Bibliometric Analysis of the Interconnection Between Global Trade and Exchange Rate Policies

Loso Judijanto[1], Dhiana Ekowati[2]
[1] IPOSS Jakarta, losojudijantobumn@gmail.com
[2] Sekolah Tinggi Ilmu Ekonomi Nusa Megarkencana, dhianaekowati@gmail.com

Article Info

ABSTRACT

This study conducts a bibliometric analysis to explore the intricate relationships between global trade and exchange rate policies. Utilizing data extracted from major academic databases, the research synthesizes relevant literature from the past three decades to identify key thematic areas, influential authors, and the evolution of research trends over time. The analysis reveals how exchange rate volatility impacts global trade dynamics, highlights the theoretical underpinnings such as the Mundell-Fleming model and the Purchasing Power Parity, and identifies gaps in the current literature. The study's findings provide significant insights into the role of exchange rate management in economic stability and the interconnectedness of global markets. Practical implications are discussed with a focus on policy formulation and strategic financial management, while theoretical contributions offer enhancements to existing economic frameworks and propose new areas for empirical research. This research not only enriches the academic field of international economics but also serves as a foundational resource for policymakers and economic strategists navigating the complexities of global trade.

Corresponding Author:

Name: Loso Judijanto
Institution: IPOSS Jakarta
Email: losojudijantobumn@gmail.com

1. INTRODUCTION

Global trade has consistently been a major force shaping economies worldwide, influencing everything from individual livelihoods to international relations [1]. The intricate relationships among nations through trade are often reflected in the fluctuations of exchange rates, which serve as vital economic indicators [2]. Exchange rates are influenced by various factors including trade balances, interest rates, and macroeconomic policies, showcasing a dynamic interplay with global trade activities [3], [4]. Understanding this interplay is crucial as it can have profound implications on a country's economic stability and growth prospects [5].

The influence of exchange rate policies on global trade is a multifaceted subject that has garnered considerable attention from economists and policymakers [6]. Exchange rate volatility can significantly affect a country's trade competitiveness, impacting the prices of exports and imports, and thereby influencing trade volumes [7]. For instance, a devaluation of the domestic

currency might make exports cheaper and more attractive to foreign buyers, potentially boosting a country's export volumes [8], [9]. Conversely, this devaluation can increase the cost of imports, affecting domestic markets and possibly leading to inflationary pressures [10].

The global economic landscape has witnessed various instances where exchange rate policies have been strategically used as a tool to achieve trade competitiveness [9], [11]. Countries often engage in competitive devaluations, a race to lower their currency values to gain a trade advantage over others [8]. This strategy, however, can lead to retaliatory actions from trade partners, initiating cycles of devaluation that can destabilize global financial markets [6], [12]. Therefore, understanding the strategic use and impact of exchange rate policies on global trade is crucial for sustainable economic planning and policy formulation.

In light of globalization, the examination of exchange rates and trade policies has become increasingly complex due to the interconnectedness of global markets. The ripple effects of policy changes in one country can have significant consequences on the global trade network, affecting multiple economies simultaneously. This intricate relationship necessitates a thorough and nuanced analysis to aid in the crafting of policies that promote stable and beneficial trade relationships among nations, underpinning the importance of exploring this area through academic and empirical lenses.

The theoretical framework for analyzing the interconnection between global trade and exchange rate policies is grounded in the principles of international finance and trade theories. Notably, the Mundell-Fleming model provides insights into how exchange rate regimes impact economic variables in the context of an open economy [13], [14]. Additionally, the Purchasing Power Parity and the International Fisher Effect offer explanations on how exchange rates adjust in response to differential inflation and interest rates, respectively, between countries. These

theoretical perspectives are crucial as they provide the foundation for understanding the mechanisms through which exchange rate policies influence trade flows and economic stability [15], [16].

Despite the extensive body of literature on the relationship between exchange rates and global trade, there remains a lack of comprehensive bibliometric analysis that synthesizes these studies to identify prevailing trends, gaps, and emergent themes in this field. A bibliometric analysis can provide a macroscopic view of the research landscape, highlighting the evolution of key concepts and the interconnections among various studies . This approach is particularly pertinent as it allows for an assessment of the intellectual structure and the dynamics of research on global trade and exchange rate policies, thus informing future research directions and policy development [17], [18].

The objective of this research is to conduct a bibliometric analysis to map and evaluate the existing academic and empirical research on the interconnection between global trade and exchange rate policies. This study aims to identify the most influential works, key authors, and principal research clusters within this field. By doing so, it seeks to uncover the theoretical and empirical trajectories that have shaped the understanding of how exchange rate policies influence global trade dynamics. Additionally, this research intends to pinpoint research gaps and suggest areas for future investigation, thereby contributing to a more comprehensive understanding of the strategic implications of exchange rate policies on global trade.

2. LITERATURE REVIEW
2.1 Overview of Global Trade and Exchange Rate Dynamics

Global trade and exchange rate dynamics have been extensively studied, reflecting their critical role in international economics. According to [19], exchange rate movements are pivotal in shaping trade flows as they directly

influence the price competitiveness of a nation's goods on the global market. This relationship is often explored through the lens of the elasticity approach, which assesses how responsive international trade volumes are to changes in exchange rates. The seminal work of [20] posits that exchange rate volatility can deter trade activities by increasing the risk and uncertainty associated with international transactions, thereby affecting decisions on resource allocation and pricing strategies.

2.2 Impact of Exchange Rate Policies on Trade Competitiveness

Exchange rate policies, including managed floats or fixed rates, can significantly affect a country's trade competitiveness. According to [21], countries with proactive exchange rate policies tend to experience improved trade balances, as these policies can be tailored to support domestic economic conditions. For example, by devaluing their currency, countries can make their exports cheaper and more attractive in international markets, potentially increasing their market share. However, [22] note that such competitive devaluations might lead to trade wars, as countries retaliate to protect their own economic interests, which can ultimately harm global trade relations.

