

Technology-driven shifts in trade policy and global financial markets: a bibliometric analysis of trends and impacts (2016–2025)

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Review

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Abstract

Purpose – This study aims to examine the intellectual structure, thematic evolution, and global research patterns of technology-driven trade policy and global financial systems by analysing publication trends, influential contributors, and emerging themes.

Design/methodology/approach – A bibliometric analysis was conducted using 606 Scopus-indexed publications (2016–2025). A PRISMA-based screening process refined the dataset, while Excel, VOSviewer, and Publish or Perish were used to assess publication trends, co-authorship networks, keyword clusters, and citation performance.

Findings – The results show a consistent rise in research output, with the USA, China, and the United Kingdom dominating contributions and citations. Thematic clusters highlight growing interest in economic integration, financial innovation, digital governance, and sustainability transitions, while research from developing economies remains limited. Highly cited works focus on monetary spillovers, financial development, and environmental quality, reflecting the convergence of technology, finance, and policy.

Research limitations/implications – This analysis is limited to Scopus-indexed and publications published in English, potentially underrepresenting regional scholarship.

Practical implications – The findings support policymakers in understanding how digital transformation, financial resilience, and sustainability considerations shape global economic governance.

Originality/value – This study is the first to systematically map research at the intersection of technology-driven trade policy and global financial markets, offering integrated insights that earlier bibliometric studies, which analysed these domains separately, have not captured.

Keywords Digital transformation, Global financial markets, Green finance, Sustainable development,

Trade policy

Paper type General review

1. Introduction

In an era marked by unprecedented global interdependence, the relationship between trade policy and financial markets has emerged as one of the most influential determinants of economic growth and stability. Global trade now accounts for nearly 60% of the world's GDP

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(World Bank, 2024), and international capital flows exceeded US\$24 trillion in 2023 (IMF, 2024), underscoring the extent to which cross-border trade and finance are interwoven. Yet, this intricate linkage has become increasingly complex amid technological disruptions, geopolitical tensions, and the ongoing transition toward sustainability (Herman & Oliver, 2023). Digital platforms, blockchain systems, and financial technologies (fintech) are transforming the way goods, services, and capital move across borders, prompting scholars and policymakers alike to rethink how trade and financial systems are governed (Robinson & Thierfelder, 2024). The question of how trade policy frameworks interact with the evolving architecture of global financial markets has thus become central to understanding the resilience and adaptability of the world economy.

At the global level, technological transformation and digitalization have blurred traditional boundaries between trade and finance. For example, the exponential growth of digital trade is estimated at US\$6.1 trillion in 2024, up from US\$4.9 trillion in 2021, illustrating how financial technologies and e-commerce are redefining trade rules and market access (UNCTAD, 2024). Meanwhile, the integration of sustainability and climate considerations into trade and financial systems, such as the European Union's Carbon Border Adjustment Mechanism and China's expansion of green finance policies, reflects a paradigm shift from purely economic efficiency to environmentally conscious globalization (Dufour, 2023; Wang, Huang, & Liu, 2022). These shifts have generated intense scholarly debate. Some argue that liberalized trade and open financial markets foster innovation and inclusive growth, while others caution that excessive exposure to global volatility can amplify inequality and destabilize developing economies (Stiglitz, 2017; Boubaker, Goodell, Pandey, & Kumari, 2022).

From an organizational and institutional perspective, international financial institutions, central banks, and trade organizations have also redefined their roles. The World Trade Organization (WTO) now includes digital trade and data governance in its negotiation agenda, while the IMF and World Bank have prioritized the stabilization of capital flows and financial inclusion in emerging markets (Cerra, 2021; IMF, 2023). At the same time, multinational corporations and domestic financial regulators face mounting pressure to align investment and trade decisions with digital transformation and sustainability principles (Krugman, Obstfeld, & Melitz, 2018; Rodrik, 2011). This evolving environment has spurred academic interest in understanding how policy frameworks, institutions, and markets interact to shape both macroeconomic outcomes and organizational behavior (Mishkin & Eakins, 2019).

In Asia and the developing world, these dynamics have distinctive implications. Economies such as Malaysia, Indonesia, and Vietnam are deeply integrated into global production and financial networks, yet they remain vulnerable to external shocks. Malaysia, for instance, recorded a trade-to-GDP ratio exceeding 130% in 2024 (World Bank, 2024), highlighting its heavy reliance on international trade and finance. The nation's growing fintech ecosystem valued at over US\$3.5 billion in 2024, illustrates the regional interplay between digital finance and trade competitiveness (Bank Negara Malaysia, 2024). However, this dependence also exposes emerging markets to global financial volatility and shifts in trade policy among major economies such as the United States and China. Consequently, understanding how trade policy interacts with financial markets is not only a theoretical question but a pressing policy concern for governments seeking to balance openness, stability, and sustainable growth (Boubaker *et al.*, 2022).

Despite these developments, academic engagement with the intersection of trade policy and financial markets remains fragmented. Existing studies often examine each domain in isolation, trade policy as a function of tariff regimes or geopolitical strategy, and financial markets through the lenses of capital flows or monetary transmission (Mishkin & Eakins, 2019; Georgiadis, 2016). While some research has explored trade-finance linkages during crises such as the 2008 global recession and the COVID-19 pandemic (Acheampong, 2019; Smales, 2021), the majority of these analyses remain sectoral or country-specific (Irwin, 2022; Robinson & Thierfelder, 2024). There is limited integration of technological and sustainability dimensions, and few studies have quantitatively mapped the intellectual landscape of this

evolving field. The academic debate thus reflects a tension between those advocating for a more integrated understanding of trade–finance–technology interactions and those focusing narrowly on either macroeconomic or policy perspectives. As [Ahmad \(2021\)](#) and [Gereffi, Lim, and Lee \(2021\)](#) argue, future research must bridge this divide by systematically identifying how digital innovation, sustainability imperatives, and policy coordination collectively shape global financial outcomes. Yet, bibliometric evidence on how these themes have evolved, who the leading contributors are, and where scholarly gaps persist remains scarce.

This study is motivated by the need to address these shortcomings. In light of the accelerating digital transformation of trade and finance, as well as the geopolitical and environmental challenges reshaping global economic systems, it is crucial to map the intellectual structure of existing research. A bibliometric approach provides an objective and data-driven means to capture these dynamics tracking publication trends, identifying influential authors and institutions, and uncovering emerging themes that define the frontier of this field. By focusing on the period 2016–2025, the study captures the most recent phase of technological and policy transition, including post-pandemic recovery and the rise of green finance.

The gap this study addresses lies in the absence of a comprehensive, interdisciplinary mapping of the literature that links trade policy, financial markets, and technological transformation. Most prior reviews have relied on narrative or empirical analyses confined to developed economies or specific events, offering limited insights into the global intellectual evolution of the topic ([Mudey, Kulmie, & Umar, 2025](#); [Jiddah, Hanan, & Anuar, 2024](#)). This study therefore fills that gap by systematically analyzing 606 peer-reviewed publications from the Scopus database using bibliometric tools such as VOSviewer and Biblioshiny. It not only identifies the key contributors and emerging topics but also reveals the thematic shifts toward digitalization, sustainability, and inclusivity that define the current research frontier. By doing so, the study contributes to a more coherent understanding of how trade policy and global financial markets interact in an increasingly digital and interconnected world offering both theoretical synthesis for academics and empirical insight for policymakers striving to navigate the complexities of global economic governance.

2. Literature review

2.1 Trade policy

Trade policy can be broadly defined as a country's strategic framework for managing its international trade relations. According to [Krugman et al. \(2018\)](#), trade policy encompasses instruments and regulations such as tariffs, import quotas, export subsidies, and trade agreements that shape the cross-border flow of goods and services. Building on this, [Rodrik \(2011\)](#) emphasises the political economy dimension of trade policy, describing it as a balancing mechanism between global integration and domestic economic protection. Similarly, the [World Trade Organization \(2022\)](#) expands this definition to include behind-the-border regulations such as intellectual property rights, investment policies, and technical standards.

