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# Legal Aspects of Antitrust Law: A Bibliometric Analysis

Robiaaton Adawiyah Safri<sup>1\*</sup>, Nasarudin Abdul Rahman<sup>2</sup>

<sup>1</sup>Ahmad Ibrahim Kulliyyah of Laws, International Islamic University Malaysia, Malaysia and School of Law, Universiti Utara Malaysia, Sintok, Kedah, Malaysia

<sup>2</sup>Ahmad Ibrahim Kulliyyah of Laws, International Islamic University Malaysia, Malaysia

\*Corresponding Author

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### **ABSTRACT**

This study examines the global scholarly landscape on the legal aspects of antitrust law by conducting a comprehensive bibliometric analysis to understand the evolution, intellectual structure and contemporary research directions within this field. Although antitrust law has long been central to market regulation and economic governance, the rapid expansion of digital markets, emerging enforcement challenges and increasing cross-border legal complexities have created a need for systematic mapping of academic contributions to identify dominant themes, research gaps and influential jurisdictions. To address this problem, the present study utilised a multi-stage methodology integrating several digital research tools. Data were retrieved using Scopus advanced searching, producing a final dataset of 885 documents after applying predefined inclusion and exclusion criteria. Statistical patterns and graphical trends were generated through the Scopus Analyzer, enabling examination of publication growth, leading countries, institutions, sources and citation performance. OpenRefine was employed to clean, standardise and harmonise the dataset, particularly for resolving inconsistencies in author names, keywords and country affiliations. Subsequently, VOSviewer software was used to construct visualisations through co-authorship, co-occurrence and citation-network mapping to uncover thematic clusters and collaboration structures. The results reveal significant growth in antitrust-related legal scholarship between 2005 and 2025, with the United States and several European jurisdictions dominating output and influence. Keyword networks identify four major thematic clusters: core legal doctrines of competition law, anti-competitive conduct and market power, digital-platform regulation and jurisdiction-specific enforcement frameworks. Overall, the findings highlight a dynamic and increasingly diversified research landscape, underscoring the evolving interplay between law, economics and digital regulation. This study contributes a structured evidence base that supports future research directions and helps scholars, policymakers, and practitioners understand where antitrust law scholarship is advancing and where further exploration is needed.

Keywords: Antitrust, Competition Law, Jurisdictions, Policy

# INTRODUCTION

Antitrust law, a cornerstone of modern economic regulation, aims to promote competition and prevent monopolistic practices that can harm consumers and the economy. Originating from the late 19th century with the Sherman Act of 1890 in the United States, antitrust laws have evolved to address various forms of anticompetitive behavior, including monopolization, cartels and mergers that may substantially lessen competition (Bowden, 2017). The legal framework of antitrust law is complex, involving a blend of economic principles and legal doctrines that seek to balance market efficiency with broader societal values (Nachbar, 2013; White, 2016). This paper aims to explore the legal aspects of antitrust law, focusing on its background, the problems it addresses, the necessity of studying it and key concepts from literature.

Antitrust laws are designed to protect consumers and ensure fair competition in the marketplace. In the United States, these laws are enforced by the Antitrust Division of the Department of Justice (DOJ), the Federal Trade Commission (FTC), state attorneys general and private parties (Steren, 2022). The primary statutes include the Sherman Act, the Clayton Act and the Federal Trade Commission Act, which collectively address various anticompetitive practices such as price-fixing, monopolization and mergers that may reduce competition (Feinstein





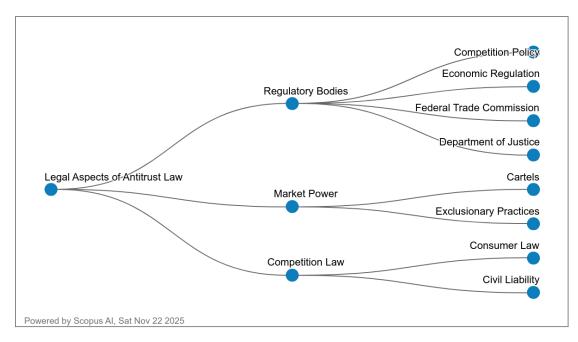
et al., 2015; Steren, 2022). In the European Union, competition law is governed by Articles 101 and 102 of the Treaty on the Functioning of the European Union (TFEU), which prohibits anti-competitive agreements and abuse of dominant positions.

