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Bibliometric Analysis of Global Economic Policy Uncertainty: Over the Last Decade

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ABSTRACT

Purpose: The study aims to provide a bibliometric analysis of the topic of global economic policy uncertainty (GEPU) by compiling the last ten years' worth of research in the field. The study reveals trends in publications, pinpoints theme areas within the field of GEPU, evaluates the gap, and suggests potential avenues of research.

Methods: Data for the analysis were taken from the Scopus database over ten years, from 2014 to 2023. The first search yielded 151 publications in total, of which 129 were selected for further screening and analysis using VOSviewer software.

Findings: Following uncertainty and GEPU, the main themes that arose from the keyword co-occurrence analysis were COVID-19 and stock returns. Several studies examined the GEPU index's predictive ability using the GARCH-MIDAS model. The investigation revealed investment in alternative financial assets and commodities markets as the main themes, and China as the leading country in research in this field.

Implications: By offering systematic and integrated research and synthesizing all the earlier published findings, this study significantly advances the emerging subject of GEPU. It also highlights the research gap examining the impact of GEPU on firm-level outcomes.

Originality: There are hardly any studies that focus on the importance of GEPU, and a bibliometric analysis compiling the studies of GEPU is rare to find. The study not only documents the trend clusters but also highlights the importance of GEPU as a policy tool**..**

1. Introduction

Due to political unrest, economic crisis, and various geopolitical events worldwide, the significance of Global Economic Policy Uncertainty (GEPU) as a determinant of strategic decisions in an organization has become more crucial (Shankar, 2020). Following various global disruptions, including Brexit, Donald Trump's victory in the U.S., the spread of COVID-19, and the Russia–Ukraine crisis, global economic policy uncertainty has gained importance. Also, with advancements in technology, widespread media, and extensive communication networks, any sudden and unexpected change in the policy, social, or economic environment in one part of the world or a country can create a series of harmful waves, resonating around the globe, which makes it vital to examine this field. Uncertainty has recently increased because of political division and the rising importance of government expenditure in the overall economy. GEPU is not a problem faced by a single country but is a global problem faced by all economies due to close financial and trade relations between various countries (Zhou *et al.*, 2022).

Baker *et al.* (2016) explain EPU as "the probability of changes in future policies compared to the existing condition and how these changes affect the micro and macro ecosystems." Global EPU is calculated using a GEPU index, which is formulated using the GDP-weighted average of the national EPU index of 16 countries that constitute two-thirds of global output. As a weighted average of newspaper-based uncertainty for various countries, GEPU serves as a reliable measure of global uncertainty, policy, and economic conditions (Davis, 2016).

Prior literature has studied the impact of GEPU on tourism (Sharma & Khanna, 2023), gold price volatility (Fang *et al.*, 2018), bitcoin (Bilgin *et al.*, 2018), crude oil market volatility (Lian *et al.*, 2019), etc. Global economic

policy uncertainty affects labour productivity growth, new product growth, and innovation in businesses. As a result, during uncertain times, the priority is bound to shift from risky marketing strategies and innovation to the conservation of existing resources, thereby reducing new product innovation and R&D spending (Shankar, 2020). GEPU adversely impacts tourism activities in a country in the short run, but this impact turns favourable over the longer term. Trade, monetary, or trade-related policy changes, if made in the proper context, would have a beneficial impact on tourism activities that would be visible in the long run (Sharma & Khanna, 2023). GEPU has been studied with respect to gold price volatility, revealing predictive power in the gold futures market. It has a positive and significant impact on fluctuations in the gold futures market (Fang *et al.*, 2018). It has been proposed that with an increase in Global EPU, gold prices increase, and with a decrease in Global EPU, gold prices decrease, but this is statistically insignificant. This suggests that the increasing influence of rising EPU on gold prices is not directly countered by positive improvements in the global economy, which reduce the global EPU, leading to a decrease in gold prices (Bilgin *et al.*, 2018). Investors use information on the level of GEPU to predict volatility in Bitcoin and to enhance the understanding of the correlation between Bitcoin and bonds, commodities, and equities, respectively (Fang *et al.*, 2019). GEPU also leads to an increase in the cost of capital of a firm, thereby hampering corporate innovation, especially for businesses that are financially constrained or dependent on external financing (Xu, 2020). The U.S. equity market volatility index and the GEPU index can significantly predict crude oil market volatility (Lian *et al.*, 2019). GEPU and the US EPU index can forecast crude oil price volatility as compared to other country-specific indices, speculation, and demand–supply fundamentals of oil (Wei *et al.*, 2017).

Despite growing research in the field of GEPU, there are hardly any studies performing quantitative research on the bibliometric traits of literature explaining the academic characteristics of the field. A comprehensive study investigating and answering questions about the dominant articles in the field, the most prolific authors, the most relevant recurring themes, and the most productive and influential institutions and nations in research in the domain of GEPU is still needed. This study addresses these questions. Global economic policy uncertainty is a comparatively new topic, with research published only in recent years. Owing to the rapid growth of research in this field, clarity and direction in the domain can only be achieved by conducting a systematic and comprehensive analysis that summarises all the published material.