2.3 Strategic Use of Exchange Rate Policies

Strategic use of exchange rate policies is a common practice among nations to bolster economic stability and growth. [23] provide an analysis of how major economies manipulate their currency values through central bank interventions, impacting their trade dynamics with partners. These interventions often aim to prevent excessive appreciation or depreciation of the currency, which could lead to undesirable economic consequences. Furthermore, (2) discuss the implications of such policies in emerging markets, where the control of exchange rate movements is crucial in avoiding

financial crises and ensuring economic resilience [24].

2.4 Theoretical Perspectives on Exchange Rates and Trade

From a theoretical perspective, various models have been proposed to explain the interaction between exchange rates and trade. The Mundell-Fleming model, as discussed by [25], suggests that under certain conditions, exchange rate flexibility can be advantageous for an open economy in regulating its monetary policy and responding to external shocks. Additionally, the Purchasing Power Parity (PPP) theory and the International Fisher Effect are central to understanding how differential inflation and interest rates across countries influence exchange rate adjustments and, consequently, trade flows.

2.5 Empirical Studies and Their Findings

Empirical research on the relationship between exchange rates and global trade offers mixed findings, reflecting the complexity of this interaction. [26] find that in the long run, exchange rate volatility has a negative impact on the trade balance for certain commodities, but not universally across all sectors. Similarly, [27] points out that the impact of exchange rate policies on trade balance is conditional on the specific economic structure and the existing level of trade barriers of a country. These studies highlight the sector-specific and country-specific factors that mediate the influence of exchange rates on trade.

2.6 Bibliometric Analyses in Economic Research

Bibliometric analysis has emerged as a powerful tool in economic research to map the knowledge base and identify the trajectory of scholarly literature. [28] utilize bibliometric methods to review the literature on global business cycles, demonstrating how such analyses can reveal dominant themes and gaps in existing research. Applying similar methods to the study of global trade and exchange rate policies could

provide insights into the evolution of theories and the effectiveness of different empirical methodologies over time.

3. METHOD

This research employs a bibliometric analysis to systematically review and synthesize existing literature on the interconnection between global trade and exchange rate policies. The data for the study is extracted from Google Scholar utilizing comprehensive search terms related to "global trade," "exchange rate policies," "currency management," and "international economics." The time frame for the literature search spans from 1900 to the present, ensuring a broad coverage of both foundational studies and contemporary research. The retrieved documents are then analyzed using VOSviewer software, which facilitates the creation of co-citation and bibliographic coupling networks, allowing for the identification of key research clusters, trends, and gaps in the field. The analysis includes metrics such as citation counts, h-index, and journal impact factors to assess the influence and relevance of the identified studies.

4. RESULT AND DISCUSSION
4.1 Result and Discussion

Table 1. Research Data Metrics

Metrics Data	Information
Publication years	1900-2024
Citation years	124
Papers	980
Citations	193788
Cites/year	1562.81
Cites/paper	197.74
Cites/author	143119.05
Papers/author	597.38
Authors/paper	2.11
h-index	63
g-index	437
hI,norm	58
hI,annual	0.47
hA, index	46
Paper with ACC >=	1,2,5,10,20:461,108,65,56

Source: Output Publish or Perish, 2024

Table 1 provides a comprehensive overview of the bibliometric data related to the research on global trade and exchange rate policies. The publication span ranges from 1900 to 2024, reflecting over a century of academic contributions. The dataset includes 980 papers that collectively have accumulated 193,788 citations, averaging approximately 1,562.81 citations per year and 197.74 citations per paper. The high citation count per author (143,119.05) and the number of papers per author (597.38) suggest a significant impact and productivity within this research domain. The average number of authors per paper is 2.11, indicating collaboration among researchers. Metrics such as the h-index of 63 and g-index of 437 demonstrate both the quantity and the impact of highly cited works. The hI,norm of 58 and hI,annual of 0.47 reflect the normalized and annualized citation impact, respectively. Additionally, the data shows that 461 papers have at least one citation, 108 have two or more, 65 have five or more, 56 have ten or more, and 20 have twenty or more, highlighting the breadth and depth of influential research in this field. Overall, these metrics underscore the extensive and impactful body of work in

the study of global trade and exchange rate policies.

a. Citation Analysis

Table 2. Most Cited Article

Citations	Author and Year	Title
17517	[29]	International investment and international trade in the product cycle
10625	[30]	International economics: Theory and policy
10490	[31]	A sensitivity analysis of cross-country growth regressions
9037	[32]	Does trade cause growth?
6175	[33]	The purchasing-power parity doctrine: a reappraisal
6130	[34]	Trade policy and economic growth: a skeptic's guide to the cross-national evidence
5401	[35]	Noise
5296	[36]	Booming sector and de-industrialisation in a small open economy
5196	[37]	International production and the multinational enterprise (RLE international business)
5160	[38]	The endogenity of the optimum currency area criteria

Source: Output Publish or Perish, 2024

Table 2 above presents a list of highly influential articles in the field of international trade and exchange rate policies, along with their citation counts. Each article has made significant contributions to the academic discourse, reflecting its impact on the field. The findings of these seminal works offer critical insights into various aspects of global trade and exchange rate dynamics.

1. International Investment and Trade in the Product Cycle (Vernon, 1966)
   Vernon's article, with 17,517 citations, introduces the Product Life Cycle (PLC) theory, which explains how a product's production and trade dynamics evolve over its lifecycle. According to Vernon, products move through stages of introduction, growth, maturity, and decline, and this progression affects their trade patterns and international investment flows. The theory suggests that innovative products are initially produced and exported by developed countries, but as they mature, production may shift to developing countries due to lower labor costs. This work has profoundly influenced the understanding of international trade dynamics and the strategic decisions of multinational corporations.

