

COVID-19 Impact on the Cultural and Creative Industries in Germany

Economic Effects in a Scenario Analysis for 2020, 2021 & 2022
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Abstract

The present projections aim at quantifying the impact of the COVID-19 pandemic on the Cultural and Creative Industries (CCIs) in Germany and their subsectors, considering current economic and health related policy developments. The focus of these analyses lies on ex-post reflections of turnover losses in the years 2020 and 2021, as well as an analysis of the coming year 2022, in two scenarios. This study uses the guideline of the Conference of Ministers of Economic Affairs of 2016 for the statistical delimitation of the CCIs and its subsectors respectively.¹

In the past two years, the German CCIs has been under continuous pressure from the pandemic. With a turnover collapse over -8.7 percent in 2020, COVID-19 has marked the biggest setback for the sector since the beginning of the documentation series of the German *Cultural and Creative Industries Monitoring Report*. Overall, **turnover losses in 2020 account for -15.3 billion euros**, pushing back individual subsectors to their previous turnover levels from 2003. In particular, subsectors of the cultural industries have suffered the most losses with a total turnover decline of -13.5 percent, e. g. performing arts (-81 %), music (-44 %), film (-41 %) and visual arts (-39 %). Once again, these results point to the vulnerability of cultural workers in the current crisis. Moreover, the results do not indicate any recovery for 2021, but rather a second fallback of **-6.3 percent or -11.0 billion euros compared to 2019** (see Chapter 0)

For 2022, we assumed two different scenarios for estimating the potential economic effects of the crisis: Scenario 1 implies high infection figures until the end of the first quarter of 2022, while scenario 2 assumes high infection figures until the second quarter of 2022 (respectively a renewed relapse in autumn/winter 2022). According to these projections, turnover losses of the German CCIs range between -1.5 percent and -6.5 percent compared to the pre-crisis year of 2019. In 2022, disparities between subsectors of the cultural industries and the creative industries remain to be observed, with an estimated turnover loss between -9.1 percent and -15.8 percent for the cultural sector. These results show that large parts of the CCIs will continue to suffer under the crisis in 2022 postponing a potential recovery in further distance. Even in the most optimistic outlook, the German CCIs will unlikely reach its pre-pandemic turnover levels in 2022. **The estimated turnover losses for 2022 are between -2.6 billion euros and -11.4 billion euros.**

Once again, performing arts (up to -73 %), music (up to -63 %), visual arts (up to -38 %) as well as film (up to -38 %) are expected to be particularly affected by the crisis in 2022 – **some of them being thrown back to turnover levels later than 2003**. Other subsectors are likely expecting turnover increases compared to 2019, such as software/games (up to +8 %) and architecture (up to +9 %). On the other hand, these subsectors are also little affected by the pandemic restrictions in their core activities or are otherwise characterised by already existing sufficient competences in the digital sphere. In the most optimistic outlook, a growth of +12 percent (software/games) or +13 percent /architecture) could be expected in comparison to the pre-pandemic year (see Chapter 0).

¹ https://www.wirtschaftsministerkonferenz.de/WMK/DE/termine/Sitzungen/16-06-08-09-WMK/16-06-08-09-bericht-leitfaden-ak-kultur-kreativwirtschaft-10.pdf?__blob=publicationFile&v=2



Considering our previous forecasts from spring 2020 and early 2021, the recent projections illustrate how unpredictable the course of the pandemic is proving to be. Our updated estimates for 2020 assume a decline in turnover of -15.3 billion euros, putting our previous predictions below the scenario determined in spring 2021 with a loss of -22.4 billion euros. Ultimately, it shows that our most pessimistic presumption at the time assumed a short-term setback, followed by a steady upward trend in a relatively short period. Looking ahead to 2022, the scenario of a “triple U” is most likely to emerge, meaning a downturn in three valleys. The CCIs in Germany are thus in particular suffering from the long duration of the COVID-19 restrictions, which will have lasted for three years in 2022. Reserve assets and equities increasingly deplete by protracted losses. For the past two years, **turnover losses add up to -26.3 billion euros** with an **expected overall turnover loss ranging between -29 billion euros and -38 billion euros in 2022**. In the worst-case scenario, a further deterioration of the economic situation is expected not for all, but for some subsectors.

After two years of enduring difficulties, we are now heading towards 2022, which we fear will likely hold further challenges for the German CCIs. If, contrary to our expectations, there is a recovery from spring/summer onwards, a slow recovery to the pre-pandemic year of 2019 is possible. However, speaking for the industry as a whole, this will unlikely be achieved before 2023, since the recovery among subsectors is happening at very different velocities. This said, for some subsectors of the cultural industries a return to pre-pandemic levels is not yet foreseeable.

Finally, this paper addresses long-term structural changes and upheavals in the sector, illustrating key areas of action that are likely to be of huge importance for the CCIs after the pandemic, e. g. securing skilled work force, overcoming uncertainties along value chains, and shifting towards more sustainability and digitisation of the sector (see Chapter **Fehler! Verweisquelle konnte nicht gefunden werden.**).

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1 The Cultural and Creative Industries and COVID-19

On 11th March 2020, the World Health Organisation (WHO) declared the global spread of COVID-19 a pandemic.² Ever since, the CCIs have been under constant distress and are likely to remain so until the pandemic becomes controllable. Currently and with regard to 2022 this does not seem to be the case.

In response to the spread of COVID-19 at the beginning of **the first wave in 2020**, the federal government and the federal states agreed upon initial guidelines of action against the virus. Closures were issued to restrict contacts in public areas, specifically for facilities open to the public. For the CCIs, the closures affected many key venues, including theatres, operas, concert halls, retail outlets, clubs, as well as cinemas and facilities for large events. Due to falling infection figures, the first cautious relaxation on these measures came into force, gradually reopening cultural and leisure facilities as well as stationary retails under strict hygiene conditions from the beginning of May until the summer of 2020. From mid-October 2020, **the second wave** began to spread around Germany with rapidly rising infection figures, imposing new restrictions on public life.

The second lockdown was gradually extended into 2021 and lasted until May 2021.³ Due to the highly transmissible and concerning **Delta variant** of the virus, opening was only allowed from low 7-day incidence. As soon as sufficient vaccines and rapid testing became available, gradual openings took place in the second quarter of the year. After a period of easing in the summer, the situation worsened again in autumn and winter 2021. The authorities relied on additional protective measures and booster campaigns. The spread of **Omicron** with a two to three times higher contagion led to new challenges,⁴ bringing up discussions on mandatory vaccinations and further lockdowns to contain the spread of the new variant.

Due to Omicron, the first quarter of 2022 is likely to be marked by high infections figures, making predictions on the end of the pandemic difficult to foresee.

In support of the CCIs, the federal and state governments set a variety of relief programmes and measures during the pandemic, including short-term emergency support, short time working compensations, access to loans, a simplified access to basic income support, a special federal fund for cultural events as well as the NEUSTART KULTUR programme.⁵ The relief measures taken have positive effects on key players of the CCIs that have been affected strongly, but comprehensive data is currently still lacking as to quantify the impact of the relief aids. However, it should be noted that sectors' representatives as well as cultural workers, self-employed, and companies stress the importance of the support measures in contributing to securing cultural infrastructures and businesses.

² <https://www.who.int/health-topics/coronavirus>

³ <https://www.bundesregierung.de/breg-de/themen/coronavirus/corona-massnahmen-1734724>

⁴ <https://www.bundesregierung.de/breg-de/themen/coronavirus/corona-diese-regeln-und-einschraenkung-gelten-1734724>

⁵ <https://www.bundesregierung.de/breg-de/themen/coronavirus/hilfen-fuer-kuenstler-und-kreative-1732438>



This paper provides an analysis on the COVID-19 impact on the German CCIs for the years 2020 and 2021, as well as a potential outlook for 2022 in two scenarios. First, an evaluation for 2020 and 2021 will be conducted in retrospective for the CCIs and its respective subsectors. Second, the affectedness of the CCIs in 2022 is estimated based on two different assumptions on the potential course of the pandemic. Third, based on interviews with experts and representatives of various subsectors, long-term structural challenges and upheavals in the sector are illustrated.

2 Methodology

The present projections aim at quantifying the impact of the COVID-19 pandemic on the Cultural and Creative Industries (CCI) in Germany and their subsectors, considering current economic and health related policy developments. The focus of these analyses lies on ex-post reflections of turnover losses in the years 2020 and 2021, as well as an analysis of the coming year 2022, in two scenarios.

This study follows the standard delimitation for the statistical record of the CCIs and its respective subsectors provided by the guidelines of the Conference of Ministers of Economic Affairs of 2016⁶, thus allowing for a broader comparison of the results with existing research on the sector in the German literature.

Projections on the impact of the pandemic on CCIs and its subsectors are based on data taken from the Federal Statistical Office and the Federal Employment Agency for 2019. Projections incorporate published information and studies on the impact of COVID-19 by industry associations of subsectors, analyses on the impact on value chains, and results of a total of 17 interviews with industry representatives. Topics covered by the interviews included a retrospective assessment of the pandemic impact of the years 2020 and 2021, assessments on the expected course for 2022, potential recovery, as well as structural changes in the respective subsectors. The interviews took place in November and December of 2021. Experts also were allowed to answer the questions in written form. It should be noted that the interview results reflect the impressions on the state of the respective subsector at the given time.

Collected findings on the state of CCIs and subsectors have been systematised and applied on turnover data⁷ for individual subsectors at the 5-digit WZ 2008 Code. For this, impact logics were derived from the collected information and sector statements, serving as the base for plotting potential annual trends. The resulting turnover losses are recorded as totals for individual subsectors and the entire CCIs.

Current health policy developments and decisions as well as possible risk factors serve as the basis for the present scenario analysis, which intends to map the potential economic impact corridor of CCIs in Germany in two potential scenarios:

- **Scenario 1: High infection rates until the end of the first quarter of 2022**

In this scenario, we assume that further restrictions on public life occur in January and February to contain Omicron and associated infection incidences. As the measure show effectiveness, contact restrictions are eased in March. Nevertheless, as a certain degree of insecurity remains among the population, business activities of CCIs continue to be in part (severely) restricted until the end of March 2022, followed by a gradual recovery because of progressing coverage of vaccination of the population.

⁶ https://www.wirtschaftsministerkonferenz.de/WMK/DE/termine/Sitzungen/16-06-08-09-WMK/16-06-08-09-bericht-leitfaden-ak-kultur-kreativwirtschaft-10.pdf?__blob=publicationFile&v=2

⁷ It is assumed that the annual turnover generated are distributed evenly over the months.



- **Scenario 2: High infection rates to follow into the second quarter of 2022 (respectively renewed relapse in autumn/winter 2022)**

This scenario assumes that Omicron lasts significantly longer, resulting in further uncertainties due to tightened measures, which extend into the second quarter of 2022. Some restrictions last until the end of April/ mid-May followed by a gradual recovery due to further progresses in vaccination and seasonal effects. However, due to further virus mutations risks of rising infections are considered for autumn/winter 2022.

After the drop in infection figures, the following months of recovery could still be difficult for certain subsectors of the CCIs. This is the case for subsectors related to events. In particular, large events have long lead times for planning and scheduling, making business quick starts impossible.

The impact of COVID-19 varies across the economic branches and occupational groups of the subsectors. Consequently, our scenarios represent an average of self-employed, employees subject to social security contributions, marginally employed, and SMEs, as well as large enterprises. The degree to which individual subsectors and groups will suffer from the crisis and what effects can be expected on the entire CCIs is analysed in the following chapters.