The primary problem that antitrust law seeks to address is the prevention of monopolistic practices that can lead to higher prices, reduced quality, and stifled innovation. Monopolies and cartels can manipulate markets to their advantage, harming consumers and smaller businesses. For instance, antitrust laws prohibit unreasonable restraints of trade, efforts to monopolize through anticompetitive means, and business consolidations that might substantially lessen competition (Steren, 2022). The enforcement of these laws ensures that markets remain competitive, benefiting consumers through lower prices and better products and services.

The need to study antitrust law is underscored by the evolving nature of markets and the emergence of new economic sectors, such as the digital economy and blockchain technology. As markets become more complex, the application of antitrust principles must adapt to new challenges. For example, the rise of decentralized finance and virtual asset markets has introduced novel antitrust issues that require updated legal frameworks and enforcement strategies (Stylianou, 2025). Additionally, the intersection of antitrust law with other legal domains, such as intellectual property, highlights the importance of understanding how these laws interact and influence each other (Katz, 2016; Noonan, 2015). Studying antitrust law is essential for developing effective policies that can address contemporary market dynamics and ensure fair competition.

The literature on antitrust law is extensive, covering various theoretical and practical aspects. One key concept is the "rule of reason," which evaluates the economic efficiency of business conduct to determine its legality (Nachbar, 2013). This approach contrasts with the "per se" rule, which deems certain practices inherently illegal without a detailed analysis of their effects. Another important concept is the role of market power and its abuse, where dominant firms may engage in exclusionary practices to maintain their market position (Steren, 2022; Stylianou, 2025). The literature also explores the philosophical foundations of antitrust law, examining the balance between economic efficiency and other societal values, such as freedom of choice and regulatory fairness (Black, 2005; Nachbar, 2013; White, 2016).

Accordingly, the legal aspects of antitrust law are critical in maintaining competitive markets and protecting consumers from anticompetitive practices. The historical development of antitrust regulations, the problems they address, and the need for ongoing study highlight the importance of this legal framework. Key concepts from literature, such as the rule of reason, market power, and the intersection with intellectual property, provide a comprehensive understanding of antitrust law's role in modern economies. As markets continue to evolve, the study and application of antitrust principles will remain essential in ensuring fair competition and fostering innovation.



**Figure 1.** Key concepts generated on legal aspects of antitrust law





Figure 1 presents a concept map comprising twelve interconnected concepts that collectively outline the thematic structure of "Legal Aspects of Antitrust Law." Deductively moving from left to right, the central concept branches into three major thematic pathways, Regulatory Bodies, Market Power and Competition Law, each expanding into specialised sub-concepts. The first pathway, Regulatory Bodies, unfolds into four institutional and policy-related elements: Competition Policy, Economic Regulation, the Federal Trade Commission and the Department of Justice, illustrating the governance architecture responsible for enforcing antitrust rules. The second pathway, Market Power, further divides into Cartels and Exclusionary Practices, capturing the core forms of anti-competitive conduct involving coordinated collusion and unilateral abuses. The third pathway, Competition Law, branches into Consumer Law and Civil Liability, highlighting the legal consequences, consumer protection dimensions and accountability mechanisms embedded within antitrust enforcement. Overall, the rightward progression of the map demonstrates how the legal aspects of antitrust law operate through a layered integration of regulatory authorities, market-behaviour analysis, and substantive legal obligations, revealing a coherent and comprehensive research landscape within the field.

## **Research Questions**

This study investigates the following five research questions:

RQ1: What are the research trends of legal aspects of antitrust law according to the year of publication?

RQ2: What are the top 10 cited articles of legal aspects of antitrust law?

RQ3: Which are the top 10 countries on legal aspects of antitrust law based on number of publication?

RQ4: What are the popular keywords related to legal aspects of antitrust law?

RQ5: What are co-authorship by countries' collaboration of legal aspects of antitrust law?