Authors were inspired to investigate the growing significance of in-depth study in the field of GEPU by the paucity of literature in this area, which was followed by an increase in interest and publications fairly recently. In addition to providing academics and managers with prospective directions for future research, this study aims to add to their current understanding. It aims not only to explore the intellectual structure of the GEPU research field but also to evaluate how this field has evolved in response to global shocks and highlight the concentration of studies focusing on the methodological framework. It also sheds light on the scarcity of research that examines how rising global uncertainty directly impacts firm-level decision-making. Using a variety of techniques, this study conducts a bibliometric analysis on data taken from the Scopus database over ten years, from 2014 to 2023. To statistically create a set of data relevant to a field of study, bibliometric analysis is frequently preferred (Bhatt *et al.*, 2020). It facilitates the future scope of study in new areas, helps understand research trends, and helps comprehend the current research available. There have been recent studies that have extended the research of GEPU by examining it in relation to climate related policy risk, financial constraints and fragmentation in geopolitics (Gupta *et al.*, 2024; Owusu & Korankye, 2023). These motivate us further to comprehensively study the field of GEPU.

The following sections explain the remainder of this study. The approach used for data collection and analysis is described in the subsequent section. The findings and discussion follow this section. The conclusion of the analysis and suggestions for additional research are covered in the final section.

2. Data and Methodology

The study adopts a mixed-method research design, as secondary data are used to analyse trends and the number of publications, and a qualitative approach is adopted to analyse clusters and themes. A non-probability sampling design has been adopted. Bibliometric analysis is used in the study to review the global economic policy uncertainty literature. Bibliometric analysis qualitatively investigates a large volume of existing research to ascertain the historical and current trends in the field of study (Bhatt *et al.*, 2020). It reviews and summarizes the most productive and influential articles, journals, authors, organizations, keywords, countries, etc. (Bhukya *et al.*, 2022; Arora *et al.*, 2023).

Table 1: Data Filtering Criteria

Screening Criteria	Reject	Accept
Initial Search	-	151
Excluding Documents Not in English	15	136

Excluding Errors in Records	2	134
Screening the Documents for Relevance by Vetting the Titles, Abstracts, and Keywords	5	129

Table 1 presents the systematic filtering and screening process followed during the course of the research. . The first search in the database generated 151 research articles. Only articles, conference papers, and review articles were accepted as document types while doing the initial screening. The papers were trimmed to 136 by maintaining the subject area as "Economics, Econometrics, Finance, Business, Management, and Accounting." To make sure that only relevant articles were considered, content screening was done on the document titles and abstracts. Following the process of exclusion, there were just 129 entries remaining.

The Scopus database is used in this study to find pertinent publications. It is the most widely used database for performing bibliometric analysis (Pranckut, 2021). Continuous improvement and consistency in the quality of the standard of research studies form the basis of the journals indexed in the Scopus database. Compared to other databases like PubMed, Web of Science, etc., Scopus is more extensive and comprehensive (Bartol & Budimir, 2013). Papers published in the Scopus database are more rigorously peer-reviewed, and applied research journals are indexed more thoroughly. In addition, it provides comprehensive coverage of the renowned finance and economics journals, which makes it compatible with bibliometric tools like VOSviewer.

The selection of keywords is an essential component of effective data collection. A carefully developed search string of keywords is used to search the database. Authors used the keywords "Global Economic Policy Uncertainty," "Global EPU," and "GEPU," as shown in Table I. Since the research aimed at comprehending the field of GEPU, the keywords focused on the same. Author keywords were selected over indexed keywords, as they reflect the concept of the study. Authors identified English-language journal articles, conference proceedings, and review papers that were Scopus indexed between 2014 and 2023. GEPU is a fairly recent topic, and research in the field picked up after the introduction of the GEPU index in 2016. Before the Davis index, there was no quantitative measure to gauge GEPU. Also, the period of 2014–2023 captures major global events such as Brexit, the US–China trade dispute, COVID-19, the Russia–Ukraine war, etc., making it significantly relevant.

Bibliometric analysis can be done with a variety of tools, including Bibexcel, Bibliomaps, CR Explorer, and others. Literature has used VOSviewer, Biblioshiny, Gephi, and Bibexcel in several fields (Hafeez *et al.*, 2019). Authors have utilized VOSviewer to investigate the data retrieved from the Scopus database. VOSviewer can export and import data from a variety of sources and provides excellent visual network maps that make the analysis more comprehensive. VOSviewer has a very user-friendly interface, and due to its low-dimensional visualization, the placement of any two objects captures the similarity between the objects (Van Eck & Waltman, 2007).
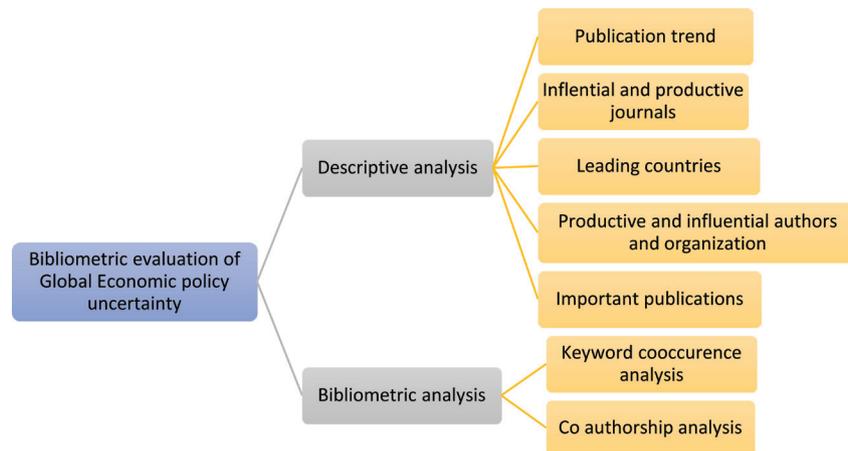

Figure 1: Bibliometric Flowchart

3. Results and Discussion

The main conclusions of the analysis of the data on Global EPU are explained in this section. To comprehend the intellectual framework of the field of study, this section covers the publication trend, the most cited journals, nations, organizations, and publications, as well as co-authorship analysis, keyword analysis, and co-occurrence analysis. This section not only details the trends and clusters but also interprets the bibliometric patterns to explain the evolution of GEPU in response to various changing times.

