MARKET POWER AND GOVERNANCE POWER

NEW TOOLS FOR ANTITRUST ENFORCEMENT IN THE DECENTRALIZED GIG ECONOMY

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ABSTRACT

This Article advances a new framework for digital-age antitrust enforcement by integrating measures of market concentration (such as the Herfindahl-Hirschman Index) with novel metrics of governance concentration (the Nakamoto coefficient and Gini coefficient). Focusing on the rise of decentralized autonomous organizations (DAOs) and gig economy platforms, it demonstrates that traditional antitrust tools are insufficient for assessing competitive risk and organizational power in markets characterized by algorithmic management and decentralized coordination. Through detailed theoretical development, case studies of representative gig DAOs, and the construction of a dual-metric "matrix" mapping four distinct organizational types, the Article shows how both economic scale and governance structure must be evaluated to determine when intervention is warranted.

The framework reveals that organizations combining scale with genuinely dispersed control, named "Decentralized Titans" and "Commons Ideals," should benefit from structural defenses against regulatory intervention. But DAOs that are practically controlled by few people, named "Algorithmic Leviathans" and "Captive Platforms," require targeted remedies to address concentrated power and labor-side harms. Policy and practice recommendations show how agencies and courts can use this dual-metric approach to calibrate remedies. This approach favors governance reform, transparency, and interoperability over blunt structural breakups to balance competitive markets with worker protection. By bridging economic and organizational analysis, this Article offers a quantifiable, fact-driven, adaptable roadmap for antitrust law to meet the challenges of the digital, gig, and DAO era.

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INTRODUCTION

The central conceptual tool of antitrust law, the definition of "single entity" or "firm," is facing an acute identity crisis as algorithmic gig platforms and decentralized autonomous organizations ("DAOs") disrupt traditional corporate boundaries. Notably, courts have long recognized that "[a] parent and its wholly owned subsidiary have a complete unity of interest" such that "they act as a single entity for antitrust purposes,"[2] but have also cautioned that formal corporate separateness does not always provide clear guidance for complex business arrangements.[3] In *American Needle*, the Supreme Court explained that "substance, not form, determines whether a[n] arrangement is concerted action" and that antitrust analysis must focus on whether entities "pursue separate economic interests" and are capable of competition,[4] an inquiry rendered more challenging as digital platforms supplant conventional organizational hierarchies with algorithmic governance and blockchain-based coordination.[5]

Contemporary competition authorities and scholars now confront the reality that algorithms may "create incentives and mechanisms to collude that would not exist otherwise,"[6] and that DAOs furnish decentralized frameworks for economic coordination outside familiar legal structures, raising "important antitrust implications"[7] for global enforcement regimes. As a result, competition analysis must be retooled to address how law, not only economics, struggles to define and police boundaries of market power in the digital age.

To address the analytical deficit in existing competition law, I propose that courts and regulators evaluate both market concentration and decentralization when assessing market power in digitally organized ecosystems. Specifically, established measures such as the Herfindahl-Hirschman Index (HHI) could be deployed alongside a decentralization metric—like the Nakamoto coefficient—which captures how control is distributed across core decision-makers in blockchain,

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[2] *Copperweld Corp. v. Independence Tube Corp.*, 467 U.S. 752, 771 (1984) (establishing "single entity" doctrine for antitrust).

[3] *Copperweld*, 467 U.S. at 774 ("The logic underlying the Court's decisions has not always been easy to apply in the context of complex business arrangements. The Court itself has acknowledged that it is not easy to determine when two entities are sufficiently independent to constitute separate entities for §1 purposes.") (emphasizing difficulty in drawing boundaries of a single entity).

[4] *American Needle, Inc. v. Nat'l Football League*, 560 U.S. 183, 195 (2010) ("Substance, not form, determines whether a[n] arrangement is concerted action"; "The NFL teams do not possess either the unitary decisionmaking quality or the single aggregation of economic power characteristic of independent action.") (clarifying 'firm' definition is context-dependent for antitrust).

[5] OECD, *Algorithms and Collusion: Competition Policy in the Digital Age* 11–12 (2017) ("The OECD concludes that algorithms may create incentives and mechanisms to collude that would not exist otherwise . . . algorithms can concur to make collusive outcomes more likely and stable over time.") (digital-platform governance challenges antitrust frameworks).

[6] *Id.* at 12.

[7] Thibault Schrepel, *An Introduction to Blockchain Antitrust*, at 1 (Kluwer 2023) ("Blockchain raises new competition issues.… [I]t should come as no surprise that blockchain has important antitrust implications.") (articulating DAOs' relevance to antitrust law).

DAO, or algorithmically managed platforms.[8] By mapping both economic concentration and governance centralization, authorities can distinguish genuinely decentralized networks from platforms with hidden, algorithmic, or coded concentrations of power.[9] This dual-metric methodology reflects recent calls in the competition literature for multi-dimensional standards in digital markets[10] and aligns with emerging international norms that emphasize function over form in antitrust review.[11] When systematically applied, such a framework enables law to capture both the risks and benefits of new organizational forms, ensuring competitive fairness even where economic and organizational boundaries are blurred by technology.

This Article begins by setting out the problem of measuring power in gig and digital platform markets, critiques the limitations of traditional antitrust metrics, and then proposes a dual-metric approach that jointly analyzes market and governance concentration. Applying this framework illustratively to representative gig DAOs, it presents a four-quadrant matrix identifying distinct risk profiles and policy implications. The Article concludes by offering tailored recommendations for regulators and courts, demonstrating how the proposed model could enable more precise, effective, and just antitrust oversight in the Gig DAO era.

MARKET POWER AND THE SINGLE ENTITY DOCTRINE

The cornerstone of antitrust analysis is **market power**, a concept used both to identify harm to competition and to differentiate between unilateral and coordinated conduct in economic markets. The "single entity" doctrine, formalized by the Supreme Court in *Copperweld*, holds that a parent and its wholly owned subsidiary "have a complete unity of interest," and therefore cannot conspire under Section 1 of the Sherman Act.[12] This principle reframes the firm as a unit of economic function, not merely a legal structure. Nevertheless, courts have frequently noted

[8] *See* Lin William Cong et al., *Decentralized Governance in Blockchain-Based Organizations*, OXFORD REVIEW OF ECONOMIC POLICY 36 (2), 2020 ("The Nakamoto coefficient offers a quantifiable measure of decentralization, indicating the number of entities needed to control a blockchain's consensus.") (introducing governance metrics for digital organizations).

[9] OECD, *Artificial Intelligence, Data and Competition* 16 (2024) ("Multi-dimensional approaches to competition analysis—including metrics for data concentration and decentralized governance—will be essential in assessing market power in AI and platform environments.") (calling for multi-factor tests for digital markets).

[10] Thibault Schrepel, *Collusion by Blockchain and Smart Contracts*, 33 HARV. J.L. & TECH. 117 (2019) (advocating for multi-dimensional standards).