# **METHODOLOGY**

Bibliometric analysis provides a systematic approach to collecting, organizing, and evaluating data derived from scholarly publications (Alves et al., 2021; Assyakur & Rosa, 2022; Verbeek et al., 2002). Rather than merely quantifying outputs or identifying leading authors and journals (Wu & Wu, 2017), this method employs advanced techniques such as co-citation analysis to reveal intellectual linkages and research trends within a discipline. Implementing such an analysis involves an iterative process of selecting appropriate keywords, retrieving relevant literature and critically reviewing sources to construct a comprehensive and reliable dataset (Fahimnia et al., 2015). In the present study, priority was given to high-impact works, as these publications exert the greatest influence on shaping the theoretical underpinnings of antitrust law scholarship. To ensure accuracy and credibility, the Scopus database was chosen as the primary source due to its extensive coverage and established reputation for scholarly reliability (Al-Khoury et al., 2022; di Stefano et al., 2010; Khiste & Paithankar, 2017). Accordingly, publications indexed in Elsevier's Scopus between 2005 and 2025 were systematically gathered and analyzed to provide a robust overview of research developments.

# Data search strategy

The bibliometric search strategy was constructed using a highly targeted Boolean query FROM Scopus database with the search string *TITLE* ( *ANTITRUST AND* ( *law OR rule OR ruling OR polic OR legal OR regulat* OR governance OR princip\* OR convention OR ethic\* ) ) AND PUBYEAR > 2009 AND PUBYEAR < 2026 AND ( LIMIT-TO ( LANGUAGE , "English" ) )\*\* with the literature accessed in November 2025, ensuring adequate coverage of two decades of academic work. The Boolean operators "OR" and "AND" were intentionally used to broaden the scope of conceptual variants surrounding the legal aspects of antitrust such as "law," "rule," "ruling," "policy," "legal," "regulatory," "governance," "principles," "convention," and "ethics" while still ensuring that the core keyword "antitrust" remains the central anchor in the title field. Truncation symbols (e.g., *polic, regulat, ethic*) further expanded the capture of plural forms and varied word endings, thereby reducing the risk of missing relevant publications due to linguistic variation. Additionally, restricting the search to publication years 2005—





2025 (i.e., PUBYEAR > 2004 and PUBYEAR < 2026) created a defined timeline that allowed systematic examination of contemporary developments following the global consolidation of competition law reforms, economic globalisation and evolving enforcement philosophies across major jurisdictions such as the United States, the European Union and emerging economies.

Furthermore, the time filter also functioned as an exclusion mechanism, automatically removing publications before 2005, which were deemed outside the scope of current doctrinal and policy environments. The language filter (LIMIT-TO: English) was included as part of the screening criteria to ensure consistency of interpretation, accessibility of methodological details and comparability of findings across studies, while simultaneously excluding non-English publications that may not be easily interpretable or would introduce translation inconsistencies. Based on this structured query and screening design, the initial number of documents retrieved was 1,435, representing the total volume of publications matching either fully or partially the thematic focus before any narrowing or eligibility assessment. Following this, a systematic screening was conducted using explicit inclusion and exclusion criteria, whereby English-language publications within the years 2005–2025 were included, and non-English studies and those published before 2005 were excluded. This process allowed the removal of duplicates, misclassified items, non-scholarly material and studies outside the thematic scope. The refinement aimed to retain only those papers that clearly aligned with the legal, regulatory and governance dimensions of antitrust, as opposed to purely economic, industrial-organisation or technological studies that mentioned antitrust tangentially without contributing meaningfully to the legal discourse. Through this rigorous filtering, the dataset was reduced to a final corpus of 885 publications, representing a curated, high-quality selection that accurately reflects scholarly engagement with the legal aspects of antitrust over a twenty-year period. This refined dataset not only strengthens the reliability of subsequent bibliometric analyses but also provides a clearer, more coherent representation of research patterns, thematic evolution, jurisdictional diversity and intellectual structure within the field of antitrust law.

Table 1. The search string

Source	Search string
Scopus	TITLE ( ANTITRUST AND ( law OR rule OR ruling OR polic* OR legal OR regulat*
	OR governance OR princip* OR convention OR ethic* ) ) AND PUBYEAR > 2004
	AND PUBYEAR < 2026 AND ( LIMIT-TO ( LANGUAGE , "English" ) )
	Access date: November 2025

**Table 2.** The selection criterion of searching

Criterion	Inclusion	Exclusion	
Language	English	Non-English	
Timeline	2005 - 2025	< 2005	
		> 2025	

#### **Data analysis**

VOSviewer, created by Nees Jan van Eck and Ludo Waltman at Leiden University, is a well-recognized bibliometric tool designed for the visualization and analysis of scientific literature (van Eck & Waltman, 2010, 2017). Renowned for its intuitive and interactive interface, the software enables researchers to generate detailed visual maps, clusters and density plots that illustrate connections among studies, authors and concepts within a research domain. It facilitates the examination of co-authorship, co-citation and keyword co-occurrence networks, making it indispensable for exploring the evolution of academic knowledge. Continuous updates and methodological refinements have enhanced its precision and usability, ensuring its relevance for both novice and experienced scholars working with extensive bibliometric datasets.

