

REVIEW ARTICLE


Citation: Wang, X., Xu, Z., Wang, X., & Skare, M. (2022). A review of inflation from 1906 to 2022: a comprehensive analysis of inflation studies from a global perspective. *Oeconomia Copernicana*, 13(3), 595–631. doi: 10.24136/oc.2022.018

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Article history: Received: 5.06.2022; Accepted: 29.08.2022; Published online: 25.09.2022

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A review of inflation from 1906 to 2022: a comprehensive analysis of inflation studies from a global perspective

JEL Classification: A11; A14; B16

Keywords: *inflation; bibliometrics; visualization tool; policy suggestions*

Abstract

Research background: Inflation has always been the core issue of economic research and there are many academic research achievements in this field. In recent years, global inflation has intensified, and many scholars focus on research in this field again, providing certain reference value for countries around the world to formulate corresponding macro policies.

Purpose of the article: The five-year impact factors are used as the evaluation criteria in this paper, and 1,637 high-quality documents on inflation from 1906 to 2022 are collected from the

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Web of Science Core Collection database. Using bibliometrics, a comprehensive review of influential literature in the field of inflation is conducted to reveal the evolution and trends of the field.

Methods: First, we focus on these high-quality documents about the descriptive statistical characteristics, high cited documents and high impact factor journals. Then, based on the visualization tool, the cooperative network of countries/regions, authors and institutions is depicted and the cooperative relationship between them is determined. At the same time, the most influential countries/regions, authors and institutions are identified by analyzing the citation structure. In addition, through thematic and keyword analysis, the topic hotspots and future research trends of high-quality literature in the field of inflation are deduced.

Findings & value added: On the whole, the research on inflation in the United States is relatively mature, and has produced a large number of influential academic cooperation results. Finally, we have a series of discussions on the history of inflation in the United States and policy suggestions. In the future, governments of various countries, especially the United States, will still face certain challenges in how to formulate policies and measures to mitigate the impact of inflation.

Introduction

Inflation has always been a hot topic studied by many scholars in the economic field. Many scholars have different ways of defining the phenomenon of inflation. Feldman, as the leader of the monetarism school, explained inflation from the monetary aspect as a monetary phenomenon caused by excessive money supply (Friedman, 1968, pp. 1–17). In addition, price school scholars emphasize the result of inflation and explain inflation as the process of the general price level rising continuously (Laidler & Parkin, 1977, pp. 169–237). In the face of the complexity and uncertainty of inflation, scholars around the world have different discussions on the causes of inflation due to the differences in basic concepts and backgrounds. Different theories have been formed according to the influencing factors of inflation, including demand-pull theory, monetary theory, cost-push theory, structural theory, input theory, expectation theory and so on (Argy, 1970, pp. 73–85; Auerbach, 1976, pp. 99–111; Gordon & Hall, 1985, pp. 263–302; Hendershott & Van Horne, 1973, pp. 301–314; Weber, 1995, pp. 2–11; Machlup, 1960, pp. 125–139; Shinkai, 1973, pp. 962–971). In addition to the research on the causes of inflation, scholars from all over the world have also conducted a large number of theoretical and empirical studies on inflation expectations, the persistence of inflation, the interaction mechanism of inflation, economic growth and macroeconomic policies (Fuhrer, 1995, pp. 3–17; Johansen & Juselius, 2009, pp. 169–210; Pivetta & Reis, 2007, pp. 1326–1358; Woodford, 2013, pp. 303–346). A large number of studies have shown that the formulation of a series of regulation modes such as monetary policy, fiscal policy and income distribution policy is of great significance for stabilizing inflation and maintaining sustained economic growth (Barro, 1974, pp. 1095–1117; Liu *et al.*, 2009, pp. 284–303;

Taylor, 1999, pp. 655–679), meanwhile, the inflation prediction model can be used as a guiding tool for macroeconomic policies (Korobilis, 2017, pp. 11–20; Marsilli, 2017, pp. 64; Salisu *et al.*, 2019, pp. 649–668).

Bibliometrics refers to the interdisciplinary science that quantitatively analyzes all knowledge carriers using mathematical and statistical methods (Tarragona *et al.*, 2020). The objects of bibliometric analysis mainly include documents, authors, keywords, network relationships between subjects and objects, etc. It is also a necessary means for scholars to understand the knowledge system, development context and frontier hotspots of a certain academic field (Wang *et al.*, 2021c, pp. 328–353). On the one hand, because there are many theoretical branches in the field of inflation, tens of thousands of research results in the form of papers have been included in the Web of Science (WoS) core database. Therefore, few scholars have analyzed the development and current situation of the inflation field through bibliometrics, and most of them use the form of literature review to review and summarize representative papers in different directions in the inflation field. On the other hand, while there is a great deal of research in the area of inflation, the quality and influence of the documents vary. The journal impact factor is often one of the important quantitative indicators to measure the academic influence of a journal. Generally speaking, the higher the journal impact factor, the higher the journal's influence and quality, and the more research significance and value the documents included in the journal. In the field of inflation, few scholars have performed quantitative analyses of literature published in high-quality, influential journals. Therefore, this paper is devoted to selecting high-quality literature for bibliometric analysis according to the journal impact factor and draws some conclusions.

This paper uses some commonly used bibliometric tools to conduct a comprehensive bibliometric analysis of documents with high influence in the field of inflation. Specifically, the main purposes of this paper are as follows: (1) Grasp the basic characteristics of the selected document globally; (2) Focus on high-cited and high-impact documents; (3) Understand the cooperation network from different levels; (4) Reveal the influence of different levels by analyzing the citation structure; (5) Explore the topic developments through thematic and keyword analysis; (6) Discuss the future research trend, and give some policy suggestions.

The rest of the paper is organized as follows: Section 2 introduces the process of screening data sources and the bibliometric methods used in this paper. Then, the visualization results are presented and explained in Section 3. In Section 4, we have a series of discussions on the U.S. inflation history

and policy suggestions. Finally, conclusions of this paper are summarized in Section 5.

Data and methods

This paper focuses on screening the literature published in journals with high impact factors. Through screening high-quality and influential literature, it further explores the development and evolution in the field of inflation with bibliometric technology and visualization tools. Therefore, this section introduces the process of acquiring data materials and the methods used in bibliometric analysis.

Data source

In order to ensure the reliability of our data sources, relevant steps such as data collection and screening are required. First of all, an authoritative database is chosen. WoS is one of the world's leading online databases covering multiple disciplines and fields, which contains influential literature information worldwide (S. Adriaanse & Rensleigh, 2013, pp. 734–1034). As this paper explores the representative and influential scientific literature information, we choose the WoS core collection in WoS as the database source, which includes indexes such as Science Citation Index Expanded (SCI-Expanded), Social Science Citation Index (SSCI), etc. In this paper, we explore inflation related research in business economics, not Physics or other disciplines. At the same time, the influence of review literature should be excluded. Thus, the retrieval strategies are set as follows: Database = WoS Core Collection; Title search= "Inflation"; Publication date= "All years"; Research Areas= "Business Economics"; Quick Filters= "Review Articles (Exclude-document types)". Then, the titles of journals are selected from the analysis search results in WoS, and the impact factors of these journals are retrieved. Finally, we screen 1,637 high-quality documents from 70 journals with an impact factor greater than 5, and perform subsequent bibliometric analysis. We export the details of these documents in plain text format, including the title, author, unit, keywords information, citation information and so on.

Bibliometrics

Bibliometrics is an effective tool to analyze literature. It can dig out the characteristics of literature and the structure and relationship of a research

field, and even capture the future research trend (Tunger & Eulerich, 2018, pp. 2041–2059). Since bibliometric analysis can reveal the development and evolution of a subject area, it provides a certain reference value for more scholars to understand and study new subject areas (Wang *et al.*, 2021, pp. 543–557; Wang *et al.*, 2020b, pp. 865–886; Xu *et al.*, 2021, pp. 304–318). At the same time, Bibliometrics often uses visual analysis tools to obtain a clearer and more intuitive visual network diagram, thereby determining the internal evolution and cooperation of various aspects (Wang *et al.*, 2021a, pp. 1515–1538).