2. International Economics: Theory and Policy (Krugman & Obstfeld, 2009)
   This textbook, cited 10,625 times, is a foundational work in international economics. Krugman and Obstfeld provide a comprehensive overview of both theoretical and policy aspects of international trade and finance. The book covers topics such as trade theories, exchange rate mechanisms, and the impact of trade policies on economic growth. Its extensive use in academic settings underscores its role in shaping the teaching and understanding of international economic principles. The authors' discussions on trade models and policy implications have been instrumental in guiding both

academic research and practical policy-making.

3. A Sensitivity Analysis of Cross-Country Growth Regressions (Levine & Renelt, 1992)
With 10,490 citations, Levine and Renelt's article presents a rigorous sensitivity analysis of cross-country growth regressions. The study assesses the robustness of various factors influencing economic growth across different countries, emphasizing the importance of empirical validation in economic research. By critically analyzing the results of growth regressions, the paper highlights the challenges of drawing definitive conclusions from cross-country comparisons and stresses the need for careful consideration of model specifications and variable selection.

4. Does Trade Cause Growth? (Frankel & Romer, 1999)
Frankel and Romer's study, cited 9,037 times, investigates the causal relationship between trade and economic growth. Using econometric techniques, the authors provide evidence that trade has a positive effect on economic growth, challenging the notion that growth leads to increased trade. Their findings underscore the importance of trade as a driver of economic development and have been influential in shaping debates on trade policy and growth strategies. The paper has contributed significantly to the empirical literature on trade and growth, providing a basis for further research and policy formulation.

5. The Purchasing-Power Parity Doctrine: A Reappraisal (Balassa, 1964)
Balassa's work, with 6,175 citations, reevaluates the Purchasing Power Parity (PPP) doctrine, which posits that exchange rates should adjust to reflect changes in price levels between countries. Balassa's reappraisal highlights limitations and deviations from the PPP theory observed in empirical data. The paper's insights into the applicability and accuracy of PPP in different contexts have informed subsequent research and debates on exchange rate theory and policy. Balassa's contribution remains a cornerstone in understanding the relationship between exchange rates and price levels.

6. Trade Policy and Economic Growth: A Skeptic's Guide to the Cross-National Evidence (Rodriguez & Rodrik, 2001)
Cited 6,130 times, Rodriguez and Rodrik's paper critically examines the relationship between trade policy and economic growth, providing a skeptical perspective on the cross-national evidence supporting this relationship. The authors argue that the empirical support for the positive impact of trade policy on growth is less robust than often claimed, highlighting methodological issues and the complexity of the trade-growth relationship. This critical analysis has stimulated further research and debate on the effectiveness of trade policies in promoting economic development.

7. Booming Sector and De-Industrialisation in a Small Open Economy (Corden, 1984)
Corden's article, with 5,296 citations, explores the phenomenon of de-industrialization in small open economies experiencing a booming sector, often driven by

resource discoveries or other external factors. The paper discusses how a booming sector can lead to currency appreciation, making other industries less competitive, and ultimately resulting in a decline in the industrial base. Corden's analysis provides valuable insights into the economic challenges faced by countries with significant sectoral imbalances and has influenced policy discussions on managing resource-driven economic changes.

8. International Production and the Multinational Enterprise (Dunning, 1981)
   With 5,196 citations, Dunning's work focuses on the role of multinational enterprises (MNEs) in international production. Dunning's eclectic theory explains the factors that influence MNEs' decisions to invest abroad, including ownership advantages, location advantages, and internalization advantages. This theory has been instrumental in understanding the global expansion strategies of multinational firms and the impact of foreign direct investment (FDI) on international trade and economic development.
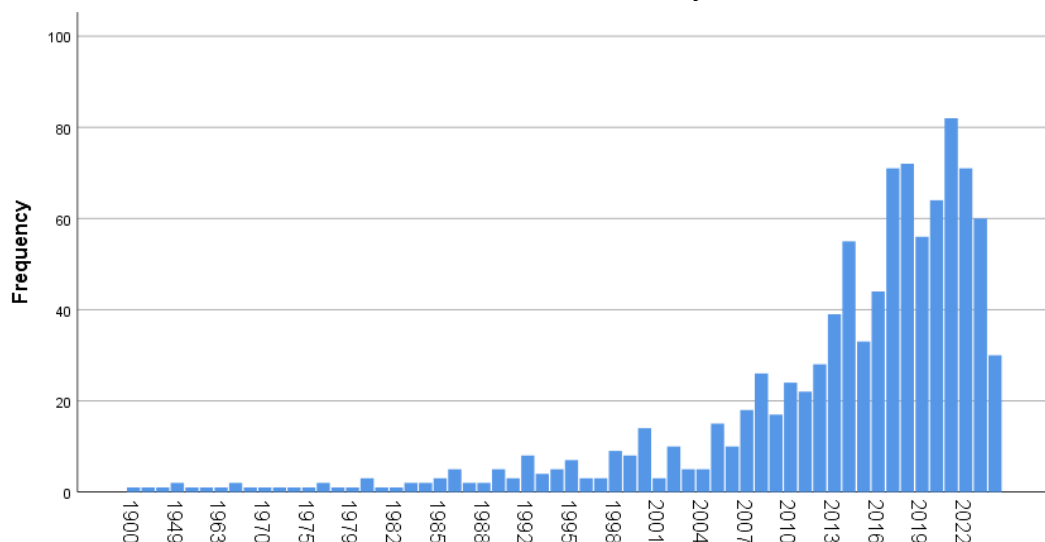
9. The Endogeneity of the Optimum Currency Area Criteria (Frankel & Rose, 1998)
   Frankel and Rose's paper, cited 5,160 times, examines the concept of the optimum currency area (OCA) and argues that the criteria for determining an optimal currency area are endogenously influenced by the degree of economic integration between countries. The authors' findings challenge traditional views on currency unions and suggest that economic integration can improve the suitability of a currency area over time. This work has contributed to the debate on the viability of currency unions and the European monetary integration process.

