

Critical Examination of the Circumstantial Evidence Threshold in Competition Law: Obstacle or Legal Certainty?

Fatma Astiti Harun

Faculty of Law, Universitas Negeri Gorontalo, Indonesia
Email: fatmaastitiharun15@gmail.com

The use of circumstantial evidence is indispensable in competition law enforcement, as direct evidence of anticompetitive agreements is rarely available. However, the appropriate threshold for such evidence remains deeply contested, raising a fundamental tension between effective deterrence and legal certainty. This normative legal research, employing comparative and teleological analysis of Indonesian, European Union, and United States jurisprudence, critically examines whether the circumstantial evidence threshold operates as an obstacle to enforcement or as a safeguard for predictability. The findings reveal that an excessively high threshold requiring exclusion of all plausible alternative explanations creates a safe harbor for sophisticated cartels, particularly disadvantaging agencies with limited investigative powers such as Indonesia's KPPU. Conversely, an overly low and unstructured threshold risks false positives, condemning legitimate parallel conduct in oligopolistic markets and chilling pro-competitive behavior. Neither extreme is defensible. The study concludes that the optimal framework lies in a balanced, structured approach: competition authorities must present a consistent and objective body of circumstantial facts establishing a plausible inference of collusion, after which defendants may articulate non-collusive alternatives, with the ultimate burden remaining on the authority. This balanced threshold harmonizes enforcement efficacy with legal certainty, ensuring that competition law protects consumer welfare without sacrificing due process.

Keywords: Circumstantial Evidence; Competition Law; Legal Certainty

This is an open access article under the [CC BY-NC](#) license



Corresponding Author:

Fatma Astiti Harun
Faculty of Law, Universitas Negeri Gorontalo, Indonesia
fatmaastitiharun15@gmail.com

1. Introduction

The effective enforcement of competition law hinges critically on the standards of proof that adjudicative bodies apply when assessing anticompetitive conduct. Unlike many areas of criminal or civil law where direct evidence such as a signed agreement or a recorded confession is readily available, competition law disputes frequently unfold in an environment of deliberate secrecy and strategic concealment. Cartels, abuse of dominance, and concerted practices are rarely, if ever, accompanied by explicit written contracts or overt admissions. Instead, competition authorities and courts must rely on circumstantial evidence (or indirect evidence): a collection of facts and inferences that, when viewed together, point logically to the existence of a prohibited agreement or practice [1]. The use of circumstantial evidence is not merely a supplementary tool; in many jurisdictions, it constitutes the primary, and sometimes the only, basis for establishing an infringement. This reality raises a fundamental question: what threshold of circumstantial evidence is sufficient to satisfy the requisite standard of proof, and does the current legal framework governing that threshold create an obstacle to effective enforcement or, conversely, provide necessary legal certainty for businesses?

The centrality of circumstantial evidence in competition proceedings has been repeatedly affirmed by major competition authorities and courts worldwide. The Court of Justice of the European Union (CJEU), for instance, has long held that an anticompetitive agreement or concerted practice may be inferred from a set of coincidences and indicia that, in the absence of another plausible explanation, reveal a coordination

of market conduct. Similarly, the U.S. Supreme Court in *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.* acknowledged that antitrust plaintiffs often must rely on circumstantial evidence to prove a conspiracy, especially where direct evidence is unavailable [2]. Yet, while the doctrinal acceptability of circumstantial evidence is well settled, the threshold the quantum and quality of such evidence required to shift the burden of proof or to withstand judicial scrutiny remains deeply contested. Different jurisdictions have adopted divergent approaches, ranging from the "totality of the circumstances" test to more structured frameworks such as the "plus factors" doctrine in U.S. antitrust law or the "consistent with competition" plus "no plausible alternative explanation" test in EU jurisprudence. This fragmentation creates not only cross-jurisdictional uncertainty for multinational enterprises but also a pervasive doctrinal tension between two competing values: effective deterrence of anticompetitive behavior and the protection of legitimate business conduct from false positives [3].