3.1. Publication by Year

Figure 2 illustrates the pattern of the number of publications on global EPU research annually. An analysis of this trend in research interest suggests that the GEPU field did not exist as a research area from 2014 to 2016, with only one paper published during this period. A total of around 14 papers were published between 2017 and 2019. There has been a sudden growth in research in the field of GEPU since 2020. The year 2020 saw a massive onslaught of COVID-19 worldwide, leading to a rise in EPU in all countries. This led to a surge in academic research in this field, catching the attention of researchers and scholars due to the practical implications of studying this topic. The number of articles published on GEPU from 2020 onwards grew by 77%. With a total of 26%, 2023 saw the most significant number of publications. This sudden surge in research in the GEPU field post-2020 points to the fact that this field is sensitive to global shocks and geopolitical conflicts. Additionally, it indicates a research gap in forward-looking policy uncertainty frameworks, particularly for developing economies. This is a positive indication, as the growth in publications might influence policymakers and industry experts to introduce policies and practices that adapt to continuous growth.

Figure 2: Year-Wise Distribution of Publications on GEPU

3.2. Publication by Journal

Below, Table 2 lists the most dominant journals based on the number of citations. The journals' themes and GEPU's theme are complementary. The International Journal of Finance and Economics (129), Energy Economics (189), Economic Modelling (143), Finance Research Letters (254), and The International Review of Financial Analysis (with the highest number of citations, 335) are the top five most cited journals. Figure 3 displays the most productive journals in terms of the highest number of articles produced in the field of GEPU. The top five journals are Finance Research Letters (9), The International Journal of Finance and Economics (8), International Review of Financial Analysis (7), Resources Policy (7), and Tourism Economics (5). The data are represented in Table 2 and Figure 3.

Table 2: Journal-Wise Citations and Publications

| TP (Total Publications)	JOURNAL	TC (Total Citations)
7	International Review of Financial Analysis	335
9	Finance Research Letters	254
3	Energy Economics	189
4	Economic Modelling	143
8	International Journal of Finance and Economics	129
7	Resources Policy	110
2	Journal of Futures Markets	105
2	Applied Economics	90
3	North American Journal of Economics and Finance	72
4	Research in International Business and Finance	65
5	Tourism Economics	61
2	Economic Research-EkonomskaIstrazivanja	58
2	Journal of Forecasting	46
2	China Finance Review International	44
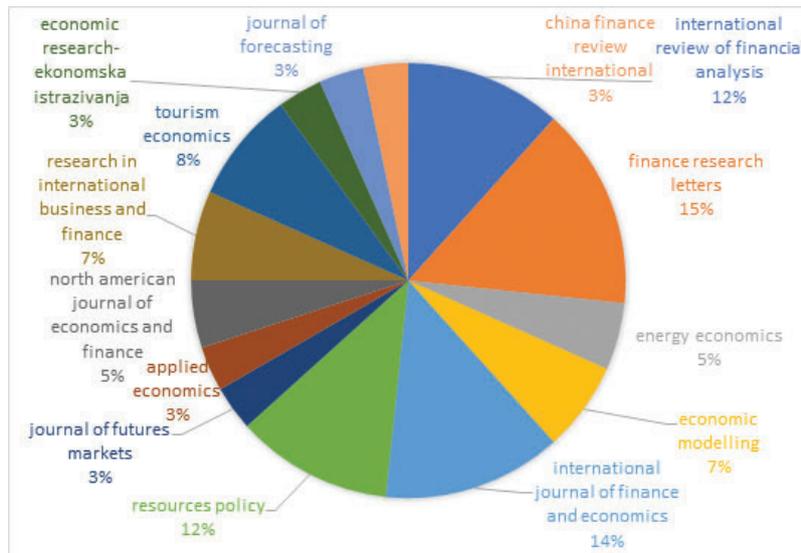
Figure 3: Journal-Wise Distribution of GEPU Publications

3.3. Publication by Country

Global Economic Policy Uncertainty is gaining importance, and research in this field still has much potential. The top publishing nations and those with the highest citations in this field are displayed in Table 3. As illustrated in Figure 4, the top three nations in terms of the total number of papers are China (54), Turkey (20), and the United States (14). When it comes to the volume of citations, the top three nations are China (1387), the United States (381), and Turkey (322). Both the number of articles and the number of citations garnered place China at the top of the list. Table 3 and Figure 4 represent the above data. The fact that China is leading the charts in terms of publications and citations indicates that it is greatly sensitive to changing global conditions, which might be due to its policies related to global trade and capital allocation.

Table 3: Country-Wise Citations and Publications

Rank	Publications	Country	Rank	Country	Citations
1	54	China	1	China	1387
2	20	Turkey	2	United States	381
3	14	United States	3	Turkey	322
3	14	United Kingdom	4	France	321
4	12	Malaysia	5	Malaysia	221
5	11	Vietnam	6	United Kingdom	204
6	8	France	7	Australia	197
6	8	Pakistan	8	Vietnam	180
7	5	Ghana	9	Italy	93
8	4	Germany	10	Germany	92
9	3	Australia	11	Sweden	76
9	3	Italy	12	Ireland	45
9	3	Sweden	13	Ghana	43
9	3	Ireland	14	Pakistan	41

3.4. Publication by Author and Institutions

The top 10-ranked authors in terms of the total citations received have published only one paper each, except Libing Fang. Zhaoxia Xu contributed one document with the highest number of citations, as evident from Table IV of the most cited papers. This paper investigates how GEPU affects business innovation and proposes that increasing GEPU increases a firm's capital cost, leading to decreased innovation. Firms relying on external finance and that are financially constrained are impacted more. Libing Fang has published two studies in total, but the study receiving citations of 163 explores the influence of GEPU on volatility in Bitcoin, bonds, commodities, and global equities, and the correlation between these components. The study proposes that GEPU negatively impacts the correlation between Bitcoin and bonds but positively impacts the correlation between Bitcoin and commodities and Bitcoin and equities. Yu Wei published a study using the GARCH model to analyze the predictive power of GEPU and National EPU,

along with global oil demand, supply, and speculation, in forecasting crude oil market volatility. This paper received 162 citations.