Recent developments, however, indicate a fundamental transformation in the nature of trade policy, driven by digitalisation and technological innovation. Contemporary research highlights that digital trade rules embedded within preferential trade agreements significantly influence global value chain participation, particularly in service-oriented sectors. For instance, [Wu, Luo, and Wood \(2023\)](#) demonstrate that digital trade provisions enhance cross-border efficiency by facilitating data flows and reducing transaction costs. Similarly, [Suh and Roh \(2023\)](#) find that well-structured digital trade policies positively affect digital trade expansion by reducing regulatory fragmentation and improving institutional coordination.

From a broader governance perspective, [Peters \(2023\)](#) underscores the growing importance of frameworks such as the Digital Economy Partnership Agreement (DEPA) in shaping the architecture of global digital trade. In addition, legal and regulatory analyses by [Khan \(2023\)](#)

highlight the misalignment between emerging digital trade rules and existing multilateral frameworks, particularly within the WTO system, suggesting the need for updated global regulatory mechanisms.

More recent empirical studies further reinforce the evolving nature of trade policy. Jones, Kira, and Tavengerwei (2024) evaluate the effectiveness of digital trade agreements, concluding that while current frameworks largely preserve existing trade structures, they also create pathways for innovation and policy reform. Likewise, Tang, Jiang, Mao, and Cao (2025) demonstrate that the depth of digital trade rules significantly promotes bilateral value chain cooperation, particularly in digitally intensive industries. Collectively, these studies indicate that contemporary trade policy has shifted from traditional tariff-based mechanisms toward digitally driven, data-centric governance frameworks that integrate technology, regulation, and global economic coordination.

2.2 Financial market

Financial markets are fundamental components of the global economic system and serve as platforms for the exchange of financial assets and the allocation of capital (Jannati, Kumar, Niessen-Ruenzi, & Wolfers, 2025). According to Mishkin and Eakins (2019), a financial market is a structure that facilitates the transfer of funds between savers and borrowers through instruments such as bonds, stocks, and derivatives. Furthermore, Levine (2005) defines financial markets as institutional mechanisms that enable the mobilisation and efficient allocation of resources, support liquidity, and provide opportunities for risk management and investment. Similarly, Cavusgil (2021) emphasises the role of financial markets in connecting global economies by facilitating cross-border capital flows, influencing interest rates, and driving economic growth.

The International Monetary Fund (IMF, 2023) further underscores the systemic importance of financial markets, describing them as mechanisms that not only connect investors and borrowers but also transmit the effects of monetary and fiscal policies across economies. In addition, Fabozzi, Modigliani, and Jones (2009) conceptualise financial markets as complex networks of institutions and instruments that enhance transparency, enable price discovery, and ensure efficient capital allocation.

In recent years, however, financial markets have undergone significant transformation due to rapid technological advancements. Mishkin and Eakins (2019) highlight the growing influence of digital innovations, where technologies such as blockchain and algorithmic trading are redefining the conduct and regulation of financial transactions. Extending this perspective, recent studies emphasise the increasing role of financial technology (fintech), artificial intelligence (AI), and machine learning in shaping modern financial systems. AI-driven analytics and algorithmic models are now widely used to improve forecasting accuracy, optimise investment decisions, and enhance risk management processes. Moreover, the emergence of digital financial instruments, including central bank digital currencies (CBDCs) and digital payment platforms, is transforming cross-border financial transactions and monetary policy implementation.

At the same time, fintech governance has become a critical area of scholarly and policy attention, focusing on the development of regulatory frameworks that balance innovation with financial stability and systemic risk management. These developments indicate a paradigm shift toward digitally integrated financial ecosystems, where technological capabilities, regulatory institutions, and global market dynamics interact to shape financial performance and resilience. Taken together, these perspectives reflect the evolving, dynamic, and multi-layered nature of financial markets in an increasingly globalised and technology-driven economy.

2.3 Past studies

A number of bibliometric studies have examined discrete aspects of trade and finance scholarship, each contributing to the evolving understanding of how global economic systems

are shaped by policy and technology. For instance, [Patel, Goodell, Oriani, Paltrinieri, and Yarovaya \(2022\)](#) mapped the evolution of financial market integration literature, identifying thematic clusters related to capital flows, policy reform, and market liberalisation. Similarly, [Jiang and Qu \(2020\)](#) analysed international trade in manufacturing, revealing the dominance of industrialised economies in global production networks.

More recent studies have expanded the scope of bibliometric inquiry. [Judijanto and Ekowati \(2024\)](#) explored the interconnection between global trade and exchange-rate policy, while [Obrenovic, Oblakovic, and Asa \(2024\)](#) analysed financial and economic research trends during the COVID-19 pandemic, highlighting increased attention to financial resilience and digital transformation. In addition, [Tran Viet and Phan Thanh \(2024\)](#) examined trade-remedy research through citation and co-authorship networks, providing insights into dispute resolution mechanisms in global trade systems.

Beyond bibliometric analyses, recent empirical and policy-oriented studies (2022–2025) have increasingly focused on the intersection of digital transformation, financial innovation, and global trade systems. Contemporary research highlights the growing importance of fintech ecosystems, artificial intelligence (AI)-driven financial decision-making, and the integration of sustainability principles into global economic governance. For example, recent studies on digital trade policy demonstrate how evolving regulatory frameworks and digital trade agreements influence global value chains and cross-border service trade, thereby reshaping international economic interactions ([Wu et al., 2023](#); [Suh & Roh, 2023](#); [Tang et al., 2025](#)). These developments indicate that technological innovation is not only transforming financial markets but also redefining trade dynamics, regulatory structures, and policy coordination mechanisms at the global level.

Despite these advancements, existing literature remains largely fragmented. Most studies continue to focus on isolated domains either trade policy, financial markets, or digital transformation without providing a comprehensive and integrated perspective. Moreover, limited attention has been given to systematically mapping the intellectual structure, thematic evolution, and collaborative networks that define this interdisciplinary field. In particular, recent developments in digital trade governance, AI-driven financial systems, and sustainability-oriented finance have not been adequately captured in existing bibliometric reviews, leaving a significant gap in understanding the convergence of these domains.

Therefore, this study addresses these gaps by conducting a comprehensive bibliometric analysis of 606 Scopus-indexed publications from 2016 to 2025. By integrating trade policy, global financial markets, and technological transformation within a unified analytical framework, the study provides new insights into research trends, influential contributors, and emerging thematic areas. This contributes to a more holistic understanding of how digitalisation, sustainability, and policy innovation are collectively shaping the future of global economic systems.

3. Methods of information extraction

After data retrieval, the dataset was refined using Microsoft Excel 2019 to remove duplicates, incomplete records, and documents outside the study's scope, ensuring that only relevant and high-quality publications were retained for analysis. To enhance methodological transparency and maintain consistency with established bibliometric standards, clearly defined inclusion and exclusion criteria were applied. The inclusion criteria comprised peer-reviewed journal articles, conference papers, book chapters, and review papers published between 2016 and 2025, written in English, and containing the keywords “trade policy” and “global financial markets” in their titles. In addition, only studies that explicitly examined the relationship between trade policy, financial systems, digital transformation, or sustainability were considered relevant.

Conversely, publications that did not meet these criteria were systematically excluded. This included non-academic or grey literature such as policy briefs, editorials, and news articles,

as well as duplicate or incomplete records retrieved from the Scopus database. Studies focusing exclusively on domestic or regional financial and trade issues without a clear international or policy-oriented dimension were also removed. Collectively, these criteria ensured that the final dataset comprised publications that directly aligned with the research objectives and contributed meaningfully to understanding the evolving intersection between trade policy and global financial markets.

Following data screening and refinement, the analytical process integrated three complementary tools. Microsoft Excel 2019 was used for descriptive and trend analyses, while VOSviewer (version 1.6.16) facilitated the visualization of co-authorship networks and keyword co-occurrence patterns. In addition, Harzing's Publish or Perish software was employed to compute citation indicators, including total citations, citations per paper, and h-index values, enabling the assessment of authorial and institutional influence.