3 COVID-19 Impact on the Cultural and Creative Industries

Nearly 260,000 companies and more than 1,8 million employees belong to the German CCIs. In 2019, they generated an overall turnover of 175.7 billion euros.⁸ More than 258,000 employees work as freelancers or are self-employed and almost 300,000 count as so called mini self-employed – i.e., their annual turnover is less than 17,500 euros. According to its own figures, almost 190,000 people were actively insured in the German artists' social insurance (Künstlersozialkasse) in 2020. Many artists and self-employed people, such as in stage-related fields and event technology, but also photography, film, or literature, live on the edge of subsistence level anyway. COVID-19 and the measures to contain the virus had significant consequences for many areas of the CCIs in 2020 and 2021. In 2022, the severity of the economic impact is expected to continue, especially at the beginning of the year.

3.1 Reviewing 2020 and 2021

Due to the course of the pandemic and the associated contact restrictions, it is assumed that turnover losses for **2020** will fall by **a total of -15.3 billion euros**, from 175.7 billion euros to 160.4 billion euros. This figure corresponds to a relative decline in CCIs turnover of -8.7 percent compared to the pre-pandemic year 2019. The decline in turnover is thus roughly on par with that of the manufacturing industry in Germany, which suffered a loss of -8.5 percent.⁹

In **2021**, high infection figures and restrictions were particularly prevalent in the beginning and the end of the year, leading to further **turnover losses of 11.0 billion euros**. This figure corresponds to a relative decline in CCIs turnover of -6,3 percent compared to the pre-pandemic year 2019 and a respective increase of +2,7 percent compared to the previous year, 2020.

In comparison, the subsectors belonging to the cultural industries¹⁰ are particularly affected by the pandemic (see Figure 1), both in 2020 (-13.5 %) and 2021 (-13.5 %). Total turnover fell from 94.5 billion euros in 2019 to 81.8 billion euros in 2020, stagnating at 81,7 billion euros in 2021. Compared to the creative industries¹¹, the cultural industries have been hit by the pandemic more than five times as hard. Once again, these results point to the vulnerability of cultural workers in the current crisis.

⁸ Figure does not include WZ 18.14 „Bookbinder“

⁹ <https://de.statista.com/statistik/daten/studie/241480/umfrage/umsaetze-der-wichtigsten-industriebranchen-in-deutschland/>

¹⁰ All CCIs subsectors without advertising market and software/games industry

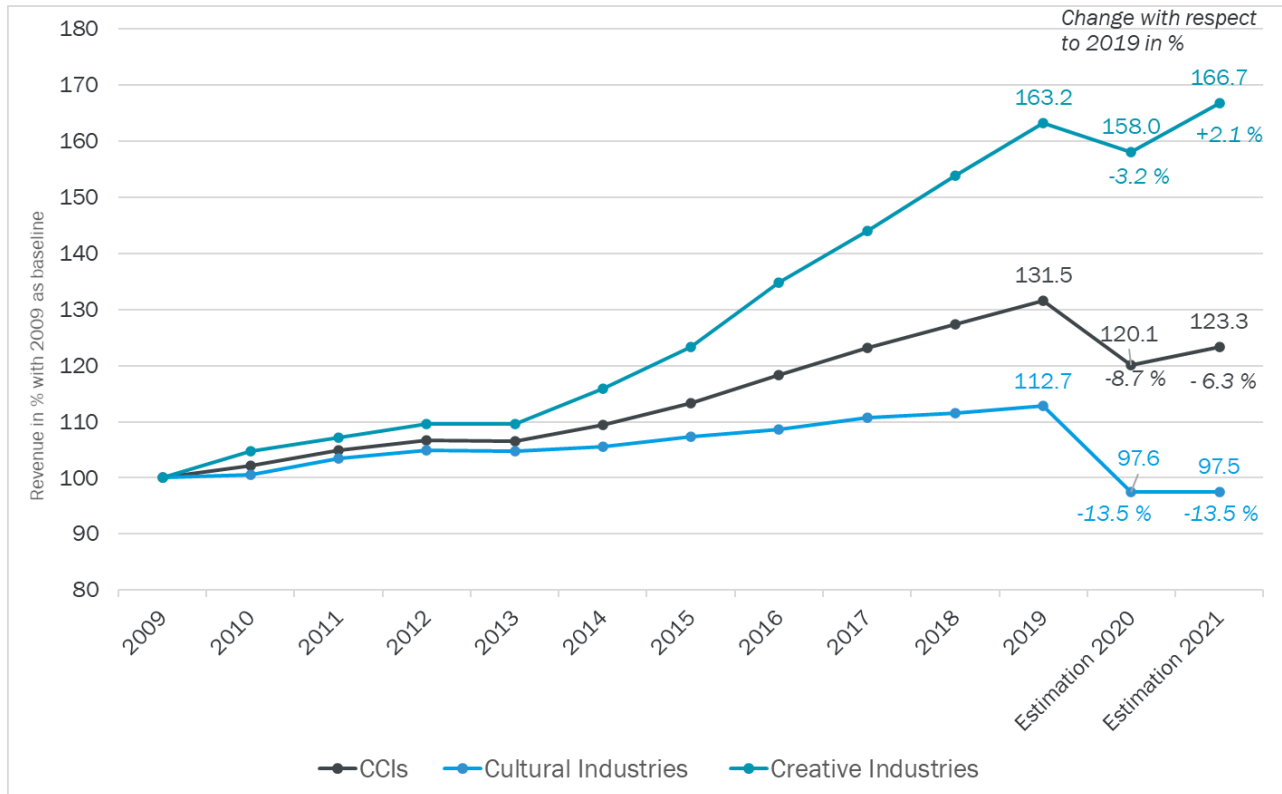
¹¹ Advertising market and software-/games industry



Figure 1: Turnover development of the CCIs until 2021

Indexation of turnover 2009 = 100. Creative Industries = software/games industry and advertising market; all other subsectors of the CCIs count into cultural industries.

Reading aid: The turnover of creative industries increased by 63.2 % from 2009 to 2019. In 2020, turnover decreased by -3.2 % compared to 2019. Thus, turnover in 2020 was still 58.0 % higher than in 2009.



Source: The Federal Government's Centre of Excellence for the Cultural and Creative Industries (2022). Calculations based on data from the Federal Statistical Office of Germany.

On the one hand, the distinct divergence within the CCIs results from ramifications of venue closures and overall bans on public events that affect the cultural sphere and in particular music, performing arts, and film, as well as visual arts with the sharpest decline in turnover. On the other hand, less severely affected subsectors benefit from increasing growth in digital business as well as a special business cycle in the construction industry. Accordingly, the software/games industry and architecture recorded only slight losses in 2020 and continued to grow in 2021, although at a lower level.

Considering our previous forecasts from spring 2020 and early 2021, the recent projections illustrate how unpredictable the course of the pandemic is proving to be: our updated estimates for 2020 assume a decline in turnover of -15.3 billion euros, putting our previous predictions below the scenario determined in spring 2021 with a loss of -22.4 billion euros. Ultimately, it shows that our most pessimistic presumption at the time assumed a short-term setback, followed by a steady upward trend in a relatively short period – at the given time, a V-shaped course has been widely assumed among observers of the crisis. Meanwhile, the pandemic has taken more of a W-shaped course, with an initial rapid recovery followed by stagnation or further collapse due to lockdowns and opportunities to open the economy anew. Looking ahead to 2022, the scenario of a “triple U” is most likely to emerge, meaning a downturn in three valleys. Irrespective of attempts to predict the



further course of the pandemic, one major concern becomes clear: the CCIs in Germany are particularly suffering from the long duration of the COVID-19 restrictions, which have lasted for three years in 2022. Reserve assets and equities increasingly deplete by protracted losses. For the past two years, turnover losses add up to -26.3 billion euros, with an expected overall turnover loss ranging between -29 billion euros and -38 billion euros in 2022.

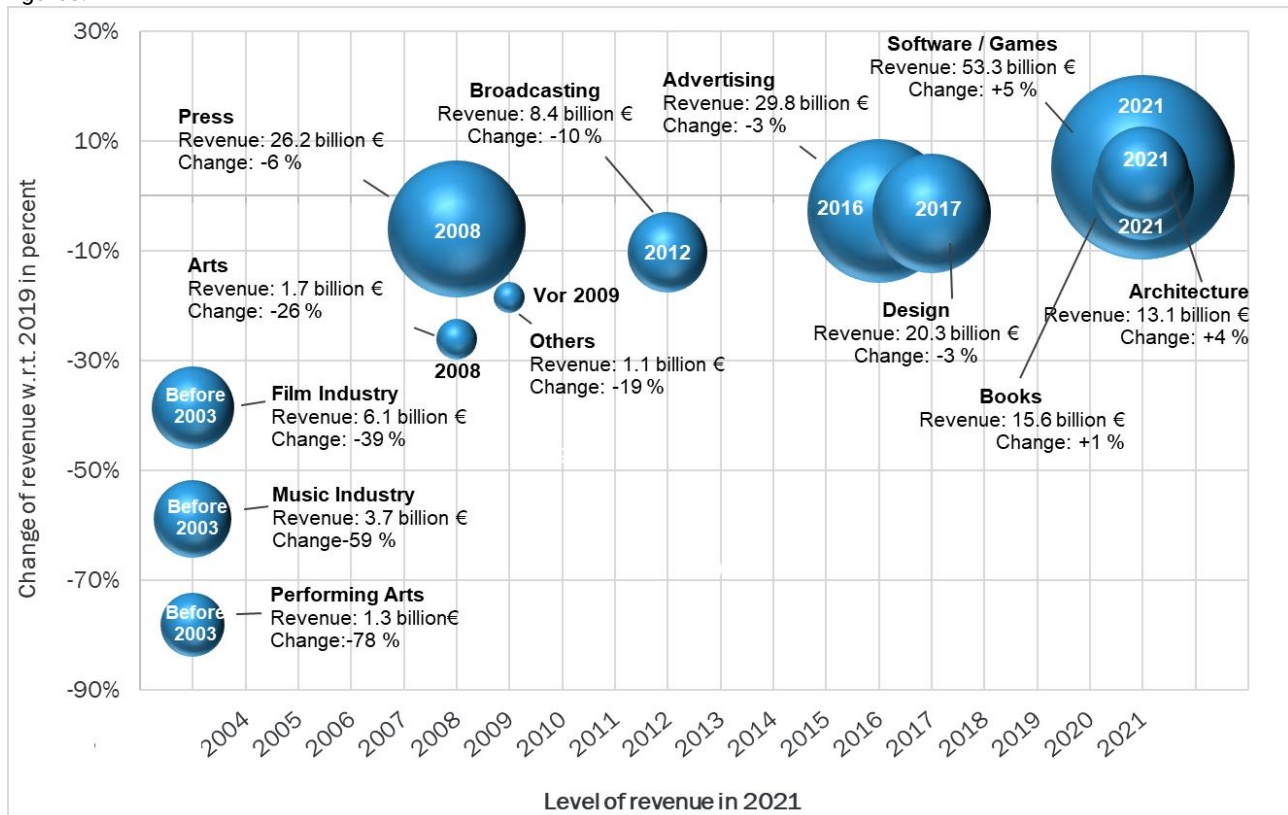
Figure 2 illustrates the subsectors' estimated turnover losses for 2021 with respect to the approximate year those subsectors fallback to. Accordingly, film (6.1 billion euros), performing arts (1.3 billion euros), and visual arts (1.7 billion euros) fall back by 18 years reaching turnover levels similar to 2003. Music (3.7 billion euros) and press (26.2 billion euros) fall back by almost 15 years. While advertisement (29.8 billion euros) and design (53.3 billion euros) fall back by only a few years, software/games (53.3 billion euros), architecture (13.1 billion euros), and books (15.6 billion euros) have already exceeded the pre-pandemic level in 2021 and grow despite the difficult conditions.

