studios, etc.	59.7	58.2	56.8	59.7	58.6	57.0	59.2	59.9	59.9	60.8	59.5
Publishing of primer music. 666 673 633 621 633 631 633<	59.20.2	Publishing of sound recordings	66.5	61.6	62.9	58.4	59.4	57.7	53.5	54.9	55.4	59.1	57.6
Billet comparie; orcherture, bands and chois.46.46.147.147.84	59.20.3	Publishing of printed music	66.6	65.7	63.3	62.0	62.4	66.1	67.7	61.9	63.0	62.6	66.8
Support articline to performing arts 331 401 331 336 332 331	90.01.2	Ballet companies, orchestras, bands and choirs	46.4	46.1	47.8	48.7	50.6	49.5	50.7	53.4	52.2	50.8	53.1
Own-account musicians, etc.TMTMTMTMTMTMTMTMTMOrganisation of theare performances and concerts533533534533546533533533Operations of theare performances and concerts5335345335345335345335	90.02	Support activities to performing arts	39.1	40.4	37.1	38.0	37.6	35.6	36.4	36.1	35.0	34.2	34.7
Organisation of theate performances and concert balls, etc. 33 53 <th>90.03.1</th> <th>Own-account musicians, etc.</th> <th>77.4</th> <th>76.4</th> <th>68.1</th> <th>72.2</th> <th>76.6</th> <th>75.0</th> <th>75.2</th> <th>77.0</th> <th>75.0</th> <th>75.8</th> <th>73.7</th>	90.03.1	Own-account musicians, etc.	77.4	76.4	68.1	72.2	76.6	75.0	75.2	77.0	75.0	75.8	73.7
	90.04.1	Organisation of theatre performances and concerts	53.9	53.2	53.8	52.6	54.5	53.9	54.6	56.0	55.9	56.3	57.8
Immediate total S20 S13 S10 S13	90.04.2	Operation of opera houses, theatre and concert halls, etc.	58.8	59.4	59.7	59.1	58.9	58.6	58.4	58.4	59.7	60.3	62.5
mater image image <th< th=""><th></th><th>Submarket total</th><th>52.9</th><th>52.6</th><th>51.8</th><th>51.0</th><th>51.8</th><th>50.1</th><th>50.3</th><th>50.3</th><th>49.6</th><th>49.0</th><th>50.0</th></th<>		Submarket total	52.9	52.6	51.8	51.0	51.8	50.1	50.3	50.3	49.6	49.0	50.0
Binding and related services 639 634 630 633 616 57.2 58.4 59.0 50.1 Retail safe of books Retail safe of books 82.7 82.4 82.8 82.9 82.0 80.0 80.0 80.0 80.0 Retail safe of books 64.7 64.7 64.7 64.7 64.7 64.7 64.0 60.0 62.3 Book on eccount transfors 72.4 <th>2. Book marke</th> <th></th>	2. Book marke												
Reai size of books:	18.14	Binding and related services	63.9	63.4	63.0	60.3	61.8	61.6	57.2	58.4	59.9	59.1	60.0
Retail sele in second-hand booktrores74172.663372.267.364.760.660.062.5Book publishing0.00esca63.564.864.965.765.965.765.065.765.065.765.0Own-account transitors7.3.47.3.27.3.27.3.27.3.27.3.27.3.264.765.365.77.3.265.365.765.365.77.3.27.3.2Own-account transitors7.37.37.37.37.37.37.37.37.37.3Ather7.37.37.37.37.37.37.37.37.37.3AtherKeal sele of att, etc.8.28.18.18.18.18.17.37.37.37.3AtherKeal sele of attiques, etc.8.26.36.36.36.36.36.36.36.36.36.36.36.36.36.36.36.36.37.37.37.37.37.3AtherKeal sele of attiques, etc.8.28.18.18.18.18.18.18.18.17.3	47.61	Retail sale of books	82.7	82.4	82.6	82.8	82.8	82.2	82.0	80.5	81.0	80.6	80.5
Book publishing Book publ	47.79.2	Retail sale in second-hand bookstores	74.1	72.6	69.3	72.2	67.3	68.7	64.7	60.6	60.0	62.5	65.0
	58.11	Book publishing	65.5	64.8	64.9	66.8	67.2	66.3	67.8	6.99	66.7	67.0	65.5
	74.30.1	Own-account translators	72.4	72.0	70.7	69.5	67.6	6.99	67.4	66.3	65.1	64.5	63.5
Submarket total 743 743 743 726 725 724	90.03.2	Own-account writers	82.5	78.3	81.0	79.9	78.4	77.4	77.4	76.3	74.7	73.8	73.1
anter Simplement Simplement </th <th></th> <th>Submarket total</th> <th>74.9</th> <th>74.2</th> <th>74.1</th> <th>74.3</th> <th>74.2</th> <th>73.8</th> <th>72.7</th> <th>72.0</th> <th>72.5</th> <th>72.4</th> <th>72.4</th>		Submarket total	74.9	74.2	74.1	74.3	74.2	73.8	72.7	72.0	72.5	72.4	72.4
Retail sale of art, etc.816819815811812803794795Retail sale of art, etc.596591569573585591503574575Retail sale of antiques, etc.596591610631611593614605603603603Own-account visual artists647630631611593614605603613603Museums activities647630631611593614605630634Museums activities647630631611593614632602613602Submarket total701690630630631633632640636Museums activities77777777Submarket total7630630630631630630630630Motion picture, video and V programme production531544556576573573576576Motion picture, video and V programme post-production573640573576573573573573573573576576Motion picture, video and V programme post-production573574575573573573573573573576576Motion picture, video and V programme post-production573574575573573	3. Art market												
Retail sale of antiques, etc.59.659.156.955.957.358.559.158.057.457.5Own-account visual artists61.863.063.161.159.361.460.560.261.360.2Museums activities64.763.063.464.063.763.963.563.264.063.6Museums activities64.763.063.464.063.763.963.264.063.6Museums activities70.163.063.463.063.463.563.264.063.763.264.063.5Museums activities70.163.063.063.063.663.264.763.663.264.763.6Museums activities70.163.063.063.063.663.263.264.763.663.663.664.763.6Museum activities73.353.053.254.853.655.455.655.655.757.657.657.657.6Mustion picture, video and TV programme post-production53.154.455.857.455.757.359.957.159.957.657.6Mustion picture, video and TV programme distribution57.359.757.656.757.957.757.657.657.657.6Mustion picture projection activities53.154.757.657.757.754.757.657.657.6 <th>47.78.3</th> <th>Retail sale of art, etc.</th> <th>82.6</th> <th>81.9</th> <th>81.8</th> <th>81.5</th> <th>81.1</th> <th>81.2</th> <th>80.2</th> <th>80.3</th> <th>79.4</th> <th>79.5</th> <th>79.7</th>	47.78.3	Retail sale of art, etc.	82.6	81.9	81.8	81.5	81.1	81.2	80.2	80.3	79.4	79.5	79.7
	47.79.1	Retail sale of antiques, etc.	59.6	59.1	56.9	55.9	57.3	58.5	59.1	58.0	57.4	57.5	57.3
Museums activities 64.7 63.0 63.4 64.0 63.5 63.2 64.0 63.6 Submarket total 70.1 69.6 69.0 68.1 68.3 68.2 64.0 63.6 Industr 70.1 69.6 69.0 68.0 68.1 68.3 68.2 67.6 67.6 Retail sale of music and video recordings, etc. 48.3 53.0 50.2 48.4 53.9 50.2 46.7 44.2 44.2 Motion picture, video and TV programme production 53.1 54.4 55.6 57.4 57.6 57.3 59.9 57.1 59.9 59.9 59.9 59.9 59.9 59.9 59.9 59.9 59.9 59.9 59.9 59.9 59.9 59.9 59.9 59.9 59.9 <	90.03.3	Own-account visual artists	61.8	63.0	63.1	61.1	59.3	61.4	60.5	60.2	61.3	60.2	61.4
Submarket total 70.1 69.6 69.0 68.1 68.8 68.3 66.2 67.8 67.6 Industry Retail safe of music and video recordings, etc. 48.3 53.0 53.0 68.1 68.3 68.3 68.3 67.4 67.6 Retail safe of music and video recordings, etc. 48.3 53.0 50.2 48.4 54.7 54.1 54.2 54.7 Motion picture, video and TV programme production 53.1 54.4 55.6 57.4 57.3 59.9 57.1 54.7 54.7 54.7 54.7 54.7 54.7 54.7 Motion picture, video and TV programme distribution 57.3 60.7 59.3 57.4 55.6 57.4 57.3	91.02	Museums activities	64.7	63.0	63.4	64.0	63.7	63.9	63.5	63.2	64.0	63.6	63.5
Industry Industry Retail sale of music and video recordings, etc. 48.3 53.0 50.2 48.4 53.9 50.2 44.7 44.2 44.7 Motion picture, video and TV programme production 53.1 54.4 55.5 55.4 57.9 54.1 54.2 57.9 54.1 54.2 54.7 54.1 54.2 54.7 54.1 54.9 54.7 54.1 54.9 54.7 54.1 54.9 54.7 54.1 54.9 54.7 54.9 54.7 54.9 54.9 54.9 54.9 54.9 54.9 54.9 54.9 54.9 54.9 54.8 54.8 54.8 54.8 54.8 54.1 54.9 54.1 54.1 54.2 54.1 54.9 54.1		Submarket total	70.1	69.6	0.69	68.0	68.1	68.8	68.3	68.2	67.8	67.6	67.4
Retail sale of music and video recordings, etc.48.353.050.248.453.950.246.744.444.244.7Motion picture, video and TV programme production55.254.456.255.655.454.754.154.254.754.7Motion picture, video and TV programme post-production53.154.455.855.655.355.957.359.957.159.957.159.951.9Motion picture, video and TV programme distribution57.350.759.357.657.857.359.957.159.957.159.957.1Motion picture projection activities56.857.457.357.657.3 <th>4. Film indust</th> <th>ry</th> <th></th>	4. Film indust	ry											
Motion picture, video and TV programme production 55.2 54.4 56.2 55.6 55.4 54.7 54.2 57.6 56.7 Motion picture, video and TV programme post-production 53.1 54.4 55.8 57.6 57.3 59.9 57.1 59.9 57.1 Motion picture, video and TV programme distribution 57.3 60.7 59.3 57.4 55.6 56.8 57.1 59.9 57.1 Motion picture projection activities 56.8 57.3 57.4 57.6 57.3 57.1 56.6 56.5 Motion picture projection activities 60.9 60.6 57.1 57.6 57.3 57.1 56.6 56.5 Motion picture projection activities 60.9 60.6 59.1 57.6 57.3 57.1 56.6 56.5 56.8 Motion picture projection activities 60.9 60.6 59.1 59.0 57.1 56.6 56.5 56.8 Non-account stage, motion picture, radio and TV artists, etc. 60.1 61.2 63.7 57.9 57.1 57.6 56.7 56.3 57.6 Non-account stage, motion picture, radio and TV artists, etc. 60.1 61.2 63.7 57.9 57.1 57.6 56.7 56.3 57.6 Non-account stage, motion picture, radio and TV artists, etc. 60.1 61.2 63.7 57.7 57.7 57.7 59.7 59.7 59.7 59.7 59.7 59.7 59.7 59.7 <	47.63	Retail sale of music and video recordings, etc.	48.3	53.0	50.2	48.4	53.9	50.2	46.7	44.4	44.2	44.7	40.8
Motion picture, video and TV programme post-production 53.1 54.4 55.8 57.6 57.9 57.9 57.1 59.9 61.9 Motion picture, video and TV programme distribution 57.3 60.7 59.3 57.4 55.6 56.8 57.1 59.9 61.9 61.9 Motion picture, video and TV programme distribution 57.3 60.7 59.3 57.4 55.6 56.8 57.2 57.3 57.1 56.6 56.5 56.8 Motion picture projection activities 56.8 57.4 57.5 57.3 57.1 56.7 56.3 56.8 Renting of video tapes and disks 60.9 60.6 59.1 57.9 57.1 57.5 56.3 56.3 Own-account stage, motion picture, radio and TV artists, etc. 60.1 61.2 63.3 60.3 60.0 59.4 59.7 58.1 58.4 58.1 Own-account stage, motion picture, radio and TV artists, etc. 60.1 61.2 63.3 50.3 50.4 59.7 58.7 58.1 59.7 <th>59.11</th> <td>Motion picture, video and TV programme production</td> <td>55.2</td> <td>54.4</td> <td>56.2</td> <td>55.6</td> <td>55.4</td> <td>54.7</td> <td>54.1</td> <td>54.2</td> <td>57.6</td> <td>56.7</td> <td>56.0</td>	59.11	Motion picture, video and TV programme production	55.2	54.4	56.2	55.6	55.4	54.7	54.1	54.2	57.6	56.7	56.0
Motion picture, video and TV programme distribution 57.3 60.7 59.3 57.4 55.6 56.8 53.1 55.4 57.2 52.9 Motion picture projection activities 56.8 57.4 57.3 57.5 57.3 55.5 56.8 56.5 56.5 56.5 56.5 56.3 56.3 56.4 57.2 52.9 Motion picture projection activities 56.8 57.4 57.3 57.5 57.1 56.6 56.8 56.8 56.3 56.3 56.3 56.3 56.3 56.3 56.3 56.3 56.3 56.3 56.3 56.3 58.1 57.3 57.3 56.3 56.3 56.3 58.1 58.2 58.1 59.0 57.9 57.3 56.3 56.3 56.3 56.3 56.3 56.3 56.3 58.2 58.3 58.1 58.2 58.3 58.3 58.3 58.3 58.3 58.3 58.3 58.3 58.3 58.3 58.3 58.3 58.3 58.3	59.12	Motion picture, video and TV programme post-production	53.1	54.4	55.8	57.6	57.9	57.3	59.9	57.1	59.9	61.9	64.2
Motion picture projection activities 56.8 57.4 57.3 57.5 57.3 57.1 56.6 56.5 56.8 Renting of video tapes and disks 60.9 60.6 59.1 59.0 57.9 57.1 56.6 56.5 56.8 Non-account stage, motion picture, radio and TV artists, etc. 60.1 61.2 63.5 62.3 60.6 60.0 59.4 59.7 58.2 58.3 Own-account stage, motion picture, radio and TV artists, etc. 60.1 61.2 63.5 62.3 60.6 60.0 59.4 59.7 58.2 Submarket total 57.4 57.7 57.7 57.3 56.7 56.8 56.7 56.8 56.7 56.8 56.7 56.3 56.7 56.3 56.7 56	59.13	Motion picture, video and TV programme distribution	57.3	60.7	59.3	57.4	55.6	56.8	53.1	55.4	57.2	52.9	56.2
Renting of video tapes and disks 60.9 60.6 59.1 57.0 57.1 57.5 56.3 54.5 53.1 Own-account stage, motion picture, radio and TV artists, etc. 60.1 61.2 63.5 62.3 60.6 60.0 59.4 59.7 58.3 58.3 58.2 58.3 58.2 58.3 58.2 58.2 58.2 58.2 58.2 58.2 58.2 58.2 58.2 58.2 58.2 58.2 58.2 58.2 56.3 56.7 56.2 56.3 56.7<	59.14	Motion picture projection activities	56.8	57.4	57.3	57.6	57.5	57.3	57.1	56.6	56.5	56.8	56.9
Own-account stage, motion picture, radio and TV artists, etc. 60.1 61.2 63.5 62.3 60.3 60.6 60.0 59.4 58.2 Submarket total 57.4 57.8 57.7 57.3 57.0 56.7 56.8 56.7	77.22	Renting of video tapes and disks	6.09	60.6	59.1	59.0	57.9	57.1	57.5	56.3	54.5	53.1	53.3
57.4 57.8 57.7 57.3 57.0 56.7 56.2 56.8 56.7	90.01.4		60.1	61.2	63.5	62.3	60.3	60.6	60.0	59.4	59.7	58.2	61.3
		Submarket total	57.4	57.8	57.7	57.7	57.3	57.0	56.7	56.2	56.8	56.7	56.9