Scopus was selected as the sole data source for this bibliometric analysis due to its comprehensive coverage of high-quality, peer-reviewed journals across economics, finance, policy, and interdisciplinary social sciences. Compared to alternative databases, Scopus offers broader international journal coverage, particularly in applied economics and policy-oriented research, and provides standardized bibliometric metadata that enhance analytical consistency and replicability. Consistent with prior bibliometric studies in trade, finance, and sustainability research, the use of Scopus ensures that the dataset is both representative of global scholarly output and suitable for large-scale bibliometric mapping. The overall search, screening, and inclusion process followed a PRISMA-style approach, which is widely adopted in bibliometric research to enhance transparency and replicability. This procedure involved sequential stages of identification, screening, eligibility, and inclusion, ensuring methodological rigour in dataset compilation. The complete workflow and selection process leading to the final dataset are illustrated in [Figure 1](#).

Having established the methodological framework, the next section presents the main findings of the bibliometric analysis, highlighting publication trends, key contributors, and thematic clusters.

4. Results

This section presents the key findings of the bibliometric analysis on the evolving relationship between trade policy and global financial markets. The results capture publication trends, influential authors, leading institutions, and emerging thematic areas that have shaped this field between 2016 and 2025. The analysis also highlights geographical and disciplinary patterns, revealing how research output, collaboration networks, and citation impact have collectively defined the intellectual structure of the domain.

4.1 Annual growth of publication

The temporal distribution of publications on technology-driven shifts in trade policy and global financial markets ([Table 1](#), [Figure 2](#)) reveals three distinct developmental phases. The first phase (2016–2018) marks the emergence of academic attention, when only a few studies explored the nexus between digital technologies, trade policy, and financial markets. This limited output corresponds with the early implementation of fintech regulation and digital-trade facilitation agreements in major economies. A second phase (2019–2021) shows a steady expansion in scholarly production, coinciding with increased global debates over data governance, digital currencies, and the economic impacts of Industry 4.0. During this period, cross-disciplinary collaboration became more evident as economics, policy, and technology researchers converged on shared issues such as AI in trade logistics and blockchain-based financial monitoring. The third phase (2022–2025) demonstrates accelerated growth, with publication counts peaking in 2025. This rapid increase aligns with the post-pandemic digital acceleration that redefined global trade networks and investment flows. The surge also reflects

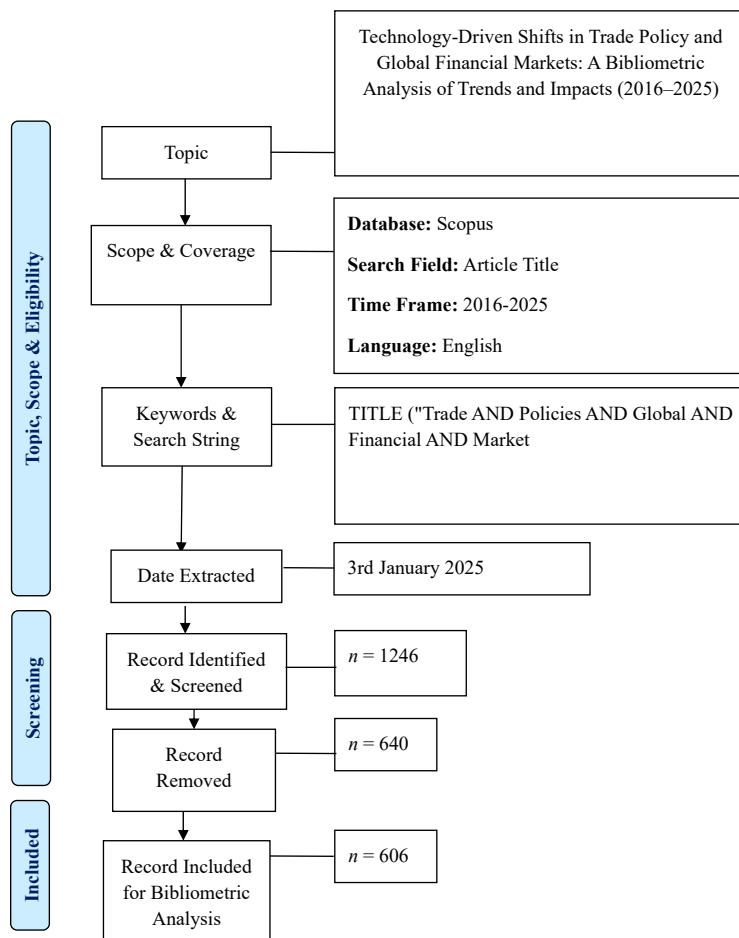


Figure 1. Search strategy diagram. Sources: Authors' work

Table 1. Year of publication

Year	TP	NCP	TC	C/P	C/CP	h	g
2025	3	0	0	0.00	0.00	0	0
2024	93	39	147	1.58	3.77	6	9
2023	78	59	393	5.04	6.66	10	16
2022	74	58	580	7.84	10.00	14	21
2021	79	57	948	12.00	16.63	16	29
2020	65	52	914	14.06	17.58	16	29
2019	66	49	1,343	20.35	27.41	17	36
2018	57	35	587	10.30	16.77	11	23
2017	46	32	480	10.43	15.00	11	21
2016	45	38	782	17.38	20.58	13	27

Note(s): TP = total number of publications; NCP = number of cited publications; TC = total citations; C/P = average citations per publication; C/CP = average citations per cited publication; h = h-index; and g = g-index

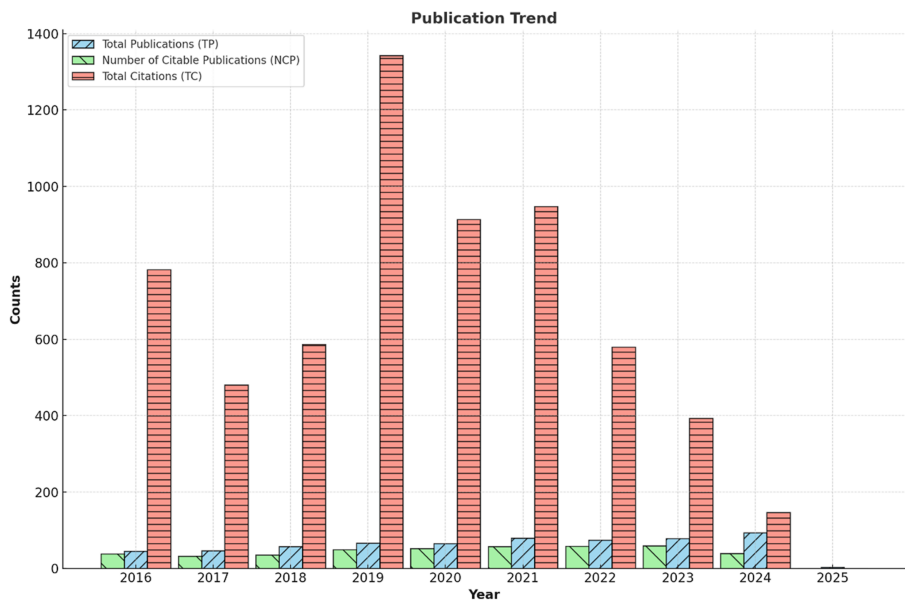


Figure 2. Total publication and citation by year

the institutionalisation of digital trade research within international policy frameworks (e.g. WTO e-commerce negotiations). Citation trends mirror this pattern, suggesting that earlier works from 2019–2021 have become foundational references in subsequent studies, signifying the field’s growing intellectual maturity.

4.2 Type of document and sources

The analysis of source types (Table 2, Figure 5) indicates that the majority of publications on technology-driven trade policy and global financial markets were disseminated through peer-reviewed journals, followed by a smaller proportion of conference proceedings and book series. This distribution suggests a high degree of academic consolidation, where research is primarily communicated through established scholarly outlets rather than transient or preliminary venues.