Additionally, Figure 2 shows the subsectors' respective share in total turnover of the CCIs.¹² While performing arts, visual arts, music, and film have fallen quite significantly, their share in total turnover is rather low (below 8 % each). In contrast, the shares of advertising and software/games account for over 15 % and 25% respectively. Overall, this leads to a more equalized depiction of the economic damage felt in the CCIs, falling back to a turnover level comparable to 2017.

¹² Figures for shares in total turnover refer to 2019.

Figure 2: Classification of subsectors' turnover for 2021

Reading aid: In terms of estimated turnover for 2021, design falls back to the same level as 2017 (20.3 billion euros). The bubble size of the subsectors indicates the relative share in total turnover of the CCIs. Turnover declines show rounded figures.



Source: The Federal Government's Centre of Excellence for the Cultural and Creative Industries (2022). Calculations based on data from the Federal Statistical Office of Germany.

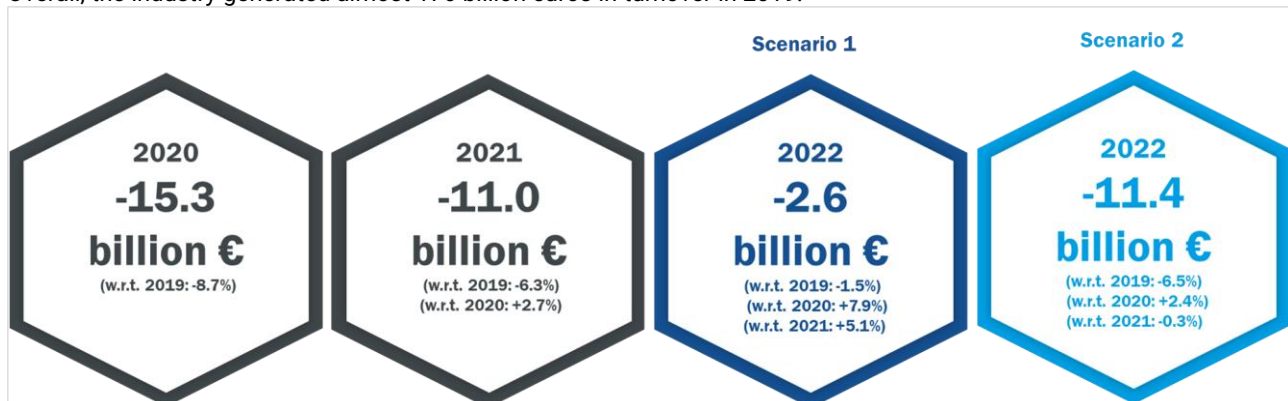
3.2 Preview 2022: Turnover losses

For 2022, it is estimated that a more severe course of the pandemic could lead to turnover losses of 11.4 billion euros (see Figure 3). This corresponds to a decline in turnover of -6.5 percent compared to the pre-pandemic year of 2019. Consequently, losses account for less than in 2020 (-15.3 billion euros; however, the CCIs stagnate at the turnover level of 2021).



Figure 3: Estimated turnover losses of the CCIs 2020-2022

Overall, the industry generated almost 176 billion euros in turnover in 2019.¹³

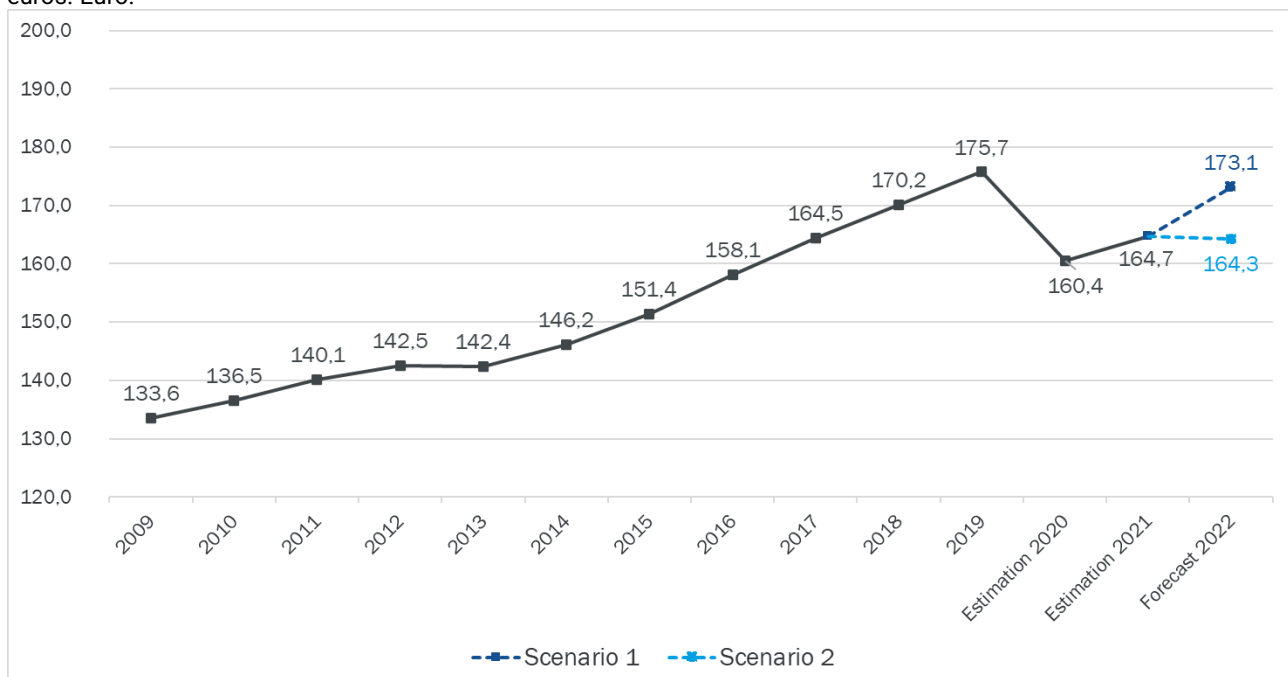


Source: The Federal Government's Centre of Excellence for the Cultural and Creative Industries (2022). Calculations based on data from the Federal Statistical Office of Germany.

Due to the dynamics and high volatility of the crisis, the potential economic burden for the CCIs varies accordingly. The potential corridor for losses ranges between 2.6 billion euros or -1.5 percent in the first scenario of *high infections figures until the end of the first quarter of 2022* and 11.4 billion euros or -6.5 percent in the second scenario of *high infection figures into the second quarter of 2022 (respectively renewed relapse in autumn/winter 2022)*.

Figure 4: CCIs turnover for 2022 in comparison to previous years

Realised turnover 2009 to 2019. Estimated turnover for 2020 and 2021 as well as forecast for 2022. Turnover in billion euros. Euro.



Source: The Federal Government's Centre of Excellence for the Cultural and Creative Industries (2022). Calculations based on data from the Federal Statistical Office of Germany.

¹³ Figures for 2020 and 2021 are based on estimates, as the most recent data is not yet available. Figures for 2022 are forecasts by the Federal Government's Centre of Excellence for the Cultural and Creative Industries.



Revenue losses for the past two years already add up to 26.3 billion euros and, depending on the scenario, could potentially increase to a total of around 29 billion euros and 38 billion euros respectively in 2022.

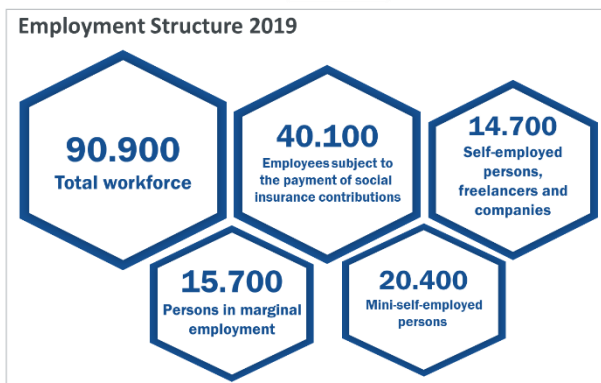
The first scenario assumes 2022 to be a year of recovery, where the CCIs could grow its turnover to 173.1 billion euros, cautiously approaching pre-pandemic levels (see Figure 4). In the second scenario, 2022 is likely to be similarly challenging year as 2021, where turnover stagnates at 163.3 billion euros.

4 Detailed reflection of subsectors

This chapter breaks down COVID-19 impact by the respective subsectors of the CCIs and presents key figures in individual subsector fact sheets: The upper part contains figures on employment and conspicuous features regarding the affectedness of the subsectors and structural challenges. Key employment figures provide for an orientation of the pre-pandemic employment structure; data is based on the Federal Statistical Office and the Federal Employment Agency.

The graph in the middle of each profile depicts the turnover trend since 2009 and projections on turnover losses for 2022 according to the scenario analyses. Linear marks within the graph allow for retracing of setbacks in turnover levels as well as the respective year.

The lower part of the fact sheet presents focal findings and observations that describe the pandemic course based.

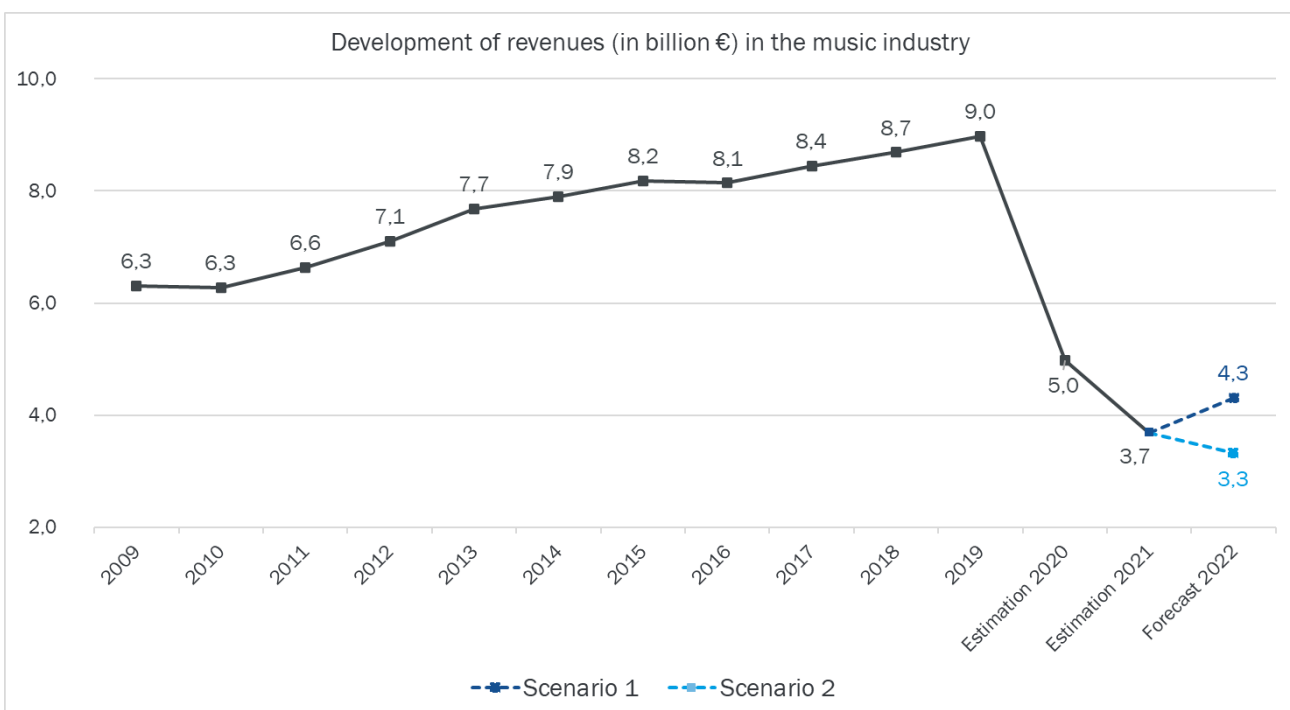


Characteristics

Rapid growth in audio streaming, severely affected by event cancellations, turnover losses from copyright collectives, retail closures.