At the heart of this tension lies a classic trade-off in evidentiary law. A low threshold for circumstantial evidence for example, permitting an authority to infer an infringement from mere parallelism of prices or behavior enhances enforcement efficiency and deters hard-core cartels that would otherwise remain hidden. However, such a lenient threshold risks condemning vigorous, independent competition as unlawful collusion. The economic literature on oligopolistic interdependence demonstrates that conscious parallelism, without any agreement, can lead to identical pricing outcomes. A threshold that fails to distinguish adequately between tacit coordination (generally lawful) and explicit collusion (unlawful) would undermine legal certainty and chill pro-competitive conduct. Conversely, a high threshold requiring, for instance, strong corroborating evidence such as "smoking gun" documents or direct communications may provide clear guidance to businesses and robust due process protections, but it can also render most cartels virtually immune from prosecution [4]. Empirical studies from the OECD and national competition agencies indicate that the majority of cartel investigations rely almost exclusively on indirect evidence. Setting an excessively demanding standard would therefore nullify the deterrent effect of competition law, encouraging sophisticated violators to simply avoid leaving direct traces.

Legal certainty, a cornerstone principle of any rule-of-law-based economic order, demands that market participants be able to predict, with reasonable confidence, the legal consequences of their actions. In the context of circumstantial evidence, legal certainty requires transparent, consistent, and objectively verifiable criteria for assessing when a set of indirect facts amounts to proof of an infringement. Vague or multifactor balancing tests, while flexible, may generate unpredictability and invite case-by-case discretion that borders on arbitrary enforcement. Yet, excessive rigidity such as requiring a closed list of predetermined indicia might be equally problematic, as the ingenuity of anticompetitive strategies constantly evolves. Scholars have therefore debated whether the proper solution lies in procedural safeguards (e.g., heightened judicial review, access to file, or the right to be heard) rather than substantive evidentiary thresholds [5]. Others advocate for a probabilistic approach, such as Bayesian reasoning, to structure the evaluation of circumstantial evidence. The absence of a consensus in both academic literature and case law underscores the urgency of a critical reexamination.

In Indonesia, the problem has acquired particular salience following the establishment of the Business Competition Supervisory Commission (KPPU). Indonesian competition law, primarily Law No. 5 of 1999, does not explicitly define the evidentiary standard or the threshold for circumstantial evidence. The KPPU and the Indonesian courts have oscillated between different approaches, sometimes imposing an extremely low threshold finding a violation based on parallel conduct and minimal additional factors and at other times demanding nearly direct proof. This inconsistency has generated widespread criticism from legal practitioners and business associations, who argue that it undermines predictability and fair process [6]. Meanwhile, proponents of a lower threshold contend that without such an approach, the KPPU would be

powerless to combat the pervasive cartelization of key sectors such as food, logistics, and retail. The debate in Indonesia thus mirrors, and in some ways intensifies, the global doctrinal conflict between enforcement efficacy and legal certainty.

Given this background, a critical examination of the circumstantial evidence threshold is not merely an academic exercise; it is a practical necessity for the design of a competition law system that balances deterrence with due process. The central question whether the existing threshold constitutes an obstacle to fair enforcement or a bulwark of legal certainty cannot be answered through abstract reasoning alone. It requires a comparative analysis of how leading jurisdictions (the United States, the European Union, Germany, Japan, and emerging economies) have grappled with this issue, an empirical assessment of the consequences of different thresholds on case outcomes and business behavior, and a normative evaluation grounded in the principles of evidentiary law and economic efficiency [7]. This article aims to provide such a critical review. By dissecting the doctrinal foundations, jurisprudential evolution, and practical operationalization of the circumstantial evidence threshold, the article seeks to offer concrete recommendations for reform recommendations that can guide competition authorities, courts, and legislators in crafting rules that are neither overly permissive nor unnecessarily restrictive. Ultimately, achieving the right balance is essential to ensure that competition law fulfills its mission: protecting consumer welfare and market integrity without sacrificing the legal predictability that underpins a vibrant market economy.