The dominance of journal publications reflects the field’s increasing methodological sophistication and the adoption of rigorous peer-review standards. Conversely, the relatively limited share of conference outputs implies that the domain has transitioned from early-stage conceptualisation to a phase of mature theoretical exploration, where most researchers prefer journal dissemination to ensure credibility and broader impact. The presence of book series

Table 2. Types of documents

Document type	TP	%
Article	466	76.90%
Book Chapter	81	13.37%
Book	32	5.28%
Conference Paper	27	4.46%

Note(s): TP = total number of publications; % = percentage

and edited volumes further indicates that the topic has gained recognition in academic publishing circles, reinforcing its cross-disciplinary appeal.

The distribution of document types (Table 3) reveals that journal articles dominate the dataset, followed by conference proceedings and book chapters. The predominance of journal articles underscores the formalisation and academic legitimisation of this research domain. It suggests that investigations into trade policy and digital finance have matured beyond exploratory studies and are now being disseminated through peer-reviewed channels that demand methodological rigour and theoretical grounding. By contrast, the relatively lower number of conference papers indicates limited early-stage experimentation and a slower integration of these topics into global research symposia. This could reflect either a narrow researcher base or limited funding opportunities for presenting emerging work internationally. Book chapters, though few, demonstrate the broadening of discourse into edited volumes, policy compendia, and multidisciplinary compilations signifying increased academic recognition of the field's policy relevance.

4.3 Document language

As shown in Table 4, the overwhelming majority of publications were written in English, accounting for nearly all documents retrieved. This linguistic dominance is not merely a reflection of Scopus indexing criteria but also of the globalisation of academic communication and the concentration of influential publishing outlets in English-speaking regions. However, the absence or underrepresentation of works in other languages such as Chinese, Spanish, or French indicates a potential geographical bias in the available literature. It suggests that much of the research on technology and trade policy may be shaped by Western academic perspectives, potentially overlooking regional variations in financial governance and digital policy implementation. This bias reinforces the need for future bibliometric efforts to incorporate multilingual databases to capture a more balanced global view.

4.4 Subject area

Table 5 analyzes the distribution of publications by subject area and shows the most important research areas in the field of trade policy and global financial markets. The leading field, economics, econometrics and finance, comprises 355 publications (58.58%), which underlines its central importance. This is followed by the social sciences with 223

Table 3. Source type

Source type	TP	%
Journal	465	76.73%
Book	105	17.33%
Book Series	20	3.30%
Conference Proceeding	16	2.64%

Note(s): TP = total number of publications; % = percentage

Table 4. Languages

Language	TP	%
English	606	99.84%
Persian	1	0.16%

Note(s): TP = total number of publications; % = percentage

Table 5. Subject area

Subject area	TP	%
Agricultural and Biological Sciences	9	1.49%
Arts and Humanities	17	2.81%
Business, Management and Accounting	171	28.22%
Chemical Engineering	2	0.33%
Chemistry	1	0.17%
Computer Science	35	5.78%
Decision Sciences	14	2.31%
Earth and Planetary Sciences	9	1.49%
Economics, Econometrics and Finance	355	58.58%
Energy	53	8.75%
Engineering	42	6.93%
Environmental Science	96	15.84%
Health Professions	1	0.17%
Materials Science	2	0.33%
Mathematics	23	3.80%
Medicine	7	1.16%
Multidisciplinary	10	1.65%
Pharmacology, Toxicology and Pharmaceutics	1	0.17%
Physics and Astronomy	7	1.16%
Psychology	2	0.33%
Social Sciences	223	36.80%

Note(s): TP = total number of publications; NCP = number of cited publications; TC = total citations; C/P = average citations per publication; C/CP = average citations per cited publication; h = h-index; and g = g-index

publications (36.80%), reflecting interdisciplinary approaches. Economics, management and accounting (28.22%) and environmental sciences (15.84%) also emphasize research focused on organization and sustainability. Lower contributions come from energy (8.75%), engineering (6.93%) and computer science (5.78%), reflecting an interest in technology and infrastructure. Areas such as mathematics (3.80%) and arts and humanities (2.81%) make a modest contribution, while agricultural and earth sciences (1.49% each) are represented only to a small extent. Fields such as health, pharmacology and physics, which are each below 1%, make a minimal contribution but contribute to the thematic breadth. This distribution underlines the predominant focus on finance, economics and social sciences, complemented by interdisciplinary contributions from the fields of technology, environment and engineering, reflecting the diverse academic spectrum of the dataset.

4.5 Top countries

The geographical distribution of publications (Table 6, Figure 6) reveals that the United States, China, and the United Kingdom are the leading contributors to this research domain. This dominance aligns with these countries’ global roles in both trade governance and technological innovation. The United States leads not only in publication output but also in citation influence, reflecting its extensive network of research institutions focusing on digital trade and fintech regulation. On the other hand, China’s strong performance corresponds with its strategic push toward digital Silk Road initiatives and the integration of financial technology within its Belt and Road framework. Similarly, the United Kingdom’s contributions reflect its emphasis on post-Brexit trade policy reforms and the digitalisation of financial markets. In contrast, developing economies particularly in Africa and Latin America, remain underrepresented, highlighting the global imbalance in research participation. This disparity underscores the need for greater collaborative frameworks and capacity-building initiatives to foster inclusive scholarship on technology and trade policy.

Table 6. Top 16 countries with the highest number of documents

Country	TP	NCP	TC	C/P	C/CP	h
United States	118	84	1,454	12.32	17.31	19
China	86	68	1,086	12.63	15.97	19
United Kingdom	56	44	930	16.61	21.14	15
India	43	28	402	9.35	14.36	10
Germany	34	29	691	20.32	23.83	11
Turkey	34	20	387	11.38	19.35	10
Russian Federation	33	16	239	7.24	14.94	7
France	26	19	246	9.46	12.95	8
Australia	22	22	637	28.95	28.95	10
South Africa	21	22	637	30.33	28.95	10
Italy	18	22	637	35.39	28.95	10
Pakistan	17	16	371	21.82	23.19	10
South Korea	16	12	193	12.06	16.08	5
Canada	15	10	119	7.93	11.90	7
Malaysia	14	10	96	6.86	9.60	6

Note(s): TP = total number of publications; NCP = number of cited publications; TC = total citations; C/P = average citations per publication; C/CP = average citations per cited publication; h = h-index; and g = g-index

4.6 Authorship analysis

Tables 7 and 8 presents the most influential authors, revealing notable variations in productivity and scholarly impact. Georgiadis, G. (European Central Bank) stands out as the most influential author, with 243 citations from only three publications, an exceptionally high citation-per-publication ratio ($C/P = 81.00$). This indicates that his works function as seminal references in the field, likely due to their policy-oriented and macroeconomic relevance. Nguyen, D.K. (Pôle Léonard De Vinci, France) follows with 124 citations, underscoring the expanding European contribution to the discourse on digital trade and financial integration. Aizenman, J. (University of Southern California) also demonstrates substantial impact, garnering 92 citations across four publications ($C/P = 23.00$), reflecting strong engagement with global macroeconomic and policy-modelling perspectives. Similarly, Hammoudeh, S. (LeBow College of Business) exhibits consistent influence ($C/P = 19.00$), contributing significantly to studies linking international finance with energy policy dynamics.