This paper uses a variety of bibliometric tools for visual analysis, including VOS viewer and BiblioShiny. Among them, the VOS viewer has become one of the most widely used visualization tools in bibliometrics because of its powerful visualization capability (Stopar & Bartol, 2019, pp. 479–498). At the same time, VOS viewer has good compatibility, and it can be combined with other software tools such as Pajek and SCImago Graphica to re-adjust its network layout, so as to get clearer and more beautiful visual graphics. BiblioShiny is one of the tools of scientific measurement and visual network analysis based on R language, which is used to sort out the research status and research hotspots in different fields. In addition, because of its powerful function and simple operation, it has become a common visualization tool in bibliometrics.

In this paper, in order to fully reveal the characteristics and knowledge system of high-quality documents in the field of inflation, the bibliometrics method is adopted to conduct comprehensive analysis from the following perspectives: First, the Authors aimed to grasp the overall characteristics of the selected documents, including the number of documents, the average number of citations per year. Next, the goal was to reveal leading and influential scholarly research in the field of inflation, including high-cited documents and high-impact journals. Then, the Authors show collaborative networks in the inflation area to identify high-yielding countries, authors, and institutions. In addition to this, by using bibliometric tools, we conduct the citation analysis to understand the countries, institutions and authors with academic influence in the field. Finally, keywords co-occurrence analysis is very helpful for understanding hot topics, development changes and forecasting trends in the field of inflation.

Findings

In the field of inflation, the documents published by high-impact journals show certain characteristics in various aspects. The analysis results of doc-

uments are presented in this section according to the bibliometric visualization tool.

Descriptive statistics and results

The main information about high-quality documents in the field of inflation is shown in Table 1.

These high-level documents span the period from 1906 to 2022. During this period, the annual documents and citations are shown in Figure 1 and Figure 2. The first high-impact factor journal document was published in 1906, and the number of articles published each year fluctuated slightly over the decades. Since 1971, more and more high-level documents have been published each year, until 1982, when the number of articles published was the highest, with 63 high-impact documents. This phenomenon may be related to high inflation in the United States during the same period. Figure 2 shows that since 1963, the average annual document citations in the field of inflation have increased year by year on the whole, indicating that this field has gradually become a hot field and influential documents have emerged continuously. It can be inferred that since the inflation crisis in various countries, the theory and research in this area have gradually become the focus.

Highly cited documents

The term ‘high-cited document’ refers to one whose cumulative citation frequency ranks high in each discipline. Statistical analysis of them is the focus of bibliometrics research. Table 2 lists the top 10 cited documents from the selected documents, ranked according to the number of citations. Obviously, these 10 documents have more than 400 citations, and the first three documents have more than 1000 citations. The most influential document was the work of Engle (1982, pp. 987–1007), with the highest number of citations (9488) and far ahead of the second-ranked document. This document establishes a model to estimate the mean and variance of united-kingdom inflation, and the model has been recognized by scholars around the world and has certain influence in the field of inflation. At the same time, we count the 5-year impact factors of the journals of these 10 documents. Among them, the impact factors of 6 documents exceed 10, indicating their significant influence and contribution. It is obvious from Table 2 that several scholars, like Fama and Stock, are very authoritative experts in the field of inflation and have published a number of highly cited documents. It is worth mentioning that Fama is a thinker in the field of financial

economics and won the Nobel Prize in Economics in 2013. These highly cited documents were published from 1973 to 2003, and 4 documents were published in AMERICAN ECONOMIC REVIEW.

High impact factor journals

Journal impact factor was proposed by Garfield and Sher (1963, pp. 195–201), which is the most widely used evaluation index in academic circles to evaluate the academic influence of journals. Journal impact factors can not only be used to evaluate the quality of journals, but are also gradually becoming one of the tools to evaluate the academic ability and level of scholars, institutions and countries (Casadevall & Fang, 2014). In the early journals, the impact factor of two years has always been used as the statistical period of papers and citations, but the time span of the two-year statistical period is too short, and many scholars believe that the impact factor of five years is better to evaluate the influence of journals (Archambault & Larivière, 2009, pp. 635–649; Glänzel & Moed, 2002, pp. 171–193; Sala & Crawford, 2006, pp. 1–2). The impact factors of the journals selected in this paper mainly take 5 years as the statistical period, and a small number of journals do not have 5-year impact factor data, so the existing impact factors are adopted. At the same time, there are differences in the impact factors and citations of journals in different disciplines. Therefore, in order to reflect the influence of journals in different categories, Journal Citation Reports (JCR) adopts the quartile classification standard of impact factors, classifying journals into Q1, Q2, Q3 and Q4. Journals ranked in Q1 are usually the top journals in their discipline category and have high academic status and influence. Table 3 shows the journals with the top 10 impact factors in the selected documents. These 10 journals all have an impact factor greater than 10, and most of them rank Q1 in the JCR category. It can be seen that these 10 journals are the top journals in the field of inflation, and the documents published in them are very valuable.

Collaboration network of the countries/regions, authors and institutions

The 1,637 high-level documents selected have certain academic influence. Therefore, the internal characteristics of the inflation field are revealed from the aspects of countries, authors and institutions through the visual collaboration network.

The most productive countries/regions

In the area of inflation, cooperation between countries facilitates the publication of high-impact documents. Figure 3 shows the national distribution and density of the selected high-impact documents, with the countries that cooperate connected by red lines. The thicker the red line, the closer the academic cooperation between countries. Obviously, these countries are mainly distributed in North America, South America, Asia, Europe and Australia, among which North America has the largest number of documents. With the help of VOSviewer and SCImago Graphica visualization tools, the cooperation between specific countries and the volume of publications in each country are shown in Figure 4. The United States has the closest relationship with other countries in the field of inflation and has published the most documents, with a total of 657 documents. This may be due to the fact that the United States, as an economic power, experienced unprecedented inflation from 1970 to 1983. Under the background of economic globalization, the economies of various countries interact with each other, and inflation comes not only from domestic, but also from external countries. Therefore, the phenomenon of inflation is globalized, causing the panic of global economic inflation.

The most productive authors

The co-authorship analysis is helpful in understanding the scientific research output and cooperation of scholars from various countries. The statistical results show that 1821 authors have published high-quality documents in this field. By setting the threshold to 2 (i.e., the minimum number of documents of an author is 2), there are 309 authors who meet the threshold. The collaboration network at the level of author has 120 links and 191 total links strengths are shown in Figure 5. The grey spheres represent the authors who have less contact with other authors, and the colored spheres represent the authors who have worked closely with other authors. The larger the sphere is, the more documents the author has published. It can be seen that Gordon is an excellent and independent author with a large output in the study of inflation. In addition, authors like Fama and Feldstein are closely cooperating with other authors and have many research achievements.

Figure 6(a) shows the top 10 authors who produced the most from these high-quality documents. As can be seen, Gordon produced 13 documents, followed by Fama and Feldstein, which both produced 9 high-level documents. Then, supported by BiblioShiny, Figure 6(b) shows the time span

and annual citation of documents published by these scholars from the time dimension. The circle on the timeline represents the time node when the author produced high-quality documents, the size of the circle represents the quantity of the author's output, and the larger the circle is, the more documents are produced. The color depth of the circle indicates the author's total number of citations per year. The darker the color, the more citations per year. As a prolific scholar, Gordon has produced many high-quality papers in the area of inflation between 1970 and 2005. He is a professor of social science and economics in the United States and a world-class expert on inflation, unemployment, productivity, and economic growth. Moreover, during the years from 2011 to 2020, Coibion and Gorodnichenko published a number of highly influential documents in the field of inflation, and may be very promising scholars in the future.

The most productive institutions

With the help of VOS viewer visualization tool, by setting the minimum number of documents to 66 institutions meet the thresholds. Except for 3 independent institutions, the remaining 63 institutions have cooperative relationships with each other. Their cooperation visualization network is shown in Figure 7. These institutions by circle nodes are divided into 12 clusters, and the cooperation of each institution is represented by different colored lines. The larger the circle node area is, the larger the number of organization documents is. Natl Bur Econ Res (NBER) (96) and Harvard Univ (37) rank the top two institutions with the highest productivity in publishing high-quality documents in the field of inflation. At the same time, Natl bur econ res is also the top institution that cooperate most closely with other institutions, with a total link strength of 52. The cooperation of these institutions has greatly facilitated the development of the field of inflation and helped countries to jointly face the effects and challenges of global inflation.