10. Noise (Black, 1986)
    Black's article, with 5,401 citations, addresses the concept of "noise" in financial markets, referring to the random fluctuations in asset prices that are not attributable to fundamental factors. Black argues that market noise can obscure the true signals of market conditions and affect trading decisions. This seminal work has implications for understanding market efficiency, investor behavior, and the impact of speculative activities on financial markets.

   b.   Yearly Publication

Figure 1. Number of Publication based on Year

Figure 1 presents a histogram illustrating the number of publications related to global trade and exchange rate policies over the years, starting from 1960 through 2022. The graph indicates a gradual increase in publications, with a noticeable rise beginning in the early 1990s, reaching a peak around 2019. This upward trend might be attributed to the increasing globalization and complexity of international trade, alongside significant policy changes and financial crises prompting heightened academic and policy interest in these topics. The peak around 2019 could also reflect heightened scholarly activity due to recent global economic tensions and trade wars, followed by a slight decline, possibly due to the global disruptions caused by the COVID-19 pandemic starting in 2020. The distribution showcases the evolving interest and the importance of understanding trade and exchange rate dynamics in an increasingly interconnected global economy.

c. Publisher and Frequency of Publishing

Figure 2. Number of Publishing based on Year

Figure 2 displays the frequency of publications across various academic and research platforms as indicated by the histogram. The bars represent the number of publications associated with different journals and research websites, with noticeable spikes in platforms like "univ-publiah.science," "Taylor & Francis," and "Nature.com." These spikes suggest that these platforms are major contributors to research dissemination in the fields relevant to the data, likely indicating their prominence and reliability as sources of scholarly information. Smaller bars for other sources such as "journalssagepub.com" and "elsevier.com" imply less frequent publication activity but still denote their participation in the academic discourse.

d. Keyword Co-Occurrence Analysis
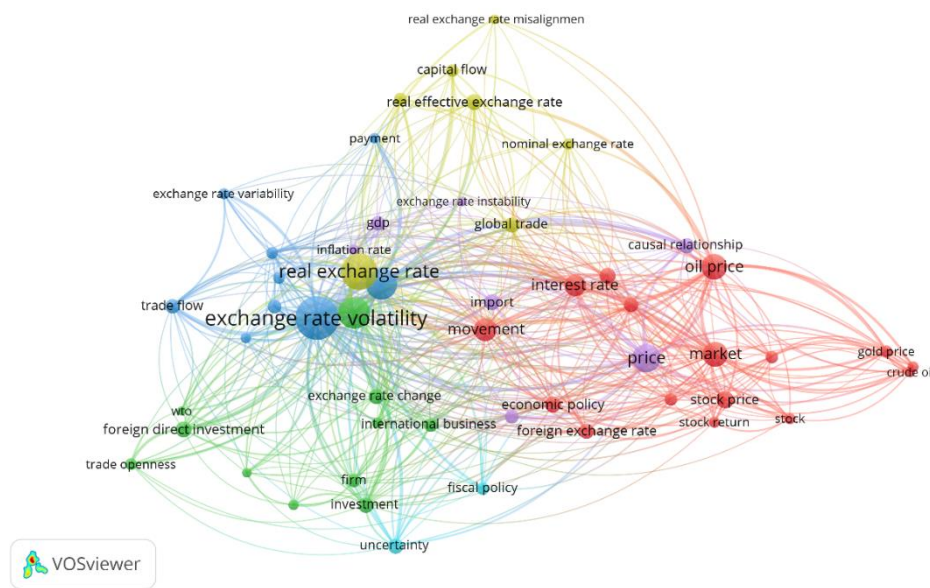   1. Network Visualization

Figure 3. Network Visualization

Figure 3 presents a bibliometric network analysis created using VOSviewer, visualizing the interconnections and thematic clusters within research related to exchange rates and global trade. This type of visualization helps identify the key areas of focus and how they are interconnected. Each node represents a specific research topic, and the lines indicate the relationships or co-occurrences of these topics in the literature.

a. **Green Cluster: Economic Fundamentals and Trade Dynamics**
This cluster is centered around "exchange rate volatility," linking closely with "real exchange rate," "trade flow," "foreign direct investment," and "WTO" (World Trade Organization). These topics suggest a strong focus on how exchange rate fluctuations influence international trade flows, investments, and the broader economic interactions governed by trade policies.

This cluster reflects the core discussions around how fundamental economic variables and policy settings affect exchange rate behaviors and their subsequent impact on global trade dynamics.

b. **Blue Cluster: Monetary Policies and Macro-Economic Indicators**
Featuring topics like "interest rate," "inflation rate," and "economic policy," this cluster deals with the macroeconomic tools and indicators that influence and are influenced by exchange rates. It highlights the central role of monetary policies in managing exchange rate movements and stabilizing economies. This cluster underscores research focused on the relationships between monetary policy tools, such as interest rates, and their effects on currency values and inflation dynamics.

c. **Red Cluster: Market Variables and Financial Metrics**

Dominated by "price," "market," "stock price," "gold price," and "oil price," this cluster explores the relationship between exchange rates and various market prices, including commodities and financial assets. This area examines how exchange rate fluctuations can affect the pricing mechanisms in different markets, and conversely, how movements in these markets can impact exchange rates. The emphasis here is on the interplay between currency values and global market dynamics, including the effects of commodity price changes on financial markets and exchange rates.

d. **Yellow Cluster: Specific Financial Instruments and Market Responses**

This cluster includes terms like "stock," "stock return," and "movement," which focus more specifically on the financial

market's reactions to exchange rate changes and economic announcements. This cluster likely explores the immediate impact of exchange rate adjustments on stock markets, investigating how investors respond to exchange rate news and economic data through changes in stock prices and returns.