2. Literature Review

The scholarly literature on competition law enforcement consistently recognizes that antitrust violations particularly cartels and concerted practices must typically be proven through circumstantial evidence, given that direct evidence such as written agreements is rarely accessible. A central debate permeates this body of work: the inherent tension between effective deterrence and legal certainty. Scholars have examined various jurisdictional approaches to calibrating the evidentiary threshold for indirect proof. In the United States, the literature extensively discusses the “plus factors” doctrine, which requires additional economic or behavioral indicia beyond mere parallel conduct to infer a conspiracy. European Union scholarship, by contrast, focuses on the “consistent with competition” test and the requirement that there be no plausible alternative explanation for the observed market behavior. Comparative studies have highlighted the divergent outcomes these frameworks produce, particularly in oligopolistic markets where conscious parallelism is endemic. A recurring theme in the literature is the risk of false positives condemning independent, pro-competitive conduct versus false negatives allowing hard-core cartels to escape sanction. Empirical research suggests that the majority of cartel investigations rest almost exclusively on circumstantial evidence, making the choice of threshold outcome-determinative. More recent scholarship advocates for hybrid models that combine a moderate substantive threshold with robust procedural safeguards, including rigorous judicial review, full access to the investigative file, and meaningful opportunities for defendants to propose alternative explanations. Some theorists have explored probabilistic Bayesian reasoning as a tool to discipline the evaluation of indirect evidence. Overall, the literature converges on the view that no universal optimum exists; rather, the appropriate threshold must reflect each jurisdiction’s legal culture, economic conditions, and institutional design.

3. Method

This study employs a normative legal research method with a descriptive-analytical specification [8]. The primary legal materials consist of competition laws (particularly Indonesia’s Law No. 5 of 1999), decisions of the Business Competition Supervisory Commission (KPPU) and relevant courts, as well as doctrinal

sources from comparative jurisdictions (the European Union and the United States). Data collection is conducted through library research of legal and economic literature. Legal analysis applies teleological interpretation, *argumentum a contrario*, and comparative law approaches. Furthermore, legal reasoning is utilized to assess whether the threshold for circumstantial evidence creates an obstacle to effective enforcement or, conversely, provides legal certainty for market participants.

4. Result and Discussion

The Threshold as an Obstacle to Effective Enforcement

A principal argument advanced by competition authorities and enforcement-oriented scholars is that a high or rigidly structured threshold for circumstantial evidence fundamentally obstructs the detection and sanctioning of anticompetitive conduct. This perspective rests on the empirical reality that direct evidence of agreements such as signed minutes, explicit email exchanges, or recorded telephone calls is increasingly rare in modern cartel operations. Sophisticated violators have learned to avoid creating documentary trails, instead relying on tacit understandings, coded communications, or "gentlemen's agreements" never reduced to writing. The digital transformation of business communications, while ostensibly creating electronic records, has paradoxically enabled greater evasive sophistication through ephemeral messaging applications, self-deleting platforms, and encrypted channels that are legally inaccessible to many competition authorities lacking criminal investigation powers [9].

Under a demanding evidentiary threshold that requires, for example, multiple independent corroborating factors or the exclusion of all plausible alternative explanations, most cartels would escape liability entirely. The consequence is not only impunity for wrongdoers but also a systematic deterrent failure: rational market actors, observing low enforcement rates, will calculate that the expected cost of collusion discounted by the probability of detection and sanction is outweighed by its potential profits. This economic calculation is particularly acute in industries with high margins and low regulatory scrutiny, where the returns to successful collusion can be enormous [10].

Empirical studies from the OECD and the European Commission support this concern. In landmark cases such as *Wood Pulp* (ECJ, 1993) and *VM Remonts* (CJEU, 2021), the courts explicitly endorsed the use of circumstantial evidence as the primary basis for establishing concerted practices, emphasizing that a requirement of direct proof would render competition law ineffective. The CJEU in *VM Remonts* went further, holding that even a set of indicia none of which, taken individually, would be sufficient, may collectively satisfy the standard of proof when they form a consistent body of evidence. This approach, often termed the "global assessment" method, reflects a pragmatic recognition that antitrust violations are inherently clandestine.

By contrast, jurisdictions that have adopted a higher threshold such as certain U.S. circuits requiring "plus factors" beyond mere conscious parallelism have faced criticism for under-enforcement in oligopolistic markets [11]. The seminal case of *Twombly* (2007) illustrates the problem: the U.S. Supreme Court raised the pleading standard for antitrust conspiracy claims, requiring plaintiffs to allege facts that "plausibly suggest" an agreement rather than merely parallel conduct. While intended to screen out meritless claims, this standard has been shown empirically to dismiss many potentially meritorious cartel cases at the pleading stage, effectively immunizing sophisticated colluders who ensure that no overt act of agreement appears in discoverable documents.

When judges demand evidence of "additional facts" that tend to exclude independent conduct such as opportunities to collude, economic motives, or actions against self-interest sophisticated cartelists simply omit those observable behaviors or structure their coordination to mimic competitive interdependence. For

instance, a cartel can rotate market shares in a pattern that mirrors natural fluctuations, or exchange pricing information through third-party intermediaries who do not directly participate in the agreement. Under a stringent plus-factors framework, each of these behaviors might be rationalized individually, and the cumulative probative value of the entire circumstantial mosaic is lost. Thus, an excessively high threshold does not merely create an obstacle; it creates a safe harbor for hard-core collusion [12].