In contrast, authors such as Izumi, K. (University of Tokyo) record lower citation metrics ($C/P = 3.67$), though a g-index of 3 signals emerging research potential and growing academic visibility. The variety of affiliations represented from central banks to universities and policy research institutes highlights the multisectoral character of this research domain,

Table 7. Most prolific authors

Author name	Affiliation	TP	Country	NCP	TC	C/P	C/CP	h	g
Aizenman, J.	University of Southern California	4	USA	3	92	23.00	30.67	3	3
Nguyen, D.K.	Pôle Léonard De Vinci	4	France	3	124	31.00	41.33	3	3
Georgiadis, G.	European Central Bank	3	Germany	3	243	81.00	81.00	3	3
Hammoudeh, S.	LeBow College of Business	3	USA	3	57	19.00	19.00	3	3
Izumi, K.	The University of Tokyo	3	Japan	3	11	3.67	3.67	1	3

Note(s): TP = total number of publications; NCP = number of cited publications; TC = total citations; C/P = average citations per publication; C/CP = average citations per cited publication; h = h-index; and g = g-index

Table 8. Number of authors per document

Author count	Total no. of publication (TP)	Percentage %	Cumulative %
0	13	2.15	0.0215
1	170	28.05	0.2805
2	171	28.22	0.2822
3	128	21.12	0.2112
4	72	11.88	0.1188
5	28	4.62	0.0462
6	13	2.15	0.0215
7	1	0.17	0.0017
8	3	0.50	0.0050
9	3	0.50	0.0050
10	3	0.50	0.0050
18	1	0.17	0.0017
Grand Total	606	100.00	1

Note(s): TP = total number of publications; NCP = number of cited publications; TC = total citations; C/P = average citations per publication; C/CP = average citations per cited publication; h = h-index; and g = g-index

where applied policy expertise intersects with theoretical inquiry. Hence, the citation distribution reveals a global yet uneven pattern of scholarly influence, dominated by Western and East Asian institutions that maintain strong investments in digital economy, fintech regulation, and trade governance research.

4.7 Influential affiliation

Table 9 presents the most productive and influential institutions contributing to this domain. The results reveal a strong concentration of scholarly output within major international and policy-oriented organisations, underscoring the strategic relevance of this field to global economic governance. The National Bureau of Economic Research (NBER) in the United States ranks as the most influential institution, with 9 total publications, 250 citations, and a citation-per-publication (C/P) ratio of 27.78. Its high non-cited publication ratio (NCP = 7) and g-index of 7 indicate consistent impact across multiple studies. This dominance reflects NBER’s long-standing role in shaping macroeconomic research and its integration of digital finance and trade policy into broader economic modelling frameworks. Similarly, the European Central Bank (Germany) follows closely, with 6 publications and 274 citations,

Table 9. Most influential Affiliation with a minimum of 4 publications

Institution	Country	TP	NCP	TC	C/P	C/CP	h	g
National Bureau of Economic Research	USA	9	7	250	27.78	35.71	7	7
The Australian National University	Australia	8	6	60	7.50	10.00	4	7
International Monetary Fund	USA	6	4	28	4.67	7.00	3	4
University College London	UK	6	4	73	12.17	18.25	3	4
European Central Bank	Germany	6	6	274	45.67	45.67	5	6
The World Bank, USA	USA	6	3	22	3.67	7.33	3	3
University of Johannesburg	South Africa	5	3	28	5.60	9.33	2	3
The Brookings Institution	USA	5	4	23	4.60	5.75	3	4
Central University of Finance and Economics	China	5	3	24	4.80	8.00	3	3

Note(s): TP = total number of publications; NCP = number of cited publications; TC = total citations; C/P = average citations per publication; C/CP = average citations per cited publication; h = h-index; and g = g-index

Other prominent contributors include The Australian National University (C/P = 7.50) and University College London (C/P = 12.17), both of which represent academically driven contributions emphasising empirical and policy analyses of digital trade and financial integration. Meanwhile, multilateral organisations such as the International Monetary Fund (IMF) and the World Bank (both USA-based) display moderate productivity but relatively lower citation performance (C/P = 4.67 and 3.67, respectively), reflecting their focus on applied policy publications rather than high-impact academic outputs. Emerging contributions from institutions in the Global South, such as the University of Johannesburg (South Africa) and the Central University of Finance and Economics (China), demonstrate a gradual diversification of the research landscape. Although their citation ratios remain modest (C/P = 5.60 and 4.80, respectively), their growing participation signals an expanding scholarly footprint from developing regions that are increasingly engaging in debates on digital trade and financial inclusion.

Figure 3. Keyword co-occurrence network visualisation generated with VOSviewer, illustrating thematic clusters in the literature on technology-driven trade policy and global financial markets. Node size indicates keyword frequency, while link strength and proximity represent co-occurrence relationships. The colour-coded clusters reveal five major research areas: macroeconomic policy and trade performance (red), investment and financial market dynamics (green), commerce and sustainable development (blue), governance and institutional frameworks (purple), and economic growth and fiscal policy (yellow).

The network highlights the multidimensional nature of the field, showing how technological, financial, and policy discourses intersect within global economic research. The red and green clusters form the intellectual core, linking international trade and financial



Figure 3. Visualization map of co-occurrence author keywords

market integration with macroeconomic modelling and investment analysis. The blue cluster reflects a growing focus on sustainability, signalling a shift toward environmentally conscious trade practices and inclusive development. Meanwhile, the purple and yellow clusters underscore the importance of governance, institutional capacity, and fiscal policy in shaping digital and financial transformations. Collectively, the map demonstrates that the literature has evolved from isolated analyses of trade and finance toward an integrated, sustainability-oriented research paradigm.

Table 10 complements Figure 3 by presenting the twenty most frequently occurring keywords in numerical terms. As shown in Table 10, “International Trade” emerges as the most dominant keyword, appearing in 72 publications (11.88%), followed by “China” (8.91%) and “Financial Market” (8.25%), reinforcing the thematic clusters identified in the co-occurrence network.

4.9 Analysis of citation matrix

Table 11 summarises the core bibliometric indicators describing the scientific output and impact of publications over the ten-year study period. A total of 606 articles were identified,

Table 10. Top 20 keywords

Keywords	TP	%
International Trade	72	11.88%
China	54	8.91%
Financial Market	50	8.25%
Commerce	46	7.59%
Investments	44	7.26%
Financial Crisis	43	7.10%
Financial Markets	43	7.10%
Economic Growth	37	6.11%
Monetary Policy	33	5.45%
United States	32	5.28%
Global Economy	27	4.46%
Stock Market	27	4.46%
Investment	25	4.13%
Economic And Social Effects	23	3.80%
Gross Domestic Product	23	3.80%
Sustainable Development	23	3.80%
Climate Change	22	3.63%
Financial System	22	3.63%
COVID-19	21	3.47%
Finance	21	3.47%

Note(s): TP = total number of publications, % = percentage

Table 11. Citation matrix

Matrix	Date
Paper	606
Citation	6,174
years	10
Cites Per Year	686
Cites Per Paper	10.19
Author Per Paper	2.48
H Index	37

collectively cited 6,174 times, representing an average of 686 citations per year. This consistent citation volume demonstrates sustained scholarly attention and the growing academic significance of the field. The average citations per publication (C/P = 10.19) indicate a moderate-to-high impact, suggesting that the body of research is not only prolific but also widely referenced across related disciplines. The mean of 2.48 authors per article reflects a collaborative research orientation, typical of multidisciplinary domains such as trade policy, financial governance, and digital transformation. Moreover, the dataset's H-index of 37 confirms both productivity and influence signifying that at least 37 publications have received 37 or more citations each.

Hence, these metrics portray a decade of robust and collaborative scholarly activity, highlighting the intellectual depth and sustained relevance of research on technology-driven shifts in trade policy and global financial markets. The consistent citation growth and diverse authorship patterns underscore the field's maturation into a globally recognised research domain that bridges economics, technology, and governance studies. In the same vein, Figure 4 provides a visual representation of the citation matrix summarised in Table 11, illustrating the relative distribution of publications, citation counts, and productivity indicators across the ten-year study period.

Table 12 lists the five most highly cited articles within the dataset. As shown in Table 12, Acheampong's (2019) study on financial development and environmental quality is the most cited work, with 416 citations and an average of 69.33 citations per year, followed by Georgiadis (2016) on global monetary policy spillovers and Cheng and Chiu (2018) on geopolitical risk in emerging economies underscoring the field's strong linkages to environmental, monetary, and geopolitical themes.

