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UNVEILING THE RESILIENCE OF CREATIVE BUSINESS: NAVIGATING THE IMPACT AND RECOVERY PATH OF COVID-19 IN BULGARIA*

Stanimir Stamatev [1], Miglena Angelova [2]

[1,2] University of National and World Economy, 8 Dekemvri str., 1700 Sofia, Bulgaria

E-mails: [1] sstamatev@unwe.bg; [2] m.angelova@unwe.bg

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Abstract. The primary objective of the current research is to identify the impact that COVID-19 had on the Creative Business in Bulgaria and their first steps for recovery from the crisis. Our research is based on official and reliable Bulgarian National Statistical Institute data. Based on the number of employed persons, the sectors most affected by COVID-19 in the creative business are sound recording and music publishing, photography, and advertising. For the period 2017-2022, there has been a slowdown in the growth rate of gross wages in the creative industries. This slowdown is most noticeable in 2019 and mainly in 2020, followed by a smooth and gradual recovery. At the same time, creative business companies in Bulgaria received the most extensive support in terms of public funding in 2020. The most generously supported sectors in 2020 within the Creative Industries are Advertising, followed by the Production and distribution of films and television shows and Computer Programming. The Creative Business companies in Bulgaria demonstrated relatively good sustainability and adaptability during and after the COVID-19 crisis. The rates in profit change confirm the serious negative impact of the pandemic (results in 2019 and 2020). Still, at the same time, it reveals a good level of resilience and recovery of the companies (results for 2021 and 2022).

Keywords: Creative Industries; Creative Business; Recovery; Post-COVID situation

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JEL Classifications: M00, M14, O31, O33

1. Introduction

The COVID-19 pandemic of 2019-2020 ushered in an unprecedented era of global disruption, leaving virtually no sector untouched. Among the hardest hit were the creative industries, comprising diverse fields such as arts, entertainment, media, design, and fashion, but also part of the IT sector (responsible for e-games), architecture, etc. Renowned for their dynamism and ability to reflect and shape societal trends, these industries grappled with many challenges as the pandemic unfolded.

The outbreak of COVID-19 triggered a cascade of repercussions across the creative landscape, disrupting production processes, decimating revenue streams, and challenging the very essence of artistic expression. Lockdown measures, social distancing protocols, and the abrupt halt of live events brought about a seismic shift in how creativity was produced and consumed. The closure of theaters, galleries, and performance venues left artists, performers, and creators in limbo, confronting profound uncertainties about their livelihoods and the future of their craft.

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Yet, amidst this upheaval, the creative industries also exhibited remarkable resilience, harnessing innovation, adaptability, and digital platforms to navigate the tumultuous terrain of the pandemic era. Virtual performances, online exhibitions, and digital collaborations emerged as lifelines, fostering connections between creators and audiences in ways previously unimagined. The crisis sparked a wave of creativity, with artists and innovators rising to the challenge, redefining traditional paradigms, and forging new pathways.

As we embark on the journey of understanding the impact of COVID-19 on the creative industries and charting a course for recovery, it becomes imperative to delve into the multifaceted dimensions of this transformative period. This scientific article explores the nuanced interplay between the pandemic and the creative ecosystem, examining the profound disruptions, adaptive responses, and emergent trends that have shaped its trajectory.

Based on the comprehensive analysis of the official results achieved by Bulgarian companies in creative industries during these turbulent years of the pandemic and followed by the economic crisis, we will be able to understand the effect that the pandemic had on different economic sectors within the creative industries on a national level and at the same time – to assess the impact on the financial support provided by responsible governmental authorities to these companies.

2. Literature review

The COVID-19 pandemic and all measures taken as a precaution against the spread of disease and social isolation for a very long time seriously negatively impacted economic life in almost all sectors and all levels – regional, national, and global. Companies in Culture and Creative Industries (CCI) were also generally negatively affected (except the IT sector), and several years after this huge crash, some of the enterprises in these industries still cannot fully overcome the consequences that the pandemic crisis has brought. Therefore, the interest in this specific topic from the scientific point of view is logical, even if the discussion is not very lively and comprehensive. This topic gained the most interest in 2022. Still, this could be considered a weakening discourse, missing the effect and changes the pandemic imposes on people and companies in the midterm period.

2.1. Crisis overcoming approaches in creative industries

Khlystova, Kalyuzhnova and Belitski (2022) made a systematic literature review covering 59 papers and argued that according to the exploring papers, COVID-19 had positive implications for IT and Software companies but at the same time, negative – for music industries, all culture calendar and events, festivals etc. Peñarroya-Farell and Miralles (2022) claim that a considerable number of enterprises have endured the ramifications of the pandemic through the introduction of redesigned business models, which have yielded novel value propositions in light of adverse environmental conditions. These firms have undertaken a strategic approach to crisis management by flexibly adjusting their business frameworks. Langevang et al. (2022) pinpointed and identified three strategies people use in creative fields to navigate uncertain circumstances: going digital, diversification, and active social focus and engagement. According to Fahmi, Krismiyaningsih, Sagala and Rustiadi (2023), the arts and culture-oriented creative sectors possess intrinsic capabilities enabling them to sustain their business following calamitous events, notably encompassing creativity, adeptness in sustaining market segments and a commitment to cultural preservation and empowerment. Authors also believe that it is crucial to leverage these capabilities to acquire new knowledge and discern opportunities conducive to bolstering resilience. While external aid plays a pivotal role in fortifying resilience, particularly in mitigating physical damages and losses, the onus ultimately rests on business proprietors to organize their enterprises effectively to confront emergent challenges (ibid).

Eletxigerra, Caldeira and Kastenholz (2023) proposed a cost-benefit approach for the wine tourist sector, based on the creative activities for customers as one of the possible solutions for overcoming the negative impact of COVID-19. Again, for tourism, this time focused on the direct connection in the line intangible heritage – creative industries – UNESCO creative cities, is devoted to interesting research, developed by Arcos-Pumarola, Paquin and Sitges (2023). At the same time, Viganò, England and Comunian (2023) outline the

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role of a creative ecosystem based on a cluster as an interesting tool for developing local industries, crafts and culture.

Rius-Ulldemolins and Díaz-Solano (2023) explore the role of creative and cultural cities and changes in their development strategies. They study the new cultural approach of Valencia (Spain); the authors admit that notwithstanding the aspiration for a more culturally inclusive approach by the newly established government and the narrative of social participation underpinning these initiatives, their trajectory primarily gravitates towards urban branding endeavours. Kim (2023) also explores the connection between local governments and arts and culture development and concludes that the establishment of a structured governance framework, coupled with sustained technical support, enabled local arts organizations to advocate for their organizational interests and requirements effectively, as well as to address the broader needs of their community through negotiation.

2.2. Pandemic and its reflection on creative people

Shaughnessy et al. (2022) explore the effect that COVID-19 had on the people working in the creative business, and through thematic analysis, they outlined three general and important themes: pandemic precarity and creative practice, inclusivity and diversifying audiences, and adapting, developing, and disrupting cultural practices. These subjects depict an emerging workforce in the early stages of their careers, demonstrating dedication and involvement in their creative pursuits. Simultaneously, they desire a more equitable, just, and diverse industry that safeguards artists' interests and engages with audiences more flexibly (ibid). Duarte and Gauntlett (2022) explore the reactions of creative people during and after the pandemic and draw interesting conclusions. According to them, initially, the exigencies of the period prompted individuals to cultivate novel concepts of their creative self-identity. Subsequently, amidst the pandemic, many discovered a profound resonance with nature and outdoor environments, finding solace and inspiration therein. Lastly, the foremost challenges encountered by these individuals were predominantly associated with maintaining mental well-being and securing financial stability. Tønnessen, Dhir and Flåten (2021) suggest that internal and external digital knowledge sharing are substantial predictors of creative performance within remote work during the COVID-19 pandemic.

Nagayama (2023) investigated the interplay among multi-locational work, features of work locations, and various worker outcomes, including engagement, creativity, and well-being. The research findings revealed a positive correlation between multi-locational work and all examined outcomes, with the strongest association evident in creativity. Moreover, according to the author, the diversity of location features, as perceived in work and non-work activities, augmented the positive relationship between multi-locational work and creativity. Scholars also admit that non-work flexibility partially mediates the connection between multi-locational work and creativity and well-being (ibid). Srivastava, Murnane, Billington and Samuelson (2024) analyzed the work performance in home versus office. Their findings suggest a noteworthy disparity in perceived work performance between office and home settings, with the former yielding significantly higher ratings. Conversely, comfort and well-being were reported to be considerably higher in the home environment, according to their results. Logistic regression analyses underscored temperature, noise levels, workstation furniture quality, and aesthetic considerations as the foremost predictors of perceived work performance (ibid).

2.3. Sustainability and future development of creative business

Anjaningrum, Azizah and Suryadi (2024) argue that the implementation of Business Intelligence is projected to play a pivotal role in enhancing the performance of Small and Medium Enterprises, with organizational learning serving as a mediating factor. Furthermore, their research findings affirm the existence of serial mediation, indicating that organizational learning and subsequent innovation mediate the relationship between business intelligence and SME performance. However, the significance of network learning and innovation cannot be understated, given their substantial direct influence on SME performance.