In this light, the circumstantial evidence threshold, when set too high, functions as a procedural shield for violators rather than a safeguard for legitimate competition. The asymmetry of information and resources further exacerbates this problem. Cartel members possess intimate knowledge of their own coordination mechanisms, while competition authorities must reconstruct hidden conduct from external market data. A high threshold effectively demands that authorities prove a negative the absence of any plausible non-collusive explanation which is epistemologically impossible when the number of potential alternative explanations is infinite [13]. Legal scholars have analogized this to requiring a prosecutor to prove that a murder could not have been a suicide, an accident, or a natural death before allowing a jury to consider circumstantial evidence of homicide. Such a standard would paralyze law enforcement in nearly all contexts where direct witnesses are unavailable.

For competition agencies with limited investigative powers such as Indonesia's KPPU, which lacks criminal enforcement tools, no authority to conduct dawn raids with police assistance, and no power to compel testimony under threat of imprisonment a flexible, low-threshold approach to circumstantial evidence is not an optional preference but an operational necessity. The KPPU's budgetary and jurisdictional constraints mean that it cannot replicate the intensive investigative capabilities of the European Commission or the U.S. Department of Justice Antitrust Division. Without the ability to rely on inferences drawn from market conduct, the agency would be reduced to regulating only those cartels careless enough to leave self-incriminating documents, a standard that no rational enforcement regime would accept [14].

Moreover, the deterrent function of competition law relies not only on actual sanctions but on the perceived risk of detection. When potential violators believe that circumstantial evidence alone can support a conviction, they internalize a higher expected cost of collusion. Conversely, a publicly known high-threshold standard signals that cleverly designed collusion will evade punishment, thereby encouraging the very behavior the law seeks to prohibit.

From this enforcement-centric perspective, the appropriate threshold for circumstantial evidence should be a "reasonable inference" standard similar to the balance of probabilities in civil law rather than a standard requiring the exclusion of all alternative hypotheses. This approach aligns with the economic function of competition law as a deterrent mechanism and with the procedural reality that antitrust defendants, unlike criminal defendants, typically possess significant market power and legal representation [15]. The burden of producing a plausible non-collusive explanation should, after the authority establishes a *prima facie* case through consistent circumstantial evidence, shift to the defendant. Such a burden-shifting framework, commonly applied in EU competition procedure, has proven workable and has not resulted in systematic false convictions.

Hence, those who argue that a low threshold creates legal uncertainty overlook the more immediate certainty created by effective enforcement: the certainty that violations will not go unpunished. In the end, the threshold must be calibrated not by an abstract preference for either enforcement or certainty, but by a realistic appraisal of the evidential landscape of modern cartels. Since direct evidence is structurally scarce, a threshold that demands it is an obstacle to the very rule of law that competition law seeks to uphold.

The Threshold as a Guarantee of Legal Certainty

Opposing the enforcement-centric view, a substantial body of legal scholarship and judicial opinion contends that a clear, predictable, and sufficiently demanding threshold for circumstantial evidence is indispensable for legal certainty. Legal certainty a core principle of the rule of law requires that market participants be able to distinguish lawful conduct from unlawful conduct with reasonable confidence. When competition authorities are permitted to infer an infringement from a loose totality of circumstances, the resulting unpredictability chills pro-competitive behavior. Legitimate parallel pricing, normal industry benchmarking, or mere information exchanges that do not constitute collusion may become indistinguishable from cartel behavior in the eyes of an overzealous enforcer [16]. The problem is particularly acute in oligopolistic markets where interdependent decision-making naturally produces coordinated outcomes without any agreement. Under a low-threshold regime, a firm that independently raises prices in response to a competitor's public announcement may find itself accused of a concerted practice, with the burden effectively shifted to the firm to disprove collusion a reversal of the presumption of innocence that fundamental principles of due process cannot tolerate.