[11] Jacques Crémer, Yves-Alexandre de Montjoye & Heike Schweitzer, *Competition Policy for the Digital Era* 7, 59–60, 83, 127 (Eur. Comm'n, Directorate-Gen. for Competition 2019), https://doi.org/10.2763/407537 (urging regulatory support where ongoing intervention is needed, e.g., to "impose and allow for effective interoperability" (p. 7); explaining protocol/data/full-protocol interoperability as pro-competitive instruments that can share network effects and address concentration tendencies (pp. 59–60); distinguishing portability from broader data-access/interoperability regimes and recognizing competition-law-based data access, especially for dominant firms (p. 83); and stressing that in digital markets innovation effects often outweigh price effects and must be systematically integrated into competition analysis (p. 127)).)

[12] *Copperweld Corp. v. Independence Tube Corp.*, 467 U.S. 752, 771 (1984) ("A parent and its wholly owned subsidiary have a complete unity of interest.").

the complexity of delineating firm boundaries, especially in multifaceted or dynamically structured business arrangements.[13] *American Needle v. NFL* advanced the doctrine by emphasizing that "substance, not form, determines whether a[n] arrangement is concerted action,"[14] thus directing antitrust analysis to the actual economic interests and autonomy of the entities involved. The framework established by these precedents has shaped both agency enforcement and judicial decision-making, serving to distinguish collaboration from monopoly in traditional commercial contexts, where corporate identity and boundaries are usually well defined. As recent case law and merger enforcement actions underscore, doctrinal clarity on market power and single entity status remains essential, even as competitive realities and analytical tools continue to evolve.[15]

In doctrinal practice, market power is also quantified through the **Herfindahl-Hirschman Index (HHI)**, which aggregates the squares of firms' market shares to produce a numerical measure of concentration. U.S. merger review now rests on these figures pursuant to the 2023 DOJ/FTC Merger Guidelines, which classify markets as "highly concentrated" at a post-merger HHI above 1,800. Notably, this Biden-era policy reflects a significant lowering from the 2,500-point threshold in earlier standards.[16] Under the revised Guidelines, a transaction is presumptively unlawful if it results in an HHI increase of 100 points or more in such a market, or if the merged firm would hold over 30% market share with a qualifying HHI increase.[17] These quantitative rules reflect increased regulatory vigilance, as recent enforcement actions and cases such as *United States v. Google* reveal active judicial engagement with structural presumptions and analytic screens based on concentration metrics.[18] Internationally, the European Commission and other global authorities employ similar concentration ratios, adapting threshold tests and policy instruments to ensure that competitive harms can be detected across a spectrum of traditional and digitally mediated markets.[19]

Judicial interpretation of market power and agency guidelines has evolved in tandem with both legislative change and shifting economic realities. Courts today

[13] *Id.* at 774 ("The logic underlying the Court's decisions has not always been easy to apply . . . it is not easy to determine when two entities are sufficiently independent to constitute separate entities for §1 purposes.").

[14] *American Needle, Inc. v. Nat'l Football League*, 560 U.S. 183, 195 (2010) ("Substance, not form, determines whether a[n] arrangement is concerted action.").

[15] *E.g.*, *United States v. Google LLC*, No. 1:20-cv-03010 (D.D.C. 2025) (applying single entity doctrine in digital market context); RealPage, Inc. Antitrust Litigation (DOJ 2024).

[16] DOJ & FTC, *2023 Merger Guidelines* §II.A (2023) ("A market is considered highly concentrated if the post-merger HHI is greater than 1,800.").

[17] *Id.* ("Mergers resulting in an increase of the HHI of 100 or more, or creating firms with more than 30% share, are presumed unlawful.").

[18] *United States v. Google LLC*, No. 1:20-cv-03010 (D.D.C. 2025); see also DOJ/FTC, *Recent Enforcement Actions*, https://www.ftc.gov/legal-library/browse/cases-proceedings/recent-merger-cases.

[19] European Commission, *Guidelines on the Assessment of Horizontal Mergers* ¶19–22 (2004) (EU thresholds for market concentration); see Baker Botts, *Key Takeaways on EU Merger Control: Global Antitrust Hot Topics* (2025).

regularly apply structural presumptions from the latest **Merger Guidelines**, striking down or subjecting to close scrutiny mergers that tip HHI above 1,800 or aggregate market shares above 30 percent.[20] In *United States v. Google*, district court analysis closely tracked agency guidelines to address Google's entrenched position in search and advertising while referencing both concentration metrics and functional tests derived from *Copperweld* and *American Needle*.[21] Enforcement actions such as the *RealPage* litigation further signal a renewed willingness to scrutinize algorithmic coordination and hub-and-spoke arrangements for competitive harm, demonstrating that the boundaries of the "single entity" doctrine and traditional market share tests remain front-and-center in legal analysis even as new market configurations arise.[22] Recent EU and UK merger cases have similarly exemplified this trend, with courts pressing both economic and functional tests for dominance and competitive effect.[23]

The complexities of market definition and power assessment have become especially pronounced in cases involving **multi-sided platforms**. The Supreme Court's decision in *Ohio v. American Express Co.* established that antitrust analysis for such platforms must consider all sides of a transaction, recognizing interdependent user groups and indirect network effects.[24] Lower courts have implemented *AmEx* in subsequent technology litigation, notably *Epic Games, Inc. v. Apple Inc.*, where the Ninth Circuit used *AmEx's* multi-sided market framework to evaluate the competitive dynamics of app distribution and payment processing.[25] Scholarship by Kacyn H. Fujii finds that *AmEx* and its progeny have created procedural and substantive ambiguities for platform cases, with courts struggling to articulate coherent standards for market definition and harm assessment in technology markets.[26] Herbert Hovenkamp observes that antitrust remedies for platforms should prioritize restructuring and interoperability mandates over breakups, and stresses that market power metrics for platforms require flexibility to accurately account for multi-sided relationships and network effects.[27] The 2023 DOJ/FTC Merger Guidelines acknowledge these analytical complexities, highlighting the need for functional definitions and economic rigor when evaluating

[20] DOJ & FTC, *2023 Merger Guidelines* §II.A (2023); *see also DOJ/FTC Recent Enforcement Actions*.

[21] *United States v. Google LLC*, No. 1:20-cv-03010 (D.D.C. 2025) ("Market power and competitive effects findings were guided by merger guideline thresholds and functional market definitions.").

[22] *United States v. RealPage, Inc.*, No. 3:23-cv-03847 (N.D. Tex. 2024) (algorithmic price-setting and hub-and-spoke antitrust liability).

[23] European Commission, *Revised Market Definition Notice* (2024); Baker Botts, *Key Takeaways on EU Merger Control: Global Antitrust Hot Topics* (2025).

[24] *Ohio v. American Express Co.*, 138 S. Ct. 2274, 2287 (2018) ("In two-sided markets, courts must analyze both sides of the platform to assess market power and competitive effects.").

[25] *Epic Games, Inc. v. Apple Inc.*, 67 F.4th 946, 961–63 (9th Cir. 2024); *see also* Daniel J. Hemel, *How Epic v. Apple Operationalizes Ohio v. Amex*, YALE J. REG. BULLETIN (2024).