As shown in Table 13, the analysis of the most active source titles reveals a diverse publication landscape in terms of output volume, citation impact, and journal quality. The analysis of the most active source titles reveals a diverse publication landscape in terms of output volume, citation impact, and journal quality. Economic Outlook ranks first in total publications (18 articles) but records only three citations, reflecting limited academic influence despite high productivity. Its low bibliometric scores, CiteScore (0.2), SJR (0.103), and SNIP (0.03) suggest that while it serves as an outlet for topical discussions, it lacks deep scholarly penetration and long-term citation traction. In contrast, Resources Policy and Energy

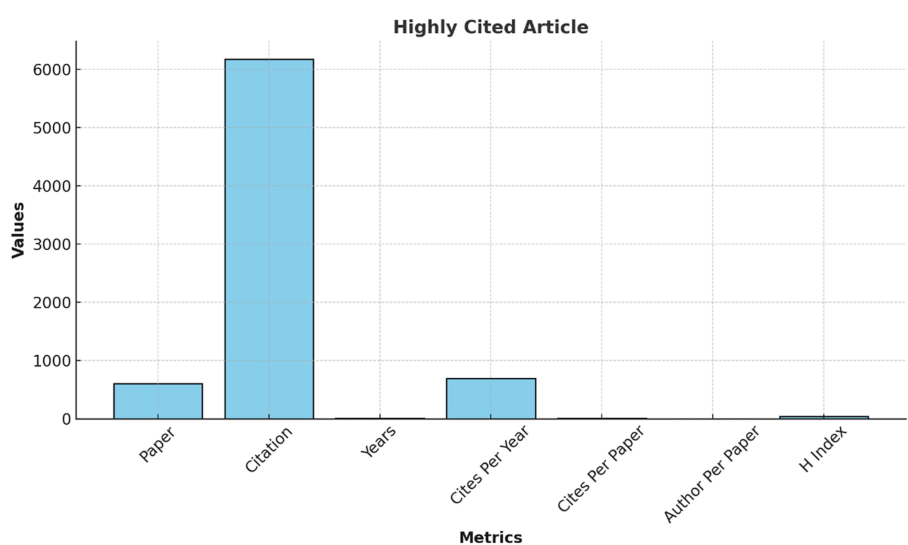


Figure 4. Cited matrix

Table 12. Highly cited article

NO	Authors	Title	Year	Cites	Cites per year
1	A.O. Acheampong	Modelling for insight: Does financial development improve environmental quality?	2019	416	69.33
2	G. Georgiadis	Determinants of global spillovers from US monetary policy	2016	172	19.11
3	C.H.J. Cheng, C.-W.J. Chiu	How important are global geopolitical risks to emerging countries?	2018	150	21.43
4	Å–, ÅÅ§ikgÅ¶z, A. GÅ¼nay	The early impact of the Covid-19 pandemic on the global and Turkish economy	2020	149	29.8
5	K. Manova, Z. Yu	How firms export: Processing vs. ordinary trade with financial frictions	2016	148	16.44

Table 13. Most active source title

Source title	TP	TC	Publisher	Cite score	SJR 2018	SNIP 2018
Economic Outlook	18	3	John Wiley & Son	0.2	0.103	0.03
Resources Policy	17	433	Elsevier	13.4	2.063	2.083
Energy Economics	10	754	Elsevier	18.6	3.555	2.637
Environmental Science and Pollution Research	7	45	Springer Nature	8.7	1.006	1.141
Journal of Risk And Financial Management	7	22	MDPI	4.5	0.485	0.875

Note(s): TP = total number of publications; TC = total citations

Economics, both published by Elsevier, exhibit a more balanced relationship between productivity and impact. Resources Policy contributes 17 articles and receives 433 citations, supported by strong metrics (CiteScore = 13.4; SJR = 2.063; SNIP = 2.083), confirming its centrality in resource and trade-related economic research.

In the same vein, energy economics, with 10 publications and 754 citations, stands out as the most influential journal in this domain. Its high bibliometric indicators (CiteScore = 18.6; SJR = 3.555; SNIP = 2.637) affirm its reputation as a leading platform for research connecting technological innovation, energy markets, and macroeconomic policy. Other journals such as Environmental Science and Pollution Research and the Journal of Risk and Financial Management make more modest yet meaningful contributions. The former balances environmental and policy relevance with moderate citation frequency (7 publications, 45 citations), indicating a growing interdisciplinary link between sustainability and economic governance. The latter, with 7 publications and 22 citations, maintains a narrower focus, reflecting a specialised or emerging niche in financial risk and trade dynamics.

4.10 Network visualization

As illustrated in Figure 5, a co-citation network was generated using the full counting method and a minimum citation threshold of four citations per document. The visualisation identifies the intellectual structure of the literature by clustering the most frequently cited works into distinct, colour-coded groups each representing a major research stream within the field of technology-driven trade policy and global financial markets. The dominant red cluster contains seminal works by scholars such as Georgiadis and Acheampong, whose studies examine the spillover effects of monetary policy and the linkages between financial development and environmental quality. These foundational contributions have shaped the

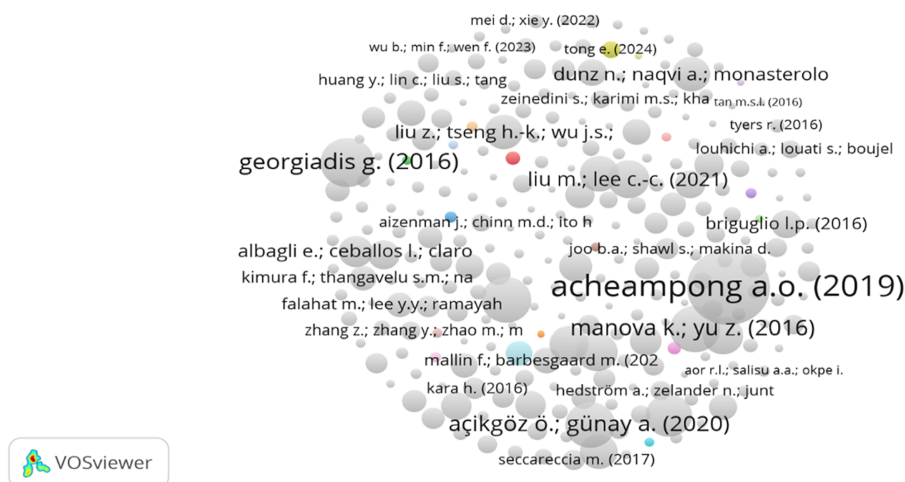


Figure 5. Network visualization map of co citations by documents with a minimum number of citations set to 4

subsequent evolution of research on macroeconomic shocks, policy transmission mechanisms, and sustainability-oriented financial strategies, establishing a conceptual bridge between monetary regulation and environmental economics.

The green cluster focuses on the interplay between geopolitical risk, digital trade, and global uncertainty. Influential works by Cheng and Chiu analyse how digitalisation and political volatility affect trade performance and capital flows, particularly in emerging economies. Their findings underscore the growing scholarly concern with the vulnerability and adaptive capacity of developing markets in an increasingly interconnected digital economy.

4.11 Network visualization by country

The analysis of citation relationships at the country level, visualised in Figure 6 using VOSviewer, applies a minimum threshold of one document per author and at least four citations. The resulting network map illustrates the global distribution of scholarly influence and collaboration within the field of technology-driven trade policy and global financial markets. The United States occupies a dominant position in the network, forming strong citation linkages with China, the United Kingdom, Australia, and Germany. This centrality underscores the intellectual leadership of advanced economies, which act as hubs for knowledge creation and dissemination in digital trade and financial governance research. Their close proximity in the map signifies intensive cross-citation and collaborative interdependence, reflecting shared research agendas shaped by global policy frameworks and economic integration.

The network also reveals clear regional cooperation patterns. Among European countries, the United Kingdom, Germany, and France display dense interconnections, consistent with the European Union's emphasis on coordinated digital and financial regulation. In contrast, emerging economies such as India, South Africa, and Pakistan occupy peripheral yet increasingly visible positions, indicating their growing participation in global scholarly dialogues. This shift suggests the gradual diffusion of research capacity toward developing regions, where localised studies are beginning to contribute to global discourses on trade, technology, and financial resilience.