Self-employed artists were hit the hardest. Professionals in the event sector migrating to other sectors.

Other issues: Supply chain problems for musical instruments, monetarisation of digital content.



Conclusion

2020: Drastic decline in the first year of the pandemic: -44 % w.r.t. 2019.

2021: Deterioration of the situation in the second year: -59 % w.r.t. 2019; -26 % w.r.t. 2020.

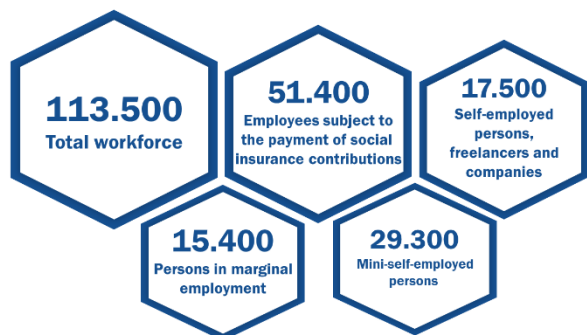
2022: In a worse scenario the market further collapses (-10 % w.r.t. 2021; -63 % w.r.t. 2019). In a second scenario the decline is leveling off between 2020 and 2021 (-52 % w.r.t. 2019).

Overall: The music industry is hit particularly hard by the restrictions of the pandemic. Apart from performing arts, no other subsector has been more affected in 2020 and 2021.





Employment Structure 2019



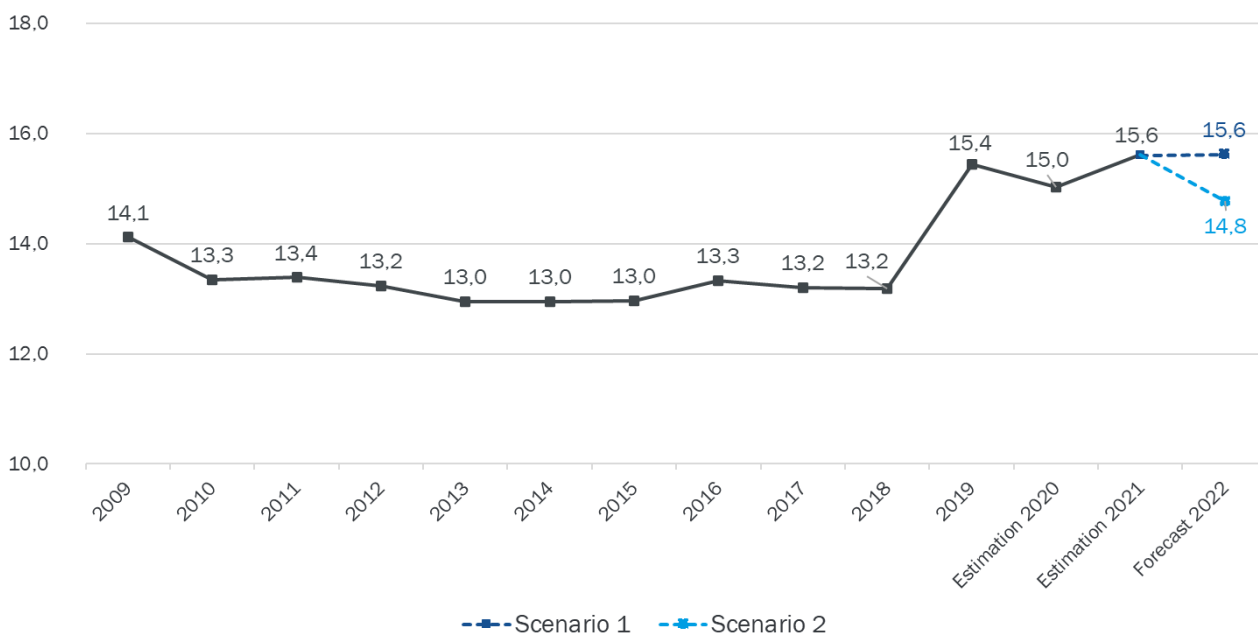
Characteristics

Demand for books remains on a high level. Stationary bookstores have been affected by store closures and revenue is increasingly shifting towards online retailing.

While the digital segment with e-books and audio books is growing, so is the discussion about fair licensing agreements and payment.

Increasing costs due to supply bottlenecks for paper and high energy prices.

Development of revenues (in billion €) in the book market



Conclusion

2020: After a strong growth from 2018 to 2019, book market sales remain at a high level (-3% w.r.t. 2019).

2021: In the second year of the pandemic, a modest improvement could be expected in comparison to the pandemic level: +1 % w.r.t. 2019; +4 % w.r.t. 2020.

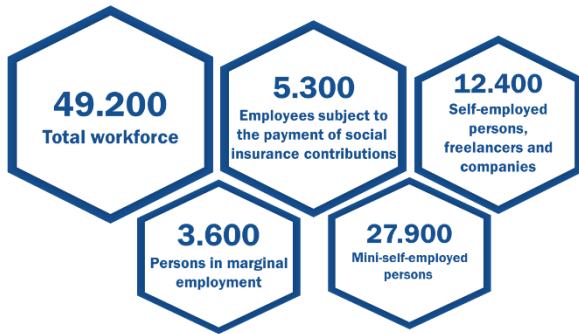
2022: In the first scenario, the submarket remains at the 2021 level (+1% w.r.t. 2019). In the second scenario, sales decline slightly in 2022 (-5% w.r.t. 2021; -4% w.r.t. 2019).

Overall: The book market is less affected by pandemic restrictions than originally assumed. In 2021, the subsector is expected to have exceeded pandemic levels. In 2022, the level could be maintained, with the possibility of a slight decrease.





Employment Structure 2019



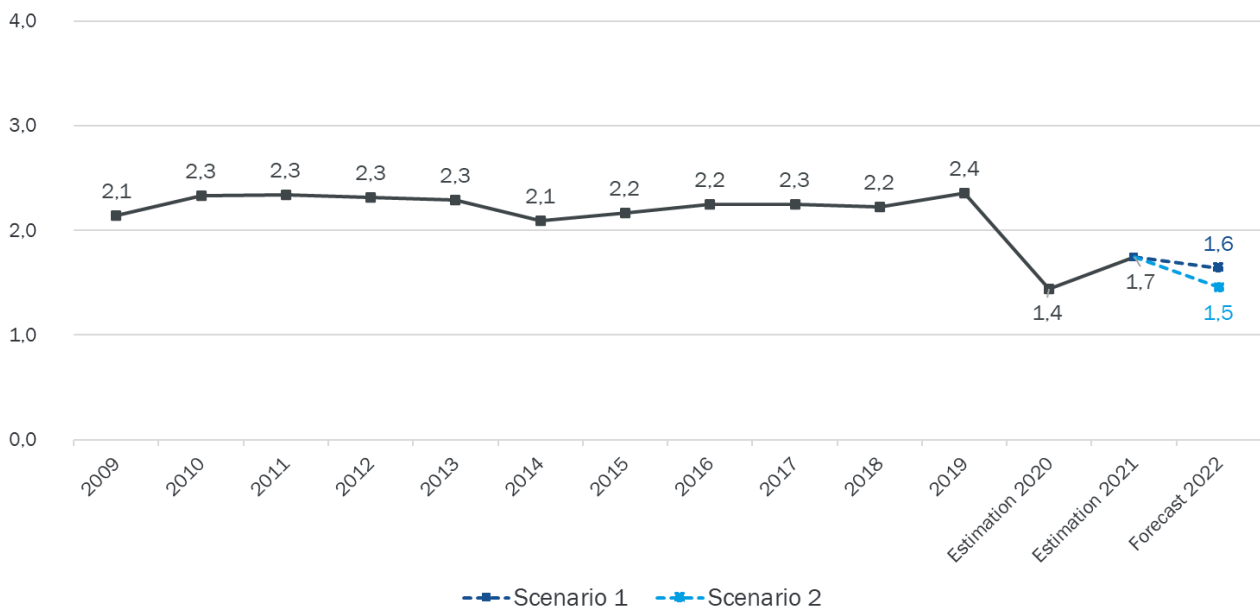
Characteristics

Unknown artists without established buyers were facing a tough situation. The cancellation of art fairs led to a lack of contacts and networking opportunities.

Hardly any new galleries were founded: This caused a decline in infrastructure and higher competition for visibility among artists.

Digital show rooms and non-fungible token (NFT) sales* will establish themselves alongside traditional galleries.

Development of revenues (in billion €) in the art market



Conclusion

2020: Severe drawback in the first year of the pandemic: -39 % w.r.t. 2019.

2021: Improvement of the situation in the second year: -26 % w.r.t. 2019; +21 % w.r.t. 2020.

2022: In the second scenario, a double-digit drop occurs in 2022 (-16 % w.r.t. 2021; -38 % w.r.t. 2019). In the first scenario, the drop is milder (-30% w.r.t. 2019; -6% w.r.t. 2021) and stagnates at the 2021 level.

Overall: Especially in 2020 this subsector was strongly affected by the restrictions of the pandemic. In 2021, a moderate catch-up is assumed, which stagnates in 2022 in the best-case scenario. In the second scenario, sales collapse again slightly.

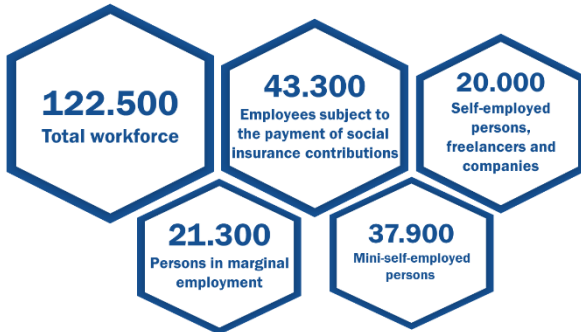
* Non-fungible tokens (NFTs) are non-replaceable digitally protected objects. This allows digital files or content such as music or computer-generated artwork to be marked as individual items (<https://fh-hwz.ch/news/was-ist-ein-nft/>).



