

INTERNATIONAL TRADE AND LAW BASED ON BIBLIOMETRIC APPROACH

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ABSTRACT

This study applies a bibliometric approach to investigate the complex dynamics of international trade and law by analyzing a 994 academic papers. Through methods like co-citation analysis and keyword frequency analysis, the study maps the intellectual landscape of the field, revealing significant research clusters related to international law, economic growth, global trade, and human rights. The analysis uncovers emerging trends in trade law evolution, the impact of globalization, environmental sustainability, and ethical concerns in trade agreements. By highlighting key research gaps and underexplored areas, the study offers valuable insights into the intersection of political, economic, and legal frameworks that shape global trade. It demonstrates the effectiveness of bibliometric analysis in synthesizing intricate information and guiding future scholarly research in international trade and law.

Keywords : International Trade; International Law; Economic Growth; Human Rights; Bibliometric Approach

ABSTRAK

Studi ini menerapkan pendekatan bibliometrik untuk menyelidiki dinamika kompleks perdagangan internasional dan hukum dengan menganalisis 994 makalah akademik. Melalui metode seperti analisis co-citation dan analisis frekuensi kata kunci, studi ini memetakan lanskap intelektual di bidang tersebut, mengungkapkan kluster penelitian signifikan terkait hukum internasional, pertumbuhan ekonomi, perdagangan global, dan hak asasi manusia. Analisis ini mengidentifikasi tren baru dalam evolusi hukum perdagangan, dampak globalisasi, keberlanjutan lingkungan, dan isu etika dalam perjanjian perdagangan. Dengan menyoroti celah penelitian utama dan area yang belum banyak dieksplorasi, studi ini menawarkan wawasan berharga tentang persimpangan kerangka politik, ekonomi, dan hukum yang membentuk perdagangan global. Studi ini menunjukkan efektivitas analisis bibliometrik dalam mensintesis informasi yang kompleks dan mengarahkan penelitian akademik di masa depan di bidang perdagangan internasional dan hukum.

Kata kunci : Perdagangan Internasional; Hukum Internasional; Pertumbuhan Ekonomi; Hak Asasi Manusia; Pendekatan Bibliometrik

INTRODUCTION

In this globalized era, the interplay between international trade and law significantly shapes economic, social, and political domains. International trade expands access to global markets, driving economic growth and spurring innovation (Krugman, 2012). Nevertheless, this global expansion raises pressing concerns, including income inequality, environmental degradation, and labor exploitation (Rodrik, 2011). Legal

frameworks, such as those established by the World Trade Organization (WTO), aim to address these challenges by balancing economic growth with social and environmental responsibilities (Stiglitz, 2018).

Emerging trends underscore the interconnection between trade policies and environmental sustainability. Nations are grappling with the challenge of fostering economic development while managing carbon emissions (Li et al., 2022). Simultaneously, the rise of digital economies presents new legal challenges in areas like data privacy, cybersecurity, and intellectual property rights in international trade (Abbott & Snidal, 2021).

The COVID-19 pandemic exposed vulnerabilities in global supply chains, highlighting the necessity for adaptable international trade laws to ensure stability during global crises (Baldwin & Evenett, 2020). At the same time, human rights concerns, particularly regarding labor practices and corporate governance, are increasingly emphasized. Scholars advocate for incorporating stricter human rights enforcement mechanisms in trade agreements (Backer, 2021).

A notable case exemplifying these dynamics is the European Union (EU) vs. Indonesia dispute over palm oil. In 2019, the EU restricted palm oil imports, citing its classification as a high-risk commodity for deforestation under the Renewable Energy Directive II. This case demonstrates that international law is not just a tool to regulate trade but also to ensure that trade is conducted in a sustainable, fair, and responsible manner. The relationship between international trade and law often serves as a determining factor in maintaining a balance between economic growth, environmental protection, and respect for human rights.

This study employs a bibliometric analysis of 994 academic papers on international trade and law to explore emerging trends, identify research clusters, and uncover gaps in the literature. By mapping this intellectual landscape, the research provides valuable insights into the evolving relationship between international trade law and its broader implications for global governance, sustainability, and human rights. The results of bibliometric analysis can serve as a basis for decision-making related to scientific research (Jannah & Widuri, 2022).

RESEARCH METHODOLOGY

The research methodology in this study utilizes a bibliometric approach combined with a literature review. This quantitative method is designed to evaluate and map the intellectual structure of academic literature systematically. By applying this approach, the study identifies patterns, key contributions, and emerging trends within the field. A total of 994 manuscripts related to international trade and law were sourced from various reputable academic databases to ensure broad and diverse representation. The selection criteria included relevance to the topic, citation impact, and publication in peer-reviewed journals. This strategy not only highlights highly influential works but also incorporates less-cited studies that are significant within niche research areas, providing a comprehensive and balanced overview of the academic landscape.