The role of Artificial Intelligence (AI) is also recognized by scientists for securing sustainability in creative industries. Amankwah-Amoah et al. (2024) claim that in contrast to various industrial sectors, where AI predominantly serves to automate repetitive tasks, creative practitioners have the opportunity to employ generative AI as a collaborative instrument, facilitating the exploration of novel creative pathways, streamlining operational procedures, and expediting creative workflows. The authors also pointed out that preserving the human element and the authenticity inherent in the outputs of the creative sectors poses a notable challenge for both the industry and broader societal contexts (ibid). Ivcevic and Grandinetti (2024) also consider AI an essential and helpful tool that could help creative people and different practitioners in their everyday tasks, supporting their level of creativity. In the line of closed relation between AI and creative industries comes the research of Hattori, Yamakawa and Miwa (2024), who explore the human bias in evaluating the products created by AI. Their study revealed a tendency towards assigning lower creativity ratings specifically to highly functional products when they were identified as being generated by AI. According to authors, this bias was notably pronounced among individuals who perceived a heightened threat stemming from generative AI technologies. They also underscore the significance of both product attribute quality and the identity of the producer in shaping perceptions of creativity (ibid). O'Toole and Horvát (2024) explore various methods to develop AI tools to enhance human creativity and enable users to participate fully and authentically in creative endeavours. According to researchers, these approaches encompass utilizing AI models to provide insights into various facets of the creative process, crafting interfaces that foster the exploration of ideas, and devising technological features that facilitate the emergence of novel creative methodologies (ibid). Tsao et al. (2024) go further in the relationship between AI and human creativity – they propose a comprehensive framework delineating the potential pathways through which artificial intelligence could progress and accumulate scientific and technological knowledge. This architectural model draws inspiration from contemporary viewpoints on how human intelligences evolve and accrue such knowledge (ibid).

Malik, Wei, Appel and Luo (2023) explore the role of blockchain technology in creative industries, arguing that this could lead to changes and different benefits for companies in these industries from strategic perspectives. Blockchain technology is also considered a useful tool for developing the recorded music industry in the Internet of Musical Things (Turchet and Ngo, 2022). Zhang, Wang and Cai (2023) explore the role of blockchain in copyright judicial practice. They admit that blockchain technology offers several functional benefits, including distributed storage, hash function verification, and timestamping, which confer upon it technical attributes such as stability, integrity, and immutability. Consequently, according to the authors, blockchain technology presents a viable solution to the challenges surrounding electronic evidence, particularly its susceptibility to distortion and modification and the complexities associated with its collection. This is particularly pertinent in copyright disputes, where establishing ownership of works and securing evidence can be arduous tasks (ibid).

Interesting aspects of gaining sustainability and future development both on individual and organizational levels are also developed by Culpepper and Gauntlett (2024); Tang, Xu, Mao and Naumann (2024); Gong, Yu and Hassink (2023); Borre, Romero, Gutiérrez and Ramírez (2023); Katz et al. (2022); Dimcheva and Stoyanov (2023) and others.

Javaid, Haleem, Singh and Sinha (2024) summarized that the ongoing digitalization of the economy fundamentally reshapes the delivery and consumption dynamics of products and services. Authors admit that Industry 4.0 initiatives are emerging as a guiding framework, offering a roadmap for numerous sectors to transition from traditional practices towards embracing the new paradigm. They also pointed out that within the digital economy, there is a notable shift towards scalable and integrated ecosystems facilitated by software platforms, which are instrumental in generating value, fostering resilience, and catalyzing innovation through the interconnectedness of goods, assets, personnel, and processes. This transition swiftly replaces antiquated, linear value chains with collaborative partnerships and networked participation (ibid).

In summary, from the literature review, the important processes that push forward the development of the economy nationally, regionally and globally are equally crucial for developing the creative industries. Undoubtedly, the development of artificial intelligence will have a very strong impact on the overall development of creativity, including at the organizational and individual levels. At the same time, the ongoing and deepening digitization will penetrate more and more comprehensively into sectors of the cultural industries that, only a few years ago, we could hardly have imagined would be digitized. All of this provides opportunities to build sustainability and, to some degree, the readiness of companies in the creative business to successfully recover

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and overcome the negative consequences of the pandemic, including relying on the implementation of innovations and strengthening human-machine interaction along the lines of creativity.

3. Methodology of the research

The major objective of the current research is to identify the impact that COVID-19 had on the Creative Business in Bulgaria and their first steps for recovery from the crisis. We wanted to base our research on official and reliable data, so we turned to representatives of the National Statistical Institute (NSI) in Bulgaria for support. For this purpose, we initiated a series of meetings with representatives of the NSI to specify the parameters of our cooperation in the specific research field. The data we work with has been provided by NSI specifically for our research team and is derived from annual data contained in the annual reports on the activity of non-financial enterprises composing the balance sheet at the country level, which is classified according to the NACE.BG-2008 for the years 2017-2022 - in thousand BGN (1 BGN equals 1.95583 Euro).

For our research, we use data provided by Bulgarian enterprises from 11 sectors of the national economy, which fall under the scope of creative industries (Table 1).

Table 1. Economic sectors within the Creative Business included in the research

Code by NACE.BG-2008	Name of position
58.11	Publication of books
58.21	Publishing of computer games
59.1	Production and distribution of films and television shows
59.2	Sound recording and music publishing
60	Radio and television activity
62.01	Computer programming
71.11	Architectural activities
73.1	Advertising activity
74.1	Specialized design activities
74.2	Activities in the field of photography
90	Artistic and creative activity

We chose to study six years, from 2017 to 2022 inclusive. In this way, we should have basic data on how businesses from the creative industries developed in the years before the pandemic (2017-2019), how the pandemic and all social isolation and lockdown measures affected them (2020-2021), as well as the first steps of recovery (2022). In all figures used in the next part of the research, when we present the change in different financial parameters of the enterprises, the base year is 2017.

When we explore this period and its reflection on the creative business at the national level, we should consider the following specific information related to Bulgaria and the COVID-19 pandemic.

On March 13, 2020, the national government declared a state of emergency throughout the country for one month, which was extended from April 3 until May 13, 2020. From May 14 to June 14, an extraordinary epidemic was declared, extended several times. On March 30, 2022, the Council of Ministers decided that from April 1, the emergency epidemic situation is cancelled. Throughout this period, various measures imposing social isolation were in force in Bulgaria - from a complete lockdown and a ban on the gathering of people, even in small groups, to various opportunities for the realization of a timid social and cultural life.

For this period, we have cumulative official data on the income-expenditure reports of the Bulgarian enterprises within the creative business in these 11 sectors of the economy, presented above.

The methodological steps of our research are presented in Table 2.

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Table 2. Methodological steps of research

Methodological steps and activities	
Step 1	***Identification of the major parameters of the research***
	- Determining the main objective of the study - Defining the main tasks and sub-tasks to achieve the objective - Determining the scope of the research, major target group (Bulgarian enterprises in Creative Industries) and the way to obtain reliable information from the target group
Step 2	***Establishing cooperation with representatives of Bulgarian National Statistical Institute (NSI)***
	- Initiation of a series of meetings with representatives of NSI to establish parameters of cooperation in the specific field of scientific research - Defining the scope of partnership - Receiving reliable official information
Step 3	***Data Analysis***
	- Analyzing the official data provided by the NSI - Outline the main trends related to the change in the incomes and expenditures of the enterprises of the Bulgarian Creative Business - Outline the main trends related to the change in rate of employment in Bulgarian Creative Business - Outline the effect from the governmental financial support for the Creative Business and its reflection on the different sectors within the Creative Business
Step 4	***Quantitative Analysis***
	- Employ statistical methods to analyze trends and patterns in the NSI data, utilizing different techniques. - Assess the differential impact of the COVID-19 pandemic across various segments of the creative industries, covering all 11 sectors. - Evaluate the magnitude of disruptions caused by the pandemic, including changes in employment levels, revenue streams, and production output.
Step 5	***Synthesis and Interpretation***
	- Synthesize quantitative findings to develop a comprehensive understanding of the multifaceted impact of COVID-19 on the creative industries. - Interpret results within the broader context of economic, social, and cultural dynamics. - Identify key drivers of resilience and recovery within the creative ecosystem, offering insights into policy interventions, institutional support mechanisms, and strategic initiatives to foster sustainable growth and innovation post-pandemic.

4. Data Analysis

For the purposes of our research and in accordance with the data received from the NSI on the performance of Bulgarian enterprises working in the Creative Industries, we will take a deeper look at the results, changes and trends for the period from 2017 to 2022 according to the following several main parameters: number of employees persons in the Creative Industries, average gross salary in the creative sector, change in income, change in expenditure and change in profit in the eleven sectors that form the creative business at national level.

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4.1. Employment Rate in the Creative Industries

Table 3. Number of employees working in Creative Business in Bulgaria,

Sector	2017	2018	2019	2020	2021	2022
Publication of books	1 130	1 088	1 156	1 151	1 196	1 282
Publishing of computer games	130	123	129	158	180	182
Production and distribution of films and television shows	3 895	5 046	4 381	3 970	4 195	4 201
Sound recording and music publishing	484	525	525	426	422	478
Radio and television activity	2 946	2 835	2 782	2 637	2 515	2 391
Computer programming	17 817	19 777	21 535	23 237	26 849	31 705
Architectural activities	4 234	4 379	4 562	4 432	4 535	4 712
Advertising activity	9 454	9 472	9 545	8 353	8 505	8 694
Specialized design activities	1 615	1 767	1 925	1 972	2 125	2 254
Activities in the field of photography	1 483	1 514	1 618	1 429	1 401	1 504
Artistic and creative activity	1 657	1 670	1 842	1 532	1 680	1 867
Total	**44 845**	**48 196**	**50 000**	**49 297**	**53 603**	**59 270**

Source: National Statistical Institute (NSI)

As can be seen from the table above, the largest sector in terms of employment is Computer programming, which generated impressive growth during the considered period. In second place comes Advertising activities, but according to the data, this sector is seriously affected by the COVID pandemic and shows a decrease in the number of employees occupied with advertising activity. At the bottom, according to the number of people working in the sector, the Sound recording and music publishing sector was also negatively affected by the crisis.