A key advantage of VOSviewer lies in its capacity to convert large-scale bibliometric data into clear visual representations, such as maps and graphs, that highlight relationships among keywords, citation links, and thematic clusters. This visual approach uncovers the intellectual structure of a field, allowing researchers to identify dominant themes, emerging topics, and influential contributions. Unlike traditional bibliometric tools,



VOSviewer combines technical rigor with practical accessibility, producing results that are both accurate and easy to interpret. Its versatility across disciplines and ability to display networks through various visual density formats have established its status as a leading instrument for mapping and assessing scientific knowledge.

For the present study, bibliometric data including publication year, title, author, journal, citation count, and keywords were extracted from the Scopus database covering the period from 2005 to November 2025 in PlainText format and analyzed using VOSviewer version 1.6.20. The software was employed to apply clustering and mapping techniques, generating visual knowledge maps that depict relationships among research elements. Methodologically, VOSviewer offers an alternative to Multidimensional Scaling (MDS) by positioning items in a low-dimensional space where distances reflect similarity (van Eck & Waltman, 2010). This process is further refined through the association strength (ASij) formula (Van Eck & Waltman, 2007), which compares observed co-occurrence frequencies with expected values under statistical independence. This innovation enhances the accuracy of network mapping, enabling deeper insights into hidden structures and patterns within scholarly research.

## FINDINGS AND DISCUSSION

This section deliberates on each of the five research questions of the study.

**Research Question 1:** What are the research trends of legal aspects of antitrust law according to the year of publication?

The publication trend on the topic "legal aspects of antitrust law" from 2005 to 2025 demonstrates a fluctuating yet gradually expanding pattern of scholarly attention over the two-decade period as illustrated in **Figure 2**.

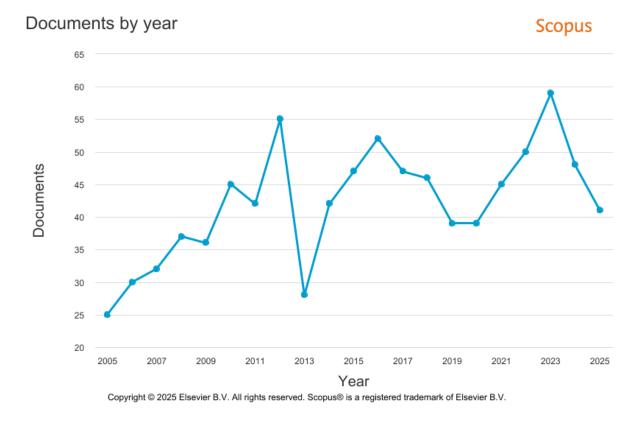


Figure 2. Publication trend by year of publication

The publication trend from 2005 to 2025 reveals a generally upward trajectory in scholarship on the legal aspects of antitrust law, with fluctuations that correspond to global economic, regulatory and enforcement developments. In the early period (2005-2010), the annual output ranged between 25 and 45 papers, reflecting a foundational phase as many jurisdictions were still modernising or adopting new competition legislation, including reforms across Asia, Latin America and Africa. The post-2008 financial crisis also stimulated renewed interest in market





regulation and corporate accountability, which helps explain the gradual rise through 2010-2012, culminating in a noticeable peak in 2012 with 55 publications. The period from 2013 to 2016 shows moderate variability but remains relatively strong, with annual counts consistently above 40 after 2014. This stability indicates a maturing research field where antitrust law began intersecting more deeply with consumer protection, digital markets and cross-border enforcement, prompting sustained academic attention.

From 2017 onward, the data displays alternating periods of growth and contraction, culminating in the highest surge between 2023 and 2025. The rise in 2023 (59 papers) followed by continued high numbers in 2024 (48) and 2025 (41) coincides with intensifying debates on digital-platform dominance, algorithmic collusion, global merger control and the regulation of Big Tech, issues that have pushed competition law into the centre of policy discourse, particularly in the US, EU and Asia-Pacific. The COVID-19 pandemic period (2020-2021) shows only slight decreases, suggesting that antitrust scholarship remained resilient as governments scrutinised pricegouging, supply-chain disruptions and dominant-firm behaviour. The fluctuation in recent years reflects the field's responsiveness to external shocks, technological transformation and evolving enforcement priorities. Overall, the dataset demonstrates that antitrust law, especially its legal and regulatory dimensions, has grown into a dynamic research area shaped by economic cycles, technological change and global regulatory convergence.