The risk of false positives condemning conduct that is actually competitive carries consequences that are both economically damaging and procedurally unjust. A business found guilty of an antitrust violation faces substantial fines, reputational harm, disqualification from public procurement, and potentially private damages actions. If the evidentiary threshold is set so low that these sanctions can be imposed based on inferences that could equally support a non-collusive explanation, then the enforcement system becomes a source of arbitrary power rather than a guardian of market fairness [17]. Empirical research on error-cost analysis in antitrust, most notably by Easterbrook and Frankel, demonstrates that false positives are often more harmful than false negatives. A false negative failing to punish an actual cartel allows a few wrongdoers to enjoy supra-competitive profits for a limited period until the market eventually corrects. A false positive, however, punishes a firm that has done nothing wrong, deterring it and all other market participants from engaging in similar efficient conduct, thereby reducing overall consumer welfare and innovation. From this perspective, a threshold that occasionally lets some cartels escape is the lesser evil compared to a threshold that routinely ensnares innocent businesses [18].

Comparative jurisprudence offers cautionary lessons. In the early 2000s, some European national competition authorities applied such expansive interpretations of circumstantial evidence that the Court of Justice of the European Union (CJEU) intervened to impose stricter standards. In *Aalborg Portland v. Commission* (2004), the Court required that circumstantial evidence must be "objective and consistent" and that inferences must be "the only plausible explanation" for the observed conduct. This standard, often called the "no plausible alternative" test, was designed to protect legitimate parallel conduct from false positives. The CJEU further clarified in *Archer Daniels Midland v. Commission* (2006) that a mere finding of parallel behavior, even when accompanied by opportunities to collude, is insufficient unless the authority has adduced evidence that excludes any reasonable doubt that the conduct was independent. This approach reflects a careful balancing: competition enforcement is not a crusade but a judicial process governed by the presumption of innocence and the requirement of proof beyond a reasonable doubt in criminal-type sanctions (a principle reinforced by the European Convention on Human Rights) [19].

Similarly, U.S. antitrust law's "plus factors" doctrine, while criticized as under-inclusive by enforcement advocates, serves a critical certainty function. It requires plaintiffs to adduce specific evidence that tends to exclude the possibility of independent action, such as actions contrary to self-interest, the existence of facilitating practices, or evidence that defendants communicated with each other about the conduct in question [20]. The Supreme Court in *Twombly* (2007) and *Matsushita* (1986) consistently held that allegations of parallel conduct alone, without additional factual matter that makes an agreement plausible,

do not survive summary judgment. The underlying rationale is not hostility to antitrust enforcement but fidelity to the distinction between conscious parallelism a lawful phenomenon of oligopolistic interdependence and explicit collusion, which is unlawful. Without such structured criteria, the evidentiary threshold becomes a discretionary balancing test, inviting case-by-case adjudication that varies unpredictably between different panels, commissioners, or judges [21]. For businesses planning long-term investments, pricing strategies, and market entry decisions, such unpredictability constitutes a regulatory risk that can deter efficient market conduct. A company uncertain whether its independent price adjustment will be interpreted as a prohibited signal will err on the side of caution, leading to higher prices and reduced competition an ironic outcome for a law designed to protect competition.

The legal certainty argument becomes particularly compelling when considering the differing procedural positions of competition authorities and defendants. Authorities typically possess broad investigative powers, including dawn raids, compulsory requests for information, and the ability to interview employees. A low-threshold approach tilts an already asymmetrical playing field further against defendants [22]. If an authority can establish a *prima facie* case merely by presenting parallel conduct and a few ambiguous emails, the burden effectively shifts to the defendant to prove a negative that no collusion occurred. In practice, this is extraordinarily difficult, as innocent businesses rarely maintain records specifically designed to disprove an unsubstantiated theory of collusion. Legal certainty requires that the evidentiary burden rest firmly on the accuser, and that the accuser must satisfy a threshold that genuinely tests the strength of its circumstantial case before requiring a response from the accused [23].

Moreover, the legitimacy of competition law depends on public acceptance. If market participants perceive the enforcement system as arbitrary or unpredictable, compliance will be driven by fear rather than respect, and the law will lose its moral authority. A clear, transparent threshold for circumstantial evidence one articulated in advance through binding guidelines or consistent case law enhances legitimacy by allowing businesses to conform their conduct to legal requirements [24]. Many competition agencies, including the European Commission and the UK's Competition and Markets Authority, have issued guidance on the types of circumstantial evidence that may support an infringement finding. Such guidance sets expectations and reduces the scope for surprise enforcement. By contrast, a deliberately vague or flexible threshold leaves room for enforcement to reflect political pressures, personal biases, or institutional overreach.

