


Article

Bibliometric Analysis of Financial and Economic Implications during the COVID-19 Pandemic Crisis

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Abstract: A bibliometric study was performed to explore the financial and economic implications of the COVID-19 pandemic. The SCOPUS database was sourced, and VOSviewer version 1.6.20 was used to generate visualizations. Articles published between 2020 and 2024 were targeted, resulting in 1257 papers used in the analysis. The comprehensive bibliometric analysis conducted in this paper was guided by the keywords “COVID-19”, “pandemic”, “financial crisis”, “financial impact”, and “economic impact”, which revealed critical insights that contribute to the body of knowledge on the financial and economic implications of the COVID-19 pandemic. The outputs belong to topical areas of economics, finance, business, and management. Keyword mapping and clustering methods were employed to analyze links between the financial crisis, economic impact, and COVID-19 themes. A co-occurrence network analysis identified key thematic clusters, including economic and financial analysis; COVID-19 research and impact; social, environmental, and corporate responsibility; regional studies and disease-related research; and economic challenges and policy responses. This study reveals an annual publication decline of 62.94% and an average citation rate of 20.13 per document. The findings suggest an abundance of global collaboration networks and authorships. This study contributes to a better understanding of the multifaceted financial and economic impact of the pandemic from a bibliometric perspective, offering a foundation for future research and the application of financial strategies and effective crisis management.



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Keywords: COVID-19 pandemic; financial crisis; economic impact; bibliometric analysis; financial impact of COVID-19; economic and financial analysis

1. Introduction

The effect of the COVID-19 pandemic on global financial and economic activities has been immense [1,2], resulting in adverse financial outcomes for businesses, industries, and entire countries [3–6]. This has sparked a swift response from the academic community aimed at understanding and addressing the implications of the pandemic [7,8]. Some scholars have reviewed the impacts of the pandemic in its initial stage [9,10], while others have focused on the economic impacts and the unpredictability of the pandemic [11]. The COVID-19 pandemic literature has applied crisis management theories and structured frameworks [12–16]. The effects of and responses to the pandemic have been examined from the perspectives of governments [17,18], businesses [19–21], and financial institutions [22,23]. Economic resilience, a significant aspect of crises, can be conceptualized via resilience theory [24]. Regardless of the perspective, the goal is to mitigate economic and financial fallout through adaptation, transformation, and continuity. Global interconnectedness and dynamics are central themes in COVID-19 research. Research on the pandemic provides an opportunity to build on theories of globalization and economic interdependence [25–27]. Shocks in one sector or part of the world reverberate through international financial markets and influence the global economy [16,28,29].

To understand the multifaceted financial and economic implications of this topic, a bibliometric analysis was performed. The bibliometric approach is suitable for sourcing the most relevant bibliographic outputs [30], identifying new research avenues [31], and driving international cooperation [32]. Researchers commonly make decisions about their future efforts based on publication output volume [33], and publication volume is related to international collaboration [34,35]. This study is grounded within the context of crisis management, resilience strategies, and global economic interconnectedness. The postoutbreak bibliometric study highlights the scholarly output throughout and after the crisis, thus allowing policymakers to gain deeper insight into the actual effectiveness of contingency planning solutions throughout the cycle to mitigate the repercussions of financial drawbacks [36]. This study encompasses studies on financial market fluctuations [37], oil prices, pricing [38], market conditions and investment, decreased business operations [39], devaluation of assets, and inability to target specific markets. Furthermore, we provide detailed insight into the academic output of financial post-COVID-19 aftershocks by reflecting on how this specific economic crisis in times of supply and demand shocks, extensive shortages, and global uncertainty was delicately managed to sustain the economy. Many researchers have addressed this challenge using standard economic theories and sustainability strategies within the context of the 2008 financial crisis or similar epidemics that may not be applicable to such a large-scale predicament [40,41]. However, preliminary investigations of COVID-19 have relied mainly on the ad hoc implementation of programs and resilience strategies based on several successful case studies [39,42].

Given the existence of many empirical studies in the above-described context, a systematic study that identifies key trends, authors, and other areas is warranted. Within the frameworks of economic and crisis management theories related to the COVID-19 pandemic, this bibliometric analysis helps contextualize the findings. This study enhances the understanding of the trends in the literature concerning the financial and economic implications of the pandemic. The main issues that call for comprehensive examinations stem from significant knowledge gaps in the literature. There is still a need to bridge the gaps between economic repercussions and policy response actions [43]. The majority of the existing studies were carried out with a focus on specific countries or immediate impacts, failing to record long-term effects and hindering generalizability. Moreover, there is a noticeable lack of research on the microeconomic costs and trade-offs [44], transport, policy responses, and quality of contingency management [45]. With all these issues in mind, a systematic bibliometric analysis is required to shed more light on the trends and details of the area.

Performance analysis, keyword mapping, and clustering were employed to address the following two research questions:

RQ1: Which are the most influential authors, documents, institutions, sources, and countries regarding the financial and economic implications of COVID-19 pandemic research?

RQ2: What are the current research themes of the financial and economic implications of COVID-19 pandemic research?