Interesting findings could be made based on the data in the table. Firstly, obviously, 2020 was very hard for the major companies in Creative Industries in Bulgaria. Out of all 11 surveyed sectors, only 3 – Publishing of computer games (22,5%), Computer programming (7,9%) and Specialized design activities (2,4%) recorded an increase in the number of employed persons in 2020, while in all others there were various levels of decline. At the same time, the serious negative effect between 2019 and 2020, according to the number of employed persons, is observed in Sound recording and music publishing (-18,9%), followed by Activities in the field of photography (-16,8%) and Advertising activity (-12,5%). The cumulative change in employment rate for all sectors within the Creative Industries is presented in Fig. 1.

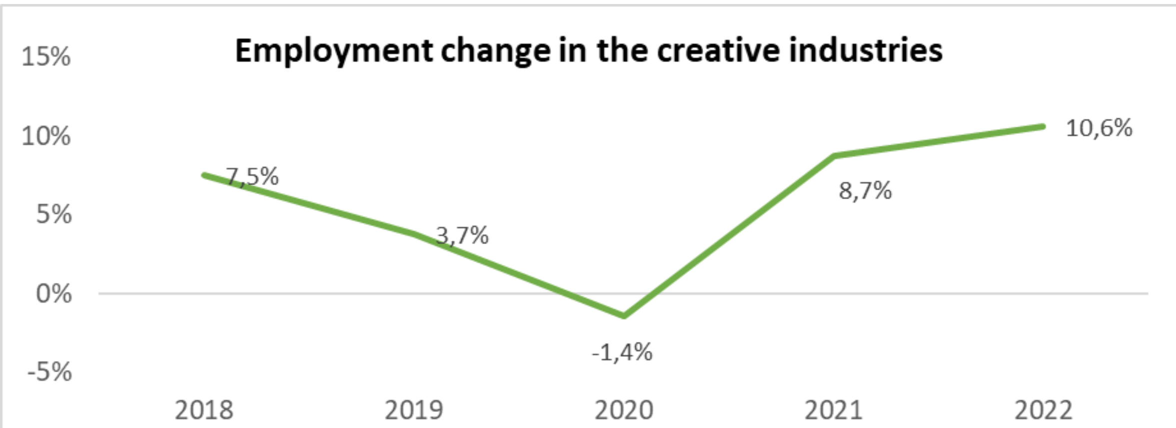

Fig. 1. Change in Employment Rate in the Creative Industries in Bulgaria
Source: NSI, own calculations

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In general, the number of people working for Creative Industries in Bulgaria decreased most seriously in 2020 as a result of the first lockdown, as after the first negative wave, the business gradually began to recover its initial positions.

4.2. Average salary in Creative Business for the period 2017-2020

Data on average wage levels by year and by sector of the creative industries are presented in Fig. 2. It is interesting to note here that even in 2018, a decrease, albeit a small one (-1,0%), in the average salary was noticed in the Production and distribution of films and television shows sector. The next year, 2019 was negative for the Computer games publishing, where the level of average sale also decreased (-16,4%). In 2022 there were only 3 sectors within the creative industries, which made negative score on the average sales – sound recording and music publishing was seriously hit (-22,5%), followed by artistic and creative activities (- 3,6%) and Radio and TV activities (-1,1%). At the same time, in 2022, interesting progress was made by Book Publishing sector – the average sale here increased the most from all Creative sectors (17,1%), followed by Advertising (10,7%) and Computer games (10,1%).

In terms of the average salary size, logically, the best-paid workers are in computer programming, where, during the considered period, salary growth is maintained. An interesting trend is observed in the average salary of people working in the publishing of computer games. For the first two years since the beginning of the considered period, this is the second sector of the creative industries, offering the highest salaries in Bulgaria. In 2019, however, it saw a decline in the average salary and subsequently showed inconsistent and fluctuating results. However, recording and music publishing has emerged as the second highest-paying sector for creative industry workers in the last two years. The growth there is remarkable – 35,4% for the 2021 and 48,4% for the 2022.

As can be seen from Fig. 3, there is a slowdown in the growth rate of gross wages in the creative industries, with this slowdown most noticeable in 2019 and mainly in 2020, followed by a smooth and gradual recovery in the growth rate of wages in the creative industries in the country. What is evident here is the negative effect that the pandemic generally has on the remuneration of people in the creative business. At the same time, however, the companies themselves were able to recover relatively quickly from the crisis and reach and even surpass the levels of workers' wages from before the introduction of the measures for social isolation, lockdown, etc.

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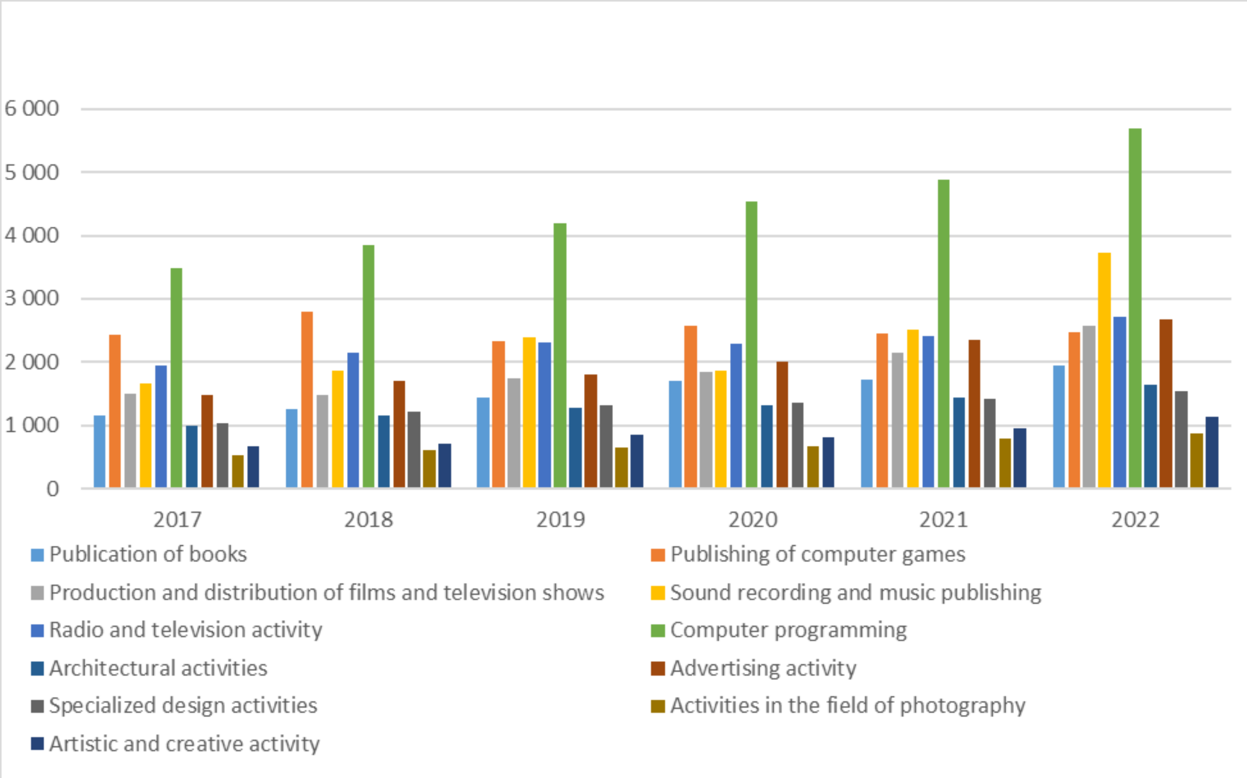

Fig. 2. Average salary in Creative Industries in Bulgaria by sectors (in BGN)
Source: NSI

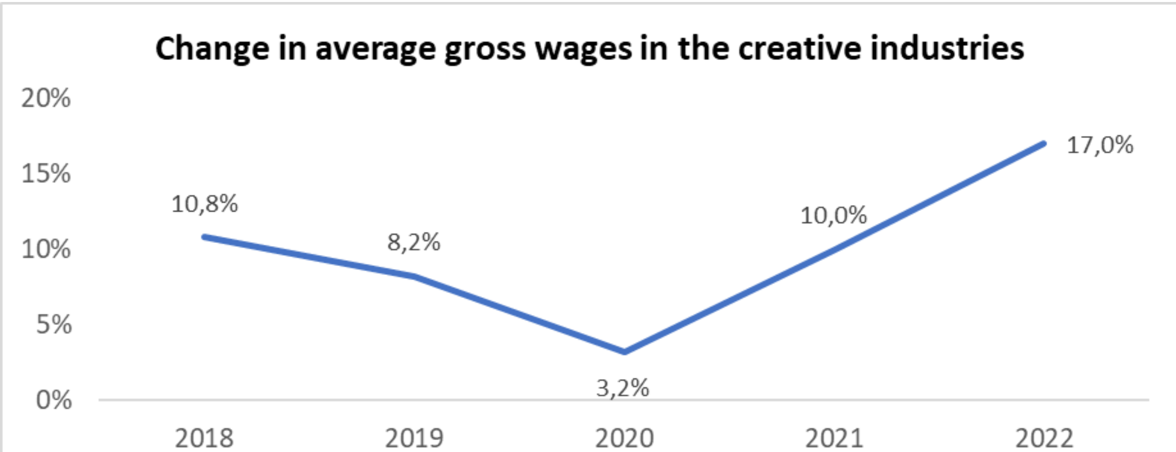

Fig. 3. Change in the average gross wages in the creative industries in Bulgaria
Source: NSI, own calculations

4.3. Change in incomes, expenditures and profit of the companies in Creative Business

For the purpose of the current research and in terms of the most comprehensive analysis of the obtained data, we will explore the incomes, expenditures and profit if the companies in all 11 sectors in the Creative Industries, grouped into four, as follows:

- Group 1 – Book publishing, Radio and TV activities, Photography Activities and Artistic and Creative Activities
- Group 2 – Computer Games Publishing and Computer Programming
- Group 3 - Production and distribution of films and television shows and Sound recording and music publishing
- Group 4 – Architecture, Advertising and Design

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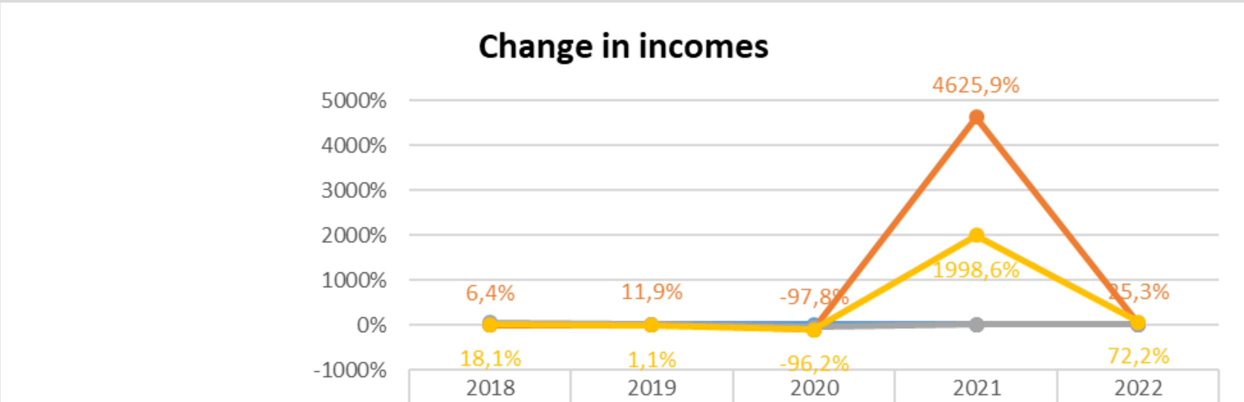
For Group 1, as can be seen from Figure 4, Photography Activities marked a good rate of income for 2017, but the next years of the period could be considered rather hard for the sector. At the same time, Book Publishing scored progress in income rate for 2020, but a slight decrease for the following 2 years. The most significant change in income rate here was radio and TV activity incomes, where the change in results between 2020 and 2021 is remarkable. Almost the same logic of the income rate was demonstrated by the Artistic and Creative Activities sector – with a huge negative hit in 2020, followed by a drastic change for the next year.



	2018	2019	2020	2021	2022
Book Publishing	3,5%	7,9%	14,3%	10,0%	7,4%
Radio and TV Activities	6,4%	11,9%	-97,8%	4625,9%	25,3%
Photography Activities	50,6%	15,3%	-38,8%	19,5%	20,2%
Artistic and Creative Activities	18,1%	1,1%	-96,2%	1998,6%	72,2%

Fig. 4. Change in incomes in selected sectors of the Creative Industries
Source: NSI, own calculations

The trend forming the change in expenditures in the Group 1 is also interesting to analyze. Here, the most stable sector is Book Publishing, showing the smooth development during the period (Fig. 5).

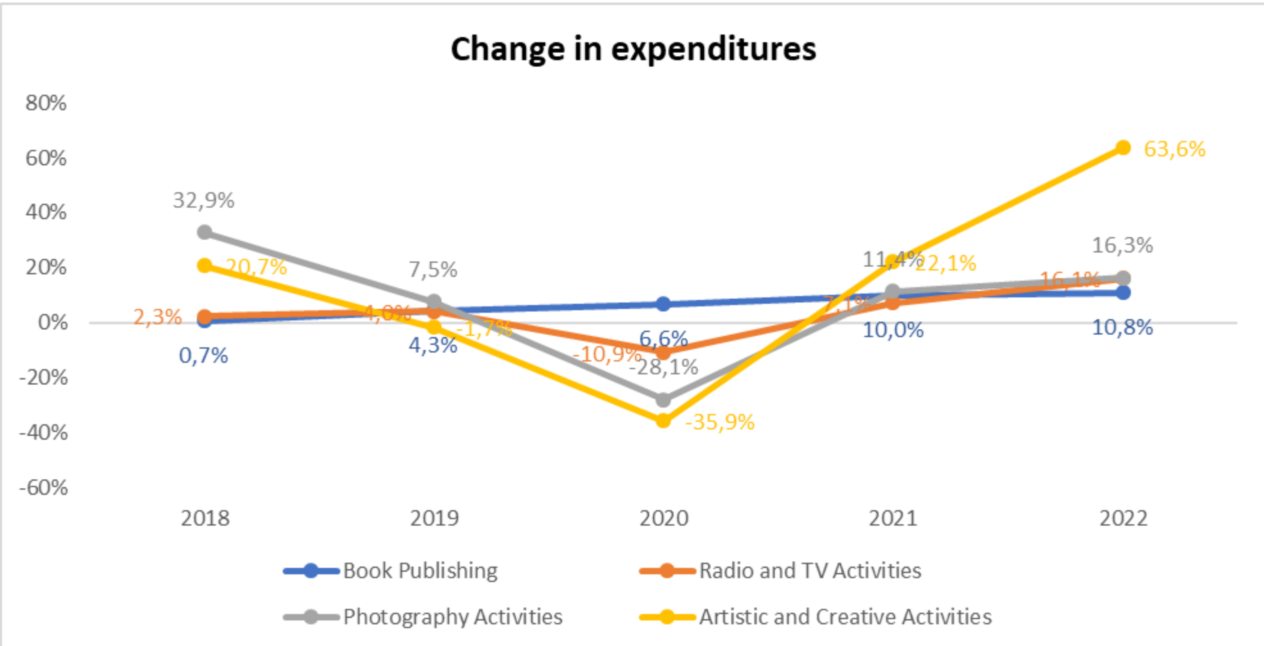


Fig. 5. Change in expenditures in selected sectors of the Creative Industries
Source: NSI, own calculations

At the same time, the other three sectors of this group performed negatively in 2020. The highest rate of negative expenditures is in Artistic and Creative Activities (-35,9 for 2020), followed by Photography activities (-28,1%) and Radio and TV activities (-10,9%). Based on these results, we could claim that Book Publishing

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was the most stable sector from Group 1 in terms of change in expenditures. Conversely, the picture will be fully clear after the results from the profit data achieved by different sectors in this group are revealed (Fig. 6).

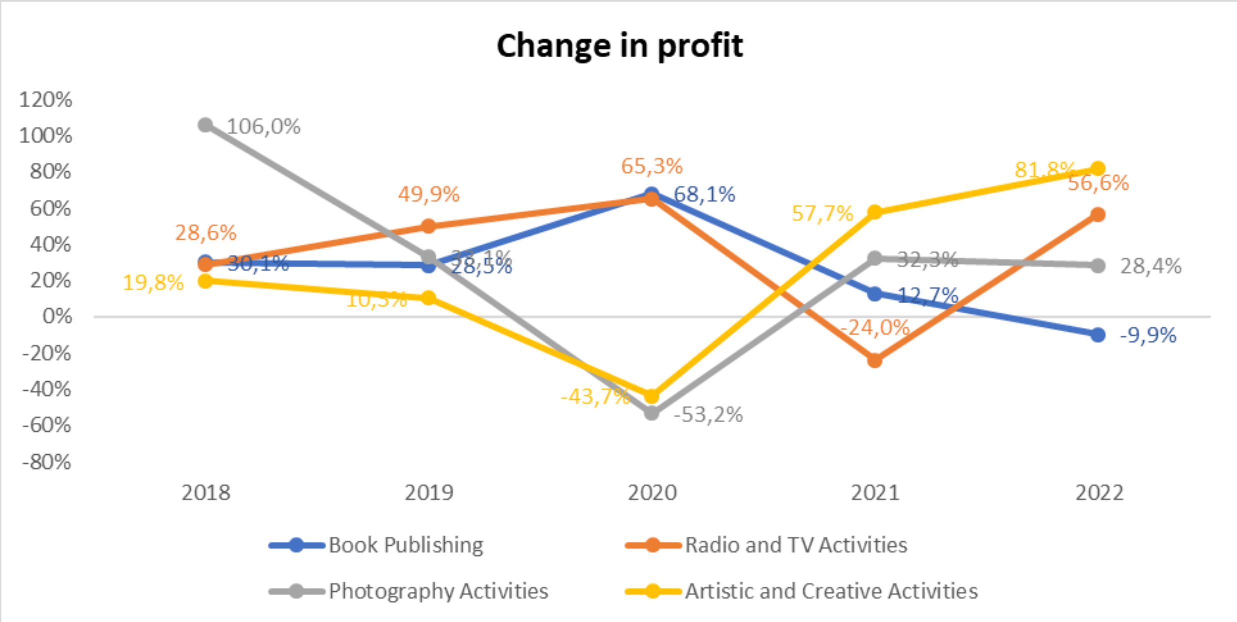

Fig. 6. Change in profit in selected sectors of the Creative Industries
Source: NSI, own calculations

Obviously, from the figure above, companies in the photographic activities sector have seen the greatest fluctuation in terms of profit. For the period under review, they do not show even minimal sustainability of some of their results. This means that the sector has certainly been hit hard by the pandemic and is definitely not yet able to recover - i.e., the profit levels of the pre-pandemic years have not yet been reached. At the same time, Book Publishing, which sector demonstrated a relatively good rate of profit growth for the first three years of the period, was seriously hit for the last two years. In fact, this sector remains the only one from Group 1, which has a negative rate for 2022. Here Artistic and Creative Activities made the most impressive progress – from negative rate for 2020 (- 43,7%) to very positive rate of profit for 2022 (81,8%). Interesting finding is the negative rate in profit change for the Radio and TV sector for 2021, which fact could be explained with the logic of project principle work in the sector and contracts in force. Therefore, the negative results in 2021 could be a reflection of the lack of new contracts signed during the lockdown period.