Proportion of women by category of economic activity (1)

y 201 2011 2013 2014 2015 2014 2015 2014 2015 2014 2015 2014 2015 2014 20	-												
Interfact in the interfact interf	Submarket/ WZ 2008	Economic activity	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Radio boadcasting Side Side <td>5. Broadcastin</td> <td>lg industry</td> <td></td>	5. Broadcastin	lg industry											
Idension programming and broadcasting480484486546525523 $Own-account journalists and press photographers733733733713713713Submatketotation674655653653653653653653Submatketotation674656674673683603603Own-account performers and circus groups731731733833833833Own-account performers and circus groups731532633603633633633Own-account performers and circus groups731731733733733733733Own-account performers and circus groups731731733733733733733Own-account performing atts731731731733733733733733Own-account performing atts733733733733733733733733733Own-account performing atts734733733733733733733733733733Own-account performing atts733$	60.10	Radio broadcasting	55.6	59.8	59.7	58.4	57.5	60.0	57.4	57.9	59.0	59.3	56.5
Own-account journalists and press photographers 75.5 72.7 71.7 71.1 71.5 71.5 71.5 Minimatistical Own-account journalists and press photographers 75.5 65.5 65.6 61.7 61.5 61.3	60.20	Television programming and broadcasting	48.0	48.4	48.6	54.6	52.6	56.4	52.5	51.9	51.9	52.9	50.1
Submalte total 646 653 654 631 631 migrats market migrats market r <t< td=""><td>90.03.5</td><td>Own-account journalists and press photographers</td><td>75.5</td><td>72.7</td><td>74.2</td><td>71.7</td><td>72.1</td><td>71.5</td><td>71.9</td><td>73.2</td><td>71.8</td><td>73.0</td><td>70.4</td></t<>	90.03.5	Own-account journalists and press photographers	75.5	72.7	74.2	71.7	72.1	71.5	71.9	73.2	71.8	73.0	70.4
ming arts market i		Submarket total	64.6	65.5	62.9	64.6	63.7	64.8	63.1	63.4	63.5	64.4	61.1
Cutural education 614 666 674 673 687 690 613 602 <td>6. Performing</td> <td>arts market</td> <td></td>	6. Performing	arts market											
Imate ensembles 513 593 606 600 618 625 601 Own-account performers and circus groups 591 571 526 544 495 553 603 Own-account stage motion picture, radio and IV artists etc. 601 612 633 603 603 Support activities to performing arts 339 534 573 536 546 545 546 Operation of opera bouses, theater and concerth lik, etc. 588 534 577 516 546 541 Operation of variety theatres and concerth lik, etc. 588 543 579 570 573 570 573 </td <td>85.52</td> <td>Cultural education</td> <td>67.4</td> <td>66.6</td> <td>67.4</td> <td>67.5</td> <td>68.7</td> <td>69.0</td> <td>69.5</td> <td>70.0</td> <td>70.2</td> <td>70.9</td> <td>71.0</td>	85.52	Cultural education	67.4	66.6	67.4	67.5	68.7	69.0	69.5	70.0	70.2	70.9	71.0
Own-account performers and circus groupsS9.1S7.1S2.6S4.4G9.5S6.3G0.3Own-account stage, motion picture, radio and TV artists, etc.60.1 61.2 63.5 62.3 60.3 60.6 60.0 Own-account stage, motion picture, radio and TV artists, etc.60.1 61.2 63.5 53.3 60.3 60.6 60.0 Organisation of theatre performances and concert hal, etc. 53.3 53.3 53.2 53.6 54.6 54.6 54.6 Operation of para houses, theatre and concert hal, etc. 57.4 57.3 57.2 57.0 57.6 54.6 54.6 Operation of para houses, theatre and concerts 57.4 57.0 57.2 57.0 57.6 54.6 54.6 Operation of para houses, theatre and concert hal, etc. 71.2 72.7 57.0 57.7 57.6 57.6 57.6 Operation of para houses, theatre and concert hal, etc. 71.2 72.7 72.7 72.7 72.7 72.7 Auburtisting agencies (50% share) 71.2 72.9 72.7 72.7 72.7 72.7 Advertising agencies (50% share) 71.2 72.7 72.7 72.7 72.7 72.7 Industrial communications designers 71.2 72.9 52.7 57.9 57.9 57.9 57.9 57.9 Industrial communications designers 71.2 72.7 72.7 72.7 72.7 72.7 72.7 Industrial communications designers	1.10.06	Theatre ensembles	57.5	59.9	60.6	60.0	61.8	62.5	60.7	60.2	61.1	62.5	60.9
Own account stage, motion picture, radio and TV artists, etc.60161.263.360.360.660.0Support activities to performing arts39.140.437.138.037.635.636.4Organisation of theatre performances and concerts39.140.437.138.037.635.636.4Organisation of theatre performances and concerts53.953.253.353.253.954.654.6Operation of opera houses, theatre and concert hals, etc.58.859.459.757.057.057.054.1Operation of opera houses, theatre and concert hals, etc.58.859.459.757.057.054.154.0Operation of viewelty and related articles57.157.057.057.057.057.057.057.0Murfacture of jeweltery and related articles73.673.973.073.173.773.773.7Advertising agencies (50% share)53.653.173.073.073.057.350.1Industrial, product and fashion designers71.270.371.271.670.373.173.373.7Industrial, product and fashion designers65.165.464.766.766.866.060.0Murfacture of jeweltery71.271.371.271.271.373.373.373.3Industrial, product and fashion designers65.165.064.766.763.864.0Graphics and communication	90.01.3	Own-account performers and circus groups	59.1	57.1	52.6	54.4	49.5	58.5	60.3	56.3	58.1	57.7	56.0
Support activities to performing arts39.1 40.4 37.1 38.0 35.6 35.6 36.4 Organisation of theatre performances and concerts 53.9 53.8 53.6 53.6 54.7 57.0 <t< td=""><td>90.01.4</td><td>Own-account stage, motion picture, radio and TV artists, etc.</td><td>60.1</td><td>61.2</td><td>63.5</td><td>62.3</td><td>60.3</td><td>60.6</td><td>60.0</td><td>59.4</td><td>59.7</td><td>58.2</td><td>61.3</td></t<>	90.01.4	Own-account stage, motion picture, radio and TV artists, etc.	60.1	61.2	63.5	62.3	60.3	60.6	60.0	59.4	59.7	58.2	61.3
Organisation of theatre performances and concerts53953.253.353.354.6Operation of theatre performances and concert halls, etc.58.859.759.158.058.4Operation of opera houses, theatre and concert halls, etc.58.859.759.158.058.4Operation of variety theatres and concert halls, etc.58.859.757.057.057.357.3Submarket total57.457.057.357.057.357.357.3Industry773.673.973.773.773.773.7Manufacture of jewellery and related articles73.473.273.773.773.773.7Advertising agencies (50% share)71.273.057.257.057.357.357.3Advertising agencies (50% share)71.271.271.473.772.372.372.4Advertising agencies (50% share)71.271.271.671.670.350.1Industrial, product and fashion designers71.470.371.272.372.372.9Industrial, product and fashion designers71.470.372.172.372.950.1Industrial, product and fashion designers73.473.372.173.372.950.1Industrial, product and fashion designers73.473.373.173.173.473.4Industrial, product and fashion designers73.773.073.173.473.474.4 <t< td=""><td>90.02</td><td>Support activities to performing arts</td><td>39.1</td><td>40.4</td><td>37.1</td><td>38.0</td><td>37.6</td><td>35.6</td><td>36.4</td><td>36.1</td><td>35.0</td><td>34.2</td><td>34.7</td></t<>	90.02	Support activities to performing arts	39.1	40.4	37.1	38.0	37.6	35.6	36.4	36.1	35.0	34.2	34.7
Operation of opera houses, theatre and concert halls, etc.5859.459.759.158.658.658.4Operation of variety theatres and cabarets64.564.364.364.364.964.1Operation of variety theatres and cabarets64.557.057.057.057.357.3Submarket ctal51.457.057.057.057.057.357.3Industry71.271.271.271.471.771.771.771.7Maufacture of jewellery and related atticles71.271.271.271.771.771.771.7Maufacture of jewellery and related atticles71.271.271.271.771.771.771.771.7Maufacture of jewellery and related atticles71.271.271.271.771.771.771.771.771.7Maufacture of jewellery and related atticles71.471.271.771.771.771.771.771.7Industrial, product and fashion designers71.471.771.771.771.771.771.771.7Industrial, product and fashion designers71.471.771.771.771.771.771.771.9Industrial, product and fashion designers71.471.771.771.771.771.771.771.7Industrial, product and fashion designers71.771.771.771.771.771.771.771.7Industrial activiti	90.04.1	Organisation of theatre performances and concerts	53.9	53.2	53.8	52.6	54.5	53.9	54.6	56.0	55.9	56.3	57.8
Operation of variety theatres and cabarets 645 61.3 62.3 64.9 64.1 Submarket total 57.4 57.6 57.3 57.0 57.3 57.3 57.3 Submarket total 57.4 57.6 57.3 57.3 57.3 57.3 57.3 57.3 Anufacture of jewellery and related articles 73.6 73.7 57.3	90.04.2	Operation of opera houses, theatre and concert halls, etc.	58.8	59.4	59.7	59.1	58.9	58.6	58.4	58.4	59.7	60.3	62.5
Submarket total 57,4 57,0 57,0 57,3 57,0 57,3 nidustry Advactive of jewellery and related articles 7.3 7.3 7.4 7.3 7.3 7.3 Manufacture of jewellery and related articles 7.3 7.3 7.3 7.3 7.3 7.3 Manufacture of jewellery and related articles 7.3 7.3 7.3 7.3 7.3 7.3 Manufacture of jewellery and related articles 7.12 7.3 7.3 7.3 7.3 7.3 Advertising agencies (50% share) 7.1 7.1 7.1 7.1 7.1 7.1 7.3 7.3 Industrial, product and fashion designers 7.1 7.1 7.1 7.1 7.3 7.3 Industrial, product and fashion designers 7.3 7.3 7.1 7.3 <td< td=""><td>90.04.3</td><td>Operation of variety theatres and cabarets</td><td>64.5</td><td>61.3</td><td>62.2</td><td>64.1</td><td>65.9</td><td>64.9</td><td>64.1</td><td>64.3</td><td>62.7</td><td>62.6</td><td>64.0</td></td<>	90.04.3	Operation of variety theatres and cabarets	64.5	61.3	62.2	64.1	65.9	64.9	64.1	64.3	62.7	62.6	64.0
nidulty 72.3 7.3 7.3 7.3 7.3 Manufacture of jewellery and related articles 7.3 7.3 7.3 7.3 7.3 Manufacture of jewellery and related articles 7.12 7.9 7.3 7.3 7.3 Consulting architectural activities in interior design 7.12 7.0 7.3 7.3 7.3 Advertising agencies (50% share) 5.3 5.2 5.19 5.0 5.12 50.5 50.1 Advertising agencies (50% share) 7.1 7.3 7.12 7.16 7.16 7.3 50.2 Advertising agencies (50% share) 65.6 65.4 64.7 64.7 65.8 63.8 65.0 Industrial, product and fashion designers 7.3<		Submarket total	57.4	57.0	57.2	57.0	57.7	57.0	57.3	57.4	57.0	57.1	59.5