**Research Question 2:** What are the top 10 cited articles of legal aspects of antitrust law?

Produced below in **Table 3** is the list of top 10 cited articles on the topic of legal aspects of antitrust law.

**Table 3:** Top 10 cited articles

Authors	Title	Year	Source title	Citation count
López & Vives (2019)	Overlapping ownership, R&D spillovers, and antitrust policy	2019	Journal of Political Economy	165
Gregory Sidak & Teece (2009)	Dynamic competition in antitrust law	2009	Journal of Competition Law and Economics	125
Cooper et al., (2005)	Vertical antitrust policy as a problem of inference	2005	International Journal of Industrial Organization	96
Evans & Jorge Padilla (2005)	Designing antitrust rules for assessing unilateral practices: A Neo-Chicago approach	2005	University of Chicago Law Review	73
Averitt & Lande (2007)	Using the "consumer choice" approach to antitrust law	2007	Antitrust Law Journal	70
Wigger & Nölke (2007)	Enhanced roles of private actors in EU business regulation and the erosion of rhenish capitalism: The case of antitrust enforcement	2007	Journal of Common Market Studies	67
Etro (2007)	Competition, innovation, and antitrust: A theory of market leaders and its policy implications	2007	Book	66
Davies (2010)	Economics and the 'nonsense' of law: The case of the Chicago antitrust revolution	2010	Economy and Society	64
Whinston (2007)	Chapter 36 Antitrust Policy toward Horizontal Mergers	2007	Handbook of Industrial Organization	63
Hylton & Deng (2007)	Antitrust around the world: An empirical analysis of the scope of competition laws and their effects	2007	Antitrust Law Journal	61

The citation profile of the top ten most influential papers in the field of legal aspects of antitrust law demonstrates that highly cited scholarships tend to emerge from works that bridge law, economics and regulatory theory fields



that often influence policy, enforcement practice, and academic debate. The most cited paper, "Overlapping ownership, R&D spillovers, and antitrust policy" (López & Vives, 2019), leads with 165 citations because it introduces a rigorous theoretical framework on how common ownership and innovation externalities alter competitive incentives, a topic that has become central in modern antitrust discourse, especially in the digital-platform era. Similarly, Sidak and Teece's "Dynamic competition in antitrust law" (2009), with 125 citations, is widely referenced because it challenges static theories of market power and emphasises innovation-driven rivalry, an issue relevant to tech markets, network effects and platform competition. Early foundational works such as Cooper et al.'s (2005) piece on vertical conduct and Evans & Padilla's (2005) Neo-Chicago analysis remain influential because they address methodological problems that still underpin enforcement debates, such as inference challenges, unilateral effects and economic reasoning in legal decisions.

The remaining highly cited papers show that research influence is strongly linked to contributions that reinterpret foundational antitrust principles or expand the field's theoretical boundaries. Averitt & Lande's "consumer choice" approach is heavily cited because it reframes consumer welfare in a more holistic manner, influencing ongoing debates about the adequacy of traditional welfare tests. Wigger & Nölke's analysis of private actors in EU regulation gains traction due to its critical reflection on institutional design and the political economy of enforcement, an area of growing concern as public-private regulatory models evolves. Etro's theoretical exploration of innovation incentives, Davies's critique of the Chicago School, Whinston's canonical chapter on horizontal mergers and Hylton & Deng's global comparative study collectively attract citations because they provide foundational insights that scholars repeatedly rely on when examining modern antitrust challenges such as digital dominance, cross-border enforcement and innovation harm theories. Overall, these papers are highly cited not merely due to their publication outlets or authorship prestige, but because they shape core debates, offer frameworks that remain relevant across decades and provide analytical tools that policymakers, academics and courts continue to apply in rapidly evolving markets.

**Research Question 3:** Which are the top 10 countries on legal aspects of antitrust law based on number of publication?

The following **Figure 3** reveals the top 10 countries based on number of publication in the area of legal aspects of antitrust law.