Film industry



Employment Structure 2019



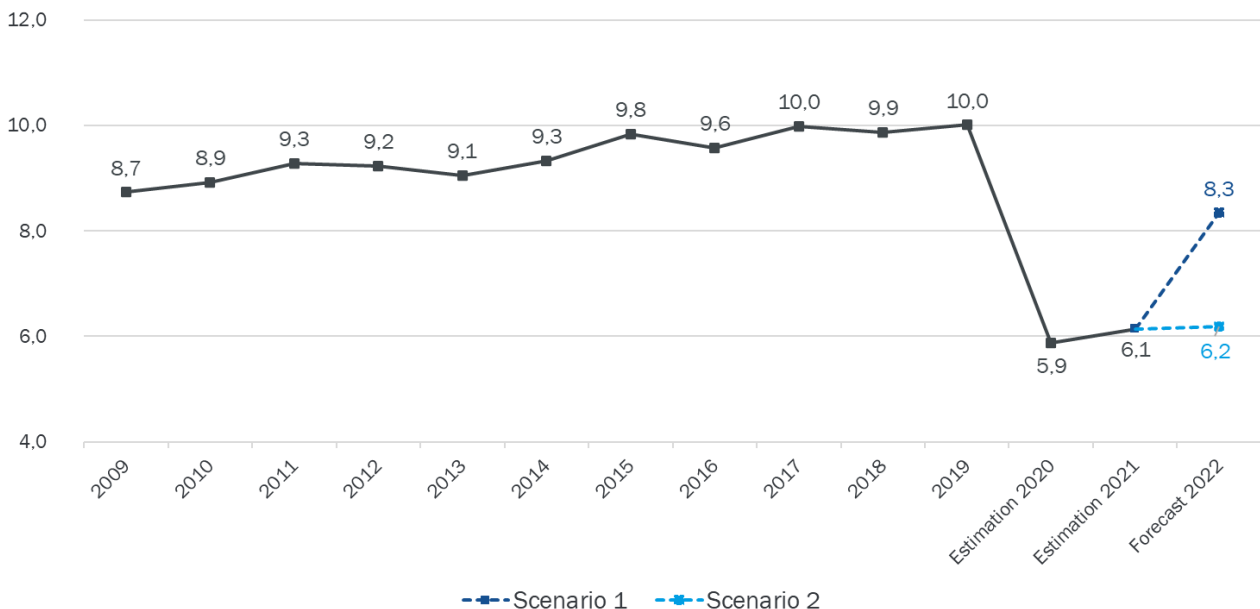
Characteristics

Catch-up effects concentrating on event films.

High competition for employees and shortage of skilled workers in film production.

Other topics: High demand for films, changing viewing habits, sustainability.

Development of revenues (in billion €) in the film industry



Conclusion

2020: A drop could be observed in the first year of the pandemic: -41 % w.r.t. 2019.

2021: In 2021, only a slight improvement of the situation was achieved: -39 % w.r.t. 2019; +5 % w.r.t. 2020.

2022: The first scenario predicts a stronger recovery (+36 % w.r.t. 2021; -17 % w.r.t. 2019). In the second scenario only a moderate increase of revenues is assumed in 2022 (+1 % w.r.t. 2021; -38 % w.r.t. 2019).

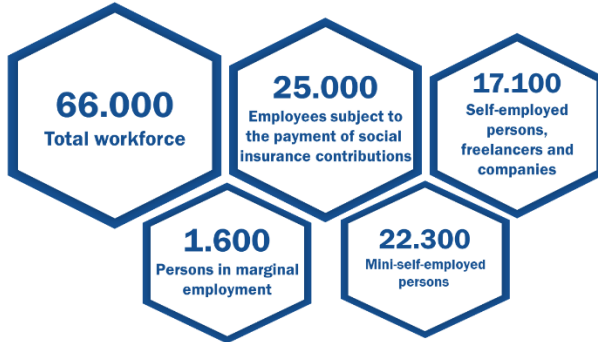
Overall: The film industry was strongly affected by the restrictions of the pandemic in 2020. In 2021, a slight catch-up is assumed, which continues in 2022 in both scenarios. In the better scenario, a significant improvement is achieved. However, the pandemic level is not yet reached.



Broadcasting industry



Employment Structure 2019



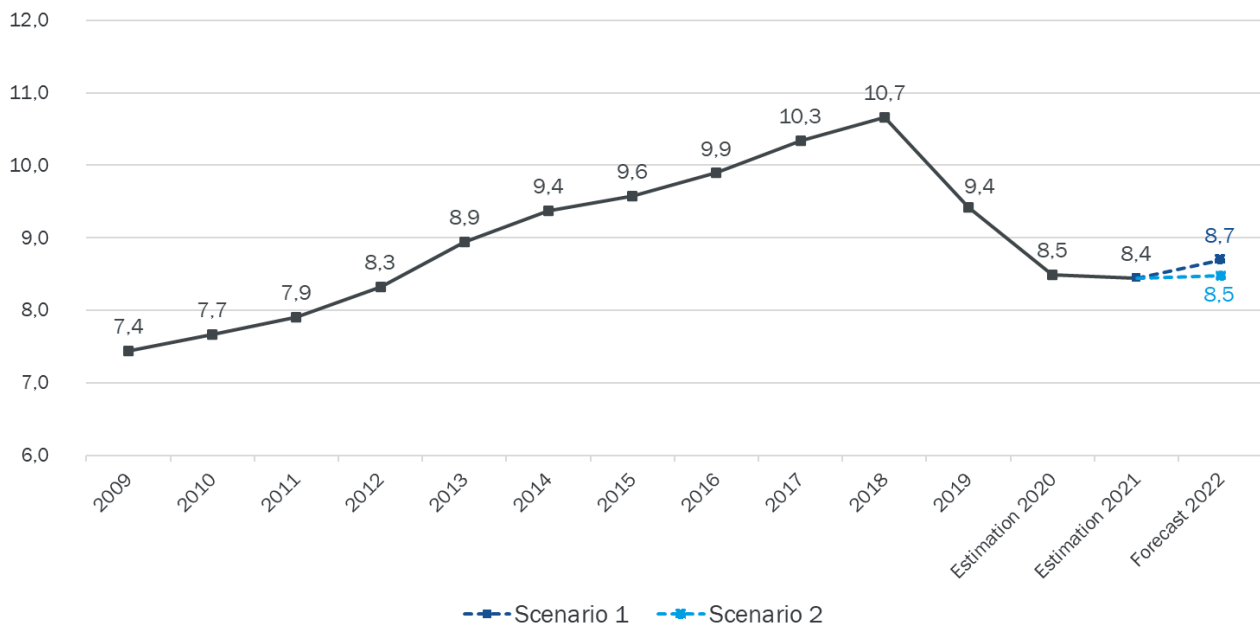
Characteristics

Subsector heavily dependent on advertising. Declining regional and local advertising revenues as an obstacle to growth.

Shift in paid audio content towards large streaming portals. High demand for video content.

Uneven competitive conditions: Competition from public broadcasters and mega-platforms.

Development of revenues (in billion €) in the broadcasting industry



Conclusion

2020: Substantial drop in the first year of the pandemic: -10 % w.r.t. 2019.

2021: No recovery in 2021: -10 % w.r.t. 2019; -1 % w.r.t. 2020.

2022: In the first scenario the subsector recovers and approaches the pre-pandemic level (+3 % w.r.t. 2021; -8 % w.r.t. 2019). In the second scenario revenues stagnate in 2022 (+/-0 % w.r.t. 2021; -10 % w.r.t. 2019).

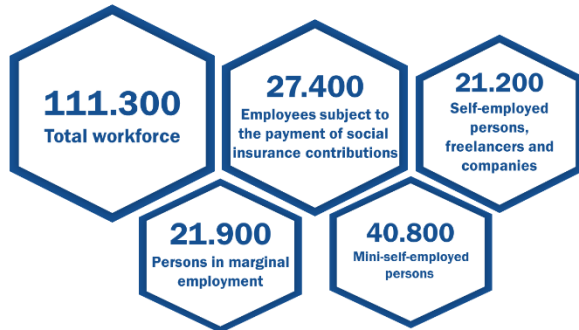
Overall: The turnover of the broadcasting industry fell in 2020 in the wake of the pandemic. In the following two years, turnover is expected to stagnate. In a better scenario, the pandemic level can be approached.



Performing arts



Employment Structure 2019



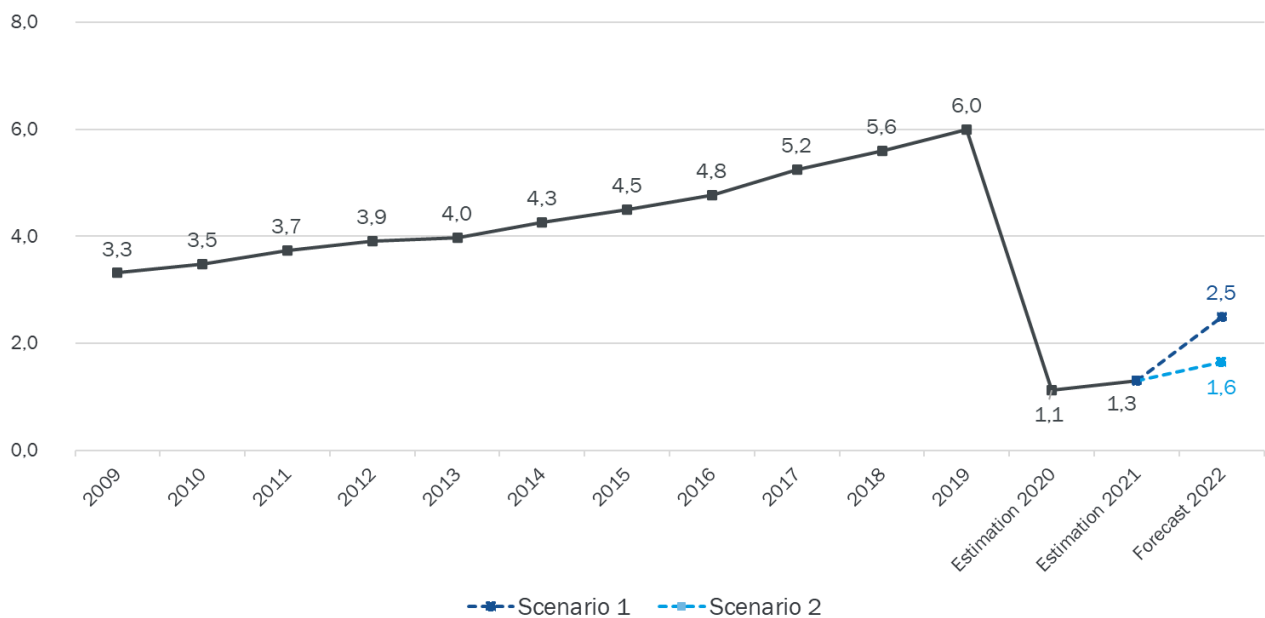
Characteristics

Subsector most affected by event cancellations, massive bottlenecks in production and a collapse in tours.

Self-employed and multi-employed people are hit the hardest.

Due to the loss of employees, securing job profiles is a challenge in the future.

Development of revenues (in billion €) in the performing arts market



Conclusion

2020: Dramatic decline in the first year of the pandemic: -81 % w.r.t. 2019.

2021: Only a minor improvement in the second year of the pandemic: -78 % w.r.t. 2019; +16 % w.r.t. 2020.

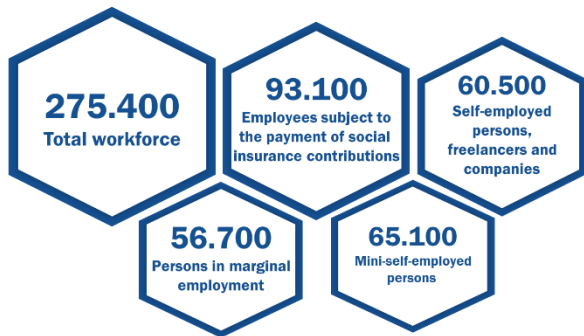
2022: Compared to the previous year, a relaxation of the situation is assumed. In the first scenario: -58 % w.r.t. 2019; +91 % w.r.t. 2021. In the second scenario: -73 % w.r.t. 2019; +26 % w.r.t. 2021.