Manufacture of jewellery and related articles73.673.974.473.772.372.7Consulting architectural activities in interior design71.270.968.068.869.669.6Advertising agencies (50% share)71.270.951.950.150.150.1Advertising agencies (50% share)71.470.371.271.670.568.469.1Advertising agencies (50% share)71.470.371.271.670.568.469.1Industrial, product and fashion designers65.165.464.764.766.563.863.963.0Interior decorators65.164.065.064.363.863.462.1Own-account photographers73.773.073.173.173.373.3Submarket total55.255.255.155.354.554.554.554.5Lotture market71.271.973.173.173.373.973.9Consulting architectural activities in building construction74.473.673.673.674.4Consulting architectural activities in fuerior design71.270.968.968.969.669.6Consulting architectural activities in town, city and regional66.763.966.764.965.764.965.7Consulting architectural activities in town, city and regional66.763.969.271.971.4Consulting architectural activities in town, cit	7. Design indu	istry											
Consulting architectural activities in interior design 71.2 70.9 68.0 68.6 69.6 Advertising agencies (50% share) 52.3 52.2 51.9 50.7 50.5 50.1 Industrial, product and fashion designers 71.4 70.3 71.6 70.5 68.4 69.1 Industrial, product and fashion designers 65.6 65.4 64.7 66.5 68.4 65.0 Interior decorators 65.1 64.7 66.5 66.3 66.3 65.0 65.0 Own-accourt photographers 73.7 73.0 73.1 73.1 73.2	32.12	Manufacture of jewellery and related articles	73.6	72.9	73.9	74.4	73.7	72.3	72.7	72.5	72.0	73.2	72.4
Advertising agencies (50% share)52.352.351.952.051.250.550.1Industrial, product and fashion designers71.470.371.271.670.568.469.1Graphics and communications designers65.164.065.064.366.368.465.1Interior decorators65.164.065.064.363.865.162.1Own-account photographers73.773.073.173.173.273.2Submarket total73.773.073.173.173.372.9Consulting acchitectural activities in building construction74.555.255.155.354.253.5Letture market73.673.073.173.173.173.973.9Consulting architectural activities in building construction74.574.473.673.371.971.4Consulting architectural activities in interior design71.270.968.068.966.965.9 </td <td>71.11.2</td> <td>Consulting architectural activities in interior design</td> <td>71.2</td> <td>70.9</td> <td>68.0</td> <td>68.8</td> <td>67.9</td> <td>68.9</td> <td>69.69</td> <td>68.8</td> <td>69.3</td> <td>69.6</td> <td>68.0</td>	71.11.2	Consulting architectural activities in interior design	71.2	70.9	68.0	68.8	67.9	68.9	69.69	68.8	69.3	69.6	68.0
Industrial, product and fashion designers 71.4 70.3 71.2 71.6 70.5 68.4 69.1 Graphics and communications designers 65.6 65.4 64.7 66.5 63.8 65.0 Interior decorators 13.7 73.0 73.0 65.3 65.3 65.4 65.1 Own-account photographers 73.7 73.0 73.0 73.1 73.3 72.9 Own-account photographers 73.7 73.0 73.1 73.1 73.3 72.9 Consulting architectural activities in interior design 74.5 74.4 73.6 72.8 71.9 71.4 Consulting architectural activities in interior design 71.2 70.9 68.6 69.7 69.7 69.7 Consulting architectural activities in interior design 71.2 70.9 68.6 69.7 69.7 69.7 69.7 Consulting architectural activities in interior design 71.2 71.3 71.3 71.9 71.4 Consulting architectural activities in interior design 67.7 68.9 68.9 69.0 69.7 Consulting architectural activities in and regional 68.7 68.9 68.9 69.0 <t< td=""><td>73.11</td><td>Advertising agencies (50% share)</td><td>52.3</td><td>52.2</td><td>51.9</td><td>52.0</td><td>51.2</td><td>50.5</td><td>50.1</td><td>49.7</td><td>49.2</td><td>49.0</td><td>49.1</td></t<>	73.11	Advertising agencies (50% share)	52.3	52.2	51.9	52.0	51.2	50.5	50.1	49.7	49.2	49.0	49.1
Graphics and communications designers $6.5.6$ $6.5.4$ $6.4.7$ $6.6.5$ $6.3.8$ $6.5.0$ Interior decorators $6.1.1$ $6.1.0$ $6.5.0$ $6.4.3$ $6.3.8$ $6.3.6$ $6.3.1$ Own-account photographers 73.7 73.0 73.0 73.1 73.3 72.9 Own-account photographers 73.7 73.0 73.1 73.3 72.9 Own-account photographers 73.7 73.0 73.1 73.3 72.9 Submarket total 55.2 55.2 55.2 55.1 55.3 54.5 54.5 53.5 Submarket total 73.0 73.0 72.1 73.1 72.9 72.9 72.9 Consulting architectural activities in building construction 74.5 74.4 73.6 72.3 71.9 71.4 Consulting architectural activities in interior design 71.2 70.9 68.0 68.9 69.9 69.9 69.9 Consulting architectural activities in town, city and regional 66.7 63.9 66.6 64.8 65.1 65.1 65.9 65.9 65.9 Consulting architectural activities in landscape architecture 68.1 68.9 68.9 68.9 69.9 69.9 Own-account restores 68.1 68.9 68.9 68.9 69.9 69.9 69.0 Own-account restores 68.1 68.9 68.9 69.0 69.7 69.9 69.0 Own-account restores 68.1 68.9 <td>74.10.1</td> <td>Industrial, product and fashion designers</td> <td>71.4</td> <td>70.3</td> <td>71.2</td> <td>71.6</td> <td>70.5</td> <td>68.4</td> <td>69.1</td> <td>67.5</td> <td>68.4</td> <td>67.0</td> <td>65.4</td>	74.10.1	Industrial, product and fashion designers	71.4	70.3	71.2	71.6	70.5	68.4	69.1	67.5	68.4	67.0	65.4
Interior decorators 65.1 64.0 65.0 64.3 63.4 62.1 Own-account photographers 73.7 73.0 73.0 73.1 73.3 73.3 73.3 Own-account photographers 55.2 55.1 55.3 54.5 53.5 53.5 Submarket total 55.2 55.1 55.3 54.5 54.5 53.5 Submarket total 65.2 55.3 55.1 55.3 54.5 54.5 53.5 Letture market 55.2 55.1 55.1 55.3 54.5 54.5 53.5 Letture market 74.6 74.4 73.6 72.8 71.9 71.4 Consulting architectural activities in building construction 74.4 73.6 72.8 71.9 71.4 Consulting architectural activities in town, city and regional 66.7 63.0 68.9 68.9 68.9 68.9 68.9 68.9 69.9 68.9 69.9 69.9 69.9 69.9 69.9 69.9 69.9 69.9 69.9 69.9 69.9 69.9 69.9 69.9	74.10.2	Graphics and communications designers	65.6	65.4	64.7	64.7	66.5	63.8	65.0	64.9	65.7	68.4	68.9
Own-account photographers 73.7 73.0 73.1 73.3 72.9 Submarket total 55.2 55.2 55.1 53.3 54.5 53.5 Submarket total 55.2 55.2 55.1 55.3 54.5 53.5 53.5 tecture market 7 7 7 7 7 7 53.5 Consulting architectural activities in building construction 74.5 74.4 73.6 72.8 71.9 71.4 Consulting architectural activities in interior design 71.2 70.9 68.0 68.8 69.5 68.9 69.6 Consulting architectural activities in town, city and regional 66.7 63.9 67.8 67.9 68.9 69.6 Consulting architectural activities in town, city and regional 66.7 63.9 67.8 67.9 68.9 69.6 Own-account restores 68.1 68.6 69.2 71.3 68.9 67.9 69.6 Own-account restores 68.1 68.6 69.2 71.3 68.9 67.9 67.9 67.9 Own-account restores	74.10.3	Interior decorators	65.1	64.0	65.0	64.3	63.8	63.4	62.1	62.6	61.7	62.9	60.9
Submarket total 55.2 55.3 55.3 54.5 54.2 53.5 tecture market 54.2 53.5 tecture market 54.2 53.5 53.5 tecture market 54.2 53.5 consulting architectural activities in building construction 74.5 74.4 73.6 72.8 71.9 71.4 Consulting architectural activities in interior design 71.2 70.9 68.0 68.8 67.9 68.9 69.6 Consulting architectural activities in town, city and regional 66.7 63.9 66.6 64.8 65.1 63.9 68.0 69.6 69.0 68.0 69.6 69.0 68.0 69.0	74.20.1	Own-account photographers	73.7	73.0	73.0	72.1	73.1	73.3	72.9	71.9	70.9	70.5	71.6
tecture market Consulting architectural activities in building construction 74.5 74.4 73.6 72.3 71.9 71.4 Consulting architectural activities in interior design 71.2 70.9 68.0 68.8 67.9 68.9 69.6 Consulting architectural activities in town, city and regional 66.7 63.9 66.6 64.8 65.1 63.9 68.0 69.5 63.9 69.6 Consulting architectural activities in town, city and regional 66.7 63.9 66.6 64.8 65.1 63.9 68.0 67.1 63.9 Consulting architectural activities in town, city and regional 66.7 63.9 66.6 64.8 65.1 63.9 65.0 63.9 63.0 63.9 Consulting architectural activities in town, city and regional 66.7 63.9 71.3 68.9 67.0 63.9 63.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0		Submarket total	55.2	55.2	55.1	55.3	54.5	54.2	53.5	53.2	52.8	52.9	52.9
Consulting architectural activities in building construction 74.5 74.4 73.6 72.8 72.3 71.9 71.4 Consulting architectural activities in interior design 71.2 70.9 68.0 68.8 67.9 68.9 69.6 Consulting architectural activities in town, city and regional planning 66.7 63.9 66.6 64.8 65.1 65.1 63.9 69.6 Consulting architectural activities in town, city and regional 66.7 63.9 66.6 64.8 65.1 63.9 63.9 Consulting architectural activities in landscape architecture 68.1 68.6 69.2 71.3 68.9 68.0 67.7 Own-account restorers 58.4 60.7 58.9 55.8 51.0 54.5 56.0	8. Architecture	e market											
Consulting architectural activities in interior design 71.2 70.9 68.0 68.8 67.9 68.9 69.6 Consulting architectural activities in town, city and regional planning 66.7 63.9 66.6 64.8 65.1 63.9 63.9 63.6 Consulting architectural activities in town, city and regional planning 66.7 63.9 66.6 64.8 65.1 63.9	71.11.1	Consulting architectural activities in building construction	74.5	74.4	73.6	72.8	72.3	71.9	71.4	70.5	70.1	69.2	69.0
Consulting architectural activities in town, city and regional 66.7 63.9 66.6 64.8 65.1 65.1 63.9 planning Consulting architectural activities in landscape architecture 68.1 68.6 69.2 71.3 68.9 68.0 67.7 Own-account restorers 58.4 60.7 58.9 55.8 51.0 54.5 56.0 Cohmenter total 72.0 72.8 72.6 70.6 70.6 70.6 70.5	71.11.2	Consulting architectural activities in interior design	71.2	70.9	68.0	68.8	67.9	68.9	69.6	68.8	69.3	69.6	68.0
Consulting architectural activities in landscape architecture 68.1 68.6 69.2 71.3 68.9 67.7 Own-account restorers 58.4 60.7 58.9 51.0 54.5 56.0 Commenter the start 73.0 73.6 73.6 70.6 70.6 70.5	71.11.3	ig architectural activities in town, city and regior	66.7	63.9	66.6	64.8	65.1	65.1	63.9	63.9	63.9	61.7	63.5
Own-account restorers 58.4 60.7 58.9 55.8 51.0 54.5 56.0 Submurde# #Mail 73 73 71 70 </td <td>71.11.4</td> <td>Consulting architectural activities in landscape architecture</td> <td>68.1</td> <td>68.6</td> <td>69.2</td> <td>71.3</td> <td>68.9</td> <td>68.0</td> <td>67.7</td> <td>68.1</td> <td>68.0</td> <td>65.3</td> <td>64.9</td>	71.11.4	Consulting architectural activities in landscape architecture	68.1	68.6	69.2	71.3	68.9	68.0	67.7	68.1	68.0	65.3	64.9
73 0 77 8 77 3 71 6 70 6 70 6 70 5	90.03.4	Own-account restorers	58.4	60.7	58.9	55.8	51.0	54.5	56.0	56.4	54.9	54.6	53.6
12:0 12:0 12:0 12:0 10:0 10:0		Submarket total	73.0	72.8	72.3	71.6	70.9	70.6	70.3	69.6	69.2	68.2	68.0