2. Financial and Economic Implications of COVID-19 Pandemic Research

The COVID-19 pandemic has had significant financial and economic implications for different sectors. The pandemic has led to increased volatility and spillover effects in the healthcare sector, with healthcare stocks experiencing minor negative impacts [46–48]. The tourism sector has been severely affected, with a decline in global tourism leading to lower GDP, increased unemployment, and job losses in various sectors, such as transportation, travel agencies, and accommodations [49–51]. Higher education institutions (HEIs) in numerous countries have experienced significant disruptions as a result of the pandemic, which has likewise affected the teaching profession and academic research [52,53]. This disturbance exposed precarious segments of society to heightened peril, especially in low-income nations [54]. To transform obstacles into opportunities, HEIs have been compelled

to adjust to new realities and apply lessons learned [55]. Technology-enhanced learning has exhibited both potential and constraints in the transition to online education [56]. Despite its limitations concerning the time frame, a systematic literature review focusing on monetary repercussions revealed a negative effect of COVID-19 on price levels, employment, and consumption due to COVID-19-related constrictions [44]. The authors found that there is a gap between standard economic approaches and their adequacy and effectiveness in unprecedented conditions of emergency, where they lack essential real-world applicability by employing responsiveness and sensibility to market changes [57]. In addition, because of unprecedented fiscal pressures, firm survival and sustainability significantly decreased [58,59]. Academic and financial facets of the education sector have been profoundly impacted by the COVID-19 pandemic, which has engendered substantial transformations and obstacles on a global scale. Key economic areas such as the pharmaceutical and tourism sectors were disrupted, leading to alterations in financial and economic performance [60]. The pandemic has affected nearly every economic operation and activity, presenting challenges, interference, and prospects for innovation and digitalization in the economic sector [61]. The consequences of COVID-19 include fluctuations in national economic conditions, start-up enterprises, and unemployment rates across various sectors, including primary, secondary, and service-based industries [62,63]. Due to a double disturbance in supply and demand, the pandemic precipitated a severe crisis that resulted in significant financial and economic disruptions and unpredictability [64]. The escalation of risk and a contraction in returns caused by the fatalities of COVID-19 have yielded substantial financial and economic consequences in financial markets [65]. These include enduring implications for monetary and fiscal intervention and the possibility of additional deglobalization [66]. A greater degree of cooperation between monetary, macroprudential, and fiscal policies is required to mitigate the adverse effects of the worldwide financial crisis [67]. Furthermore, financial institutions and markets continue to recover from the severe repercussions of the pandemic [9]. The comprehensive financial implications of the pandemic are extensive and include a reduction in activities within the service sector, including financial markets [68].

COVID-19 challenges have also led to positive transformations across multiple sectors. Technological advancements have been utilized to alleviate the disruptions caused by the pandemic [69]. The integration of digital transformation in corporate models promotes accessibility and reliability [70]. The implementation of IoT and AI technologies has been instrumental in addressing the challenges posed by COVID-19 in various sectors, including healthcare, economics, and education [71]. These technological advancements have facilitated the identification, monitoring, and containment of viral transmission, thereby aiding in the containment of the pandemic [72]. Furthermore, to mitigate risks and disruptions in the food supply chain, blockchain technology (BC-T) has been implemented, augmenting adaptability, traceability, and real-time monitoring [73]. The application of BC-T has facilitated the management of supply and demand disruptions, aiding emergency decision-making [62]. Additionally, technology has been employed to address the obstacles that the education sector encounters, as exemplified by endeavors such as REDS, which restructures the system and analyzes perspectives to combat challenges associated with the pandemic [6]. Technological progress has generally yielded inventive resolutions to alleviate disturbances and assist diverse sectors amidst the pandemic.

3. Methodology

3.1. Bibliometric Review Steps

Bibliometric methodology uses quantitative tools to analyze bibliographic and bibliometric data [74]. Analyzing vast scientific efforts enables us to make sense of extensive unstructured data [7]. Numerous indicators can be used to assess academic research. However, citations [33] and publication output volume are the most common performance metrics [75–77]. Comparatively speaking, bibliometric reviews—as opposed to conventional systematic literature reviews—offer insights into a wide range of disciplines that are

distinguishable by sizable amounts of bibliometric and bibliographic data. In particular, the methodology of this study follows [7] four-pronged strategy steps for conducting a bibliometric analysis. The four stages are establishing research objectives to direct the scope of the study, selecting the analysis techniques, collecting data from the database for analysis, executing the analysis, and presenting and disseminating the results to provide insights and solutions. Conducting a bibliometric analysis is critical for encapsulating intellectual growth in publications from authors, journals, institutions, countries, and collaboration networks on financial and economic implications during the COVID-19 pandemic. Exploring the financial and economic impacts of the pandemic offers solutions to related challenges.

This study employs keyword mapping and clustering techniques with VOSviewer to visualize relevant research trends and connections between keywords, authors, and other bibliometric elements. Keyword mapping is a technique that involves identifying and visualizing the interrelationships between the most frequently occurring keywords from the papers explored. Keyword clustering uses keyword similarities to group papers and examines the relationships between variables while identifying common themes. In this way, we attempt to achieve an understanding of the scholarly discourse on financial and economic implications during the COVID-19 pandemic.