Overall: Compared to other sectors, the subsector of performing arts showed the sharpest decline of turnover in 2020. The modest improvement assumed for 2021 and 2022 cannot even attain half of the pandemic level.



Design market

Employment Structure 2019



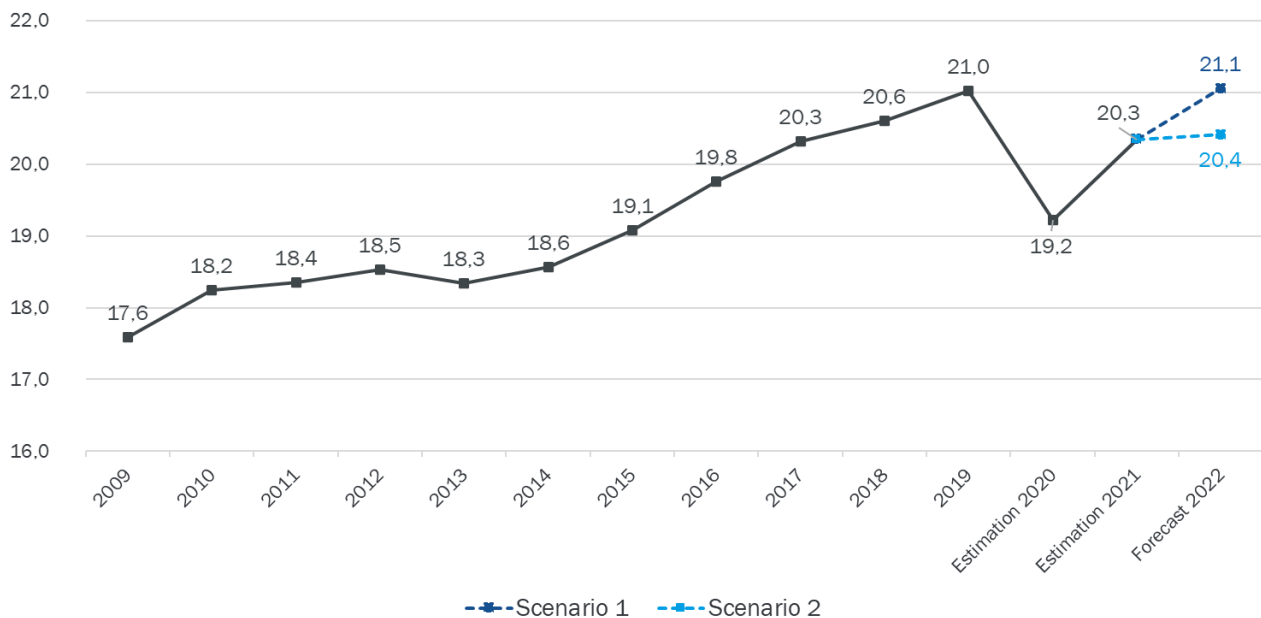
Characteristics

The higher the degree of digitalisation and interconnectedness in working, the better creative professionals have managed to navigate the crisis.

Automation of processes through (among other things) AI-assisted design, consultancy skills are becoming more relevant in design professions.

Supply chains: fashion labels are focusing on direct-to-consumer, made-to-order and reshoring.*

Development of revenues (in billion €) in the design industry



Conclusion

2020: Decline in the first year less severe than originally expected: -9 % w.r.t. 2019.

2021: Moderate improvement in the second year of the pandemic: -3 % w.r.t. 2019; +6 % w.r.t. 2020.

2022: In the first scenario the subsector can reach the pre-pandemic level (+4 % w.r.t. 2021; +/-0 % w.r.t. 2019). In the second scenario the increase in 2021 is followed by stagnation (+/-0 % w.r.t. 2021; -3 % w.r.t. 2019).

Overall: The design economy is less affected by the restrictions of the pandemic than initially expected. A catch-up process can already be assumed in 2021. In 2022, the pre-pandemic level will be reached in the best case.

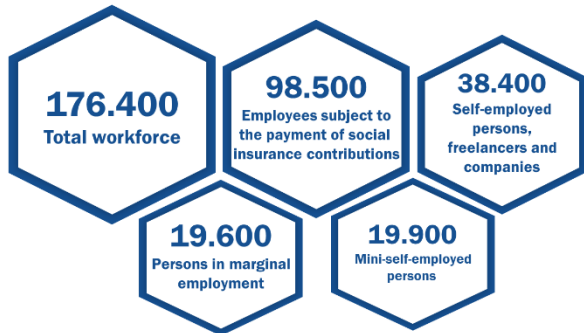
*Direct-to-consumer= Selling directly to customers without going through intermediaries;
Made-to-order= product is only manufactured when ordered; reshoring = returning production to Europe.



Architecture



Employment Structure 2019



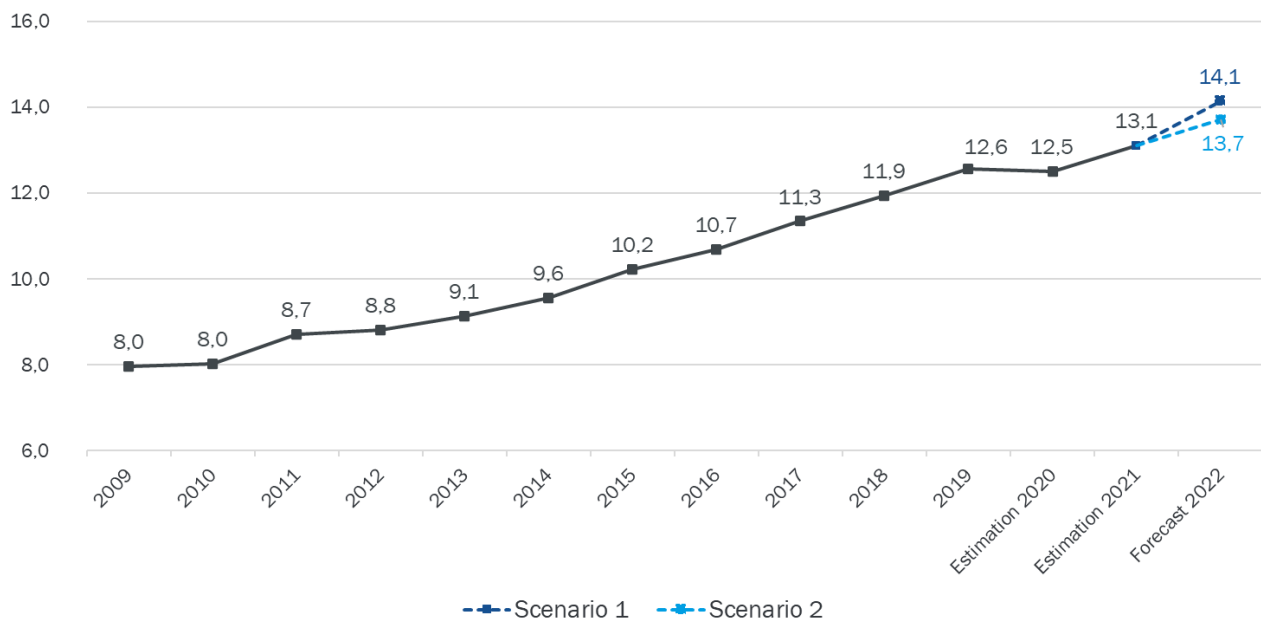
Characteristics

After a mild COVID-19 shock in 2020 the subsector is growing, driven by a boom in the construction industry. The backlog demand is high.

Obstacles to growth are the lack of skilled workers as well as supply bottlenecks and heavy price increases for materials. There is a trend towards office mergers to allow for further growth.

Green transformation: Working in existing buildings & circular construction are being increasingly implemented.

Development of revenues (in billion €) in the architecture business



Conclusion

2020: Slump in the first year of the pandemic clearly less severe than expected : -0,5 % w.r.t. 2019.

2021: Positive development in the second year of the pandemic: +4 % w.r.t. 2019; +5 % w.r.t. 2020.

2022: A further increase in revenues is expected in 2022. In the first scenario: +8 % w.r.t. 2021; +13 % w.r.t. 2019. In the second scenario: +5 % w.r.t. 2021; +9 % w.r.t. 2019.

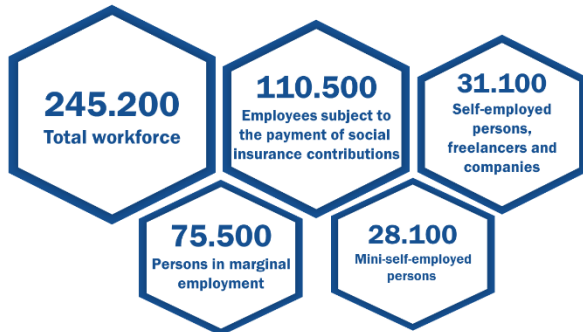
Overall: In 2020, architecture is less affected by the restrictions of the pandemic than originally assumed. A catch-up process started in 2021 and growth is anticipated to continue in 2022.



Press market



Employment Structure 2019



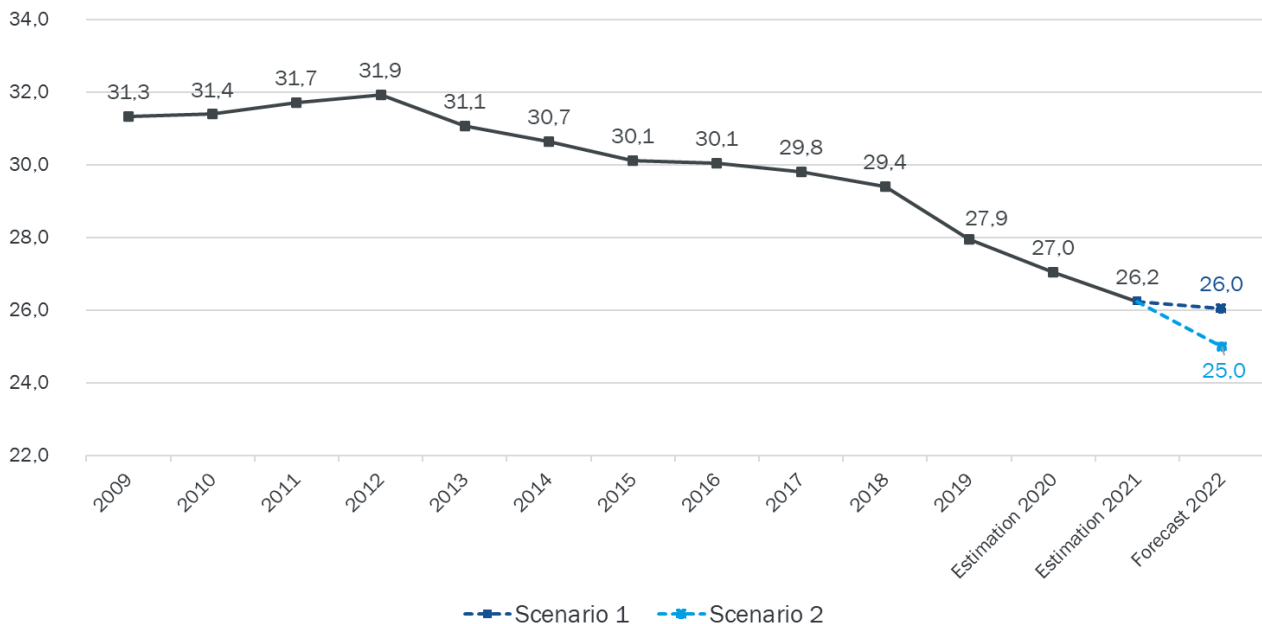
Characteristics

The need for secure information has risen during the crisis. Customer loyalty through subscriptions is high.