The most influential and prolific institutions in the field of GEPU research are examined using institutional analysis. With 268 citations, the School of Management and Engineering at Nanjing University in Jiangsu, China (268), the School of Finance at Yunnan University of Finance and

Economics in China (209), the School of Economics and Management at Southwest Jiaotong University in Chengdu, China (266), the School of Economics and Management at Nanjing University of Science and Technology in Nanjing, China (76), and the School of Finance at Southwestern University of Finance and Economics in China (71) are the top five most cited institutions.
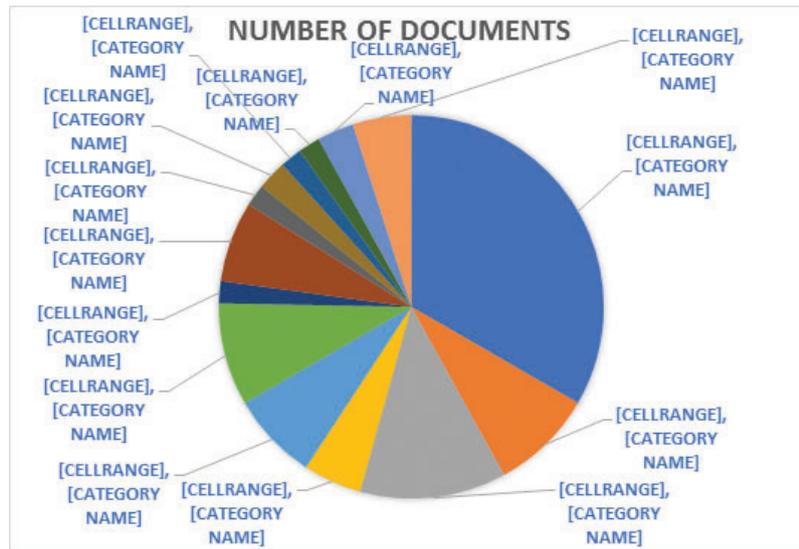

Figure 4: Country-Wise distribution of GEPU Publications

With eight publications, Southwest Jiaotong University's School of Economics and Management in Chengdu, China, is the most productive university in terms of publishing volume. Each school has three publications: the School of Economics and Management at Nanjing University of Science and Technology in Nanjing, China, and the School of Finance at Nanjing University of Finance and Economics in Nanjing, China. Figure 5 shows that each of the other institutions has two publications.

Table 4: Author-Wise and Institution-Wise Citations and Publications

TP	Author	TC	TP	Organization	TC
1	Xu Z.	189	2	School of Management and Engineering, Nanjing University, Nanjing, Jiangsu, China	268
1	Fang L.	163	2	School of Finance, Yunnan University of Finance and Economics, China	209
1	Wei Y.	162	8	School of Economics and Management, Southwest Jiao Tong University, Chengdu, China	266
1	Bai L.	128	3	School of Economics and Management, Nanjing University of science and technology, Nanjing, China	76
1	Bilgin M.H.	102	2	School of Finance, Southwestern University of Finance and Economics, China	71
1	Liang C.	90	2	School of Finance, Central University of Finance and Economics, Beijing, China	60
1	Li Z.	79	2	College of Management and Economics, Tianjin University, Tianjin, China	35
1	Canh N.P.	78	2	School of business, East China University of science and technology, Shanghai, China	35
1	Qin M.	78	2	School of public policy and administration, Chongqing University, China	30

1	Balli F.	76	2	Central bank of the republic of Turkey, Ankara, Turkey	26
2	Hoque M.E.	55	2	Department of Finance, School of business, University of cape coast, Cape coast, Ghana	26
1	Li T.	51	2	Department of Business Administration, Iqra University, Karachi, Pakistan	22