The analysis displayed in this network map offers a comprehensive overview of the multifaceted nature of exchange rate research, revealing how economic, financial, and policy-related factors intertwine. Each cluster provides insights into different aspects of exchange rate dynamics, from fundamental economic implications to specific market responses, highlighting the diverse yet interconnected nature of this field of study.
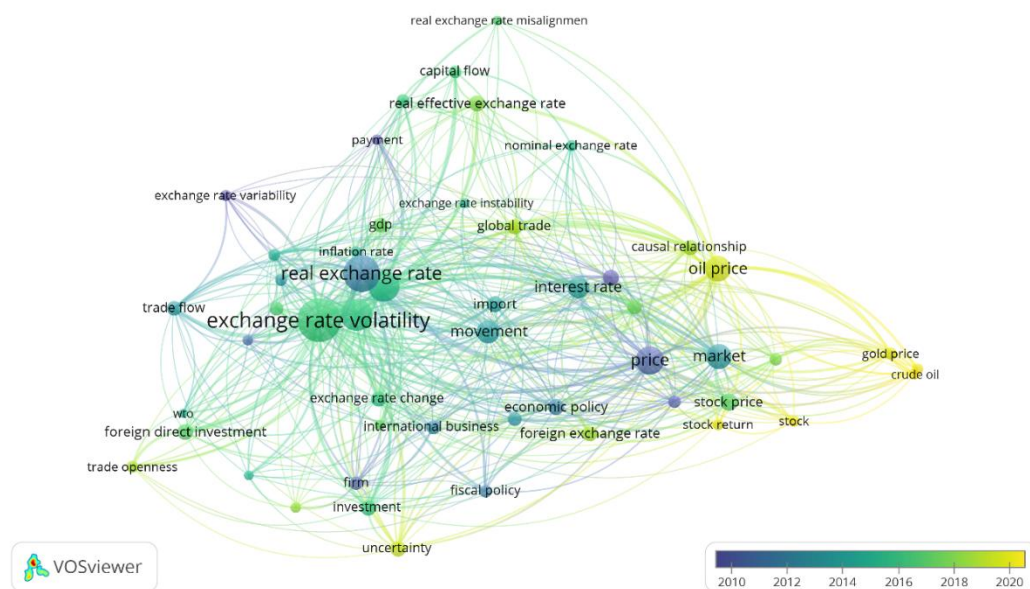
2. Overlay Visualization

Figure 4. Overlay Visualization

Figure 4 presents a bibliometric network analysis overlaid with a timeline, illustrating the evolution and interconnections of research topics related to exchange rates and global trade over the years from 2010 to 2020. The graph is structured to show how various topics have developed and shifted in focus across the decade, with each node representing a specific topic and its color gradient indicating the timeline.

In the early 2010s, the research primarily concentrated on fundamental economic relationships such as the impact of exchange rate volatility on global trade, inflation, and GDP. Topics like "trade flow," "inflation rate," and "GDP" are seen more prominently in darker shades of blue, indicating an early decade focus. This period witnessed an intense scrutiny of how traditional economic indicators interacted with exchange rate fluctuations, particularly in the aftermath of the 2008 financial crisis. Researchers aimed to understand the broader macroeconomic consequences of exchange rate movements on global economic stability and trade patterns.

Moving into the mid-2010s, there is a noticeable shift toward green nodes indicating an increased focus on economic policy, interest rates, and market dynamics. During this period, the interplay between policy decisions—including fiscal policy and foreign exchange interventions—and exchange rate behavior received more attention. This shift reflects a growing concern among policymakers and academics regarding the effectiveness of monetary policies

in a post-crisis world, where central banks globally were experimenting with unconventional monetary tools to stimulate economies.

The later years, indicated by the yellow nodes, show an expanded focus on the integration of financial markets and the influence of commodity prices such as oil and gold on exchange rates. Topics like "stock price," "oil price," and "gold price" emerge as significant areas of study. This trend demonstrates a recognition of the increased globalization of financial markets and how fluctuations in commodity markets can have ripple effects on exchange rates and economic stability. The research during this period appears to be more integrative, analyzing not just the direct impacts of exchange rates but also how these are influenced by global market sentiments and commodity price shocks.

Throughout the decade, there is a visible trend towards an integrative approach that considers multiple economic factors simultaneously. The visualization shows considerable overlap among clusters, especially in the later years, suggesting a holistic approach to studying these topics. For example, the interactions between "foreign direct investment," "economic policy," and "market prices" indicate a nuanced understanding of how various elements of economic theory and practice are interlinked and how they collectively impact global trade dynamics. The progression from fundamental economic analysis to a more integrated approach reflects the evolving nature of global trade and finance. As

markets become more interconnected, the impact of exchange rate movements extends beyond traditional trade balances to broader financial stability and economic policy effectiveness. This decade-long shift suggests future research will likely continue to explore these complex interactions, possibly incorporating emerging technologies and financial innovations such as digital currencies and blockchain, which could further transform the landscape of international trade and exchange rate policies.
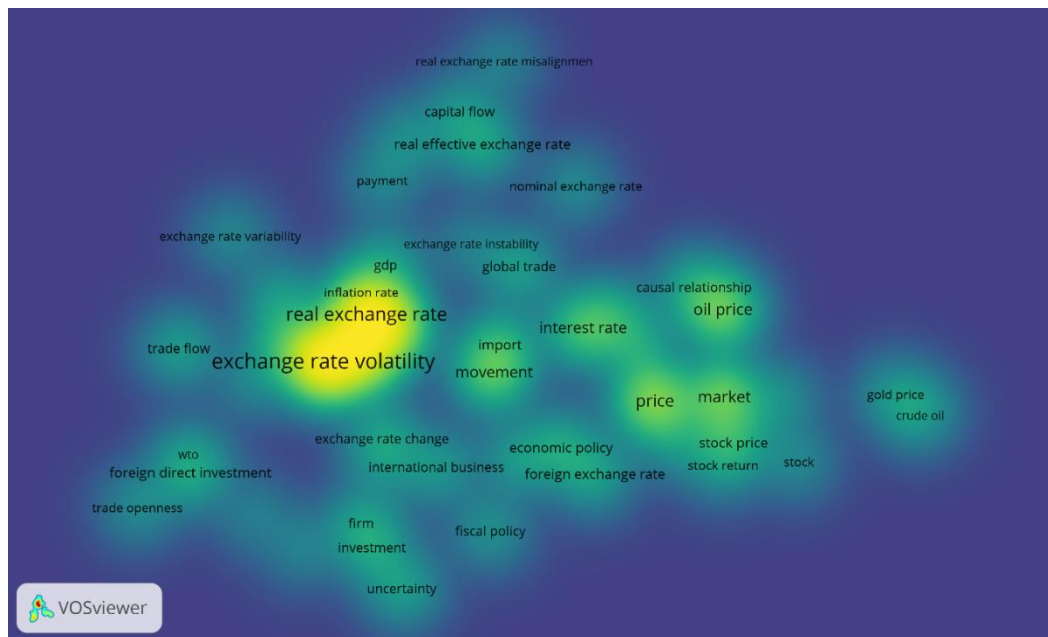
3. Density Visualization