Citation structure analysis

Document citation is an important analysis in bibliometrics, and it is one of the indicators to measure the influence of this field. Therefore, in order to further reveal the influence of the field of inflation, this section analyzes its citation situation from three aspects: countries/regions, institutions and authors.

The most influential countries/regions

According to the statistical results, 37 countries/regions published at least 2 documents among the high-level documents and collaborated with other countries/regions. The citation network of these countries/regions was obtained by VOS viewer and Pajek visualization tools, as shown in Figure 8, which clearly shows the citation situation among the countries/regions of high-quality journals published in inflation field to reveal the most influential countries/regions. In Figure 8, 37 countries/regions are represented by nodes. The citation network divides these countries/regions into 10 clusters in different colors, and the node size represents the number of times cited by the corresponding country. Obviously, the United States is the most influential country with 657 documents and 31,056 citations, followed by England, Israel, Spain and Canada. Meanwhile, the United States has a close relationship with other countries, especially the United Kingdom, which shows that they are frequently cited together.

The most influential institutions

In this subsection, we show the citation network of institutions to get a sense of the influential institutions in the area of inflation. 554 institutions published the high-quality documents which we selected. Among them, 104 institutions published documents that were cited more than 100 times. Figure 9 below shows the citation networks of 55 institutions that have published five or more high-quality documents and received 100 or more citations in total. The citation network divides these institutions into 6 clusters in different colors, and the node size represents the number of times cited by the corresponding institution. Obviously, the Natl Bur Econ Res is the most influential institution with 63 documents and 4,372 citations, followed by Harvard Univ, Univ Chicago and Carnegie Mellon Univ. The Natl Bur Econ Res is an economic forecasting organization founded in 1920 by renowned economist Wesley Clair Mitchel in pursuit of a scientific and unbiased approach to economic phenomena. It is based in the United States, and its membership is drawn from a wide range of leaders in government, business, and academia, including more than 1,300 professors of Economics who teach at North American universities. Thus, the Natl Bur Econ Res has contributed the most high-quality academic work in the field of inflation.

The most influential authors

Development and innovation in any field are the results of continuous exploration by countless scholars. According to statistics, 182 authors published documents with a total citation more than 100 times. Through VOS viewer software, the citation network of these authors is shown in Figure 10. It is worth noting that these authors are divided into 11 clusters with different colored lines, and the size of nodes indicates the cited times of authors. The larger the node size is, the higher the cited times are. As can be seen from Figure 10, the top three cited authors are Engle, Fama and Lucas respectively. Although Engle has only published one high-quality document, this document has been cited up to 9,502 times, so he is the most influential scholar in the field of inflation. Then, Fama not only produced a large number of high-quality documents, but also ranked second in the number of citations, indicating that his research content is of certain value and has attracted extensive attention and citation from scholars.

Thematic and keywords analysis

Thematic analysis can reflect the development of a field and even predict future research trend (Xie *et al.*, 2020). As shown in Figure 11 below, the horizontal and vertical axes divide the whole into four quadrants. These two axes represent the development degree and the relevance degree, respectively. Different quadrants represent different levels of maturity and importance of theme development. Among them, the first quadrant in the upper right corner represents the motor themes, the themes distributed in this quadrant have relatively good development and important theme directions. The second quadrant represents the niche themes, and the themes distributed in this quadrant have good development. The third quadrant represents themes, and the themes distributed in this quadrant may be marginal topics that have just emerged or may soon disappear, and have not developed well. The fourth quadrant represents basic themes, which are used to represent themes that are important but not well developed in the field. In Figure 11, most of the themes are close to the first quadrant, such as “expectations”, “model”, “dynamics”, etc., are well-developed and highly relevant themes. Finally, the topics in the third quadrant like “test” and “unit-root”, etc. are not well developed and less relevant themes.

Keywords analysis is very important in bibliometric analysis. This section further discusses the keywords in order to reveal the main research hotspots in the field of inflation and the trend for future research.

Co-occurrence analysis of keywords from high-quality documents is helpful to reveal the research hotspots and topics with certain research value in this field. In the following, let the minimum number of occurrences of a keyword be 53 keywords meet this threshold, and the keywords co-occurrence network as shown in Figure 12 is obtained. The keywords are divided into 5 clusters with different colored lines. “Unemployment”, “shocks” and “dynamics”, etc., are included in red cluster. “Risk”, “prices” and “market”, etc., are highlighted in green cluster. Blue cluster has “welfare”, “policy” and “growth”, etc. Yellow cluster has “monetary-policy” and “model”, etc. “Unit-root” and “heteroskedasticity”, etc., are labeled in purple cluster. Obviously, in the field of inflation, “inflation” is the keyword with the most frequent occurrence and the strongest link. In addition, “monetary-policy”, “money” and “model” also appear frequently, indicating that influential documents published in inflation field focus on the research direction of these aspects.

In order to reveal the research themes and trends in the high-impact inflation document in recent years, we need to further process the keywords. Then, the word minimum frequency is set to 10 and the number of words per year is greater than 10. The trend topics are shown in Figure 13. The results illustrate that during the past 20 years the research topics in the field of inflation mostly revolved around “monetary-policy”, “model”, “money” and other keywords. It is worth noting that in recent years, scholars have focused more on topics related to “shocks” and “risk”, which may be the economic shocks brought by the global COVID-19 pandemic and the concerns of inflation in all countries. These topics may become future trends in the field of inflation as the pandemic continues.

Further discussions

The discussions about inflation in the United States

After the previous bibliometric analysis, we found that the United States is the country with the most output and the strongest influence in the field of inflation. The U.S. dollar is the world’s currency. Once the inflation rate in the United States rises, the rest of the world will be affected to some extent (Burdekin, 1992, pp. 16–30; Ciccarelli & García, 2021; Yang *et al.*, 2006, pp. 2681–2700). Therefore, we take the United States as an example. Figure 14 below, from U.S. Bureau of Labor Statistics, shows the fluctuation of inflation rate in the United States from 1963 to 2022. The measure of inflation often takes the consumer price index as the index to reflect the

degree of inflation. In Figure 14, the blue line represents the consumer price index of urban consumers, and the red line represents the consumer price index of urban consumers excluding food and energy, namely, the core consumer price index. Internationally, the CPI increase of 3% is regarded as the warning line for inflation, and the CPI increase of more than 5% can be regarded as serious inflation. In 2012, the Fed adopted inflation at the rate of 2 percent as its long-term inflation target. By 2020, the Fed recalibrated its monetary policy to adopt “average inflation targeting” and allow inflation to be moderately higher than 2%. Looking back on history, inflation in the United States often occurs during wars and crises (Bredin & Fountas, 2018, pp. 141–159). The inflation in the United States before the 1960s occurred during world wars. In the 1970s, it experienced oil crises, food crises, and economic crises. During this period, the loan business developed by the bank led to the expansion of bank credit. When the debt crisis broke out in the 1980s, inflation in the United States was exacerbated. It was not until the inflation rate reached its peak in the early 1980s that the stagflation in the United States eased after adjusting the monetary policy. After the outbreak of the US subprime mortgage crisis in 2007, the US government launched loose policies to ensure economic recovery. Subsequently, the financial crisis triggered by the subprime mortgage crisis spread to the world and affected the international financial system. After 2009, the United States has been in a period of low inflation. Until the outbreak of COVID-19 in the last two years, the global economic environment has undergone profound changes (Apergis & Apergis, 2021, pp. 1327–1331). It’s worth noticing that the inflation in the United States has soared over the past two years, reaching the highest level in nearly four decades in March 2022, with the inflation rising by 8.5%.

The inflation in the United States in the past two years may be caused by several factors. First, the COVID-19 pandemic started in late 2019 (Apergis & Apergis, 2021, pp. 1327–1331), which accelerated the inflation in the United States, which had been largely controlled for the past 40 years. Not only the United States, but most of the world’s major economies have adopted loose monetary and fiscal policies to stimulate demand to deal with the impact of the new crown epidemic. At the same time, the blockade during the epidemic has led to strong demand and disrupted supply, resulting in a general rise in prices. Loose monetary policy, on the contrary, makes inflation more pronounced (Basu *et al.*, 2012, pp. 1057–1074; Hilmola, 2021). Then, as aggregate global demand rebounded, supply was sluggish, transportation costs became higher, key productivity inputs were missing, and prices were bottled up by supply chain bottlenecks (Wang *et al.*, 2022). During the epidemic, the willingness of the American labor force

has declined, and the American people can still receive subsidies to maintain a living without working. The inflation uncertainty and labor shortage have caused the labor cost of enterprises to rise, and the price of end products has also risen (Albulescu & Oros, 2020, pp. 5770–5782). In addition, the factors of Russia's war against Ukraine and the rapid rise in crude oil prices have driven up the prices of housing, food and energy (De *et al.*, 2022). At present, the high price of international commodities has promoted global inflation, and the risk of inflation also threatens the stable development of the global economy. Especially the inflation currently faced by the United States is obviously not a short-term solution, and it is necessary to formulate better measures and policies to ease inflation.