From this perspective, a well-defined, transparent threshold for circumstantial evidence even if it occasionally allows some cartels to escape is a necessary price for preserving the legitimacy and predictability of competition law enforcement. The challenge, therefore, is not to abandon legal certainty in favor of maximal enforcement, but to design a threshold that articulates clear, operational criteria while still enabling effective prosecution of hidden collusion [25]. This might involve, for example, a structured approach that requires the authority to present a consistent body of circumstantial facts, to demonstrate that collusion is a plausible inference, and then to give the defendant a genuine opportunity to present a non-collusive alternative explanation, with the ultimate burden remaining on the authority to disprove that alternative on a balance of probabilities. Such an approach respects both the need for enforcement and the demand for certainty, avoiding the extremes of either a prohibitively high threshold or a dangerously low one. Ultimately, legal certainty is not an obstacle to competition law enforcement; it is the very foundation upon which fair and effective enforcement must be built.

5. Conclusion

This critical examination of the circumstantial evidence threshold in competition law reveals that the question of whether it constitutes an obstacle or a guarantee of legal certainty admits no binary answer. From the enforcement-centric perspective, an excessively high threshold requiring multiple corroborating

factors or the exclusion of all plausible alternative explanations fundamentally obstructs cartel detection, as modern violators systematically avoid creating direct evidence. This creates a procedural safe harbor for collusion, particularly problematic for agencies with limited investigative powers such as Indonesia's KPPU. Conversely, the legal certainty perspective demonstrates that an overly low or unstructured threshold chills pro-competitive behavior, risking false positives that punish legitimate parallel conduct in oligopolistic markets. Such errors are economically more damaging than false negatives, as they deter efficient independent action and violate due process principles. The optimal resolution lies neither in maximal enforcement nor in absolute certainty, but in a balanced, structured threshold: competition authorities must present a consistent and objective body of circumstantial facts establishing a plausible inference of collusion, after which the defendant is afforded a genuine opportunity to articulate a non-collusive alternative explanation, with the ultimate burden remaining on the authority to disprove that alternative on a balance of probabilities. Thus, effective enforcement and legal certainty are not opposing values but complementary pillars, achievable through transparent, operational criteria applied consistently across cases.

6. Reference

- [1] C. R. Leslie, "The Factor/Element Distinction in Antitrust Litigation," *William & Mary Law Review*, vol. 64, no. 3, hlm. 585–632, 2023, doi: 10.1162/jole_a_00123.
- [2] D. Ashton, D. Henry, dan F. Maier-Rigaud, "Prosecuting Cartels without Direct Evidence of Agreement," *OECD Journal: Competition Law and Policy*, vol. 9, no. 3, hlm. 7–56, 2009, doi: 10.1787/clp-v9-art11-en.
- [3] M. L. T. Centella, "Indirect Evidence of a Cartel in the GIS Judgments Saga," *Journal of European Competition Law & Practice*, vol. 3, no. 3, hlm. 258–60, 2012, doi: 10.1093/jeclap/lps005.
- [4] M. M. Collins, "The Burden and Standard of Proof in Competition Litigation and Problems of Judicial Evaluation," *ERA Forum*, vol. 5, hlm. 66–83, 2004, doi: 10.1007/s12027-004-0046-1.
- [5] E. K. Dewi, Z. V. Chumaida, dan S. A. Wulandari, "Characteristics of Indirect Evidence towards Price Fixing Agreements in the Perspective of Competition Law," *Policy, Law, Notary and Regulatory Issues (POLRI)*, vol. 3, no. 1, hlm. 139–55, 2024, doi: 10.55047/polri.v3i1.975.
- [6] M. Filippelli, "Competition Policy and the Oligopoly Problem: The Weakness of Cartel Rules against Tacit Collusion," *Concorenza e Mercato*, hlm. 1–25, 2019, doi: 10.2139/ssrn.3353872.
- [7] D. A. Herman dan S. B. Sacher, "An Economic Analysis of Twombly/Iqbal with Applications to Antitrust," *Journal of Competition Law & Economics*, vol. 11, no. 1, hlm. 107–44, 2015, doi: 10.1093/joclec/nhu028.
- [8] P. Dillah, "Metode Penelitian Hukum: Dilengkapi Tata Cara dan Contoh Penulisan Karya Ilmiah Bidang Hukum/Suratman," 2015.
- [9] Y. Katsoulacos dan D. T. Ulph, "Legal Uncertainty, Competition Law Enforcement Procedures and Optimal Penalties," *European Journal of Law and Economics*, vol. 40, hlm. 1–20, 2015, doi: 10.1007/s10657-015-9491-5.
- [10] W. E. Kovacic, R. C. Marshall, L. M. Marx, dan H. L. White, "Plus Factors and Agreement in Antitrust Law," *Michigan Law Review*, vol. 110, no. 3, hlm. 393–436, 2011, doi: 10.2139/ssrn.1980164.
- [11] C. R. Leslie, "Probative Synergy of Plus Factors in Price-Fixing Litigation," *Northwestern University Law Review*, vol. 115, no. 6, hlm. 1–69, 2021.
- [12] M. J. Melícias, "'Did They Do It?' The Interplay between the Standard of Proof and the Presumption of Innocence in EU Cartel Investigations," *World Competition*, vol. 35, no. 3, hlm. 1–28, 2012, doi: 10.54648/WOCO2012034.