The bibliometric analysis was carried out using specialized tools such as VOSviewer, which supports visualizations of co-citation networks, keyword analysis, and the grouping of manuscripts into thematic clusters. These selected manuscripts were evaluated based on factors such as publication year, authorship or institutional affiliation, and citation metrics. From the 994 journals and books collected, 813 books were excluded as they were deemed irrelevant. Of the remaining 181 journals, 156 were eliminated as they did not align closely with the research topic. This filtering process left 25 journals, which were ultimately selected as the primary sources for this study. The diagram provided clearly outlines the step-by-step selection process used to identify the most relevant and high-quality materials, as illustrated in **Figure 1**.

RESULTS AND DISCUSSION

The bibliometric analysis identified four primary thematic clusters within the literature: international law, economic growth, global trade, and human rights, as illustrated in Figure 2 and Table 1.

Cluster 1: Political and legal structure

The first cluster centers around the political and legal structures that underpin international trade, encompassing topics like international law, human rights, and institutions such as the World Trade Organization (WTO). It focuses on how global governance, power dynamics, and political leadership shape the international trade environment. The role of personal politics and power highlights the influence that political leaders and state power exert in negotiating and enforcing trade agreements,

while the evolution of these systems over time reflects the historical changes in how international trade is regulated.

International law is constantly adapting to address global challenges. In the area of climate change, international collaboration has become essential (Sykes, 2015), while the increase in cyber threats highlights the need for clearer legal frameworks and strategies for state defense (Joyner & Lotrionte, 2017). Although international economic law has grown significantly, there is still a pressing need for better integration between trade and investment laws (McRae, 2014). The "persistent objector" principle, though seldom used, could gain importance by allowing states to opt out of certain international norms (Stein, 2017). Additionally, WTO members' use of countermeasures in response to breaches of international law is crucial, with clear regulations ensuring these actions remain controlled and predictable (Azaria, 2022).

International organizations have also become central in shaping policy changes, using global performance indicators (GPIs) to influence domestic policies (Morse, 2019). Tracking and publicizing state behavior through such indicators has become a form of soft power that influences international relations, as seen in U.S. efforts to combat human trafficking (Kelley & Simmons, 2015).

Cluster 2: Economic growth and environment

The second cluster emphasizes the economic and environmental factors that affect global trade. It covers issues such as economic growth, foreign direct investment (FDI), and the role of countries like China and Japan in driving global commerce. This cluster also incorporates global value chains and the impact of trade on industry and production, indicating a focus on the economic interdependencies created by international trade. The inclusion of contemporary challenges like CO2 emissions and the COVID-19 pandemic points to the complex relationship between trade, environmental sustainability, and global health crises.

Economic growth is closely tied to environmental sustainability, as advancements in energy efficiency and carbon productivity can eventually decouple growth from environmental damage, provided that governance, financial development, and international trade work together (Murshed, 2023). However, corruption, especially in authoritarian regimes, harms growth by discouraging foreign investment and increasing inflation (Gründler & Potrafke, 2019). Technological innovation, while

beneficial in reducing ecological footprints, is often counterbalanced by higher resource consumption (Jahanger et al., 2022).

The relationship between financial development and sustainability is complex, as financial growth often contributes to increased carbon emissions, particularly in regions like Asia (Shen et al., 2021; Khan et al., 2022). Therefore, promoting green investments and implementing sustainable financial practices, alongside institutional reforms, is crucial for aligning growth with environmental objectives (Li et al., 2022). Foreign direct investment (FDI) has varying effects on different regions, with governance quality playing a critical role in determining FDI's positive or negative impact on growth (Rodríguez-Pose & Cols, 2017).

Cluster 3: Global trade

The third cluster focuses on trade policy and globalization, specifically on the ways in which countries open their markets and remove trade barriers through trade liberalization and trade openness. This cluster examines the role of international trade agreements and how they facilitate or hinder global commerce. It also highlights the legal and national frameworks that influence these agreements, emphasizing the opportunities created by open trade policies for economic growth and international cooperation.

Global trade has experienced significant shifts, particularly with a slowdown in international vertical specialization and changes in the trade-GDP relationship (Constantinescu et al., 2020). Techniques like the Newcomb–Benford law have become increasingly important in detecting fraud in customs declarations, particularly within the European Union (Cerioli et al., 2019). Although trade offers significant advantages for developing nations, WTO rules often favor developed countries (Bernhardt, 2011), and trade openness has been found to spur growth more effectively than institutional quality (Redmond & Nasir, 2020).