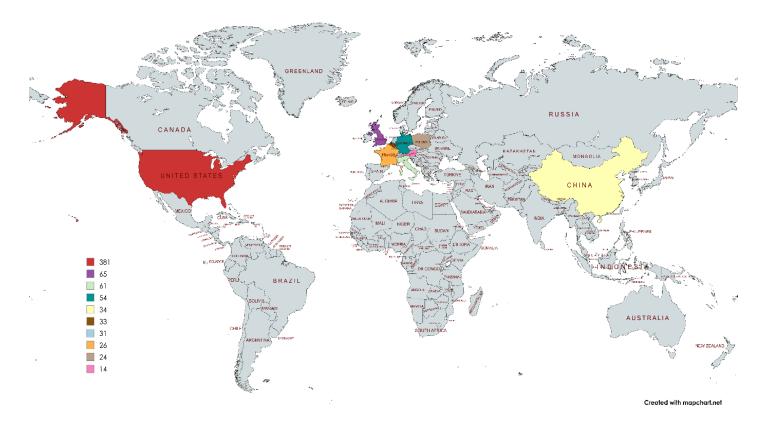


Figure 3. Top 10 countries based on number of publications

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The publication distribution shows that the United States (381 documents) overwhelmingly leads research output on the legal aspects of antitrust law, reflecting its long-standing and sophisticated antitrust tradition rooted in the Sherman Act (1890), Clayton Act (1914) and modern enforcement by the DOJ and FTC. The U.S. scholarly community consists of influential law-and-economics schools, major antitrust journals and globally recognised scholars who shape doctrinal and policy debates worldwide. Following the U.S., the United Kingdom (65), Italy (61), Germany (54), Belgium (33), Netherlands (31), France (26), Poland (24) and Austria (14) demonstrate strong European engagement. This dominance reflects the maturity of EU competition law, the central role of the European Commission in global antitrust enforcement and the presence of leading European universities and research institutes specialising in competition regulation. Countries such as Belgium and the Netherlands host key EU institutions, competition networks and regulatory bodies, which naturally stimulate scholarly activity.

The presence of China (34) among the top contributors highlights the rapid growth of its competition law scholarship following the enactment of the Anti-Monopoly Law in 2008 and its subsequent amendments. China's increasing involvement in regulating digital platforms, mergers and state-linked enterprises has attracted global academic interest and expanded domestic research output. Meanwhile, countries such as Italy, Germany, France and Austria have strong civil law traditions and active enforcement agencies, providing fertile ground for doctrinal, economic and comparative analyses. Poland's inclusion reflects the rise of Central and Eastern European scholarship following EU accession and the harmonisation of domestic competition laws with EU frameworks. Overall, these countries dominate publication output because they possess advanced legal systems, active enforcement institutions, influential academic communities and strong cross-border engagement in policy debates factors that collectively drive sustained research productivity in antitrust law.

**Research Question 4:** What are the popular keywords related to legal aspects of antitrust law?

The following **Figure 4** highlights the main keywords used by the authors related to the study of legal aspects of antitrust law.

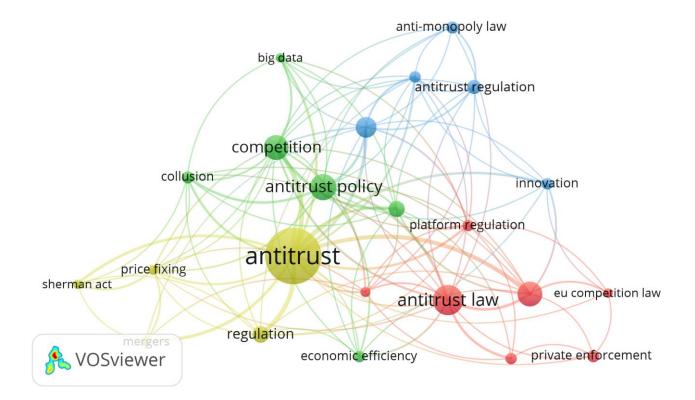


Figure 4: Network visualisation map of keywords' co-occurrence

Co-occurrence analysis of author keywords in VOSviewer identifies how frequently two or more keywords appear together within the same set of publications, enabling researchers to detect conceptual linkages, thematic structures and the intellectual architecture of a research field. In this study, the full counting method was used,





meaning each keyword occurrence was given equal weight regardless of the number of times it appeared in a single document. Out of a total of 1,059 keywords, a minimum occurrence threshold of seven resulted in 23 keywords meeting the criteria. A minimum cluster size of seven ensured that only sufficiently interconnected groups of keywords were organised into clusters. These parameters produced four distinct clusters, each representing a major thematic dimension within the legal aspects of antitrust scholarship. High-frequency keywords such as "antitrust" (100 occurrences, link strength 90), "antitrust law," "competition," "competition law," and "antitrust policy" acted as central nodes binding together related legal and economic concepts.