Publishers who are dependent on local advertising are strongly affected, as are freelancers.

Obstacles are rising paper prices, a shortage of skilled delivery staff and the changing media usage of young people.

Development of revenues (in billion €) in the press business



Conclusion

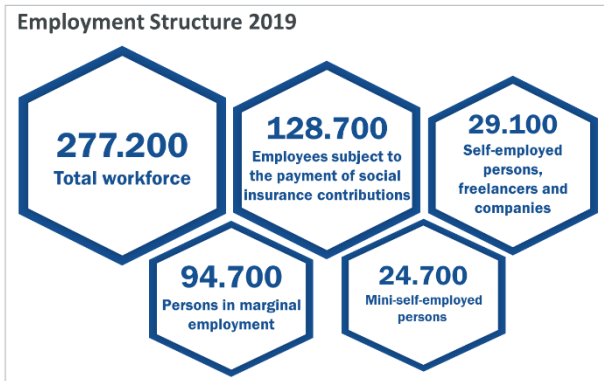
2020: Decrease observed in the first year of the pandemic: -3 % w.r.t. 2019.

2021: Decline at the same level evident in 2021: -6 % w.r.t. 2019; -3 % w.r.t. 2020.

2022: In the first scenario, the contraction increases (-5 % w.r.t. 2021; -11 % w.r.t. 2019). In the second scenario, the momentum weakens (-1 % w.r.t. 2021; -7 % w.r.t. 2019).

Overall: A steady decline in the turnover of the press market is assumed over the years.



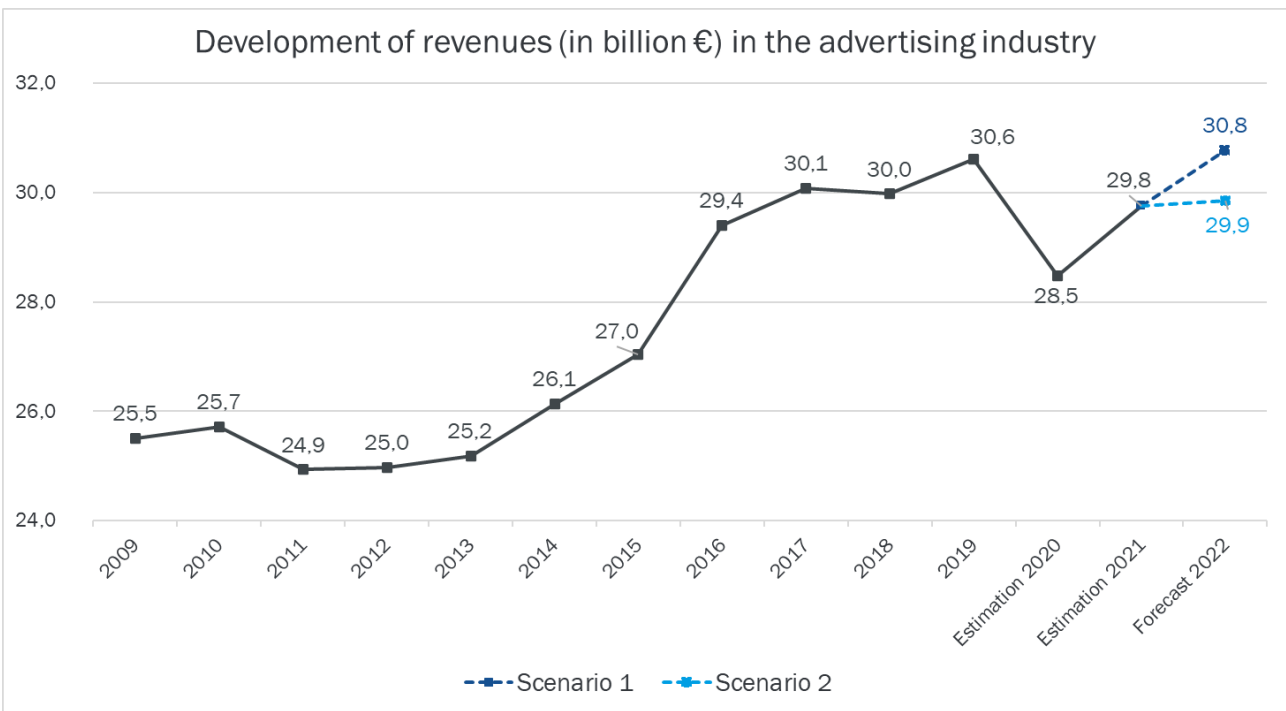


Characteristics

Digital advertising partially compensates for the loss of traditional sales channels (print, TV, radio, cinema). Asymmetrical growth of digital advertising benefits the mega-platforms.

The lack of skilled workers is an obstacle to growth for agencies. People with digital skills are needed.

In the long term the advertising industry will become more fragmented and specialized.



Conclusion

2020: Slump in the first year of the pandemic: -7 % w.r.t. 2019.

2021: Modest improvement in the second year of the pandemic: -3 % w.r.t. 2019; +5 % w.r.t. 2020.

2022: According to the first scenario, the subsector can reach the pre-pandemic level (+3 % w.r.t. 2021; +1 % w.r.t. 2019). In the second scenario, stagnation follows in 2022 compared to the previous year (+/-0 % w.r.t. 2021; -3 % w.r.t. 2019).

Overall: Especially in 2020, the advertising market was affected by the restrictions of the pandemic. A catch-up process is already assumed for 2021. In the first scenario, the pre-pandemic level will be reached again in 2022.



Software/ games industry



Employment Structure 2019



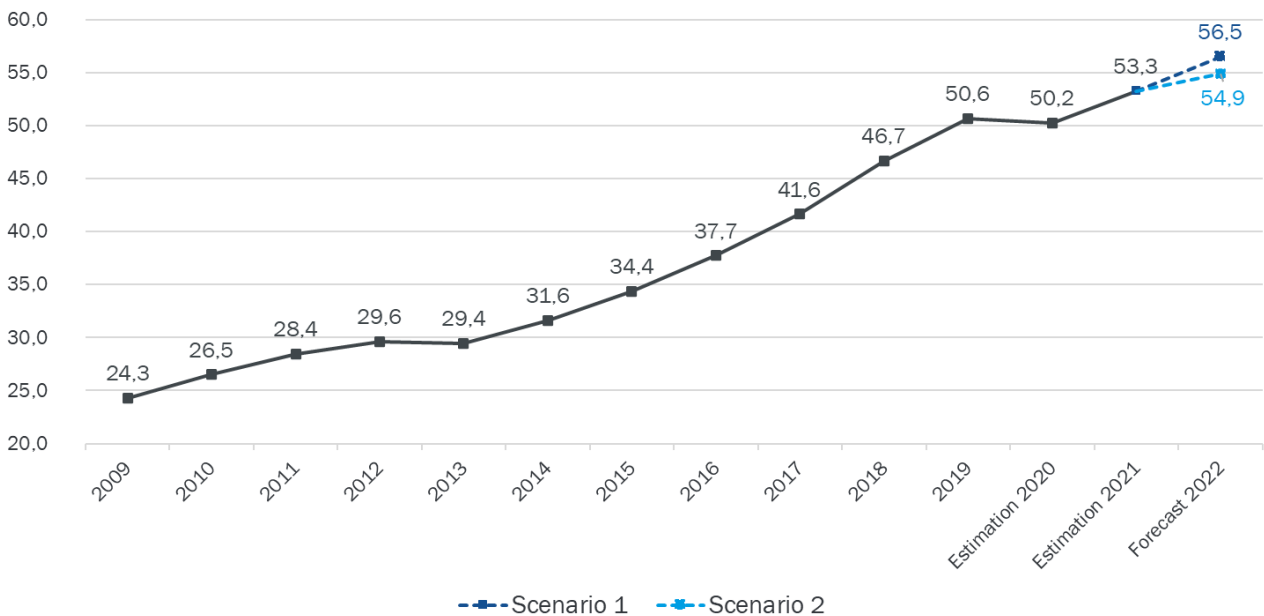
Characteristics

After the mild COVID-19 shock in 2020, this subsector is growing. Games are developing dynamically, albeit somewhat slower than the global market.

Limiting factors are competition for labour, lack of exchange at trade fairs, delays in releases.

Small studios with small marketing budgets have struggled to attract attention.

Development of revenues (in billion €) in the software/games industry



Conclusion

2020: Minor slump in the first year of the pandemic: -1 % w.r.t. 2019.

2021: Exceeding pre-pandemic level in the second year of the pandemic: +5 % w.r.t. 2019; +6 % w.r.t. 2020.

2022: In 2022, this growth is anticipated to continue. In the first scenario: +3 % w.r.t. 2021; +8 % w.r.t. 2019. In the second scenario: +6 % w.r.t. 2021; +12 % w.r.t. 2019.

Overall: The software/games industry was less affected by the restrictions of the pandemic in 2020 than originally expected. Growth can even be assumed for 2021, which will continue in 2022.



5 Structural changes and perspectives

While the last chapter comprehensively discussed the impact of COVID-19, the following chapter focuses on further structural challenges CCI are increasingly facing aside from the pandemic. Based on interviews with industry representatives and subsector specific publications the following gives a general overview of the most pressing topics being discussed.

Securing skilled workers¹⁴

One of the key challenges for the CCIs continues to be the security of its skilled workforce. Just as for the overall economy, supply shortages in skilled labour remains a major barrier for the long-term development perspectives of the CCIs in Germany. Sharing its characteristics with other service industries, the workforce builds the backbone of the industry, for this reason strategies for promoting skilled labour and young talents are always a matter of securing the fundamentals of its sectoral structure.

Structural challenges in short and medium-term

In the context of the pandemic, two main observations could be made regarding the situation of skilled labour in CCIs:

The risk of losing skilled labour to the pandemic increased particularly in event-related subsectors. According to industry representatives, part-time employment, and migrations from CCIs into vocational fields considered to be safer increased. A growing number of artists and self-employed are giving up their jobs and turning to new business fields. Likewise, difficulties in securing skilled labour exists regarding venues. Accordingly, cinemas are forced to maintain operations, sometimes unprofitable, just as to continue employment and avert migration of their skilled staff. These developments need to be treated cautiously, especially with regard to post-pandemic times. On the one hand, small-scale structures of the CCIs are threatened to break away, and on the other hand the economic viability of venues is being jeopardised. In the short and medium term, this potentially has profound implications of the industry's ability to recover from the pandemic.

At the same time, it can be observed that the immanent shortage of skilled labour in subsectors, such as architecture, advertising, and software/games causes a strong incentive for companies to retain employees despite partial economic bottlenecks. In many areas of production, skilled workforce is highly specialised and therefore difficult to compensate (e. g. animated film, architecture, games development). In the design industry, the "war for talents" is so pronounced that agencies are holding on to their skilled workers despite massive drawdowns in turnover in order to prepare for a potential post-pandemic boom in the economy.