Proportion of women by category of economic activity (2)

Proportio	Proportion of workers in marginal employment who	are fem	who are female by submarket and category of economic activity,2010 to 2020 (in $\%$)	ubmark	et and o	category	/ of ecoi	nomic a	ctivity,2	2010 to 2	2020 (in	(%
Submarket/ WZ 2008	Economic activity	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
9. Press market	at											
47.62	Retail sale of magazines, journals and periodicals	77.2	77.1	77.0	76.7	76.3	75.7	76.5	74.3	74.5	74.5	74.1
58.12	Publishing of directories, etc.	65.1	63.2	66.5	67.6	66.1	64.8	61.4	63.4	64.6	62.9	63.3
58.13	Publishing of newspapers	49.2	48.9	48.2	48.0	47.2	46.9	46.2	45.2	45.2	45.1	44.9
58.14	Publishing of journals and periodicals	54.2	53.8	52.7	53.4	54.5	53.9	54.7	53.7	53.2	53.5	53.8
58.19	Other publishing activities (excluding software)	51.5	50.4	50.0	49.5	51.7	56.0	55.5	53.4	52.9	52.5	53.2
63.91	News agency activities	58.2	58.1	54.9	57.0	56.6	55.7	58.1	56.7	56.5	56.9	56.0
90.03.5	Own-account journalists and press photographers	75.5	72.7	74.2	71.7	72.1	71.5	71.9	73.2	71.8	73.0	70.4
	Submarket total	54.9	54.3	53.7	53.5	54.1	54.5	54.3	53.5	53.3	52.8	52.6
10. Advertising market	g market											
73.11	Advertising agencies	52.3	52.2	51.9	52.0	51.2	50.5	50.1	49.7	49.2	49.0	49.1
73.12	Media representation	50.6	51.2	51.1	51.2	52.5	52.6	56.0	58.1	57.7	57.2	57.0
	Submarket total	52.2	52.1	51.8	52.0	51.3	50.6	50.2	49.9	49.5	49.3	49.3
11. Software/	11. Software/games industry											
58.21	Publishing of computer games	35.6	45.9	42.2	36.2	35.4	45.7	41.4	42.0	56.7	53.2	50.7
58.29	Other software publishing	57.6	56.1	55.7	55.4	55.1	54.1	56.0	56.3	55.6	55.8	55.8
62.01.1	Web-page design and programming	55.9	56.6	55.9	56.4	57.3	57.7	57.5	58.1	58.2	57.1	57.7
62.01.9	Other software development	60.7	59.7	58.9	58.0	57.2	57.5	56.7	55.7	55.7	54.8	55.1
63.12	Web portals	53.3	56.0	56.3	56.7	56.7	52.2	53.7	54.0	54.1	54.1	54.2
	Submarket total	59.2	58.6	57.8	57.3	56.9	56.9	56.6	56.1	56.1	55.3	55.6
12. Other												
32.11	Striking of coins	59.5	60.0	58.2	60.4	59.4	57.8	59.9	57.0	55.8	53.1	52.4
32.13	Manufacture of imitation jewellery and related articles	6.9	69.8	71.2	70.1	71.3	69.5	67.5	68.0	70.6	75.9	73.2
74.20.2	Photographic laboratories	62.8	62.2	63.2	63.1	61.4	63.9	61.2	62.2	60.3	58.7	58.6
74.30.2	Own-account interpreters	64.2	62.8	63.9	61.4	63.2	63.4	64.5	64.0	61.7	58.9	58.3
91.01	Libraries and archives	65.7	62.9	65.3	65.2	66.0	65.1	65.5	66.0	64.8	65.2	65.1
91.03	Operation of historical sites and buildings and similar visitor attractions	60.0	62.1	57.8	53.3	51.3	56.7	55.8	53.4	54.5	55.0	54.7
91.04	Botanical and zoological gardens and nature reserves	62.6	62.0	63.1	64.3	62.5	63.7	63.2	64.0	61.9	61.2	60.6
	Submarket total	64.2	63.8	64.5	64.1	63.7	64.2	63.5	63.6	62.5	61.6	61.1
Cultural and d	Cultural and creative industries (excluding double counts)	57.2	56.9	56.6	56.6	56.5	56.7	56.2	55.7	55.6	54.7	55.0
Overall economy	ŋy	62.7	62.3	61.9	61.4	61.0	60.6	60.2	59.6	59.1	58.7	58.1
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Proportion of women by category of economic activity (3)

European Union comparison/Definition of the CCIs by subgroups

The international standard indicators studied below provide an overview of the indicators for the number of companies, turnover, employees, gross value added and gross investment in tangible assets in the European comparison. The basis for this is the Structural Business Statistics (SBS), which Eurostat compiles and publishes centrally for the countries of the European Union.

The figures for the CCIs are based on the subgroup definition (cf. Table). For this reason, the figures for

Germany differ from those in the rest of the report, in which the breakdown is by submarket.

The Structural Business Statistics cover the bulk of the CCIs at the level of the subgroup definition. Due to a lack of data in the SBS, the groups "Artistic/creative activities, etc." (WZ 90) and "Museums, libraries, etc.) (WZ 91) are not included in the figures. Some of the figures had to be estimated.

Subgroup/ WZ 2008	Economic activity	Percentage of companies*	Percentage of turnover**	Percentage of employees***	Percentage of people in marginal employment****
1. Publishing					
58.1	Book, press, software publishers	100	100	100	100
58.2	Publishing of software	100	100	100	100
2. Film industry / sou	nd recording industry				
59.1	Film industry				
59.2	Sound recording/music publishers	100	100	100	100
3. Broadcasting					
60	Radio and television	100	100	40	40
4. Software and game	es, etc.				
from 62.0	IT services	39	39	47	50
5. Architects' offices					
from 71.1	Architects' and engineering offices	29	18	18	26
6. Advertising					
73.1	Advertising	100	100	100	100
7. Design agencies, pl	notography, etc.				
74.1	Studios for textile, jewellery, graphic etc. design	100	100	100	100
74.2	Photography and photo labs	100	100	100	100
74.3	Translating and interpreting	100	100	100	100
8. Artistic/creative ac	tivities, etc.				
90.0	Creative, arts and entertainment activities	100	100	38	60
9. Museums, libraries	, etc.				
91.0	Libraries, archives, museums, botanical and zoological gardens	100	100	8	8
10. Jewellery and mus	sical instrument manufacture				
32.1	Manufacture of coins, jewellery and similar articles	100	100	100	100
32.2	Manufacture of musical instruments	100	100	100	100
11. Trade in culture, e	tc.				
47.6	Retail sale of publications, sports equipment and toys (in sales rooms)	89	75	83	96

Note: Model does not contain economic activities with multiple allocations, therefore no need to depict double counts. *Taxpayers and companies with annual turnover of €17,500 or more; **Turnover corresponds to deliveries and services; ***Employees corresponds to full-time and part-time employees subject to social security contributions, without marginal employees; ****Marginal employees corresponds to employees on marginal wages (exclusively marginal and sideline employees combined). For example: in the calculation of the number of companies in the Architects' Offices subgroup, 29% of the companies engaged in economic activity 71.1 Architects' and engineering offices were included. Source: Classification of Economic Activities (WZ 2008), Destatis; Arbeitskreis Kulturstatistik e.V., Söndermann 2012

CCIs in EU comparison 2013 – 2019 – number of companies

Country	2013	2014	2015	2016	2017	2018	2019	Difference 2013/2019
Austria	29,218	29,892	30,279	30,62	31,745	31,223	33,881	16.0%
Belgium	40,448	39,647	40,596	42,399	42,578	45,088	47,826	18.2%
Bulgaria	15,31	15,665	16,12	16,798	17,145	17,528	18,121	18.4%
Croatia	9,325	9,305	9,415	9,571	9,866	10,223	14,92	60.0%
Cyprus	2,337	2,386	2,495	2,735	3,057	3,374	3,718	59.1%
Czech Republic	66,365	67,322	68,814	71,495	75,519	79,965	84,629	27.5%
Denmark	19,768	20,349	20,28	21,639	22,405	22,721	23,307	17.9%
Estonia	4,495	4,847	5,292	5,483	6,192	6,636	7,134	58.7%
Finland	17,153	16,955	16,999	17,036	17,389	17,178	17,572	2.4 %
France	213,07	235,871	200,533	211,216	199,563	207,042	225,259	5.7%
Germany	163,51	185,678	192,862	194,449	206,215	203,082	197,185	20.6 %
Greece	40,874	45,879	42,754	42,161	38,174	37,71	38,353	-6.2%
Hungary	35,41	37,709	40,3	42,645	45,496	48,925	53,735	51.8%
Italy	200,424	200,238	199,464	203,451	206,371	208,285	202,771	1.2 %
Lithuania	10,285	13,453	15,426	16,386	17,842	19,243	20,483	99.2%
Netherlands	126,885	132,115	139,191	147,009	153,322	162,442	172,13	35.7%
Poland	94,907	102,933	109,691	118,778	126,806	146,627	155,421	63.8%
Portugal	35,314	35,532	36,663	38,043	40,248	41,383	43,6	23.5%
Romania	23,749	25,149	25,977	27,544	29,842	31,762	34,08	43.5%
Slovakia	20,851	23,498	25,558	26,631	29,229	31,952	33,496	60.6%
Slovenia	10,057	10,625	11,37	12,064	12,616	13,181	13,629	35.5%
Spain	126,948	128,529	134,307	154,88	151,68	158,725	162,969	28.4%
Sweden	86,164	87,687	88,466	89,758	90,316	86,279	87,505	1.6%

Source: Structural Business Statistics, Eurostat 2021; in-house calculations by ZEW, in-house calculations by Goldmedia (EU Member States with inadequate data basis not included.)