The resulting clusters contribute significantly to the body of knowledge by revealing the dominant research streams shaping the discourse on antitrust law. The first cluster emphasises core legal doctrines such as antitrust law, competition law, regulation and consumer welfare indicating ongoing debates about legal standards and enforcement principles. Landmark cases such as *Ohio v. American Express* illustrate the judiciary's struggle in United States to define relevant markets within two-sided digital platforms, while decisions by the European Commission in *Intel and Michelin* shed light on evidentiary standards for evaluating loyalty rebates and exclusionary practices. The conceptual relationships within this cluster mirror longstanding academic debates surrounding the tension between economic efficiency, fairness and the appropriate scope of judicial intervention in competitive markets.

The second cluster centres on anti-competitive conduct, including collusion, price fixing and market power, reflecting traditional economic harm with the influence of several well-known cases that have shaped global understanding of cartel behaviour and unilateral abuses. One of the most influential examples is the United States Supreme Court decision in *United States v Socony-Vacuum Oil Co.*, which remains the foundational case establishing that price fixing is automatically unlawful under the Sherman Act, regardless of the firms' motives or the market conditions. Similarly, the European Commission's decision in *Hoffmann-La Roche*, as one of the most famous EU dominance cases where the Court of Justice held that loyalty rebates offered by a dominant firm can constitute an abuse when they are designed to tie customers and foreclose rivals. It is a foundational case for analysing exclusionary practices and remains frequently referenced in modern rebate and discount jurisprudence. The merging of legal analysis with economic modelling in this cluster demonstrates that the study of antitrust harm increasingly depends on interdisciplinary reasoning.

A third cluster highlights emerging issues such as digital platforms, big data, platform regulation and innovation, demonstrating how technological transformation is reshaping antitrust concerns. The importance of these keywords reflects the growing complexity of regulating digital ecosystems where market power is no longer derived solely from price or output, but from data accumulation, network effects and platform dependency. One of the most prominent examples is the European Commission's Google Shopping decision, which found that Google abused its dominant position by systematically favouring its own comparison-shopping service over those of rivals. This decision has become a reference point for understanding self-preferencing, a behaviour unique to digital intermediaries that control access to users through algorithmic ranking. The case illustrates how traditional concepts of exclusionary abuse are being reinterpreted to address data-driven market structures where visibility, rather than price, determines competitive advantage. The United States antitrust suits against Google and Meta demonstrate how concerns over privacy, data integration and platform interoperability have begun to converge with classical antitrust principles. The academic interest captured in this cluster shows how scholars interrogate the adequacy of traditional legal tests for market definition, dominance assessment and exclusionary harm in digital ecosystems that do not conform to classical antitrust enforcement.

The remaining cluster captures jurisdiction-specific and enforcement-related themes like the Sherman Act, EU competition law, private enforcement and the Anti-Monopoly Law. Collectively, these keyword relationships show how classical legal analyses intersect with modern challenges, reaffirming that antitrust research now spans doctrinal law, digital-economy regulation, data governance and global enforcement trends. This mapping provides a structured understanding of how the field has evolved and where future research is likely to intensify.

Research Question 5: What are co-authorship by countries' collaboration of legal aspects of antitrust law?

Produced below is **Figure 5**, depicting the network visuatisation mapping of the authors' co-authorship collaboration by country.