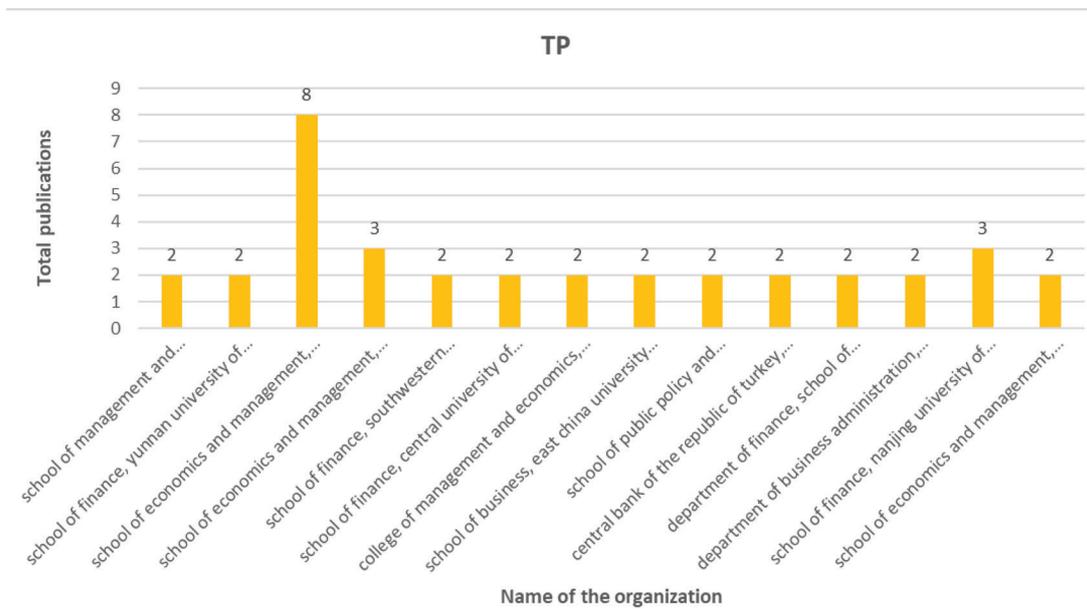| 1 | Donadelli M. | 49 | 3 | School of Finance, Nanjing University of Finance and Economics, Nanjing, China | 13 |
| 1 | Lyu Y. | 47 | 2 | School of Economics and Management, China University of mining and technology, Xuzhou, China | 10 |

Figure 5: Institution-Wise Publications in GEPU

Table 5: List Of Most Cited Papers

Document	Title of the Paper	Citations
Xu (2020)	Economic policy uncertainty, cost of capital, and corporate innovation	189
Fang *et al.* (2019)	Does global economic uncertainty matter for the volatility and hedging effectiveness of Bitcoin?	163
Wei *et al.* (2017)	Which determinant is the most informative in forecasting crude oil market volatility: Fundamental, speculation, or uncertainty?	162
Bai *et al.* (2021)	Infectious disease pandemic and permanent volatility of international stock markets: A long-term perspective	128
Fang *et al.* (2018)	The importance of global economic policy uncertainty in predicting gold futures market volatility: A GARCH-MIDAS approach	105
Bilgin *et al.* (2018)	The effects of uncertainty measures on the price of gold	102
Liang *et al.* (2020)	Uncertainty and crude oil market volatility: new evidence	90
Li and Zhong (2020)	Impact of economic policy uncertainty shocks on China's financial conditions	79
Qin *et al.* (2021)	BitCoin: A new basket for eggs?	78

Canh *et al.* (2020)	Determinants of foreign direct investment inflows: The role of economic policy uncertainty	78
Balli *et al.* (2018)	A tale of two shocks: What do we learn from the impacts of economic policy uncertainties on tourism?	76
Li *et al.* (2020)	Economic policy uncertainty and the Chinese stock market volatility: Novel evidence	51
Donadelli and Persha (2014)	Understanding emerging market equity risk premia: Industries, governance, and macroeconomic policy uncertainty	49
Lyu *et al.* (2021)	Time-varying effects of global economic policy uncertainty shocks on crude oil price volatility: New evidence	47

3.5. Keyword and Co-Occurrence Analysis

Keyword occurrence highlights the linkage between two terms that occur at the same time in an article, describing their link. For clustering of the publications, a ground for relatedness needs to be ascertained. Author keywords mainly constitute those words that, in the author's opinion, capture the underlying theme and the spirit of their work (Mall *et al.*, 2023). Keywords mainly exhibit the central idea of the publication, providing a quick overview of the existing data on the theme (Khanra *et al.*, 2020). This approach clarifies the hot trends and topics in the concerned field. Authors have utilized the author's keywords in this study, and the data revealed which words have been utilized in previous studies. In the VOSviewer software, the limit on the minimum number of co-occurrences was kept at 4, which revealed 11 keywords. These words were grouped into four clusters. Table 6 shows the frequency of occurrences of various keywords, and Table 7 groups the keywords into clusters. Network maps with and without overlay are shown in Figures 6 and 7.

Table 6: Occurrences of Author Keywords

S.no	Label	Occurrences
1	Economic Policy Uncertainty	41
2	Global Economic Policy Uncertainty	36
3	Volatility Forecasting	11
4	Garch-Midas	10
5	Covid-19	8
6	GEPU	7
7	Uncertainty	7
8	Bitcoin	5
9	Emerging Markets	4
10	Oil Prices	4
11	Stock Returns	4

Table 7: Cluster-Wise Author Keywords

S.no	Label	Cluster	Total Link Strength
1	Bitcoin	1 (red)	4
2	Covid-19	1	9
3	Uncertainty	1	2
4	Garch-Midas	2 (green)	14
5	Global Economic Policy Uncertainty	2	13
6	Volatility Forecasting	2	14
7	Gepu	3 (blue)	5
8	Oil Prices	3	4
9	Stock Returns	3	5
10	Economic Policy Uncertainty	4 (yellow)	10
11	Emerging Markets	4	4

Authors propose that "Economic Policy Uncertainty" and "Global Economic Policy Uncertainty" are the two most important and frequently occurring keywords, with frequencies of 41 and 36, respectively. This is also evident from the network map, where they have the largest nodes compared to other keywords. Figure 6 displays the network map with overlay, and it is evident that COVID-19 and stock returns are the themes emerging in 2022, followed by uncertainty and GEPU in 2021.