[26] Kacyn H. Fujii, *The Impact of Amex and Its Progeny on Technology Platforms*, 120 MICH. L. REV. 691 (2022).

[27] Herbert Hovenkamp, *Antitrust and Platform Monopoly*, 130 YALE L.J. 1952, 1960–77 (2021).

competition in platform settings.[28] European and Asian regulators have likewise revised their guidance, converging on a more adaptive approach to platform market analysis that addresses both doctrinal and practical challenges.[29]

The rise of gig platforms like Uber, Lyft, and DoorDash has foregrounded new challenges for antitrust enforcement in labor markets. Gig economy firms increasingly exert substantial market power over workers through platform control, algorithmic wage-setting, and contractual restrictions, often classifying drivers and service providers as independent contractors to avoid labor protections.[30] The FTC and DOJ have responded with heightened enforcement, issuing joint guidelines in 2025 clarifying that antitrust law applies to business practices affecting gig workers, including wage suppression, deceptive earnings claims, and exclusionary conduct.[31] Recent settlements with Lyft and Amazon Flex address misleading wage representations and illegal withholding of tips, demonstrating both the breadth of agency oversight and the vulnerability of platform workers to exploitation.[32] Legal scholars argue that antitrust remedies should enable collective bargaining for gig workers, extending labor exemptions to cover independent contractors—a controversial but increasingly relevant reform.[33] Courts have begun to grapple with these issues directly: in *Confederación Hípica de Puerto Rico, Inc. v. Confederación de Jinetes Puertorriqueños, Inc.*, the First Circuit cautiously

[28] DOJ & FTC, 2023 Merger Guidelines §III.D (2023).

[29] See European Commission, Market Definition Notice (2024), https://competition-policy.ec.europa.eu/mergers/legislation/notices-and-guidelines_en (codifies analytic adjustments for multisided and digital markets, emphasizing functional and evidence-based market definition); WilmerHale, EU Merger Control: What You Need to Know From 2024 to Navigate 2025 (Jan. 30, 2025), https://www.wilmerhale.com/en/insights/publications/20250131-eu-merger-control-what-you-need-to-know-from-2024-to-navigate-2025 ("Recent trends in EU merger review point to expanded qualitative and quantitative assessment for dominant platforms, with particular attention to market structure and network effects."); Baker Botts, Key Takeaways on EU Merger Control: Global Antitrust Hot Topics (Sept. 2, 2025), https://www.bakerbotts.com/thought-leadership/publications/2025/october/key-takeaways-on-eu-merger-control-global-antitrust-hot-topics ("EU competition authorities increasingly employ sector-specific guidelines and economic tools to supplement traditional concentration metrics."); Scott Morton et al., "Digital Platform Regulation: Making Markets Work for People," Yale School of Management, https://som.yale.edu/sites/default/files/2025-05/SCOTT-MORTON_Digital_Platform_Regulation_pages.pdf (providing comparative analysis of digital market reforms and regulatory adaptation); Financier Worldwide, "Post-Amex – Market Definition and Anticompetitive Effects" (Dec. 31, 2024), https://www.financierworldwide.com/post-amex-market-definition-and-anticompetitive-effects ("Asian authorities, particularly in Japan and South Korea, have issued new guidelines addressing multi-market coordination and cross-platform competitive effects.").

[30] Human Rights Watch, *The Gig Trap: Algorithmic, Wage and Labor Exploitation in Platform Work in the US*, (May 11, 2025), https://www.hrw.org/report/2025/05/12/the-gig-trap/algorithmic-wage-and-labor-exploitation-in-platform-work-in-the-us; Len Sherman, *Why The FTC Needs To Investigate Uber's Anti-Competitive Business Practices*, FORBES (Sept. 6, 2024).

[31] FTC & DOJ, *Joint Guidelines on Business Practices Impacting Workers* (Apr. 14, 2025), https://www.ftc.gov/news-events/news/press-releases/2025/01/ftc-doj-jointly-issue-antitrust-guidelines-business-practices-impact-workers.

[32] FTC, *FTC Takes Action to Stop Lyft from Deceiving Drivers with Misleading Earnings Claims* (July 29, 2025), https://www.ftc.gov/news-events/news/press-releases/2024/10/ftc-takes-action-stop-lyft-deceiving-drivers-misleading-earnings-claims; FTC Policy Statement on Enforcement Related to Gig Work (2022).

[33] Marina Lao, *Workers in the 'Gig' Economy: The Case for Extending the Antitrust Labor Exemption*, 51 UC DAVIS L. REV. 1543 (2018); Ioana Marinescu & Eric Posner, *Why Has Antitrust Law Failed Workers?*, 105 CORNELL L. REV. 1343 (2020)

extended labor antitrust exemptions to certain gig workers, suggesting a new doctrinal pathway for labor organizing.[34] Meanwhile, the "gig trap"—platforms capturing enormous revenues while workers see stagnating wages and eroded bargaining power—has drawn criticism from human rights organizations and labor economists, prompting ongoing litigation and regulatory inquiry into algorithmic exploitation and market concentration across U.S., European, and Asian jurisdictions.[35]

Taken together, these doctrinal developments reveal both the strengths and the growing limitations of traditional competition law tools in the face of economic and technological change. Whether the challenge is measuring market power in conventional corporate mergers, deciphering competitive effects in complex multi-sided platforms, or protecting gig workers from algorithmic wage suppression and monopsony practices, authorities have adapted by refining existing doctrines and embracing new enforcement priorities. Yet, as the boundaries of "market power" grow increasingly fluid, and as digital, decentralized, and algorithmic forms of governance become more pervasive, it is clear that orthodox tests, whether rooted in the single entity doctrine or structural concentration metrics like HHI, no longer suffice as the sole arbiters of competitive harm and economic authority.

The next section sets out a new analytic approach, introducing functional metrics for decentralization and network structure to supplement classic indicators—laying the groundwork for a more capable, future-oriented framework to analyze competition and governance in dynamically evolving markets.

GOVERNANCE POWER AND DECENTRALIZED AUTONOMOUS ORGANIZATIONS

The prior Part has shown how doctrines and quantitative metrics such as the HHI inform the analysis of market power and concentration in both traditional and digitally mediated industries. In this Part, the analytic lens turns inward to address a new dimension: the distribution of governance power *within* DAOs and, in particular, gig DAOs now operating at scale in labor and platform markets.

To rigorously evaluate governance power, antitrust analysts are increasingly turning to two conceptual metrics: the Nakamoto coefficient ("NMC") and the Gini coefficient. The **Nakamoto coefficient** is defined as the minimum number of entities required to control over half of a network's critical resources.[36] The **Gini coefficient**, borrowed from economic inequality analysis, measures the

[34] *Confederación Hípica de Puerto Rico, Inc. v. Confederación de Jinetes Puertorriqueños, Inc.*, 30 F.4th 306 (1st Cir. 2022); Josh Jacob, *Avenues for Gig Worker Collective Action after Jinetes*, 123 Colum. L. Rev. 208 (2023).