3.2. Data Collection

The bibliographic information and citation data for the analysis of this study were collected from the SCOPUS database. The SCOPUS database was chosen because it indexes more than 23,000 journals, conference proceedings, and other types of publications. Previous studies such as those of Jin [78] and Umeokafor [79] also used the SCOPUS database because its comprehensive coverage is approximately 20% greater than that of the Web of Science (WoS). The search criteria and article selection focused on the 2020 to 2024 period based on the keywords used in the document search. The keywords used to perform the search included “COVID-19”, “pandemic”, “financial crisis”, “financial impact”, and “economic impact” (Figure 1).

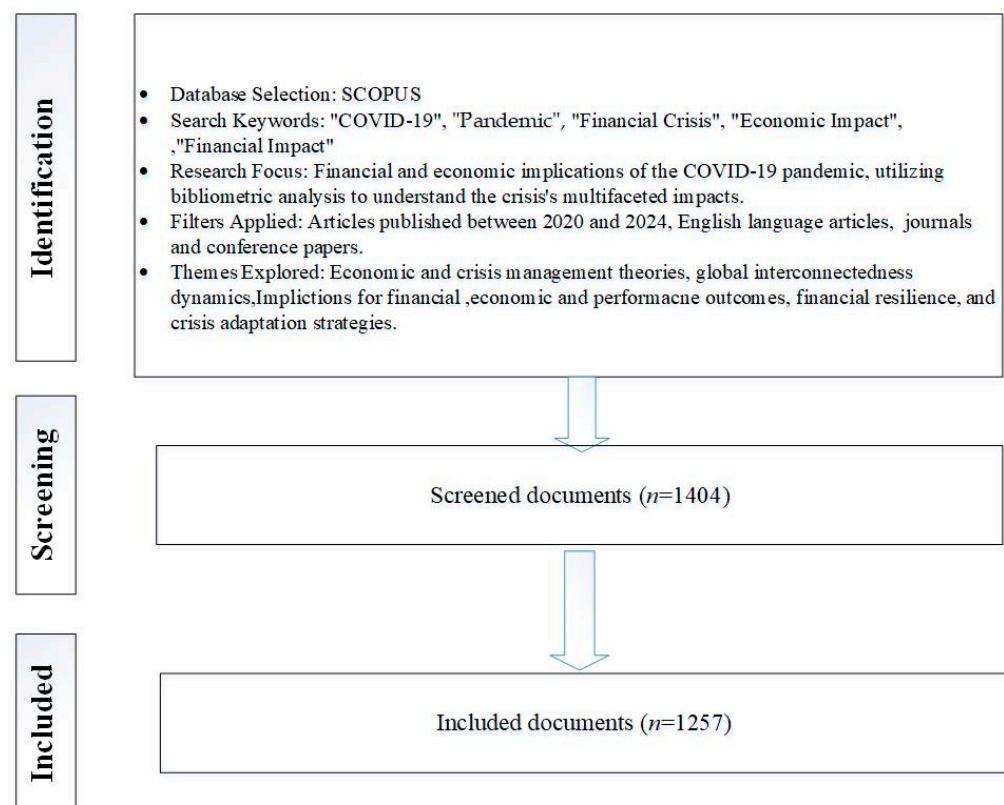


Figure 1. Bibliometric selection flow chart.

Next, the filters were applied to select English language articles and journal and conference papers and exclude all other types of literature. The search scope was limited to the themes of economics, finance, business, and management. The initial search of the SCOPUS database yielded 1404 documents. However, after further meticulous screening of the documents, we excluded all the papers that were outside the scope. This was achieved by manually reviewing the article titles and abstracts to ensure relevancy and accuracy in contributing to the sample for the bibliometric analysis. After eliminating irrelevant papers, the remaining studies that met the inclusion criteria were subjected to a bibliometric analysis. The final dataset included 1257 papers.

4. Results

4.1. Structured Publication Activity

The bibliometric analysis was performed on a sample of 1257 publications published between 2020 and 2024. The publication topics focus on the financial and economic implications of the COVID-19 pandemic crisis, which highlights the multifaceted landscape of related research. The results indicate a notable decline in annual publications of -62.94% . The average age of the publication documents is 1.25 years, which is a positive indication of the rapid scholarly response of the research community to the unfolding implications of COVID-19 for economic activity. Each document garnered an average of 20.13 citations, indicative of this body of work's high impact and relevance, supported by a robust reference network of 62,863 citations. The dataset revealed a breadth of research focuses, as evidenced by 2063 "Keywords Plus" and 3632 "Author's Keywords". The authors were widely distributed among 3551 contributors, with 191 leading as authors of single-authored documents, amounting to 195 such works. Collaborative efforts yielded an average of 3.05 coauthors per document, with a significant portion of 30.95% featuring international coauthorships.

Most outputs (1169) and some conference papers (55) collectively shape scholarly conversations on the economic impact of the pandemic. Table 1 illustrates the key bibliometric indicators of the research between 2020 and 2024.

Table 1. Key indicators of the bibliometric analysis.