Cluster 1 (red coloured), as shown in Table VII, is based on the central theme of hedging using alternative financial assets, focusing on Bitcoin and gold. Fang *et al.* (2019) examine whether the long-term volatilities in Bitcoin, commodities, bonds, and global equity are affected by GEPU. This paper is the second-highest cited paper. The study observed that the impact is positive except for bonds. It was found that the correlation between Bitcoin and bonds is negatively impacted, and that between Bitcoin and commodities and Bitcoin and equities is positively impacted by GEPU. Qin *et al.* (2021) examine whether, during times of higher GEPU, Bitcoin can be used for diversifying investment risks and propose that it cannot always be

considered a safe hedge. Still, during recent trade tensions globally, it can be used to optimize investor investments. Long *et al.* (2021) employ the NARDL model to examine the pattern of Bitcoin and gold under different types of uncertainties. The impact was found to be asymmetric. It was observed that for Bitcoin, the decrease in uncertainties has a greater effect than the increase, and for gold, the reverse is true. The findings indicate that when global shocks destabilize conventional assets, focus shifts towards identifying and investing in non-traditional assets for growth and hedging. It highlights that Bitcoin is considered a risky investment, and investors are cautious, whereas gold is still considered a safe bet. A strong regulatory framework needs to be established to ensure that digital assets are used for risk mitigation and not speculation.

The second cluster (green coloured) focuses on volatility forecasting models, especially the GARCH-MIDAS approach. The top-most link strength from the network map is seen between GARCH-MIDAS and volatility forecasting, followed by Global EPU and volatility forecasting, and Global EPU and GARCH-MIDAS. The GARCH-MIDAS model forecasts crude oil market volatility by analyzing global EPU and EPU with other traditional determinants. It was observed that GEPU and U.S. EPU indices have the highest predictive power for "West Texas Intermediate spot oil volatility" (Wei *et al.*, 2017). This paper also has the third most citations, thereby signifying its importance. An extended GARCH-MIDAS model is used to analyze the impact of infectious disease on stock market fluctuations in the U.S., China, Japan, and the UK, and proposes that this impact is positive with a 24-month lag (Bai *et al.*, 2021). The ability of the GEPU index to predict patterns in short- and long-term gold futures is also investigated using the GARCH-MIDAS model. According to the study, GEPU considerably and favourably predicts movements, and the GARCH-MIDAS model's prediction capacity is much increased when low-frequency GEPU data is incorporated into the equation (Fang *et al.*, 2018). The findings indicate that the majority of the literature has presented GEPU as a predictive signal as opposed to a structural policy variable. Although this modelling approach has solidified GEPU's forecasting ability, it has also resulted in a specialization of study within a limited econometric framework. Studies investigating how uncertainty is transmitted through various channels and its impact on firm-level strategies remain largely limited.

Cluster 3 (blue coloured) investigates GEPU as a macroeconomic transmission channel, with the central theme focusing on the commodities market. Xu *et al.* (2019) inspect the association between exchange rates of major currencies and crude oil prices. The effects of COVID-19, oil prices, GEPU, and gold prices on China's financial development were studied by Jiang *et al.* (2022). The analysis revealed that oil prices moved in tandem with the financial performance of China, which was negatively impacted by an increase in COVID-19 registered patients. Financial growth was also negatively impacted by gold prices and GEPU. Ozcelebi (2021) sought to clarify how GEPU and U.S. long-term bond yields affected oil prices. The findings highlight that higher GEPU might amplify global shocks by impacting the commodities markets. Consequently, policies in energy-sensitive developing countries need to account for GEPU.

Cluster 4 (yellow coloured) mainly studied EPU, focusing on emerging markets and firm-level strategies. Increasing EPU leads to an increasing cost of capital, discouraging innovations in corporates. This holds for businesses that are strapped for cash and those that depend on outside funding (Xu *et al.*, 2020). With the most significant number of citations, this publication is also among the most important in this discipline. The origin of uncertainty shocks and the effect of EPU on China's Financial Conditions Index are investigated by Li and Zhong (2018). The US EPU index was the most impactful external factor leading to a fall in China's Index. Although this cluster is small in size, it is of significance as it highlights how GEPU might alter corporate investment strategies by increasing the cost of capital and making funding constrained. The small size of this cluster highlights a very crucial research gap in this field.

3.6. Evolution of Research in EPU

The development of GEPU themes during the analysis period is seen in the second section of the keyword analysis. According to Table 8 and the visualization overlay in Figure 7, the field underwent three stages of development between 2021 and 2022. The studies on economic policy uncertainty and volatility forecasting and analysis utilizing the GARCH-MIDAS model dominated Phase 1 of the GEPU field. GEPU studies, or global economic policy uncertainty, were the main emphasis of the second phase of 2021 (4–8). Examining how GEPU affects oil prices is another main goal of this phase. Phase 3 moves to the year 2022, and the issues discussed include the influence of COVID-19 and its analysis on stock returns. Since GEPU is a new field gaining importance in recent times, the evolution can be observed only from the year 2021. The dominant themes are "economic policy uncertainty," "global economic policy uncertainty," "volatility forecasting," and "GARCH-MIDAS," as seen in Figure 7. This indicates that research was mainly focused on examining GEPU as a forecasting tool. The research is slowly shifting to understanding the impact of GEPU on commodities and financial markets in terms of analysing stock returns.
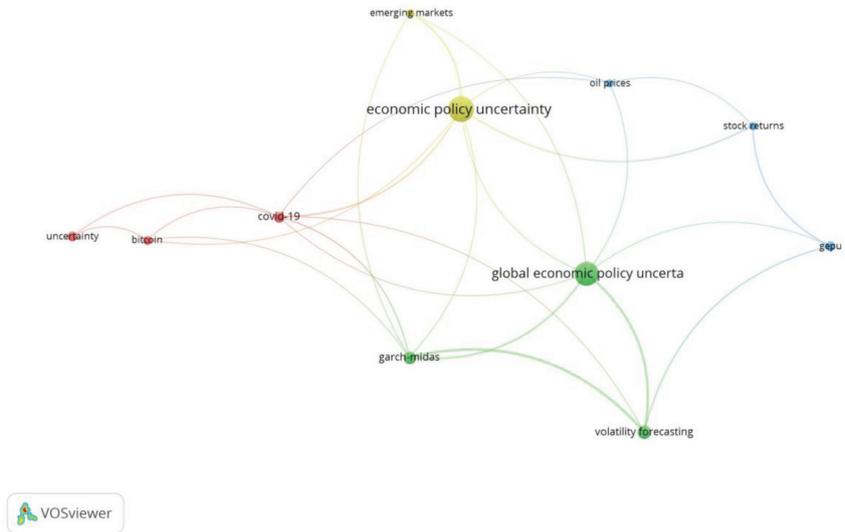
Figure 6: Network Map of Author Keyword Co-Occurrence showing Thematic Clustering