[35] Human Rights Watch, *supra* note [#]; Administrative Law Review, *The Gig Worker Question*, 76 ADMIN. L. REV. 945, 947 (2024); ACCC, Merger Guidelines (Australia, 2024).

[36] Low NMC values—typically under 10—signal that a handful of actors dominate decision-making, whereas high values indicate broader distribution and resilience against capture. *See* Cong et al., *supra* note [#], at 10 ("The Nakamoto coefficient measures effective decentralization by counting the smallest coalition needed to control >50% of governance power."); Arxiv, Analysis of Voting Power in Decentralized Governance.

distributional equality of governance rights, ranging from 0.0 (perfect equality) to 1.0 (total concentration; one actor rules all).[37]

Although many such organizations present as "decentralized," recent evidence—including high Gini coefficients recorded across major DAOs—demonstrates that the appearance of decentralization often masks significant concentrations of control.[38] Thus, to understand real market power in digitally organized ecosystems, antitrust analysis must be sensitive to both the external structure of competition and the internal allocation of decision-making power. As the following sections detail, mapping governance power and recognizing the risks of the "decentralization illusion" are critical preconditions to synthesizing outward and inward metrics for modern antitrust enforcement.

DAOs, and especially gig DAOs, are no longer theoretical constructs. DAOs are now established actors in platform and labor markets, coordinating everything from freelance staffing to payroll and benefits for independent workers.[39] Distinguished by blockchain-based protocols, tokenized voting, and transparent smart contracts, these organizations are designed to distribute governance rights and responsibilities among members rather than concentrate authority in a traditional managerial hierarchy.[40]

Yet, despite their promise of democratized control, recent empirical research shows that high Gini coefficients are common within major DAOs, revealing often persistent, and sometimes severe, concentrations of governance power even in the absence of a centralized management structure.[41] As such, any meaningful antitrust analysis in the platform economy must look beyond the formal trappings of decentralization and examine how governance power is actually distributed within these organizations. This necessity gives rise to a fundamental methodological

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[37] Bitquery, supra note [#] ("Gini coefficient reveals striking inequality within DAOs: values of 0.95 and higher indicate effective centralization.").

[38] See Lin William Cong et al., *Decentralized Governance in Blockchain-Based Organizations*,(August 2025 draft), available at https://perma.cc/H3DC-ZHJ9; BITQUERY, *Understanding Wealth Distribution with Gini and Nakamoto Coefficient* (Nov. 16, 2023), available at https://perma.cc/Q23P-3ZJK.

[39] *See* Braintrust, *The world's first user-owned talent network, transforming global hiring through decentralized governance,* https://www.usebraintrust.com/governance/ (last visited Nov. 3, 2025) (outlining DAO structure for labor market coordination), [https://perma.cc/8KJA-HX6F]; Opolis, *Employment Commons White Paper*, https://opolis.co/wp-content/uploads/2021/01/White-paper.pdf (detailing DAO-managed employment infrastructure), [https://perma.cc/7P64-PGBG]; Burnett Specialists, *2025 Gig Economy Trends*, https://burnettspecialists.com/blog/gig-economy-trends-for-2025-what-job-seekers-and-employers-need-to-know/ (summarizing scalability and impact of gig DAOs on contemporary employment markets), [https://perma.cc/CPB6-XQYY].

[40] Schrepel & Gal, *Algorithmic Antitrust*, *supra* note[#], at 117–18 (2019) ("DAOs rely on 'smart contract-based governance' which replaces the centralized control of conventional corporations with 'member-driven decision-making.'"); GreenAppleX, *Roles and Use Cases of DAOs in 2025*, https://greenapplex.com/blog/roles-and-use-cases-of-daos-in-2025 (quoting, "DAOs empower their communities to make key product, hiring, and strategic decisions"), [https://perma.cc/HZ6D-4TJV].

[41] Cong et al., *Decentralized Governance in Blockchain-Based Organizations*, *supra* note [#] ("…recent calculations reveal Gini coefficients between 0.90 and 0.98 for governance tokens in leading DAOs, a signature of acute concentration"); Bitquery, *supra* note [#] (explaining, "Gini coefficient reveals inequality—values exceeding 0.90 suggest near-total concentration at the top").

shift: in the DAO era, understanding real market power requires mapping not only market share, but also the reality of internal governance power dynamics.

The concentrations of governance power empirically observed within major DAOs are not a mere theoretical curiosity. They have concrete consequences for how antitrust law should reach and evaluate these new organizational forms. DAOs, regardless of their surface-level decentralization, retain the operational capacity to coordinate pricing, restrict entry, or allocate market resources in ways that may harm competition[42] This presents acute challenges for enforcement, since algorithmic coordination and "smart contracts" can automate cartel-like behavior while obscuring who, in fact, holds control because DAOs can functionally replicate both single-entity and cartel characteristics, which complicates enforcement by confusing the boundaries of the firm.[43]

Antitrust doctrine hinges on the classification of organizations as either "single entities" or collaborations among competitors.[44] A DAO with heavily concentrated governance (e.g., low NMC, high Gini) may functionally operate as a classic firm, wielding unified strategic control. By contrast, a DAO with dispersed control may resemble a multi-actor joint venture, where coordinated action is less likely and legal exposure under Section 1 of the Sherman Act rises.[45] Importantly, highly decentralized governance (high NMC, low Gini) can serve as a structural check against exclusionary or exploitative conduct, functioning as rebuttal evidence in competition inquiries.[46]

However, these metrics require qualification due to the problem of **delegation**. In most DAOs, token holders often delegate their votes to highly visible representatives or "delegates," who then accrue outsized control in practice.[47] While intended to increase participation and efficiency, delegation typically results in a power law distribution that concentrates voting rights, reinforcing oligarchy even where formal decentralization is present.[48]

Recent developments in the gig economy and digital labor markets provide concrete illustrations of the relationship between governance structure and antitrust analysis. Braintrust and Opolis, two of the most prominent gig DAOs, demonstrate

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[42] Cong et al., *Decentralized Governance in Blockchain-Based Organizations*, *supra* note [#] ("DAOs with governance concentrations above 0.95 Gini are susceptible to capture by dominant interests, with practical consequences for exclusion and collusion.").

[43] Schrepel & Gal, *Algorithmic Antitrust*, *supra* note [#], 120–22 (2019) ("Smart contracts facilitate algorithmic antitrust harms and complicate detection.").

[44] *Copperweld*, 467 U.S. 752.

[45] GreenAppleX, *Roles and Use Cases of DAOs in 2025*, *supra* note [#] (discussing legal ambiguity of DAOs as both firm- and cartel-like).

[46] Bitquery, supra note [#]; Cong et al., supra note [#] ("High dispersion of voting power dilutes coordinated exclusion risk").

[47] Appel et al., *Decentralized Governance and Digital Asset Prices*, https://perma.cc/XV2Y-LCJA ("Delegated voting mechanisms often result in highly concentrated outcomes regardless of initial token dispersion.").