Policy suggestions

There are many complex factors affecting inflation. In order to deal with inflation, all countries need to adopt corresponding macroeconomic policies according to their actual situations to alleviate inflation. In the past two years, inflation has become one of the main risks threatening the global economy. More than 80 countries have been affected by inflation, and their economies are all suffering from different crises. Especially for the United States, the inflation rate has soared for many consecutive months. In order to ease inflation, from the perspective of monetary policy, some countries around the world have started or planned to start raising interest rates and tightening monetary policies in an attempt to slow down borrowing and spending and curb inflation expectations. The worsening inflation has brought pressure on people's lives and psychology, especially in the United States this round of inflation has caused imported inflation to other countries and has a certain negative impact on the world economy. Therefore, it is necessary to consider some policy suggestions and measures to control or prevent inflation. By increasing the use of the country's currency, maintaining the country's financial stability, moderately raising the inflation target, and increasing the tolerance for inflation. At the same time, since inflation has become a global problem, countries should strengthen communication and cooperation in terms of policies, fully convey information, and slow down another external shock (Deng *et al.*, 2022, pp. 1–9).

To ensure a controllable supply chain, companies can increase productivity by flexibly adjusting their supply chain and production and operation methods. At the same time, companies improve innovation ability and promote scientific and technological research and development. The revelation of history to the US economy is that the turn of macroeconomic policy

cannot be too radical, and monetary policy should first focus on solving the problem of high inflation and then pay attention to the economic market.

As global inflation hits, how should China respond? Although China has experienced inflation in the process of development, it is still a country with good economic development. The current inflationary pressure in China mainly comes from external shocks, especially global inflation caused by the depreciation of the US dollar and liquidity spillover (Zhang, 2016, pp. 301–313). Mainly through macro-control to control market prices, China ensures the supply of bulk commodities, and implement prudent monetary and fiscal policies. Increased support for the real economy, especially for small and medium-sized enterprises and vulnerable groups affected by the epidemic. In addition, China needs to further improve the structure of its domestic futures market and reserve currency, strengthen coordination and cooperation with other countries, increase its international influence, and jointly address global governance challenges with other countries (Deng *et al.*, 2022, pp. 1–9).

Limitations

This paper mainly conducts a comprehensive bibliometric analysis of documents included in high-level journals in the field of inflation, which has certain contributions but also has certain limitations. First of all, the evaluation of high-quality and high-impact documents in this paper is based on the journal's impact factor as a defining indicator. It does not rule out that there are a few documents whose quality and impact are not as good as those that are included in journals with lower impact factors. Then, some discussions and explanations in this paper have a certain personal subjective understanding. Finally, the bibliometric visualization tool used in this paper also has certain technical limitations. For example, model and models, monetary policy and monetary policy have the same meanings, but different word forms are identified as different keywords by the bibliometric tool.

Conclusions

Inflation, as the core issue in macroeconomic research, has been paid close attention by scholars for a long time, and a lot of research results have been produced. In order to be representative, we highlight the key points of the entire field, and reveal the research status and development direction of this field. In this paper, we select influential documents in this field for a com-

prehensive bibliometric analysis, and draw the following conclusions: (1) From the results of descriptive statistics, in the field of inflation, the highest number of high-level documents were published in 1982. After 1963, the annual average number of citations in this field increased year by year. Especially in recent years, this field has become the focus of scholars' attention. Among them, the most cited document is from the research done by Engle RF, which has been cited as high as 9,502. At the same time, the journal with the highest impact factor ranking in this field is QUARTERLY JOURNAL OF ECONOMICS. (2) The cooperation between countries is beneficial to research and development in the field of inflation. The results show that the United States has published the most documents in cooperation with other countries in this field, especially England. From the citation analysis results, the United States is still far ahead in the number of citations, followed by England. (3) Regarding authors, the author who published the most high-quality documents is Gordon, followed by Fama and Feldstein. Influential authors in the field are Engle and Fama, etc., because their published documents are highly cited. At the institutional level, the most prolific and influential institution is Natl Bur Econ Res, both in terms of the number of publications and citations. The research results of this institution have greatly promoted the development of the inflation field. (4) Through the analysis of themes and keywords, we have found that in these high-quality documents, keywords with high attention are “monetary-policy”, “money”, “model” and so on. In addition, due to the impact of the new crown epidemic in recent years, countries around the world have experienced an inflation crisis. In the field of inflation, future scholars will pay more attention to topics related to keywords such as “shocks” and “risk”.

In history, the United States has experienced a lot of inflation and has contributed a lot of research results in this field. Finally, this paper discusses the history and causes of inflation in the United States and gives some policy suggestions. How countries cope with the current inflation crisis may be the focus of future research in this field.

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Acknowledgments

The work was supported by the National Natural Science Foundation of China (No. 72071135).

Annex

Table 1. The main information about the collection

Description	Results
Timespan	1906:2022
Documents	1637
Average years from publication	36.4
Average citations per documents	34.71
Keywords Plus	850
Authors	1821
References	21235

Table 2. The top-10 documents with the highest number of citations

Title	Authors	Journals	Impact factor	Citations	Year
Autoregressive conditional heteroscedasticity with estimates of the variance of united-kingdom inflation	Engle	ECONOMETRICA	7.458	9502	1982
Some international evidence on output-inflation tradeoffs	Lucas	AMERICAN ECONOMIC REVIEW	10.144	1274	1973
Inflation dynamics: A structural econometric analysis	Gali and Gertler	JOURNAL OF MONETARY ECONOMICS	5.241	1119	1999
Asset returns and inflation	Fama and Schwert	JOURNAL OF FINANCIAL ECONOMICS	11.164	992	1977
Stock returns, real activity, inflation, and money	Fama	AMERICAN ECONOMIC REVIEW	10.144	953	1981
Nobel Lecture: Inflation and Unemployment	Friedman	JOURNAL OF POLITICAL ECONOMY	9.662	817	1977
Preferences over Inflation and Unemployment: Evidence from Surveys of Happiness	Di Tella et al.	AMERICAN ECONOMIC REVIEW	10.144	733	2001
Forecasting inflation	Stock and Watson	JOURNAL OF MONETARY ECONOMICS	5.241	631	1999
Forecasting Output and Inflation: The Role of Asset Prices	Stock and Watson	JOURNAL OF ECONOMIC LITERATURE	10.148	608	2003
Short-term interest rates as predictors of inflation	Fama	AMERICAN ECONOMIC REVIEW	10.144	498	1975

Table 3. The top-10 journals with the high impact factor

Journal	Impact factor	JCR Category	JCR partition
QUARTERLY JOURNAL OF ECONOMICS	20.935	ECONOMICS	Q1
JOURNAL OF MARKETING	15.325	BUSINESS	Q1
JOURNAL OF ECONOMIC PERSPECTIVES	13.612	ECONOMICS	Q1
JOURNAL OF INTERNATIONAL BUSINESS STUDIES	13.555	BUSINESS& MANAGEMENT	Q1; Q1
JOURNAL OF SERVICE RESEARCH	13.396	BUSINESS	Q1
JOURNAL OF FINANCE	11.753	BUSINESS, FINANCE&ECONOMICS	Q1; Q1
JOURNAL OF FINANCIAL ECONOMICS	11.164	BUSINESS, FINANCE&ECONOMICS	Q1; Q1
JOURNAL OF MANAGEMENT STUDIES	10.96	BUSINESS& MANAGEMENT	Q1; Q1
JOURNAL OF RETAILING	10.761	BUSINESS	Q2
JOURNAL OF ECONOMIC LITERATURE	10.148	ECONOMICS	Q1