Metric	Value
Timespan	2020–2024
Sources	598
Documents	1257
Annual Growth Rate %	-62.94
Document Average Age	1.25
Average Citations per Doc	20.13
References	62,863
Keywords Plus (ID)	2063
Author's Keywords (DE)	3632
Authors	3551
Authors of Single-authored Docs	191
Single-authored Docs	195
Coauthors per Doc	3.05
International Coauthorships %	30.95
Document Types (Articles)	1169
Document Types (Conference Papers)	55

The publication trends, authorship patterns, and extent of global collaboration within the field are presented next. Figure 2 shows the most influential authors for the financial

and economic implications of COVID-19 pandemic research between 2020 and 2024. Naeem and Bouri are the most prolific authors, with 36 and 33 publications, respectively, followed by Mensi (32), Umar (32), and Vo (30).

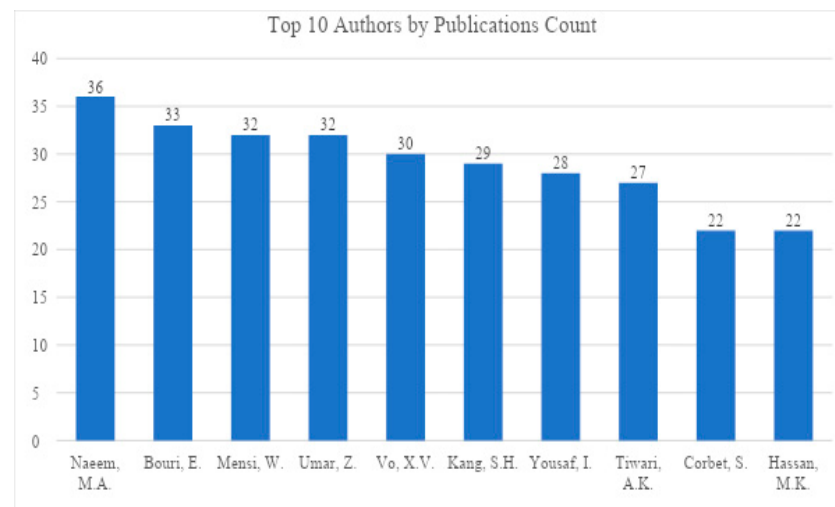


Figure 2. Leading authors by publication count.

4.2. Bibliometric Analysis of Influential Countries

France has 59 documents and a substantial 2239 citations, reflecting an average number of citations per document of approximately 38. Italy has 79 documents and 2084 citations, indicating a strong impact on the field. Denmark's focused contribution of 11 documents garnered an average of 179 citations per document, likely indicating extremely valuable research. With 30 documents, Romania follows closely with 1966 citations, emphasizing its research influence. Belarus's single document has been cited 1773 times, indicating a pivotal contribution to the field. On average, there were 76 and 162 citations per document across Switzerland and Morocco, respectively. The United Kingdom's significant scholarly output of 131 documents has resulted in 1438 citations, revealing broad engagement across the academic community. However, the United Kingdom has the lowest number of citations per document (10.98). Finally, Slovakia and Iran are among the most influential countries contributing to impactful research on the topic. Both countries have a high average citation count. Slovakian authors have published 17 documents, resulting in 1332 citations and 78.35 citations per document. Iranian authors have published 20 documents, with 1287 citations and a 64.35 citation rate. The numbers above show the substantial impact of the number of quality papers on the volume of publications (Table 2).

Table 2. Top 10 countries by output.

Rank	Country	Documents	Citations	Citations per Document
1	France	59	2239	37.95
2	Italy	79	2084	26.38
3	Denmark	11	1971	179.18
4	Romania	30	1966	65.53
5	Belarus	1	1773	1773.00
6	Switzerland	21	1590	75.71
7	Morocco	9	1456	161.78
8	United Kingdom	131	1438	10.98
9	Slovakia	17	1332	78.35
10	Iran	20	1287	64.35

4.3. Collaboration Networks of the Top Global Research Countries

The bibliometric analysis of research collaborations between 2020 and 2024 provides details on leading country collaborations. Table 3 shows the number of published documents, total citations per document, and total link strength regarding the global collaboration network. The results show that the USA is in the top position as a prolific country with an advanced collaboration network. The USA has 184 documents and 199 total citations, although the citation rate per document (1.08) is moderately lower than that of Spain (5.53) and Malaysia (1.84). The United Kingdom is in second place, with 131 documents. This reflects that the United States and the United Kingdom are open to significant research engagement and collaboration in exerting great academic productivity on financial and economic implications during the COVID-19 pandemic crisis.

Table 3. Summary of the top 10 countries in global research collaborations.

Rank	Country	Documents	Citations	Citations per Document	Total Link Strength
1	United States	184	199	1.08	100.00
2	United Kingdom	131	22	0.17	86.00
3	China	118	7	0.06	74.00
4	Italy	79	1	0.01	37.00
5	India	75	69	0.92	24.00
6	Australia	65	9	0.14	45.00
7	France	59	61	1.03	46.00
8	Spain	58	321	5.53	14.00
9	Malaysia	55	101	1.84	39.00
10	Canada	54	15	0.28	29.00

In the third position is China, with substantial contributions in collaboration with other countries amounting to 118 documents, suggesting a growing research interest and presence regarding the financial and economic implications of the COVID-19 pandemic. Italy and India are other countries that have made notable contributions, with 79 and 75 documents, respectively. Bibliometric analysis indicates varying citation impacts, meaning that high publication counts do not necessarily translate into citation impacts. Furthermore, Australia (65), France (59), and Spain (58) are influential countries that are engaging more with other countries to contribute insights and knowledge to the corpus of knowledge within the top 10. There were 55 publications in Malaysia and 54 in Canada. Malaysia has the second-highest citation ratio, 1.84, after Spain, which is 5.53; this reflects the diverse nature of the related research. The citation impact is measured by the citation-to-document ratio, underscoring the importance of quality and relevance in research over quantity.