For the companies in Group 2, operating in sectors Computer Games Publishing and Computer programming, the picture could be considered as rather different.

The Computer Game Publishing sector marked growth in income rate for the first two years of the period and a significant decline for 2020. For the remaining two years of the period, the data for this specific sector remains confidential. At the same time, the Computer programming sector made a relatively slight decline in income rate for the first three years but demonstrated stable development for the last two years of the period (Fig. 7).

In terms of rate of expenditures (Fig. 8), Computer Programming sector demonstrates its stability. At the same time, Computer Game Publishing has shown fluctuation and growth in its expenditures for the last 2 years. This growth in expenditures, in fact, is easily explained when we have the change in profit of these two sectors (Fig. 9).

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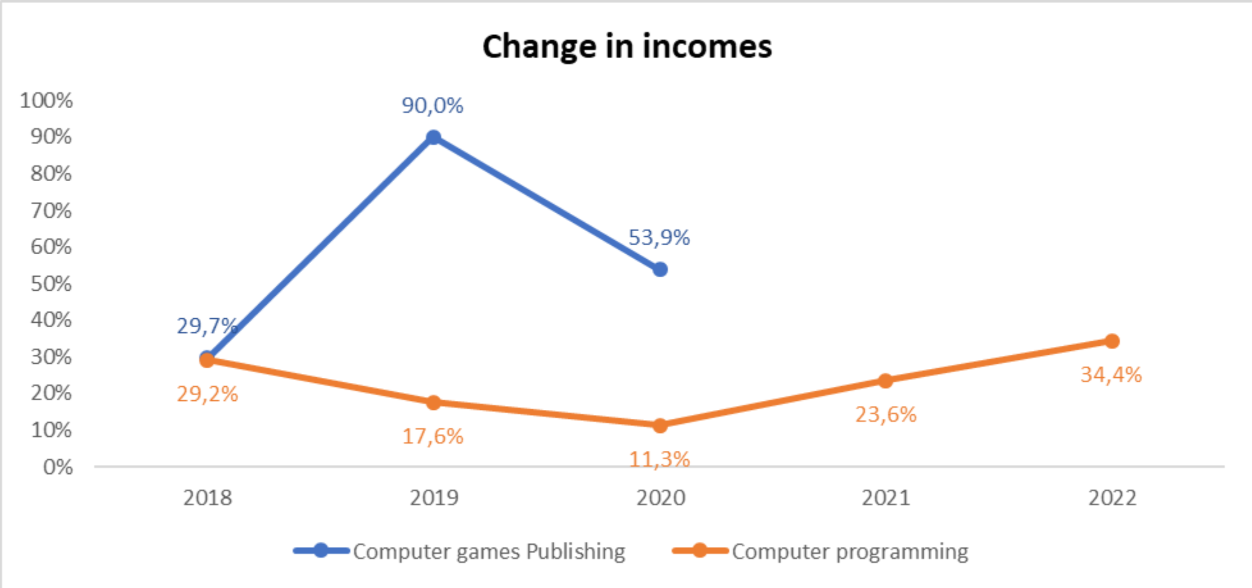

Fig. 7. Change in incomes in selected sectors of the Creative Industries
Source: NSI, own calculations

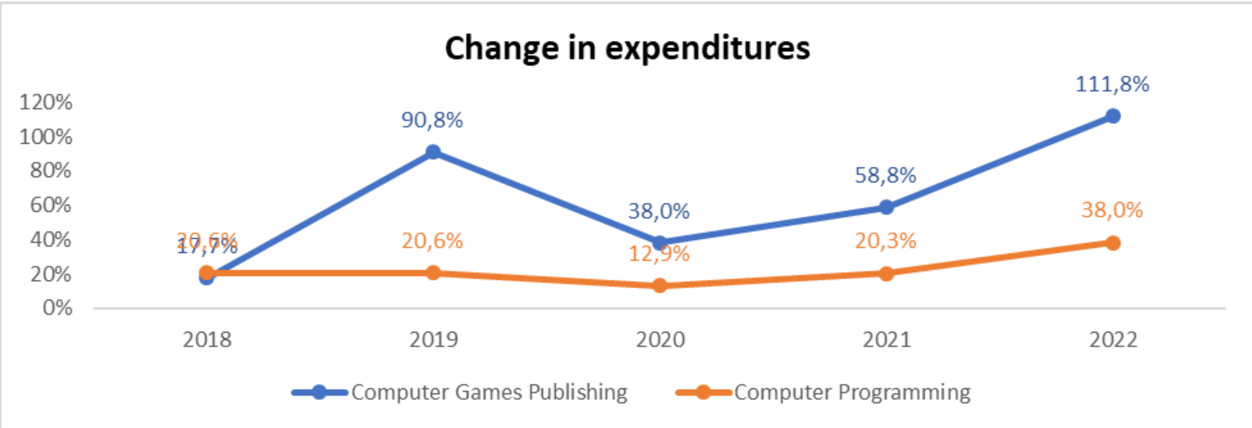

Fig. 8. Change in expenditures in selected sectors of the Creative Industries
Source: NSI, own calculations

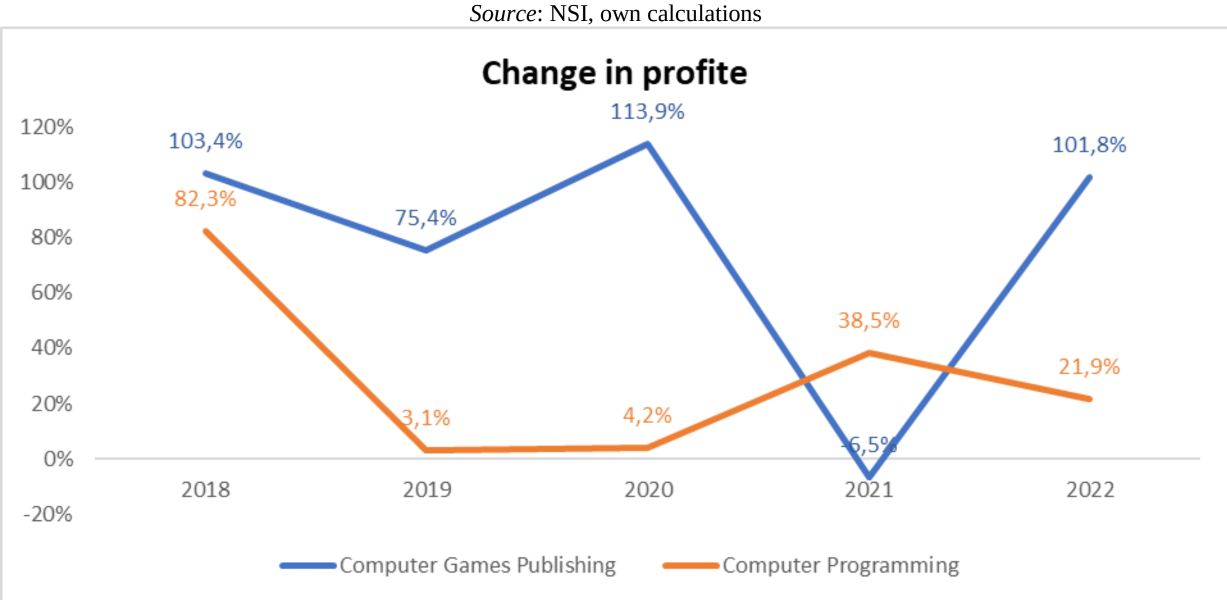

Fig. 9. Change in profit in selected sectors of the Creative Industries
Source: NSI, own calculations

The most serious year for Computer Game publishing was 2021 when the sector scored a negative rate of profit change. However, the sector managed to cope rapidly, considering the results of the following 2022 year, with a 101,8 change in the profit rate. This negative result in 2021 could also be explained by the lack of sufficient contracts and new clients in the previous year, marked by the lockdown and serious precaution measures. At the same time, the results obtained by the Computer Programming sector in Bulgaria show a decrease in profit rate for 2019, followed by a slight 2-year growth. Interesting here is the decrease in the profit rate for 2022, which could not be considered as a direct reflection of the COVID-19 crisis, rather than other global trends in this specific sector – for instance, the rapid development of AI and others, structural changes in programming teams, etc. This sector in Bulgaria is heterogeneous; companies have different profiles and main financial sources (for instance, branches of international companies in Bulgaria), reflecting the overall company's financial performance and sustainability.

Group 3 is formed by companies in the Production and Distribution of films and Sound recording and Music Publishing sectors. According to data for the incomes, both sectors have roughly the same trajectory of change in incomes (Fig. 10).