CCIs in EU comparison 2013 – 2019 – turnover (in €m)

Country	2013	2014	2015	2016	2017	2018	2019	Difference 2013/2019
Austria	18,204	17,685	18,549	18,126	18,671	18,974	19,76	8.6%
Belgium	21,161	22,307	21,561	22,282	23,744	22,035	23,251	9.9%
Bulgaria	1,964	2,064	2,33	2,502	2,691	2,961	3,281	67.1%
Croatia	1,988	1,929	1,991	2,105	2,288	2,515	2,818	41.8%
Cyprus	1,199	1,239	1,383	1,566	1,905	2,117	3,052	154.5%
Czech Republic	9,896	9,72	10,463	11,179	12,258	13,627	14,576	47.3%
Denmark	14,81	15,321	16,229	16,338	16,707	16,942	17,403	17.5%
Estonia	867	987	1,03	1,109	1,254	1,418	1,491	71.9%
Finland	7,787	11,451	11,879	12,162	12,511	14,349	14,532	86.6%
France	120,972	119,009	121,747	124,707	134,563	135,162	144,703	19.6%
Germany	148,725	154,37	153,574	166,109	175,864	178,148	181,811	22.2%
Greece	5,733	5,26	5,284	5,208	5,552	5,578	5,953	3.8%
Hungary	6,313	6,156	6,298	6,673	7,604	8,087	8,195	29.8%
Italy	67,639	68,246	69,96	69,05	70,052	72,057	73,604	8.8%
Lithuania	1,024	1,123	1,284	1,353	1,511	1,687	1,796	75.4%
Netherlands	31,267	32,851	35,037	38,913	41,681	44,646	47,501	51.9%
Poland	21,298	20,512	22,707	23,212	25,551	27,282	28,215	32.5%
Portugal	6,533	6,749	7,053	7,437	7,957	8,365	9,112	39.5%
Romania	4,572	5,065	5,506	6,016	6,498	7,371	8,398	83.7%
Slovakia	2,864	3,379	4,04	4,236	4,676	5,162	5,571	94.5%
Slovenia	1,835	1,902	2,012	2,08	2,256	2,431	2,639	43.9%
Spain	48,786	51,132	55,119	57,281	59,423	61,852	64,471	32.1%
Sweden	32,393	31,823	37,729	38,455	39,166	39,89	42,792	32.1%

Source: Structural Business Statistics, Eurostat 2021; in-house calculations by ZEW, in-house calculations by Goldmedia (EU Member States with inadequate data basis not included.)

CCIs EU comparison 2013 – 2019 – gross value added (in €m)

		-						
Land	2013	2014	2015	2016	2017	2018	2019	Difference 2013/2019
Austria	5,982	6,028	6,347	6,261	6,411	6,683	7,093	18.6%
Belgium	6,151	6,468	6,826	6,871	6,977	7,416	8,269	34.4%
Bulgaria	650	695	827	959	1,077	1,265	1,389	113.7%
Croatia	680	681	713	769	858	958	1,094	60.8%
Cyprus	331	398	282	331	396	645	867	161.8%
Czech Republic	2,783	2,849	3,192	3,327	3,836	4,421	4,953	77.9%
Denmark	6,012	6,193	6,59	7,017	7,051	7,086	7,509	24.9%
Estonia	284	325	366	397	436	479	514	80.8%
Finland	1,526	4,548	4,601	4,865	5,142	5,672	5,829	282.0%
France	46,724	47,725	48,559	49,706	54,864	54,597	57,323	22.7%
Germany	67,959	70,111	71,354	72,963	74,701	78,208	81,436	19.8%
Greece	1,807	1,577	1,647	1,491	1,952	1,691	1,86	2.9%
Hungary	1,887	1,84	1,806	1,83	2,24	2,487	2,626	39.2%
Italy	21,888	22,535	23,27	23,285	23,808	24,939	25,391	16.0%
Lithuania	363	419	485	513	582	660	708	95.1%
Netherlands	13,262	13,747	14,217	15,272	16,089	16,95	17,724	33.6%
Poland	6,281	6,537	7,07	7,472	8,012	8,639	9,258	47.4%
Portugal	2,113	2,2	2,303	2,504	2,757	2,978	3,34	58.1%
Romania	1,61	2,022	2,143	2,541	2,931	3,305	2,837	76.3%
Slovakia	830	966	1,124	1,186	1,246	1,309	1,401	68.9%
Slovenia	513	552	597	634	725	802	893	74.0%
Spain	16,722	17,184	19,02	19,519	20,914	22,294	23,603	41.2%
Sweden	11,838	11,828	13,517	13,673	13,331	12,998	13,654	15.3%

Source: Structural Business Statistics, Eurostat 2021; in-house calculations by ZEW, in-house calculations by Goldmedia (EU Member States with inadequate data basis not included.)

CCIs EU comparison 2013 – 2019 – gross fixed investment (in €m)

Country	2013	2014	2015	2016	2017	2018	2019	Difference 2013/2019
Austria	311	315	348	333	282	422	419	34.8%
Belgium	786	960	886	871	741	928	1,086	38.2%
Bulgaria	79	88	85	90	83	86	137	72.9%
Croatia	23	30	18	35	27	27	37	62.5%
Cyprus	10	37	10	22	25	14	17	73.2%
Czech Republic	290	260	301	327	407	392	424	46.0%
Denmark	295	217	227	261	218	226	239	-18.8%
Estonia	29	31	27	33	39	46	49	70.2%
Finland	111	150	170	191	199	181	163	46.6%
France	2,808	2,715	3,003	3,053	4,56	4,339	5,493	95.6%
Germany	3,299	3,255	3,231	3,573	3,896	4,506	5,257	59.3%
Greece	145	198	204	185	162	89	83	-43.2%
Hungary	168	207	159	160	233	238	253	50.3%
Italy	1,219	1,232	1,181	1,295	1,263	1,22	1,161	-4.7%
Lithuania	38	44	38	42	44	46	44	16.0%
Netherlands	702	630	660	683	908	998	1,074	52.9%
Poland	710	681	763	706	803	848	999	40.7%
Portugal	159	211	182	204	208	263	353	122.1%
Romania	192	320	271	251	347	314	410	113.0%
Slovakia	104	139	144	208	297	332	383	268.2%
Slovenia	51	34	37	35	52	56	60	17.0%
Spain	767	787	896	863	997	915	878	14.4%
Sweden	467	516	575	555	612	675	687	47.2%

Source: Structural Business Statistics, Eurostat 2021; in-house calculations by ZEW, in-house calculations by Goldmedia *Gross fixed investment (EU Member States with inadequate data basis not included.)

CCIs in EU comparison 2013 – 2019 – employees

Country	2013	2014	2015	2016	2017	2018	2019	Difference 2013/2019
Austria	109,937	112,6	115,308	117,022	119,53	121,976	126,71	15.3%
Belgium	104,227	101,464	102,531	105,671	109,273	118,945	124,018	19.0%
Bulgaria	55,737	55,493	57,008	62,702	64,587	67,996	70,954	27.3%
Croatia	31,304	32,321	31,707	32,407	33,663	34,719	42,249	35.0%
Cyprus	6,502	6,807	7,322	8,019	8,836	10,062	11,237	72.8%
Czech Republic	118,028	119,082	122,31	127,309	133,117	137,959	143,626	21.7%
Denmark	94,031	94,265	95,749	103,321	104,921	106,547	106,719	13.5%
Estonia	16,379	16,084	16,815	17,464	18,474	19,542	20,247	23.6%
Finland	79,32	79,04	78,907	79,218	80,966	83,388	85,404	7.7%
France	706,808	726,724	694,317	734,085	760,581	745,474	780,707	10.5%
Germany	1,108,921	1,145,499	1,163,744	1,184,597	1,247,839	1,330,819	1,332,547	20.2%
Greece	89,717	90,116	79,39	86,55	83,712	92,047	91,282	1.7%
Hungary	84,244	87,536	92,257	98,652	101,185	105,437	112,796	33.9%
Italy	470,34	469,384	473,585	488,767	498,936	503,455	503,053	7.0%
Lithuania	28,431	31,438	33,915	35,463	36,516	37,6	39,302	38.2%
Netherlands	264,653	263,319	275,572	284,119	296,3	309,003	318,761	20.4%
Poland	259,301	275,107	293,868	315,371	329,112	348,093	359,252	38.5%
Portugal	85,537	87,545	91,161	94,721	101,805	107,693	116,7	36.4%
Romania	113,021	115,027	118,877	125,513	129,575	136,8	142,53	26.1%
Slovakia	44,064	50,594	56,287	55,273	59,23	63,47	66,364	50.6%
Slovenia	21,369	21,655	22,283	22,972	24,129	25,343	26,602	24.5%
Spain	425,517	426,769	451,683	476,391	481,564	513,008	528,536	24.2%
Sweden	183,073	181,881	193,809	200,645	206,81	213,164	220,573	20.5%
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Source: Structural Business Statistics, Eurostat 2021; in-house calculations by ZEW, in-house calculations by Goldmedia (EU Member States with inadequate data basis not included.)

Parameters and statistical references

Number of companies

The figures provided on the number of companies 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 $\leq 17,501$ in the lowest bracket to ≤ 50 m 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 distinguished. Micro-enterprises (turnover of $\leq 2m$ or less), small enterprises (turnover of between €2m and €10m), medium-sized enterprises (turnover of €10m and €50m) and large enterprises (turnover of more than €50m). 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 are published by the Federal Statistical Office in its National Accounts. Data on gross value added are 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.

International comparison

It is necessary to draw a comparison between different countries in order to assess the status of the German cultural and creative industries in the international context. On the basis of the Structural Business Statistics (SBS) of Eurostat, the European statistical agency, the usual core indicators (number of companies, turnover, value added, gross fixed investment and employment) are compared with regard to the economic development of the cultural and creative industries of 23 EU countries (EU Member States with inadequate data basis are not included: Ireland, Latvia, Luxembourg, Malta).

These figures for the cultural and creative industries are based on the definition of CCIs by subgroup. For this reason, the figures for Germany differ from those in the rest of the report, in which the breakdown is by submarket.

Due to a lack of data in the SBS, the groups "Artistic/creative activities, etc." (WZ 90) and "Museums, libraries, etc." (WZ 91) are not included in the figures. Some of the figures had to be estimated.

Gainful employment

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. Self-employed persons in mini-jobs include taxable entrepreneurs with an annual income of €17,500 or less. 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 subgroups (5-digit numbers). The Employment Statistics allow conclusions to be drawn on employees subject to social security contributions and persons in marginal employment.

Core workers are the employees subject to social security contributions and the self-employed persons with a turnover exceeding €17,500.

People in marginal employment are the employees in marginal employment and self-employed persons in mini-jobs with a turnover of up to €17,500.

The total labour force is the core workers and those in marginal employment.

Self-employed persons in mini-jobs

For the purpose of this report, self-employed persons in mini-jobs are considered to be entrepreneurs generating €17,500 in turnover or less. The number of self-employed persons in mini-jobs is determined from 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 ³/₄ 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 2017 onwards are estimates. Also, this disregards the new assessment basis of €22,000 (turnover) in place since 2020. In deviation from previous studies up to 2019, the

data provided on self-employed persons in minijobs since 2020 are 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.

Definition of own-account workers: Ownaccount workers are defined as self-employed workers <u>without</u> dependent employees.

Definition of small business people: Small business people can be owners of companies, self-employed persons, freelancers, or farmers or foresters. The precondition is that their turnover in the preceding year did not exceed €22,000 (until 2019: €17,500), and is unlikely to exceed €50,000 in the current year.

Source: Goldmedia, HMS, Prof. rer. oec. Rüdiger Wink (HTWK Leipzig)

2020/2021 forecasts

2020 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 2019 for turnover, number of companies and number of self-employed persons
- up until (in some cases) 2020 for gross value added figures from the National Accounts
- up until 2016 for self-employed persons in mini-jobs.

For the extrapolation of data on the number of companies, self-employed (including those with mini-jobs) and gross value added up to 2020, an in-house forecast was made based on the development rates of the preceding years and an impact analysis was carried out per submarket at the level of the individual classes of economic activity; also, interviews with experts in the business associations were used.

Turnover in 2020

Turnover statistics for 2020 derive from the Federal Government Centre of Excellence for the Cultural and Creative Industries (2021): "Betroffenheit der Kultur- und Kreativwirtschaft von der Corona-Pandemie. Ökonomische Auswirkungen 2021 & 2022 anhand einer Szenarioanalyse" (Impact of the COVID-19 pandemic on the cultural and creative industries. Economic impact in 2021 and 2022 based on a scenario analysis) (status: December 2021). The turnover figures were provided in advance to Goldmedia.

In deviation from the methodology in the monitoring report (turnover 2010–2019), economic activity class 18.14 (Book-binding and related services) in the book market submarket is not covered by the impact paper of the Federal Government Centre of Excellence for the Cultural and Creative Industries (2021) for the 2020 turnover year. Similarly, economic activity class 18.14 is not included in the totals for the entire CCIs in the 2020 turnover year. Correspondingly, all of the figures and indicators calculated with regard to turnover in 2020 in this monitoring report are based on turnover figures without class 18.14.

Turnover forecast for 2021 and 2022

A turnover forecast for 2021 and 2022 was conducted for each submarket of the cultural and creative industries. This also derives from the Federal Government Centre of Excellence for the Cultural and Creative Industries (2021).