Figure 1. The annual number of documents on inflation

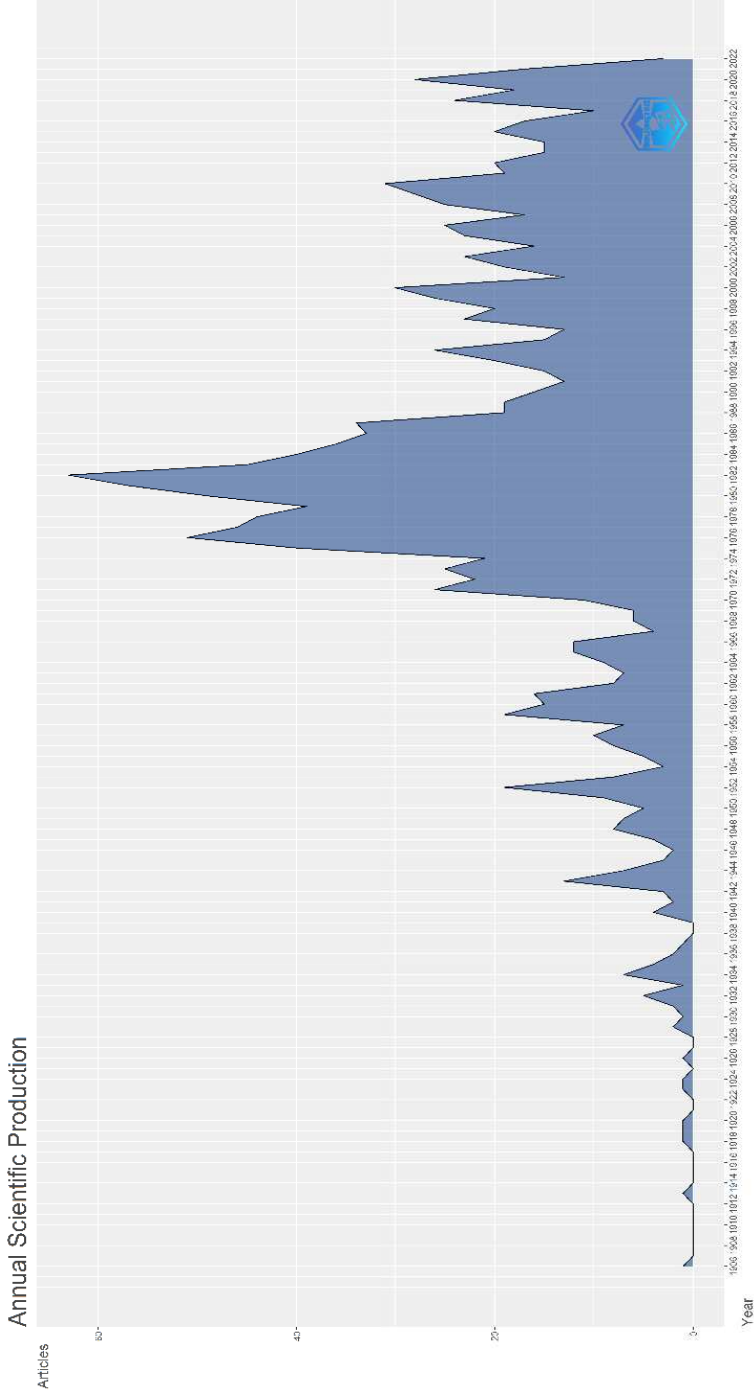


Figure 2. The average citations on inflation per year

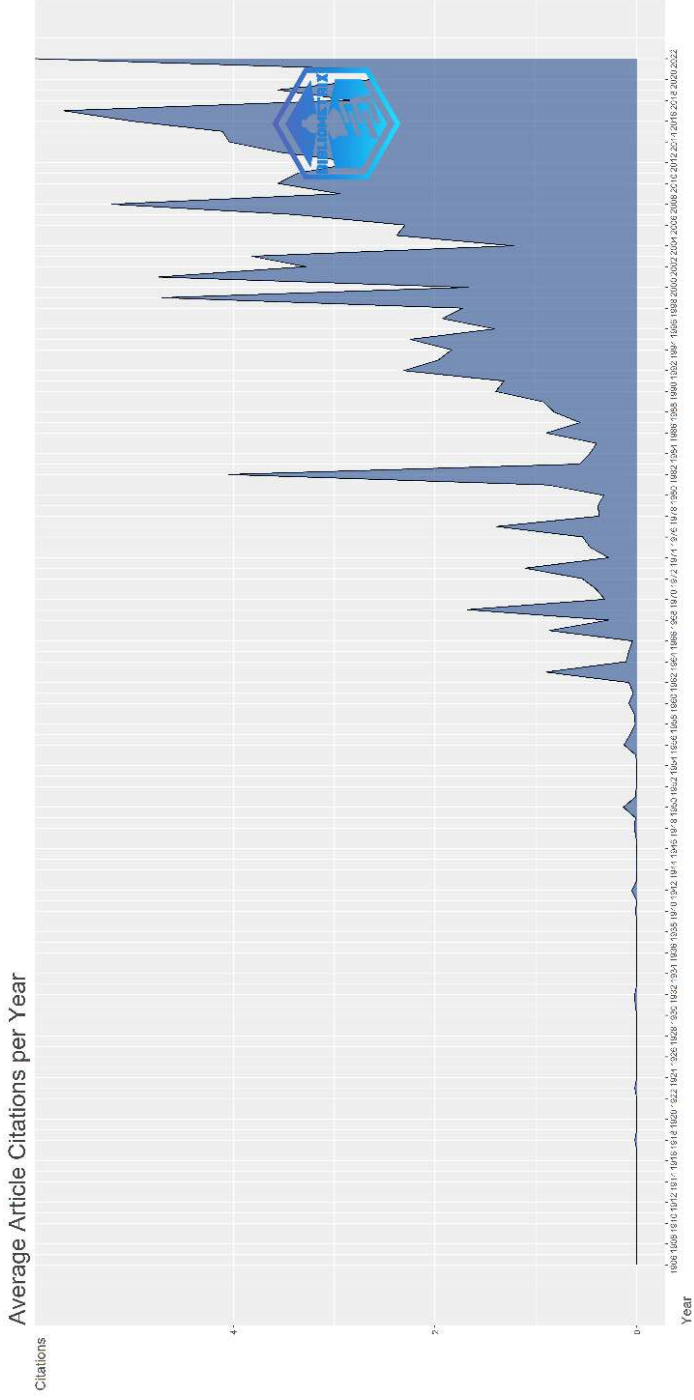


Figure 3. The countries collaboration maps of documents on inflation



Figure 4. The cooperation network and the number of documents between countries

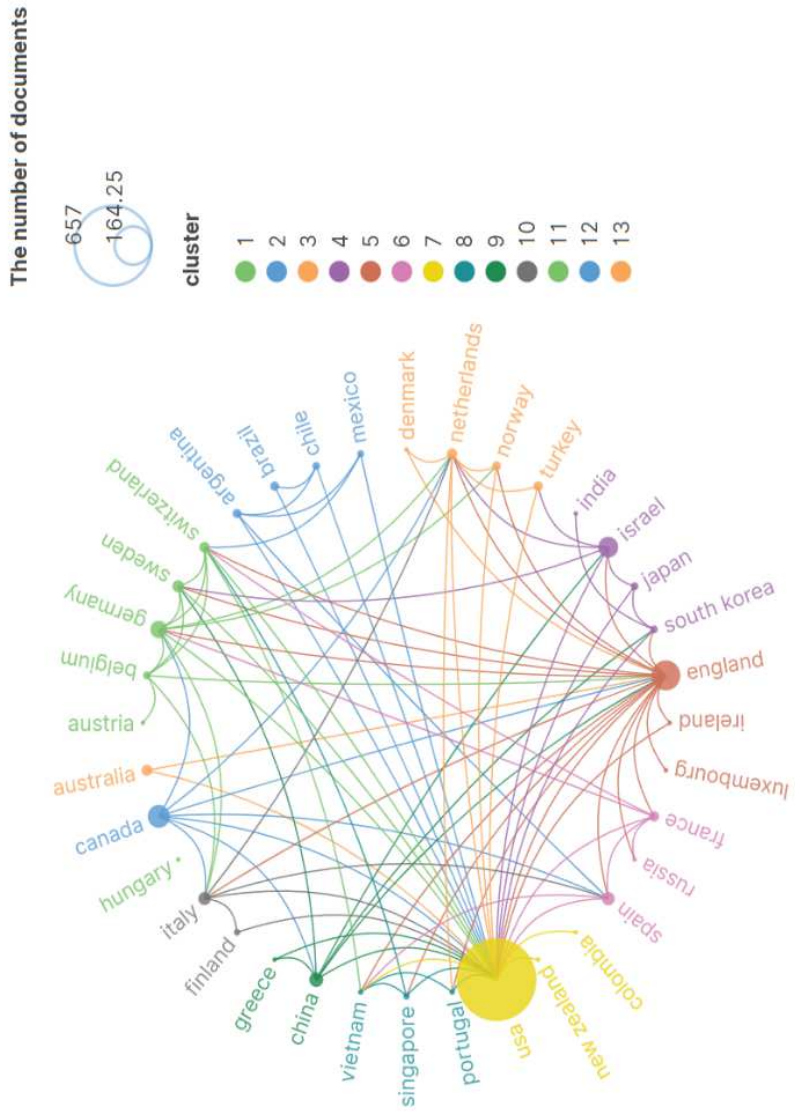


Figure 5. The cooperation network with 309 authors