The bibliometric analysis of global research collaborations illustrates how countries' economic and financial research outputs and effects vary. The network map in Figure 3 displays international coauthorship links, emphasizing the collaborative nature of the research community on the financial and economic implications of COVID-19 pandemic research. The USA, in blue, leads with its large global collaborative network with Canada, the Netherlands, Spain, and Italy, indicating a broad research network with significant impact. China has also shown a significant collaborative network with numerous countries in the study of the financial and economic implications of COVID-19. Other countries with developed networks include Australia, Malaysia, India, Canada, France, and Russia, which contribute greatly to the body of knowledge. The network analysis results indicate varying collaboration networks with financial and economic implications during the COVID-19 pandemic. The Asian region has contributed significantly to the financial and economic

implications of COVID-19 pandemic research, as illustrated in Figure 3. Countries such as India, Malaysia, and Saudi Arabia show impactful collaborations with Australia from Oceania, as shown in green. At the same time, China is leading in significant collaborations with France and South Africa, as shown in brown. Red indicates significant collaboration between Poland, Russia, and Romania. Notably, countries such as Myanmar, Peru, and Colombia are isolated from international collaboration on the theme of the economic and financial implications of the COVID-19 pandemic.

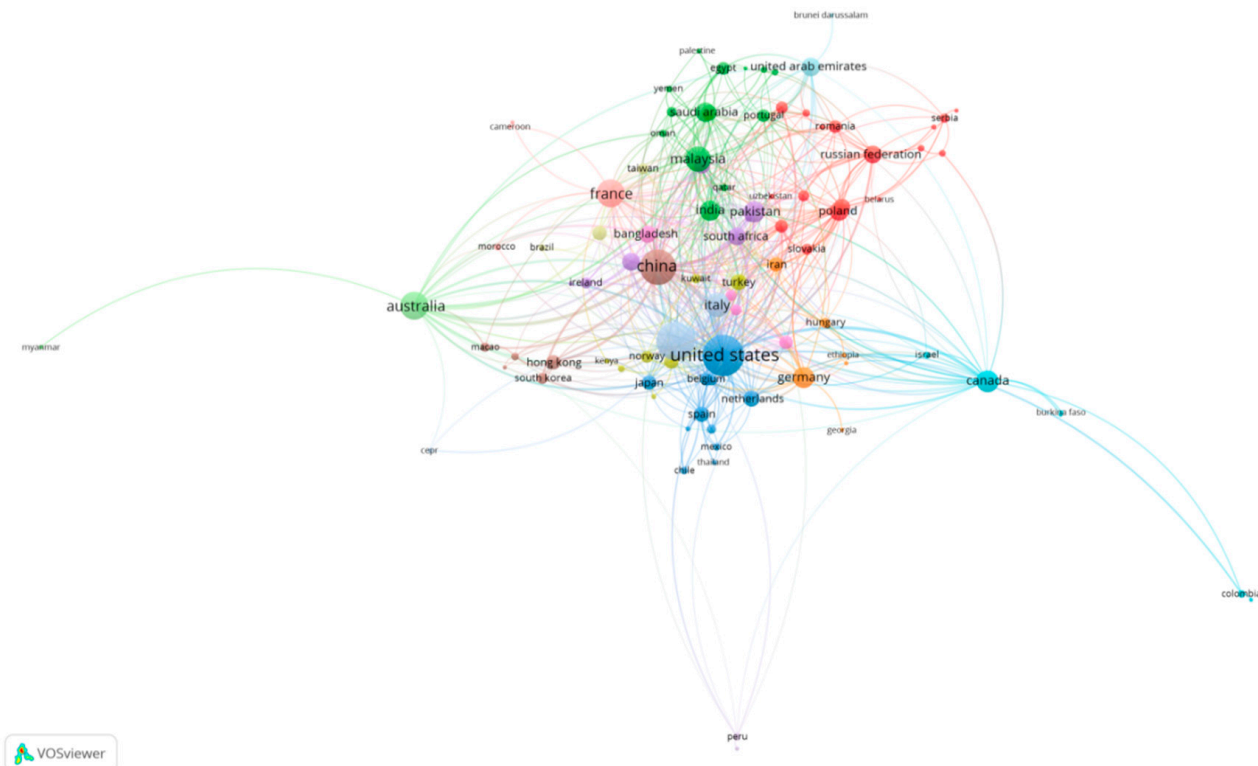


Figure 3. International coauthorship links.