The global value chain (GVC) literature emphasizes the integration of corporate social responsibility (CSR) within industrial clusters, as companies face growing pressure to improve both economic and social outcomes (Gereffi & Lee, 2016). Digital technologies are reshaping GVC organization and competition (Strange & Zucchella, 2017), and future research is needed to understand the influence of financialization and protectionism on these chains (Kano et al., 2020).

Cluster 4: Human Rights

The fourth cluster is centered around human rights, legal principles, and the governance of trade. It explores the legal status of entities and principles that guide trade practices, particularly in relation to international human rights. This cluster examines the ethical dimensions of trade, including how legal norms and patterns influence governance. By focusing on principles and governance structures, it addresses the broader legal frameworks that ensure international trade is conducted fairly and in accordance with global standards of justice and human rights.

The connection between international trade and human rights is gaining greater prominence. Legal processes at the transnational level should encourage states to adopt human rights norms as intrinsic values, rather than complying only when convenient (Addison & Harold, 2017). The 1986 UN Declaration on the Right to Development highlights the interconnectedness of various rights and stresses that developing nations must enact policies to achieve these rights (Arjun, 2017). Extreme poverty is increasingly recognized as a violation of human rights, with governments being held accountable for perpetuating it (Thomas, 2017). Multinational corporations present unique human rights challenges, necessitating stricter enforcement of regulations to prevent abuses motivated by profit (Stephens, 2017).

Discussion

Theoretical contribution

The clusters identified within the international trade literature provide a rich foundation for theoretical contributions that can deepen our understanding of trade dynamics. In Cluster 1, which focuses on political and legal structures, researchers can develop a Political Economy of Trade Law Model that integrates political interests with international legal frameworks. This model can incorporate constructivist theories, emphasizing how norms and ideas shape trade policies and outcomes. Additionally, the examination of power dynamics in global trade governance through a neo-Gramscian lens could yield insights into how hegemony influences trade rules, particularly in the context of interactions between developed and developing nations. Such contributions can illuminate the complexities of how domestic and international political contexts shape legal negotiations and affect trade outcomes.

In Cluster 2, centered on economic and environmental factors, scholars can propose a new theoretical framework that integrates sustainability into trade models, potentially leading to the development of Eco-Traditional Trade Theory. This framework can challenge conventional trade theories that prioritize economic growth without accounting for environmental impacts. Furthermore, the impact of global disruptions, such as the COVID-19 pandemic, can inspire contributions to a Resilience Theory in Trade, focusing on how industries and economies adapt to shocks. Meanwhile, in Cluster 3, the introduction of a Globalization Framework could address the multifaceted impacts of globalization on trade policies, while Cluster 4 may lead to a Human Rights Trade Theory that emphasizes ethical dimensions in trade agreements. Overall, these theoretical advancements can significantly enhance the comprehension of the intricate relationship between trade, politics, and ethics in the global arena.

Opportunities for future studies

The clusters identified in the table provide fertile ground for several important themes for future studies on international trade.

In Cluster 1, which centers on political and legal structures in trade, highlights several potential themes. One is the evolution of international trade law, particularly how legal frameworks adapt to global challenges such as economic crises, conflicts, and technological progress. Another area involves examining the role of organizations like the World Trade Organization (WTO) in resolving trade disputes, including perceptions of their effectiveness in both developed and developing nations. Additionally, future studies could explore how power dynamics between major economies and smaller or emerging markets influence global trade policies, especially in tariff negotiations and enforcement mechanisms.

Cluster 2, focusing on economic and environmental aspects, underscores the growing relevance of sustainability in global trade. Topics for further exploration include the impact of CO₂ emissions and stricter environmental regulations on trade patterns, as well as how high-emission industries adapt to these changes. Another promising area is analyzing the long-term effects of the COVID-19 pandemic on global value chains and trade strategies as countries and industries adjust to persistent supply chain disruptions. Furthermore, China's expanding role in global trade warrants deeper

investigation, particularly its integration into global value chains and its trade relationships with other major economies.

In Cluster 3, which deals with trade policy and globalization, research opportunities include examining the impacts of trade liberalization on emerging economies, particularly regarding economic growth and inequality. Studies could also delve into the role of trade agreements in facilitating global commerce, especially against the backdrop of rising protectionism in key economies. Understanding how international trade policies evolve amid economic nationalism and balancing national interests with global trade liberalization presents a critical avenue for research.