Source: Goldmedia, HMS, Prof Wink; Federal Government'Centre of Excellence for the Cultural and Creative Industries 12/2021

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

Turnover forecast for 2021 and 2022

Excerpt from the methodology of the impact paper 12/2021:

"The extrapolations of the impact on the CCIs and individual submarkets are based on data from the Federal Statistical Office (VAT statistics) and the Federal Employment Agency for 2019. The analyses include studies published by business associations on the impact of COVID-19, analyses on the impact on value chains and the findings from 17 guideline-based interviews with sectoral representatives. The interviews covered, among other things, a retrospective assessment of the impact in 2020 and 2021, assessments of the course of 2022 and a potential recovery phase, and structural changes in the respective sector. The interviews took place in November and December 2021. Experts then had the possibility to answer interview questionnaires in writing. Here, it must be borne in mind that the findings from the interviews reflect the impressions in and the impact on the sector at the time.

In a calculation process, the findings on the impact situation were pooled and systematised, and applied to the turnover data of specific classes of economic activity (at WZ five-digit level). In addition, impact logic was derived from the pooled sectoral statements and information, and potential developments over the year were sketched out. The resulting turnover losses are compiled as totals for individual submarkets and all the CCIs."

"So-called 'recovery months' following drops in infections are also difficult for many submarkets of the CCIs. For example, the events industry needs a certain period of preparation time to be able to put on events. Large-scale events in particular are at much greater risk of closures.

The effects are felt to differing degrees in the various economic activity classes and occupation groups of the submarkets. This means that the impact scenarios form an average from own-account workers, employees subject to social security contributions, people in marginal employment, SMEs and large companies."

Scenario 1

"High infection figures until the end of the first quarter of 2022"

In this scenario, there are further restrictions on public life in January and February in order to curb the Omicron variant and the related infection rates. Since the measures have an impact, contact restrictions are relaxed in March. Despite this, there continues to be a certain degree of public uncertainty, and this restricts the respective business activities of the CCI companies. Against this background, some severe economic restrictions can be expected until the end of March 2022, with a gradual economic recovery as a result of higher vaccination rates.

Scenario 2

"High infection figures into the second quarter of 2022 (or renewed relapse in autumn/winter 2022)"

In this scenario, the Omicron wave lasts much longer. This means that the uncertainty caused by existing or tighter restrictions is extended into the second quarter of 2022. It is assumed that some of the restrictions on businesses last until the end of April / middle of May and that there is subsequently a gradual economic recovery thanks to rising vaccination rates and seasonal effects. At the same time, account is taken of the risk that the infection rates can rise further as a result of new virus mutations in the autumn of 2022.

Source: The Federal Government Centre of Excellence for the Cultural and Creative Industries 12/2021

Business associations and sources

Business associations and sources for the music industry

Berlin Music Commission	www.berlin-music-commission.de
Bundesinnungsverband für das Musikinstrumenten-Handwerk (German Musical Instrument Makers Federation)	www.biv-musikinstrumente.de
Bundeskonferenz Jazz (Federal Conference on Jazz)	www.bk-jazz.de
Berufsverband der Auftragskomponisten in Deutschland e.V. (CC Composers Club)	www.composers-club.de
Bundesverband der deutschen Musikinstrumenten-Hersteller e.V. (Federal Musical Instrument Manufacturers Association)	www.musikinstrumente.org
Bundesverband der Freien Musikschulen e.V. (Federal Association of Independent Music Schools)	www.bdpm-musikschulverband.de
Bundesverband der Konzert- und Veranstaltungswirtschaft e.V. (Federal Association of the Concert and Event Industry)	www.bdkv.de
Bundesverband Musiktechnologie Deutschland ("MusicTech Germany) e.V. (Federal Association for Music Technology in Germany)	www.music-tech.de
Bundesverband Musikindustrie e.V. (Federal Association of the Music Industry)	www.musikindustrie.de
Deutsche Filmkomponistenunion (German Film Composers Union)	www.defkom.de
Deutsche Jazzunion (German Jazz Union)	www.deutsche-jazzunion.de
Deutscher Komponistenverband e. V. (German Composers Association)	www.komponistenverband.de
Deutscher Musikrat e. V. (German Music Council)	www.musikrat.de
Deutscher Rock & Pop Musikerverband e. V. (German Rock and Pop Musicians' Association)	www.musiker-online.com/deutscher-rock-pop- musikerverband-e-v
Deutscher Tonkünstlerverband e. V. (German Sound Artists Association)	www.dtkv.org
DMV – Deutscher Musikverleger-Verband e. V. (German Music Publishers' Association)	www.dmv-online.com
EVVC – Europäischer Verband der Veranstaltungs-Centren e.V. (European Association of Event Centers)	www.evvc.org
GEMA – Gesellschaft für musikalische Aufführungs- und mechanische Vervielfältigungsrechte (Society for Musical Performing and Mechanical Reproduction Rights)	www.gema.de
Gesamtverband Deutscher Musikfachgeschäfte e.V. (Federation of German Music Dealers)	www.gdm-online.com
Interessenverband Musikmanager & Consultants e.V. (Interest Group Music Managers and Consult- ants)	www.imuc.de
LiveMusikKommission Verband der Musikspielstätten in Deutschland e.V. (Federal Association of Music Venues in Germany)	www.livemusikkommission.de
mediamusic e.V. (Association of Media Music)	www.mediamusic-ev.de
Deutsches Musikinformationszentrum (miz) (MIZ German Music Information Centre)	https://miz.org
SOMM – Society Of Music Merchants e. V.	www.somm.eu
VdM Verband deutscher Musikschulen (Association of German Music Schools)	www.musikschulen.de
Verband der Streichquartette und weiterer Kammermusik-Ensembles e.V. (VdSQ) (Association of German String Quartets)	www.vdsq.de
Verband Deutscher Tonmeister*innen e.V. (German Association for Audio Professionals)	www.tonmeister.org
Verband unabhängiger Musikunternehmer*innen e.V. (VUT) (Association of Independent Musicians and Music Companies)	www.vut.de
VPLT – Der Verband für Medien- und Veranstaltungstechnik e.V. (German Entertainment Technology Association)	www.vplt.org

Business associations and sources for the book market

Autorinnenvereinigung e.V. (Association of Female Authors)	www.autorinnenvereinigung.eu
BDÜ – Bundesverband der Dolmetscher und Übersetzer e.V. (Federal Association of Interpreters and Translators)	www.bdue.de
Börsenverein des Deutschen Buchhandels e.V. (German Publishers and Booksellers Association)	www.boersenverein.de
Bundesverband junger Autoren und Autorinnen e. V. (Federal Association of Young Authors)	www.jungeautoren.org
Deutsche Literaturkonferenz e. V. (German Literature Conference)	www.literaturkonferenz.de/home.html
Freier Deutscher Autorenverband, Schutzverband deutscher Schriftsteller e.V. (Independent German Authors Association)	www.fda.de
Verband der Freien Lektorinnen und Lektoren e.V. (Association of Freelance Editors)	www.vfll.de
Verband Deutscher Antiquare e.V. (German Association of Antiquarian Booksellers)	www.antiquare.de
Verband deutscher Schriftsteller (VS) in ver.di (Association of German Writers within the German United Trade Services Union)	www.vs.verdi.de

Business associations and sources for the art market

BDK Fachverband für Kunstpädagogik e.V. (BDK Professional Association for Art Education)	www.bdk-online.info
Bundesverband Bildender Künstlerinnen und Künstler e. V. (Federal Association of Visual Artists)	www.bbk-bundesverband.de
Bundesverband Deutscher Galerien und Kunsthändler e. V. (Federal Association of German Galleries and Art Dealers)	www.bvdg.de
Bundesverband Deutscher Kunstversteigerer e.V. (Association of German Art Auctioneers)	www.kunstversteigerer.de
Deutscher Künstlerbund e. V. (Association of German Artists)	www.kuenstlerbund.de
Internationale Gesellschaft der Bildenden Künste (International Society of Fine Arts)	www.igbk.de
Verband der Gemeinschaften der Künstlerinnen und Kunstförderer e.V. (GEDOK) (Federation of Women Artists and Patrons of the Arts)	www.gedok.de
Verband deutscher Kunsthistoriker (Association of German Art Historians)	www.kunsthistoriker.org
Verein zur Veranstaltung von Kunstausstellungen e. V. (Association for the Organisation of Art Exhibitions)	www.diegrosse.de

Business associations and sources for the film industry

AG Kino-Gilde deutscher Filmkunsttheater e. V. (Guild of German Art Film Theatre)	www.agkino.de
AG Kurzfilm e.V. – Bundesverband Deutscher Kurzfilm (German Short Film Association)	www.ag-kurzfilm.de
AG Verleih Arbeitsgemeinschaft der unabhängigen Filmverleiher e.V. (Independent Film Distributors Working Group)	www.ag-verleih.de
Allianz Deutscher Produzenten – Film & Fernsehen e.V. (German Producers Alliance - Film and Television)	www.produzentenallianz.de
Arbeitsgemeinschaft Dokumentarfilm e.V. (AG DOK) (Documentary Filmmakers Working Group)	www.agdok.de
Berufsvereinigung Filmton e.V. (German Association for Film Sound Professionals)	www.bvft.de
Bundesverband Audiovisuelle Medien e.V. (BVV) (Federal Association of Audiovisual Media)	www.bvv-medien.de
Bundesverband Beleuchtung und Kamerabühne e.V. (National Association of Lighting and Dolly Grip)	www.bvb-verband.de
Bundesverband Casting e.V. (Federal Association of Casting Directors)	www.castingverband.de
Berufsverband Kinematografie (BVK) (German Society of Cinematographers)	www.kinematografie.org
Bundesverband der Film- und Fernsehregisseure in Deutschland e.V. (BVR) (Federal Association of Film and Television Directors in Germany)	www.regieverband.de
Bundesverband Schauspiel e.V. (BFFS) (German Actors Association)	www.bffs.de
Bundesverband Deutscher Film-Autoren e.V. (BDFA) (Association of German Scriptwriters)	www.bdfa.de
Bundesverband Deutscher Film- und AV-Produzenten e.V. (BAV) (Federal Association of German Film and Audiovisual Producers)	www.bundesverband-av.de
Bundesverband deutscher Stuntleute e.V. (German Stunt Association)	www.german-stunt-association.de

Business associations and sources for the film industry

Bundesverband Filmschnitt Editor e.V. (Association of Film Editors)	www.bfs-filmeditor.de
Bundesverband Kommunale Filmarbeit e.V. (German Association of Municipal and Cultural Cinemas)	www.kommunale-kinos.de
Bundesverband Locationscouts e (Location Scouts Guild of Germany)	www.bvlocation.de
Bundesverband Produktion Film und Fernsehen e. V. (BvP) (Federal Association of Film and TV Production)	www.bv-produktion.de
Bundesvereinigung Maskenbild BVM e. V. (Federal Screen Make-up Artists Association)	www.maskenbild.de
BVK – Bundesverband der Fernsehkameraleute e. V. (Federal Association of Television Camera Professionals)	www.bvfk.tv
Fernseh- und Kinotechnische Gesellschaft (FKTG) (Television and Cinematic Society)	www.fktg.org
FDW Werbung im Kino e. V. (FDW) (Cinema Advertising)	www.fdw.de
GEMA – Gesellschaft für musikalische Aufführungs- und mechanische Vervielfältigungsrechte (Society for Musical Performing and Mechanical Reproduction Rights)	www.gema.de
German Films	www.german-cinema.de
HDF KINO e.V. (HDF) (HDF Cinemas Association)	www.hdf-kino.de
SPIO – Spitzenorganisation der Filmwirtschaft e. V. (Umbrella Organisation of the Film Industry)	www.spio.de
VDD – Verband deutscher Drehbuchautoren e.V. (Association of German Scriptwriters)	www.drehbuchautoren.de
VeDRA – Verband für Film- und Fernsehdramaturgie (Association for Film and Television Dramatic Composition)	www.dramaturgenverband.org
Verband der Filmverleiher e.V. (VdF) (Film Distributors Association)	www.vdfkino.de
Verband der Requisite und Set Decoration e.V. (German Association for Prop Masters and Set Decorators)	www.vdr-sd.de
Verband Deutscher Filmexporteure e.V. (VDFE) (Association of German Film Exporters)	www.vdfe.de
Verband Deutscher Schauspieler-Agenturen e.V. (Association of German Actors' Agencies)	www.schauspieler-agenturen.de
Verband Technischer Betriebe für Film und Fernsehen e.V. (VTFF) (Association of Technical Companies for Film and Television)	www.vtff.de
VSK – Verband der Berufsgruppen Szenenbild und Kostümbild e.V. (Association of Production and Costume Design)	www.v-sk.de