4.4. Leading Institutions

This analysis underscores the contribution of various institutions worldwide to the topic of our investigation. The top 10 organizations in terms of documents and citations are presented in Table 4. The Bucharest University of Economic Studies leads with seven documents, indicating a robust academic presence. The Ipag Business School in Paris and the Institute for Fiscal Studies in the United Kingdom follow, with five and four documents, respectively. The Institute for Fiscal Studies has a large citation count of 577, suggesting high-impact research. The International Monetary Fund and the University of Economics in Vietnam contributed four documents, with the former achieving 75 citations, underscoring its global influence. Other notable institutions include the College of Business at Zayed University and the NBER in the USA, which present influential research with three documents each. The Institute for Fiscal Studies at the University of Porto and University College London manifest significant impact, with two documents each, amassing 491 citations, indicating significant research that resonates within the academic community.

Table 4. Leading institutions.

Rank	Organization	Documents	Citations
1	Bucharest University of Economic Studies	7	32
2	Ipag Business School, Paris	5	133
3	Institute for Fiscal Studies, UK	4	577
4	Department of Finance and Banking, Islamic University, BD	4	106
5	International Monetary Fund, USA	4	75
6	University of Economics, University of Danang	4	33
7	College of Business, Zayed University	3	74
8	NBER, Cambridge, MA, USA	3	21
9	Institute for Fiscal Studies, University of Porto	2	491
10	University College London, Institute for Fiscal Studies	2	491

4.5. Bibliometric Analysis of Top Prolific Journals

The bibliometric assessment of the most influential academic journals showcases the volume of the contributions and the breadth of the journals' influence as determined by citation counts. The *“Journal of Risk and Financial Management”* and *“Economic Research-Ekonomska Istrazivanja”*, with 20 documents, and *Sustainability (Switzerland)*, with 19 documents, stand out because of their centrality in the context of the economic and financial implications of the COVID-19 pandemic. *“Sustainability (Switzerland)”* achieved the highest number of citations at 1040, indicating its significant impact. *“Resources Policy”* also published 19 documents, 363 citations, whereas *“Applied Economics Letters”* and *“Finance Research Letters”* contributed 17 and 16 documents, respectively, with the latter resulting in 831 citations, illustrating its considerable influence on COVID-19 finance research.

“Technological Forecasting and Social Change” and *“Springer Proceedings in Business and Economics”* had 15 and 13 documents, respectively. The full information of the top 10 leading journals is displayed in Table 5.

Table 5. Leading journals.

Rank	Journal	Documents	Citations
1	<i>Journal of Risk and Financial Management</i>	20	400
2	<i>Economic Research-Ekonomska Istrazivanja</i>	20	276
3	<i>Sustainability</i>	19	1040
4	<i>Resources Policy</i>	19	363
5	<i>Applied Economics Letters</i>	17	64
6	<i>Finance Research Letters</i>	16	831
7	<i>Applied Economics</i>	16	104
8	<i>Technological Forecasting and Social Change</i>	15	397
9	<i>Springer Proceedings in Business and Economics</i>	15	3
10	<i>World Development</i>	13	536

4.6. Bibliometric Analysis of Keyword Occurrences

Table 6 illustrates the frequency of key terms within the documents analyzed, shedding light on the central topics in economic and financial research during the COVID-19 era. The most frequently occurring keywords were “COVID-19”, “pandemic”, and “COVID-19 pandemic”, according to a bibliometric analysis of keyword occurrences from 2020 to 2024. The bibliometric analysis of keyword occurrences indicates extensive contributions to the

theme of the financial and economic implications of COVID-19. The analysis revealed the prevalence of essential elements, such as “sustainability”, among the top 10 keywords, indicating how COVID-19 affects the sustainability of many economic activities. Hence, developing strategies to ensure sustainability in financial and economic terms is critical to the success of organizations. The top 10 keywords are displayed in Table 6. Therefore, understanding the severity and challenges of dealing with the pandemic is as important as finding solutions to ensure good public health and the continuity of global commerce and economic activities.

Table 6. Summary of the top 10 most common keywords.

Rank	Keyword	Occurrences	Total Link Strength
1	COVID-19	1086	1086.00
2	Pandemic	179	179.00
3	COVID-19 pandemic	158	158.00
4	Financial crisis	103	103.00
5	Crisis management	96	96.00
6	Epidemic	96	96.00
7	Economic impact	93	93.00
8	Coronavirus	65	65.00
9	Crisis	65	65.00
10	Sustainability	56	56.00

A co-occurrence network was generated of all keywords with a minimum of ten occurrences, highlighting prevalent research themes. The analysis reveals distinct clusters of keywords, including the economic and financial analysis cluster, which encompasses economic and financial research, market performance, and financial uncertainties. The sample keywords include “commerce”, “economic activity”, and “financial markets”. COVID-19 research and impact is another prominent cluster, with keywords “COVID-19 pandemic”, “disease control”, and “tourism”, which illustrate the pandemic’s effects on tourism and governance. Other key clusters included social, environmental, and corporate responsibility, with keywords such as “climate change”, “corporate social responsibility”, and “sustainability”, and regional studies and disease-related research, with keywords such as “Africa”, “SARS-CoV-2”, and “lockdown”. The economic challenges and policy responses cluster, and the keywords “economic crisis”, “fiscal policy”, and “unemployment” include the pandemic’s economic consequences and policy measures to counteract them. Other clusters identified are related to wider economic and social conditions, recovery and resilience, and financial technology.