Figure 5. Density Visualization

Figure 5 presents a bibliometric visualization illustrating the distribution of research topics related to exchange rates and global trade. The color intensity of the nodes in the visualization reflects the relative prominence or frequency of research focus, with brighter areas indicating topics that have been more frequently explored and darker nodes suggesting less explored or emerging areas. Based on the figure, several potential research topics can be identified as less bright area on the figure.

1. Real Exchange Rate Misalignment

   The node indicating "real exchange rate misalignment" appears less bright, suggesting that while it is recognized within the literature, it may not be as heavily researched as central topics like "exchange rate volatility" or "inflation rate." This topic involves the deviation of the real exchange rate from its equilibrium value, which can have significant implications for economic competitiveness and balance of payments stability. Research in this area could focus on developing new methodologies for assessing misalignment, exploring the consequences of sustained misalignment for emerging markets, or evaluating policy measures designed to correct

or mitigate these misalignments.

2. Capital Flow

Similarly, the "capital flow" node is less highlighted, indicating potential for deeper exploration. Capital flows—both inflows and outflows—are critical for understanding financial markets and economic stability in a globalized world. Potential research could examine the impact of regulatory policies on capital flows, the role of capital controls in managing economic crises, or the relationship between capital flows and exchange rate fluctuations in developing versus developed economies.

3. Fiscal Policy

"Fiscal policy" is another less prominent node that holds significant importance, especially in its interaction with exchange rates and global trade. Research in this area could explore how fiscal expansions or contractions influence exchange rate movements, the effectiveness of fiscal interventions in trade-balanced adjustments, or cross-country comparisons of fiscal policy impacts on trade deficits.

4. WTO and Trade Openness

The nodes for "WTO" (World Trade Organization) and "trade openness" also appear less bright, suggesting that these areas might benefit from further research. Studies could focus on the effectiveness of WTO trade policies and regulations in moderating exchange rate volatility, or on how different degrees of trade openness affect economic resilience to exchange rate shocks.

5. Firm Investment

Investment at the firm level, particularly in relation to exchange rate expectations and international business operations, appears as a less explored area. Research could be directed towards understanding how exchange rate expectations influence firm-level investment decisions, the role of exchange rate hedging in protecting overseas investments, or comparative studies of investment behaviors across different exchange rate regimes.

6. Uncertainty

The concept of "uncertainty," particularly in the context of international trade and finance, also presents as a darker node. This could encompass research into how political and economic uncertainty affects exchange rate volatility, the impact of uncertainty on trade flows, and the mechanisms through which businesses mitigate risk associated with exchange rate fluctuations.

Research in these less explored areas could provide valuable insights for policymakers and economic planners. For example, better understanding of real exchange rate misalignment could lead to more effective interventions to avoid harmful economic imbalances. Similarly, insights into capital flows could inform regulatory frameworks that balance the benefits of global capital while minimizing risks such as sudden stops or financial contagion. By focusing on less explored areas, researchers can

contribute to filling knowledge gaps in the literature, potentially leading to new theoretical developments or refinements of existing models. This could be particularly impactful in fields like fiscal policy and its cross-effects with trade and exchange rates, where existing models may not fully capture complex contemporary economic realities.

In summary, the less bright areas identified in the bibliometric map not only offer opportunities for significant academic contributions but also have the potential to influence practical economic management and policy-making at both national and international levels. By advancing research in these areas, scholars can help develop a more nuanced understanding of the complex interplay between exchange rates, trade policies, and global economic stability.
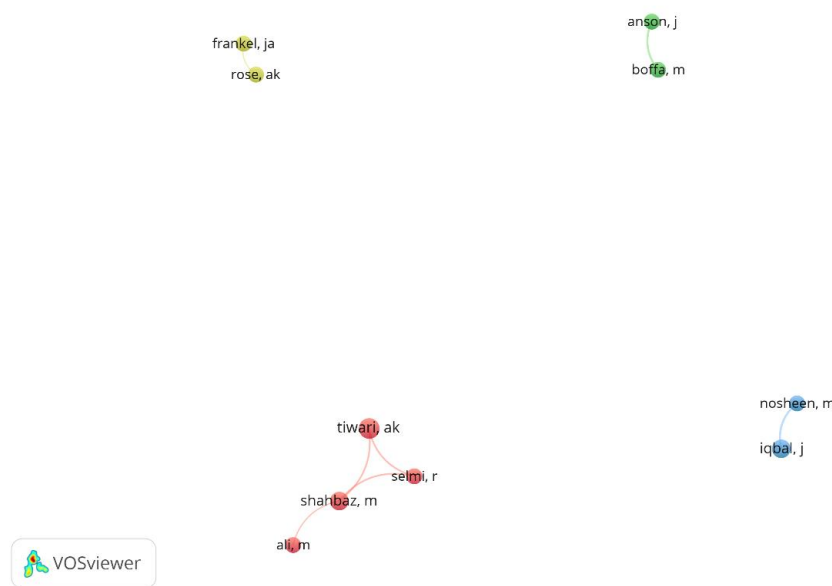
e. Co-Authorship Analysis