[48] GreenAppleX, *supra* note [#] ("Delegate-centric governance perpetuates asymmetric voting power.").

how similar market-facing business models can yield different legal characterizations—and risk profiles—depending on the internal distribution of power. FUDx, while less empirically documented, is representative of a new wave of DAOs challenging established delivery platforms.

Braintrust is a user-owned, Web3-based talent marketplace designed to connect freelance workers with clients seeking specialized expertise, including legal, financial, and technology services. The BTRST token represents both ownership and governance rights, and ownership of this token confers proposal and voting rights. Braintrust allows talent to advertise their availability, set their own rates, and apply directly for projects sourced from Fortune 1000 companies such as Nestlé, Nike, and NASA. Clients have access to a pool of vetted experts and can select individuals or teams for a wide variety of project assignments, ranging in size and complexity.[49]

The platform operates as a not-for-profit and charges a flat 10% fee to clients, which funds network operations, although current product pages list a 15% client fee, indicating a pricing update or product-tier variation. Freelancers keep 100% of their earnings. Governance of Braintrust is decentralized, with users—talent and clients—granted governing rights through blockchain tokens. As a competitive talent marketplace, Braintrust's top competitors include other digital platforms such as Turing, Buzzzy, Squadio, and MVP Match, which similarly enable open market matching between freelance experts and client demand.[50]

Braintrust's structure aims to remove traditional staffing intermediaries, thereby promoting direct competition among freelancers for project-based work and offering organizations a transparent, on-demand approach to hiring talent. These features place Braintrust in the emerging category of networked marketplaces that blend market competition with user control, distinguishing it within the broader gig economy landscape.[51]

Public data sufficiently to directly measure Braintrust governance power is not available, so no conclusions can be drawn from direct evidence. However, circumstantial evidence and analogous case provide grounds for further inquiry. Braintrust uses token-weighted voting ("the more tokens you have, the greater your

[49] Joseph B. Fuller, Manjari Raman & Emilie B. Feldman, *Building the On-Demand Workforce, Harv. Bus. Sch. Case No. 20-076*, at 6–7 (2020), https://www.hbs.edu/managing-the-future-of-work/Documents/20-076.pdf [https://perma.cc/Y2JV-Q6HJ]; Braintrust, *Braintrust: The Decentralized Talent Network* (Whitepaper) 4, 10–12 (Sept. 2021) [https://perma.cc/73B4-F23U]; Sarah Friedman, *This futuristic gig platform is owned by workers who keep 100% of earnings*, The Hustle (Apr. 4, 2024) [https://perma.cc/T7BM-W93C]; CBInights, *Braintrust* (last visited Nov. 11, 2025) [https://perma.cc/T84D-98MD]; Braintrust, *Terms of Service* (last updated Feb. 6, 2025; last visited Nov. 11, 2025) [https://perma.cc/2SYT-LSMS].

[50] Messari, *State of Braintrust* (Q1 2023) (Apr. 20, 2023), https://messari.io/report/state-of-braintrust-q1-2023 ("Braintrust takes a flat 10% fee … paid by the client; talent keeps full billings."); see also Braintrust, The 10 Biggest Misconceptions About Braintrust (Aug. 11, 2021), https://www.usebraintrust.com/blog/10-biggest-misconceptions-about-braintrust ("zero fees to Talent … 10% service fee to clients") [https://perma.cc/U4FP-84TJ].

[51] *See* PR Newswire, Coatue and Tiger Global Purchase $100M Braintrust Tokens to Seed Web3 Network Development Initiative (Dec. 9, 2021) (noting this is a press release provided by Braintrust) [https://perma.cc/W7WB-YFQE].

voting power"), so its formal decentralization can still produce high voting-power concentration, a pattern widely documented across large token-governed DAOs such as Uniswap and Compound, where measured Gini coefficients approach 0.95–0.99.[52] Using some realistic assumptions based on typical patterns in crypto holding,[53] we can estimate Braintrust's Gini is probably in the 0.85-0.92 range, representing significant (but not severe) governance power concentration—enough to undermine nominal claims about the truly decentralized nature of this marketplace.

Opolis ("The Employment Commons") represents an alternative model of decentralized labor organization. Legally structured as a Colorado public-benefit limited cooperative association (LCA), Opolis provides an employer-of-record service that enables freelancers and self-employed professionals to receive W-2 payroll, tax withholding, and group benefits while remaining independent contractors in substance.[54] Membership is divided into two classes—Employee Members and Coalition Members—each subscribing to a single share of class-specific common stock and governed by the cooperative's Bylaws through a Board of Stewards.[55] This structure institutes a near one-member-one-vote rule within each class, replacing token-weighted control with democratic membership voting grounded in cooperative law.

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[52] Johnnatan Messias and Ayae Ide, Fairness in Token Delegation: *Mitigating Voting Power Concentration in DAOs*, arXiv (draft submitted Oct. 7, 2025), https://arxiv.org/pdf/2510.05830 [https://perma.cc/UTR7-YY94]; Robin Fritsch, Marino Müller & Roger Wattenhofer, *Analyzing Voting Power in Decentralized Governance: Who Controls DAOs?* tbl. 2 & § 4.1 (Apr. 3, 2022) (preprint), https://arxiv.org/abs/2204.01176 [https://perma.cc/B9MP-S3SS] (reporting, as of Mar. 1, 2022, Compound: Gini_delegates 0.987; Gini_delegates_voted 0.964; Nakamoto (delegates) 8; Uniswap: Gini_delegates 0.995; Gini_delegates_voted 0.971; Nakamoto (delegates) 11; describing these as "extreme" inequalities and noting concentration of potential voting power among a handful of delegates).; *see also* Appel, *supra* note [#].

[53] Based on publicly available token holder data from November 2025, the top five Braintrust (BTRST) addresses collectively control approximately 29.5% of the total token supply, with the single largest holder controlling 7.5%. For the purposes of this estimate, it is assumed that after the top five holders, the next several largest holders each possess between 3% and 4% of supply, such that the ten largest holders together could control just over 50% of the outstanding tokens if voting as a bloc. This produces a back-of-the-envelope Nakamoto coefficient estimate in the range of 10–12. The remaining "tail" of token holders—constituting roughly 70% of supply—is presumed to be distributed among many small, unrelated holders, which necessarily limits the impact of perfect decentralization assumptions. As a result, even under a best-case (but unrealistic) scenario of atomized individual holdings outside the top 10, the estimated Gini coefficient for voting power would still remain high, plausibly within the 0.85–0.92 range, reflecting significant inequality in potential voting influence. These calculations are for illustrative purposes, using only summary statistics for the largest known holders. *See* Gate.com, *2025 BTRST Price Prediction: Analyzing Market Trends and Future Growth of the Braintrust Token* (Sept. 30, 2025) https://www.gate.com/crypto-wiki/article/2025-btrst-price-prediction-analyzing-market-trends-and-future-growth-potential-of-the-braintrust-token [https://perma.cc/KWT3-924D].