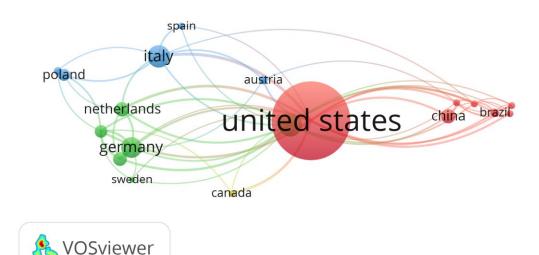


Figure 5. Network visualisation map of authors' collaboration by country

Co-authorship by country collaboration in VOSviewer measures how frequently authors from different countries work together on the same publications, revealing the structure of international research networks and the geographical distribution of scholarly influence. It identifies not only productivity but the degree of connectedness among countries through shared intellectual output. Using the full counting method, where each co-authored publication is counted equally for all participating countries, a dataset of 58 countries was analysed. Applying a minimum occurrence threshold of seven publications resulted in 19 countries meeting the inclusion criteria. A minimum cluster size of seven ensured that only countries with sufficiently strong collaboration networks formed meaningful groups, generating four clusters overall. Each cluster represents a regionally or thematically interconnected set of countries whose research patterns reflect shared legal traditions, regulatory frameworks, or joint academic engagement in antitrust law. High-productivity countries such as the United States (395 documents; 55 link strength), the United Kingdom (65 documents; 37 link strength) and major EU jurisdictions (France, Germany, Italy, Belgium, Netherlands) anchor the global collaborative structure, while emerging contributors like China, Brazil, South Korea and India appear as important but less central nodes.

The findings contribute significantly to understanding the global development of antitrust scholarships by illustrating how legal, institutional and regional factors shape international collaboration. Countries with strong enforcement institutions and long-standing antitrust frameworks particularly the United States and leading EU Member States form the core of global knowledge production, explaining their high total link strength and centrality within the network. Their collaboration patterns reflect the influence of mature competition authorities, established academic communities and robust cross-border regulatory cooperation. Meanwhile, the presence of China, Brazil, India and South Korea highlights the growing participation of jurisdictions that have recently strengthened or modernised their competition laws, signalling a diversification of global scholarship. These collaboration clusters indicate how ideas diffuse across legal systems, how comparative perspectives shape doctrinal development and how globalisation of markets requires increasingly harmonised competition policies. Overall, the co-authorship network provides a valuable map of intellectual connectivity, showing which countries drive theoretical advancement, which serve as bridges between regions and how international cooperation enriches the field of antitrust law.

#### CONCLUSION

The purpose of this bibliometric study was to examine the evolution, thematic development and global research patterns surrounding the legal aspects of antitrust law, with the intention of identifying major scholarly trends and mapping the intellectual landscape of the field. The analysis set out to address several research questions,





including publication trends, the most influential articles, leading contributing countries, dominant keywords and international collaboration patterns. The findings show a steady expansion of academic interest from 2005 to 2025, with notable surges during periods marked by regulatory debates, technological disruption and intensified scrutiny of digital markets. The dataset of 885 documents reveals strong contributions from jurisdictions with well-established competition regimes, particularly the United States and European countries, while emerging economies have also shown increasing engagement. Keyword clustering indicates four major thematic concentrations: foundational legal doctrines, anti-competitive conduct, digital-platform regulation and jurisdiction-focused enforcement issues. Co-authorship mapping further demonstrates that mature legal systems form the core of global collaboration networks, while newer competition law jurisdictions contribute meaningful but regionally contained research links.

These results contribute significant value to antitrust scholarship by offering a structured overview of how legal debates, economic reasoning and regulatory transformations influence the direction of research. The study highlights how traditional themes such as market power, collusion and consumer welfare coexist with contemporary issues including digital dominance, big data and platform governance. This analysis also underscores the strong connection between global enforcement approaches and academic productivity, providing insights beneficial for understanding policy diffusion and comparative legal development. Practical implications emerge in the form of enhanced clarity for regulators, policymakers and scholars seeking to identify influential jurisdictions, track evolving enforcement priorities or design future research agendas based on observed gaps. Several limitations exist, including reliance on a single database, potential omission of non-indexed works and linguistic restrictions that may exclude valuable regional literature. Future research could extend this work by incorporating multi-database comparisons, qualitative citation content analysis or longitudinal thematic modelling to capture the deeper evolution of doctrinal debates.

Overall, this study demonstrates the importance of bibliometric techniques for revealing structured patterns, intellectual linkages and global movement within antitrust law scholarship. The results underline how systematic mapping can guide future inquiry, encourage deeper engagement with emerging topics and support evidence-based understanding of legal developments within the broader landscape of competition regulation. The significance of this research lies in its ability to provide a comprehensive, data-driven foundation that helps position antitrust law within ongoing global transformations, ensuring that scholars and practitioners remain informed about the dynamic shifts shaping this legal domain.

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