Figure 4 depicts the network exhibiting keyword frequencies between 2020 and 2024. This highlights the significant research focus on COVID-19, as evidenced by the most frequent occurrences of the keywords “COVID-19”, “pandemic”, and “COVID-19 pandemic”. Figure 4 encapsulates the themes that have been of great interest to researchers. The COVID-19 node is centrally positioned, showing how it is linked to finance and economics, economic and social effects, and uncertainty in the yellow cluster. The green cluster shows the implications of COVID-19 for destabilizing people and industries. The blue cluster revolves around commerce, including financial markets, costs, oil prices, market conditions, and investments linked to the COVID-19 pandemic. The red cluster shows the results, encapsulating the essence of sustainability in the face of the COVID-19 pandemic. Sustainable practices such as innovation, sustainable leadership, entrepreneurship, decision-making, sustainable supply chains, crisis management, and profitability have been significantly researched to ensure that humankind and businesses remain steadfast and resilient in the face of the COVID-19 pandemic.

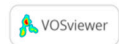


Figure 4. Keyword co-occurrence map.

5. Discussion

The COVID-19 pandemic has significantly impacted the global economy, resulting in severe financial and economic implications. The bibliometric analysis performed provides significant insights into the papers published on topics related to the economic and financial implications of the COVID-19 pandemic. The study objective is to situate and interpret the results within the expanding body of research discourse. Despite evidence for the contrary [80], metrics, including publication output volume and citation counts, are crucial for evaluating the quality of academic output, as indicated by Cancino [33] and Albort-Morant and Ribeiro-Soriano [31]. Research on this topic has increased significantly since the pandemic started, and our analysis confirms the suggested rapid response of the academic community [7,10]. The average publication age of 1.25 years demonstrated a proactive response, which aligns with prior research findings [12,15]. The productive academic output encompassing 1257 documents among 3551 contributors reiterates a robust academic response. Additionally, the analysis revealed that 191 authors published 195 single-authored documents.

The results of this analysis support the claim that publication volume is strongly associated with international collaboration [34,35]. Our results indicate diverse authorship and global collaboration, as collaborative efforts yield an average of 3.05 coauthors per document, with a significant portion of 30.95% featuring international coauthorships. These results align with the theories of globalization and economic interdependence [25–27]. Our findings indicate that the research output and impact of different countries in the fields of economics and finance are truly global.

This study further revealed significant quality impacts, as evidenced by the average citation rate of 20.13 per document. The country analyses show that some countries exhibit voluminous output and broad engagement across the academic community. The United Kingdom's output of 131 documents has 1438 citations, and France's 59 documents have an impressive 2239 citations. Not surprisingly, there are two UK institutions among the top 10 leading global institutions, University College London, the Institute for Fiscal Studies,

and the Institute for Fiscal Studies. Consequently, these two institutions have the highest citation rates. The bibliometric indicators reveal that targeted, high-quality contributions can be equally impactful. Belarus's single document has been cited 1773 times, highlighting the quality of work over quantity. Insights into the research output and impact of different countries in the fields of economics and finance reveal diverse levels of global research productivity and influence, with varying levels of engagement and impact across countries. The USA has 184 documents and 199 citations, indicating broad engagement across the academic community and significant quality impact. China has a substantial number of documents (118) but a modest citation impact (7), even though it has one of the largest global collaboration networks.

This study used keyword mapping and clustering techniques to identify relevant research trends and examine the connections between keywords, authors, and other factors. Our findings echo Bennett and Lemoine's [81] emphasis on adaptive and resilient financial strategies. Keywords such as "sustainable finance", "sustainability", and "resilience" were identified through a bibliometric analysis of keyword occurrences. These keywords show that long-term resilience and the creation of financial strategies that can handle shocks are becoming more critical. The analysis of organizations and journals further affirms the interdisciplinary nature of this field. The keyword analysis reflects a comprehensive focus on "financial crisis", "crisis management", and "economic impact", indicating a nuanced exploration of the repercussions across various sectors. A co-occurrence network analysis identified key thematic clusters, including economic and financial analysis; COVID-19 research and impact; social, environmental, and corporate responsibility; regional studies and disease-related research; and economic challenges and policy responses. Consequently, this finding echoes crisis management theories [12–15,82] that aim to understand the long-term effects of the crisis on different sectors. The COVID-19 crisis exposed numerous unsustainable and nonresilient aspects of the global economy and triggered reflection on how to resolve those issues. Some solutions in education, finance, economics, healthcare, and tourism have already been proposed [17,48,50,83].

This study charts several COVID-19-related themes that have been of great interest to researchers in recent years. One of the themes is exploring the connection of COVID-19 to finance and economics, as well as economic and social effects, and how it is causing uncertainties (Figure 4—yellow cluster). Although the adverse effects of the pandemic on businesses, industries, and countries have been studied [3–5,84], as has the unpredictability of the pandemic [11], these themes remain appealing for further research. Similar opportunities are outlined in the green cluster, which shows the implications of COVID-19 for destabilizing humans and industries [85,86], and in the blue cluster, which revolves around commerce, including financial markets, costs, oil prices, market conditions, and investments [87]. The red cluster includes sustainability in relation to the pandemic. Sustainable practices such as innovation, sustainable leadership, entrepreneurship, decision-making, sustainable supply chains, crisis management, and profitability have been significantly researched to ensure that humankind and businesses remain steadfast and resilient in the face of the COVID-19 pandemic, and these practices present an opportunity for further research.