[54] *Employment Commons LCA—Terms of Service*, Opolis (Oct. 1, 2024), https://opolis.co/terms-of-service/ [https://perma.cc/LD5B-EHTN] (identifying "Employment Commons LCA, a Colorado public-benefit limited cooperative association" providing W-2 payroll and benefits administration).

[55] *Employee Member—Membership Agreement*, Opolis (last visited Nov. 11, 2025), https://opolis.co/employee-member/ [https://perma.cc/K5S6-ZQH2] (requiring each Employee Member to purchase one share of Class A Common Stock; governance by Bylaws and Board of Stewards); Stakeholder Economics & Tokenization of the Employment Commons (Whitepaper), Opolis (last visited Nov. 11, 2025), https://opolis.co/resources/downloads/Opolis-White-Paper.pdf [https://perma.cc/VZ4X-Q2D4].

The Opolis cooperative issues a digital token, $WORK, described in public documents as a patronage or rewards instrument that distributes community incentives for participation rather than conveying ownership or voting power.[56] $WORK tokens are not yet available for open market sale, and Opolis has not published quantitative decentralization metrics such as a Gini or Nakamoto coefficient; therefore, no empirical assessment of governance concentration can be made at this time. Nonetheless, Opolis's hybrid design—anchoring on-chain record-keeping to an off-chain cooperative charter—places it in what commentators term the emerging "LCA-DAO" class of legally wrapped decentralized organizations.[57] From an antitrust perspective, this cooperative model differs sharply from token-weighted gig platforms: the locus of governance power is formally dispersed across members rather than accumulated in large token holdings. Opolis thus serves as a comparative baseline for genuinely democratic decentralized governance in labor markets, even as its empirical distribution of control remains to be measured.

FUDx is a blockchain-based project proposing a hyperlocal, decentralized hospitality and delivery marketplace, intended to serve restaurants, delivery agents, and consumers by leveraging peer-to-peer networks and smart contracts for transparency and reduced commission costs.[58] The platform aspires to address monopsony and middleman problems in the on-demand delivery sector by issuing its own utility token ("FUDx Coin") for payments, rewards, and ecosystem participation. Its architecture includes distributed ledger management, tokenized transactions, and planned support for autonomous delivery fleets and IoT integration.

Governance details, voting mechanisms, decentralization metrics, and live market operations for FUDx remain undeveloped as of publication. The FUDx Coin white paper lays out tokenomics with allocations for public sale, team, partners, marketing, rewards, and ecosystem reserves, but does not specify projected voting power distribution, governance protocols, or empirical measures of concentration (such as Gini or Nakamoto coefficients). As with other emerging gig DAOs, FUDx's case illustrates the expansion of decentralized labor platforms into sectors

[56] *WORK Tokens: A Simple Guide to Opolis Rewards*, Opolis 1–3 (June 2023), https://opolis.co/wp-content/uploads/2023/06/WORK-Tokens-A-Guide-to-Opolis-Rewards.pdf [https://perma.cc/47PE-BF6K] ("The Opolis WORK token is a digital rewards token received by Members for engaging in activities valuable to the cooperative"); *Opolis Employment Commons Launches $WORK Token*, GlobeNewswire (Apr. 22, 2021), https://www.globenewswire.com/news-release/2021/04/22/2215144/0/en/Opolis-Employment-Commons-Launches-WORK-Token.html [https://perma.cc/GYT9-HL5Y] (announcing $WORK as a community patronage utility used inside the Commons).

[57] Navigating DAO Legality (written input of Opolis Employment Commons), U.S. Sec. & Exch. Comm'n, FinHub Comment File 9–10 (Jan. 27, 2024), https://www.sec.gov/files/ctf-written-input-navigating-dao-legality-opolis-043025.pdf [https://perma.cc/KB3N-Z63Q] (describing Employment Commons (Opolis) as "a pioneer in the LCA-DAO class," combining cooperative membership and on-chain coordination).

[58] *FUDx Coin White Paper*, FUDxCoin.com (last visited Nov. 11, 2025), https://www.fudxcoin.com/Assets/whitepaper.pdf [https://perma.cc/9BGY-W3AU].

historically dominated by monopolistic intermediaries and highlights the need for continued legal and economic analysis as this market matures.

These examples confirm that—consistent with the theoretical and doctrinal case built above—the real antitrust classification and enforcement risk of a gig DAO hinges as much on the internal distribution of governance power as on its outward market share.

The application of governance metrics to gig DAOs such as Braintrust and Opolis demonstrates a fundamental methodological imperative for modern antitrust: analysis must shift from a single, outward-facing measure of market concentration (e.g., HHI or market share) to a dual-axis framework that simultaneously maps economic concentration and governance centralization. Only through this two-dimensional lens can competition policy reliably capture the complex realities of digitally organized ecosystems. Structurally decentralized organizations—like Opolis, featuring high NMC and low Gini—provide powerful structural evidence that anti-competitive coordination is organizationally implausible. In a merger review or conduct investigation, such structural resistance to power capture constitutes robust rebuttal evidence that "no substantial lessening of competition is threatened," even where market share appears significant.[59] By contrast, platforms with high economic competition but sharply concentrated governance—like Braintrust—may functionally replicate the risks of traditional single-entity monopolists, justifying scrutiny rooted in established antitrust doctrine.[60]

Market Power and Governance Power

The descriptive and analytical groundwork of the preceding sections culminates in a simple, yet powerful insight: antitrust analysis for digitally organized firms must proceed along two axes, mapping both market (economic) concentration and governance (structural) concentration. This dual-metric framework enables competition authorities to classify platform and DAO risks more precisely, illuminate which organizational forms truly threaten competition, and choose interventions that are targeted, flexible, and consistent with the realities of digital markets. The following pages operationalize this diagnostic, define its four core quadrants, and offer strategies for law and policy that reflect the complexity—and promise—of the new digital firm.

Building on these analytic foundations, the proposed dual-axis framework can be operationalized as a simple but powerful matrix. On one axis lies market concentration, measured conventionally by the Herfindahl-Hirschman Index (HHI) or analogous market share assessments—the classic "outward" view of competitive

[59] U.S. Dep't of Justice & Fed. Trade Comm'n, *2023 Merger Guidelines* §3 ("Merger parties may provide evidence of ... structural features that render anticompetitive effects implausible."), https://www.justice.gov/atr/2023-merger-guidelines [https://perma.cc/2946-JB35].

[60] *Copperweld*, 467 U.S. at 769–71 ("substance, not form" determines single entity status); Cong et al., *supra* note [#] (high Gini, low NMC DAOs "effectively recreate classic 'firm' power structures").

structure. The other axis, newly added for the digital era, charts governance concentration, captured by metrics such as the Nakamoto coefficient and the Gini coefficient—a finely calibrated "inward" view of how organizational power is distributed. Each digital firm, protocol, or platform can thus be plotted within this two-dimensional space, and four distinct zones—or analytical quadrants—emerge. This structured approach enables competition authorities to classify organizational risks more precisely and to tailor interventions accordingly.