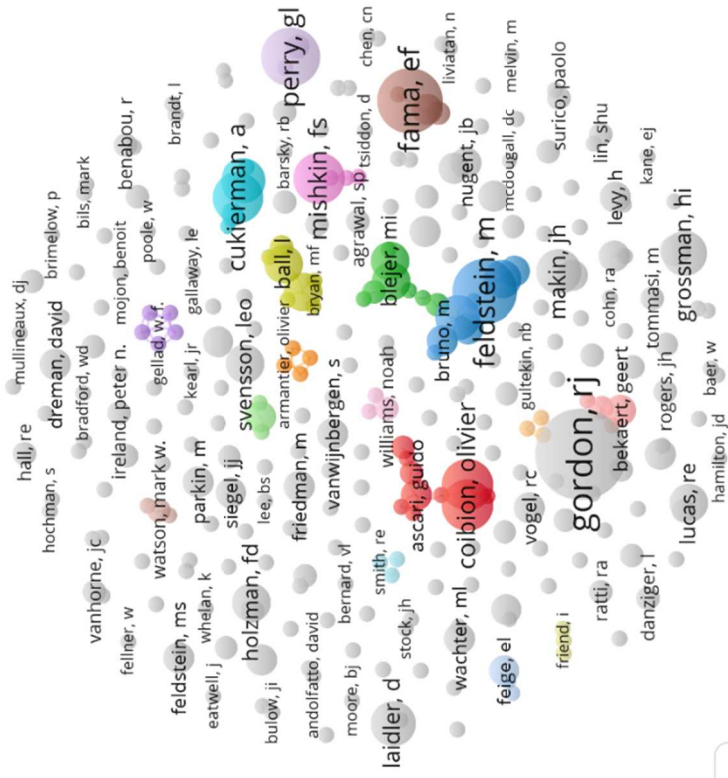
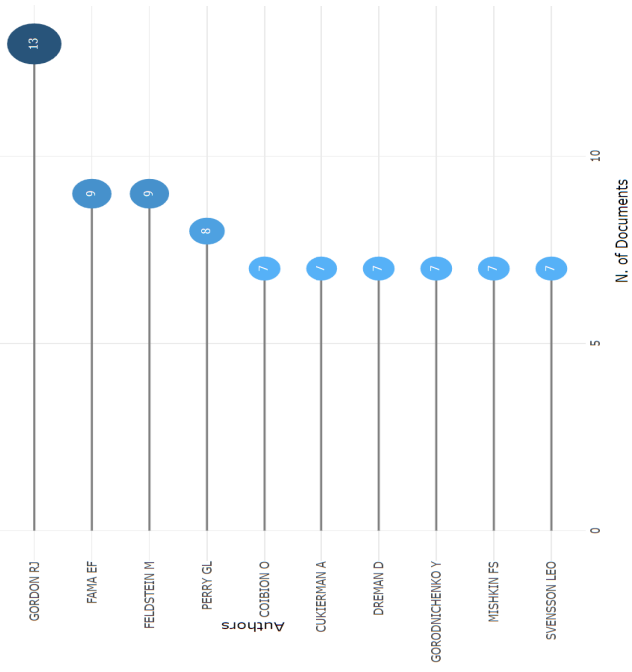


Figure 6. The top 10 most productive authors on inflation

(a) The top 10 most productive authors.



(b) The top-authors' production over time.

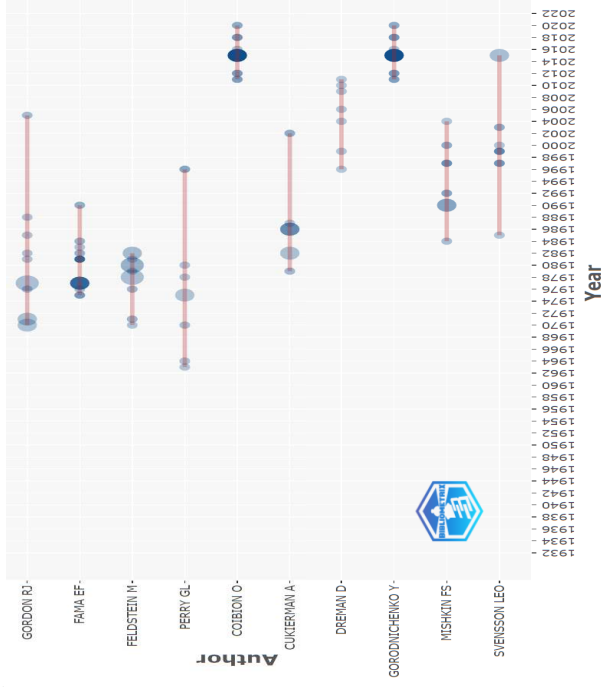


Figure 7. The collaboration network of institutions

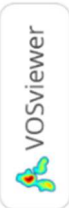
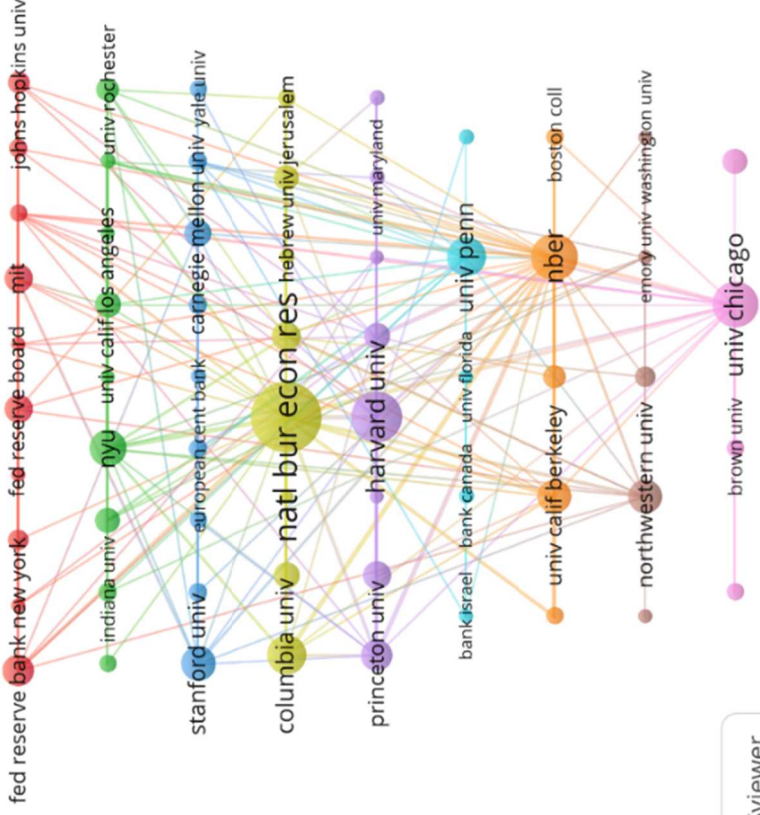