Table 8: Time-Wise Evolution of Author Keywords

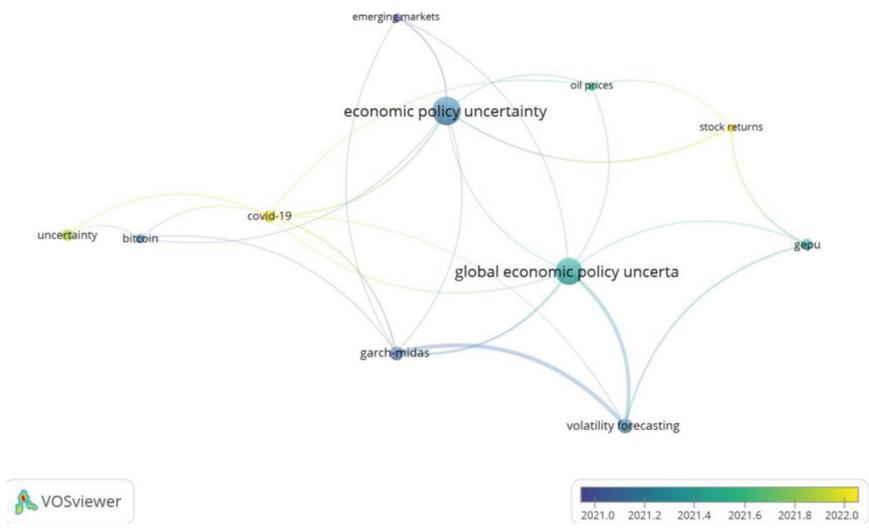| Phase 1 - 2021 (0-2)		Phase 2 - 2021(4-8)		Phase 3 - 2022	
Keywords	Occurrences	Keywords	Occurrences	Keywords	Occurrences
Economic Policy Uncertainty	41	Global Economic Policy Uncertainty	36	Covid 19	8
Volatility Forecasting	11	Oil Prices	4	Stock Returns	4
Garch Midas	10	GEPU	7		
Emerging Markets	4	Uncertainty	7		
Bitcoin	5				

Figure 7: Overlay Visualization of Author Keyword Co-Occurrence

3.7. Country-Wise Co-authorship Analysis

Figure 8 illustrates the degree of co-authorship association among different nations. A minimum of 2 citations was set as the criterion, with a minimum of 3 co-authorship publications. Then 11 of the countries met the threshold.

The maximum link strength, and hence maximum co-authorship, was observed among the authors in China and the UK, followed by China and the U.S., and China and France. Additionally, China is the nation with the most articles and citations.
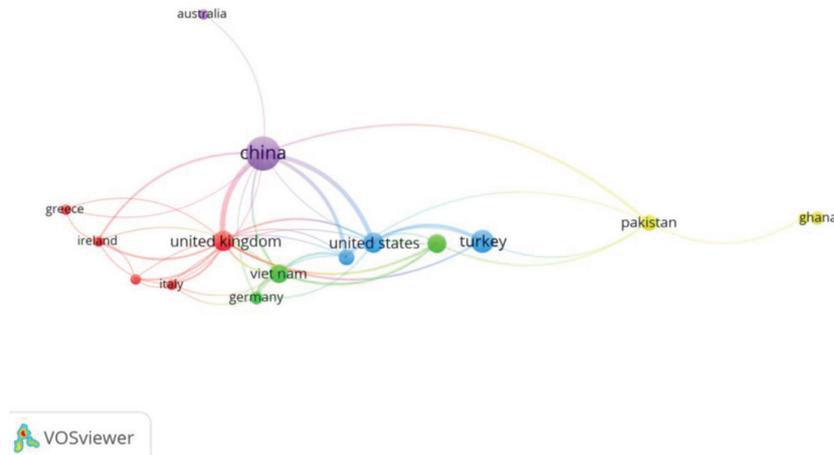