Figure 6. Author Collaboration

In the visualization, nodes represent individual authors, and the lines would typically indicate collaborations or thematic linkages based on co-authorship or co-citation. Authors such as "Frankel, JA" and "Rose, AK" are located closely together, suggesting they might have collaborated or have significant thematic overlap in their research. This proximity can also indicate a strong influence in similar subfields or methodologies. The cluster around "Tiwari, AK", "Selmi, R", "Shahbaz, M", and "Ali, M" suggests a possibly vibrant research group or a thematic focus area where these authors contribute collectively or engage in related topics. The presence of other isolated nodes like "Anson, J", "Boffa, M", "Nosheen, M", and "Iqbal, J" might indicate that these authors work independently or in different subfields compared to the central cluster, or they could be emerging researchers in the area establishing their niches.

4.2 Practical Implications

The study's findings on the interconnections between global trade and exchange rate policies have significant practical implications for policymakers, business leaders, and

financial analysts. By understanding the nuances of how exchange rate volatility impacts global trade dynamics, policymakers can devise more informed and effective economic strategies to stabilize markets and promote sustainable trade practices. For instance, the insights gained can help in tailoring fiscal and monetary policies that accommodate the specific needs of an economy, managing currency risks, and planning for international investments and operations. Businesses, especially multinational corporations, can use this knowledge to better predict market trends and manage the financial risks associated with currency fluctuations. Financial analysts can leverage these insights to provide more accurate forecasts and investment advice, particularly in commodities and foreign exchange markets. Overall, the comprehensive analysis of exchange rate policies and their impact on global trade provides a solid foundation for economic decision-making and strategic planning in an interconnected global economy.

4.3 Theoretical Contributions

This study contributes significantly to the theoretical understanding of the complex relationships between exchange rate policies and global trade. By employing a bibliometric analysis, the research synthesizes a vast array of literature to highlight evolving trends, foundational theories, and emerging gaps in the field. Theoretically, the study reinforces and expands on existing models such as the Mundell-Fleming model and the theories of Purchasing Power Parity and International Fisher Effect, by integrating contemporary empirical findings and diverse academic perspectives. It also introduces new dimensions to the discourse on how global economic integration and market dynamics influence exchange rate behavior and trade policies. Furthermore, the study's

methodological approach itself contributes to the academic discipline by demonstrating how bibliometric techniques can be applied to map out and interpret complex theoretical landscapes, providing a replicable model for future research in economics and beyond. This layered understanding not only enriches the academic dialogue but also sets the stage for subsequent empirical studies aiming to explore identified gaps and theoretical predictions.

5. CONCLUSION

This study, through its comprehensive bibliometric analysis, has effectively mapped the expansive terrain of research surrounding the interconnections between global trade and exchange rate policies. It illuminated the most influential studies and authors, traced the evolution of key themes over decades, and identified both well-trodden and less-explored avenues within the scholarly discourse. The findings underscore the critical role of exchange rate management in global economic stability and highlight the intricate relationship between currency values and international trade dynamics. The practical implications of this study are vast, offering policymakers, business strategists, and financial analysts data-driven insights to better navigate the complexities of global markets. Theoretically, the research enriches existing economic models and introduces new perspectives, thereby contributing to a more nuanced understanding of international finance. By bridging theoretical gaps and suggesting areas for further research, the study not only contributes to academic knowledge but also supports the development of more robust economic policies that can foster sustainable global trade environments. In conclusion, the insights garnered from this analysis provide a valuable resource for both advancing economic theory and informing practical economic policy and business strategy in an interconnected world.

REFERENCES

[1]   A. Animashaun and A. Mensah, "The Impact of Current Account Imbalances on Exchange Rate Movements," *Int. J. Innov. Res. Dev.*, vol. 13, pp. 24–26, Jan. 2024, doi: 10.24940/ijird/2024/v13/i1/JAN24005.

[2]   R. Du, "Examining the Trends and Influencing Factors of International Trade in the Era of New Economic Globalization," *Proc. Bus. Econ. Stud.*, vol. 6, pp. 45–49, Dec. 2023, doi: 10.26689/pbes.v6i6.5779.

[3]   M. S. Shah, "Analysing the Factors Behind Exchange Rate Fluctuations in India," *Int. J. Res. Appl. Sci. Eng. Technol.*, 2024.

[4]   M. G. Isaev, L. R. Gazieva, and M. I. Gairbekova, "Global trade as a factor in the growth of the world economy," *Ind. Econ.*, 2022.

[5]   B. Khouiled, S.-E. Chini, and M. Benrouina, "Dynamic relationship between exchange rate and trade balance," *Socioecon. Challenges*, 2023.

[6]   S. Liu, "Impact of Exchange Rate Fluctuation on Import and Export Enterprises in China and Japan and Countermeasures," *Highlights Business, Econ. Manag.*, 2024.

[7]   Z. Ouattara, "THE IMPACT OF EXCHANGE RATE VOLATILITY ON INTERNATIONAL TRADE IN DEVELOPING COUNTRIES: EVIDENCE FROM TURKIYE," *Pressacademia*, 2023.

[8]   K. Zweed and A. Shimran, "The impact of exchange rate regulations on Iraq's merchandise exports for the period 1990-2019," *Al Kut J. Econ. Adm. Sci.*, 2024.

[9]   G. S. S. Vaibhav, "A Study On Impact Of Exchange Rate Fluctuations On Indian Exports," *Int. J. Multidiscip. Res.*, 2024.