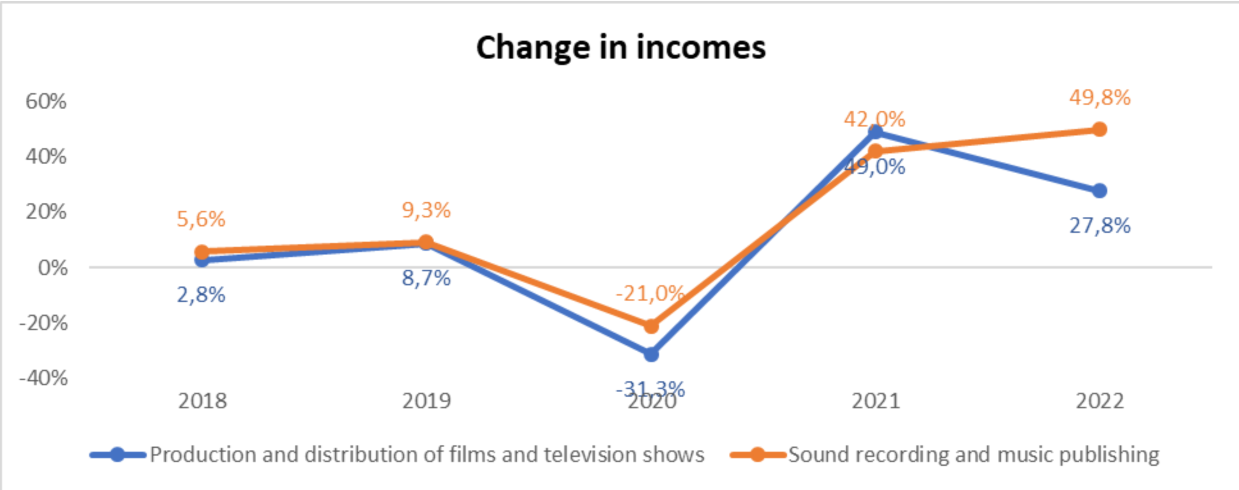

Fig. 10. Change in incomes in selected sectors of the Creative Industries
Source: NSI, own calculations

Both sectors were seriously hit by the pandemic in 2020 but achieved a positive income rate in the next 2021 year. At the same time, Sound recording and Music Publishing also have a positive income rate for the next 2022 year, while the Production and distribution of films and TV Shows mark a decline (Fig. 11).

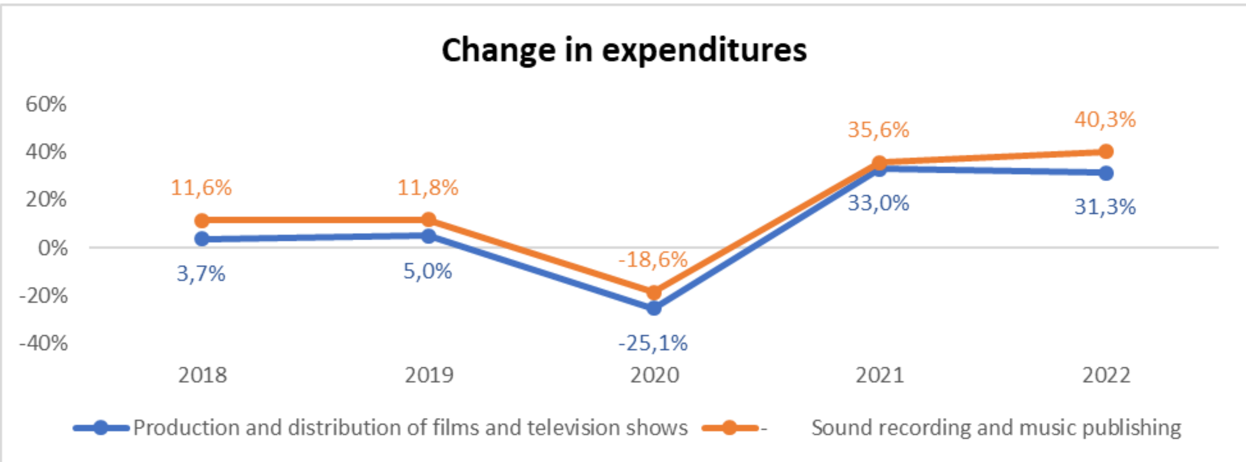

Fig. 11. Change in expenditures in selected sectors of the Creative Industries
Source: NSI, own calculations

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The same logic of development of the two sectors is seen in terms of the changes in the period's expenditures. The most dramatic year when the results of both sectors are negative is 2022, which is confirmed again by the results achieved in this group for the profit change rate (Fig. 12).

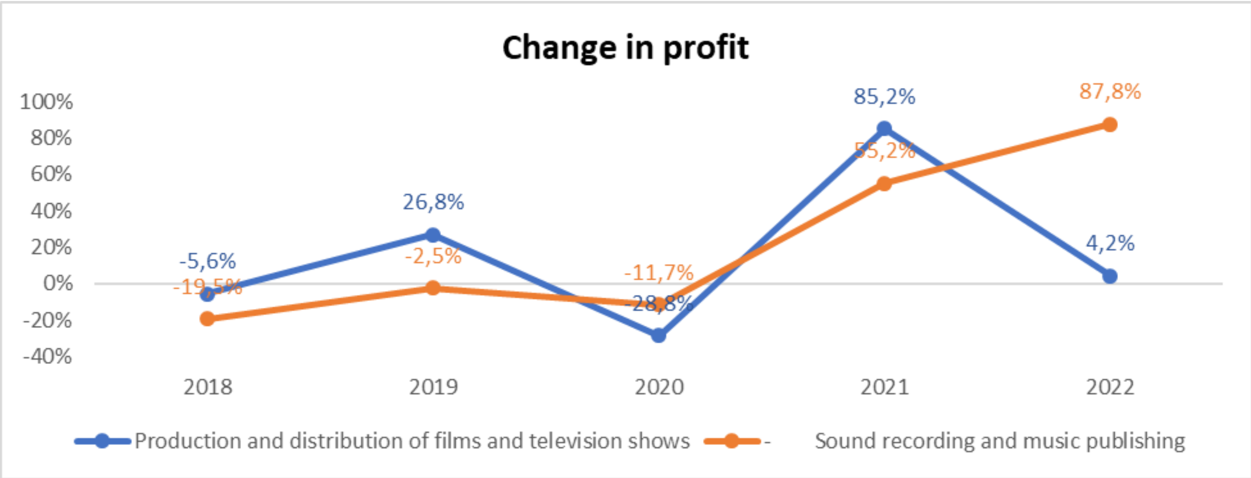

Fig. 12. Change in profit in selected sectors of the Creative Industries
Source: NSI, own calculations

As shown in Fig. 12, the production and distribution of films and television shows experienced a more remarkable turbulent change in profit during the period compared to the Sound recording and Music Publishing sector. Again, it is obvious that the seriousness of the crisis hit both sectors in 2020, which is more serious for the Films and TV shows, but right after the crisis, this sector marked great positive change, even bigger than the Sound recording. In 2022, Sound and music recording continues its positive change in profit rate, while the Films and TV shows sector demonstrates a decrease from the change level. This fact could be considered as a sign that this sector has difficulties overcoming the different effects of a pandemic.

The last group, 4, from the creative industries, is formed by the sectors Architecture, Advertising and Design, which demonstrate different variations in their companies` financial performance during the years of the considered period.

The three sectors achieve interesting results in terms of incomes, especially compared to each other. For instance, the most favourable change in incomes as the starting point of the period belongs to Advertising (5,9%), but at the same time, this sector is the only one of the three, which marks a negative change in incomes for the next two years. In 2021, Advertising managed to achieve a 24,4% change in incomes, which led the sector again to the premier position. The last year of the period Advertising achieved slight negative change in incomes, which fact gives the second place for the sector for 2022.

The second starting position is for Architecture, which also begins the period with a positive change in incomes (1,5%), keeping this positive change and second position for the next year. In 2020, the sector, even with the negative change in incomes, demonstrated a relatively good level of income, which transformed the sector into the leading one and relatively stable in front of the crisis. After 2020, Architecture achieved a good level of positive change in incomes. Still, it was overtaken by the rate of development of the companies in the other two sectors, which were hit much harder by the crisis. At the same time, the fluctuations in the Design Sector are very strong, especially in comparison with the two other sectors. Design started in third place in 2018, and achieved the biggest change for the next year, which led the sector to first place in 2019, then in 2020, it was seriously hit by the crisis but demonstrated successful efforts for recovery and development with the most serious positive change in incomes and logically first place for 2022 (Fig. 13).

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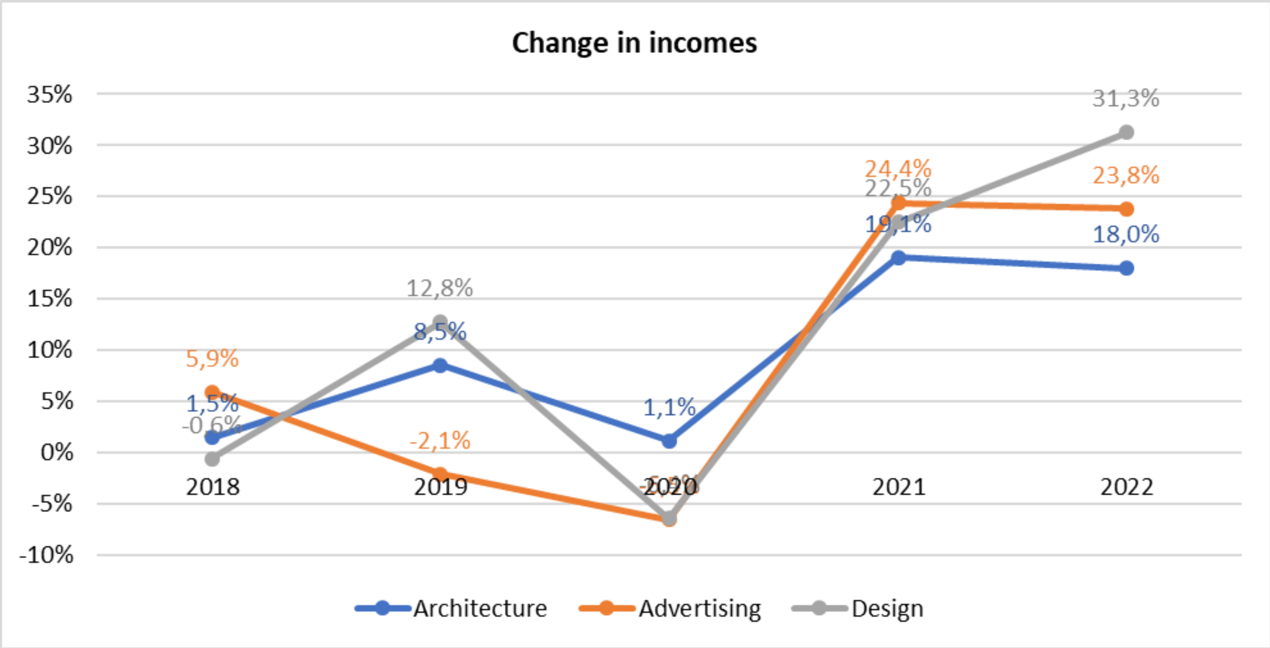

Fig. 13. Change in incomes in selected sectors of the Creative Industries
Source: NSI, own calculations

The change in expenditures (Fig. 14) confirms the already made conclusion that the Advertising sector had the most severe and dramatic change during the period, while the two other sectors had relatively common trends.