Business associations and sources for the broadcasting industry

APR – Arbeitsgemeinschaft Privater Rundfunk (Working Group of Private Broadcasters in Germany)	www.privatfunk.de
BFR – Bundesverband freier Radios (Federal Association of Independent Radio Stations)	www.freie-radios.de
Bundesverband Offene Kanäle (Federal Association of Open Channels)	www.bok.de
Deutscher Journalisten-Verband e. V. (German Federation of Journalists)	www.djv.de
DFJV Deutscher Fachjournalisten-Verband AG (German Specialist Journalists Association)	www.dfjv.de
Freischreiber - Berufsverband freier Journalistinnen und Journalisten (Association of Freelance Journalists)	www.freischreiber.de
Verband Privater Medien e.V. (VAUNET) (German Media Association)	www.vau.net

Business associations and sources for the performing arts market

Allgemeiner Deutscher Tanzlehrerverband (ADTV) (General German Dance Teachers Association)	www.adtv.de
Berufsverband Deutscher Tanzlehrer e.V. (BDT) (Professional Association of German Dance Teachers)	www.bdt-ev.de
Bundesverband Freie Darstellende Künste (German Association of Independent Performing Arts)	www.darstellende-kuenste.de
Bundesvereinigung Kabarett e. V. (Federal Cabaret Association)	www.Bundesvereinigung-kabarett.de
Deutscher Bühnenverein – Bundesverband der Theater und Orchester (Federal Association of Theatres and Orchestras)	www.buehnenverein.de
dg – dramaturgische gesellschaft (Dramatic Composition Society)	www.dramaturgische-gesellschaft.de
DTHG – Deutsche theatertechnische Gesellschaft (German Theatre Technical Society)	www.dthg.de
EVVC – Europäischer Verband der Veranstaltungs-Centren e.V. (European Association of Event Centers)	www.evvc.org
Genossenschaft Deutscher Bühnen-Angehöriger (GDBA) (Guild of the German Stage)	www.buehnengenossenschaft.de
Interessenverband Deutscher Schauspieler e. V. (IDS) (German Actors Interest Association)	www.ids-ev.eu
Verband Deutscher Puppentheater e.V. (VDP) (German Puppetry Association)	www.vdp-ev.de
Verband Deutscher Schauspieler Agenturen (Association of German Actors' Agencies)	www.schauspieler-agenturen.de
WIFTG – Women in Film & Television Germany e. V.	www.wiftg.de

Business associations and sources for the design industry

Allianz deutscher Designer (AGD) e. V. (Alliance of German Designers)	www.agd.de
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Art Directors Club (ADC) e.V.	www.adc.de
BDG Berufsverband der Deutschen Kommunikationsdesigner e. V. (Professional Association of German Communication Designers)	www.bdg.de
Berufsverband Freie Fotografen und Filmgestalter e. V. (BFF) (Professional Association of Freelance Photographers and Film Creators)	www.bff.de
Bundesverband Kunsthandwerk – Berufsverband Handwerk Kunst Design e.V. (German Crafts Association – the German Crafts Council)	www.bundesverband-kunsthandwerk.de
Deutsche Gesellschaft für Designtheorie und -forschung (DGTF) (German Society for Design Theory and Research)	www.dgtf.de
Deutscher Designer Club e.V. (DDC) (German Designer Club)	www.ddc.de
Deutscher Designtag e.V. (DT) (German Designers Association)	www.designtag.org
Fashion Council Germany e.V.	www.fashion-council-germany.org
Freelens e. V. (association of freelance photographers)	www.freelens.com
German Fashion Designers Federation e.V.	www.gfdf.de
Gesamtverband Kommunikationsagenturen GWA e.V. (Association of Communications Agencies)	www.gwa.de
Gesamtverband der deutschen Textil- und Modeindustrie e.V. (Confederation of the German Textile and Fashion Industry)	www.textil-mode.de
Illustratoren Organisation e.V. (Illustrators Organisation)	www.io-home.org
Internationales Design Zentrum Berlin (IDZ) (International Design Center Berlin)	www.idz.de
Rat für Formgebung (German Design Council)	www.german-design-council.de
Verband Deutscher Industrie Designer e.V. (VDID) (Association of German Industrial Designers)	www.vdid.de
VDMD – Netzwerk für Mode.Textil.Interieur.Accessoire.Design e.V. (VDMD) (Association of German Fashion and Textile Designers)	www.vdmd.de

Business associations and sources for the architecture market

BDB Bund Deutscher Baumeister, Architekten und Ingenieure e.V. (Federation of German Builders, Architects and Engineers)	www.baumeister-online.de
Bund Deutscher Architekten BDA (Association of German Architects)	www.bda-bund.de
Bund Deutscher Innenarchitekten BDIA e.V. (Association of German Interior Architects/Designers)	www.bdia.de
Bund Deutscher Landschaftsarchitekten (BDLA) (Association of German Landscape Architects)	www.bdla.de
Bundesarchitektenkammer (Federal Chamber of Architects)	www.bak.de
Bundesingenieur- und Architektenverband e.V. (BIAV) (Federal Engineers and Architects Association)	www.biav.de
Bundesverband Garten-, Landschafts- und Sportplatzbau e. V. (Federal Association for Garden, Land- scape and Sports Ground Construction)	www.galabau.de
DAI Verband Deutscher Architekten- und Ingenieurvereine e. V. (Association of German Architects' and Engineers' Societies)	www.dai.org
Informationskreis für Raumplanung e.V. (IfR) (Information Group for Spatial Planning)	www.ifr-ev.de
SRL – Vereinigung für Stadt-, Regional- und Landesplanung e. V. (Association of Town, Regional and State Planning)	www.srl.de
VAA – Vereinigung angestellter Architekten (Association of Employed Architects)	www.vaa-nrw.de
Verband deutscher Architekten e. V. (VDA) (German Architects Association)	www.vda-architekten.de
Vereinigung Freischaffender Architekten Deutschlands (VFA) (Association of Freelance Architects in Germany)	www.vfa-architekten.de

Business associations and sources for the press market

bdfj Bundesvereinigung der Fachjournalisten e. V. (Federal Association of Specialised Journalists)	www.bdfj.de
Bundesverband Deutscher Buch-, Zeitungs- und Zeitschriften-Grossisten e.V. (Federal Association of German Book, Newspaper and Magazine Wholesalers)	www.pressegrosso.de
Bundesverband Digitalpublisher und Zeitungsverleger (BDZV) (German Newspaper Publishers and Digital Publishers Association)	www.bdzv.de
Deutsche Journalistinnen- und Journalisten-Union (dju) in ver.di (German Journalists' Union within the German United Trade Services Union)	www.dju.verdi.de
Deutscher Fachjournalisten-Verband AG (DFJV) (German Specialised Journalists Association)	www.dfjv.de
Deutscher Journalisten-Verband e.V. (German Federation of Journalists)	www.djv.de
Deutscher Presseverband (DPV) (German Press and Journalists Federation)	www.dpv.org
Deutscher Verband der Pressejournalisten AG (DVPJ) (German Association of Press Journalists)	www.dv-p.org
Freischreiber – Berufsverband freier Journalistinnen und Journalisten (Association of Freelance Journalists)	www.freischreiber.de
Journalistinnenbund e.V. (Women Journalists' Association)	www.journalistinnen.de
Photoindustrie-Verband e.V. (Photo Industry Association)	www.piv-imaging.com/photoindustrie-verband
Verband der deutschen Filmkritik e.V. (vdfk) (Association of German Film Critics)	www.vdfk.de
Verband Deutscher Bühnen- und Medienverlage e.V. (VDB) (Association of German Stage and Media Publishers)	www.theatertexte.de
Verband deutscher Lokalzeitungen e.V. (Association of Local Press Owners)	www.lokalpresse.de
Verband Deutscher Zeitschriftenverleger e.V. (VDZ) (Association of German Magazine Publishers)	www.vdz.de

Business associations and sources for the advertising market

AIW – Arbeitskreis inhabergeführter Marketing- und Kommunikationsagenturen (Working Group of Owner-Managed Marketing and Communication Agencies)	www.aiw-werbung.de
Allianz inhabergeführter Kommunikationsagenturen e.V. (AIKA) (Alliance of Owner-Managed Communication Agencies)	www.aika.de
Berufsverband der Deutschen Kommunikationsdesigner e. V. (BDG) (Professional Association of German Communication Designers)	www.bdg.de
Deutsche Public Relations Gesellschaft e.V. – DPRG (German Public Relations Society)	www.dprg.de
Fachverband Freier Werbetexter e.V. (FFW) (Association of Freelance Advertising Copywriters)	www.texterverband.de
FAW – Fachverband Außenwerbung e. V. (Out-of-Home Advertising Association)	www.faw-ev.de
Gesamtverband Kommunikationsagenturen GWA e.V. (Association of Communications Agencies)	www.gwa.de
Gesamtverband der Werbeartikel-Wirtschaft GWW e.V. (Association of the Promotional Merchandise Industry)	www.gww.de
Produzentenallianz / Sektion Werbung (Association of German Advertising Film Producers)	www.werbefilmproduzenten.de
Zentralverband der deutschen Werbewirtschaft e. V. (ZAW) (German Advertising Federation)	www.zaw.de
Zentralverband Schilder und Lichtreklame (ZVSL) Bundesinnungsverband der Schilder- und Lichtreklamehersteller (Central Advertising Technology Association)	www.zvsl.de

Business associations and sources for the software and games industry

Bundesverband Informationswirtschaft, Telekommunikation und neue Medien e.V. (German Association for Information Technology, Telecommunications and New Media)	www.bitkom.org
eco – Verband der deutschen Internetwirtschaft e.V. (eco – Association of the German Internet Industry)	www.eco.de
game – Verband der deutschen Games-Branche (German Games Industry Association)	www.game.de
Stiftung Digitale Spielekultur gGmbH (Foundation for Digital Games Culture)	www.stiftung-digitale-spielekultur.de

Overarching associations and sources

Bundesverband Digitale Wirtschaft e.V. (German Association for the Digital Economy)	www.bvdw.org
Bundesverband der Kultur- und Kreativwirtschaft Deutschland e. V. (Kreative Germany) (Federal Association of the Cultural and Creative Industries in Germany)	www.kreative-deutschland.de
connexx.av – ver.di-Netzwerk für Medienschaffende (connexx.av – ver.di – Network for Media Professionals)	www.connexx-av.de
Deutscher Kulturrat e.V. (German Culture Council)	www.kulturrat.de
Künstlersozialkasse (Artists Social Security Fund)	www.kuenstlersozialkasse.de
medianet berlinbrandenburg e.V.	www.medianet-bb.de
Corint Media	www.corint-media.com

List of sources

Bundesarchitektenkammer (Federal Chamber of Architects) (2021): Surveys on the effects of the pandemic. Online: <u>https://bak.de/politik-und-praxis/wirtschaft-und-mittelstand/umfragen-kammermitglieder/umfragen-zur-coronakrise/ [18 November 2021].</u>

BDZV – Bundesverband Digitalpublisher und Zeitungsverleger (German Newspaper Publishers and Digital Publishers Association) (2021): Regarding the economic situation of the German newspapers.

Online: www.bdzv.de/alle-themen/marktdaten/zur-wirtschaftlichen-lage-der-deutschen-zeitungen-2021 [15 November 2021].

Bertscheck/Erdsiek (2020): Soloselbständigkeit in der Corona-Krise. Digitalisierung hilft bei der Bewältigung der Krise, (Own-account workers in the pandemic. Digitalisation helps to tackle the crisis), ZEW-Kurzexpertise No. 20-08, Mannheim. Online: https://ftp.zew.de/pub/zew-docs/ZEWKurzexpertise2008.pdf [15 November 2021].

BINGK – Bundesingenieurkammer (Federal Chamber of Engineers) (2021): 4th short survey on the impact of the pandemic. Abridged v ersion of the report for architects and engineers. Online: <u>https://bingk.de/wp-content/uploads/2022/01/2021_BAK_BIngK_Corona-4_</u> Bericht-Gesamt_Kurzfassung.pdf [18 November 2021].

Bitkom – Bundesverband Informationswirtschaft, Telekommunikation und neue Medien e.V. (German Association for Information Technology, Telecommunications and New Media) (2021a):

Online: ICT market figures: www.bitkom.org/Marktdaten/ITK-Konjunktur/ITK-Markt-Deutschland.html [18 November 2021].

Bitkom (2021b): The computer gaming trends in 2021. Online: <u>www.bitkom.org/sites/default/files/2021-08/bitkom-charts-gaming-</u>trends-23-08-2021.pdf [18 November 2021].

BMWK – Bundesministerium für Wirtschaft und Klimaschutz (Federal Ministry for Economic Affairs and Climate Action) (2021): New Start Assistance. Online: www.ueberbrueckungshilfe-unternehmen.de/UBH/Navigation/DE/Neustarthilfen/neustarthilfe_uebersicht.html [30 November 2021].