This bibliometric analysis of financial and monetary implications following the pandemic provides a breakdown of the diverse research themes emerging during the crisis and postrecovery. This overarching prompt focus of scholarly attention to the immediate and long-term effects on global economic stability points to the plurality of interests for both immediate fiscal impacts and the development of sustainable lasting resilience responses. The principal topic of "COVID-19" is indicative of the all-encompassing financial implications of healthcare crises with spillover effects over economic sectors. Presumably, concentrated and cross-disciplinary effort is required to examine, analyze, and comprehend these emerging challenges. It also emphasizes both positive and negative aftershock reconceptualizations in the aftermath. Systematic analysis accounts for accompanying social effects concerning income, employment, and poverty rates caused by uncertainty

and unpredictability. It can be inferred from our results that researchers have appraised the crisis as having destabilizing effects on traditional business models that rely on standard economic theory. Considering that the pandemic has posed an unprecedented global challenge, studies call for a reassessment of resilience strategies in all sectors based on empirical evidence and case studies of successful strategic approaches. Notably, the themes of sustainability and resilience point to interest in devising long-term flexible strategies and sustainable practices. There is a need to shift corporate policies from profitability to responsiveness in the face of economic shocks. Given the impact of ongoing international conflicts, wars, and political turmoil on financial, economic, and business outcomes [21], a systematic review of the area from the crisis management perspective should be conducted. Although our analysis is detailed in presenting the interrelated topics and complexities of economic downturns, a critical evaluation is warranted. First, we note that the global research community's immediate response to adversity contributed to timely access to relevant research. However, since the majority of studies were performed while the crisis was ongoing, to extend and validate the results, longitudinal studies on governing efficiency are needed. Moreover, resilience, as a pervasively observed theme, denotes the shift in national and organizational practices toward sustainability during future challenges. In addition, convergence in the red cluster poses a booming ground for extrapolating and operationalizing multisectoral activities. Finally, our analysis accentuates the necessity of a uniform interdisciplinary approach that would exponentially improve economic, social, and environmental soundness through mutual multidisciplinary collaboration.

6. Conclusions, Limitations, and Future Research Directions

This bibliometric analysis measures the degree to which scholars have examined and discussed the economic and financial implications of the COVID-19 pandemic. Using this analysis, we have offered an outlook on scholarly research concerning the financial and economic implications of the COVID-19 pandemic. The bibliometric study successfully addressed the two research questions and identified the most influential authors, documents, institutions, sources, countries, and research themes on the financial and economic implications of COVID-19 pandemic research. The results validate the importance of the theories of financial resilience, crisis management, and global interconnectedness in influencing scholarly discourse. However, there are certain limitations to this study. Broad keywords were used to identify papers fitting the aim of our analysis. The initial search was performed using the keywords “COVID-19”, “pandemic”, “financial crisis”, “financial impact”, and “economic impact”. Although the screening and elimination process was meticulous, it is possible that some valuable papers were missed and not included in this study. For that reason, another set of keywords could be used and potentially yield valuable findings. The current study is contingent on the financial aspect of the economic downturn, so it may not fully capture the extent of all relevant publications, such as those focusing on healthcare, global poverty and inequality, income losses among disadvantaged populations, decreases in household income, and unemployment, as well as successful utilization of technological means to penetrate new markets. Financial sector operations and projects constitute a complex sector with various activities and constraints [6,43,88], whereas innovation is key for the advancement of organizations, the economy, and society [78,89,90]. Therefore, this investigation is limited in that it may not capture the nuanced complexities between economic fallout and prospects arising from the crisis. Due to its specific features, such as physical constriction, the pandemic has been found to be a catalyst for transformative work practices [91,92]. Although we consider the most severely impacted industries, unfortunately, it was not possible to address their specific challenges. It would be beneficial for future bibliometric studies to focus on the effects on a particular industry. Additionally, the document search focused on particular subject areas, such as economics, econometrics and finance, business, management, and accounting. This study focused only on peer-reviewed journal papers and conference papers that were published in the English language. This resulted in 1257 papers being included in this bibliometric

analysis. Future studies can address all of these limitations by modifying the filtering process and expanding the search scope to include other keywords, scientific fields, types of publications, and publications written in all other languages. SCOPUS and VOSviewer were used in this study. Future studies could also access the WoS database and utilize other types of software to create data visualizations. The primary contribution of this study lies in its emphasis on the financial, economic, national, and organizational consequences of the COVID-19 pandemic crisis. This study enriches the body of knowledge on the topic of the financial and economic implications of COVID-19 by providing a nuanced understanding of the pandemic's economic implications, thus opening avenues for future research on crisis management and sustainable financial strategies. As such, this study paves the way for future research into sustainable financial strategies and crisis management.

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