Figure 8. The citation network of countries/regions

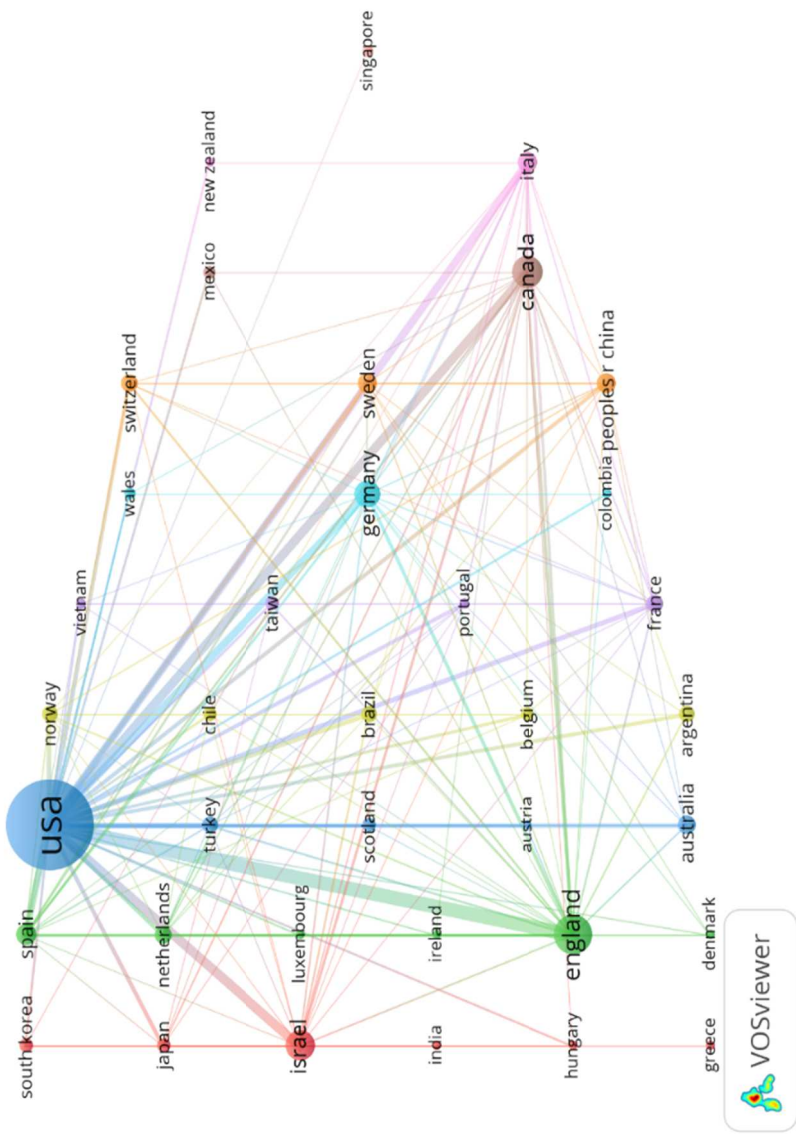


Figure 9. The citation network of institutions

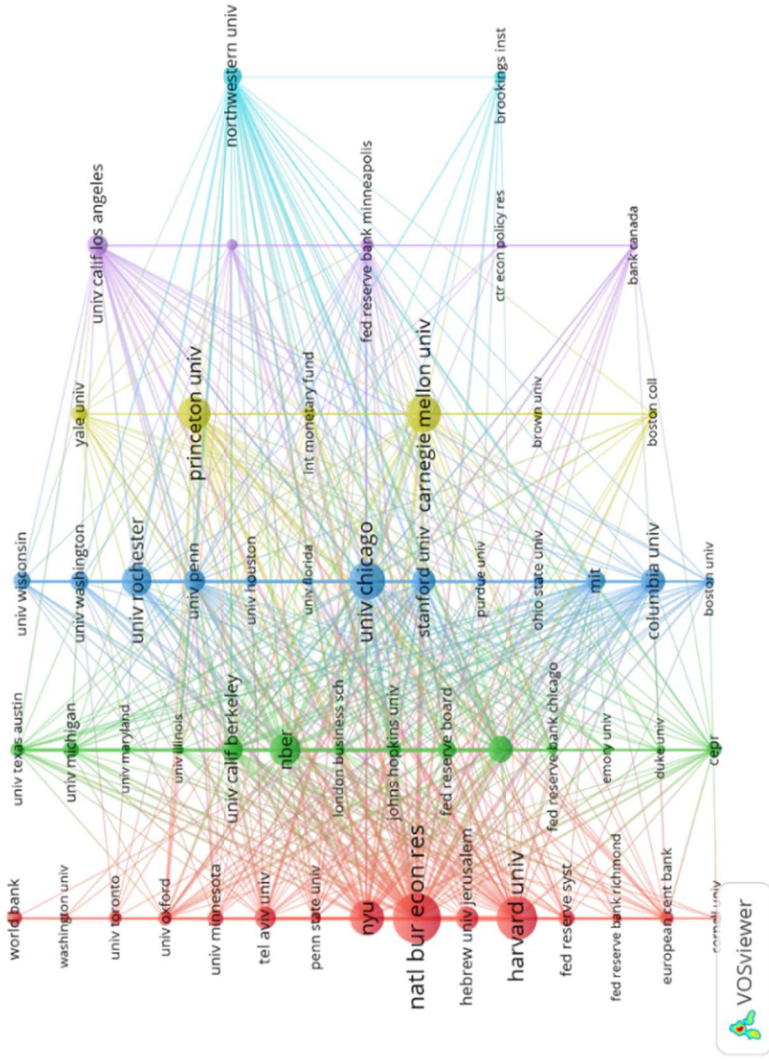


Figure 10. The citation network of authors

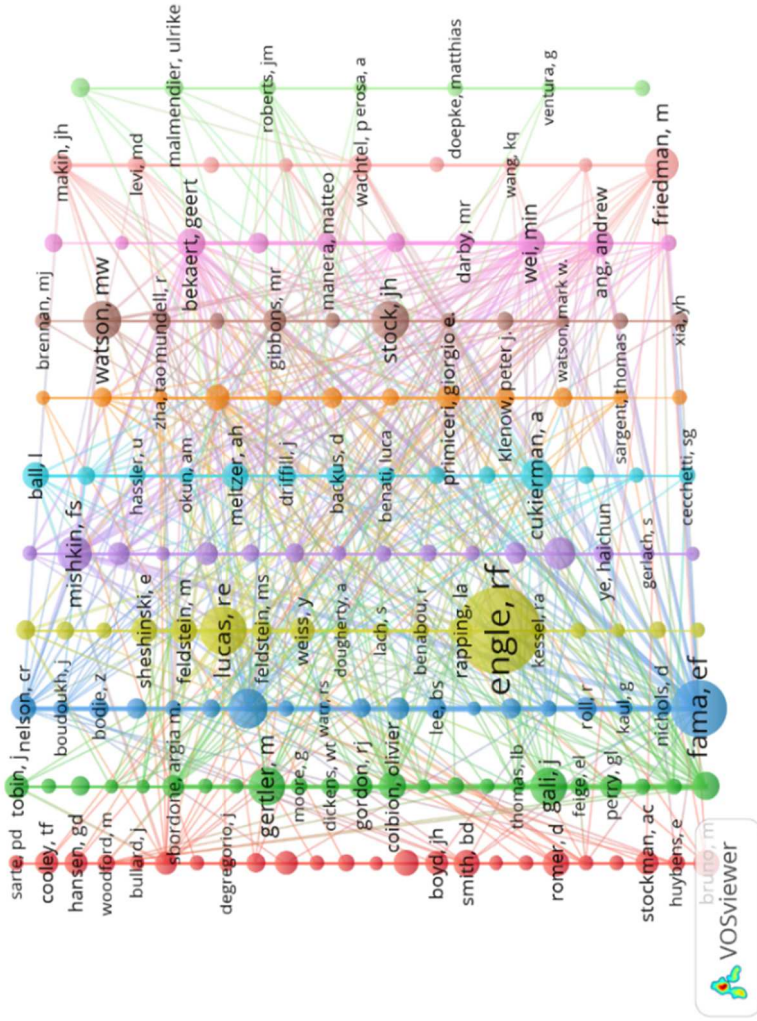


Figure 11. The theme evolution map in the field of inflation

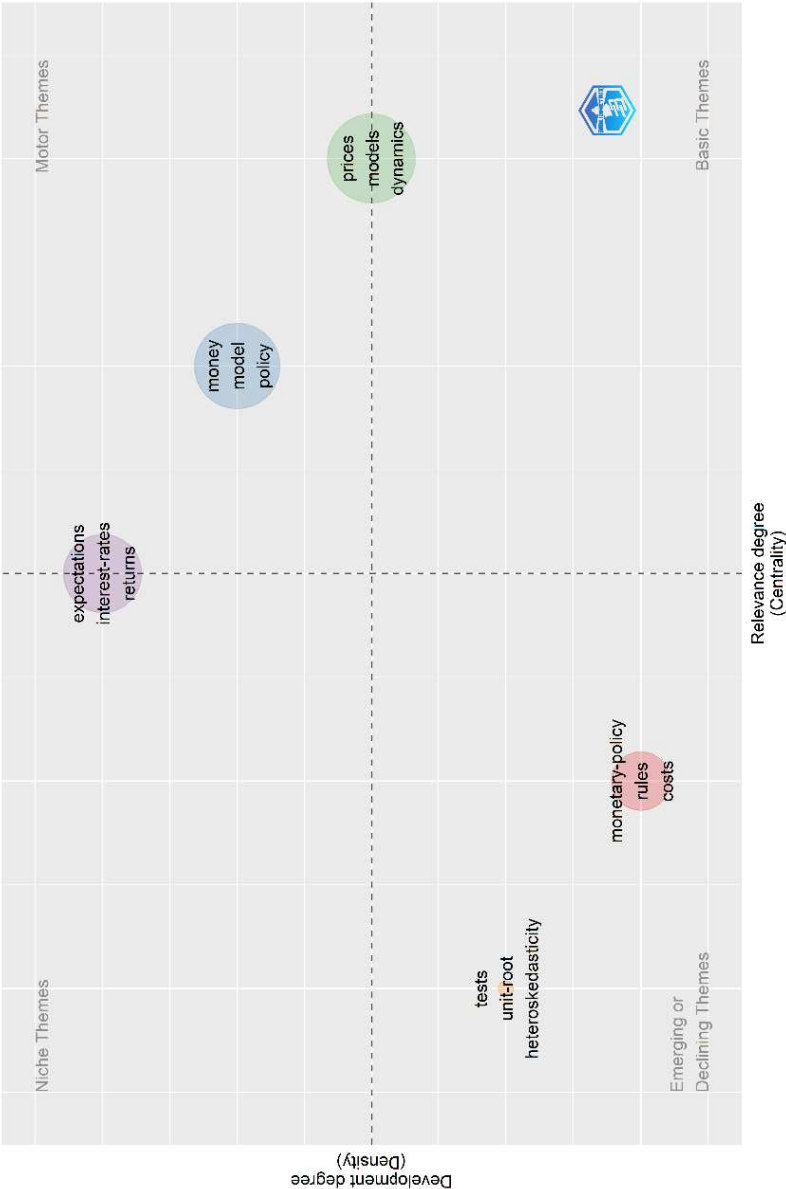


Figure 12. The keyword co-occurrence network