BOEV – Börsenverein des deutschen Buchhandels (German Publishers and Booksellers Association) (2021): Der Buchmarkt in der Pandemie. Starke Nachfrage, schwierige Situation für den Handel. Konzepte für lebendige Innenstädte gefragt (The book market in the pandemic. Strong demand, difficult situation for retailers, concept needed for vibrant inner cities). [Press release], 8 July 2021. Online: www.boersenverein.de/presse/pressemitteilungen/detailseite/der-buchmarkt-in-der-pandemie-starke-nachfrage-schwierigesituation-fuer-den-handel-konzepte-fuer-lebendige-innenstaedte-gefragt [18 November 2021].

Bundesagentur für Arbeit (Federal Employment Agency) (2021): Beschäftigungsstatistik, Zeitreihendaten zu den Berichtsjahren 2010 – 2020; zusätzliche Sonderauswertung nach KldB 2010 (Employment Statistics, time series data on reporting years 2010 – 2020; additional special assessment based on 2010 job classifications)

BVMI – Bundesverband Musikindustrie (Federal Association of the Music Industry) (2021): Half-yearly stocktake. Online: www.musikindustrie.de/presse/presseinformationen/bvmi-halbjahresbilanz-1 [15 November 2021].

DASL – Deutsche Akademie für Städtebau und Landesplanung (German Academy for Urban Planning and Regional Spatial Planning) (2021): DASL – Kompakt. 1. Halbjahresbericht der Deutschen Akademie für Städtebau und Landesplanung, Mai 2021 (DASL compact. 1st half-yearly report of the German Academy for Urban and Regional Planning, May 2021. Online: https://dasl.de/wp-content/uploads/2015/07/DASL-Kompakt-1_2021.pdf [18 November 2021].

Destatis – Statistisches Bundesamt (Federal Statistical Office) (2021a): VAT statistics (advance returns). Times series data on reporting years 2010–2019.

Destatis (2021b): VAT statistics (asessments). Times series data on reporting years 2010-2016.

Destatis (2021c): National Accounts. Time series data for reporting years, in most cases until 2020.

DIHK – Industrie- und Handelskammer (Association of German Chambers of Commerce and Industry) (2021): Stimmung am Bau trübt sich ein. Sonderauswertung zur Konjunkturumfrage Jahresbeginn 2021 (Sentiment in construction deteriorating. Special evaluation of the industry survey at start of 2021) [Press release], 23 February 2021. Online:

Online: www.dihk.de/de/aktuelles-und-presse/aktuelle-informationen/stimmung-am-bau-truebt-sich-ein-37088 [18 November 2021].

DJV – Deutscher Journalisten-Verband (German Federation of Journalists) (2021): Auswirkungen der Corona-Pandemie auf den freien Journalismus (Effects of pandemic on freelance journalism).

Online: www.djv.de/fileadmin/user_upload/Freiendateien/Freie-Hintergrund/FreienumfrageDJV2021.pdf [15 November 2021].

eco-Verband der deutschen Internetwirtschaft e.V. (Association of the German Internet Industry) (2020): Start in eine digitale Dekade der Superlative: Neue eco Studie erwartet bis 2025 Umsatzzuwächse um 75 Prozent für die Internetwirtschaft in Deutschland (Launching a digital decade of superlatives: new eco study expects sales growth of 75% for internet industry in Germany up to 2025). Online: www.eco.de/presse/start-in-eine-digitale-dekade-der-superlative-neue-eco-studie-erwartet-bis-2025-umsatzzuwaechseum-75-prozent-fuer-die-internetwirtschaft-in-deutschland/ [18.11.2021].

eco-Verband der deutschen Internetwirtschaft e.V. (2021): Digitale Dekade: Internetwirtschaft ist Teil der Lösung. (Digital decade: internet industry part of the solution), Online: www.eco.de/presse/digitale-dekade-internetwirtschaft-ist-teil-der-loesung/ [18 November 2021].

EUROSTAT (2021): Structural Business Statistics 2013 – 2019. Online: https://ec.europa.eu/eurostat/de/web/structural-business-statistics [3 December 2021]

Falkenhagen, L. (2021): Schriftsteller gehen bei den Bundeshilfen oft leer aus (Many writers lose out in federal support), 26 February 2021. Online: www.kulturrat.de/themen/corona-vs-kultur/schriftsteller-gehen-bei-den-bundeshilfen-oft-leer-aus/ [18 November 2021].

FAW – Fachverband Außenwerbung (Out-of-Home Advertising Association) (2021): OOH ist zurück auf Wachstumskurs (OOH growing again) (Press release of 29 July 2021).

Online: https://faw-ev.de/pressemitteilungen/255-ooh-ist-zurueck-auf-wachstumskurs [18 November 2021].

Fraunhofer-Verbund IUK-Technologie (Fraunhofer ICT Group) (2021): Wertschöpfung durch Software in Deutschland. (Value creation by software in Germany). Online: www.iuk.fraunhofer.de/content/dam/iuk/de/documents/positionspapier_wertsch%C3%B6pfung-durch-software_de.pdf [18 November 2021].

FEP – Federation of European Publishers (2021): One Year After. Consequences of the COVID-19 crisis on the book market – An overview of 2020, Federation of European Publishers, March 2021.

Online: www.boersenblatt.net/sites/default/files/documents/2021-03/260321%20-%20One_Year_After_Brochure_FEP_COVID_Update_ final_.pdf [18 November 2021].

game – Verband der deutschen Games-Branche (German Games Industry Association) (2021a): Infografik Deutscher Games-Markt 2021 (Diagram of German computer games market). Online: www.game.de/marktdaten/infografik-deutscher-games-markt-2021/ [18 November 2021].

game (2021b): Wachstum Umsatz deutscher Games-Unternehmen (Turnover growth of German computer games companies). Online: www.game.de/marktdaten/wachstum-umsatz-deutscher-games-unternehmen/ [18 November 2021].

game (2021c): Gamesmap, as of: 18 November 2021. Online: www.gamesmap.de/ [18 November 2021].

game (2021d): Deutscher Games-Markt wächst um 22 Prozent im ersten Halbjahr 2021 (German computer games market grows by 22% in first half of 2021). Online: <u>https://www.game.de/deutscher-games-markt-waechst-um-22-prozent-im-ersten-halbjahr-2021</u> [18 November 2021].

GWA – **Gesamtverband Kommunikationsagenturen (Association of Communications Agencies) (2021):** Frühjahrsmonitor 2021 (2021 spring monitor). Online: www.gwa.de/content/uploads/2021/01/20210407_GWA_Fruehjahrsmonitor_2021.pdf. [18 November 2021].

HMS – Hamburg Media School (2020): Die Games-Branche in Deutschland 2018/19/20 (The computer games sector in Germany 2018/19/20). Online: www.game.de/wp-content/uploads/2020/12/Games-Studie_2018-20_HMS_2021-01-26_V3.pdf [18 November 2021].

Ingame (2021): Twitch-Leak: Deutsche Top 20-Streamer – So viel verdienen sie wirklich wirklich (Twitch leak: Top 20 German streamers – how much they really earn). Online: www.ingame.de/news/streaming/twitch-einnahmen-leak-20-deutschen-twitch-streamer-millionen-montanablack-knossi-verdienst-geld-san-francisco-91045662.html [18 November 2021].

Jarmuschek/Sturm (2021): Reifezeit für die Kulturwirtschaft. Wo steht der Kunstmarkt heute? (Time for the cultural industry to mature: where does the art market stand today?) In: Politik & Kultur, No. 12/21-01/22. Online: https://www.bvdg.de/sites/default/files/BMS_KJ%20Reifezeit%20Kulturwirtschaft%20PUK%2012.2021.pdf

Kirchberg (2019): Wach-Operationen mit Musik den Schrecken nehmen (Using music to relieve fear of awake surgery). In: Die Rheinpfalz online. Online: <u>https://themenwelten.rheinpfalz.de/universitaetsklinik-mannheim-arbeitsgruppe-wach-op-operationen-musik-miriam-</u>ratliff-neurochirurgische-klinik-neuroonkologisches-zentrum-79125 [15 November 2021].

Kompetenzzentrum Kultur- und Kreativwirtschaft des Bundes Federal Government Centre of Excellence for the Cultural and Creative Industries) (2021): Betroffenheit der Kultur- und Kreativwirtschaft von der Corona-Pandemie. Ökonomische Auswirkungen 2021 & 2022 anhand einer Szenarioanalyse (Impact of pandemic on CCIs. Economic impact in 2021 & 2022 (status: December 2021). [The sales figures were provided to Goldmedia prior to publication.]

Produzentenallianz (Producers Alliance) (2020): Produzentenallianz-Herbstumfrage 2019/20, Eine Zusammenfassung (Producers Alliance autumn survey 2019/20. A summary). Online: www.produzentenallianz-Herbstumfrage 2019/20, Eine Zusammenfassung (Producers Alliance 2019/20. A summary). Online: www.produzentenallianz.de/dokumente/publikation/produzentenallianz-herbstumfrage-2019-20-eine-zusammenfassung/ [18 November 2021].

ProSiebenSat.1 Media SE (2021): Mid-year financial report 2021. Online: www.prosiebensat1.com/uploads/2021/08/04/P7S1_Q2_2021_DE.pdf [13 November 2021].

PwC – PricewaterhouseCoopers GmbH (2021): German Entertainment & Media Outlook 2021-2025. Fakten, Prognosen und Trends für 13 Segmente der Entertainment- und Medienbranche in Deutschland Facts, forecasts and trends for 13 segments of the entertainment and media sector in Germany). Online: www.pwc.de/de/technologie-medien-und-telekommunikation/german-entertainment-and-media-outlook-2021-2025.html [26 November 2021].

Rentz, I. (2020): ZAW entwirft düstere Prognose für 2020 – und erhöht den Druck auf die Politik (ZAW with gloomy forecast for 2020 – and increases pressure on government), in: Horizont (4 June 2020). Online: www.horizont.net/marketing/nachrichten/werbekonjunktur-zawentwirft-duestere-prognose-fuer-2020---und-erhoeht-den-druck-auf-die-politik-183400 [13 November 2021].

RTL Group (2021): Mid-year accounts 2021.

Online: www.rtlgroup.com/files/pdf3/2021.08-rtl-group-interim-results-2021_prsentation-deutsch.pdf [13 November 2021].

Söndermann, Michael (2012): Kurzanleitung zur Erstellung einer statistischen Datengrundlage für die Kulturwirtschaft. Statistische Anpassung der Kultur- und Kreativwirtschaft in Deutschland (Brief guidelines for producing a statistical data basis for the cultural industry. Statistical adjustment of the CCIs in Germany). 2nd recommendation of the Conference of the Ministers for Economic Affairs 2011. 1st recommendation of the Conference of the Ministers for Economic Affairs 2009.

SPIO – Spitzenorganisation der Filmwirtschaft (Umbrella Organisation of the Film Industry) (2021): Kinos 2020 (Cinemas in 2020). Online: www.spio.de/?seitid=26&tid=3 [28 November 2021].

Streamlabs-Blog (2020): Streamlabs & Stream Hatchet Q3 Live Streaming Industry Report. Online: https://blog.streamlabs.com/streamlabs-stream-hatchet-q3-live-streaming-industry-report-a49adba105ba [18 November 2021].

VAUNET (German Media Association) (2021): VAUNET-Prognose zum Medienmarkt 2021 (VAUNET media market forecast for 2021). Online: www.vau.net/pressebilder/content/publikation-grafiken-vaunet-prognose-medienmarkt-2021 [15 November 2021].

VDID – **Verband Deutscher Industriedesigner Industriedesigner (Association of German Industrial Designers) (2021):** VDID Blitzumfrage 2021 (Brief VDID survey), 17 March 2021. Online: www.vdid.de/news/pdf/2861_1.pdf. [18 November 2021].

VDR – Verband der Restauratoren (Association of Restorers) (2021): Die Situation der Restaurator:innen im Frühjahr 2021 (Situation of restorers in spring 2021). Online: www.restauratoren.de/zweite-umfrage-zur-situation-der-restauratorinnen-in-der-pandemie/. [18 November 2021].

ver.di (2021): Corona FAQ für Soloselbständige (COVID FAQs for own-account workers), as of: 18 October 2021. Online: https://selbststaendige.verdi.de/beratung/corona-infopool/++co++aa8e1eea-6896-11ea-bfc7-001a4a160100 [18 November 2021].

ZAW – Zentralverband der deutschen Werbewirtschaft (German Advertising Federation) (2021): Wirtschaft und Werbung 2020 (Economy and advertising 2020). Online: zaw.de/branchendaten/wirtschaft-und-werbung-2019/ [30 November 2021].

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