[10]   U. N. Kayani, A. F. Aysan, A. Gul, S. A. Haider, and S. Ahmad, "Unpacking the asymmetric impact of exchange rate volatility on trade flows: A study of selected developed and developing Asian economies," *PLoS One*, vol. 18, no. 10, p. e0291261, 2023.

[11]   E. NYECHE, "Impact of exchange rate on economic growth in Nigeria," *Int. J. Adv. Econ.*, vol. 6, no. 6, pp. 242–250, 2024.

[12]   P. Viktor and A. Molnar, "The Analysis and Countermeasures of US Dollar Exchange Rate on Chinas Import and Export Trade," *Eurasia Proc. Educ. Soc. Sci.*, 2024.

[13]   D. Islam and M. A. Al Faisal, "Determinants of Uruguay's Real Effective Exchange Rate: A Mundell-Fleming Model Approach," *arXiv Prepr. arXiv2403.16452*, 2024.

[14]   A. Dvoskin, G. D. Feldman, and M. T. Landau, "The Argentine economy through the lens of an adapted Mundell–Fleming model for small open peripheral economies," *Rev. Keynes. Econ.*, vol. 12, no. 2, pp. 239–264, 2024.

[15]   V. T. Quy, N. Q. Thang, N. N. H. Nhi, and L. Q. Thang, "Purchasing power parity and international fisher effect hypothesis test: evidence from vietnam and 12 major trading partners (2000–2022)," *Am. J. Theor. Appl. Bus.*, vol. 9, no. 2, pp. 30–38, 2023.

[16]   D. C. Pangestuti, A. Fadila, and S. Nugraheni, "Rupiah Exchange Rate Fluctuations in The US Dollar, Purchasing Power Parity Theory and Fisher Effect Theory Testing," *Nominal Barom. Ris. Akunt. dan Manaj.*, vol. 11, no. 1, pp. 79–97, 2022.

[17]   T. Sarı and A. Aypay, "A Bibliometric Study of Issues in Educational Policy," *Educ. Sci.*, vol. 14, no. 6, p. 568, 2024.

[18]   Ö. Şahin and E. Bil, "Bibliometric Analysis of Studies of Published in the Field of Volatility," *Ege Acad. Rev.*, vol. 24, no. 2, pp. 131–148, 2024.

[19]   Y.-W. Cheung and R. Sengupta, "Impact of exchange rate movements on exports: An analysis of Indian non-financial sector firms," *J. Int. Money Financ.*, vol. 39, pp. 231–245, 2013.

[20]   M. Obstfeld and K. S. Rogoff, "Risk and exchange rates," National bureau of economic research Cambridge, Mass., USA, 1998.

[21]   B. Eichengreen, "The real exchange rate and economic growth," *Soc. Econ. Stud.*, pp. 7–20, 2007.

[22]   K. M. E. Dominguez, "Revisiting exchange rate rules," *IMF Econ. Rev.*, vol. 68, no. 3, pp. 693–719, 2020.

[23]   D. A. Steinberg and V. C. Shih, "Interest group influence in authoritarian states: The political determinants of Chinese exchange rate policy," *Comp. Polit. Stud.*, vol. 45, no. 11, pp. 1405–1434, 2012.

[24]   J. Aizenman and M. Binici, "Exchange market pressure in OECD and emerging economies: Domestic vs. external factors and capital flows in the old and new normal," *J. Int. Money Financ.*, vol. 66, pp. 65–87, 2016.

[25]   M. Obstfeld and A. M. Taylor, "The great depression as a watershed: international capital mobility over the long run," in *The defining moment: The Great Depression and the American economy in the twentieth century*, University of Chicago Press, 1998, pp. 353–402.

[26]   M. Bahmani-Oskooee and S. W. Hegerty, "Exchange rate volatility and trade flows: a review article," *J. Econ. Stud.*, vol. 34, no. 3, pp. 211–255, 2007.

[27]   G. Dell'Ariccia, "Exchange rate fluctuations and trade flows: Evidence from the European Union," *IMF Staff Pap.*, vol. 46, no. 3, pp. 315–334, 1999.

[28]   M. A. Kose, C. Otrok, and C. H. Whiteman, "International business cycles: World, region, and country-specific factors," *Am. Econ. Rev.*, vol. 93, no. 4, pp. 1216–1239, 2003.

[29]   R. Vernon, "International investment and international trade in the product cycle," in *International economic policies and their theoretical foundations*, Elsevier, 1992, pp. 415–435.

[30]   P. R. Krugman and M. Obstfeld, *International economics: Theory and policy*. Pearson Education, 2009.

[31]   R. Levine and D. Renelt, "A sensitivity analysis of cross-country growth regressions," *Am. Econ. Rev.*, pp. 942–963, 1992.

[32]   J. A. Frankel and D. Romer, "Does trade cause growth?," in *Global trade*, Routledge, 2017, pp. 255–276.

[33]   B. Balassa, "The purchasing-power parity doctrine: a reappraisal," *J. Polit. Econ.*, vol. 72, no. 6, pp. 584–596, 1964.

[34]   F. Rodriguez and D. Rodrik, "Trade policy and economic growth: a skeptic's guide to the cross-national evidence," *NBER Macroecon. Annu.*, vol. 15, pp. 261–325, 2000.

[35]   F. Black, "Noise," *J. Finance*, vol. 41, no. 3, pp. 528–543, 1986.

[36]   W. M. Corden, "Booming sector and de-industrialisation in a small open economy," in *INTERNATIONAL TRADE THEORY AND POLICY*, Edward Elgar Publishing, 1992, pp. 429–452.

[37]   J. Dunning, *International production and the multinational enterprise (RLE international business)*. Routledge, 2013.

[38]   J. A. Frankel and A. K. Rose, "The endogenity of the optimum currency area criteria," *Econ. J.*, vol. 108, no. 449, pp. 1009–1025, 1998.