	Low Governance Concentration Low NMC / High Gini)	High Governance Concentration (Low NMC / High Gini)
High Market Concentration (High HHI)	Q1: Decentralized Titan Monopolistic & Distributed	Q2: Algorithmic Leviathan Monopolistic & Oligarchic
Low Market Concentration (Low HHI)	Q3: Commons Ideal Competitive & Distributed	Q4: Captive Platform Competitive & Oligarchic

Q1: Decentralized Titan

A "Decentralized Titan" is an organization with significant market share or HHI, but internal governance is demonstrably dispersed—evidenced by a high Nakamoto coefficient and a low Gini coefficient. While such entities may initially raise regulatory concerns due to their size and influence, both empirical studies and policy analysis suggest that decentralized governance serves as powerful rebuttal evidence against anticompetitive risk.[61] Recent research confirms that although most major DAOs display increasing centralization over time, the best-designed (e.g., one-member-one-vote cooperatives or experimental DAOs using quadratic voting or delegation safeguards) can sustain relatively low governance concentration.[62] For these rare cases, policy focus should be on transparency and ongoing monitoring, not structural breakups, because scale efficiencies are preserved without managerial dominance or exclusionary conduct.

Q2: Algorithmic Leviathan

The "Algorithmic Leviathan" archetype captures the greatest antitrust risk: organizations that are both economically dominant (high HHI/market share) and internally governed by a small elite (low NMC, high Gini). Studies of leading DeFi,

[61] Cong et al., at 2–3, 9–15 (documenting rare instances of persistent decentralized governance in DAOs with significant participation safeguards).

[62] *Id.* at 16–18 (surveying mechanisms such as quadratic voting and delegated safeguards as "meaningful correctives to the centralization trend").

DEX, and lending DAOs show that Gini coefficients routinely exceed 0.93, with the top decile controlling over 75% of voting power[63]—mirroring risks familiar from classic monopolies, but often compounded by automation and algorithmic opacity.[64] Here, the potential for exclusionary conduct, market exploitation, and coordination is at its peak; law and policy should prioritize active conduct remedies, mandated governance restructuring, or, as a last resort, divestiture of governing rights. Interoperability and transparency requirements, as endorsed in recent antitrust guidance, are especially justified for Leviathans.[65]

Q3: Commons Ideal

The "Commons Ideal" describes organizations that are both fragmented in the market (low HHI) and feature genuinely decentralized internal structures (high NMC, low Gini). Empirical studies identify this quadrant with certain cooperatives and small, socially-focused DAOs wherein governance and economic power are widely distributed and collective decision-making prevails.[66] In these cases, the structure itself functions as a perpetual barrier to collusion, exclusion, or abuse. Risks of anticompetitive behavior are lowest,[67] and this category serves as the policy benchmark: law should avoid intervention and instead enable or gently encourage the emergence of such models, which often enhance both voice and market competition.

Q4: Captive Platform

"Captive Platforms" appear competitive in market terms but hide highly concentrated governance. Token-weighted voting, delegation mechanisms, and vote concentration yield low NMC and high Gini coefficients even as the entity's market share is low. Leading DAOs—including Uniswap, Compound, Aave, and ENS—are paradigmatic cases: studies consistently find Gini coefficients for voting power exceeding 0.95 and Nakamoto coefficients below 15, indicating high

[63] See Chao, *A Study of Uniswap On-Chain Voting: Implications for Power, Apathy and Ethics*, https://www.panewslab.com/en/articles/7c66f3fa-b71d-4fa0-898d-243cf083e8a8 [https://perma.cc/MVY5-ER6D] (reporting Gini coefficients of "0.938" and top decile holding >75% of power).

[64] Li Cheng, *Algorithmic Monopolization and Antitrust Regulation in the AI Industry*, 10(38s) J. Inf. Sys. Eng. & Mgmt. 2025, https://jisem-journal.com/index.php/journal/article/download/6941/3217/11596 [https://perma.cc/42VL-C4BS] (describing algorithmic exclusion, opacity, and self-preferencing in dominant digital platforms).

[65] US DOJ & FTC, 2023 Merger Guidelines §3 ("Parties may provide evidence of ... structural features that render anticompetitive effects implausible. When the Agencies conclude a merger would cause a lessening of competition, they evaluate rebuttal arguments ... including market realities.").

[66] Sharma et al., *Large Scale Analysis of Decentralized Autonomous Organizations*, arXiv (Oct. 16, 2024) https://arxiv.org/html/2410.13095v1 [https://perma.cc/F98B-SUGX] (2020) (demonstrating statistically significant lower Gini coefficients and high decentralization in small, social-good, and public-goods DAOs).

[67] Paul Van Vulpen & Slinger Jansen, *Decentralized autonomous organization design for the commons*, FRONTIERS (Dec. 6, 2023) https://www.frontiersin.org/journals/blockchain/articles/10.3389/fbloc.2023.1287249/full (arguing "commons DAOs" have lowest risk of coordination failure).

governance concentration and limited effective decentralization.[68] Despite their decentralized branding, these structures functionally replicate single-entity risks, potentially evading Section 1 scrutiny for collusion but susceptible to managerial self-dealing, manipulation, and user exploitation.[69] Legal and regulatory oversight should focus on governance reforms (e.g., forced decentralization), transparency, and internal neutrality, aligning with recent legal commentary advocating process-based remedies over asset-based ones.[70]

Summary: Integrating Market and Governance Power

This dual-metric framework demonstrates why antitrust in digitally organized markets must analyze both outward market structure and inward governance. "Decentralized Titans" and "Commons Ideals" serve as evidence that true decentralization can rebut standard presumptions of harm—even at scale—by rendering coordination or abuse structurally implausible. By contrast, "Algorithmic Leviathans" and "Captive Platforms" expose how concentrated governance perpetuates the risks of exclusion and exploitation, regardless of HHI or surface competition. The matrix thus provides the backbone for decentralized-distributed antitrust analysis: interventions should precisely fit the locus of actual risk, targeting opaque or concentrated governance but enabling innovation and efficiency wherever structural checks already exist.[71]

POLICY AND PRACTICE IMPLICATIONS FOR ANTITRUST IN THE GIG DAO ERA

This Part distills the dual-metric framework into actionable guidance for the next era of gig economy oversight. By integrating market concentration (HHI) and governance concentration (NMC/Gini), regulators and courts can finally match remedies and review standards to the actual source of risk and power in digitally organized gig markets.

First, enforcement agencies should treat low-governance-concentration gig DAOs—those with high Nakamoto coefficients, low Gini coefficients, and robust transparency—as presenting a strong structural defense against antitrust intervention.[72] Whether or not a platform has significant market share, a genuinely decentralized decision-making structure rebuts assumptions of collusion,

[68] *See* Cong et al.; Fritsch et al.

[69] Winston & Strawn LLP, *Mitigating Antitrust Risk In Decentralized Autonomous Orgs,* https://www.winston.com/en/insights-news/mitigating-antitrust-risk-in-decentralized-autonomous-orgs [https://perma.cc/DKE7-9RM4] ("DAO voting structure can lead to co-conspirator liability and platform-owner self-preferencing unless mechanisms prevent governance capture").