Figure 8: Network Map of Country-Wise Co-Authorship

Upon inspecting Figure 9, which shows the network map of co-authorship with overlay, it was observed that in 2022, Ireland, Ghana, Pakistan, and Vietnam had more co-authorship publications, but not necessarily among each other.
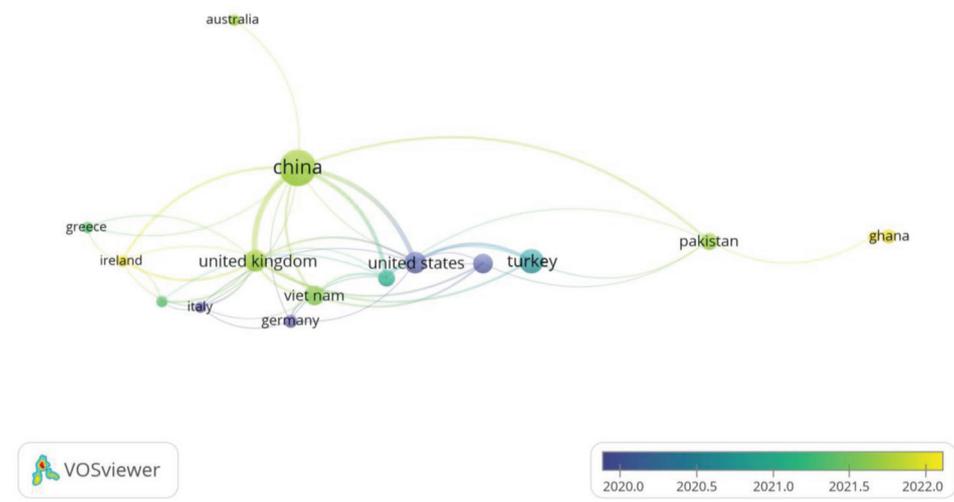

Figure 9: Overlay visualization of Country-Wise Co-Authorship

4. Discussion and Conclusion

Research on global economic policy uncertainty is crucial since it affects both people and enterprises significantly. Since global uncertainty impacts the global economy as a whole, its effects are extensive. Uncertainty in global economic policy is a relatively new issue, with only recent studies

having been published. Since the body of research in this field is expanding so quickly, clarity requires a systematic and comprehensive study. It is uncommon to find a study that compiles the most recent findings on the subject of global economic policy uncertainty. This analysis's bibliographic source came from a search in Scopus that produced 151

publications between 2014 and 2023 using keywords like "global economic policy uncertainty," "GEPU," and others.

A recent surge in publications in the year 2020 was observed, which coincided with the rising global uncertainty due to the onslaught of COVID-19. Owing to its extensive influence on the economies of nations across the globe, research in this stream has gained importance and popularity. *International Review of Financial Analysis* received the maximum citations for its publications, and *Finance Research Letters* proved to be the most productive journal in this field. China proved to be the top-ranked country in terms of citations and publications. The United States and Turkey followed behind as the most cited and most productive countries, respectively. Zhaoxia Xu published the article with the maximum citations, and Libing Fang followed close behind, publishing two articles on the topic. The School of Management and Engineering, Nanjing University, Jiangsu, China, with 268 citations, was the most cited organization, and the School of Economics and Management, Southwest Jiaotong University, Chengdu, China, with eight publications, was the most productive. Both organizations are located in China. The study keywords "Economic Policy Uncertainty" and "Global Economic Policy Uncertainty" were highlighted as the most frequently occurring keywords in the analysis. It was also observed that COVID-19 and stock returns were the themes emerging in 2022, followed by uncertainty and GEPU in 2021. The GARCH-MIDAS model proved to be an essential tool used in various studies to analyze the volatility of multiple determinants, such as crude oil, gold, and stock market volatility. It was also used to study the predictive and forecasting power of the GEPU index in various studies.

A central theme of alternative financial assets was observed, and studies investigating digital assets like Bitcoin as a hedge against global uncertainty were published. Another cluster highlighting the impact on the commodities market was proposed. Various variables and their impact were investigated on oil prices, which included GEPU, U.S. long-term bond yields, gold prices, and the exchange rate of global currencies. Changes in oil prices significantly contribute to the world economy as a whole and offer a promising future scope for analysis. EPU was observed to negatively impact activities like innovation and R&D in corporations by increasing the cost of capital.

Countries like China and Turkey dominate the GEPU research field. This indicates their vulnerability to global shocks, probably due to their trade openness, commodity dependence, and capital mobility. In addition to being a volatility index, GEPU serves as an indicator of changing global scenarios, thereby resulting in a slowdown in innovation and investment, leading to capital outflows and financial instability. This is particularly true for emerging economies. Research is shifting from a methodological framework to the impact of GEPU on financial markets, but this shift is slow. This makes it pertinent to formulate policies to hedge against the impact of rising global uncertainty to protect corporate investments and financial markets and to avoid economic slowdown.

5. Implication of the Study

This work contributes significantly to the developing subject of Global Economic Policy Uncertainty (GEPU) by providing systematic and integrative research while combining previously published findings. It clarifies theoretical ambiguities and advances knowledge of how global uncertainty spreads across country- and firm-level decision-making by combining scattered facts into a logical analytical framework. A clear roadmap for future research is also provided by the study's summary, which covers topics such as sector-specific effects, cross-country heterogeneity, behavioral reactions to uncertainty, and the relationship between geopolitical threats and changes in economic policy. The findings emphasize GEPU as a warning sign for risk management, capital structuring, and strategic planning; from a policy standpoint, they stress the significance of stability, openness, and global cooperation to reduce uncertainty spillovers. Since GEPU studies are concentrated around volatility forecasting models, it highlights how businesses are increasingly relying on uncertainty indices for strategic decision-making related to capital allocation and portfolio management. The practical applicability of GEPU as a managerial and policy tool would be greatly increased by strengthening future research along the aspects of institutional quality, strategic corporate behavior, and policy coordination.

6. Limitations of the Study

The primary source of data for the research is a single database, which has drawbacks. Research that uses multiple databases provides a broader picture. Also, the studies researched are in a single language. Future studies can include research in two or more languages.

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Conflict of Interest

The author declares that they have no conflict of interest regarding the publication of this paper.

Data Availability Statement

The data used in this study were collected from the Scopus database, which is publicly accessible.

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