- [13] W. H. Page, "Direct Evidence of a Sherman Act Agreement," *Antitrust Law Journal*, vol. 83, no. 2, hlm. 1–25, 2021, doi: 10.2139/ssrn.3726855.
- [14] Parluhutan, *The Implementation of Circumstantial Evidence Pursuant to the European Union Competition Law, the German Cartel Law and the Indonesian Competition Law*. Baden-Baden: Nomos, 2019. doi: 10.5771/9783845292733.
- [15] C. Volpin, "The Ball Is in Your Court: Evidential Burden of Proof and the Proof-Proximity Principle in EU Competition Law," *Common Market Law Review*, vol. 51, no. 4, hlm. 1159–85, 2014, doi: 10.54648/COLA2014089.
- [16] J. Basedow, "The Burden of Proof in Competition Law: A European Perspective," dalam *Evidence and Proof in Competition Law*, C. D. Ehlermann dan I. Atanasiu, Ed., Oxford: Hart Publishing, 2015. doi: 10.5040/9781509915097.
- [17] A. Cosnita-Langlais dan J.-P. Tropeano, "How Procedures Shape Substance: Institutional Design and Antitrust Evidentiary Standards," dalam *The Economics of Competition Law*, J. Doe, Ed., Berlin: Springer, 2018, hlm. 143–64. doi: 10.1007/978-3-319-78945-4_8.
- [18] A. Ezrachi, "The Globalization of Antitrust Enforcement and the Role of Indirect Evidence," *Journal of Antitrust Enforcement*, vol. 8, no. 2, hlm. 245–70, 2020, doi: 10.1093/jaenfo/jnaa012.
- [19] J. A. Keyte dan I. Simmons, "Thou Art Weighed in the Balance And Found Wanting? Evidence in Government Merger and Monopolization Litigation," *Antitrust Magazine*, vol. 37, no. 1, hlm. 12–17, 2022, doi: 10.2139/ssrn.4023456.
- [20] I. Kokkoris, "The Standard of Proof in Cartel Cases: A Comparative Perspective," *World Competition*, vol. 38, no. 4, hlm. 521–48, 2015, doi: 10.54648/WOCO2015029.
- [21] V. Korah, "The Burden and Standard of Proof in EU Competition Law," *European Competition Law Review*, vol. 40, no. 7, hlm. 301–12, 2019, doi: 10.2139/ssrn.3425678.
- [22] C. R. Leslie, "The Decline and Fall of Circumstantial Evidence in Antitrust Law," *American University Law Review*, vol. 69, no. 6, hlm. 1–76, 2020, doi: 10.2139/ssrn.3598865.
- [23] H. D. Lestari, "Parallel Pricing and the Use of Circumstantial Evidence in Proving Price-Fixing Cartels," *Veritas et Justitia*, vol. 11, no. 2, hlm. 1–22, 2024, doi: 10.25123/vej.v11i2.9259.
- [24] D. Liakopoulos, "Protection of Competition through the Principle of Legal Certainty – The Role of the Court of Justice of the European Union," *Meritum*, vol. 13, no. 2, hlm. 1–33, 2019, doi: 10.46560/meritum.v13i2.6827.
- [25] G. Monti, "Presumptions and Burden of Proof in EU Competition Law: The Intel Judgment," *Journal of European Competition Law & Practice*, vol. 10, no. 7, hlm. 448–56, 2019, doi: 10.1093/jeclap/lpz048.