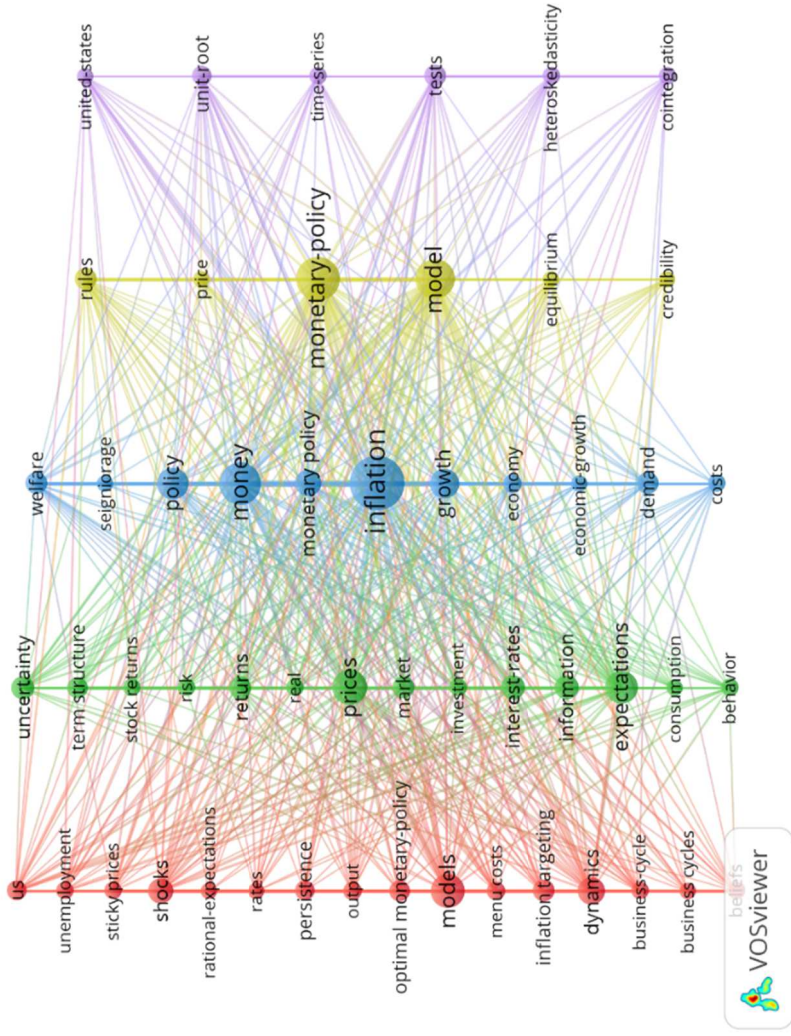
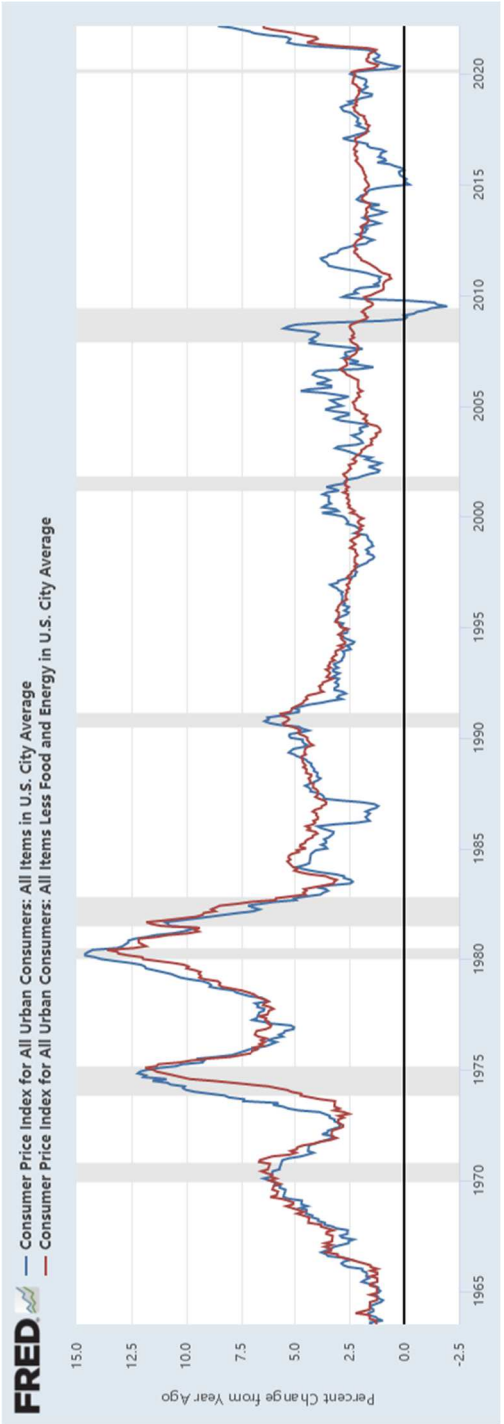


Figure 14. The consumer price index and core consumer price index fluctuations of the United States from 1961 to 2022



Note: Shaded areas indicate U.S recessions.

Units: Index 1982-1984=100, Seasonally Adjusted

Source: U.S. Bureau of Labor Statistics (2022a, 2022b). Release: Consumer Price Index.