[70] *Id.* (advocating "monitoring, reporting, disciplinary, and restructuring policy tailored to DAO governance failures").

[71] Monopoly Power and Market Power in Antitrust Law, U.S. DOJ (2024), https://www.justice.gov/archives/atr/monopoly-power-and-market-power-antitrust-law [https://perma.cc/NLX3-DDRM] ("antitrust should chart both price and exclusionary power; focusing solely on one closes courts' eyes to potential anti-competitive effects").

[72] *See* Cong et al.

exclusion, or algorithmic wage-fixing.[73] This extends to gig worker cooperatives and Opolis-type organizations, which use one-member-one-vote or other anti-oligarchic designs as structural assurances of market and worker fairness.[74] For such firms, policymakers should avoid remedies that would undermine network efficiencies. This structural integrity, achieved through anti-oligarchic designs, functions as rebuttal evidence—consistent with Section 3 of the Merger Guidelines—that merger-specific procompetitive efficiencies are present and that structural barriers to harm exist, justifying lighter-touch oversight, reporting, and agency "safe harbors."[75]

Second, antitrust agencies and courts should recognize that a low-governance-concentration Gig DAO—demonstrated by high Nakamoto and low Gini coefficients—provides a strong legal shield against intervention, even where gig workers collectively coordinate wages or terms. In classical antitrust, collective bargaining by independent contractors is per se unlawful price-fixing under Section 1 of the Sherman Act unless exempted. Yet, when gig workers organize under a truly decentralized DAO, dispersed voting power acts as a robust rebuttal, structurally preventing collusion and reducing risk of exclusion or algorithmic exploitation. This allows both courts and enforcers a factual basis to decline intervention, ensuring competitive and labor benefits are preserved. Lighter-touch oversight or agency safe harbors may justly apply in such contexts.

Third, for gig DAOs and platforms displaying concentrated governance—empirically evidenced by low NMC and high Gini coefficients and amplified by delegation mechanisms that reinforce a "rich-get-richer" dynamic and ideological misalignment—policy must focus on internal platform power, not just output or price. This structure enables algorithmic management with tremendous exploitation potential: ratings-based allocation, dynamic wage-setting (causing arbitrary pay fluctuations and suppressing wages), and exclusionary gating.[76] Instances of monopsony, self-preferencing, discrimination, and exclusion should trigger scrutiny and creative, proportional remedies such as forced decentralization, transparency in delegation, platform neutrality, mandated labor-side representation, and interoperability/pooling.[77] Remedies should prioritize internal restructuring and efficiency, not asset break-up. Where collective bargaining in gig DAOs raises antitrust questions, the FTC and DOJ should clarify—via rulemaking—that organizing under credible, decentralized, pro-competitive DAO governance is not

[73] U.S. DOJ & FTC, 2023 Merger Guidelines §3.

[74] *See* Opolis, White Paper, supra note [#].

[75] *See* Vulpen & Jansen, supra note [#].

[76] See AI Now, Artificial Power: 2025 Landscape Report (Jun. 3, 2025), https://ainowinstitute.org/wp-content/uploads/2025/06/FINAL-20250602_AINowLandscapeReport_Full.pdf [https://perma.cc/BMH7-CJZE].

[77] Herbert Hovenkamp*, Structural Antitrust Relief Against Digital Platforms*, 7 J. L. & INNOVATION 57, 69–74 (2024), https://scholarship.law.upenn.edu/context/jli/article/1033/viewcontent/Hovenkamp_Structural_Antitrust_Relief_Against_Digital_Platforms_Publication_Draft_FINAL.pdf; Annie Soo Yeon Ahn, *Antitrust, Self-Preferencing, and Display of Search Results*,79 Ill. L. Rev. Online (2025) https://illinoislawreview.org/online/antitrust-self-preferencing-and-display-of-search-results/ [https://perma.cc/497D-GFTU].

per se unlawful price-fixing. This is necessary, as private suits and damages have otherwise chilled organizing, and the labor exemption is still narrowly tied to employment status under federal law.[78]

Finally, the dual-metric framework equips antitrust with the agility and depth needed for the Gig DAO era. Enforcement and policy must reject one-size-fits-all penalties and instead pursue remedies exactly proportional to the structural reality revealed—whether that means fostering decentralized gig cooperatives by recognizing their organizational resistance to collusion and exclusion, or restructuring concentrated, algorithmic platforms to prevent exploitation and internal abuse. By targeting the true locus of risk—whether external market dominance, inward oligarchy, or their intersection—authorities can unlock efficiencies, protect worker and consumer welfare, and harness the democratic, innovative potential of DAOs and gig platforms.[79] This quantifiable, fact-driven, function-over-form approach not only realigns antitrust with its empiricist roots, but provides a scalable, actionable roadmap for competition oversight in digital, decentralized, and labor-intensive industries where old doctrines and blanket remedies no longer suffice.[80] In sum, the prescription is clear: tailored, data-driven scrutiny according to the dual axes of market and governance power is essential to effective gig-era competition policy and to the future evolution of digital market law.[81]

CONCLUSION

This Article charts a new course for antitrust in the Gig DAO era by introducing a dual-metric framework that analyzes both market and governance concentration. In doing so, it moves beyond the limits of traditional tools to provide a more faithful account of power and risk in digitally organized and labor-intensive markets. When applied to gig platforms and decentralized organizations, this framework enables regulators and courts to calibrate remedies that are proportional, innovation-friendly, and just—distinguishing between entities where scale poses little risk and those where hidden concentrations of governance power enable exclusion, exploitation, or collusion.

Antitrust law's success in the digital age requires an individualized, empiricist approach—one that matches the remedy not to form or size, but to the structure and incentives that truly govern economic outcomes. The prescription is clear: only through flexible, evidence-driven scrutiny, attentive to both outward market share

[78] FTC, *Rulemaking Petition for Gig Worker Antitrust Labor Exemption*, filed May 2025; Lina M. Khan, Testimony to Congress, Sept. 28, 2025; FTC, *Federal Trade Commission Enforcement Policy Statement on Exemption of Protected Labor Activity by Workers from Antitrust Liability* https://www.ftc.gov/system/files/ftc_gov/pdf/p251201laborexemptionpolicystatement.pdf [https://perma.cc/6U4P-XETH].

[79] U.S. DOJ & FTC, 2023 Merger Guidelines §3, *supra* note [#]; Hovenkamp, *supra* note [#].

[80] *See* Cong, *supra* note [#]; Decentralized autonomous organization design for the commons, *supra* note [#].

[81] *See* Ahn, supra note [#].

and inward organizational dynamics, can competition law ensure efficient, dynamic, and fair markets for workers, consumers, and creators alike.

Looking forward, the tools and concepts developed here supply a roadmap for addressing emerging legal controversies in labor markets, digital governance, and beyond. As technologies, market forms, and threats to economic justice evolve, the dual-metric model stands ready to guide future policy, judicial interpretation, and empirical inquiry—preserving antitrust's vital purpose as the law of fair and open markets in the twenty-first century.