¹⁴ Detailed information on the topic can be found here: [Dossier_Nachwuchs-und-Fachkrafte-der-KKW_Dezember2021.pdf \(kreativ-bund.de\)](#)



The inequalities between the cultural industry and the creative industry as detailed in chapter 3.1 likewise become prevalent with respect to the labour situation, affecting the post-pandemic trajectories in the short to medium-term.

Structural challenges in long-term

Regardless of the pandemic, digitalisation plays a huge role for long-term perspectives of the workforce in CCIs, confronting it structural challenges, such as the qualification of the workforce and competition for skilled workers between CCIs and the overall economy.

Various studies indicate that employment in occupations related to creativity and culture will likely continue to grow at above-average rates.¹⁵ This is because the overall demand for creative competences and skills continues to increase,¹⁶ while the potential for creative occupations being substituted by current technology and automation remains relatively low.¹⁷ These trends imply that the overall demand for skilled workers in the CCIs will increase. A large part of this growth will concentrate in growth areas related to digitalisation. A particular need for skilled workers is expected in areas such as software/games, film, and TV (in particular, visual effects, VFX, and animation)¹⁸. Furthermore, great importance is attached to those areas that require *createch skills*¹⁹ (e. g. digital content, design, and internet applications). The progressive establishment of AI-based applications and web3/blockchain in creative practices also presupposes an increased need for skilled workers at the interface to CCIs and IT. In sum, this implies that the growing concentration of skilled labour demand related to digitalisation is likely to continue in future, especially in the software/games industry.

In addition, creative enterprises will have to face intense competition for skilled workers in the future. Since the demand for creative and tech-savvy workers is increasing in the overall economy, creative enterprises will have to compete more strongly with enterprises outside the CCIs. Thereby, enterprises of the CCIs could compensate for competitive disadvantages (e. g. in wage) through its leading role non-wage related benefits and working conditions. When looking for suitable jobs, younger generations attach greater importance to aspect such as flat hierarchies, a high degree of personal responsibility and autonomy, the meaningfulness of one's own work and diversity in the company. Thus, these potentials give competitive advantage to CCIs, which could increase the attractiveness of the industry for young talent.

¹⁵ E. g. EDGE Foundation (2018): Skills shortages in the UK economy, McKinsey Global Institute (2020): The future of work in Europe

¹⁶ PEC (2020): Creative Skills Monitor

¹⁷ The potential for substitutability is regularly surveyed by the IAB Forum

¹⁸ Soilsbury und Bakhshi (2019): What do we know about migrant and skills needs of UK creative businesses? Findings from the Creative Industries Council Migration and Skills Survey.

¹⁹ PEC (2019): The Creative Digital Skills Revolution.



Rising risks in value chains

COVID-19 revealed the fragility of globalised trade. The chip shortage in large parts of the manufacturing industry exemplified how strong value chains are dependent on the production in other countries. Products become more expensive and delivery times become less predictable putting enterprises at higher economic risks. Despite the pandemic, international trade conflicts and political unrest endanger globalised value chains.

Supply bottlenecks and uncertainties can also be observed in the value chains of CCIs. Architecture is lacking building materials, and the supply side for hardware does not meet demands in the software/games industry. The music industry suffers from shortage of supply for musical instruments and vinyl. The press, book market, design, and advertising face paper shortage and rising prices, in parts over 50 percent. Complicating the situation further, rising costs for energy, labour, and logistics create higher burdens for businesses. In some cases, import costs increase by a factor of 10 to 15 due to higher container prices, making it unprofitable for distributors to stay in business in the medium and long-term. What is more, those costs cannot be passed on to consumers, as an exorbitant increase in end consumer costs will likely lead to sales problems. Currently, cost overruns are borne by industrial partners of the CCIs, although this not affordable in the long run.

This development, although only partly caused by the pandemic, has a profound effect on the entire value chain. Considering rising inflation, these factors have a negative impact on consumer sentiments, as reported by some of the subsector representatives.

At the same time, new approaches are being sought to counter value chain related uncertainties, reduce rising production costs, and simultaneously contribute to sustainability. One of the topics under discussion is the concept of reshoring, which describes the resettlement of production sites in Europe. Subprocesses and entire production sequences have been continuously outsourced to low-wage countries (offshoring), from 2010, however Europe has seen an increased trend towards reshoring its production sites. The reason being rising wages in low-wage countries and falling labour costs shares in industrialised countries due to increased automation and digitalisation of production processes as well as lower transport costs. As a result, production in Europe is becoming more attractive, as savings in transport costs make production comparably cheaper than abroad.²⁰ However, it should be noted, that there are also development barriers along the way to reshoring production sites in Europe, such as establishing production infrastructure, the material supply, and innovation ecosystems for the expansion and further development of products would have to be resettled. Furthermore, systematised value chains and seamless logistics all the way to the end consumer are required (especially in e-commerce).

²⁰ Fairlis Magazin (2020): Umweltvorteile von Reshoring (online: <https://www.fairlis.de/post/umweltvorteile-von-reshoring-zurueck-zu-made-in-germany/#>)



Transformation towards more sustainability

Further changes in the CCIs are on the horizon regarding the transformation towards a more sustainable economy. In line with the Paris climate goals and the European Union's Green Deal, the ecological footprint of the economy must be reduced; this includes in CCIs.

In this context, the CCIs play an important role as an initiator of innovation, providing practical examples on how to incorporate sustainable approaches in use and consumption of resources along the entire value creation cycle. These approaches are primarily developed and tested within their own subsectors, while showing perspectives on how sustainability can be thought of in the overall economy. Often it is small businesses that are the driving force of sustainability.

In architecture, circular building is an approach to thought processes within a holistic framework, putting the idea of recycling at the centre. Recyclable building materials, a sustainable construction method, the avoidance of emissions, and the reuse of materials are guiding principles for implementing new constructions. So too, is a critical reflection of whether new constructions are necessary in the first place, or rather more sustainable alternatives, like the modernisation of existing building stocks, is a better fit. Thereby, innovative tools for implementation come from the subsector itself. With regard to the recycling of materials, architecture relies on its own digital platform infrastructure to make searching and trading of specific components (especially in the restoration of old building stocks) more efficient, cutting bottlenecks for materials and reintroducing them into the building processes. The "New European Bauhaus" programme of the European Union provides important impulses in this regard. It promotes projects at the interface of architecture, art, and design, which are dedicated to sustainable transformation in cities and communities.

In the fashion industry, entire business models start from the idea of sustainability. The made-to-order model is a manufacturing principle, that combines a strong focus on demand-orientation with an ecological and domestic approach to production. As soon as a minimum number of orders is reached, production begins. This way, overproduction, which is a common problem in the fashion industry, can be prevented, while eliminating long delivery routes from overseas.

Further examples can be found in the art market, e. g. with the Gallery Coalition, that works on systems for waste reduction and recycling of materials on exhibition logistics. In the press market, publishers examine new ways to make online papers leaner to reduce energy consumption and CO₂. In the music industry, festivals are experimenting with hydrogen generators as an attempt to move closer to climate neutrality. Further steps are taken to support climate neutrality in the film industry, where the German Federal Film Board subsidises costs pro rata for sustainable related consultancy services. In addition, cross-market initiatives have been created, including the 'Aktionsnetzwerk Nachhaltigkeit', which, in corporation with the Chamber of Industry and Commerce, has launched professional trainings for transformation managers to help shape sustainability in the cultural sphere.

Digital transformation

Accelerated by the pandemic, digital transformation has arrived in all subsectors of the CCIs, influencing business models and the nature of work. For many businesses, COVID-19 exposed structural challenges related to digitalisation.

Changing consumer preferences due to the pandemic, has further accelerated the ongoing **shrinkage of physical goods in favour of digital goods**. In particular, sales in streaming related services in music, film, e-books, but also online advertising and games, grew more dynamically than in physical segments. In the music industry, digital sales increase by 20.3 percent in 2020, while physical music sales declined by 11.7 percent.²¹ In advertising, the ad business is further shifting towards digital formats. Net advertising revenues in the digital sphere increased by 10.7 percent in 2020, while traditional print ads shrank by 13.4 percent. Outdoor advertising (-19.4%) and cinema advertising (-78.8%) were hit even harder than print.²² Big tech-players, such as Google and Facebook, benefit the most from these structural shifts in advertising. Consumer-driven shifts towards digital formats can also be observed in the book market and press market, where physical sales have been steadily declining. In this sense, the pandemic accelerates and consolidates the structural upheaval that has been taking place in the CCIs for years.

As a result, structural challenges at business model level arise in two ways:

1. Legal questions concerning a fair remuneration and licensing of actors with traditional business models become more acute as the revenue gap between digital and physical business widens. In this regard, at the European level, the Digital Market Act aims at creating a fairer environment for competition among all market participants.
2. Due to a lack of innovation in developing new customer groups, structural challenges at the business model level continue to threaten CCIs. In the transition towards a digital economy, businesses from the analogue and linear world face big challenges competing with the market leaders dominating the platform economy. This transition can only succeed under the condition that digital products already existing in the market are not simply copied by CCIs, but rather reimagined and developed further to add new value for consumers. In the context of platforms, for example, it can be seen that the curation of content can serve as a unique selling point for new business models, representing a more exclusive alternative to algorithm-based recommendations on platforms.

Finally, the transition of the internet economy from a centralised platform structure (Web2) to the decentralised and blockchain-based concept of Web3 forms a new field for innovation and business model development for CCIs. Web3 provides for an additional layer of infrastructure to the internet, on which users have more control and authority over their data. Thus, Web3 is distinct from the current Web2 internet, in which data and content are commercially exploited by big tech companies.

²¹ BVMI (2021): Musikindustrie in Zahlen 2020. (online: https://www.musikindustrie.de/fileadmin/bvmi/upload/06_Publikationen/MiZ_Jahrbuch/2020/BVMI_Musikindustrie_in_Zahlen_2020.pdf)

²² ZAW: Netto-Werbeinnahmen erfassbarer Werbeträger in Deutschland 2019 und 2020. (online: <https://zaw.de/wp-content/uploads/2021/05/ZAW21-Netto-Werbeinnahmen.pdf>)



In particular, artists are experimenting with new Web3 use cases offering favourable conditions for their businesses:

- Blockchain-based applications enable more self-determination for artists by eliminating intermediaries, such as platforms, in the monetisation of content. With non-fungible tokens (NFTs), artists get a new source of revenue in the digital realm. Through NFTs it is possible to bring scarcity to digital art, music, games, and films, allowing to trade goods at a higher price due to their “uniqueness”. In arts, music, and games, new NFT-based business models are currently emerging with the potential to fundamentally change creative markets. Digital art and music, as well as in-game items are the first popular examples of that.
- New funding sources are emerging through a token-based economy, with which creative artists can collect capital for their work and production, following similar principles as IPOs.

Besides Defi (Decentralised Finance)²³ and DAOs (Decentralized Autonomous Organisations)²⁴, crypto-collectibles²⁵ in arts and culture are one of the first marketable areas for applying blockchain technology, putting CCIs in a favourable position of potentially taking a leading role as a pioneer. Currently, the technology is still quite experimental and the NFT market in particular is very speculative. However, in the medium to long-term, blockchain applications in CCIs are promising.

²³ Decentralized Finance is a concept to describe peer-to-peer financial services offered via blockchain technology, taking over core functions of banking (e. g. earning interest, taking out loans, lending money, etc.)

²⁴ Decentralized Autonomous Organization represent organisations that are managed and transparently coordinated by blockchain-based codified rule systems. In contrast to traditional organisations with a centralised management entity, DAOs are controlled by their members.

²⁵ Crypto collectibles are based on NFTs and represent virtual collectibles.



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