Cluster 4, emphasizing human rights, legal principles, and governance, suggests significant research potential at the intersection of trade and human rights. This includes evaluating the inclusion of human rights clauses in trade agreements and their effectiveness in enhancing labor conditions, environmental standards, and corporate accountability. Additionally, future studies could investigate the legal principles shaping global trade governance, focusing on enforcement mechanisms across different jurisdictions and their capacity to promote equitable trade. Ethical considerations in international trade, such as balancing profit motives with human rights and environmental responsibilities, also merit further exploration.

This bibliometric review of 994 academic papers reveals intricate connections between international law, economic growth, global trade, and human rights. It highlights how legal frameworks are evolving to address pressing issues like climate change, cybersecurity, and international economic law. Greater integration between trade and investment laws, coupled with stronger international cooperation, is identified as crucial to tackling these challenges.

The study also underscores the need to balance economic growth with sustainability. While growth fosters innovation and productivity, it poses risks such as environmental degradation and rising inequality. Policymakers are encouraged to prioritize green investments and sustainable practices to align economic development with environmental objectives.

Furthermore, global trade dynamics, particularly in global value chains, expose regulatory challenges for developing nations, as current WTO rules often favor developed countries. There is a pressing need for more equitable trade policies and for

integrating human rights into trade frameworks. Legal mechanisms should ensure corporate accountability and protect fundamental rights. Finally, emerging technologies like blockchain and AI represent promising areas for research into their influence on global trade governance, while empirical studies are needed to assess the effectiveness of legal systems in addressing global issues such as climate change, cybersecurity, and labor rights.

CONCLUSION

This bibliometric analysis of 994 academic papers on international trade and law highlights four key clusters: political and legal structures, economic growth and environmental factors, global trade, and human rights. The study underscores the evolving nature of international law in response to global challenges like climate change, cyber threats, and economic inequality, emphasizing the need for better integration between trade and investment laws. It also highlights the balance between economic growth and sustainability, calling for policies that support green investments and sustainable practices. Global trade presents regulatory challenges, particularly for developing countries, as WTO rules often favor developed nations, necessitating more equitable trade policies. Furthermore, integrating human rights into trade agreements is crucial for ensuring corporate accountability and addressing ethical concerns. The study suggests that future research should focus on the impact of emerging technologies, the effectiveness of legal frameworks, and the role of international cooperation in addressing pressing global issues.

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FIGURE, GRAPH AND TABLES

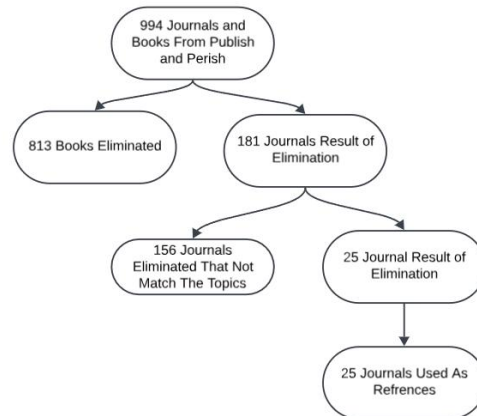


Figure 1. Elimination process of journals and books used for research references
 Source: Author (2024)

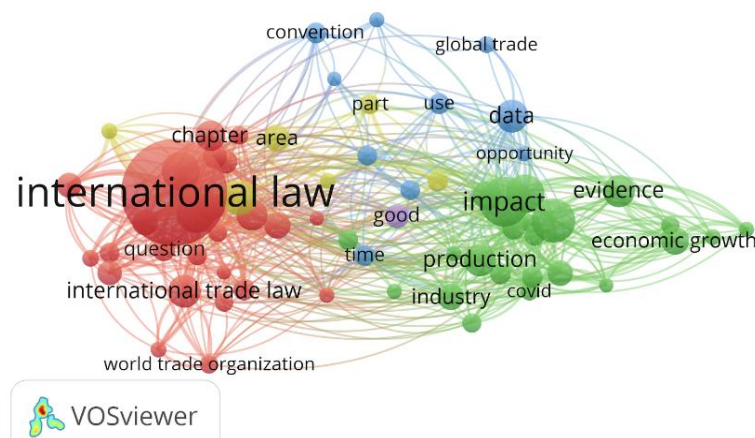


Figure 2. Network visualization result
 Source: VosViewer

Table 1. Clusters result from VOSviewer

Cluster 1	Cluster 2	Cluster 3	Cluster 4
Evolution	China	Global trade	International human rights
Human right	CO2 emission	International trade agreement	Legal status
History	COVID	National law	Pattern
International law	Economic growth	Opportunity	Principle
International organization	Financial development		
International relation	Foreign direct investment		
International trade law	Global value chain		
Nature	Growth		
Personal Politic	Industry		
Power	International business		
World trade organization	Japan		
	Production		
	Trade liberalization		
	Trade openness		