4.12 Thematic map

The thematic map (Figure 7) illustrates the intellectual structure of the field, categorising research themes based on their centrality and density. The motor themes highly developed and central topics include digital transformation, trade liberalisation, and financial integration,

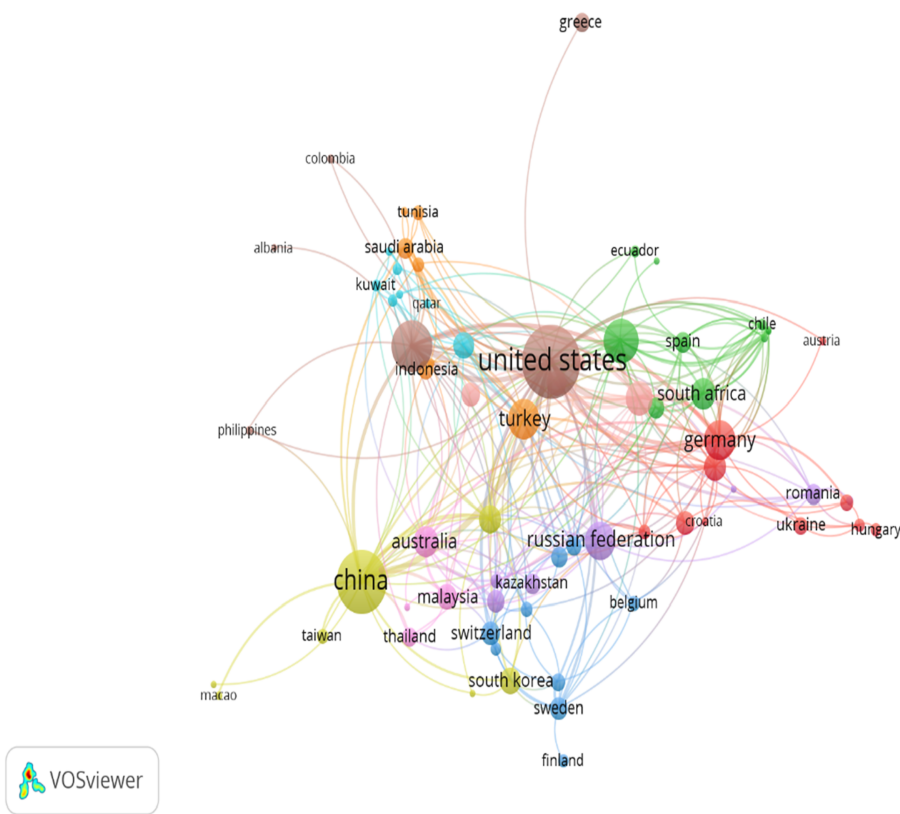


Figure 6. Network visualization map of citations by countries with minimum number of documents of an author = 1; minimum number of citations of an author = 4

reflecting the dominant analytical focus of scholars. These themes serve as the backbone of current discourse, connecting technological adaptation with macroeconomic stability and global competitiveness.

Emerging or peripheral themes, such as sustainability finance, policy innovation, and AI-driven trade models, occupy transitional zones, indicating promising future research frontiers. Thematic dispersion over time shows a movement from foundational studies on trade openness and economic growth to more complex analyses integrating machine learning, digital currencies, and regulatory innovation. This trajectory highlights how the field is evolving toward a data-intensive, policy-oriented paradigm, where traditional trade and finance theories are being reshaped by digital technologies.

Figure 8 illustrates the thematic evolution of the field over time, tracking how key research themes have emerged, merged, or declined across successive periods. The map shows a clear progression from foundational concepts such as trade openness and economic growth toward more contemporary themes, including digital transformation, sustainability finance, and AI-driven trade models, reflecting the field’s dynamic conceptual trajectory.

5. Discussion

The results of this bibliometric analysis demonstrate a clear and accelerating shift in global research priorities related to trade policy and financial market dynamics. The steady growth in

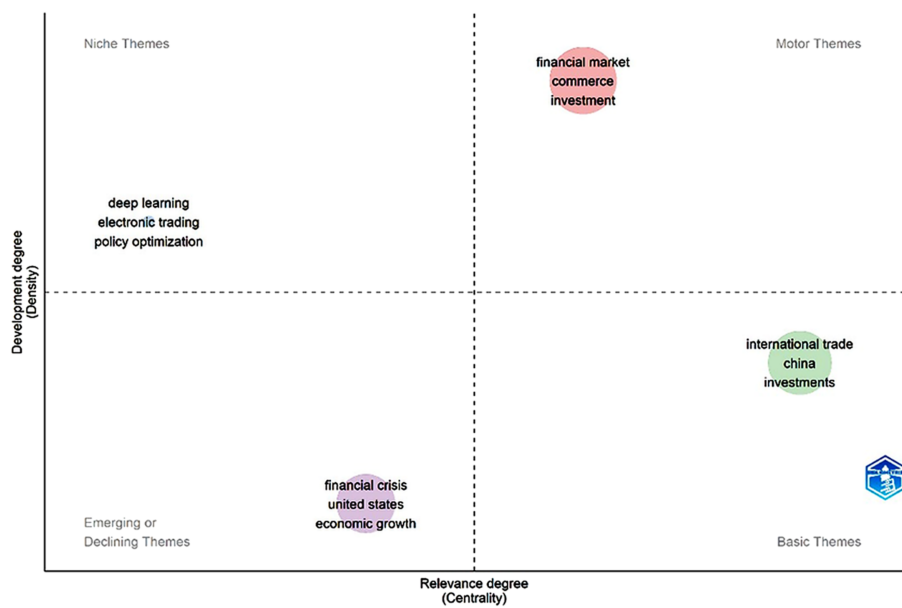


Figure 7. Thematic analysis map

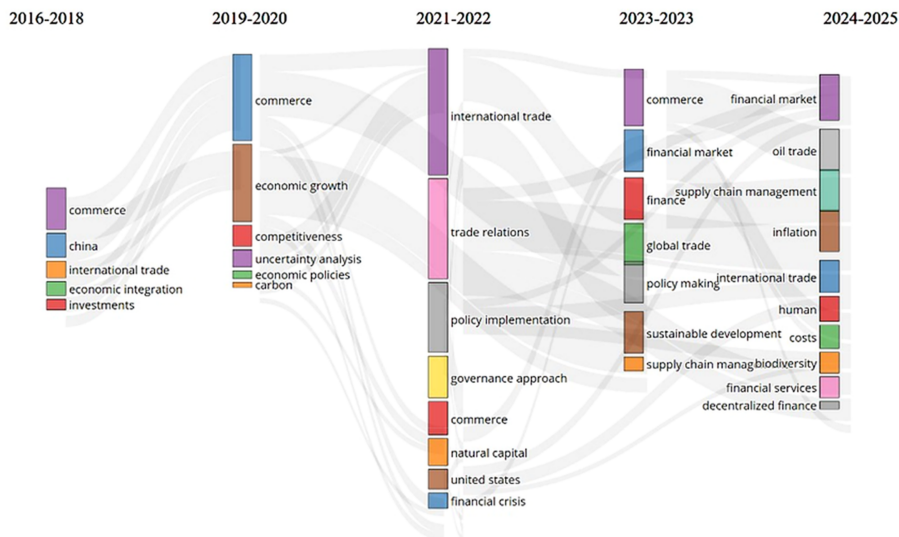


Figure 8. Thematic evolution

publications from 2016 to 2025 reflects increasing scholarly concern with the interconnectedness of global financial flows, technological innovation, and evolving geopolitical conditions. This pattern closely mirrors earlier bibliometric observations in financial integration research (Patel *et al.*, 2022), suggesting that the academic community increasingly recognises the need to understand economic systems that are more interdependent, technologically enabled, and sensitive to external shocks.