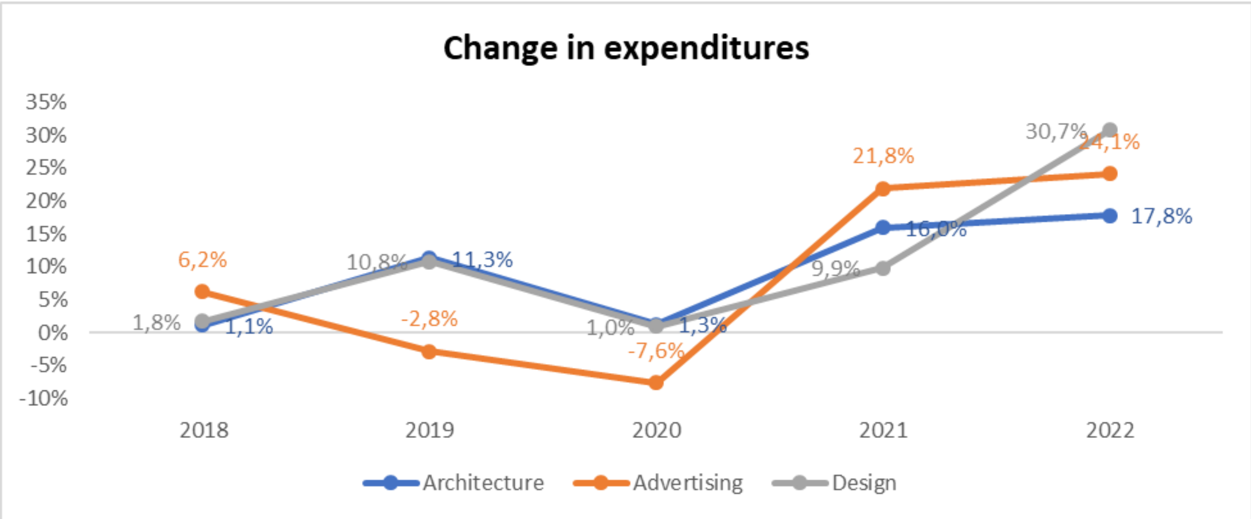

Fig. 14. Change in expenditures in selected sectors of the Creative Industries
Source: NSI, own calculations

In terms of profit during the period, the Design sector experienced a serious change, which made the sector the most unstable and sensitive to the COVID-19 crisis. This sector started with an adverse change in profit (which poses the sector in third place), followed by the biggest change for the next year (first place), and again the most significant change in profit, but this time negative for 2020 (again third place) and the last two years with positive change in profit with a slight decline for the last one, but in the first place for incomes among these three sectors. At the same time, Advertising and Architecture had almost the same logic of profit change during the period. Still, Advertising demonstrated more sensitivity to the crisis change, while Architecture achieved relatively stable results, especially compared to the other sectors (Fig. 15).

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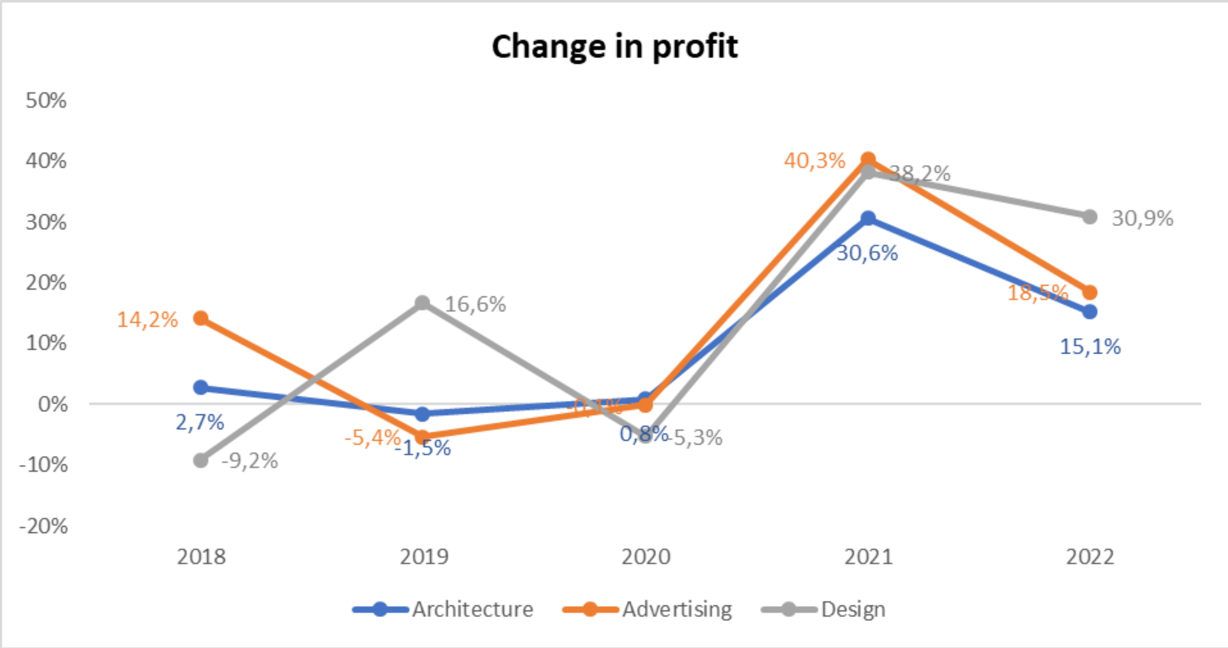

Fig. 15. Change in profit in selected sectors of the Creative Industries
Source: NSI, own calculations

In summary, for all Bulgarian companies working in Creative Business, the COVID-19 pandemic was a serious challenge that changed the overall logic of the companies` development. It is evident from both figures (Fig. 16 and Fig. 17), containing cumulative data for changes in incomes and changes in expenditures that 2020 was very difficult for all the companies in the Creative Business.

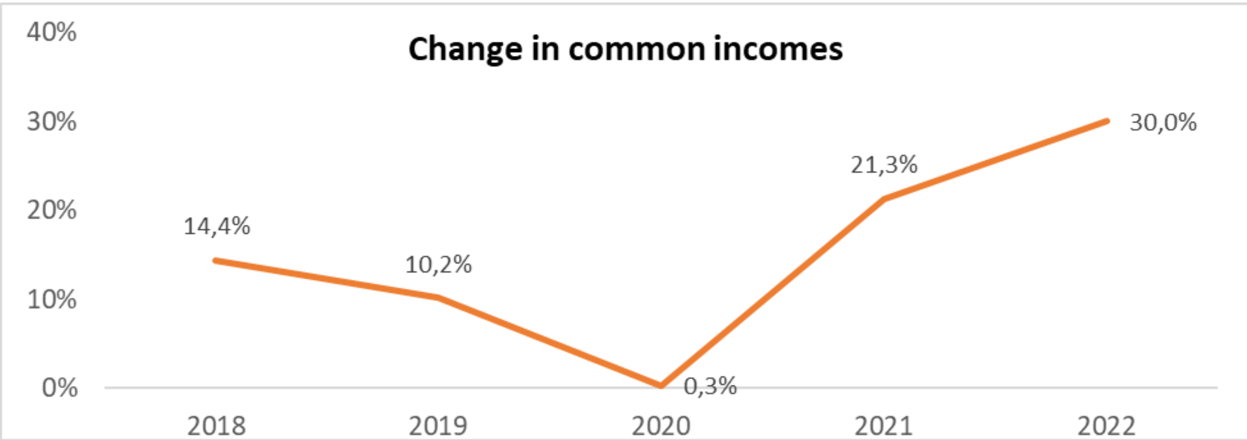

Fig. 16. Change in common incomes for all sectors within the Creative Industries
Source: NSI, own calculations

When we explore the ability of Creative Businesses in Bulgaria to resist and recover from the consequences of the crisis, one important aspect also has to be considered – the concrete policy and measures taken by the different governmental authorities to support businesses in these difficult and unprecedented times. The following figure (Fig. 18) reveals this part of the public support. Still, here, we also have to notice that part of the information provided by NSI is defined as "confidential" and, therefore, is missing. Nevertheless, several trends could be drawn based on the available data.

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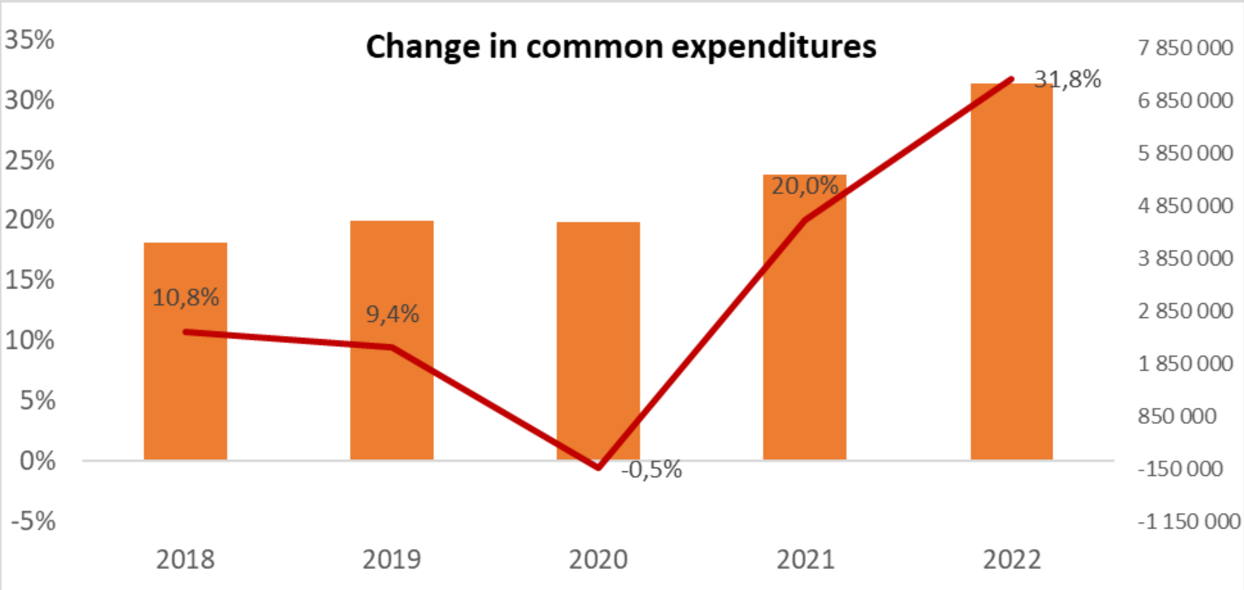
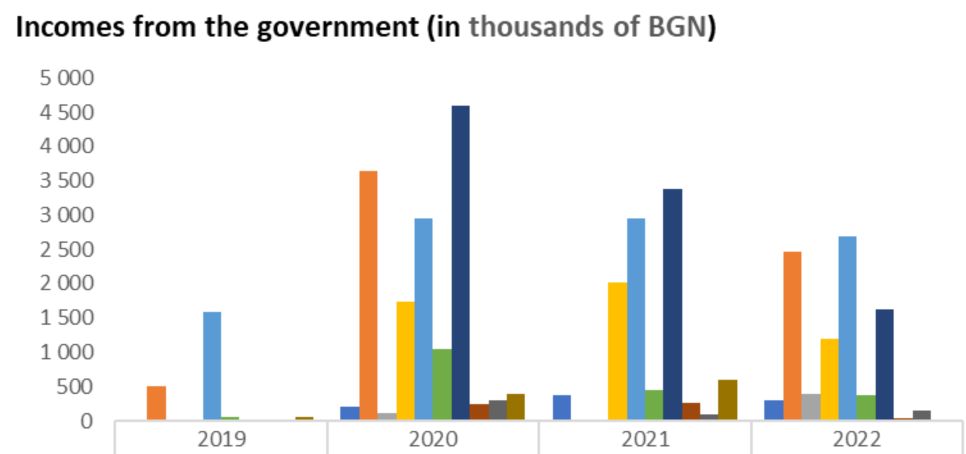


Fig. 17. Change in common expenditure for all sectors within the Creative Industries
Source: NSI, own calculations



	2019	2020	2021	2022
Book publishing	9	214	370	299
Films and TV shows	502	3 633	0	2 472
Sound and music records	0	114	0	387
Radio and TV	0	1 733	2 017	1 200
Computer programming	1 583	2 958	2 951	2 684
Architecture	61	1 039	450	376
Advertising	0	4 584	3 379	1 625
Design	0	242	264	29
Photography	0	307	102	149
Artistic and Creative Activities	49	389	595	0

Fig. 18. Governmental support provided by different sectors within the Creative Industries
Source: NSI

First of all, it is evident that five sectors of the Creative Business received financial governmental support even in 2019, which fact could be explained in two separate lines of consideration: first line – defining these sectors as priority sectors for the national economy (for instance Computer programming, Films and TV Shows, Artistic and Creative Activities) and second line – that these sectors are traditional ones with a close and stable relationship with authorities (Architecture and Book publishing).

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Second, the most significant support in terms of public funding was received by creative business companies in 2020. The most generously supported sectors in 2020 within the Creative Industries are Advertising, Films, TV shows, and Computer Programming. During the next two years of the period (2021 and 2022), the intensity of public support for companies will gradually decrease, assuming that along with the removal of social isolation measures, companies will be able to create their forces for further development.

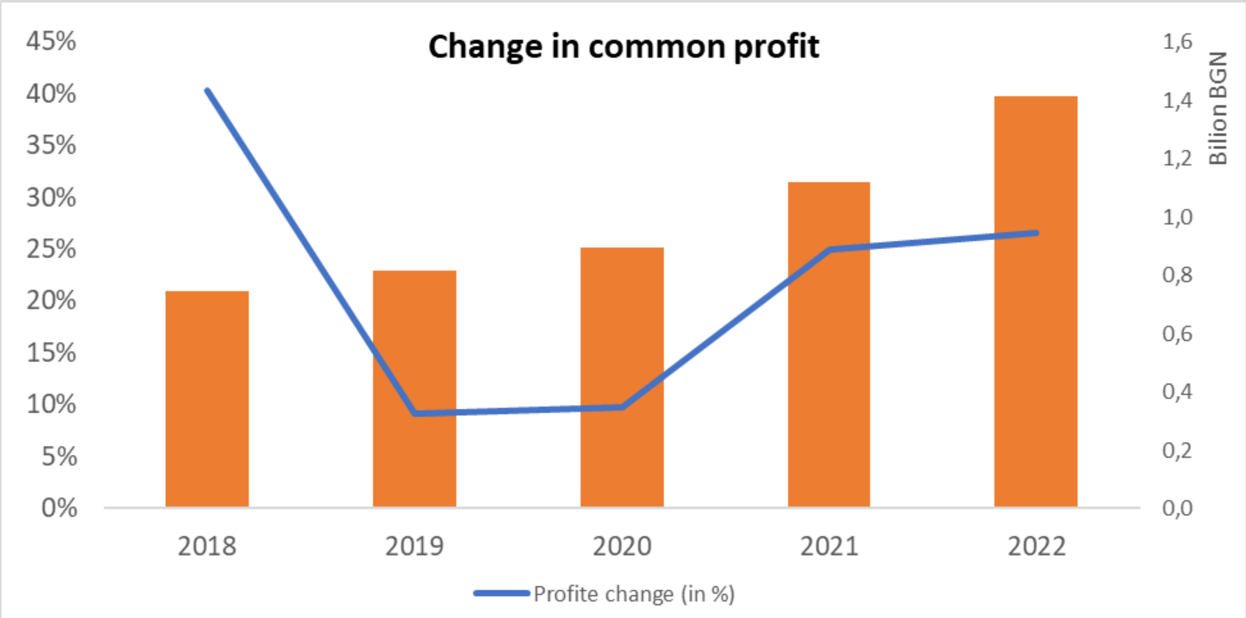

Fig. 19. Change in common profit for all sectors within the Creative Industries
Source: NSI, own calculations

As a result of all precaution measures, lockdowns and, at the same time – different initiatives and measures for securing business organizations at the national level, it could be concluded that the Creative Business companies in Bulgaria demonstrated a relatively good level of sustainability and adaptability during and right after the COVID-19 crisis. The rates in profit change (Fig. 19) confirm the profound negative impact of the pandemic (results in 2019 and 2020), but at the same time – reveal a good level of resilience and recovery of the companies (results in 2021 and 2022).

5. Conclusion

Creative industries in Bulgaria have been profoundly impacted by the COVID-19 pandemic, facing unprecedented hurdles and disruptions, confirmed by their overall performance and financial results in official data. The sudden cessation of economic activities and restrictions on public gatherings and mobility severely affected sectors such as film, music, performing arts, and visual arts. Nevertheless, amidst these obstacles, the creative sectors have showcased resilience and adaptability, utilizing digital platforms and innovative methods to maintain audience engagement and generate income.

As Bulgaria progresses towards recovery, it's clear that a comprehensive approach is necessary to revive the creative industries. This entails targeted financial support, policy measures to encourage digitalization and innovation, and initiatives to foster cultural exchange and local and international collaboration. Additionally, there's a pressing need for improved infrastructure and resources to facilitate the transition to hybrid production and distribution models.

Although the recovery path may be challenging, it also presents an opportunity for the creative industries to rethink their roles and significance in society. By harnessing creativity, innovation, and collaboration, Bulgaria's creative sectors can emerge stronger and more resilient in a post-pandemic era, contributing to cultural enrichment, economic prosperity, and social cohesion.

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In essence, the obstacles posed by COVID-19 have underscored the importance of a dynamic and sustainable creative environment, emphasizing the necessity for coordinated efforts among government, industry, and civil society to ensure the continued vitality and relevance of Bulgaria's creative sectors.

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Stanimir STAMATEV is an Assistant Professor Ph.D. in the Department of Management, University of National and World Economy, Sofia, Bulgaria. Research interests: Creative Business Management, Financial Management, Leadership, Knowledge Management.
ORCID ID: https://orcid.org/0009-0004-6406-0210

Miglena ANGELOVA is an Assoc. Professor Ph.D. in the Department of Management, University of National and World Economy, Sofia, Bulgaria. Research interests: Creative Business Management, Change Management, Strategic Management, IT Management, HR Management
ORCID ID: https://orcid.org/0000-0002-4460-133X