A comparative assessment with prior bibliometric studies yields several important insights. First, the geographical concentration of knowledge production in the United States, China, and the United Kingdom is consistent with earlier findings by [Jiang and Qu \(2020\)](#), who documented the dominance of advanced economies in international trade scholarship. However, the present analysis reveals an even sharper concentration than observed in earlier decades. This suggests that, despite expanding global economic integration, scientific influence remains disproportionately anchored in countries with strong research infrastructures and central roles in global policy formulation. Such imbalances raise concerns about the continued underrepresentation of developing-economy perspectives in global trade governance literature.

At the institutional level, the prominent roles of organisations such as the National Bureau of Economic Research and the European Central Bank reinforce the observation by [Gök, Rigby, & Shapira \(2016\)](#) that institutional capacity and research funding strongly shape scholarly visibility and citation impact. The dominance of these institutions likely reflects their access to advanced econometric modelling capabilities and high-frequency financial datasets. In contrast, the limited representation of institutions from Africa and Latin America highlights persistent structural constraints that restrict broader global academic participation.

The citation structure identified in this study further complements these findings. The strong influence of authors such as Georgiadis and Aizenman aligns with their well-established contributions to the literature on monetary spillovers and macro-financial linkages ([Georgiadis, 2016](#); [Acheampong, 2019](#)). Notably, however, the growing prominence of sustainability-oriented studies particularly those addressing green finance and environmental performance signals an emerging convergence between climate concerns and financial governance. This thematic shift was not fully captured in earlier bibliometric research, indicating an ongoing diversification of global financial scholarship beyond traditional monetary transmission frameworks toward ecological and technological considerations.

The thematic clusters derived from the keyword analysis further illustrate this broadening of research priorities. Core topics such as international trade and financial market integration remain central, consistent with earlier findings by [Judijanto and Ekowati \(2024\)](#). Nevertheless, the emergence of themes related to digital trade, blockchain applications, green finance, and geopolitical risk reflects a structural evolution in how scholars conceptualise global economic vulnerabilities and opportunities. These topics were largely absent in early bibliometric studies, suggesting that recent global disruptions including the COVID-19 pandemic, the Russia–Ukraine conflict, and rapid fintech expansion have profoundly reshaped academic discourse.

From a critical perspective, the limited contribution of developing-country scholarship within the dataset highlights a persistent structural divide in global knowledge production. While financial markets are increasingly interconnected, the distribution of scientific influence remains uneven. This imbalance has important theoretical implications, as dominant global models may lack contextual relevance in low-income settings where digital readiness, institutional capacity, and regulatory frameworks differ significantly. It also points to a potential epistemic bias, whereby leading economies shape the conceptual vocabulary and policy narratives used to interpret global financial transformations.

Quantitatively, the bibliometric evidence underscores the field's rapid expansion. The 606 publications analysed generated 6,174 citations over the study period, with an average of 10.19 citations per paper and an H-index of 37. Research output peaked between 2022 and 2025, accounting for more than 40% of total publications, reflecting intensified scholarly engagement following the COVID-19 pandemic and accelerated digitalisation. Country-level analysis further reveals that the United States, China, and the United Kingdom collectively account for over 43% of total publications and more than half of all citations, underscoring their dominant role in shaping global trade and financial research agendas.

Within the sustainability-oriented cluster, several highly influential studies anchor this emerging research paradigm. [Acheampong \(2019\)](#) provides foundational evidence on the

relationship between financial development and environmental quality, while Wang *et al.* (2022) examine the effectiveness of carbon trading policies in aligning financial markets with sustainability objectives. Similarly, Boubaker *et al.* (2022) demonstrate how geopolitical shocks and environmental risks interact with global financial systems. Collectively, these studies position green finance and environmental governance as central pillars in the evolving trade–finance research landscape.

Overall, this study not only aligns with previous bibliometric observations but extends the literature by demonstrating how technological transformation and sustainability imperatives are reshaping research at the intersection of trade and finance. Unlike earlier analyses that treated trade, finance, or sustainability as largely separate domains, the findings highlight a growing convergence driven by digital innovation, climate policy pressures, and geopolitical fragmentation. These developments underscore the need for more inclusive and interdisciplinary frameworks capable of capturing the complexity of contemporary global economic systems.

6. Conclusion and future research direction

This bibliometric study of research on trade policy and global financial markets (2016–2025) provides a comprehensive synthesis of the field’s intellectual structure, thematic evolution, and scholarly impact. The findings reveal a steady and accelerating growth of research output, underscoring the expanding importance of trade and financial policy in promoting global economic stability, driving digital transformation, and addressing emerging challenges such as sustainability and climate change. This growth can be attributed to broader structural shifts in the global economy, particularly the rapid expansion of digital technologies, increasing financial interconnectedness, and heightened policy attention following global disruptions such as the COVID-19 pandemic.

Developed economies particularly the United States, China, and the United Kingdom remain the dominant contributors in terms of both publication volume and citation impact. This dominance reflects their advanced digital infrastructure, strong research funding systems, and central roles in global trade governance and financial regulation. Influential institutions such as the National Bureau of Economic Research and the European Central Bank, together with prominent scholars including Rodrik and Krugman, have played pivotal roles in shaping theoretical and empirical debates on globalisation, trade liberalisation, and macroeconomic governance.

At the same time, the emergence of themes related to digital trade, green finance, and geopolitical risk highlights the field’s growing interdisciplinarity and responsiveness to global transformations. These thematic shifts are driven by real-world developments, including the rise of fintech ecosystems, increasing climate-related financial risks, and the growing importance of digital trade agreements and data governance. Collectively, the findings confirm that the intersection of trade policy and financial markets has evolved into a mature yet dynamic research domain that bridges economics, technology, and governance.

From a practical perspective, the findings offer several actionable implications. First, policymakers should prioritise the development of comprehensive digital trade frameworks that address cross-border data flows, digital taxation, and platform governance, ensuring alignment with emerging global standards. Second, financial regulators and central banks need to strengthen fintech governance and oversight mechanisms, particularly in areas such as artificial intelligence-driven financial services, algorithmic trading, and digital currencies, to balance innovation with financial stability. Third, international organisations such as the World Trade Organization (WTO) and the International Monetary Fund (IMF) should promote policy harmonisation and multilateral cooperation, reducing regulatory fragmentation and enhancing global financial coordination. Fourth, governments in developing economies should invest in digital infrastructure and institutional capacity-building, enabling them to participate more effectively in global value chains and benefit from digital trade and financial integration.

Despite these contributions, several limitations warrant acknowledgment. This study relied exclusively on English-language publications indexed in the Scopus database, which, although comprehensive, may underrepresent research published in regional or emerging journals. As a result, scholarly contributions from developing economies and region-specific perspectives may not be fully captured. In addition, the study period (2016–2025) provides only a contemporary snapshot, potentially overlooking earlier historical developments that shaped long-term trade and financial dynamics. While bibliometric tools such as VOSviewer and Publish or Perish are effective for mapping research influence and collaboration networks, they are limited in their ability to capture qualitative dimensions such as theoretical innovation, methodological depth, and policy relevance. Furthermore, reliance on English-language sources may partially obscure region-specific initiatives, including studies published in Chinese-language databases that could offer deeper insight into themes such as the Digital Silk Road and China's strategic integration of fintech and digital infrastructure into trade policy.

These limitations point to several promising avenues for future research. Expanding bibliometric analyses to incorporate multiple databases such as Web of Science, Google Scholar, and regional repositories would enable a more inclusive and comprehensive mapping of global scholarship. Extending the temporal scope beyond 2016–2025 could also reveal longer-term intellectual trajectories and policy shifts in trade and financial systems. Future studies should place greater emphasis on the experiences and contributions of developing economies, particularly in Africa, South Asia, and Latin America, to enhance global representativeness. Additionally, deeper exploration of emerging topics including blockchain technology, green finance, digital trade regulation, artificial intelligence in financial systems, and data governance would further illuminate how technological innovation and sustainability imperatives are reshaping global financial architectures. Finally, combining bibliometric approaches with qualitative methods, such as case studies or policy analysis, could provide richer insights into the underlying mechanisms linking trade policy, technological innovation, and financial market performance.

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